

**Product catalogue** 

ALPHA PAGE 2 FIRST PAGE 6

MILLENNIUM NXTGEN PAGE 10 04
ON-LINE 1

PAGE 14

ON-LINE 2 PAGE 18

STEP PAGE 22

BLACK& PAGE 26

FIRST RADIANT PAGE 30

12
LINE-UP

PAGE 34

TXTURE PAGE 38

13
MXTURE

PAGE 42

CAMBRIDGE PAGE 46

PERPETUAL PAGE 50

SHINE-UP PAGE 54 NORMAL | NEW

PRMAL | NEW FIRST LINES
NORMAL PAGE 62
PAGE 58

**20** 

IN-GROOVE PAGE 66 21

**XTRA** 

PAGE 70

FIRST

**29** 

ALTERNATIVE100 PAGE 78 <u>30</u>

FIRST STRIPES PAGE 82 **31** 

FIRST WAVES PAGE 86 **32** 

FIRST BLOCKS NEW SHAPI
PAGE 90 PAGE 94

33 NEW SHAPES

34

MOTION /// VISION PAGE 98 **35** 

PURE AIR100 PAGE 102 **36** 

PAGE 74

DSGN CLOUD PAGE 106 **37** 

DSGN TWEED PAGE 110 38

DSGN TRACK PAGE 114 **39** 

OPPOSITE PAGE 118 **40** 

OPPOSITE LINES PAGE 122 41

PIXEL PAGE 126

**42** 

PATCHWORK PAGE 130 **43** 

PATTERN PAGE 134 44

MOSS PAGE 138 **45** 

LEAF PAGE 142 46

WILLOW PAGE 146 <u>47</u>

GRIND PAGE 150 48

FASHION& PAGE 154 49
VELVET&

**PAGE 158** 

**50** 

BLAZE PAGE 162 <u>51</u>

DUSK

**PAGE 166** 

51 DAWN

**PAGE 170** 

**52** 

GLEAM PAGE 174 **53** 

SPARK PAGE 178





ALPHA



CONSTRUCTION	Tufted 1/10" Loop	FIRE RESISTANCE	EN 13501-1 B <sub>n</sub> -s1
PILE MATERIAL	100% PA 6 Solution Dyed Nylon	FASTNESS TO LIGHT	ISO 105-B02 ≥ 7
SECONDARY BACKING	Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece. 10% recycled content included	RUBBING FASTNESS	EN ISO 105-X12 ≥ 4
TOTAL WEIGHT	Ca. 4 300 g/m²	COLOUR FASTNESS TO WATER	EN ISO 105-E01 ≥ 4
PILE WEIGHT	Ca. 500 g/m²	THERMAL RESISTANCE	ISO 8302

			0.067 m <sup>2</sup> K/W
PILE ABOVE BACKING	Ca. 302 g/m²	IMPACT NOISE RATING	ISO 10140 ΔL: 30 dB <sub>(1 000 Hz)</sub> ΔL <sub>w</sub> : 22 dB
TOTAL HEIGHT	Ca. 5.8 mm	SOUND ABSORPTION	ISO 354

		a <sub>w</sub> . o.	. 10					
		Hz	125	250	500	1000	2000	4000
		$\alpha_{S}$	0.04	0.03	0.07	0.15	0.29	0.32
PILE HEIGHT Ca. 2.6 mm	PERMANENT ANTISTATIC	ISO 6 ≤ 2 k						

PILE DENSITY	Ca. 0.116 g/cm³	TRANSVERSAL RESISTANCE	ISO/DIS 10965 ≤ 10 <sup>9</sup> Ohm

TUFT DENSITY	Ca. 171 600 /m²	SIZE & PACKING	50 cm x 50 cm box: 5 m <sup>2</sup>
			pallet: 20 boxes

CLASSIFICATION	EN 1307	NUMBER OF COLOURS	14
	33 - LC1		

CASTOR CHAIR SUITABILITY	EN 985 A: continuous use	DIMENSIONAL STABILITY	EN 986 Max. 0.20%

DONNÉES ENVIRONNEMENTALES	Démarche HQEe: cf. FDES suivant NF P01-010 Déclaration du 30/07/2003	GUT-NR BRE	982A6E5F ENP 428
UPEC CLASSIFICATION CERTIFICATE N° NF-UPEC		LEED®	Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.



















### 1. RECYCLED CONTENT

a. 53% Overall recycled content.

### b. Yarn

100% PA 6 Solution Dyed.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till  $\pm$  10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

## 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### b. CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b)

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 μg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number 982A6E5F. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### e. Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product

The EPD-declaration-number is EPD-MOD-20150181-CBC2-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 — Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet titles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\frac{\text{Hea 05-Acoustic performance}}{\text{To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 22 decibels (<math>\Delta L_w$ -ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

MAT 1 – Life Cycle Impact BREEAM Rating Offices Certificate ENP 428 ae, A-rating – Eco point score 0.284.

To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full file to expect of the building. For more information on the Green Guide to Specification visit www.fore.ou.klygreenguide or www.greenbooklive.com.

# MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3.
installation, for more details. Concerns cutting waste on installation of carpet tiles.

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mat MR4 Post-Industrial recycled content: 53%.
MR4 Post-Consumer recycled content: 0%.
MR credit: Building product disclosure and optimisation - Material ingredients ion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	T9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

### 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

modulyss® carpet tiles are free from odours. (see GUT certification program)

## Acoustics

This product is strongly sound absorbent. It reduces the contact noise by 22 decibels ( $\Delta L_{\rm w}$  - ISO 10140), with a perfect acoustic effect as result.



FIRST



CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1 B<sub>ff</sub>-s1 PILE MATERIAL 100% PA 6 Solution Dyed Nylon FASTNESS TO LIGHT ISO 105-B02 SECONDARY BACKING Back2Back: Modified bitumen enhanced with RUBBING FASTNESS EN ISO 105-X12 a thermoplastic elastomer, reinforced with ≥ 4 a glass fibre fleece covered with 100% PES fleece. 10% recycled content included. TOTAL WEIGHT Ca. 4 300 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01 > 4 PILE WEIGHT Ca. 540 g/m² THERMAL RESISTANCE ISO 8302 0.047 m<sup>2</sup> K/W PILE ABOVE BACKING Ca. 330 g/m² IMPACT NOISE RATING ISO 10140 ΔL: 37 dB (1 000 Hz)  $\Delta L_w$ : 25 dB TOTAL HEIGHT Ca. 6.4 mm SOUND ABSORPTION ISO 354 α ...: 0.20 Hz 125 250 500 1000 2000 **4000** 0.01 0.04 0.07 0.19 0.29 0.34 ISO 6356 PILE HEIGHT Ca. 2.9 mm PERMANENT ANTISTATIC PILE DENSITY Ca. 0.114 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm TUFT DENSITY Ca. 156 000 /m² SIZE & PACKING 50 cm x 50 cm box: 5 m<sup>2</sup> CLASSIFICATION EN 1307 NUMBER OF COLOURS 22 33 - LC1

DONNÉES Démarche HQE®: cf. FDES **ENVIRONNEMENTALES** 

CASTOR CHAIR SUITABILITY EN 985

suivant NF P01-010 Déclaration du 30/07/2003

A: continuous use

UPEC CLASSIFICATION CERTIFICATE N° NF-UPEC







DIMENSIONAL STABILITY EN 986



Product contributes toward satisfying

Credits under LEED®. For more information, see the modulyss sustainable datasheets.











GUT-NR ACF385AA

BRE ENP 428

### 1. RECYCLED CONTENT

a. 50% Overall recycled content.

### b.

100% PA 6 Solution Dyed Nylon.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till  $\pm$  10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### b. CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b)

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number ACF385AA These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### e. Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20150181-CBC2-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 — Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet titles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\frac{\text{Hea 05-Acoustic performance}}{\text{To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 25 decibels (<math>\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.20 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BrP 428 i, A-rating – Eco point score 0.295.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

# MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3.
installation, for more details. Concerns cutting waste on installation of carpet tiles.

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit. Hiteriois Life-Cycle impact reduction.

MR credit. Building product disclosure and optimisation Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw materials.

MR4 Post-Industrial recycled content: 50%.

MR4 Post-Consumer recycled content: 0%.

MR credit: Building product disclosure and optimisation - Material ingredients

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance.

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13
	_

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

### 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

modulyss® carpet tiles are free from odours. (see GUT certification program)

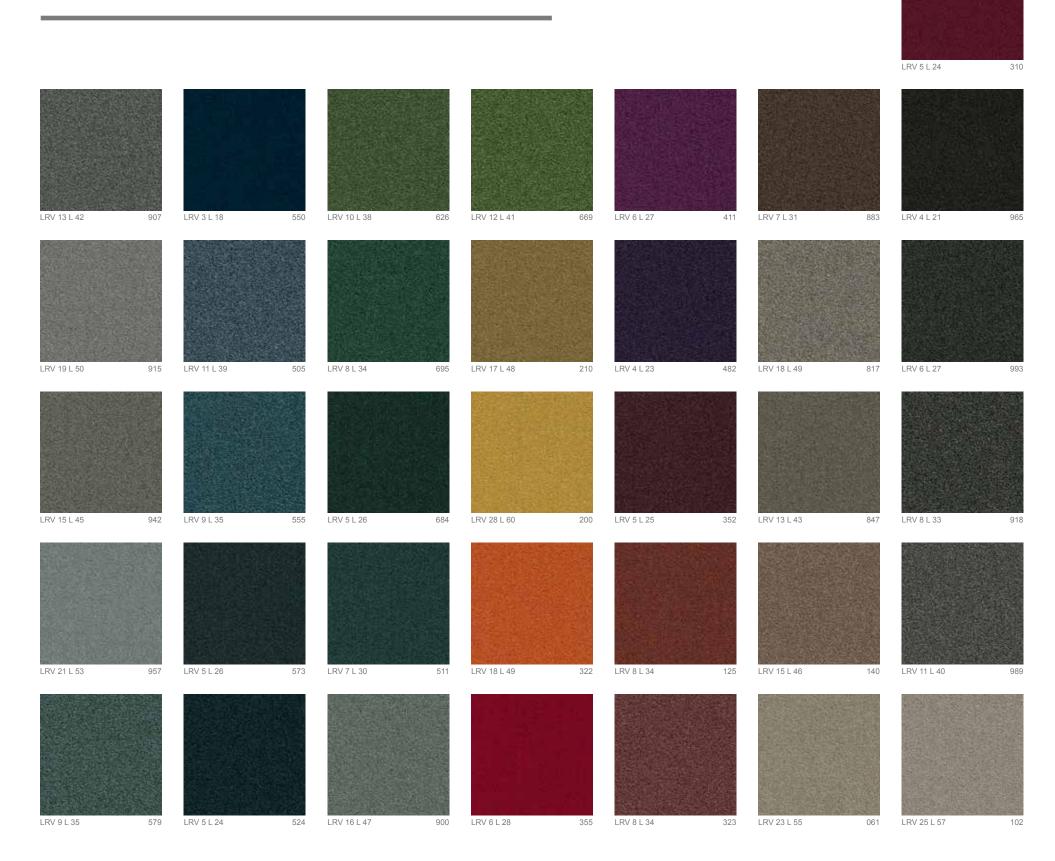
# Acoustics

This product is strongly sound absorbent. It reduces the contact noise by 25 decibels ( $\Delta L_{\rm W}$  - ISO 10140), with a perfect acoustic effect as result.



# 03

# MILLENNIUM NXTGEN



CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1 B<sub>ff</sub>-s1

PILE MATERIAL 100% ECONYL® yarn ISO 105-B02 FASTNESS TO LIGHT 100% Regenerated Solution Dyed Nylon

SECONDARY BACKING Back2Back: Modified bitumen enhanced with RUBBING FASTNESS EN ISO 105-X12 a thermoplastic elastomer, reinforced with ≥ 4

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 400 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01 > 4

PILE WEIGHT Ca. 600 g/m² THERMAL RESISTANCE ISO 8302

PILE ABOVE BACKING Ca. 395 g/m² IMPACT NOISE RATING ISO 10140

SOUND ABSORPTION α ...: 0.15 Hz 125 250 500 1000 2000 4000

PILE HEIGHT Ca. 3.2 mm ISO 6356 PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.123 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 160 000 /m² SIZE & PACKING 50 cm x 50 cm

CLASSIFICATION EN 1307 NUMBER OF COLOURS 36 33 - LC1

CASTOR CHAIR SUITABILITY EN 985 DIMENSIONAL STABILITY EN 986 A: continuous use

DONNÉES Démarche HQE®: cf. FDES GUT-NR 53ED8F90 **ENVIRONNEMENTALES** suivant NF P01-010

Déclaration du 30/07/2003 Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets. UPEC CLASSIFICATION CERTIFICATE N° NF-UPEC



TOTAL HEIGHT Ca. 6.3 mm



ISO 354

0.00 0.00 0.06 0.14 0.31 0.39









# 

# Sustainable datasheet

### 1. RECYCLED CONTENT

### a. 64% Overall recycled content

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon. ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

# Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

# Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001

Certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns. Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

### c CARE

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO, emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. CRI (US and international)

Carpet & Rug Institute Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b)

### b. GUT (DE)

Gemeinschaft Umweltfreundlicher Teppichboden

# TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number 53ED8F90. These criteria include VOC tresholds, odour and chemical substances

### c. REACH (EU)

modulyss® complies with the strict European REACH standards.

### d. Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

### M1 (FI)

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product.

# The EPD-declaration-number is EPD-MOD-20150329-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# a. BRE Global (UK)

Building Research Establishment. This product can contribute towards credits in:

# Hea 02 - Indoor Air Quality

Hea 02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.
■ modulys% carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 – Acoustic performance</u> To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 25 decibels ( $\Delta L_w$  – ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

# MAT 1 – Life Cycle Impact BREEAM Rating Offices

BREEAM Rating Offices
All modulyses products are rated for offices according to BRE Green Guide to Specification.
The BRE Global Environmental Profiles Certification Scheme requires evidence of a minimum of
6 months continuous production prior to a request for certification and the certification process
takes approximately 6 months to complete. As a result, we are currently not able to provide a
BRE Global Environmental Profile Certificate for Millennium Nxtgen but please note that a similar
product has obtained an Ecopoint score of 0.26 and is A<sup>\*</sup>-rated for offices.

MAT.5 — Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3,
installation, for more details. Concerns cutting waste on installation of carpet tiles.

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction.

MR credit: Building product disclosure and optimisation Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 57%.

MR4 Post-Consumer recycled content: 7%.

MR credit: Building product disclosure and optimisation - Material ingredients. ion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

# HQE (FR)

### Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free.

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

modulyss® carpet tiles are free from odours. (see GUT certification program) Acoustics

9. MEMBER OF HEALTHY SEAS®

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® varn by Aquafil. Europe's premier manufacturer of PA 6 carpet fibre.

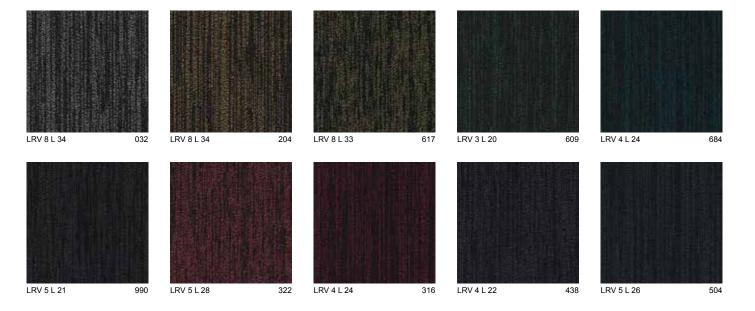
This product is strongly sound absorbent. It reduces the contact noise by

25 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.





ON-LINE 1



CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1 B<sub>n</sub>-s1

PILE MATERIAL 100% PA 6.6 Antron® FASTNESS TO LIGHT ISO 105-B02 ≥ 5-6

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 530 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01 ≥ 4

PILE WEIGHT Ca. 700 g/m² THERMAL RESISTANCE ISO 8302 0.036 m² K/W

PILE ABOVE BACKING Ca. 380 g/m² IMPACT NOISE RATING LISO 10140 ΔL: 35 dB (1 000 Hz)

 $\Delta L_{w}$ : 23 dB

TOTAL HEIGHT Ca. 6.0 mm SOUND ABSORPTION ISO 354  $\alpha_{\omega}$ : 0.15

Hz 125 250 500 1000 2000 4000

 $\alpha_{\rm S} = 0.01 - 0.03 - 0.04 - 0.14 - 0.25 - 0.32$  PILE HEIGHT Ca. 2.6 mm PERMANENT ANTISTATIC ISO 6356

≤2 kV

PILE DENSITY Ca. 0.146 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

box: 5 m²
pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 10, Special colours possible

CASTOR CHAIR SUITABILITY EN 985 DIMENSIONAL STABILITY EN 986

A: continuous use Max. 0.2%

DONNÉES Démarche HQE®: cf. FDES GUT-NR BF14081C
ENVIRONNEMENTALES Suivant NF P01-010
Déclaration du 30/07/2003 BRE ENP 428

LEED® Product contributes toward satisfying
Credits under LEED®. For more information,







see the modulyss sustainable datasheets.







### 1. RECYCLED CONTENT

a. 51% Overall recycled content

### b. Yarn

100% PA 6.6 Antron®.

### **Primary Backing**

Colback SMR is produced out 100% post-consumer recycled PET, originated from bottle scrap

### d. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

# a. Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO2 emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-603.

### b. CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1101 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number BF14081C. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product

# The EPD-declaration-number is EPD-MOD-20170098-CBC1-EN

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 \_ Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyss° carpet titles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 – Acoustic performance</u>
To ensure the buildings' acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 23 decibels ( $\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 t, A-rating – Eco point score 0.353.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

# MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - So MR4 Post-Industrial recycled content: 49%. MR4 Post-Consumer recycled content: 2%. MR credit: Construction and demolition waste management. ion - Sourcing of raw materials

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

# HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# d. Good Environmental - Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

### 8. HEALTH & COMFORT

## Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

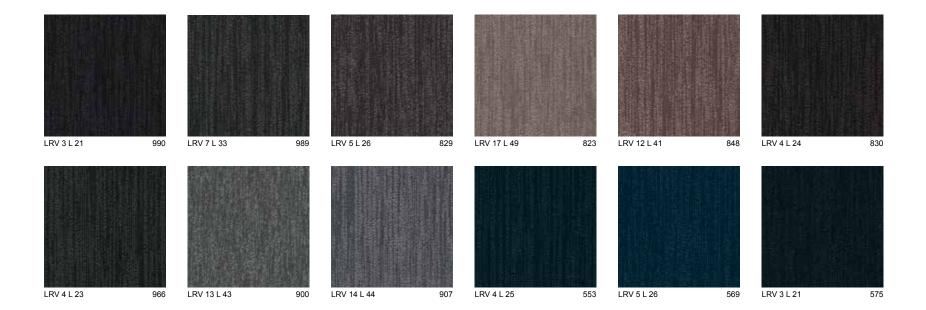
modulyss® carpet tiles are free from odours (see GUT certification program).

### Acoustics

This product is strongly sound absorbent. It reduces the contact noise by 23 decibels (ΔL... - ISO 10140), with a perfect acoustic effect as result



ON-LINE 2



CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1

ISO 105-B02 PILE MATERIAL 100% PA 6.6 Antron® FASTNESS TO LIGHT

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12

a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 530 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01

PILE WEIGHT Ca. 700 g/m² ISO 8302 THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 380 g/m² IMPACT NOISE RATING ISO 10140

 $\Delta L\colon 35~dB~\mbox{(1 000 Hz)}$  $\Delta L_w$ : 23 dB

TOTAL HEIGHT Ca. 6.0 mm SOUND ABSORPTION ISO 354  $\alpha_w$ : 0.15

125 250 500 1000 2000 4000 Hz

0.01 0.03 0.04 0.14 0.25 0.32 PILE HEIGHT Ca. 2.6 mm ISO 6356

PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.146 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 146 500 /m² SIZE & PACKING 50 cm x 50 cm

pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 12, Special colours possible

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY

A: continuous use

Démarche HQE® : cf. FDES GUT-NR BF14081C **ENVIRONNEMENTALES** suivant NF P01-010 Déclaration du 30/07/2003 BRE ENP 428

> LEED® Product contributes toward satisfying Credits under LEED®. For more information,







see the modulyss sustainable datasheets.







### 1. RECYCLED CONTENT

a. 51% Overall recycled content

### b. Yarn

100% PA 6.6 Antron®.

### **Primary Backing**

Colback SMR is produced out 100% post-consumer recycled PET, originated from bottle scrap

### d. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
ISO-1500 Control State (CRI) (SRI) and the UN's Sustainable Development Goals (SDGs)

Recycling raw yarns
All the left over and waste yarns are collected and recycled.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

# a. Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO2 emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-603.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1101 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number BF14081C. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products, B-rating,

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product

The EPD-declaration-number is EPD-MOD-20170098-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 \_ Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyss\* carpet titles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 – Acoustic performance</u>
To ensure the buildings' acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 23 decibels ( $\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 t, A-rating – Eco point score 0.353.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

## LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimization - Environmental Product Declarations MR4 Post-Industrial recycled content: 49%.
MR4 Post-Consumer recycled content: 2%.
MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance.

Products are not reviewed under LEED® LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

### HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# d. Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

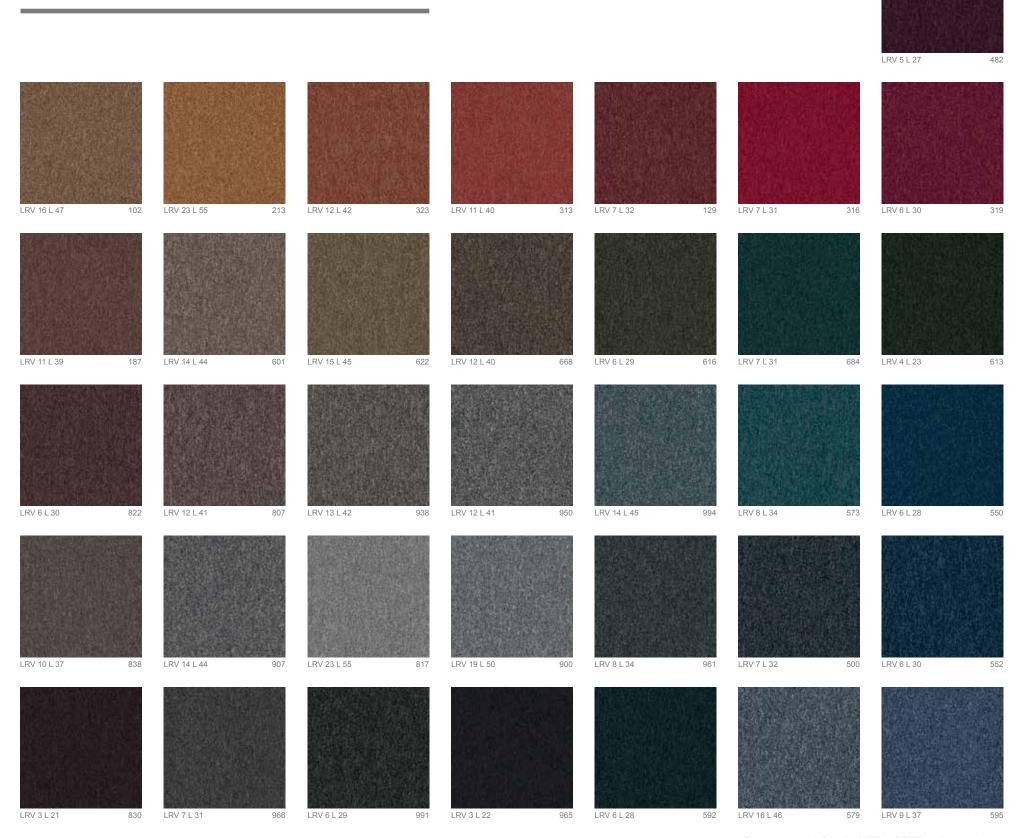
# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

### Odour modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 23 decibels ( $\Delta L_{_W}$  - ISO 10140), with a perfect acoustic effect as result.

# STEP



Go to page 71 for the XTRA STEP colour palette.

CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE B<sub>1</sub>-s1 EN 13501-1 B<sub>2</sub>-s1

PILE MATERIAL 100% PA 6 Aqualon FASTNESS TO LIGHT ISO 105-B02 ≥ 5-6

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a thermoplastic elastomer, reinforced with Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with ≥ 4

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 300 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01 ≥ 4

PILE WEIGHT Ca. 530 g/m² THERMAL RESISTANCE ISO 8302

PILE ABOVE BACKING Ca. 335 g/m² IMPACT NOISE RATING  $\Delta L$ : 33 dB (1000 Hz)

ΔL. 33 dB (1000 Hz) ΔL<sub>w</sub>: 24 dB

TOTAL HEIGHT Ca. 6.0 mm SOUND ABSORPTION ISO 354  $\alpha_{\rm w}$ : 0.15  $_{\rm Hz}$  125 250 500 1000 2000 4000

 $\alpha_{\rm S} = 0.01 - 0.03 - 0.06 - 0.23 - 0.30 - 0.35$  PILE HEIGHT Ca. 2.8 mm PERMANENT ANTISTATIC ISO 6356

PILE DENSITY Ca. 0.120 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

CLASSIFICATION EN 1307
33 - LC1

NUMBER OF COLOURS 45, Special colours possible

CASTOR CHAIR SUITABILITY EN 985
A: continuous use

DIMENSIONAL STABILITY EN 986
Max. 0.20%

DONNÉES ENVIRONNEMENTALES Démarche HQE®: cf. FDES Suivant NF P01-010 Déclaration du 30/07/2003 BRE ENP 428

UPEC CLASSIFICATION CERTIFICATE N° NF-UPEC U<sub>3</sub>P<sub>3</sub>E<sub>1</sub>C<sub>0</sub> 297-005.1 LEED® Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.















### 1. RECYCLED CONTENT

a. 52% Overall recycled content.

### b. Yarn

100% PA 6 Aqualon.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till  $\pm$  10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

# Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### b. CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1101 (see LEED®, point 7.b)

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 μg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number FB2487CE. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### e. Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170095-CBC1-EN

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

### a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 — Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet titles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\frac{\text{Hea 05-Acoustic performance}}{\text{To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 24 decibels (<math>\Delta L_w$ -ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BrP 428 y. A-rating – Eco point score 0.299.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

# MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3.
installation, for more details. Concerns cutting waste on installation of carpet tiles.

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mat MR4 Post-Industrial recycled content: 52%.
MR4 Post-Consumer recycled content: 0%.
MR credit: Building product disclosure and optimisation - Material ingredients ion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

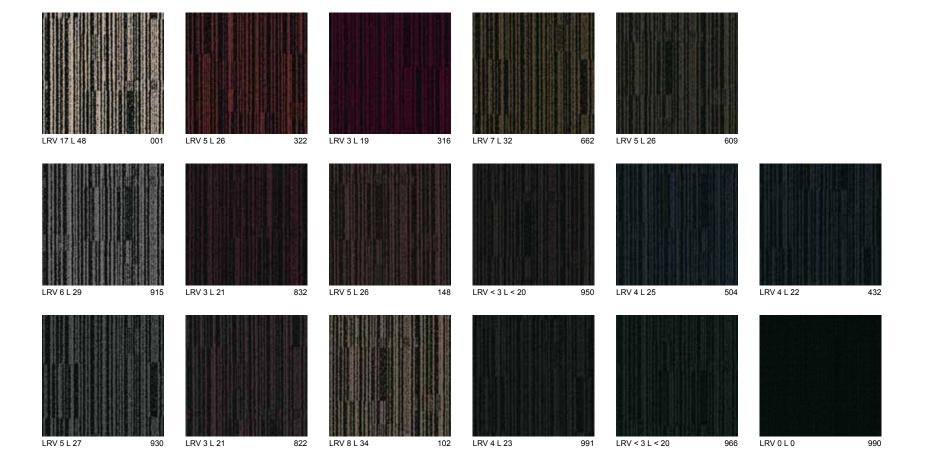
modulyss® carpet tiles are free from odours. (see GUT certification program)

This product is strongly sound absorbent. It reduces the contact noise by 24 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.





BLACK&



CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1
B<sub>H</sub>-s1

PILE MATERIAL 50% PA 6.6 Antron® + FASTNESS TO LIGHT ISO 105-B02

SECONDARY BACKING

Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES

EN ISO 105-X12
≥ 4

fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 400 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01

PILE WEIGHT Ca. 850 g/m<sup>2</sup> THERMAL RESISTANCE ISO 8302

PILE ABOVE BACKING Ca. 422 g/m² IMPACT NOISE RATING SUBJECT STATING ISO 10140 AL: 37 dB (1 000 Hz) AL: 24 dB

TOTAL HEIGHT Ca. 6.8 mm SOUND ABSORPTION ISO 354  $\alpha_{w}$ : 0.20 Hz 125 250 500 1000 2000 4000

 $\alpha_{\rm S} = 0.01 - 0.02 - 0.07 - 0.22 - 0.33 - 0.44$  PILE HEIGHT Ca. 3.5 mm PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.121 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 154 440 /m² SIZE & PACKING 50 cm x 50 cm box: 5 m² pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 17, Special colours possible

CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES ENVIRONNEMENTALES Démarche HQE®: cf. FDES GUT-NR 4F621479

suivant NF P01-010
Déclaration du 30/07/2003 BRE ENP 428

ANTISOIL TREATED I-Protect® LEED® Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.













### 1. RECYCLED CONTENT

a. 46% Overall recycled content

### b. Yarn

50% PA 6.6 Antron® + 50% PA 6.6 Antron® SDN.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain; from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

## 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-603.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1101 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 4F621479. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170098-CBC1-EN

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea.02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit
■ modulyss³ carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\frac{\text{Hea 05}-\text{Acoustic performance}}{\text{To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 24 decibels (<math>\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.20 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 c, A-rating – Eco point score 0.375.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

## LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 46%.

MR4 Post-Consumer recycled content: 0%.

MR credit: Building product disclosure and optimisation - Material ingredients. tion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

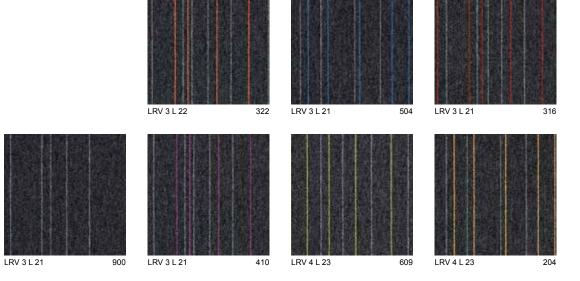
modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 24 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.



# FIRST RADIANT



CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1
B<sub>H</sub>-s1

PILE MATERIAL 100% PA 6 Solution Dyed Aqualon FASTNESS TO LIGHT ISO 105-B02

SECONDARY BACKING

Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES

EN ISO 105-X12
≥ 4

fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 300 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01 ≥ 4

PILE WEIGHT Ca. 540 g/m<sup>2</sup> THERMAL RESISTANCE ISO 8302 0.047 m<sup>2</sup> K/W

PILE ABOVE BACKING Ca. 330 g/m² IMPACT NOISE RATING AL: 37 dB (1 000 Hz)  $\Delta L_{\rm w}$ : 25 dB

TOTAL HEIGHT Ca. 6.4 mm SOUND ABSORPTION ISO 354  $\alpha_{\omega}$ : 0.20

Hz 125 250 500 1000 2000 4000  $\alpha_{
m S}$  0.01 0.04 0.07 0.19 0.29 0.34

PILE HEIGHT Ca. 2.9 mm PERMANENT ANTISTATIC ISO 6356 ≤ 2 kV

PILE DENSITY Ca. 0.114 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

CLASSIFICATION EN 1307 NUMBER OF COLOURS 7

CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES ENVIRONNEMENTALES Démarche HQE®: cf. FDES suivant NF P01-010 Déclaration du 30/07/2003 BRE ENP 428

Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.

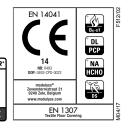




LEED®







# FIRST RADIAN

# Sustainable datasheet

### 1. RECYCLED CONTENT

a. 52% Overall recycled content

### b. Yarn

100% PA 6 Solution Dyed Aqualon.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

## 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 1DBBF654. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products, B-rating,

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20150181-CBC2-EN

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 al, A-rating – Eco point score 0.291.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 52%. MR4 Post-Consumer recycled content: 0%. MR credit: Building product disclosure and optimisation - Material ingredients. ion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

### c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

# c. Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

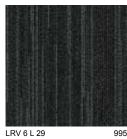
This product is strongly sound absorbent. It reduces the contact noise by 25 decibels ( $\Delta L_{w}$  - ISO 10140), with a perfect acoustic effect as result.



# 



LRV 7 L 31



995



956



LRV 11 L 39 981



LRV 12 L 41 139



CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1 B<sub>n</sub>-s1

PILE MATERIAL PA 6 Solution Dyed + PA 6 Space Dyed FASTNESS TO LIGHT ISO 105-B02 ≥ 7

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES fleece 10% recycled content included.

TOTAL WEIGHT Ca. 4 400 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01

PILE WEIGHT Ca. 550 g/m² THERMAL RESISTANCE ISO 8302

PILE ABOVE BACKING Ca. 309 g/m² IMPACT NOISE RATING ISO 10140

ΔL: 33 dB (1 000 Hz) ΔL<sub>w</sub>: 22 dB

TOTAL HEIGHT Ca. 5.7 mm SOUND ABSORPTION ISO 354  $\alpha_{w}$ : 0.15 Hz 125 250 500 1000 2000 4000

 $\alpha_{\rm S} = 0.03 = 0.02 = 0.05 = 0.16 = 0.26 = 0.35$  PILE HEIGHT Ca. 2.3 mm PERMANENT ANTISTATIC ISO 6356

PILE DENSITY Ca. 0.124 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

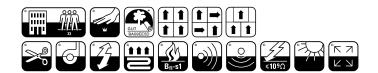
 TUFT DENSITY
 Ca. 156 000 /m²
 SIZE & PACKING box: 5 m² pallet: 20 boxes
 50 cm x 50 cm box: 5 m² pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 6

CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES Démarche HQE®: cf. FDES GUT-NR BA09EE5D Suivant NF P01-010 Déclaration du 30/07/2003 BRE ENP 428

Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.





LEED®











### 1. RECYCLED CONTENT

a. 51% Overall recycled content

### b. Yarn

PA 6 Solution Dyed + PA 6 Space Dyed.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number BA09EE5D. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20150181-CBC2-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\frac{\text{Hea 05}-\text{Acoustic performance}}{\text{To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 22 decibels (<math>\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 p. A-rating – Eco point score 0.299.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See
installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 51%.

MR4 Post-Consumer recycled content: 0%.

MR credit: Building product disclosure and optimisation - Material ingredients. tion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

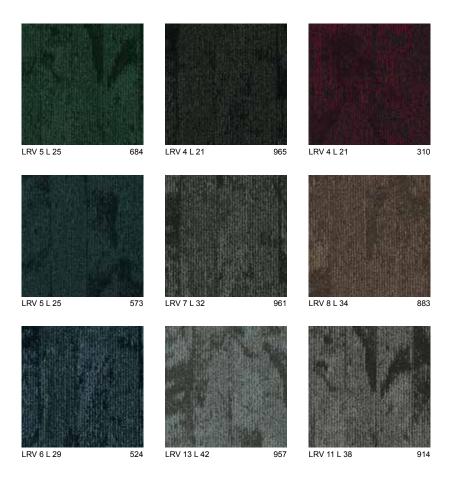
# c. Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 22 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.



# 



CONSTRUCTION Tufted 1/12" Loop Tip Sheared FIRE RESISTANCE EN 13501-1

100% ECONYL® yarn ISO 105-B02 PILE MATERIAL FASTNESS TO LIGHT 100% Regenerated Solution Dyed Nylon

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12

a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece 10% recycled content included.

TOTAL WEIGHT Ca. 4 600 g/m² **COLOUR FASTNESS TO WATER** EN ISO 105-E01

PILE WEIGHT Ca. 770 g/m² ISO 8302 THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 500 g/m² IMPACT NOISE RATING ISO 10140

TOTAL HEIGHT Ca. 7.0 mm ISO 354 SOUND ABSORPTION

 $\alpha_{\rm w}$ : 0.15

0.03 0.01 0.10 0.20 0.29 0.31

PILE HEIGHT Ca. 3.5 mm PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.143 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 230 000 /m² SIZE & PACKING 50 cm x 50 cm

pallet: 20 boxes

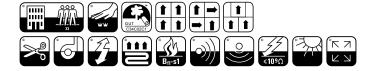
CLASSIFICATION EN 1307 NUMBER OF COLOURS 9 33 - LC2

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY

A: continuous use

Démarche HQE® : cf. FDES GUT-NR C34C02C1

suivant NF P01-010 Déclaration du 30/07/2003 Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.



**ENVIRONNEMENTALES** 



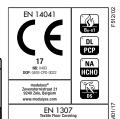




125 250 500 1000 2000 4000

ISO 6356







### 1. RECYCLED CONTENT

### a. 63% Overall recycled content.

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon. ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

# c. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001 certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns. Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

### Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

### c CARE

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO, emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of

### a. CRI (US and international)

### Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

### GUT (DE)

Gemeinschaft Umweltfreundlicher Teppichboden

# TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number C34C02C1. These criteria include VOC tresholds, odour and chemical substances.

### c. REACH (EU)

modulyss® complies with the strict European REACH standards.

### d. Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific  $\ensuremath{\mathsf{EPD}}$  in accordance with the ISO14025 and EN15804, is available for this product

# The EPD-declaration-number is EPD-MOD-20150329-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.
■ modulyss\* carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\underline{\text{Hea 05}-\text{Acoustic performance}}$  To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 24 decibels ( $\Delta L_{\rm w}$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

# MAT 1 – Life Cycle Impact BREEAM Rating Offices

BRLEAM Rating Offices
All modulyss\* products are rated for offices according to BRE Green Guide to Specification.
The BRE Global Environmental Profiles Certification Scheme requires evidence of a minimum of 6 months continuous production prior to a request for certification and the certification process takes approximately 6 months to complete. As a result, we are currently not able to provide a BRE Global Environmental Profile Certificate for Txture but please note that a similar product has obtained an Ecopoint score of 0.272 and is A<sup>+</sup>-rated for offices.

MAT 5 — Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

# WST 01 – Construction Waste Management To promote resource efficiency via the effective management and reduction of

construction waste. This product can contribute to waste reduction on site. See its installation, for more details. Concerns cutting waste on installation of carpet tiles

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 55%.

MR4 Post-Consumer recycled content: 6%.

MR credit: Building product disclosure and optimisation - Material ingredients. ion - Sourcing of raw materials.

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

### Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

modulyss® carpet tiles are free from odours (see GUT certification program).

# Acoustics

This product is strongly sound absorbent. It reduces the contact noise by 24 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.

# 9. MEMBER OF HEALTHY SEAS®

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® varn by Aquafil. Europe's premier manufacturer of PA 6 carpet fibre.



# 



CONSTRUCTION Tufted 1/12" Loop Tip Sheared FIRE RESISTANCE EN 13501-1

100% ECONYL® yarn ISO 105-B02 PILE MATERIAL FASTNESS TO LIGHT 100% Regenerated Solution Dyed Nylon

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES fleece 10% recycled content included.

TOTAL WEIGHT Ca. 4 600 g/m² **COLOUR FASTNESS TO WATER** EN ISO 105-E01

PILE WEIGHT Ca. 770 g/m² ISO 8302 THERMAL RESISTANCE 0.071 m<sup>2</sup> K/W

PILE ABOVE BACKING Ca. 500 g/m² IMPACT NOISE RATING ISO 10140

TOTAL HEIGHT Ca. 7.0 mm ISO 354 SOUND ABSORPTION  $\alpha_{\rm w}$ : 0.15

0.05 0.00 0.06 0.18 0.31 0.38

PILE HEIGHT Ca. 3.5 mm PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.143 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965

SIZE & PACKING 50 cm x 50 cm TUFT DENSITY Ca. 230 000 /m²

pallet: 20 boxes

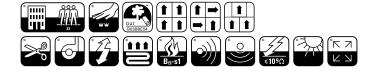
CLASSIFICATION EN 1307 NUMBER OF COLOURS 9 33 - LC2

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY

A: continuous use

Démarche HQE® : cf. FDES GUT-NR B03BBE54

suivant NF P01-010 Déclaration du 30/07/2003 **ENVIRONNEMENTALES** Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.







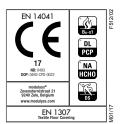


125 250 500 1000 2000 4000

ISO 6356

≤ 1 x 10° Ohm







### 1. RECYCLED CONTENT

### a. 63% Overall recycled content.

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon. ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

# c. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001 certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

### c CARE

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO, emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of

### a. CRI (US and international)

### Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

### b. GUT (DE)

Gemeinschaft Umweltfreundlicher Teppichboden

# TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number B03BBE54 These criteria include VOC tresholds, odour and chemical substances

### c. REACH (EU)

modulyss® complies with the strict European REACH standards.

### d. Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific  $\ensuremath{\mathsf{EPD}}$  in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20150329-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

# This product can contribute towards credits in:

Hea 02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.
■ modulyss\* carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\underline{\text{Hea 05}-\text{Acoustic performance}}$  To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 25 decibels ( $\Delta L_{\rm w}$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

# MAT 1 – Life Cycle Impact BREEAM Rating Offices

BREEAM Rating Offices
All modulyss\* products are rated for offices according to BRE Green Guide to Specification.
The BRE Global Environmental Profiles Certification Scheme requires evidence of a minimum of months continuous production prior to a request for certification and the certification process takes approximately 6 months to complete. As a result, we are currently not able to provide a BRE Global Environmental Profile Certificate for Mxture but please note that a similar product has obtained an Ecopoint score of 0.272 and is A\*-rated for offices.

MAT.5 — Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

# WST 01 – Construction Waste Management To promote resource efficiency via the effective management and reduction of

construction waste. This product can contribute to waste reduction on site. See its installation, for more details. Concerns cutting waste on installation of carpet tiles

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 55%.

MR4 Post-Consumer recycled content: 8%.

MR credit: Building product disclosure and optimisation - Material ingredients. tion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

### Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

# (see GUT certification program).

Acoustics This product is strongly sound absorbent. It reduces the contact noise by 25 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.

# 9. MEMBER OF HEALTHY SEAS®

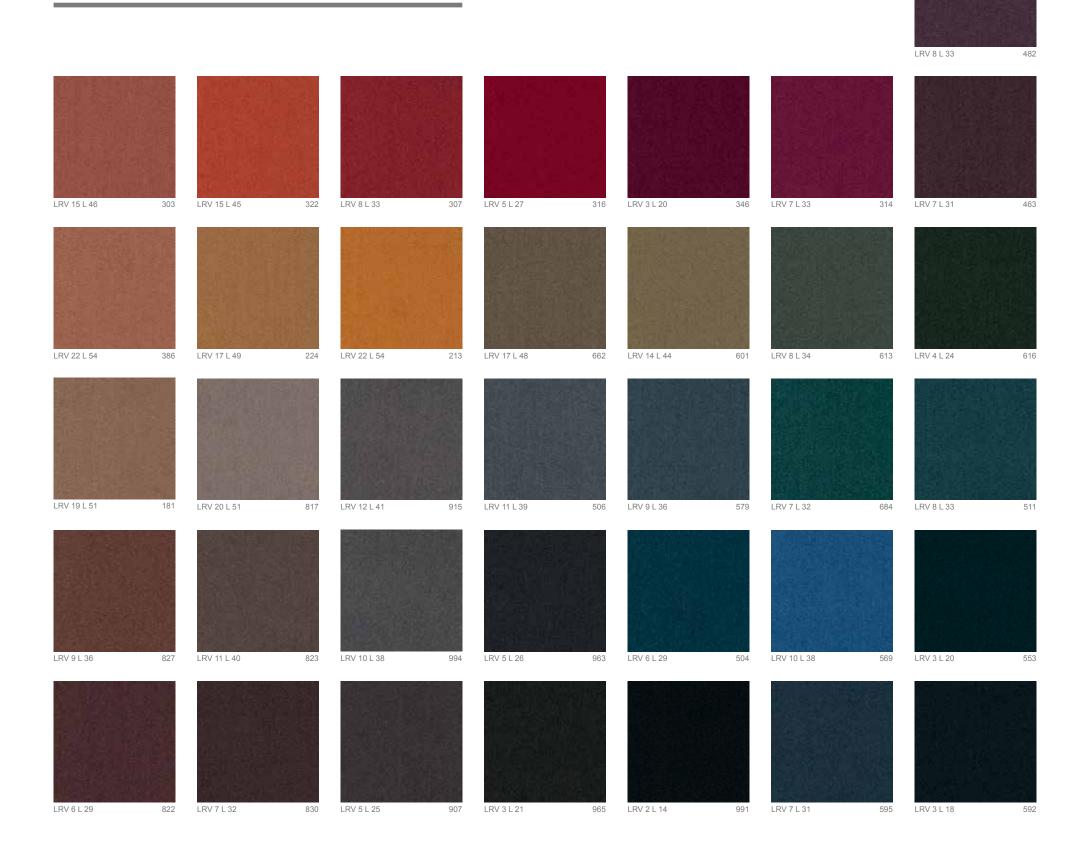
modulyss® carpet tiles are free from odours

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® varn by Aquafil. Europe's premier manufacturer of PA 6 carpet fibre.





# CAMBRIDGE



CONSTRUCTION Tuffed 1/10" Frisé FIRE RESISTANCE EN 13501-1  $B_{\eta}$ -s1

PILE MATERIAL 100% PA 6.6 Antron<sup>®</sup> FASTNESS TO LIGHT ISO 105-B02 ≥ 5

SECONDARY BACKING Back2Back: Modified bitumen enhanced with RUBBING FASTNESS EN ISO 105-X12

a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES

fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 650 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01 ≥ 4

PILE WEIGHT Ca. 1 050 g/m² THERMAL RESISTANCE ISO 8302

PILE ABOVE BACKING Ca. 728 g/m² IMPACT NOISE RATING  $\Delta L: 43 dB (1 000 Hz)$   $\Delta L_w: 28 dB$ 

TOTAL HEIGHT Ca. 8.0 mm SOUND ABSORPTION ISO 354

 $α_w$ ; 0.20 Hz 125 250 500 1000 2000 4000  $α_S$  0.02 0.02 0.09 0.27 0.38 0.51

PILE HEIGHT Ca. 5.0 mm PERMANENT ANTISTATIC ISO 6356 ≤ 2 kV

PILE DENSITY Ca. 0.146 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965, ≤ 10° Ohm

CLASSIFICATION EN 1307 NUMBER OF COLOURS 46, Special colours possible 32 - LC3

CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES Démarche HQE®: cf. FDES GUT-NR 79A87BF4
ENVIRONNEMENTALES suivant NF P01-010
Déclaration du 30/07/2003 BRE ENP 428

LEED® Product contributes toward satisfying
Credits under LEED®. For more information,
see the modulyss sustainable datasheets.













# 

# Sustainable datasheet

### 1. RECYCLED CONTENT

a. 49% Overall recycled content

### b. Yarn

100% PA 6.6 Antron®.

### c. Primary Backing

Colback SMR is produced out 100% post-consumer recycled PET, originated from bottle scrap

### d. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

 $\frac{Recycling\ raw\ yarns}{\text{All the left over and waste yarns are collected and recycled.}}$ 

 $\underline{\textbf{Ecological Packaging}}$  We only use cardboard boxes that are made of 100% recycled material.

### c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

### a. Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

### Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-603.

### b. CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1101 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number 79A87BF4. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170098-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 — Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyses' carpet titles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\frac{\text{Hea 05-Acoustic performance}}{\text{To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 28 decibels (<math>\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.20 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BrP 428 d, A-rating – Eco point score 0.415.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com. MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 32 - LC3 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See
installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mat MR4 Post-Industrial recycled content: 47%.
MR4 Post-Consumer recycled content: 2%.
MR credit: Building product disclosure and optimisation - Material ingredients on - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

MOQUETTES FDES
ucts and construction materials T2
T3
MOQUETTES FDES
T8
Т9
T10
T11
MOQUETTES FDES
T12
T13
Т

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

modulyss® carpet tiles are free from odours. (see GUT certification program)

This product is strongly sound absorbent. It reduces the contact noise by 28 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.



# PERPETUAL



Go to page 71 for the XTRA PERPETUAL colour palette.

CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE B<sub>n</sub>-s1 EN 13501-1

PILE MATERIAL 100% Polyamide FASTNESS TO LIGHT ISO 105-B02 ≥ 5

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer reinforced with

a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES

fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 600 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01 ≥ 4

PILE WEIGHT Ca. 700 g/m<sup>2</sup> THERMAL RESISTANCE ISO 8302

PILE ABOVE BACKING Ca. 450 g/m² IMPACT NOISE RATING  $\Delta L$ : 38 dB (1 000 Hz)  $\Delta L$ .: 27 dB

TOTAL HEIGHT Ca. 6.9 mm SOUND ABSORPTION ISO 354

Hz 125 250 500 1000 2000 4000  $\alpha_{\mathrm{S}}$  0.01 0.02 0.08 0.23 0.30 0.40

PILE HEIGHT Ca. 3.5 mm PERMANENT ANTISTATIC ISO 6356 ≤ 2 kV

PILE DENSITY Ca. 0.128 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 104 000 /m² SIZE & PACKING 50 cm x 50 cm box: 5 m² pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 33, Special colours possible 33 - LC2

CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES ENVIRONNEMENTALES Démarche HQE®: cf. FDES GUT-NR F2EE2716 suivant NF P01-010 Déclaration du 30/07/2003 BRE ENP 428

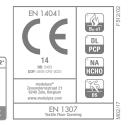
LEED® Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.











### 1. RECYCLED CONTENT

a. 51% Overall recycled content

### b. Yarn

100% Polyamide.

# Primary Backing

Colback SMR is produced out 100% post-consumer recycled PET, originated from bottle scrap

### d. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

 $\underline{\text{Recycling raw yarns}}$  All the left over and waste yarns are collected and recycled into new yarns.

 $\underline{\textbf{Ecological Packaging}}$  We only use cardboard boxes that are made of 100% recycled material.

### c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

# a. Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

# Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### b. CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1101 (see LEED®, point 7.b)

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number F2EE2716. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170095-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

# Hea 02 — Indoor Air Quality To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes. ■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit. ■ modulyses' carpet titles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\frac{\text{Hea 05-Acoustic performance}}{\text{To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 27 decibels (<math>\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.20 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BrP 428 u, A-rating – Eco point score 0.331.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

# MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3.
installation, for more details. Concerns cutting waste on installation of carpet tiles.

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mat MR4 Post-Industrial recycled content: 49%.
MR4 Post-Consumer recycled content: 2%.
MR credit: Building product disclosure and optimisation - Material ingredients tion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

### c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

MOQUETTES FDES
ucts and construction materials T2
T3
MOQUETTES FDES
T8
Т9
T10
T11
MOQUETTES FDES
T12
T13
Т

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

modulyss® carpet tiles are free from odours. (see GUT certification program)

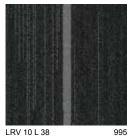
This product is strongly sound absorbent. It reduces the contact noise by 27 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.



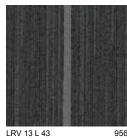








995



956



LRV 11 L 39 981 LRV 15 L 46





CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1

ISO 105-B02 PILE MATERIAL PA 6 Solution Dved + FASTNESS TO LIGHT PA 6 Space Dyed

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 600 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01

PILE WEIGHT Ca. 660 g/m² ISO 8302 THERMAL RESISTANCE

ISO 10140 PILE ABOVE BACKING Ca. 360 g/m² IMPACT NOISE RATING ΔL: 36 dB (1 000 Hz)

 $\Delta L_w$ : 24 dB

TOTAL HEIGHT Ca. 6.2 mm SOUND ABSORPTION Hz 125 250 500 1000 2000 4000

 $\alpha_{\mathsf{S}}$ 0.01 0.02 0.05 0.18 0.26 0.33 ISO 6356 PILE HEIGHT Ca. 2.8 mm PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.129 g/cm<sup>3</sup> TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 168 000 /m² 50 cm x 50 cm SIZE & PACKING box: 5 m<sup>2</sup> pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 6 33 - LC1

EN 986 CASTOR CHAIR SUITABILITY EN 985 DIMENSIONAL STABILITY A: continuous use

Démarche HQE® : cf. FDES GUT-NR A14C55D7 ENVIRONNEMENTALES suivant NF P01-010 Déclaration du 30/07/2003 BRE ENP 428

> Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.



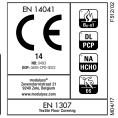


LEED®

ISO 354







# SHINIH-U

# Sustainable datasheet

### 1. RECYCLED CONTENT

a. 49% Overall recycled content.

### b. Yarn

PA 6 Solution Dyed + PA 6 Space Dyed.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number A14C55D7. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products, B-rating,

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170077-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\label{eq:heads} \frac{\text{Hea 05} - \text{Acoustic performance}}{\text{To ensure the buildings}} \ \text{acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 24 decibels ($\Delta L_{w}$ - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).}$ 

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 x, A-rating – Eco point score 0.318.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See
installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 49%.

MR4 Post-Consumer recycled content: 0%.

MR credit: Building product disclosure and optimisation - Material ingredients. tion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

# c. Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 24 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.



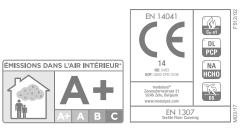
# NORMAL | NEW NORMAL



	NORMAL	NEW NORMAL		NORMAL	NEW NORMAL
CONSTRUCTION	Tufted 1/10" Loop	Tufted 1/10" Loop	FIRE RESISTANCE	EN 13501-1 C <sub>ft</sub> -s1	EN 13501-1 C <sub>fl</sub> -s1
PILE MATERIAL	100% Polyolefine	8% PA space dyed + 92% Polyolefine	FASTNESS TO LIGHT	ISO 105-B02 ≥ 5-6	ISO 105-B02 ≥ 5-6
SECONDARY BACKING	Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece 10% recycled content included.	Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece 10% recycled content included.	RUBBING FASTNESS	EN ISO 105-X12 ≥ 4	EN ISO 105-X12 ≥ 4
TOTAL WEIGHT	Ca. 4 100 g/m²	Ca. 4 100 g/m²	COLOUR FASTNESS TO WATER	EN ISO 105-E01 ≥ 4	EN ISO 105-E01 ≥ 4
PILE WEIGHT	Ca. 580 g/m²	Ca. 580 g/m²	THERMAL RESISTANCE	ISO 8302 0.045 m <sup>2</sup> K/W	ISO 8302 0.045 m <sup>2</sup> K/W
PILE ABOVE BACKING	Ca. 340 g/m²	Ca. 340 g/m²	IMPACT NOISE RATING	ISO 10140 ΔL: 39 dB <sub>(1 000 Hz)</sub> ΔL <sub>w</sub> : 26 dB	ISO 10140 ΔL: 39 dB <sub>(1 000 Hz)</sub> ΔL <sub>w</sub> : 26 dB
TOTAL HEIGHT	Ca. 6.2 mm	Ca. 6.2 mm	SOUND ABSORPTION	$\begin{array}{c} \text{ISO 354} \\ \alpha_w; \ 0.20 \\ \text{Hz} \ \ 125 \ \ 250 \ \ 500 \ \ 1000 \ 2000 \ 4000 \\ \alpha_S \ \ 0.01 \ \ 0.03 \ \ 0.07 \ \ 0.19 \ \ 0.29 \ \ 0.33 \end{array}$	$\begin{array}{c} \text{ISO 354} \\ \alpha_{w}; \ 0.20 \\ \text{Hz}  125  250  500  1000 \ 2000 \ 4000 \\ \alpha_{\text{S}}  0.01  0.03  0.07  0.19  0.29  0.33 \end{array}$
PILE HEIGHT	Ca. 3.4 mm	Ca. 3.4 mm	PERMANENT ANTISTATIC	ISO 6356 ≤ 2 kV	ISO 6356 ≤ 2 kV
PILE DENSITY	Ca. 0.100 g/cm <sup>3</sup>	Ca. 0.100 g/cm <sup>3</sup>	TRANSVERSAL RESISTANCE	ISO/DIS 10965, ≤ 10¹² Ohm	ISO/DIS 10965, ≤ 10¹² Ohm
TUFT DENSITY	Ca. 156 000 /m²	Ca. 156 000 /m²	SIZE & PACKING	50 cm x 50 cm box: 5 m <sup>2</sup> pallet: 20 boxes	50 cm x 50 cm box: 5 m <sup>2</sup> pallet: 20 boxes
CLASSIFICATION	EN 1307 31 - LC1	EN 1307 31 - LC1	NUMBER OF COLOURS	6	12
CASTOR CHAIR SUITABILITY	EN 985 B: occasional use	EN 985 B: occasional use	DIMENSIONAL STABILITY	EN 986 Max. 0.2%	EN 986 Max. 0.2%
			GUT-NR	22555	22555







# NORMAL | NEW NO

# Sustainable datasheet

### 1. RECYCLED CONTENT

a. 53% Overall recycled content.

### b. Yarn

NORMAL: 100% Polyolefine. NEW NORMAL: 8% PA Space Dyed + 92% Polyolefine

Colback SMR is produced out 100% post-consumer recycled PET, originated from bottle scrap.

# d. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### e. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### a. Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/myo/

### 3. INSTALLATION

### a. Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

### b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till  $\pm$  10%. More information can be found in our installation instructions.

### 4. END OF LIFE

### a Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

### c. CARE

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO2 emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

# 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

# a. GUT (DE)

Gemeinschaft Umweltfreundlicher Teppichboden TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number 22555. These criteria include VOC tresholds, odour and chemical substances.

# b. REACH (EU)

modulyss® complies with the strict European REACH standards.

### 6. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

### BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

### Hea 05 - Acoustic performance

The stort student performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 26 decibels  $(\Delta L_w - ISO 10140)$  and has an absorption coefficient of 0.20 (ISO 354)

MAT 5 — Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 31 - LC1 for intensive use in a contract environment.

### b. LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Building product disclosure and optimisation - Sourcing of raw materials. MR4 Post-Industrial recycled content: 51%. MR4 Post-Consumer recycled content: 2%.

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

### 7. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

### No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

modulyss® carpet tiles are free from odours. (see GUT certification program)

# Acoustics

This product is strongly sound absorbent. It reduces the contact noise by 26 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.





CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1
B.-s1

PILE MATERIAL 92% PA 6 Solution Dyed Aqualon + FASTNESS TO LIGHT 1SO 105-B02 ≥ 5-6

SECONDARY BACKING Back2Back: Modified bitumen enhanced with RUBBING FASTNESS EN ISO 105-X12

a thermoplastic elastomer, reinforced with ≥ a glass fibre fleece covered with 100% PES fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 300 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01 ≥ 4

PILE WEIGHT Ca. 540 g/m² THERMAL RESISTANCE ISO 8302

PILE ABOVE BACKING Ca. 330 g/m² IMPACT NOISE RATING  $\Delta L: 37 dB (1 000 Hz) \Delta L. : 25 dB$ 

TOTAL HEIGHT Ca. 6.4 mm SOUND ABSORPTION ISO 354

m Hz 125 250 500 1000 2000 4000  $m lpha_S$  0.01 0.04 0.07 0.19 0.29 0.34

PILE HEIGHT Ca. 2.9 mm PERMANENT ANTISTATIC ISO 6356 ≤ 2 kV

PILE DENSITY Ca. 0.114 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

CLASSIFICATION EN 1307 33 - LC1 NUMBER OF COLOURS 16

CASTOR CHAIR SUITABILITY EN 985
A: continuous use

DIMENSIONAL STABILITY EN 986
Max. 0.2%

DONNÉES ENVIRONNEMENTALES Démarche HQE®: cf. FDES Suivant NF P01-010 Déclaration du 30/07/2003 BRE ENP 428

LEED® Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.











### 1. RECYCLED CONTENT

a. 51% Overall recycled content

### b. Yarn

92% PA 6 Solution Dyed Aqualon + 8% PA 6 Space Dyed.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

### b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

# CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number EFEBD30E. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20150181-CBC2-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 k, A-rating – Eco point score 0.294.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 51%.

MR4 Post-Consumer recycled content: 0%.

MR credit: Building product disclosure and optimisation - Material ingredients. tion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

### Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

# c. Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 25 decibels ( $\Delta L_{w}$  - ISO 10140), with a perfect acoustic effect as result.



















66

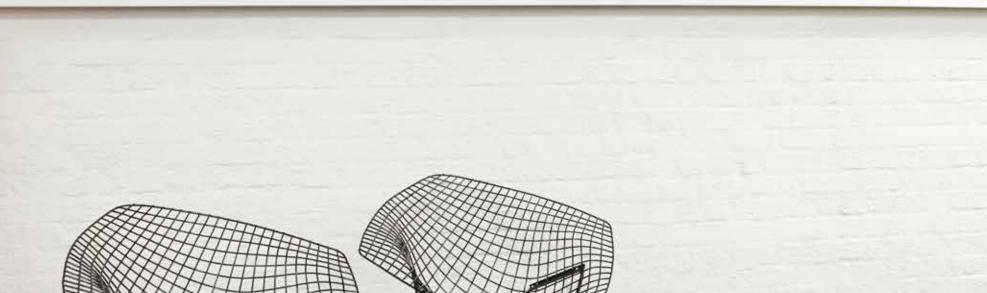












modu lyss°

**IN-GROOVE 966** 









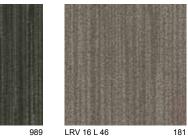
942











LRV 4 L 24 966 LRV 8 L 34

LRV 5 L 25

LRV 8 L 34

989

LRV 16 L 46

CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1

PILE MATERIAL 100% PA 6 Aqualon FASTNESS TO LIGHT ISO 105-B02

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a thermoplastic elastomer, reinforced with Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with ≥ 4

a glass fibre fleece covered with 100% PES

fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 700 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01

PILE WEIGHT Ca. 740 g/m² THERMAL RESISTANCE ISO 8302

PILE ABOVE BACKING Ca. 418 g/m² IMPACT NOISE RATING  $\Delta L$ : 36 dB (1 000 Hz)  $\Delta L$ . 22 dB

TOTAL HEIGHT Ca. 7.2 mm SOUND ABSORPTION ISO 354

Hz 125 250 500 1000 2000 4000  $lpha_{
m S}$  0.01 0.04 0.05 0.18 0.25 0.32

PILE HEIGHT Ca. 3.6 mm PERMANENT ANTISTATIC ISO 6356 ≤ 2 kV

PILE DENSITY Ca. 0.116 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

CLASSIFICATION EN 1307 33 - LC2 NUMBER OF COLOURS 7

CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES ENVIRONNEMENTALES Démarche HQE®: cf. FDES GUT-NR D64DD70E suivant NF P01-010 Déclaration du 30/07/2003 BRE ENP 428

Product contributes toward satisfying Credits under LEED\*. For more information, see the modulyss sustainable datasheets.

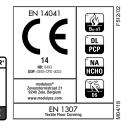




LEED®







### 1. RECYCLED CONTENT

a. 50% Overall recycled content.

### b. Yarn

100% PA 6 Agualon.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number D64DD70E. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170077-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea.02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit
■ modulyss³ carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\label{eq:heads} \frac{\text{Hea 05} - \text{Acoustic performance}}{\text{To ensure the buildings}} \ \text{acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 22 decibels ($\Delta_{\text{w}}$ - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).}$ 

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 o, A-rating – Eco point score 0.331.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 50%.

MR4 Post-Consumer recycled content: 0%.

MR credit: Building product disclosure and optimisation - Material ingredients. tion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# d. ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

### 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 22 decibels (ΔL., - ISO 10140), with a perfect acoustic effect as result



XTRA



Go to page 23 for the colour palette of STEP, to page 47 for CAMBRIDGE and to page 51 for PERPETUAL.

Please find the technical datasheets of XTRA on the following pages:

	Page
Step	24
Cambridge	48
Perpetual	52



Please find the sustainable datasheets of XTRA on the following pages:

	Page
Step	25
Cambridge	49
Perpetual	53



# FIRST ABSOLUTE



CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1

PILE MATERIAL 100% PA 6 Solution Dyed Aqualon FASTNESS TO LIGHT ISO 105-B02

SECONDARY BACKING Back2Back: Modified bitumen enhanced with RUBBING FASTNESS EN ISO 105-X12

a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 500 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01 ≥ 4

PILE WEIGHT Ca. 730 g/m² THERMAL RESISTANCE ISO 8302

PILE ABOVE BACKING Ca. 420 g/m² IMPACT NOISE RATING LISO 10140 AL: 39 dB (1 000 Hz)

TOTAL HEIGHT Ca. 7.2 mm SOUND ABSORPTION ISO 354

 $lpha_{_{
m W}}$ : 0.20 Hz 125 250 500 1000 2000 4000

PILE HEIGHT Ca. 3.5 mm PERMANENT ANTISTATIC ISO 6356 ≤ 2 kV

PILE DENSITY Ca. 0.120 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 186 000 /m² SIZE & PACKING 50 cm x 50 cm box: 5 m² pallet: 20 boxes

CLASSIFICATION EN 1307 33 - LC2 NUMBER OF COLOURS 14

CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES Démarche HQE®: cf. FDES GUT-NR 60CAEA17
ENVIRONNEMENTALES Suivant NF P01-010 Déclaration du 30/07/2003 BRE 6NP 428

LEED® Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.







0.01 0.04 0.09 0.22 0.34 0.42





### 1. RECYCLED CONTENT

a. 50% Overall recycled content

### b. Yarn

100% PA 6 Solution Dyed Aqualon.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

## 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

## CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number E0CAEA17. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170077-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 – Acoustic performance</u>
To ensure the buildings' acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces contain 29 decibels ( $\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.20 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 j. A-rating – Eco point score 0.324.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 50%.

MR4 Post-Consumer recycled content: 0%.

MR credit: Building product disclosure and optimisation - Material ingredients. tion - Sourcing of raw materials.

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

### c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

## 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

# c. Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 29 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.







592

LRV 4 L 22



LRV 16 L 47







LRV 17 L 48

181

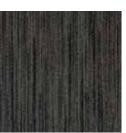


140

511



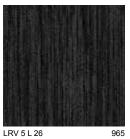
LRV 11 L 39



LRV 7 L 31 989



LRV 7 L 32



LRV 5 L 26



LRV 7 L 32

CONSTRUCTION Tufted 1/10" Loop Tip Sheared FIRE RESISTANCE EN 13501-1

PILE MATERIAL 100% ECONYL® yarn FASTNESS TO LIGHT 100% Regenerated Space Dyed Nylon FASTNESS TO LIGHT 100% Regenerated Space Dyed Nylon ≥ 7

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a thermoplastic elastomer, reinforced with Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with ≥ 4

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 400 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01

PILE WEIGHT Ca. 800 g/m² THERMAL RESISTANCE ISO 8302

PILE ABOVE BACKING Ca. 460 g/m² IMPACT NOISE RATING  $\Delta L$ : 33 dB (1 000 Hz)  $\Delta L$ : 23 dB

TOTAL HEIGHT Ca. 6.5 mm SOUND ABSORPTION ISO 354

 $H_{
m Z}$  125 250 500 1000 2000 4000  $lpha_{
m S}$  0.01 0.02 0.06 0.16 0.29 0.36

PILE HEIGHT Ca. 3.4 mm PERMANENT ANTISTATIC ISO 6356 ≤ 2 kV

PILE DENSITY Ca. 0.135 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

CLASSIFICATION EN 1307 32 - LC2 NUMBER OF COLOURS 11

CASTOR CHAIR SUITABILITY EN 985
A: continuous use

DIMENSIONAL STABILITY EN 986
Max. 0.2%

DONNÉES BNVIRONNEMENTALES Démarche HQE®: cf. FDES GUT-NR Suivant NF P01-010 Déclaration du 30/07/2003 BRE ENP 428

LEED® Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.











### 1. RECYCLED CONTENT

### a. 65% Overall recycled content

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Space Dyed Nylon. ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

## Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001 certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns. Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

### c CARE

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO, emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1101 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number F5450983. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products, B-rating,

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20150329-CBC1-EN

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

### BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea.02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit
■ modulyss³ carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 – Acoustic performance</u>
To ensure the buildings' acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 23 decibels ( $\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 b, A\*-rating – Eco point score 0.264.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 32 - LC2 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 56%.

MR4 Post-Consumer recycled content: 9%.

MR credit: Building product disclosure and optimisation - Material ingredients. tion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

modulyss® carpet tiles are free from odours (see GUT certification program).

# Acoustics

This product is strongly sound absorbent. It reduces the contact noise by 23 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.

# 9. MEMBER OF HEALTHY SEAS®

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® yarn by Aquafil, Europe's premier manufacturer of PA 6 carpet fibre.









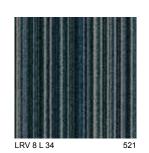












CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1

PILE MATERIAL 100% PA 6 Solution Dyed Aqualon FASTNESS TO LIGHT ISO 105-B02

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a thermoplastic elastomer, reinforced with Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with ≥ 4

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included.

TOTAL WEIGHT Ca. 4 300 g/m<sup>2</sup> COLOUR FASTNESS TO WATER EN ISO 105-E01

PILE WEIGHT Ca. 540 g/m² THERMAL RESISTANCE ISO 8302

PILE ABOVE BACKING Ca. 330 g/m² IMPACT NOISE RATING LISO 10140 AL: 37 dB (1 000 Hz)

 $\Delta L_{w}$ : 25 dB

TOTAL HEIGHT Ca. 6.4 mm SOUND ABSORPTION ISO 354

Hz 125 250 500 1000 2000 4000  $lpha_{
m S}$  0.01 0.04 0.07 0.19 0.29 0.34

PILE HEIGHT Ca. 2.9 mm PERMANENT ANTISTATIC ISO 6356 ≤ 2 kV

PILE DENSITY Ca. 0.114 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

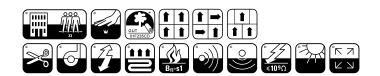
TUFT DENSITY Ca. 156 000 /m² SIZE & PACKING 50 cm x 50 cm box: 5 m² pallet: 20 boxes

CLASSIFICATION EN 1307 33 - LC1 NUMBER OF COLOURS 9

CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES ENVIRONNEMENTALES Démarche HQE®: cf. FDES suivant NF P01-010 Déclaration du 30/07/2003 BRE ENP 428

LEED® Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.













# FIRST STRIP

# Sustainable datasheet

### 1. RECYCLED CONTENT

a. 52% Overall recycled content

### b. Yarn

100% PA 6 Solution Dyed Aqualon.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

## 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 01F235CD. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products, B-rating,

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20150181-CBC2-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 I, A-rating – Eco point score 0.294.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 52%. MR4 Post-Consumer recycled content: 0%. MR credit: Building product disclosure and optimisation - Material ingredients. ion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

## 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

# c. Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 25 decibels ( $\Delta L_{w}$  - ISO 10140), with a perfect acoustic effect as result.

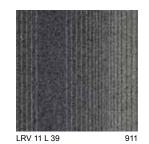






LRV 15 L 45











CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1

PILE MATERIAL 100% PA 6 Solution Dyed Aqualon FASTNESS TO LIGHT ISO 105-B02

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a thermoplastic elastomer, reinforced with Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with ≥ 4

a glass fibre fleece covered with 100% PES

fleece. 10% recycled content included.

TOTAL WEIGHT

Ca. 4 300 g/m²

COLOUR FASTNESS TO WATER

EN ISO 105-E01

≥4

PILE WEIGHT Ca. 540 g/m² THERMAL RESISTANCE ISO 8302 0.047 m² K/W

PILE ABOVE BACKING Ca. 330 g/m² IMPACT NOISE RATING ISO 10140 \( \Delta L : 37 dB (1 000 Hz) \) \( \Delta L ... : 25 dB \)

TOTAL HEIGHT Ca. 6.4 mm SOUND ABSORPTION ISO 354

 $α_{w}$  0.20 Hz 125 250 500 1000 2000 4000  $α_{S}$  0.01 0.04 0.07 0.19 0.29 0.34

PILE HEIGHT Ca. 2.9 mm PERMANENT ANTISTATIC ISO 6356

PILE DENSITY Ca. 0.114 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

CLASSIFICATION EN 1307 33 - LC1 NUMBER OF COLOURS 6

CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES ENVIRONNEMENTALES Démarche HQE®: cf. FDES Suivant NF P01-010 Déclaration du 30/07/2003 BRE DC71ACFA

LEED® Product contributes toward satisfying
Credits under LEED®. For more information,
see the modulyss sustainable datasheets.











# Sustainable datasheet

### 1. RECYCLED CONTENT

a. 52% Overall recycled content

### b. Yarn

100% PA 6 Solution Dyed Aqualon.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

## 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

# Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number DC71ACFA. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products, B-rating,

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20150181-CBC2-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea.02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit
■ modulyss³ carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 m, A-rating – Eco point score 0.294.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction MR credit: Building product disclosure and optimisation -Environmental Product Declarations. MR4 Post-Industrial recycled content: 52%. MR4 Post-Consumer recycled content: 0%.

MR credit: Building product disclosure and optimisation - Material ingredients

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

### HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

### modulyss® carpet tiles are free from odours (see GUT certification program).

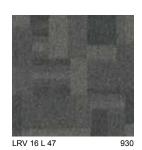
Acoustics This product is strongly sound absorbent. It reduces the contact noise by 25 decibels ( $\Delta L_{\rm w}$  - ISO 10140), with a perfect acoustic effect as result.



