ntgrate

technical specifications Greenfelt tiles and rolls

technical specifications X**tiles** Greenfelt **rolls** Greenfelt composition 83% PVC - 7% glass fibre - 10% PET PVC glass fibre PVC glass fibre wear layer 4,7 mm 4,7 mm ISO 1765 thickness 0,19 inch 0,19 inch $3.000 \, g/m^2$ $3.000 \, g/m^2$ ISO 8543 weight 88,48 oz/yd² 88,48 oz/yd² EN 1307 level of use class 33 class 33 suitability for castor chair EN 985 intensive use intensive use ISO 1815 static loading < 2KV < 2KV > 0,3 R9 > 0,3 R9 slip resistance DIN 51130 ISO 10140 impact sound ΔLw 19 dB 19 dB Class E ISO 354 acoustical absorption $\alpha_{W} = 0.15$ $\alpha w = 0.15$ EN 16205 71 dB (A) 71 dB (A) EN 105-B02 light fastness EN 13501 reaction to fire B_e-s1 ASTM E648-17 0,63 W/cm² 0,63 W/cm² critical radiant flux Class I Class I ASTM E662-15a smoke density <450 500 x 500 mm \bigoplus EN 984 dimensions 19,69 x 19,69 inch 200 – 202 cm 7,87 - 7,95 inch ISO 24341 width ISO 10965 length op aanvraag EN 986 < 0,2% < 0,2% dimensional stability **%** EN 1814 resistance to fraying very good very good EN 423/ staining resistance very good very good suitability for humid EN 15114 suitable suitable thermal resistance ISO 8302 suitable suitable (underfloor heating) C€ EN 14.041 Dop nr. 0493-CPR-0193 0493-CPR-0194

ntgrate is green.

- green and VOC emission certificates

Our stringent quality demands result in floors that have a long lifecycle. Going ntgrate® means you have a sustainable design product that will last you an eternity. Our products have all required green and VOC emission certificates. An overview:

certificate	result	description
AGBB / ABG	pass	German AgBB (2018)
BREEAM international	compliant	Breeam Int.: HEA02 (tested by an independant research facility)
Blue angel	pass	RAL UZ120
CDPH	pass	CDPH Section 01350
ECO EPD	pass	ECO EPD according to EN 15804
FDES	pass	Environmental and health declaration form: verification number: 1-42: 2021
Floorscore	compliant	CPDH/EHLB standard method
French CMR components	pass	
HPD	pass	Health Product Declaration (HPDC v2.2)
Indoor Air Comfort Gold	pass	VOC requirements on low emitting products
LEED v4	compliant	LEED V4.1 BETA Low Emitting Products
M1 classification	pass	Emission classification of building materials
Plasticizer content	phtalate free	
Recycled content	yes	
Reach	compliant	EC 1907/2006
VOC (Belgian regulation)	certified	Belgium Royal Decree C-2014/24239
VOC (French regulation)	A+ gecertificeerd	Decree no 2011-321
WELL (CPDH well building standard)	compliant	CPDH Well building standard/Well v2 feature X11 Long-term Emission control