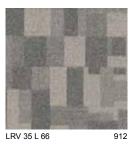
FIRST BLOCKS



575 LRV 6 L 29



993







CONSTRUCTION	Tufted 1/12" loop	FIRE RESISTANCE	EN 13501-1 B <sub>n</sub> -s1
PILE MATERIAL	100% PA 6 Solution Dyed Aqualon	FASTNESS TO LIGHT	ISO 105-B02 ≥ 7
SECONDARY BACKING	Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece. 10% recycled content included.	RUBBING FASTNESS	EN ISO 105-X12 ≥ 4
TOTAL WEIGHT	Ca. 4 400 g/m²	COLOUR FASTNESS TO WATER	EN ISO 105-E01 ≥ 4
PILE WEIGHT	Ca. 600 g/m²	THERMAL RESISTANCE	ISO 8302 0.064 m² K/W
PILE ABOVE BACKING	Ca. 335 g/m²	IMPACT NOISE RATING	ISO 10140 ΔL: 36 dB (1 000 Hz) ΔL <sub>w</sub> : 24 dB
TOTAL HEIGHT	Ca. 6.8 mm	SOUND ABSORPTION	ISO 354 α <sub>w</sub> ; 0.15 Hz 125 250 500 1000 2000 4000
PILE HEIGHT	Ca. 3.1 mm	PERMANENT ANTISTATIC	α <sub>S</sub> 0.01 0.01 0.06 0.18 0.27 0.37 ISO 6356 ≤ 2 kV
PILE DENSITY	Ca. 0.108 g/cm³	TRANSVERSAL RESISTANCE	ISO/DIS 10965 ≤ 1 x 10° Ohm
TUFT DENSITY	Ca. 174 000 /m²	SIZE & PACKING	50 cm x 50 cm box: 5 m <sup>2</sup> pallet: 20 boxes
CLASSIFICATION	EN 1307 33 - LC1	NUMBER OF COLOURS	6
CASTOR CHAIR SUITABILITY	EN 985 A: continuous use	DIMENSIONAL STABILITY	EN 986 Max. 0.2%
DONNÉES ENVIRONNEMENTALES	Démarche HQE® : cf. FDES suivant NF P01-010 Déclaration du 30/07/2003	GUT-NR BRE	FD55AAEA ENP 428



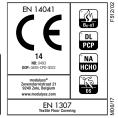




LEED® Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.







# HRSI BLOC

# Sustainable datasheet

### 1. RECYCLED CONTENT

a. 49% Overall recycled content

### b. Yarn

100% PA 6 Solution Dyed Aqualon.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

## 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number FD55AAEA. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20150181-CBC2-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea.02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit
■ modulyss³ carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\label{eq:heads} \frac{\text{Hea 05} - \text{Acoustic performance}}{\text{To ensure the buildings}} \ \text{acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces contact 24 decibels ($\Delta_{\text{w}}$ - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).}$ 

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 ah, A-rating – Eco point score 0.308.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction MR credit: Building product disclosure and optimisation -Environmental Product Declarations. MR4 Post-Industrial recycled content: 49%. MR4 Post-Consumer recycled content: 0%.

MR credit: Building product disclosure and optimisation - Material ingredients

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

### HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

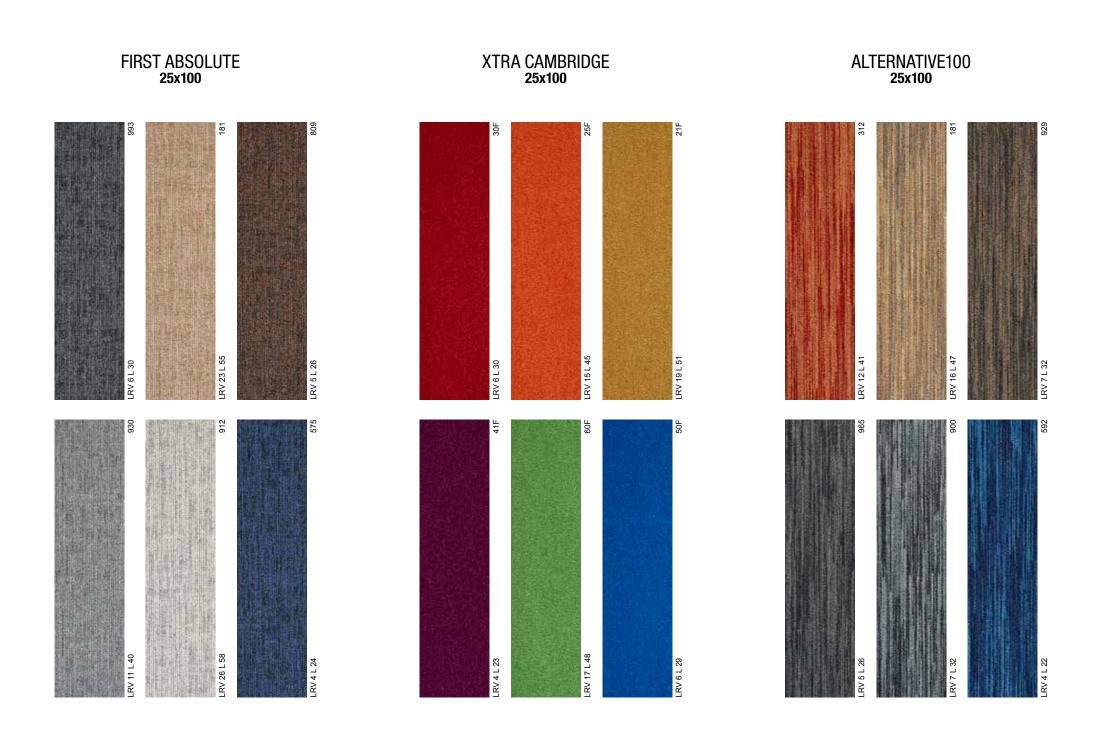
modulyss® carpet tiles are free from odours (see GUT certification program).

# Acoustics

This product is strongly sound absorbent. It reduces the contact noise by 24 decibels ( $\Delta L_{\rm w}$  - ISO 10140), with a perfect acoustic effect as result.

94 modu lyss° NEW SHAPES FIRST ABSOLUTE 181, 575, 809, 912, 930, 993

# NEW SHAPES



# NEW SHAPES

# 96

# **Technical datasheet**

Please find the technical datasheets of ALTERNATIVE100, FIRST ABSOLUTE and XTRA CAMBRIDGE on the following pages:

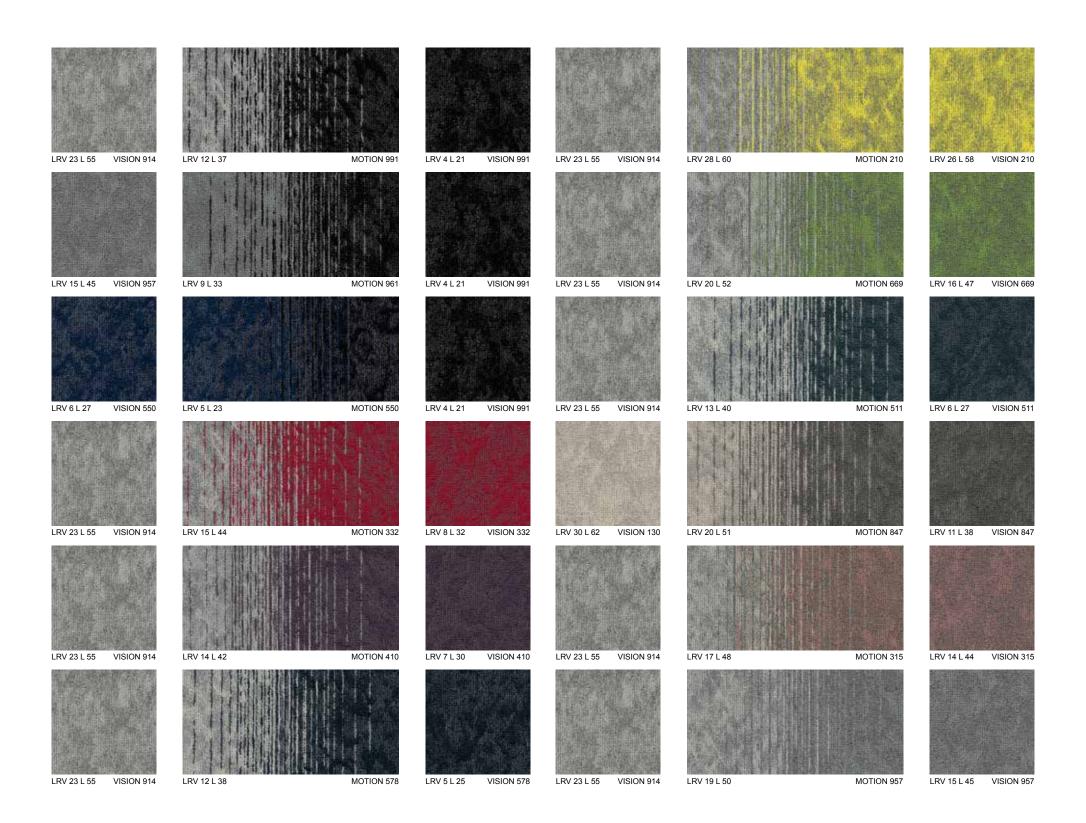
	Page
Alternative100	80
First Absolute	76
Cambridge	48

Please find the sustainable datasheets of ALTERNATIVE100, FIRST ABSOLUTE and XTRA CAMBRIDGE on the following pages:

	Page
Alternative100	81
First Absolute	77
Cambridge	49

98 VISION 315, MOTION 315, VISION 914, MOTION 957, VISION 957

# MOTION /// VISION



# **Technical datasheet**

	MOTION	VISION		MOTION	VISION
CONSTRUCTION	Tufted 1/12" Loop	Tufted 1/12" Loop	FIRE RESISTANCE	EN 13501-1 B <sub>n</sub> -s1	EN 13501-1 B <sub>n</sub> -s1
PILE MATERIAL	100% PA 6 Solution Dyed Nylon	100% PA 6 Solution Dyed Nylon	FASTNESS TO LIGHT	ISO 105-B02 ≥ 7	ISO 105-B02 ≥ 7
SECONDARY BACKING	Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece 10% recycled content included.	Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece 10% recycled content included.	RUBBING FASTNESS	EN ISO 105-X12 ≥ 4	EN ISO 105-X12 ≥ 4
TOTAL WEIGHT	Ca. 4 600 g/m²	Ca. 4 600 g/m²	COLOUR FASTNESS TO WATER	EN ISO 105-E01 ≥ 4	EN ISO 105-E01 ≥ 4
PILE WEIGHT	Ca. 680 g/m²	Ca. 680 g/m²	THERMAL RESISTANCE	ISO 8302 0.091 m <sup>2</sup> K/W	ISO 8302 0.091 m <sup>2</sup> K/W
PILE ABOVE BACKING	Ca. 410 g/m²	Ca. 410 g/m²	IMPACT NOISE RATING	ISO 10140 $\Delta L_w$ : 25 dB	ISO 10140 ΔL <sub>w</sub> : 25 dB
TOTAL HEIGHT	Ca. 7.7 mm	Ca. 7.7 mm	SOUND ABSORPTION	$\begin{array}{c} \text{ISO 354} \\ \alpha_{w}; \ 0.20 \\ \text{Hz}  125  250  500  1000 \ 2000 \ 4000 \\ \alpha_{\text{S}}  0.04  0.00  0.13  0.20  0.36  0.40 \\ \end{array}$	$\begin{array}{c} \text{ISO 354} \\ \alpha_w \colon 0.20 \\ \text{Hz}  125  250  500  1000 \ 2000 \ 4000 \\ \alpha_S  0.03  0.00  0.10  0.19  0.36  0.42 \\ \end{array}$
PILE HEIGHT	Ca. 3.7 mm	Ca. 3.7 mm	PERMANENT ANTISTATIC	ISO 6356 ≤ 2 kV	ISO 6356 ≤ 2 kV
PILE DENSITY	Ca. 0.110 g/cm³	Ca. 0.110 g/cm <sup>3</sup>	TRANSVERSAL RESISTANCE	ISO/DIS 10965 ≤ 1 x 10° Ohm	ISO/DIS 10965 ≤ 1 x 10° Ohm
TUFT DENSITY	Ca. 197 500 /m²	Ca. 197 500 /m²	SIZE & PACKING	50 cm x 50 cm box: 5 m <sup>2</sup> pallet: 20 boxes	50 cm x 50 cm box: 5 m <sup>2</sup> pallet: 20 boxes
CLASSIFICATION	EN 1307 33 - LC2	EN 1307 33 - LC2	NUMBER OF COLOURS	12	13
CASTOR CHAIR SUITABILITY	EN 985 A: continuous use	EN 985 A: continuous use	DIMENSIONAL STABILITY	EN 986 Max. 0.2%	EN 986 Max. 0.2%
DONNÉES	Démarche HQE® : cf. FDES	Démarche HQE® : cf. FDES	GUT-NR	11000732	6C678441
ENVIRONNEMEN- TALES	suivant NF P01-010 Déclaration du 30/07/2003	suivant NF P01-010 Déclaration du 30/07/2003	LEED®	Product contributes toward satisfying Credits under LEED*. For more information, see the modulyss sustainable datasheets.	Product contributes toward satisfying Credits under LEED*. For more information, see the modulyss sustainable datasheets.

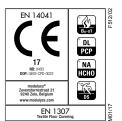












### 1. RECYCLED CONTENT

a. 48% Overall recycled content.

### b. Yarn

100% PA6 Solution Dyed Nylon.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain; from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/

# 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

# Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of

### a. CRI (US and international)

### Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

### GUT (DE)

Gemeinschaft Umweltfreundlicher Teppichboden

# TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, 11000732 (MOTION) -6C678441 (VISION). These criteria include VOC tresholds, odour and chemical substances.

### REACH (EU)

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, , is available for this product. The EPD-declaration-number is EPD-MOD-20170077-CBC1-EN.

## 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

modulyss® carpet tiles meet the requirements of EN14041, including E1 classification formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 — Acoustic performance</u>
To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by  $26 \, (\text{MOTION}) - 27 \, (\text{VISION})$  decibels ( $\Delta L_{\text{w}}$  - ISO 10140) and has an absorption coefficient of 0.20 (ISO 354).

MAT 1 – <u>Life Cycle Impact</u>
All modulyss\* products are rated for offices according to BRE Green Guide to Specification.
The BRE Global Environmental Profiles Certification Scheme requires evidence of a minimum of 6 months continuous production prior to a request for certification and the certification process takes approximately 6 months to complete. As a result, we are currently not able to provide a BRE Global Environmental Profile Certificate for Motion /// Vision but please note that a similar product has obtained an Ecopoint score of 0.325 and is A-rated for offices.

MAT 5 — Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3,
installation, for more details. Concerns cutting waste on installation of carpet tiles.

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation MR4 Post-Industrial recycled content: 48%. MR4 Post-Consumer recycled content: 01%. tion - Sourcing of raw materials.

MR credit: Building product disclosure and optimisation - Material ingredients

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

### Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13
,	

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

modulyss® carpet tiles are free from odours (see GUT certification program). Acoustics

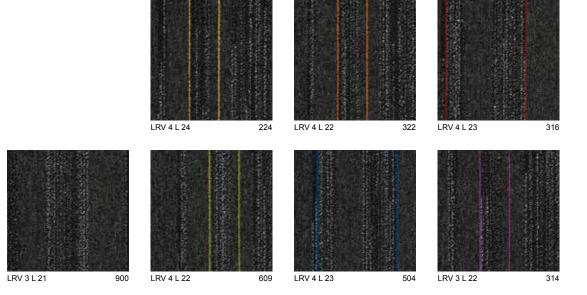
### This product is strongly sound absorbent. It reduces the contact noise by 26 (MOTION) – 27 (VISION) decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect



modu lyss°

PURE AIR100 224, MILLENNIUM100 965

# PURE AIR100



# PURE AIR10

# **Technical datasheet**

CONSTRUCTION Tufted 1/10" Loop

FIRE RESISTANCE EN 13501-1

100% PA 6 ECONYL® yarn PILE MATERIAL Regenerated Solution Dyed Nylon +

ISO 105-B02 FASTNESS TO LIGHT

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with

**RUBBING FASTNESS** 

EN ISO 105-X12

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included.

Regenerated Space Dyed Nylon

TOTAL WEIGHT Ca. 4 700 g/m²

**COLOUR FASTNESS TO WATER** 

EN ISO 105-E01

PILE WEIGHT Ca. 700 g/m²

THERMAL RESISTANCE

ISO 8302

PILE ABOVE BACKING Ca. 402 g/m²

IMPACT NOISE RATING

ISO 10140  $\Delta L \colon 37~dB~{}_{\text{(1 000 Hz)}}$ 

 $\Delta L_w$ : 24 dB

TOTAL HEIGHT Ca. 6.6 mm

PILE HEIGHT Ca. 3.0 mm

ISO 354  $\alpha_{\rm w}$ : 0.15

125 250 500 1000 2000 4000 Hz 0.00 0.00 0.05 0.15 0.25 0.30

PERMANENT ANTISTATIC

SOUND ABSORPTION

ISO 6356

PILE DENSITY Ca. 0.134 g/cm³

TRANSVERSAL RESISTANCE

ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 180 000 /m²

SIZE & PACKING 50 cm x 50 cm

pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 7

CASTOR CHAIR SUITABILITY EN 985

DIMENSIONAL STABILITY

EN 986

**ENVIRONNEMENTALES** 

A: continuous use

Démarche HQE® : cf. FDES suivant NF P01-010

GUT-NR 0F4ECF71

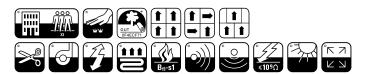
Déclaration du 30/07/2003

BRE ENP 428

GUI CERTIFICATE Gold Standard

LEED®

Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.













### 1. RECYCLED CONTENT

### a. 65% Overall recycled content.

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon + Regenerated Space Dyed Nylon.

ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

### c. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,

 $\frac{Recycling\ raw\ yarns}{All\ the\ left\ over\ and\ waste\ yarns\ are\ collected\ and\ recycled\ into\ new\ yarns.}$ 

Ecological Packaging We only use cardboard boxes that are made of 100% recycled material.

### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/

# 3. INSTALLATION

# a. Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

### 4. END OF LIFE

### Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

# Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 0F4ECF71. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20150329-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

## BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea.02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit
■ modulyss³ carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 – Acoustic performance</u>
To ensure the buildings' acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 24 decibels ( $\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 ak, A<sup>\*</sup>-rating – Eco point score 0.26.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mat MR4 Post-Industrial recycled content: 58%.
MR4 Post-Consumer recycled content: 7%.
MR credit: Building product disclosure and optimisation - Material ingredients tion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

### Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

# c. Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 24 decibels ( $\Delta L_{w}$  - ISO 10140), with a perfect acoustic effect as result.

### 9. MEMBER OF HEALTHY SEAS®

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas<sup>®</sup> was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® yarn by Aquafil, Europe's premier manufacturer of PA 6 carpet fibre.



# DSGN CLOUD



CONSTRUCTION Tufted 1/12" Loop FIRE RESISTANCE EN 13501-1

PILE MATERIAL 100% PA 6 Solution Dyed Nylon FASTNESS TO LIGHT ISO 105-B02

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a thermoplastic elastomer, reinforced with BC RUBBING FASTNESS EN ISO 105-X12 ≥ 4

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 600 g/m<sup>2</sup> COLOUR FASTNESS TO WATER EN ISO 105-E01

PILE WEIGHT Ca. 680 g/m<sup>2</sup> THERMAL RESISTANCE ISO 8302 0.070 m<sup>2</sup> K/W

PILE ABOVE BACKING Ca. 420 g/m² IMPACT NOISE RATING ISO 10140 AL: 42 dB (1 000 Hz)

ΔL: 42 dB (1 000 Hz)
ΔL<sub>w</sub>: 26 dB

TOTAL HEIGHT Ca. 6.7 mm SOUND ABSORPTION ISO 354  $\alpha_{\rm w}$ : 0.15

α<sub>w</sub>: 0.15 Hz 125 250 500 1000 2000 4000

α<sub>S</sub> 0.00 0.03 0.06 0.18 0.31 0.39

PILE HEIGHT Ca. 3.3 mm PERMANENT ANTISTATIC ISO 6356 ≤ 2 kV

PILE DENSITY Ca. 0.127 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 193 000 /m² SIZE & PACKING 50 cm x 50 cm

pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 12

CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES Démarche HQE®: cf. FDES GUT-NR CC1A5FAA

ENVIRONNEMENTALES Suivant NF P01-010
Déclaration du 30/07/2003 BRE ENP 428

LEED® Product contributes toward satisfying
Credits under LEED®. For more information,
see the modulyss sustainable datasheets.











#### 1. RECYCLED CONTENT

#### a. 48% Overall recycled content.

#### b. Yarn

100% PA 6 Solution Dyed Nylon.

#### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

#### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

#### 2. MANUFACTURING

#### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

#### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

#### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

#### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

#### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

#### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

# CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number CC1A5FAA. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

#### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170077-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\label{eq:heads} \frac{\text{Hea 05} - \text{Acoustic performance}}{\text{To ensure the buildings}} \ \text{acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces contact 26 decibels ($\Delta_{\text{w}}$ - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).}$ 

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 ag, A-rating – Eco point score 0.325.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

#### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

#### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 48%. MR4 Post-Consumer recycled content: 0%. MR credit: Building product disclosure and optimisation - Material ingredients. tion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

#### Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

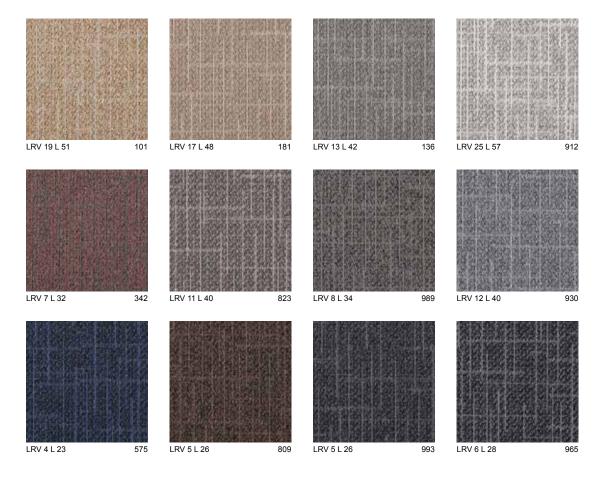
modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

# c. Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 26 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.





# DSGN TWEED

# **Technical datasheet**

CONSTRUCTION Tufted 1/12" Loop FIRE RESISTANCE BN 13501-1 B $_{\rm H}$ -s1

PILE MATERIAL 100% PA 6 Solution Dyed Nylon FASTNESS TO LIGHT ISO 105-B02 ≥ 7

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a thermoplastic elastomer, reinforced with EURBING FASTNESS EN ISO 105-X12

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 600 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01

PILE WEIGHT Ca. 680 g/m² THERMAL RESISTANCE ISO 8302 0.070 m² K/W

ΔL: 43 dB (1 000 Hz)
ΔL<sub>w</sub>: 24 dB

TOTAL HEIGHT Ca. 6.7 mm SOUND ABSORPTION ISO 354

α<sub>w</sub>: 0.15

α<sub>S</sub> 0.00 0.05 0.06 0.17 0.29 0.37 E HEIGHT Ca. 3.3 mm PERMANENT ANTISTATIC ISO 6356

PILE HEIGHT Ca. 3.3 mm PERMANENT ANTISTATIC ISO 6356 ≤ 2 kV

PILE DENSITY Ca. 0.127 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

CLASSIFICATION EN 1307 NUMBER OF COLOURS 12

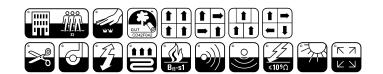
CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES Démarche HQE®: cf. FDES GUT-NR CD42F042
ENVIRONNEMENTALES Suivant NF P01-010 Déclaration du 30/07/2003 BRE ENP 428

LEED® Product contributes toward satisfying
Credits under LEED® For more information

Credits under LEED®. For more information, see the modulyss sustainable datasheets.

125 250 500 1000 2000 4000













#### 1. RECYCLED CONTENT

a. 48% Overall recycled content.

#### b. Yarn

100% PA 6 Solution Dyed Nylon.

#### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

#### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

#### 2. MANUFACTURING

#### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

#### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

#### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

#### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

#### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

#### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

#### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number CD42F042. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

#### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170077-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\label{eq:heads} \frac{\text{Hea 05} - \text{Acoustic performance}}{\text{To ensure the buildings}} \ \text{acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 24 decibels ($\Delta_{\text{w}}$ - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).}$ 

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 ag. A-rating – Eco point score 0.325.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

#### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See
installation, for more details. Concerns cutting waste on installation of carpet tile

#### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 48%. MR4 Post-Consumer recycled content: 0%. MR credit: Building product disclosure and optimisation - Material ingredients. tion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

#### Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

# c. Odour

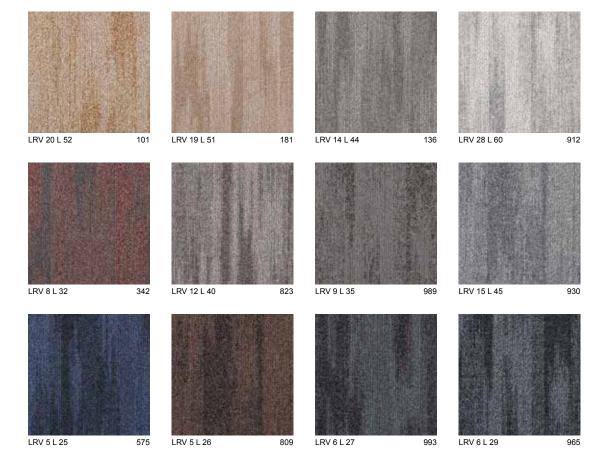
modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 24 decibels ( $\Delta L_{w}$  - ISO 10140), with a perfect acoustic effect as result.

modu lyss°

DSGN TRACK 912

# DSGN TRACK



CONSTRUCTION	Tufted 1/12" Loop	FIRE RESISTANCE	EN 13501
			Bs1

PILE MATERIAL	100% PA 6 Solution Dyed Nylon	FASTNESS TO LIGHT	ISO 105-B02
			> 7

SECONDARY BACKING	Back2Back: Modified bitumen enhanced with	RUBBING FASTNESS	EN ISO 105-X12
	a thermoplastic elastomer, reinforced with		≥ 4
	a glass fibre fleece covered with 100% PES		
	fleece. 10% recycled content included.		

TOTAL WEIGHT	Ca. 4 600 g/m²	COLOUR FASTNESS TO WATER	EN ISO 105-E01
			S 4

PILE WEIGHT	Ca. 680 g/m²	THERMAL RESISTANCE	ISO 8302
			0.064 m <sup>2</sup> K/W

PILE ABOVE BACKING	Ca. 420 g/m²	IMPACT NOISE RATING	ISO 10140
			ΔL: 42 dB (1 000 Hz)
			ΛΙ · 26 dB

TOTAL HEIGHT	Ca. 6.9 mm	SOUND ABSORPTION	ISO 3 α <sub>w</sub> : 0.1	54 15					
			Hz	125	250	500	1 000	2000	4000

			$\alpha_{S}$	0.00	0.01	0.07	0.19	0.31	0.40
PILE HEIGHT	Ca. 3.3 mm	PERMANENT ANTISTATIC	ISO 6						

PILE DENSITY	Ca. 0.127 g/cm <sup>3</sup>	TRANSVERSAL RESISTANCE	ISO/DIS 10965
			< 1 v 109 Ohm

TUFT DENSITY	Ca. 183 000 /m²	SIZE & PACKING	50 cm x 50 cm box: 5 m <sup>2</sup>
			pallet: 20 boxes

CLASSIFICATION	EN 1307	NUMBER OF COLOURS	12
	33 - LC2		

CASTOR CHAIR SUITABILITY	EN 985	DIMENSIONAL STABILITY	EN 986
	A: continuous use		Max. 0.2%

DONNÉES	Démarche HQE® : cf. FDES	GUT-NR	3EBAEE8B
ENVIRONNEMENTALES	suivant NF P01-010 Déclaration du 30/07/2003	BRE	ENP 428

LEED® Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.











#### 1. RECYCLED CONTENT

a. 48% Overall recycled content.

#### b. Yarn

100% PA 6 Solution Dyed Nylon.

#### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

#### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

#### 2. MANUFACTURING

#### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

#### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

#### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

#### b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

#### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

#### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

#### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

#### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 3EBAEE8B. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

#### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170077-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\label{eq:heads} \frac{\text{Hea 05} - \text{Acoustic performance}}{\text{To ensure the buildings}} \ \text{acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces contact 26 decibels ($\Delta_{\text{w}}$ - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).}$ 

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 ag, A-rating – Eco point score 0.325.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

#### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

#### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mate MR4 Post-Industrial recycled content: 48%. MR4 Post-Consumer recycled content: 0%. MR credit: Building product disclosure and optimisation - Material ingredients. tion - Sourcing of raw materials.

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

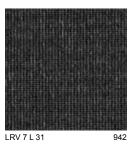
# c. Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 26 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.

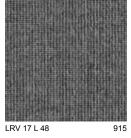








LRV 7 L 30 579

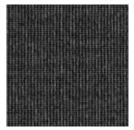




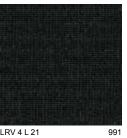
LRV 16 L 47 817



LRV 14 L 44 907



LRV 8 L 33



LRV 4 L 21



LRV 4 L 22



535



LRV 9 L 36 847



LRV 5 L 26

CONSTRUCTION Minituft® 5/64" Loop FIRE RESISTANCE EN 13501-1

ISO 105-B02 PILE MATERIAL 100% PA 6 Solution Dyed Nylon FASTNESS TO LIGHT

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 600 g/m² **COLOUR FASTNESS TO WATER** EN ISO 105-E01

PILE WEIGHT Ca. 500 g/m² ISO 8302 THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 170 g/m² IMPACT NOISE RATING ISO 10140 ΔL: 11 dB (1 000 Hz)

 $\Delta L_w$ : 16 dB

TOTAL HEIGHT Ca. 5.9 mm ISO 354 SOUND ABSORPTION

 $\alpha_{\rm w}$ : 0.15 125 250 500 1000 2000 4000 Hz

ISO 6356

0.00 0.02 0.05 0.12 0.24 0.27

PILE HEIGHT Ca. 1.1 mm PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.155 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965,

≤ 10° Ohm

TUFT DENSITY Ca. 200 000 /m² SIZE & PACKING 50 cm x 50 cm

pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 11

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY

A: continuous use

Démarche HQE® : cf. FDES GUT-NR 81941B20 **ENVIRONNEMENTALES** 

suivant NF P01-010 Déclaration du 30/07/2003 Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.

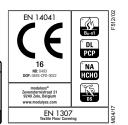












#### 1. RECYCLED CONTENT

a. 46% Overall recycled content

#### b. Yarn

100% PA 6 Solution Dyed Nylon.

#### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

#### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

#### 2. MANUFACTURING

#### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

#### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

#### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

#### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

#### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

#### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

#### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 81941B20. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

#### M1 (FI)

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product.

The EPD-declaration-number is EPD-MOD-20150181-CBC2-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.
■ modulyss\* carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\frac{\text{Hea 05-Acoustic performance}}{\text{To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 16 decibels (<math>\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

# MAT 1 – Life Cycle Impact BREEAM Rating Offices

BRELAM Mating Unices Certificate BrN 428 am, A-rating – Eco point score 0.307. To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

MAT 5 — Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

WST 01 – Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3,
installation, for more details. Concerns cutting waste on installation of carpet tiles.

#### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction MR credit: Building product disclosure and optimisation -Environmental Product Declarations. MR4 Post-Industrial recycled content: 46%. MR4 Post-Consumer recycled content: 0%.

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

Products are not reviewed under LEED® LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

#### HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# d. ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

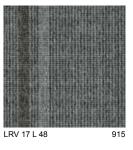
modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

modulyss® carpet tiles are free from odours (see GUT certification program).

# Acoustics

This product is strongly sound absorbent. It reduces the contact noise by 16 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.

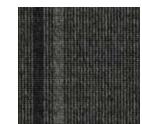
122 modu lyss° OPPOSITE LINES & OPPOSITE 847, 817



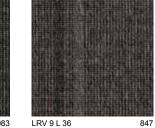




LRV 14 L 44







LRV 7 L 31 942

LRV 8 L 33 983

LRV 9 L 36

CONSTRUCTION Minituft® 5/64" Loop FIRE RESISTANCE EN 13501-1

ISO 105-B02 PILE MATERIAL 100% PA6 Solution Dyed Nylon FASTNESS TO LIGHT

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 600 g/m² **COLOUR FASTNESS TO WATER** EN ISO 105-E01

ISO 8302 PILE WEIGHT Ca. 500 g/m² THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 170 g/m² IMPACT NOISE RATING ISO 10140 ΔL: 11 dB (1 000 Hz)

 $\Delta L_{w}$ : 16 dB

125 250 500 1000 2000 4000

TOTAL HEIGHT Ca. 5.9 mm ISO 354 SOUND ABSORPTION

 $\alpha_{\rm w}$ : 0.15 Hz

ISO 6356

≤ 10° Ohm

pallet: 20 boxes

0.00 0.02 0.05 0.12 0.24 0.27

PILE HEIGHT Ca. 1.1 mm PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.155 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965,

TUFT DENSITY Ca. 200 000 /m² SIZE & PACKING 50 cm x 50 cm

CLASSIFICATION EN 1307 NUMBER OF COLOURS 6

33 - LC1

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY A: continuous use

Démarche HQE® : cf. FDES GUT-NR 81941B20 suivant NF P01-010 Déclaration du 30/07/2003 **ENVIRONNEMENTALES** 

Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.













# )( )S|| |- | |

# Sustainable datasheet

#### 1. RECYCLED CONTENT

a. 46% Overall recycled content.

#### b. Yarn

100% PA 6 Solution Dyed Nylon.

#### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

#### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

#### 2. MANUFACTURING

#### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

#### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

#### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

#### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

#### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

#### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 81941B20. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

#### M1 (FI)

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product. The EPD-declaration-number is EPD-MOD-20150181-CBC2-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 \_ Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyss\* carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\frac{\text{Hea 05-Acoustic performance}}{\text{To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 16 decibels (<math>\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

# MAT 1 – Life Cycle Impact BREEAM Rating Offices

BRELAM Mating Unices Certificate BrN 428 am, A-rating – Eco point score 0.307. To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

MAT 5 — Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

WST 01 – Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3,
installation, for more details. Concerns cutting waste on installation of carpet tiles.

#### LEED® (US and international)

Leadership in Energy and Environmental Design

modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw materials. MR4 Post-Industrial recycled content: 46%. MR4 Post-Consumer recycled content: 0%.

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

# HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

# 8. HEALTH & COMFORT

#### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

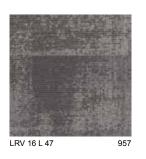
#### modulyss® carpet tiles are free from odours (see GUT certification program).

Acoustics This product is strongly sound absorbent. It reduces the contact noise by 16 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.



PIXEL

127













LRV 5 L 27

965 LR

LRV 8 L 33

351

CONSTRUCTION	Tufted 1/10" Loop, printed	FIRE RESISTANCE	EN 13501-1 B <sub>ff</sub> -s1

PILE MATERIAL	100% PA 6 IMPREL	FASTNESS TO LIGHT	ISO 105-B02
			≥ 5-6

SECONDARY BACKING	Back2Back: Modified bitumen enhanced with	RUBBING FASTNESS	EN ISO 105-X12
	a thermoplastic elastomer, reinforced with		≥ 4
	a glass fibre fleece covered with 100% PES		

fleece. 10% recycled content included

TOTAL WEIGHT	Ca. 4 400 g/m²	COLOUR FASTNESS TO WATER	EN ISO 105-E01 ≥ 4
--------------	----------------	--------------------------	-----------------------

PILE WEIGHT	Ca. 605 g/m <sup>2</sup>	THERMAL RESISTANCE	ISO 8302
			0.063 m <sup>2</sup> K/W

PILE ABOVE BACKING	Ca. 372 g/m²	IMPACT NOISE RATING	ISO 10140
			$\Delta L\colon 32~dB~{}_{\text{(1 000 Hz)}}$

			ΔL <sub>w</sub> : 23 dB
TOTAL HEIGHT	Ca. 6.6 mm	SOUND ABSORPTION	ISO 354

1017 ETIEIOTTI	COUND ABOUTH HOIT					
	$\alpha_{w}$ : 0.15					
	Hz 125 250 500 1000 2000 4000					

			$\alpha_{S}$	0.00	0.00	0.06	0.15	0.28	0.31
PILE HEIGHT	Ca. 3.1 mm	PERMANENT ANTISTATIC	ISO 6: ≤ 2 kV						

PILE DENSITY	Ca. 0.120 g/cm <sup>3</sup>	TRANSVERSAL RESISTANCE	ISO/DIS 10965
			≤ 1 x 10° Ohm

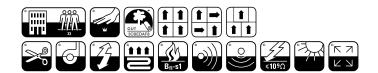
TUFT DENSITY	Ca. 218 000 /m²	SIZE & PACKING	50 cm x 50 cm
			box: 5 m <sup>2</sup>
			pallet: 20 boxes

CLASSIFICATION	EN 1307 33 - LC1	NUMBER OF COLOURS	6, Special colours possible
	33 - LC1		

CASTOR CHAIR SUITABILITY	EN 985	DIMENSIONAL STABILITY	EN 986 Max. 0.2%
	A: continuous use		Max. 0.270

	Démarche HQE® : cf. FDES	GUT-NR	3CBEDAF8
ENVIRONNEMENTALES	Déclaration du 30/07/2003	LEED®	Product contrib

30/07/2003 LEED® Product contributes toward satisfying
Credits under LEED®. For more information,
see the modulyss sustainable datasheets.













#### 1. RECYCLED CONTENT

a. 49% Overall recycled content.

#### b. Yarn

100% PA 6 IMPREL.

#### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

#### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

#### 2. MANUFACTURING

#### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

#### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

#### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

#### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

#### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

#### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

#### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1101 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 3CBEDAF8. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

#### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estatebusinesses. The core of the system is a database of substances, materials and products, B-rating,

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170095-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 \_ Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyss\* carpet titles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\label{eq:heads} \frac{\text{Hea 05} - \text{Acoustic performance}}{\text{To ensure the buildings}} \ \text{acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 23 decibels ($\Delta_{\text{w}}$ - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).}$ 

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 al, A-rating – Eco point score 0.315.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

#### MAT 5 - Designing for Robustness

o recognise and encourage adequate protection of exposed elements of the building and andscape, therefore minimising the frequency of replacement and maximising materials

optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See Item 3,
installation, for more details. Concerns cutting waste on installation of carpet tiles.

#### LEED® (US and international)

Leadership in Energy and Environmental Design

modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation Environmental Product Declarations.

MR credit: Building product disclosure and optimization - Sourcing of raw materials MR4 Post-Industrial recycled content: 49%.
MR4 Post-Consumer recycled content: 0%.

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

FQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

# HQE (FR)

#### Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

#### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium Odour

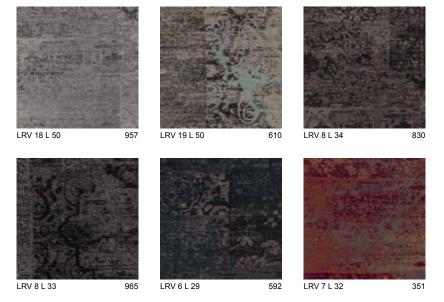
modulyss® carpet tiles are free from odours (see GUT certification program).

# Acoustics

This product is strongly sound absorbent. It reduces the contact noise by 23 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.



# PATCHWORK



CONSTRUCTION Tufted 1/10" Loop, printed FIRE RESISTANCE EN 13501-1

PILE MATERIAL 100% PA 6 IMPREL ISO 105-B02 FASTNESS TO LIGHT

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 400 g/m² **COLOUR FASTNESS TO WATER** EN ISO 105-E01

PILE WEIGHT Ca. 605 g/m² ISO 8302 THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 372 g/m² IMPACT NOISE RATING ISO 10140  $\Delta L\colon 32~dB~{}_{\text{(1 000 Hz)}}$ 

 $\Delta L_w$ : 23 dB

Hz 125 250 500 1000 2000 4000

TOTAL HEIGHT Ca. 6.6 mm ISO 354 SOUND ABSORPTION

α<sub>w</sub>: 0.15

0.00 0.00 0.06 0.15 0.28 0.31

PILE HEIGHT Ca. 3.1 mm ISO 6356 PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.120 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 218 000 /m² SIZE & PACKING 50 cm x 50 cm pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 6, Special colours possible

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY

A: continuous use

Démarche HQE® : cf. FDES GUT-NR 3CBEDAF8 **ENVIRONNEMENTALES** 

suivant NF P01-010 Déclaration du 30/07/2003 Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.

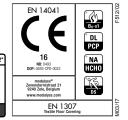












#### 1. RECYCLED CONTENT

a. 49% Overall recycled content.

#### b. Yarn

100% PA 6 IMPREL.

#### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

#### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

#### 2. MANUFACTURING

#### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

#### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

#### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

#### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

#### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

#### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

#### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1101 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 3CBEDAF8. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

#### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170095-CBC1-EN

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\label{eq:heads} \frac{\text{Hea 05} - \text{Acoustic performance}}{\text{To ensure the buildings}} \ \text{acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 23 decibels ($\Delta_{\text{w}}$ - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).}$ 

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 al, A-rating – Eco point score 0.315.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

#### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

#### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimization - So MR4 Post-Industrial recycled content: 49%. MR4 Post-Consumer recycled content: 0%. MR credit: Construction and demolition waste management. ition - Sourcing of raw materials

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

#### HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# d. Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

#### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

modulyss® carpet tiles are free from odours (see GUT certification program).

# Acoustics

This product is strongly sound absorbent. It reduces the contact noise by 23 decibels (ΔL... - ISO 10140), with a perfect acoustic effect as result



modu lyss°

# 

PATTERN



CONSTRUCTION Tufted 1/10" Loop, printed FIRE RESISTANCE EN 13501-1

PILE MATERIAL 100% PA 6 IMPREL ISO 105-B02 FASTNESS TO LIGHT

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 400 g/m² **COLOUR FASTNESS TO WATER** EN ISO 105-E01

PILE WEIGHT Ca. 605 g/m² ISO 8302 THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 372 g/m² IMPACT NOISE RATING ISO 10140  $\Delta L\colon 32~dB~{}_{\text{(1 000 Hz)}}$ 

 $\Delta L_w$ : 23 dB

TOTAL HEIGHT Ca. 6.6 mm ISO 354 SOUND ABSORPTION

 $\alpha_{\rm w}$ : 0.15

125 250 500 1000 2000 4000 Hz 0.00 0.00 0.06 0.15 0.28 0.31

PILE HEIGHT Ca. 3.1 mm ISO 6356 PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.120 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 218 000 /m² SIZE & PACKING 50 cm x 50 cm

pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 6, Special colours possible

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY A: continuous use

Démarche HQE® : cf. FDES GUT-NR 3CBEDAF8

suivant NF P01-010 Déclaration du 30/07/2003 Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.



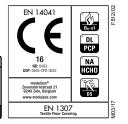
**ENVIRONNEMENTALES** 













#### 1. RECYCLED CONTENT

a. 49% Overall recycled content.

#### b. Yarn

100% PA 6 IMPREL.

#### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

#### d. Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

#### 2. MANUFACTURING

#### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

#### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification
Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001
certified (Environmental Management) since 2009. modulyss also works in accordance with
ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines
of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,
and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

#### Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

#### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

#### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

#### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

#### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1101 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 3CBEDAF8. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

#### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170095-CBC1-EN

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 \_ Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyss\* carpet titles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

 $\label{eq:heads} \frac{\text{Hea 05} - \text{Acoustic performance}}{\text{To ensure the buildings}} \ \text{acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 23 decibels ($\Delta_{\text{w}}$ - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).}$ 

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 al, A-rating – Eco point score 0.315.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

#### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

#### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation Environmental Product Declarations.

MR credit: Building product disclosure and optimization - Sourcing of raw materials MR4 Post-Industrial recycled content: 49%.
MR4 Post-Consumer recycled content: 0%.
MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usgbc.org/contact.

#### HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13
• • •	

# d. Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

#### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

modulyss® carpet tiles are free from odours (see GUT certification program).

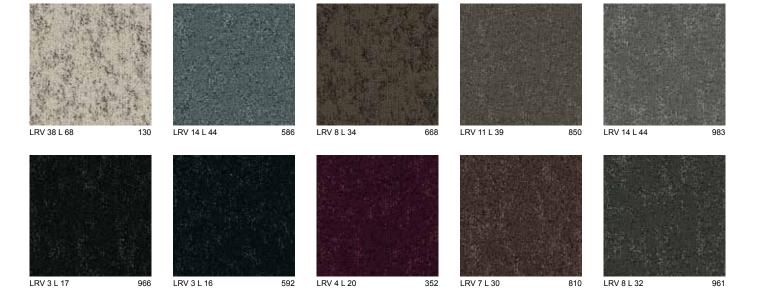
# Acoustics

This product is strongly sound absorbent. It reduces the contact noise by 23 decibels (ΔL... - ISO 10140), with a perfect acoustic effect as result





MOSS



CONSTRUCTION Tufted 1/12" Loop FIRE RESISTANCE EN 13501-1

ISO 105-B02 100% ECONYL® varn FASTNESS TO LIGHT PILE MATERIAL 100% Regenerated Solution Dyed Nylon

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 600 g/m² **COLOUR FASTNESS TO WATER** EN ISO 105-E01

PILE WEIGHT Ca. 880 g/m² ISO 8302 THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 590 g/m² IMPACT NOISE RATING ISO 10140  $\Delta L \colon 36 \ dB \ \mbox{(1 000 Hz)}$ 

 $\Delta L_w$ : 26 dB

TOTAL HEIGHT Ca. 7.8 mm ISO 354 SOUND ABSORPTION  $\alpha_{\rm w}$ : 0.15

Hz

0.00 0.00 0.09 0.21 0.35 0.45

PILE HEIGHT Ca. 4.3 mm PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.137 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 225 000 /m² SIZE & PACKING 50 cm x 50 cm

pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 10 33 - LC2

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY

A: continuous use

Démarche HQE® : cf. FDES GUT-NR 2EAA2CF8

suivant NF P01-010 Déclaration du 30/07/2003 **ENVIRONNEMENTALES** Product contributes toward satisfying Credits under LEED®. For more information,





see the modulyss sustainable datasheets.

125 250 500 1000 2000 4000

ISO 6356







#### 1. RECYCLED CONTENT

#### a. 64% Overall recycled content

#### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon. ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

# c. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

#### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

#### 2. MANUFACTURING

#### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels

#### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001 certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting and the UN's Sustainable Development Goals (SDGs).

# Recycling raw yarns All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

#### 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

#### Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

#### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

#### c CARE

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

#### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

#### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

#### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 2EAA2CF8. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

#### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170096-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

#### BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 – Acoustic performance</u>
To ensure the buildings' acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 26 decibels ( $\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 am, A\*-rating – Eco point score 0.27.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

# MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

#### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mat MR4 Post-Industrial recycled content: 55%.
MR4 Post-Consumer recycled content: 9%.
MR credit: Building product disclosure and optimisation - Material ingredients ion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

# 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

# c. Odour

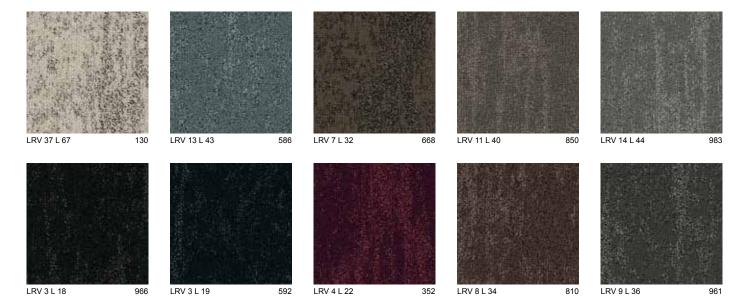
modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 26 decibels ( $\Delta L_{w}$  - ISO 10140), with a perfect acoustic effect as result.

#### 9. MEMBER OF HEALTHY SEAS®

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® yarn by Aquafil, Europe's premier manufacturer of PA 6 carpet fibre.





CONSTRUCTION Tufted 1/12" Loop

			B <sub>fl</sub> -ST
PILE MATERIAL	100% ECONYL® yarn 100% Regenerated Solution Dyed Nylon	FASTNESS TO LIGHT	ISO 105-B02 ≥ 7
SECONDARY BACKING	Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece. 10% recycled content included	RUBBING FASTNESS	EN ISO 105-X12 ≥ 4
TOTAL WEIGHT	Ca. 4 600 g/m²	COLOUR FASTNESS TO WATER	EN ISO 105-E01 ≥ 4
PILE WEIGHT	Ca. 880 g/m²	THERMAL RESISTANCE	ISO 8302 0.085 m <sup>2</sup> K/W
PILE ABOVE BACKING	Ca. 610 g/m²	IMPACT NOISE RATING	ISO 10140 ΔL: 42 dB <sub>(1 000 Hz)</sub> ΔL <sub>w</sub> : 26 dB
TOTAL HEIGHT	Ca. 7.8 mm	SOUND ABSORPTION	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
PILE HEIGHT	Ca. 4.3 mm	PERMANENT ANTISTATIC	$\alpha_{\rm S}$ 0.00 0.00 0.11 0.20 0.35 0.46 ISO 6356 ≤ 2 kV
PILE DENSITY	Ca. 0.142 g/cm³	TRANSVERSAL RESISTANCE	ISO/DIS 10965 ≤ 1 x 10° Ohm
TUFT DENSITY	Ca. 225 000 /m²	SIZE & PACKING	50 cm x 50 cm box: 5 m² pallet: 20 boxes

FIRE RESISTANCE EN 13501-1

NUMBER OF COLOURS 10

DIMENSIONAL STABILITY EN 986



CLASSIFICATION EN 1307

DONNÉES Démarche HQE®: cf. FDES suivant NF P01-010 suivant NF P01-020

CASTOR CHAIR SUITABILITY EN 985

33 - LC2

A: continuous use

suivant NF P01-010 Déclaration du 30/07/2003

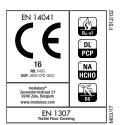


GUT-NR BDC3F1C7



Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.





### 1. RECYCLED CONTENT

### a. 64% Overall recycled content

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon. ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

### c. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001 certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns. Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

### c CARE

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO, emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number BDC3F1C7. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product

# The EPD-declaration-number is EPD-MOD-20170096-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyse's carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 – Acoustic performance</u>
To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 26 decibels ( $\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.20 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 am, A\*-rating – Eco point score 0.27.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mat MR4 Post-Industrial recycled content: 55%.
MR4 Post-Consumer recycled content: 9%.
MR credit: Building product disclosure and optimisation - Material ingredients ion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

### 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

# c. Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 26 decibels ( $\Delta L_{w}$  - ISO 10140), with a perfect acoustic effect as result.

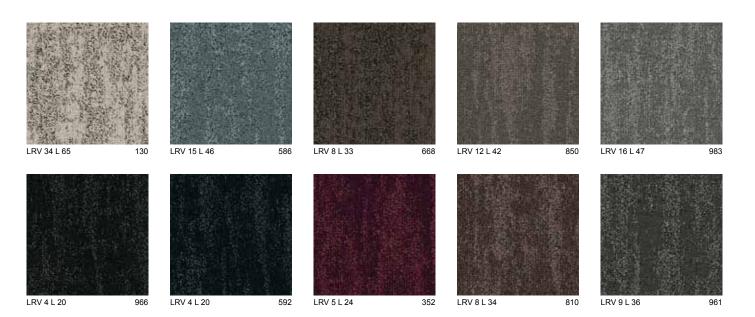
### 9. MEMBER OF HEALTHY SEAS®

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® yarn by Aquafil, Europe's premier manufacturer of PA 6 carpet fibre.



modu lyss°





CONSTRUCTION Tufted 1/12" Loop FIRE RESISTANCE EN 13501-1

100% ECONYL® yarn ISO 105-B02 FASTNESS TO LIGHT PILE MATERIAL 100% Regenerated Solution Dyed Nylon

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12

a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 600 g/m² **COLOUR FASTNESS TO WATER** EN ISO 105-E01

PILE WEIGHT Ca. 880 g/m² ISO 8302 THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 630 g/m² IMPACT NOISE RATING ISO 10140  $\Delta L\colon 36~dB~{}_{\text{(1 000 Hz)}}$ 

 $\Delta L_w$ : 27 dB

TOTAL HEIGHT Ca. 7.8 mm ISO 354 SOUND ABSORPTION  $\alpha_{\rm w}$ : 0.15

Hz

125 250 500 1000 2000 4000 0.00 0.06 0.08 0.19 0.37 0.47

PILE HEIGHT Ca. 4.3 mm ISO 6356 PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.146 g/cm<sup>3</sup> TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 225 000 /m² SIZE & PACKING 50 cm x 50 cm

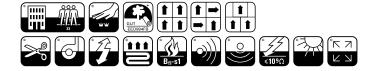
pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 10 33 - LC2

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY A: continuous use

Démarche HQE® : cf. FDES GUT-NR EED994FB **ENVIRONNEMENTALES** 

suivant NF P01-010 Déclaration du 30/07/2003 Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.

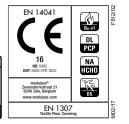












### 1. RECYCLED CONTENT

### a. 64% Overall recycled content

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

### c. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001 certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting and the UN's Sustainable Development Goals (SDGs).

# Recycling raw yarns All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

### c CARE

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number EED994FB. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product The EPD-declaration-number is EPD-MOD-20170096-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

### BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea.02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit
■ modulyss³ carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 an, A-rating – Eco point score 0.27.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

### MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mat MR4 Post-Industrial recycled content: 55%.
MR4 Post-Consumer recycled content: 9%.
MR credit: Building product disclosure and optimisation - Material ingredients ion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

### c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

### 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

### c. Odour modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by

27 decibels ( $\Delta L_{w}$  - ISO 10140), with a perfect acoustic effect as result.

### 9. MEMBER OF HEALTHY SEAS®

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® yarn by Aquafil, Europe's premier manufacturer of PA 6 carpet fibre.













850

LRV 12 L 42



LRV 15 L 46 586



LRV 9 L 36



LRV 10 L 37

LRV 5 L 24

961

966

CONSTRUCTION	Minituft® 5/64" Loop	FIRE RESISTANCE	EN 13501-
			B <sub>n</sub> -s1

PILE MATERIAL	100% ECONYL® yarn	FASTNESS TO LIGHT	ISO 105-B02
	100% Regenerated Solution Dyed Nylon		≥ 7

SECONDARY BACKING	Back2Back: Modified bitumen enhanced with	RUBBING FASTNESS	EN ISO 105-X12
	a thermoplastic elastomer, reinforced with		≥ 4
	a glass fibre fleece covered with 100% PES		

fleece. 10% recycled content included

TOTAL WEIGHT	Ca. 4 500 g/m²	COLOUR FASTNESS TO WATER	EN ISO 105-E01
			> 1

PILE WEIGHT	Ca. 600 g/m <sup>2</sup>	THERMAL RESISTANCE	ISO 8302
			0.046 m <sup>2</sup> K/W

PILE ABOVE BACKING	Ca. 197 g/m²	IMPACT NOISE RATING	ISO 10140
			ΔL: 12 dB (1 000 Hz)
			ΔL: 16 dB

TOTAL HEIGHT	Ca. 5.8 mm	SOUND ABSORPTION	α <sub>w</sub> : 0.1							
			Hz	125	250	500	1000	2000	4000	

			$\alpha_{\text{S}}$	0.01	0.05	0.04	0.10	0.24	0.29
PII E HEIGHT	Ca. 1.0 mm	PERMANENT ANTISTATIC	ISO 6	356					

PILE DENSITY	Ca. 0.197 g/cm³	TRANSVERSAL RESISTANCE	ISO/DIS 10965
			< 1 v 109 Ohm

TUFT DENSITY	Ca. 200 000 /m²	SIZE & PACKING	50 cm x 50 cm
			box: 5 m <sup>2</sup>
			pallet: 20 boxes

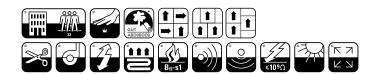
CLASSIFICATION	EN 1307	NUMBER OF COLOURS	7
	33 - I C1		

CASTOR CHAIR SUITABILITY	EN 985	DIMENSIONAL STABILITY	EN 986
	A: continuous use		Max. 0.2%

DONNÉES	Démarche HQE® : cf. FDES	GUT-NR	ABD9BDD9
ENVIRONNEMENTALES	suivant NF P01-010	LEED®	Product contributes t

Déclaration du 30/07/2003

LEED® Product contributes toward satisfying
Credits under LEED®. For more information,
see the modulyss sustainable datasheets.













### 1. RECYCLED CONTENT

### a. 61% Overall recycled content

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

### c. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001 certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns. Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

### c CARE

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1100 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number ABD9BDD9. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product

# The EPD-declaration-number is EPD-MOD-20150329-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

### BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea.02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit
■ modulyss³ carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 – Acoustic performance</u>
To ensure the buildings' acoustic performance including sound insulation meet the standards for its purpose. This product is highly sound-absorbent. It reduces conta 16 decibels ( $\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.10 (ISO 354).

MAT 1 – Life Cycle Impact
BREEAM Rating Offices
Certificate BNP 428 ao, A<sup>\*</sup>-rating - Eco Point score 0.258.
To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. For more information on the Green Guide to Specification visit www.bre.co.uk/greenguide or www.greenbooklive.com.

# MAT 5 - Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC1 for intensive use in a contract environment.

<u>WST 01 – Construction Waste Management</u>
To promote resource efficiency via the effective management and reduction of construction waste. This product can contribute to waste reduction on site. See installation, for more details. Concerns cutting waste on installation of carpet tile

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mat MR4 Post-Industrial recycled content: 55%.
MR4 Post-Consumer recycled content: 6%.
MR credit: Building product disclosure and optimisation - Material ingredients ion - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

# c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# ECNZ (NZE)

Environmental Choice of New Zealand.

This product is labeled by ECNZ Labeling Program, which encourages sustainable processes and products.

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations

### 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

# c. Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 16 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.

### 9. MEMBER OF HEALTHY SEAS®

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® yarn by Aquafil, Europe's premier manufacturer of PA 6 carpet fibre.







































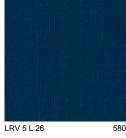


































CONSTRUCTION Tufted 1/12" Loop FIRE RESISTANCE EN 13501-1

PILE MATERIAL 100% PA 6 Aqualon FASTNESS TO LIGHT ISO 105-B02

SECONDARY BACKING Back2Back: Modified bitumen enhanced with a thermoplastic elastomer, reinforced with a thermoplastic elastomer, reinforced with PRUBBING FASTNESS EN ISO 105-X12 ≥ 4

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 800 g/m<sup>2</sup> COLOUR FASTNESS TO WATER EN ISO 105-E01

PILE WEIGHT Ca. 870 g/m² THERMAL RESISTANCE ISO 8302 0.070 m² K/W

PILE ABOVE BACKING Ca. 595 g/m² IMPACT NOISE RATING ISO 10140 AL: 44 dB (1 000 Hz)

ΔL: 44 dB (1 000 Hz) ΔL<sub>w</sub>: 26 dB

TOTAL HEIGHT Ca. 7.7 mm SOUND ABSORPTION ISO 354  $\alpha_{w}$ : 0.15

α<sub>w</sub>: 0.15 Hz 125 250 500 1000 2000 4000

α<sub>s</sub> 0.01 0.05 0.06 0.17 0.32 0.44 .E HEIGHT Ca. 4.1 mm PERMANENT ANTISTATIC ISO 6356

PILE HEIGHT Ca. 4.1 mm PERMANENT ANTISTATIC ISO 6350 ≤ 2 kV

PILE DENSITY Ca. 0.145 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

box: 5 m² pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 36, Special colours possible

CASTOR CHAIR SUITABILITY EN 985 DIMENSIONAL STABILITY EN 986

A: continuous use

Max. 0.2%

DONNÉES Démarche HQE®: cf. FDES GUT-NR 1814EC70
ENVIRONNEMENTALES suivant NF P01-010

EMENTALES suivant NF P01-010
Déclaration du 30/07/2003

LEED® Product contributes toward satisfying
Credits under LEED®. For more information,
see the modulyss sustainable datasheets.













### 1. RECYCLED CONTENT

a. 48% Overall recycled content

### b. Yarn

100% PA 6 Agualon.

### Primary Backing

Colback SMR is produced out 100% post-consumer recycled PET, originated from bottle scrap

### d. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

# 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2 000 and ISO-14001

certified (Environmental Management) since 2009. modulyss also works in accordance with

ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines

of the Global Reporting Initiative (GRI), the international standard for sustainability reporting,

and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

# a. Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

In a rectangular building, installed before walls, using our installation descriptions the waste for carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

# Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO2 emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. DIBT (DE)

Deutsche Institute für BauTechnik TVOC28<1.0 mg/m<sup>3</sup> This product is DIBT-certified, Abz-number Z-156.601-604.

### CRI (US and international)

Carpet & Rug Institute

Compliant to the requirements of Green Label Plus, GLP 1101 (see LEED®, point 7.b).

Gemeinschaft Umweltfreundlicher Teppichboden

TVOC28<100 µg/m3

This product meets the GUT-criteria, GUT-license number 1814EC70. These criteria include VOC tresholds, odour and chemical substances

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miljödata is a system of health and environmental assessment of products in the construction and real estate businesses. The core of the system is a database of substances, materials and products. B-rating.

This certificate is granted by the Building Information Foundation RTS sr. The aim of the classification is to enhance the development and the use of low-emitting building materials to create a healthy indoor environment.

# 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product. The EPD-declaration-number is EPD-MOD-20170095-CBC1-EN

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea.02 – Indoor Air Quality
To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.
■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit
■ modulyss³ carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 – Acoustic performance</u>
To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 26 decibels ( $\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

MAT 1 – Life Cycle Impact
All modulyss\* products are rated for offices according to BRE Green Guide to Specification.
The BRE Global Environmental Profiles Certification Scheme requires evidence of a minimum of 6 months continuous production prior to a request for certification and the certification process takes approximately 6 months to complete. As a result, we are currently not able to provide a BRE Global Environmental Profile Certificate for Fashion& but please note that a similar product has obtained an Ecopoint score of 0.348 and is A-rated for offices.

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

WST 01 – Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3,
installation, for more details. Concerns cutting waste on installation of carpet tiles.

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED® v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimisation -Environmental Product Declarations.

MR credit: Building product disclosure and optimisation - Sourcing of raw mat MR4 Post-Industrial recycled content: 46%.
MR4 Post-Consumer recycled content: 2%.
MR credit: Building product disclosure and optimisation - Material ingredients ation - Sourcing of raw materials

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment.

EQ credit: Acoustic performance

Products are not reviewed under LEED®, LEED® credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED®, visit www.usabc.org/contact.

### c. HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows:

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

# 8. HEALTH & COMFORT

### Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium

### modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noise by 26 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.



modu lyss°

VELVET& 541, 573

VELVET&



CONSTRUCTION Tufted 1/12" Loop Tip sheared FIRE RESISTANCE EN 13501-1

PILE MATERIAL 100% PA 6 Aqualon FASTNESS TO LIGHT ISO 105-B02

SECONDARY BACKING Back2Back: Modified bitumen enhanced with RUBBING FASTNESS EN ISO 105-X12

a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 750 g/m² COLOUR FASTNESS TO WATER EN ISO 105-E01

PILE WEIGHT Ca. 900 g/m² THERMAL RESISTANCE ISO 8302 0.094 m² K/W

PILE ABOVE BACKING Ca. 570 g/m² IMPACT NOISE RATING ISO 10140

TOTAL HEIGHT Ca. 7.6 - 8.8 mm SOUND ABSORPTION ISO 354  $\alpha_{w}$ : 0.15

Hz 125 250 500 1000 2000 4000  $\alpha_{\rm S}$  0.00 0.01 0.07 0.20 0.35 0.46

PILE HEIGHT Ca. 3.8 - 5.0 mm PERMANENT ANTISTATIC ISO 6356

S 2 KV

PILE DENSITY Ca. 0.114 - 0.150 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 10° Ohm

pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 18, Special colours possible

33 - LC2

CASTOR CHAIR SUITABILITY EN 985 A: continuous use DIMENSIONAL STABILITY EN 986 Max. 0.2%

DONNÉES Démarche HQE®: cf. FDES GUT-NR 5B8A0538
ENVIRONNEMENTALES suivant NF P01-010

suivant NF P01-010
Déclaration du 30/07/2003

LEED® Product contributes toward satisfying
Credits under LEED®. For more information,
see the modulyss sustainable datasheets.













### 1. RECYCLED CONTENT

a. 49% Overall recycled content

### b. Yarn

100% PA6 Aqualon.

### **Primary Backing**

Colback SMR is produced out 100% post-consumer recycled PET, originated from bottle scrap

### d. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2000 and ISO-14001

certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting, and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

# a. Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

In a rectangular building, installed before walls, using our installation descriptions the waste for Carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till  $\pm$  10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

# Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO2 emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. CRI (US and international)

### Carpet & Rug Institute

Compliant to the requirements of Green Label Plus certificate GLP 1101 (see LEED®, point 7.b).

### GUT (DE)

Gemeinschaft Umwelfreundlicher Teppichboden

# TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number 5B8A0538. These criteria include VOC tresholds, odour and chemical substances.

### c. REACH (EU)

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miliödata is a system of health and environmental assessment of products in the construction and real estatebusinesses. The core of the system is a database of substances, materials and products. B-rating.

## 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product.

The EPD-declaration-number is EPD-MOD-20170095-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

### a. BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 \_ Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyss\* carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

# Hea 05 – Acoustic performance

To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 25 decibels ( $\Delta L_W$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

MAT 1 — Life Cycle Impact
All modulyss\* products are rated for offices according to BRE Green Guide to Specification. The
BRE Global Environmental Profiles Certification Scheme requires evidence of a minimum of
6 months continuous production prior to a request for certification and the certification process
takes approximately 6 months to complete. As a result, we are currently not able to provide a
BRE Global Environmental Profile Certificate for Velvetis but please note that a similar product
has obtained an Ecopoint score of 0.348 and is A-rated for offices.

MAT 5 — Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3,
installation, for more details. Concerns cutting waste on installation of carpet tiles.

# LEED® (US and international)

Leadership in Energy and Environmental Design

modulyss products can contribute to the following LEED v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimization Environmental Product Declarations.

MR credit: Building product disclosure and optimization - Sourcing of raw materials. MR4 Post-Industrial recycled content: 47%. MR4 Post-Consumer recycled content: 2%.

MR credit: Building product disclosure and optimisation - Material ingredients. MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED, LEED credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED, visit www.usgbc.org/contact.

# HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

### 8. HEALTH & COMFORT

# Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noice by 25 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.



BLAZE



CONSTRUCTION Minituft® 5/64" loop FIRE RESISTANCE EN 13501-1

ISO 105-B02 100% ECONYL® varn. PILE MATERIAL FASTNESS TO LIGHT 100% Regenerated Solution Dyed Nylon

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 ≥ 4-5

a thermoplastic elastomer, reinforced with a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 950 g/m² **COLOUR FASTNESS TO WATER** EN ISO 105-E01 ≥ 4-5

ISO 8302 PILE WEIGHT Ca. 640 g/m² THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 215 g/m² IMPACT NOISE RATING ISO 10140

 $\Delta L \colon 9 \ dB \ {}_{\text{(1 000 Hz)}}$  $\Delta L_w$ : 15 dB

TOTAL HEIGHT Ca. 6.1 mm ISO 354 SOUND ABSORPTION  $\alpha_{\rm w}$ : 0.15

Hz

≤ 1 x 10° Ohm

pallet: 20 boxes

125 250 500 1000 2000 4000 0.00 0.03 0.04 0.12 0.21 0.30

PILE HEIGHT Ca. 1.0 mm ISO 6356 PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.215 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965

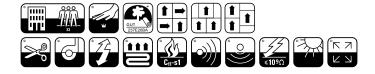
TUFT DENSITY Ca. 200 000 /m² SIZE & PACKING 50 cm x 50 cm

CLASSIFICATION EN 1307 NUMBER OF COLOURS 9

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY A: continuous use

Démarche HQE® : cf. FDES GUT-NR 237E20BA **ENVIRONNEMENTALES** 

suivant NF P01-010 Déclaration du 30/07/2003 Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.











## 1. RECYCLED CONTENT

### a. 56% Overall recycled content

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

### c. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

# Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2000 and ISO-14001

certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# b. Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for Carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions.

# 4. END OF LIFE

### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

### c CARE

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO, emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of

### a. CRI (US and international)

### Carpet & Rug Institute

Compliant to the requirements of Green Label Plus certificate GLP 1100 (see LEED®, point 7.b).

### b. GUT (DE)

Gemeinschaft Umwelfreundlicher Teppichboden

### TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number 237E20BA. These criteria include VOC tresholds, odour and chemical substances.

### c. REACH (EU)

modulyss® complies with the strict European REACH standards.

### d. Sundahus (SE)

SundaHus Miliödata is a system of health and environmental assessment of products in the construction and real estatebusinesses. The core of the system is a database of substances, materials and products. B-rating.

## 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardized way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air. soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is in request for this product.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

### BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 – Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

modulyssi\* carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

<u>Hea 05 – Acoustic performance</u>
To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 15 decibels ( $\Delta L_w$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

# MAT 1 - Life Cycle Impact

MAT 1 – Life Cycle Impact
All modulyss' products are rated for offices according to BRE Green Guide to Specification. The
BRE Global Environmental Profiles Certification Scheme requires evidence of a minimum of 6
months continuous production prior to a request for certification and the certification process
takes approximately 6 months to complete. As a result, we are currently not able to provide a
BRE Global Environmental Profile Certificate for Blaze but please note that a similar product has
obtained an Ecopoint score of 0,2700 and is A+ rated for offices.

MAT 5 — Designing for Robustness

MAT 5 — Designing for Robustness

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33-LC1 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3, installation, for more details. Concerns cutting waste on installation of carpet tiles.

# b. LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED v4 credits:

# MR credit: Interiors Life-Cycle Impact Reduction.

MR credit: Building product disclosure and optimization - Sourcing of raw materials. MR4 Post-Industrial recycled content: 50%. MR4 Post-Consumer recycled content: 5%.

MR credit: Building product disclosure and optimisation - Material ingredients.

MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance.

Products are not reviewed under LEED, LEED credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED. visit www.usgbc.org/contact.

### HQE (FR) C.

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

### Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

### 8. HEALTH & COMFORT

### a. Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

# No heavy metals

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium,

# Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

# Acoustics

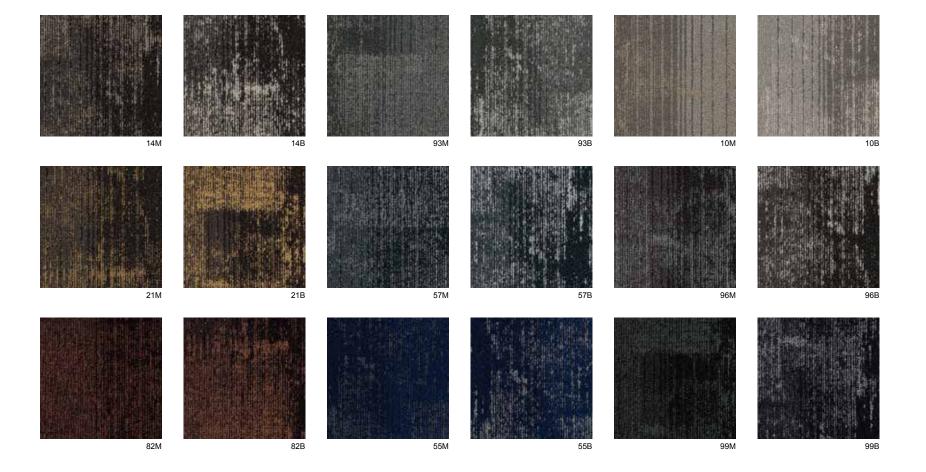
This product is strongly sound absorbent. It reduces the contact noice by 15 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.

### 9. MEMBER OF HEALTHY SEAS®

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® yarn by Aguafil Europe's premier manufacturer of PA 6 carpet fibre.



DUSK



CONSTRUCTION Tufted 1/12" Loop FIRE RESISTANCE EN 13501-1: B<sub>f</sub>-s1

ISO 105-B02 100% ECONYL® varn. PILE MATERIAL FASTNESS TO LIGHT 100% Regenerated Solution Dyed Nylon

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 a thermoplastic elastomer, reinforced with ≥ 4-5

a glass fibre fleece covered with 100% PES fleece 10% recycled content included.

TOTAL WEIGHT Ca. 4 800 g/m<sup>2</sup> **COLOUR FASTNESS TO WATER** EN ISO 105-E01 ≥ 4-5

ISO 8302 PILE WEIGHT Ca. 800 g/m<sup>2</sup> THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 620 g/m² IMPACT NOISE RATING ISO 10140  $\Delta L\colon 39~dB~{}_{\text{(1 000 Hz)}}$ 

 $\Delta L_w$ : 24 dB

TOTAL HEIGHT Ca. 7.7 mm ISO 354 SOUND ABSORPTION

 $\alpha_{\rm w}$ : 0.20

ISO 6356

125 250 500 1000 2000 4000

0.03 0.04 0.09 0.19 0.32 0.39

PILE HEIGHT Ca. 4.2 mm PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.147 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 295 000 /m<sup>2</sup> SIZE & PACKING 50 cm x 50 cm pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 18

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY

A: continuous use

Démarche HQE® : cf. FDES **GUT-NR** 1450AC8C

suivant NF P01-010 Déclaration du 30/07/2003 Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.