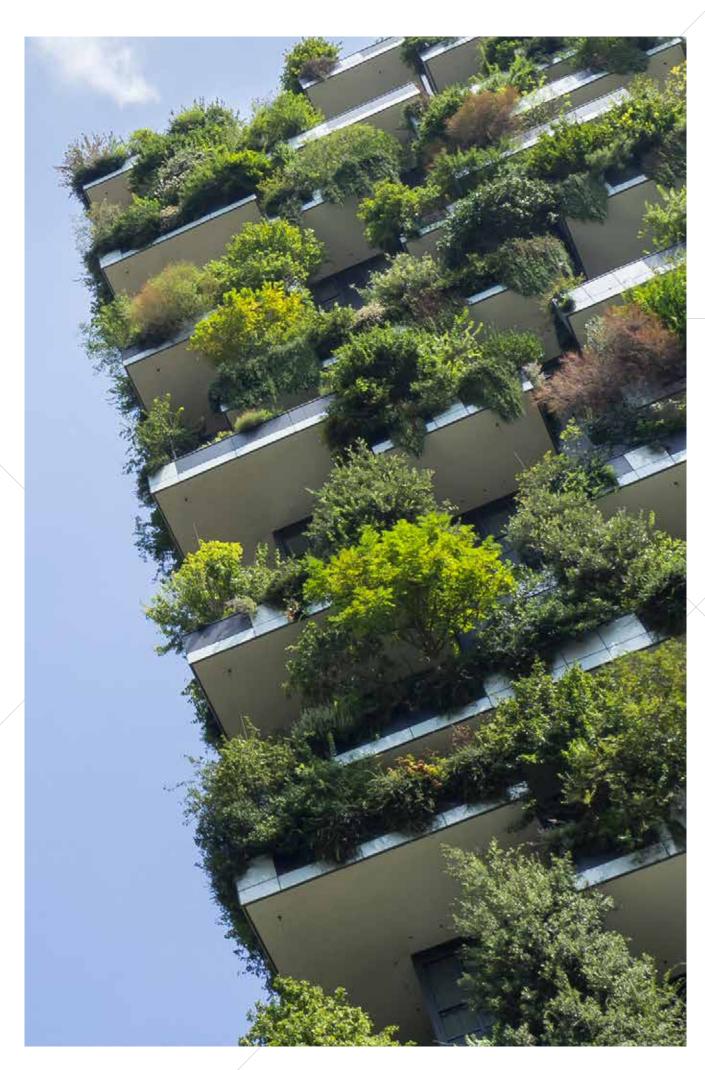
ntgrate®











Rating systems.

Deliver and validate the sustainability value of your project.

Increased existance of green building rating systems, the rise of net-zero buildings, and a sharper focus on existing structures are among the trends that will drive sustainability through 2020. As ntgrate is supporting the green recovery of our planet, we work hard on obtaining all leading green certificates.



LEED Certification stands for **Leadership in Energy and Environmental Design.** It is the accepted benchmark for the design, construction, and operation of high performance green buildings. This Green Building Rating System is a voluntary, evolving, consensus-based **international standard** for developing high-performance, sustainable buildings, using a comprehensive, point-based system. This LEED certification is initiated by USGBC (US Green Building Council) and is internationally recognized.

LEED topics are specified in **9 different main categories**, with multiple credits, on which the building is evaluated. The LEED certification process uses a point system to **determine the environmental merits of a building**; there are different rating systems for homes, commercial buildings, interior renovations, schools, neighborhood developments, and other construction projects.

Using ntgrate woven vinyl flooring, **up to 12 credits can be gained** on the following categories/ issues (according to BREEAM International New Construction 2016:

Category	Issue	Max. credits	tiles rolls	
Energy & atmosphere (EA)	Optimize energy performance	max. 18	1	
Materials & resources (MR)	Building life-cycle impact reduction	max. 5	2	
	Building product disclosure and optimization - environmental product declarations	max. 2	1	
	Building product disclosure and optimization - sourcing of raw materials	max. 2	2	
	Building product disclosure and optimization - material ingredients	max. 2	2	
Indoor environmental quality (EQ)	Low-emitting materials	max. 3	1	
	Indoor air quality assessment	max. 2	2	
	Acoustic performance	max.1	1	
Total			12	



BREEAM®

We are proud that ntgrate is one of the first Belgian flooring brands that can respond to and aid you with BREEAM certification. BREEAM (British Research Establishment Environmental Assessment Method) is a **certification system that recognises sustainable buildings** that exceed national standards. As a quality label, it encourages the market to focus on sustainability in building design as well as the environmental impact of products in buildings.

As **BREEAM** assesses the overall building concept, this label specifies 10 main categories, with multiple issues, on which the building is evaluated. Credits are awarded and weighted for each category in order to generate the final score for the building, in levels from pass to outstanding. As ntgrate, we develop durable woven vinyl flooring products that increase the architectural value of buildings and enhance people's living and working environment. Integration of ntgrate flooring (tiles, rolls and klic) in buildings can contribute to the overall sustainability level of the building, thus achieving credits for building certificates such as BREEAM. Using ntgrate flooring solutions no less than **14 BREEAM credits** can be achieved. The feasibility to obtain these credits were analysed and confirmed by an independent and qualified expert engineering company, Encon, specialized in optimising energy consumption.