**ENVIRONNEMENTALES** 









### 1. RECYCLED CONTENT

### a. 65% Overall recycled content

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

### c. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2000 and ISO-14001 certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for Carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till  $\pm$  10%. More information can be found in our installation instructions.

# 4. END OF LIFE

### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

### c CARE

Partnership modulyss<sup>®</sup>/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO, emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of

### a. CRI (US and international)

### Carpet & Rug Institute

Compliant to the requirements of Green Label Plus certificate GLP 1100 (see LEED®, point 7.b).

### GUT (DE)

Gemeinschaft Umwelfreundlicher Teppichboden

### TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number 1450AC8C These criteria include VOC tresholds, odour and chemical substances.

### c. REACH (EU)

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miliödata is a system of health and environmental assessment of products in the construction and real estatebusinesses. The core of the system is a database of substances, materials and products. B-rating.

## 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product. The EPD-declaration-number is EPD-MOD-20170096-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 \_ Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyss\* carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

# Hea 05 – Acoustic performance

To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 24 decibels ( $\Delta L_W$  - ISO 10140) and has an absorption coefficient of 0.20 (ISO 354).

MAT 1 — Life Cycle Impact
All modulyss\* products are rated for offices according to BRE Green Guide to Specification. The
BRE Global Environmental Profiles Certification Scheme requires evidence of a minimum of 6
months continuous production prior to a request for certification and the certification process
takes approximately 6 months to complete. As a result, we are currently not able to provide a
BRE Global Environmental Profile Certificate for Dusk but please note that a similar product has
obtained an Ecopoint score of 0,2700 and is A+ rated for offices.

MAT 5 — Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC3 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3,
installation, for more details. Concerns cutting waste on installation of carpet tiles.

### LEED® (US and international)

Leadership in Energy and Environmental Design modulyss products can contribute to the following LEED v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimization Environmental Product Declarations.

MR credit: Building product disclosure and optimization - Sourcing of raw materials. MR4 Post-Industrial recycled content: 57%. MR4 Post-Consumer recycled content: 8%.

MR credit: Building product disclosure and optimisation - Material ingredients. MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED, LEED credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED, visit www.usqbc.org/contact.

### HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

### 8. HEALTH & COMFORT

# a. Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

### Odour

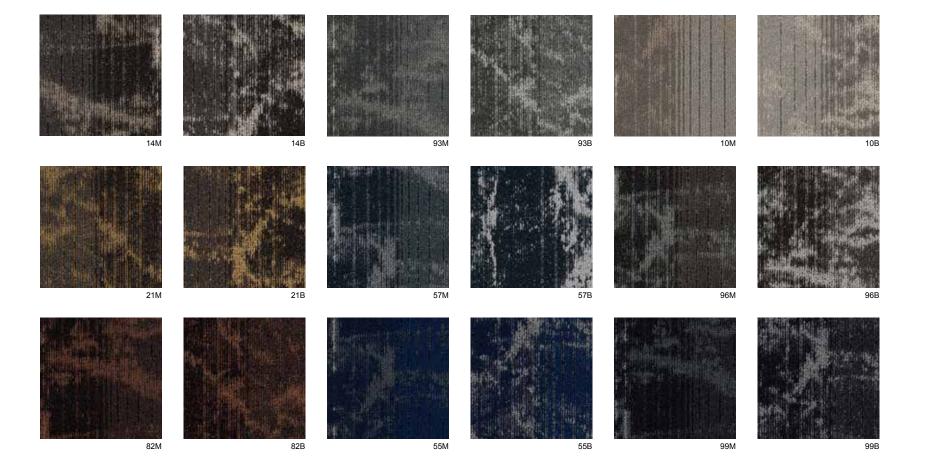
modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noice by 24 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.

# 9. MEMBER OF HEALTHY SEAS®

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® yarn by Aquafil, Europe's premier manufacturer of PA 6 carpet fibre.





CONSTRUCTION Tufted 1/12" Loop FIRE RESISTANCE EN 13501-1: B<sub>f</sub>-s1

ISO 105-B02 100% ECONYL® varn. PILE MATERIAL FASTNESS TO LIGHT 100% Regenerated Solution Dyed Nylon

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 a thermoplastic elastomer, reinforced with ≥ 4-5

a glass fibre fleece covered with 100% PES fleece 10% recycled content included.

TOTAL WEIGHT Ca. 4 800 g/m<sup>2</sup> **COLOUR FASTNESS TO WATER** EN ISO 105-E01 ≥ 4-5

ISO 8302 PILE WEIGHT Ca. 840 g/m<sup>2</sup> THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 620 g/m² IMPACT NOISE RATING ISO 10140  $\Delta L\colon 39~dB~{}_{\text{(1 000 Hz)}}$ 

 $\Delta L_w$ : 24 dB

TOTAL HEIGHT Ca. 7.7 mm ISO 354 SOUND ABSORPTION  $\alpha_{\rm w}$ : 0.20

125 250 500 1000 2000 4000

ISO 6356

pallet: 20 boxes

0.03 0.04 0.09 0.19 0.32 0.39

PILE HEIGHT Ca. 4.2 mm PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.147 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 295 000 /m<sup>2</sup> SIZE & PACKING 50 cm x 50 cm

CLASSIFICATION EN 1307 NUMBER OF COLOURS 18 33 - LC3

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY A: continuous use

Démarche HQE® : cf. FDES GUT-NR 1450AC8C

suivant NF P01-010 Déclaration du 30/07/2003 **ENVIRONNEMENTALES** Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.











### 1. RECYCLED CONTENT

### a. 66% Overall recycled content

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

### c. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2000 and ISO-14001 certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

# c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

# Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

# Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for Carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till  $\pm$  10%. More information can be found in our installation instructions.

# 4. END OF LIFE

### a. Re-use

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

### c CARE

Partnership modulyss<sup>®</sup>/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO, emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of

### a. CRI (US and international)

### Carpet & Rug Institute

Compliant to the requirements of Green Label Plus certificate GLP 1100 (see LEED®, point 7.b).

### GUT (DE)

Gemeinschaft Umwelfreundlicher Teppichboden

### TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number 1450AC8C These criteria include VOC tresholds, odour and chemical substances.

### c. REACH (EU)

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miliödata is a system of health and environmental assessment of products in the construction and real estatebusinesses. The core of the system is a database of substances, materials and products. B-rating.

## 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product. The EPD-declaration-number is EPD-MOD-20170096-CBC1-EN.

### 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

Hea 02 \_ Indoor Air Quality

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit.

■ modulyss\* carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

# Hea 05 – Acoustic performance

To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 24 decibels ( $\Delta L_W$  - ISO 10140) and has an absorption coefficient of 0.20 (ISO 354).

MAT 1 – Life Cycle Impact
All modulyss\* products are rated for offices according to BRE Green Guide to Specification. The
BRE Global Environmental Profiles Certification Scheme requires evidence of a minimum of 6
months continuous production prior to a request for certification and the certification process
takes approximately 6 months to complete. As a result, we are currently not able to provide a
BRE Global Environmental Profile Certificate for Dawn but please note that a similar product has ed an Ecopoint score of 0.2700 and is A+ rated for offices

MAT 5 — Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC3 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3,
installation, for more details. Concerns cutting waste on installation of carpet tiles.

Leadership in Energy and Environmental Design

modulyss products can contribute to the following LEED v4 credits:

### MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimization Environmental Product Declarations.

MR credit: Building product disclosure and optimization - Sourcing of raw materials. MR4 Post-Industrial recycled content: 57%. MR4 Post-Consumer recycled content: 9%.

MR credit: Building product disclosure and optimisation - Material ingredients. MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED, LEED credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED, visit www.usqbc.org/contact.

### HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	Т3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

# 8. HEALTH & COMFORT

# a. Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

### Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noice by 24 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.

# 9. MEMBER OF HEALTHY SEAS®

As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® yarn by Aquafil, Europe's premier manufacturer of PA 6 carpet fibre.



GLEAM



CONSTRUCTION Tufted 1/10" Cutpile Frisé FIRE RESISTANCE EN 13501-1: B<sub>f</sub>-s1

ECONYL® yarn, ISO 105-B02 PILE MATERIAL FASTNESS TO LIGHT 100 % Regenerated Solution Dyed Nylon

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES fleece 10% recycled content included.

TOTAL WEIGHT Ca. 5 150 g/m<sup>2</sup> **COLOUR FASTNESS TO WATER** EN ISO 105-E01

PILE WEIGHT Ca. 1 300 g/m<sup>2</sup> ISO 8302 THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 1 045 g/m<sup>2</sup> IMPACT NOISE RATING ISO 10140  $\Delta L \colon 51~dB \ \mbox{\scriptsize (1~000~Hz)}$ 

 $\Delta L_w$ : 31 dB

TOTAL HEIGHT Ca. 9.5 mm ISO 354 SOUND ABSORPTION

 $\alpha_{\rm w}$ : 0.20

ISO 6356

ISO/DIS 10965

0.00 0.03 0.12 0.23 0.44 0.57

PILE HEIGHT Ca. 6.2 mm PERMANENT ANTISTATIC

≤ 1 x 10° Ohm

TUFT DENSITY Ca. 164 000 /m<sup>2</sup> SIZE & PACKING 50 cm x 50 cm pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 27, Special colours possible

33 - LC5

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY A: continuous use

Démarche HQE® : cf. FDES **GUT-NR** 14ABF3F3 suivant NF P01-010 Déclaration du 30/07/2003 **ENVIRONNEMENTALES** 

Product contributes toward satisfying Credits under LEED®. For more information, see the modulyss sustainable datasheets.

TRANSVERSAL RESISTANCE



PILE DENSITY Ca. 0.169 g/cm³





125 250 500 1000 2000 4000







### 1. RECYCLED CONTENT

### a. 46% Overall recycled content

### b. Yarn

100% ECONYL® yarn - 100% Regenerated Solution Dyed Nylon + PA 6 ECONYL® is manufactured using post-industrial and post-consumer Polyamide 6 waste, making it 100% sustainable

### Primary Backing

Colback SMR is produced out 100% post-consumer recycled PET, originated from bottle scrap.

### Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### a. Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels

### Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

### ISO certification

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2000 and ISO-14001 certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting, and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

### 3. INSTALLATION

### Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions

# Installation waste

In a rectangular building, installed before walls, using our installation descriptions the waste for Carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till ± 10%. More information can be found in our installation instructions

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life.

# b. Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO<sub>2</sub> emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of

### a. CRI (US and international)

### Carpet & Rug Institute

Compliant to the requirements of Green Label Plus certificate GLP 1101 (see LEED®, point 7.b).

### b. GUT (DE)

Gemeinschaft Umwelfreundlicher Teppichboden

### TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number 14ABF3F3. These criteria include VOC tresholds, odour and chemical substances.

### c. REACH (EU)

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miliödata is a system of health and environmental assessment of products in the construction and real estatebusinesses. The core of the system is a database of substances, materials and products. B-rating.

## 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product. The EPD-declaration-number is EPD-MOD-20170095-CBC1-EN.

### 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

# Hea 02 \_ Indoor Air Quality To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes. ■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit. ■ modulyss\* carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

# Hea 05 – Acoustic performance

Tree about the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 31 decibels ( $\Delta L_W$  - ISO 10140) and has an absorption coefficient of 0.20 (ISO 354).

MAT 1 — Life Cycle Impact
All modulyss\* products are rated for offices according to BRE Green Guide to Specification. The
BRE Global Environmental Profiles Certification Scheme requires evidence of a minimum of 6
months continuous production prior to a request for certification and the certification process
takes approximately 6 months to complete. As a result, we are currently not able to provide a
BRE Global Environmental Profile Certificate for Gleam but please note that a similar product is

MAT 5 — Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC5 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3,
installation, for more details. Concerns cutting waste on installation of carpet tiles.

Leadership in Energy and Environmental Design

modulyss products can contribute to the following LEED v4 credits:

### MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimization Environmental Product Declarations.

MR credit: Building product disclosure and optimization - Sourcing of raw materials. MR4 Post-Industrial recycled content: 45%. MR4 Post-Consumer recycled content: 2%.

MR credit: Building product disclosure and optimisation - Material ingredients. MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED, LEED credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED, visit www.usqbc.org/contact.

# HQE (FR)

### Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	T8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

# 8. HEALTH & COMFORT

# a. Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

# Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noice by 31 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result

# 9. MEMBER OF HEALTHY SEAS®

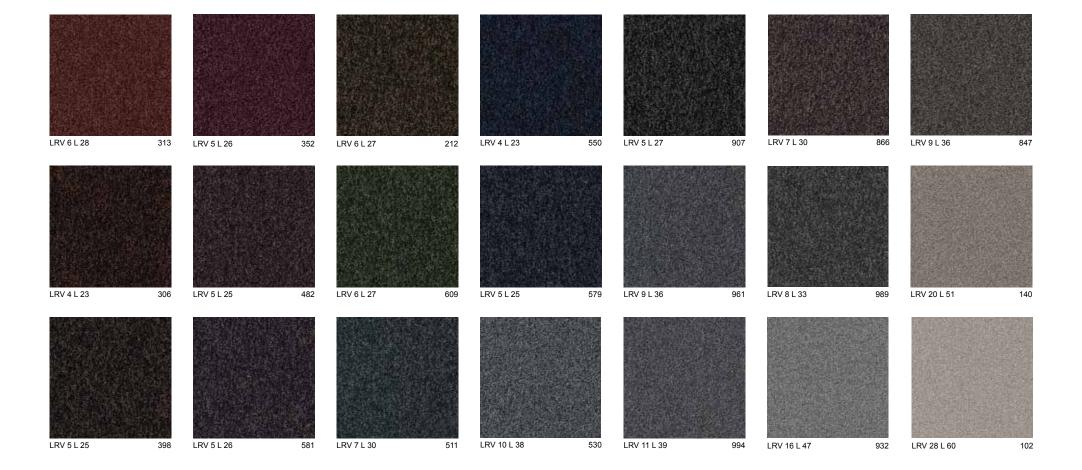
As part of our sustainable mission to reduce the Life Cycle Impact of each product, modulyss decided to join Healthy Seas® as an associate partner member. Healthy Seas® was set up to protect our seas by diving for abandoned fishing nets that catch or injure marine life. Healthy Seas® makes sure that the fishing nets get recycled and regenerated into ECONYL® yarn by Aquafil, Europe's premier manufacturer of PA 6 carpet fibre.



modu lyss°

SPARK 398 & GLEAM 398

SPARK



CONSTRUCTION Tufted 1/10" Loop FIRE RESISTANCE EN 13501-1: B<sub>f</sub>-s1

ISO 105-B02 PILE MATERIAL 100% PA 6 FASTNESS TO LIGHT

SECONDARY BACKING Back2Back: Modified bitumen enhanced with **RUBBING FASTNESS** EN ISO 105-X12 a thermoplastic elastomer, reinforced with

a glass fibre fleece covered with 100% PES fleece. 10% recycled content included

TOTAL WEIGHT Ca. 4 350 g/m² **COLOUR FASTNESS TO WATER** EN ISO 105-E01

PILE WEIGHT Ca. 690 g/m² ISO 8302 THERMAL RESISTANCE

PILE ABOVE BACKING Ca. 500 g/m² IMPACT NOISE RATING ISO 10140  $\Delta L \colon 40~dB~\text{(1 000 Hz)}$ 

 $\Delta L_w$ : 24 dB

TOTAL HEIGHT Ca. 6.6 mm ISO 354 SOUND ABSORPTION

 $\alpha_{\rm w}$ : 0.15

0.01 0.02 0.06 0.17 0.33 0.44

PILE HEIGHT Ca. 3.5 mm ISO 6356 PERMANENT ANTISTATIC

PILE DENSITY Ca. 0.143 g/cm³ TRANSVERSAL RESISTANCE ISO/DIS 10965 ≤ 1 x 10° Ohm

TUFT DENSITY Ca. 272 000 /m² SIZE & PACKING 50 cm x 50 cm

pallet: 20 boxes

CLASSIFICATION EN 1307 NUMBER OF COLOURS 21, Special colours possible

CASTOR CHAIR SUITABILITY EN 985 EN 986 DIMENSIONAL STABILITY A: continuous use

Démarche HQE® : cf. FDES GUT-NR AD42A7CE

suivant NF P01-010 Déclaration du 30/07/2003 Product contributes toward satisfying Credits under LEED®. For more information,

see the modulyss sustainable datasheets.

125 250 500 1000 2000 4000



**ENVIRONNEMENTALES** 











### 1. RECYCLED CONTENT

a. 54% Overall recycled content

### b. Yarn

100% PA 6.

### Primary Backing

Colback SMR is produced out 100% post-consumer recycled PET, originated from bottle scrap

### d. Secondary Backing - back2back

The waste from the tile cutting process is shredded and added to the secondary backing, giving it a 10% post-industrial recycled content.

### Recycled limestone in the backing

The filler used for the production of our carpet tiles is 100% post-industrial recycled, diverted from a waste stream of the limestone mining.

### 2. MANUFACTURING

### Renewable energy

49% of our energy consumption is electricity. The electricity that we use at modulyss is 100% 'green electricity' generated from renewable resources such as our own solar panels.

### b. Production site & process

modulyss runs an integrated production chain: from tufting to the packaging of the finished tile.

ISO certification

Our production site is ISO-9001 certified (Quality Management) since 2000 and ISO-14001

certified (Environmental Management) since 2009. modulyss also works in accordance with ISO26000 and publishes a Corporate Social Responsibility report in line with the guidelines of the Global Reporting Initiative (GRI), the international standard for sustainability reporting, and the UN's Sustainable Development Goals (SDGs).

Recycling raw yarns
All the left over and waste yarns are collected and recycled into new yarns.

Ecological Packaging
We only use cardboard boxes that are made of 100% recycled material.

### c. Sustainability report

Read all about our approach to the environment in our sustainability report 2016: http://www.modulyss.com/ebook/mvo/.

# 3. INSTALLATION

# a. Adhesive

modulyss® advises to use a solvent-free, easy release system with very low emissions.

In a rectangular building, installed before walls, using our installation descriptions the waste for Carpet tiles is 3-4%. In comparison for broadloom the waste during installation rises till  $\pm$  10%. More information can be found in our installation instructions.

# 4. END OF LIFE

At the end of life, after cleaning, carpet tiles can be re-used in non-critical areas, to extend the product life

### Recycling

Carpet tiles can be used as raw material for the backing of new carpet tiles in our back2back program.

Partnership modulyss®/Vanheede Environment Group in which carpet tiles are converted into secondary fuel to reduce CO2 emissions significantly. The minerals are extracted from the carpet tiles and recycled into raw material for the cement production industry, which results in ± 50% recycling of our carpet tiles.

### 5. VOC'S & CHEMICAL SUBSTANCES

This product fulfills the testing criteria for emissions of:

### a. CRI (US and international)

### Carpet & Rug Institute

Compliant to the requirements of Green Label Plus certificate GLP 1101 (see LEED®, point 7.b).

### GUT (DE)

Gemeinschaft Umwelfreundlicher Teppichboden

### TVOC28<100 µg/m<sup>3</sup>

This product meets the GUT-criteria, GUT-license number AD42A7CE. These criteria include VOC tresholds, odour and chemical substances.

### c. REACH (EU)

modulyss® complies with the strict European REACH standards.

### Sundahus (SE)

SundaHus Miliödata is a system of health and environmental assessment of products in the construction and real estatebusinesses. The core of the system is a database of substances, materials and products. B-rating.

## 6. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

An EPD is a standardised way to provide information on the environmental impact of a product during the entire life. They include information on the environmental impact of raw material extraction and production, energy use and efficiency, content of materials and chemical substances, emissions to air soil and water and waste generation. A product-specific EPD in accordance with the ISO14025 and EN15804, is available for this product. The EPD-declaration-number is EPD-MOD-20170095-CBC1-EN.

# 7. COMPLIANCE TO GREEN BUILDING CERTIFICATIONS

# BRE Global (UK)

Building Research Establishment.

This product can contribute towards credits in:

# Hea 02 \_ Indoor Air Quality To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes. ■ Use of a low-emission adhesive on installation (BN EN 13999-1:2007) can contribute to this credit. ■ modulyss\* carpet tiles meet the requirements of EN14041, including E1 classification for formaldehyde emissions, and can contribute to the credit for healthy indoor air quality.

# Hea 05 – Acoustic performance

To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose. This product is highly sound-absorbent. It reduces contact noise by 24 decibels ( $\Delta L_{\rm W}$  - ISO 10140) and has an absorption coefficient of 0.15 (ISO 354).

MAT 1 – Life Cycle Impact
All modulyss\* products are rated for offices according to BRE Green Guide to Specification. The
BRE Global Environmental Profiles Certification Scheme requires evidence of a minimum of 6
months continuous production prior to a request for certification and the certification process
takes approximately 6 months to complete. As a result, we are currently not able to provide a
BRE Global Environmental Profile Certificate for Spark but please note that a similar product has
obtained an Ecopoint score of 0.331 and is A-rated for offices.

MAT 5 – Designing for Robustness
To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. This product satisfies the requirements of EN1307 classification, class 33 - LC2 for intensive use in a contract environment.

WST 01 — Construction Waste Management
To promote resource efficiency via the effective management and reduction of
construction waste. This product can contribute to waste reduction on site. See item 3,
installation, for more details. Concerns cutting waste on installation of carpet tiles.

# LEED® (US and international)

Leadership in Energy and Environmental Design

modulyss products can contribute to the following LEED v4 credits:

MR credit: Interiors Life-Cycle Impact Reduction

MR credit: Building product disclosure and optimization Environmental Product Declarations.

MR credit: Building product disclosure and optimization - Sourcing of raw materials. MR4 Post-Industrial recycled content: 52%. MR4 Post-Consumer recycled content: 2%.

MR credit: Building product disclosure and optimisation - Material ingredients. MR credit: Construction and demolition waste management.

EQ credit: Low emitting materials.

EQ credit: Indoor air quality assessment

EQ credit: Acoustic performance

Products are not reviewed under LEED, LEED credit requirements cover the performance of materials in aggregate, not the performance of individual products of brands. For more information on LEED, visit www.usgbc.org/contact.

# HQE (FR)

Haute Qualité Environnementale

In 2005 modulyss® was awarded the HQE certificate by FDES in accordance with NF P01 010. This product can contribute to eight of the 13 HQE targets as follows

Eco-Construction	MOQUETTES FDES
Integrated choice of products and construction materials	T2
Low site nuisance	T3
Comfort	MOQUETTES FDES
Hygrothermal comfort	Т8
Acoustic comfort	Т9
Visual comfort	T10
No unpleasant smells	T11
Health	MOQUETTES FDES
Sanitary quality of areas	T12
Sanitary air quality	T13

# Good Environmental Choice Australia (GECA) (AU)

Australia's only independent, not-for-profit, multi-sector ecolabelling program. Certification program that assesses and certifies products and services that have a lower impact on the environment and human health and address important social considerations.

### 8. HEALTH & COMFORT

# a. Solvent-free Bitume

For the bitumebacking we only use bitumen that is not oxidised and is solvent-free

modulyss® carpet tiles are free of heavy metals and other harmful substances, such as lead, mercury or chromium.

### Odour

modulyss® carpet tiles are free from odours (see GUT certification program).

This product is strongly sound absorbent. It reduces the contact noice by 24 decibels (ΔL<sub>w</sub> - ISO 10140), with a perfect acoustic effect as result.