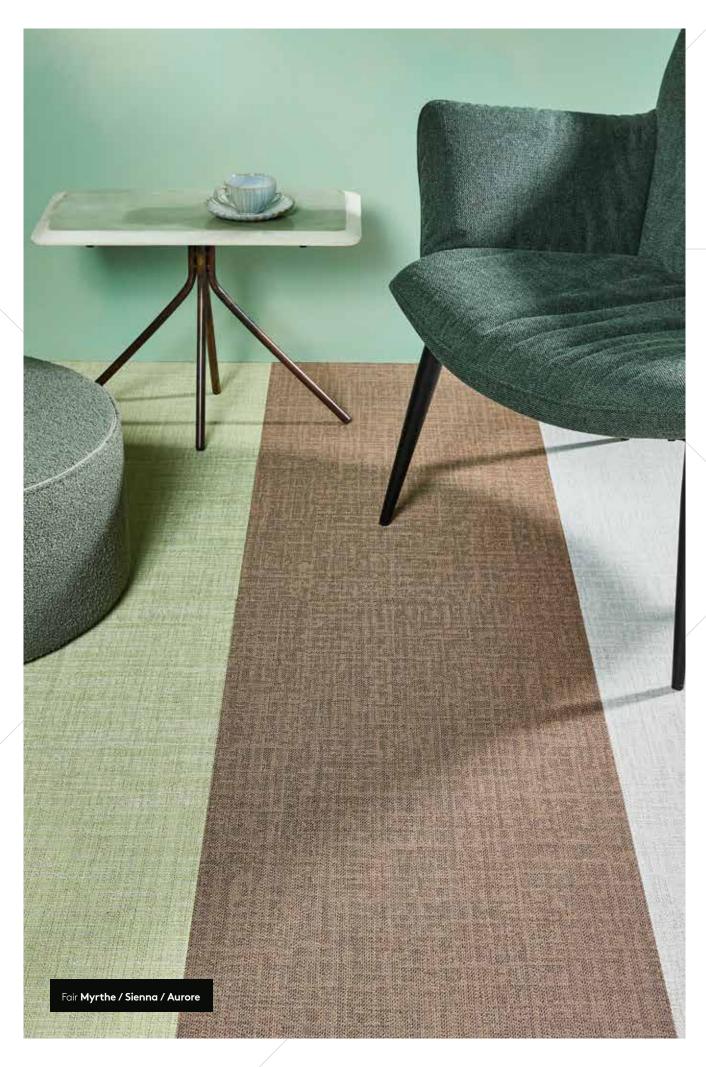
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Category	Issue	Max. credits	tiles rolls	
Health & wellbeing (HEA)	HEA2 - Indoor air quality	max. 5	2	
	HEA4 - Thermal comfort	max. 3	1	
	HEA5 - Acoustic performance	max. 2	1	
Management (MAN)	MAN2 - Life cycle cost and service life planning	max. 4	1	
	MAN4 - Commissioning and handover	max. 4	1	
Energy (ENE)	ENE1 - Reduction of energy use and carbon	max. 15	1	
Materials (MAT)	MAT1 - Life cycle impacts	max. 6	3	
	MAT5 - Designing for durability and resilience	max.1	1	
Waste (WST)	WST1 - Construction waste management	max. 4	1	
	WST4 - Speculative finishes	max.1	1	
	WST6 - Functional adaptability	max.1	1	
Total			14	

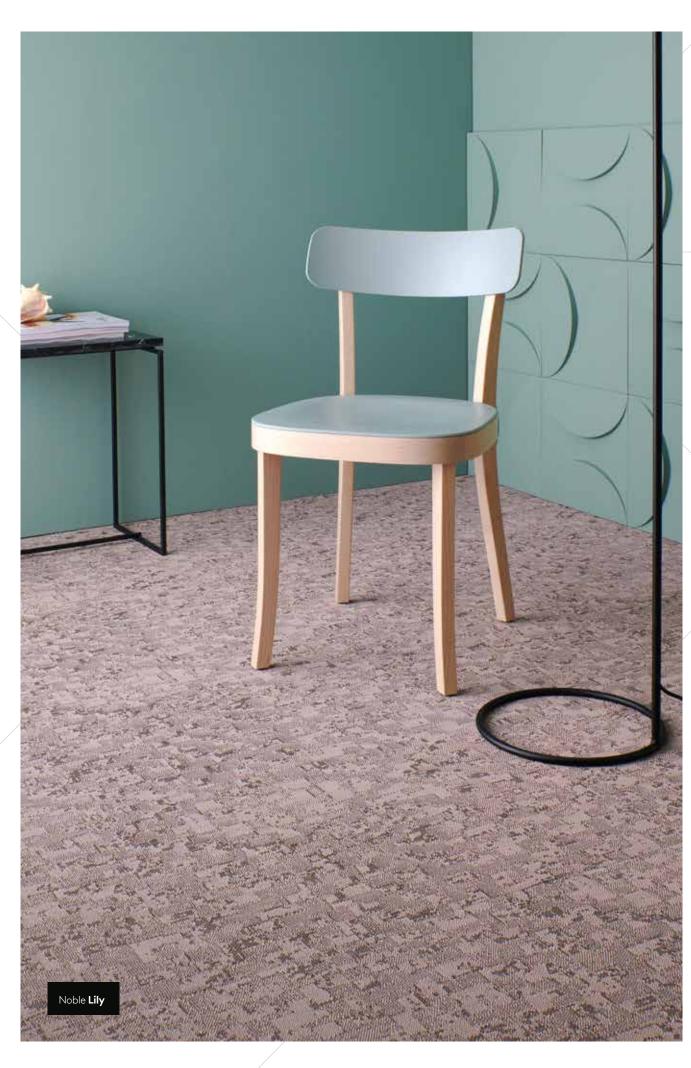


Product composition.