# Overview technical data per product – LOOP PILE

#	PAGE	PRODUCT	CONSTRUCTION	PILE MATERIAL	PILE WEIGHT	TOTAL WEIGHT	PILE ABOVE BACKING	TOTAL HEIGHT	PILE HEIGHT	PILE DENSITY	TUFT DENSITY	
00	Page 2	ALPHA	Tufted 1/10" Loop	100% PA 6 Solution Dyed Nylon	Ca. 500 g/m²	Ca. 4 300 g/m²	Ca. 302 g/m²	Ca. 5.8 mm	Ca. 2.6 mm	Ca. 0.116 g/cm³	Ca. 171 600 /m²	
29	Page 78	ALTERNATIVE100	Tufted 1/10" Loop Tip Sheared	100% ECONYL® Yarn + 100% Regenerated Space Dyed Nylon	Ca. 800 g/m²	Ca. 4 400 g/m²	Ca. 460 g/m²	Ca. 6.5 mm	Ca. 3.4 mm	Ca. 0.135 g/cm³	Ca. 206 000 /m²	
09	Page 26	BLACK&	Tufted 1/10" Loop	50% PA 6.6 Antron® + 50% PA 6.6 Antron® SDN	Ca. 850 g/m²	Ca. 4 400 g/m²	Ca. 422 g/m²	Ca. 6.8 mm	Ca. 3.5 mm	Ca. 0.121 g/cm³	Ca. 154 440 /m²	
50	Page 162	BLAZE	Minituft® 5/64" Loop	100% ECONYL® Yarn + 100% Regenerated Solution Dyed Nylon	Ca. 640 g/m²	Ca. 4 950 g/m²	Ca. 215 g/m²	Ca. 6.1 mm	Ca. 1.0 mm	Ca. 0,215 g/cm³	Ca. 200 000 /m²	
51	Page 170	DAWN	Tufted 1/12" Loop	100% ECONYL® Yarn + 100% Regenerated Solution Dyed Nylon	Ca. 840 g/m²	Ca. 4 800 g/m²	Ca. 620 g/m²	Ca. 7.7 mm	Ca. 4.2 mm	Ca. 0,147 g/cm³	Ca. 295 000 /m²	
36	Page 106	DSGN CLOUD	Tufted 1/12" Loop	100% PA 6 Solution Dyed Nylon	Ca. 680 g/m²	Ca. 4 600 g/m²	Ca. 420 g/m²	Ca. 6.7 mm	Ca. 3.3 mm	Ca. 0.127 g/cm³	Ca. 193 000 /m²	
37	Page 110	DSGN TWEED	Tufted 1/12" Loop	100% PA 6 Solution Dyed Nylon	Ca. 680 g/m²	Ca. 4 600 g/m²	Ca. 420 g/m²	Ca. 6.7 mm	Ca. 3.3 mm	Ca. 0.127 g/cm³	Ca. 221 000 /m²	
38	Page 114	DSGN TRACK	Tufted 1/12" Loop	100% PA 6 Solution Dyed Nylon	Ca. 680 g/m²	Ca. 4 600 g/m²	Ca. 420 g/m²	Ca. 6.9 mm	Ca. 3.3 mm	Ca. 0.127 g/cm³	Ca. 183 000 /m²	
51	Page 166	DUSK	Tufted 1/12" Loop	100% ECONYL® Yarn + 100% Regenerated Solution Dyed Nylon	Ca. 800 g/m²	Ca. 4 800 g/m²	Ca. 620 g/m²	Ca. 7.7 mm	Ca. 4.2 mm	Ca. 0,147 g/cm³	Ca. 295 000 /m²	
48	Page 154	FASHION&	Tufted 1/12" Loop	100% PA 6 Aqualon	Ca. 870 g/m²	Ca. 4 800 g/m²	Ca. 595 g/m²	Ca. 7.7 mm	Ca. 4.1 mm	Ca. 0.145 g/cm³	Ca. 240 000 /m²	
01	Page 6	FIRST	Tufted 1/10" Loop	100% PA 6 Solution Dyed Nylon	Ca. 540 g/m²	Ca. 4 300 g/m²	Ca. 330 g/m²	Ca. 6.4 mm	Ca. 2.9 mm	Ca. 0.114 g/cm³	Ca. 156 000 /m²	
23	Page 74	FIRST ABSOLUTE	Tufted 1/10" Loop	100% PA 6 Solution Dyed Aqualon	Ca. 730 g/m²	Ca. 4 500 g/m²	Ca. 420 g/m²	Ca. 7.2 mm	Ca. 3.5 mm	Ca. 0.120 g/cm³	Ca. 186 000 /m²	
32	Page 90	FIRST BLOCKS	Tufted 1/12" Loop	100% PA 6 Solution Dyed Aqualon	Ca. 600 g/m²	Ca. 4 400 g/m²	Ca. 335 g/m²	Ca. 6.8 mm	Ca. 3.1 mm	Ca. 0.108 g/cm³	Ca. 174 000 /m²	
19	Page 62	FIRST LINES	Tufted 1/10" Loop	92% PA 6 Solution Dyed Aqualon + 8% PA 6 Space Dyed	Ca. 540 g/m²	Ca. 4 300 g/m²	Ca. 330 g/m²	Ca. 6.4 mm	Ca. 2.9 mm	Ca. 0.114 g/cm³	Ca. 156 000 /m²	
10	Page 30	FIRST RADIANT	Tufted 1/10" Loop	100% PA 6 Solution Dyed Aqualon	Ca. 540 g/m²	Ca. 4 300 g/m²	Ca. 330 g/m²	Ca. 6.4 mm	Ca. 2.9 mm	Ca. 0.114 g/cm³	Ca. 156 000 /m²	
30	Page 82	FIRST STRIPES	Tufted 1/10" Loop	100% PA 6 Solution Dyed Aqualon	Ca. 540 g/m²	Ca. 4 300 g/m²	Ca. 330 g/m²	Ca. 6.4 mm	Ca. 2.9 mm	Ca. 0.114 g/cm³	Ca. 156 000 /m²	
31	Page 86	FIRST WAVES	Tufted 1/10" Loop	100% PA 6 Solution Dyed Aqualon	Ca. 540 g/m²	Ca. 4 300 g/m²	Ca. 330 g/m²	Ca. 6.4 mm	Ca. 2.9 mm	Ca. 0.114 g/cm³	Ca. 156 000 /m²	
47	Page 150	GRIND	Minituft® 5/64" Loop	100% ECONYL® Yarn + 100% Regenerated Solution Dyed Nylon	Ca. 600 g/m²	Ca. 4 500 g/m²	Ca. 197 g/m²	Ca. 5.8 mm	Ca. 1.0 mm	Ca. 0.197 g/cm³	Ca. 200 000 /m²	
20	Page 66	IN-GROOVE	Tufted 1/10" Loop	100% PA 6 Aqualon	Ca. 740 g/m²	Ca. 4 700 g/m²	Ca. 418 g/m²	Ca. 7.2 mm	Ca. 3.6 mm	Ca. 0.116 g/cm³	Ca. 158 500 /m²	
45	Page 142	LEAF	Tufted 1/12" Loop	100% ECONYL® Yarn + 100% Regenerated Solution Dyed Nylon	Ca. 880 g/m²	Ca. 4 600 g/m²	Ca. 610 g/m²	Ca. 7.8 mm	Ca. 4.3 mm	Ca. 0.142 g/cm³	Ca. 225 000 /m²	
12	Page 34	LINE-UP	Tufted 1/10" Loop	PA 6 Solution Dyed + PA 6 Space Dyed	Ca. 550 g/m²	Ca. 4 400 g/m²	Ca. 309 g/m²	Ca. 5.7 mm	Ca. 2.3 mm	Ca. 0.124 g/cm <sup>3</sup>	Ca. 156 000 /m²	
03	Page 10	MILLENNIUM NXTGEN	Tufted 1/10" Loop	100% ECONYL® Yarn + 100% Regenerated Solution Dyed Nylon	Ca. 600 g/m²	Ca. 4 400 g/m²	Ca. 395 g/m²	Ca. 6.3 mm	Ca. 3.2 mm	Ca. 0,123 g/cm <sup>3</sup>	Ca. 160 000 /m²	
44	Page 138	MOSS	Tufted 1/12" Loop	100% ECONYL® Yarn + 100% Regenerated Solution Dyed Nylon	Ca. 880 g/m²	Ca. 4 600 g/m²	Ca. 590 g/m²	Ca. 7.8 mm	Ca. 4.3 mm	Ca. 0.137 g/cm³	Ca. 225 000 /m²	
34	Page 98	MOTION	Tufted 1/12" Loop	100% PA 6 Solution Dyed Nylon	Ca. 680 g/m²	Ca. 4 600 g/m²	Ca. 410 g/m²	Ca. 7.7 mm	Ca. 3.7 mm	Ca. 0,110 g/cm³	Ca. 197 500 /m²	
34	Page 98	VISION	Tufted 1/12" Loop	100% PA 6 Solution Dyed Nylon	Ca. 680 g/m²	Ca. 4 600 g/m²	Ca. 410 g/m²	Ca. 7.7 mm	Ca. 3.7 mm	Ca. 0,110 g/cm³	Ca. 197 500 /m²	
13	Page 42	MXTURE	Tufted 1/12" Loop Tip Sheared	100% ECONYL® Yarn + 100% Regenerated Solution Dyed Nylon	Ca. 770 g/m²	Ca. 4 600 g/m²	Ca. 500 g/m²	Ca. 7.0 mm	Ca. 3.5 mm	Ca. 0,143 g/cm³	Ca. 230 000 /m²	

10-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	CLASS EN 1307	FIRE CLASS	THERMAL RESISTANCE	ΔL 1 000 Hz	ΔL <sub>w</sub> (dB)	α <sub>w</sub> (H)	7		1.1		1 - 1	1 -	1 1
	33-LC1	B <sub>ff</sub> -s1	0.067 m² K/W	30	22	0.15	-	-	-	-	-		_
33.4C    C_st    D_04C m*KW    S   16   0.15	32-LC2	B <sub>f</sub> -s1	0.064 m² K/W	33	23	0.15	•	-	-	-	•		
33-LC3	33-LC2	B <sub>f</sub> -s1	0.055 m² K/W	37	24	0.20	•	-	-	-	•		
23-4-C2	33-LC1	C <sub>ff</sub> -s1	0,040 m² K/W	9	15	0.15	•	-		-	•		•
33 LC2	33-LC3	B <sub>ff</sub> -s1	0,080 m² K/W	39	24	0.20	•	-	-	-	•		
33.1.C2   R <sub>y</sub> -s1   0.086 et N/W   42   26   0.15	33-LC2	B <sub>f</sub> -s1	0.070 m² K/W	42	26	0.15	•	-	•	•	•		
33 LG2	33-LC2	B <sub>ff</sub> -s1	0.070 m² K/W	43	24	0.15	•	•	•	•	•	•	
33-LC2	33-LC2	B <sub>ff</sub> -s1	0.064 m² K/W	42	26	0.15	•	•	•	•	•	•	
33-LC1   B <sub>c</sub> -s1   0.047 m <sup>2</sup> K/W   37   25   0.20	33-LC3	B <sub>ff</sub> -s1	0,075 m² K/W	39	24	0.20	•	•	•	•	•		
33-LC2 B <sub>c</sub> st 0.075 m <sup>c</sup> K/W 39 29 0.20	33-LC2	B <sub>ff</sub> -s1	0.070 m² K/W	44	26	0.15	•	•	•	•	•		
33-LC1	33-LC1	B <sub>ff</sub> -s1	0.047 m² K/W	37	25	0.20	-	-	-	-	-		
33-LC1 B <sub>y</sub> s1 0.047 m <sup>x</sup> K/W 37 25 0.20	33-LC2	B <sub>ff</sub> -s1	0.075 m² K/W	39	29	0.20	•	•	•		•		
33-LC1 B <sub>3</sub> -s1 0.047 m <sup>1</sup> K/W 37 25 0.20	33-LC1	B <sub>ff</sub> -s1	0.064 m² K/W	36	24	0.15							
33-LC1 B <sub>2</sub> -s1 0.047 m <sup>2</sup> k/W 37 25 0.20	33-LC1	B <sub>ff</sub> -s1	0.047 m² K/W	37	25	0.20		•	•		•		
33-LC1 B <sub>n</sub> -s1 0.047 m <sup>n</sup> K/W 37 25 0.20	33-LC1	B <sub>ff</sub> -s1	0.047 m² K/W	37	25	0.20		•					
33-LC1 B <sub>r</sub> ·s1 0.046 m² K/W 12 16 0.10	33-LC1	B <sub>ff</sub> -s1	0.047 m² K/W	37	25	0.20	•	•	•		•		
33-LC2 B <sub>n</sub> -s1 0.050 m <sup>2</sup> K/W 36 22 0.15	33-LC1	B <sub>n</sub> -s1	0.047 m² K/W	37	25	0.20							
33-LC2 B <sub>g</sub> -s1 0.085 m <sup>2</sup> K/W 42 26 0.20	33-LC1	B <sub>n</sub> -s1	0.046 m² K/W	12	16	0.10							•
33-LC1 B <sub>n</sub> -s1 0.039 m² K/W 33 22 0.15	33-LC2	B <sub>n</sub> -s1	0.050 m² K/W	36	22	0.15							
33-LC2 B <sub>B</sub> -s1 0,066 m <sup>2</sup> K/W 36 26 0.15	33-LC2	B <sub>n</sub> -s1	0.085 m² K/W	42	26	0.20							
33-LC2 B <sub>n</sub> -s1 0.084 m <sup>2</sup> K/W 36 26 0.15	33-LC1	B <sub>n</sub> -s1	0.039 m² K/W	33	22	0.15							
33-LC2 B <sub>n</sub> -s1 0,091 m <sup>2</sup> K/W 25 0.20	33-LC1	B <sub>n</sub> -s1	0,066 m² K/W		25	0.15	-	-	-	-	-		
33-LC2 B <sub>n</sub> -s1 0,091 m² K/W 25 0.20 ■ ■ ■ ■	33-LC2	B <sub>ff</sub> -s1	0.084 m² K/W	36	26	0.15				-	•		
	33-LC2	B <sub>n</sub> -s1	0,091 m² K/W		25	0.20							
33-LC2 B <sub>n</sub> -s1 0,071 m² K/W 25 0.15 ■ ■ ■ ■	33-LC2	B <sub>ff</sub> -s1	0,091 m² K/W		25	0.20	•	=	=	=	•		
	33-LC2	B <sub>n</sub> -s1	0,071 m² K/W		25	0.15							

#	PAGE	PRODUCT	CONSTRUCTION	PILE MATERIAL	PILE WEIGHT	TOTAL WEIGHT	PILE ABOVE BACKING	TOTAL HEIGHT	PILE HEIGHT	PILE DENSITY	TUFT DENSITY	
18	Page 58	NORMAL	Tufted 1/10" Loop	100% Polyolefine	Ca. 580 g/m²	Ca. 4 100 g/m²	Ca. 340 g/m²	Ca. 6.2 mm	Ca. 3.4 mm	Ca. 0.100 g/cm³	Ca. 156 000 /m²	
18	Page 58	NEW NORMAL	Tufted 1/10" Loop	8% PA Space Dyed + 92% Polyolefine	Ca. 580 g/m²	Ca. 4 100 g/m²	Ca. 340 g/m²	Ca. 6.2 mm	Ca. 3.4 mm	Ca. 0.100 g/cm³	Ca. 156 000 /m²	
04	Page 14	ON-LINE 1	Tufted 1/10" Loop	100% PA 6.6 Antron®	Ca. 700 g/m²	Ca. 4 530 g/m²	Ca. 380 g/m²	Ca. 6.0 mm	Ca. 2.6 mm	Ca. 0.146 g/cm³	Ca. 146 500 /m²	
05	Page 18	ON-LINE 2	Tufted 1/10" Loop	100% PA 6.6 Antron®	Ca. 700 g/m²	Ca. 4 530 g/m²	Ca. 380 g/m²	Ca. 6.0 mm	Ca. 2.6 mm	Ca. 0.146 g/cm³	Ca. 146 500 /m²	
39	Page 118	OPPOSITE	Minituft® 5/64" Loop	100% PA 6 Solution Dyed Nylon	Ca. 500 g/m²	Ca. 4 600 g/m²	Ca. 170 g/m²	Ca. 5.9 mm	Ca. 1.1 mm	Ca. 0.155 g/cm³	Ca. 200 000 /m²	
40	Page 122	OPPOSITE LINES	Minituft® 5/64" Loop	100% PA 6 Solution Dyed Nylon	Ca. 500 g/m²	Ca. 4 600 g/m²	Ca. 170 g/m²	Ca. 5.9 mm	Ca. 1.1 mm	Ca. 0.155 g/cm³	Ca. 200 000 /m²	
42	Page 130	PATCHWORK	Tufted 1/10" Loop, printed	100% PA 6 IMPREL	Ca. 605 g/m²	Ca. 4 400 g/m²	Ca. 372 g/m²	Ca. 6.6 mm	Ca. 3.1 mm	Ca. 0.120 g/cm³	Ca. 218 000 /m²	
43	Page 134	PATTERN	Tufted 1/10" Loop, printed	100% PA 6 IMPREL	Ca. 605 g/m²	Ca. 4 400 g/m²	Ca. 372 g/m²	Ca. 6.6 mm	Ca. 3.1 mm	Ca. 0.120 g/cm³	Ca. 218 000 /m²	
41	Page 126	PIXEL	Tufted 1/10" Loop, printed	100% PA 6 IMPREL	Ca. 605 g/m²	Ca. 4 400 g/m²	Ca. 372 g/m²	Ca. 6.6 mm	Ca. 3.1 mm	Ca. 0.120 g/cm³	Ca. 218 000 /m²	
15	Page 50	PERPETUAL	Tufted 1/10" Loop	100% Polyamide	Ca. 700 g/m²	Ca. 4 600 g/m²	Ca. 450 g/m²	Ca. 6.9 mm	Ca. 3.5 mm	Ca. 0.128 g/cm³	Ca. 104 000 /m²	
35	Page 102	PURE AIR100	Tufted 1/10" Loop	100% PA 6 ECONYL® Yarn + Regenerated Solution Dyed Nylon + Regenerated Space Dyed Nylon	Ca. 700 g/m²	Ca. 4 700 g/m²	Ca. 402 g/m²	Ca. 6.6 mm	Ca. 3.0 mm	Ca. 0.134 g/cm³	Ca. 180 000 /m²	
16	Page 54	SHINE-UP	Tufted 1/10" Loop	PA 6 Solution Dyed + PA 6 Space Dyed	Ca. 660 g/m²	Ca. 4 600 g/m²	Ca. 360 g/m²	Ca. 6.2 mm	Ca. 2.8 mm	Ca. 0.129 g/cm³	Ca. 168 000 /m²	
52	Page 178	SPARK	Tufted 1/10" Loop	100% PA 6	Ca. 690 g/m²	Ca. 4 350 g/m²	Ca. 500 g/m²	Ca. 6.6 mm	Ca. 3.5 mm	Ca. 0,143 g/cm³	Ca. 272 000 /m²	
06	Page 22	STEP	Tufted 1/10" Loop	100% PA 6 Aqualon	Ca. 530 g/m²	Ca. 4 300 g/m²	Ca. 335 g/m²	Ca. 6.0 mm	Ca. 2.8 mm	Ca. 0.120 g/cm³	Ca. 160 000 /m²	
13	Page 38	TXTURE	Tufted 1/12" Loop Tip Sheared	100% ECONYL® Yarn 100% Regenerated Solution Dyed Nylon	Ca. 770 g/m²	Ca. 4 600 g/m²	Ca. 500 g/m²	Ca. 7.0 mm	Ca. 3.5 mm	Ca. 0,143 g/cm³	Ca. 230 000 /m²	
49	Page 158	VELVET&	Tufted 1/12" Loop Tip Sheared	100% PA 6 Aqualon	Ca. 900 g/m²	Ca. 4 750 g/m²	Ca. 570 g/m²	Ca. 7.6 - 8.8 mm	Ca. 3.8 - 5.0 mm	Ca. 0,114 - 0,150 g/cm³	Ca. 240 000 /m²	
46	Page 146	WILLOW	Tufted 1/12" Loop	100% ECONYL® Yarn 100% Regenerated Solution Dyed Nylon	Ca. 880 g/m²	Ca. 4 600 g/m²	Ca. 630 g/m²	Ca. 7.8 mm	Ca. 4.3 mm	Ca. 0.146 g/cm³	Ca. 225 000 /m²	

# Overview technical data per product – CUT PILE

14	Page 46	CAMBRIDGE	Tufted 1/10" Frisé	100% PA 6.6 Antron®	Ca. 1050 g/m²	Ca. 4 650 g/m²	Ca. 728 g/m²	Ca. 8.0 mm	Ca. 5.0 mm	Ca. 0.146 g/cm³	Ca. 181 102 /m²	
52	Page 174	GLEAM	Tufted 1/10" Cutpile Frisé	ECONYL® Yarn 100% Regenerated Solution Dyed Nylon + PA 6	Ca. 1 300 g/m²	Ca. 5 150 g/m²	Ca. 1 045 g/m²	Ca. 9.5 mm	Ca. 6.2 mm	Ca. 0,169 g/cm <sup>3</sup>	Ca. 164 000 /m²	

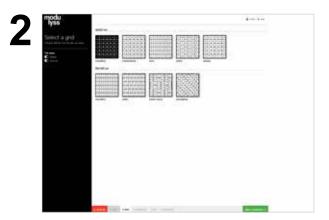
CLASS EN 1307	FIRE CLASS	THERMAL RESISTANCE	ΔL 1 000 Hz	$\Delta L_{w}$ (dB)	α <sub>w</sub> (H)	F		1 1		1 -	1 -	11
31-LC1	C <sub>ff</sub> -s1	0.045 m² K/W	39	26	0.20	-		-	-	•		
31-LC1	C <sub>ff</sub> -s1	0.045 m² K/W	39	26	0.20	-		-	-	-		
33-LC1	B <sub>ff</sub> -s1	0.036 m² K/W	35	23	0.15	•	•	•	•	•		
33-LC1	B <sub>ff</sub> -s1	0.036 m² K/W	35	23	0.15	-	•	•	•	•		
33-LC1	B <sub>n</sub> -s1	0.048 m² K/W	11	16	0.15	•	•			•		
33-LC1	B <sub>n</sub> -s1	0.048 m² K/W	11	16	0.15	•	•			•		
33-LC1	B <sub>ff</sub> -s1	0.063 m² K/W	32	23	0.15	•	•	•	•	•		
33-LC1	B <sub>ff</sub> -s1	0.063 m² K/W	32	23	0.15	•	•	•	•	•		
33-LC1	B <sub>ff</sub> -s1	0.063 m² K/W	32	23	0.15	•	•		•	•		
33-LC2	B <sub>ff</sub> -s1	0.057 m² K/W	38	27	0.20	-	-	-	-	-		
33-LC2	B <sub>ff</sub> -s1	0.065 m² K/W	37	24	0.15	•	•			•		
33-LC1	B <sub>n</sub> -s1	0.040 m² K/W	36	24	0.15	•	•	•	•	•		
33-LC2	B <sub>ff</sub> -s1	0,059 m² K/W	40	24	0.15	•				•		
33-LC1	B <sub>ff</sub> -s1	0.053 m² K/W	33	24	0.15	-	-	-	-	-		
33-LC2	B <sub>ff</sub> -s1	0,070 m² K/W		24	0.15	•	•	•	•	•		
33-LC2	B <sub>n</sub> -s1	0,094 m² K/W		25	0.15	•	•	•		•		
33-LC2	B <sub>ff</sub> -s1	0.086 m² K/W	36	27	0.15	•	•		•	•		
						•						
32-LC3	B <sub>ff</sub> -s1	0.071 m² K/W	43	28	0.20		-	-	-			
33-LC5	B <sub>ff</sub> -s1	0,107 m² K/W	51	31	0.20	-	-	•				

Creating your own floor design is easy with our user-friendly modulyss designer.

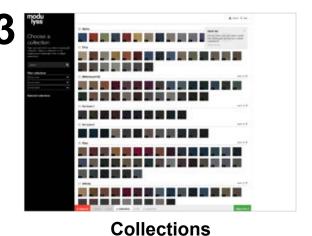
It only takes 5 simple steps!



Space
Create your own floor space. Select your room type and change the dimensions.



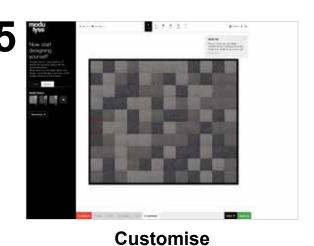
**Grid**Choose from a wide range of grids.
The grid defines how the carpet tiles are installed.



Choose from our entire collection. You can mix & match tiles from one or multiple collections.



Fill your floor space with a base colour or start with a blank canvas.



Change colours, add details, make patterns or randomly fill your space with the randomise option.



### LIUNI S.P.A.

Via G. Stephenson, 43 20157 MILANO - Italy Tel. +39 02 30731 Fax +39 02 3073221 info@liuni.com

# **FILIALE DI ROMA**

Via Aurelia, 547 | 557A 00165 ROMA - Italy Tel. +39 06 6604851 Fax +39 06 66048540 filialeroma@liuni.com

# **FILIALE DI VERONA**

Via G. De Sandre, 9 37135 VERONA - Italy Tel. +39 045 592861 Fax +39 045 8019262 filialeverona@liuni.com

www.liuni.com