- Açoustic, sustainable backing 'Greenfelt'

The ntgrate® top layer and fiberglass core are extremely tough and sturdy. The high-tech Topgrate® weave sets a new standard in floor quality: it's dimensionally stable, extremely wear-resistant and has great colour uniformity. Approved for intensive, high commercial use.

item	CAS NO	specification	%	
base	65997-17-3	Solid glass and glass/fiber	5-6	
charges	1317-65-3	Carbonate of ca. natural raw material	19-21	
pigment	1333-86-4	various	<0.1	
plasticizer	6422-86-2	phthalate free	19-21	
polymer	9002-86-2	PVC	39-41	
reinforcement	25038-59-9	Polyethylene terephthalate (PET)	9.5-10	



Light reflection.

- brite lite a significant effect on energy consumption and visual health.

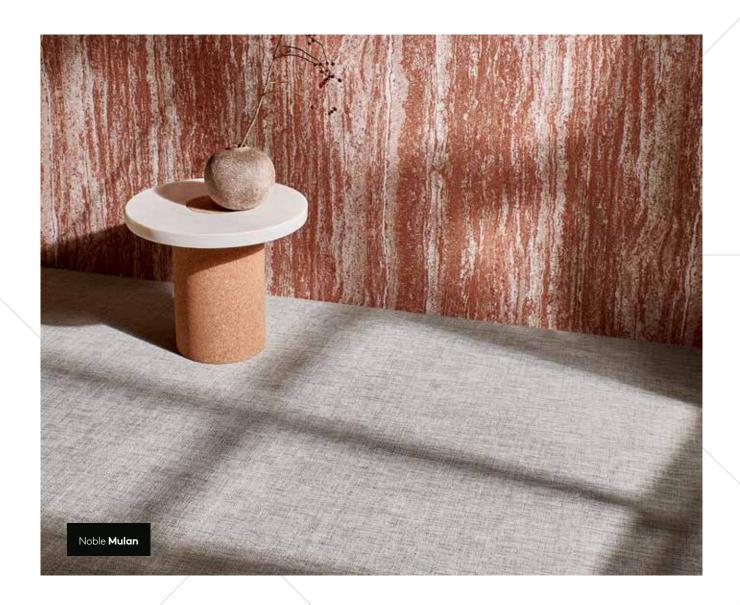
The Light Reflectance Value (LRV) indicates the extent to which light is reflected from a surface illuminated by a light source. It concerns the total amount of visible and usable light (of all wavelengths and in all directions) that is reflected from all surfaces present.

The brightness in a living space is determined by the orientation of that space and the size of the different surfaces (windows, floors, ceilings, etc.). But did you know that the colours, structure and gloss of the materials used also have a significant influence on this LRV value? All these elements determine the extent to which light is reflected or absorbed.

Colors react to light in different ways. Colors with a high light reflectance value (LRV) reflect more light, so less artificial light is needed to illuminate a room. LRV is measured from zero (black), which covers a fully absorbing area up to 100. This highest value will then again reflect perfectly (perfect white). Some thus promote the natural brightness of the room, others darken the room more quickly.

Lighting designers in particular use the LRV values in the light study for the choice of lighting sources. In this way it is determined how much artificial light is needed to optimally illuminate the space. Smart interior design also has direct economic and environmental benefits. In an office environment, lighting accounts for half of the total energy consumption.

On the next 2 pages you can already find the **brite lite** selection of ntgrate designs and colors. This collection contains integrated floors that achieve the highest LRV score and thus make an extra contribution to the sustainability of a building.



sharp



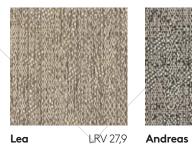
LRV 43,7





LRV 24,6 Blanca

strong







noble











Jacqueline ■ LRV 24,9

Madeleine ■ LRV 20,5 Theodore ■

fair





LRV 36,3 **Pia**



LRV 22 **Amber**



LRV 21,3



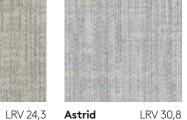
LRV 30,8

LRV 43,9



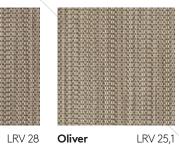
Myrthe





gentle





brite lite collection.

brave









ntgrate. woven vinyl flooring.

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Go wild and mix it all up in your hotel lobby. Keep it sober in your office space. Unique designs and trendy characters let you combine to your heart's content: from rough and rugged to wonderfully subdued. Who would you like to be?

Like a painter works his canvas using light, so does your floor's design. The incidence of light and laying direction determine the atmosphere of your interior project.

ntgrate® technical_specs_IBA_07_2021_EN

ntgrate®