

Owner: Scan Underlay Production ApS  
No.: MD-19007-EN  
ECO EPD: 00000980  
Issued: 17-09-2019  
Valid to: 17-09-2024

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3<sup>rd</sup> PARTY VERIFIED

**EPD**

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VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804



**Owner of declaration**

Scan Underlay Production ApS  
 Ursusvej 16, 8464 Galten,  
 Denmark  
 CVR: 36558172



**Issued:**  
17-09-2019

**Valid to:**  
17-09-2024

**Programme operator**

Danish Technological Institute  
 www.dti.dk



**Programme**

EPD Danmark  
 www.epddanmark.dk



**Basis of calculation**

This EPD is developed in accordance with the European standard EN 15804.

**Comparability**

EPDs of construction products may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

**Validity**

This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

**Use**

The intended use of an EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing the environmental performance of buildings.

**EPD type**

- Cradle-to-gate
- Cradle-to-gate with options
- Cradle-to-grave

**Declared products**

Acoustic Silence 1050, as well as Acoustic Silence Stripe 50 (50 mm wide) and Acoustic Silence Stripe (100 mm wide), which consists of the product Acoustic Silence 1050, cut in stripes.

**Production site**


Galten, Denmark.

**Products use**

The product is used to reduce sound vibrations, impact sound and multi-story sound transmission and is used in connection with renovation and new construction.

**Declared unit**

1 m<sup>2</sup> under-screed insulation

CEN standard EN 15804 serves as the core PCR
Independent verification of the declaration and data, according to EN ISO 14025
<input type="checkbox"/> internal <input checked="" type="checkbox"/> external
Third party verifier:  <hr/> David Althoff Palm, Ramboll

  
 Henrik Fred Larsen  
 EPD Danmark

**Life cycle stages and modules (MND = module not declared)**

Product			Construction process		Use								End of life			Beyond the system boundary
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Re-use, recovery and recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

# Product information

## Product description

The main product components are shown in the table below. These amounts to 100 weight % of the declared product.

Material	Weight-% of declared product
Rubber granulate, from recycled car tires	90 %
Fiber and binders (Polyester, polyethylene, polypropylene)	10 %
Packaging of final product	g/m <sup>2</sup> under-screed insulation
Wooden pallet	50
Plastic foil	0.6
Tape	0.2

The specified amount of packaging is valid for Acoustic Silence 1050, as well as for Acoustic Silence Stripe 50 and Acoustic Silence Stripe 100 (100 mm wide) stripes bought in pallet sizes. For particularly small orders of the two kinds of stripes, more packaging will be applied per m<sup>2</sup>. This is not covered in this EPD.

## Representativity

This declaration, including data collection and the modeled foreground system including results, represents the production of 1 m<sup>2</sup> under-screed insulation Acoustic Silence 1050, as well as for Acoustic Silence Stripe 50 and Acoustic Silence Stripe 100, from the production site in Galten, Denmark. Product specific data are based on annual average values from year 2018, provided by Scan Underlay. Background data are based on the GaBi Professional database 2018. The background data that are used are < 10 years old.

## Dangerous substances

The products do not contain substances listed in the "Candidate List of Substances of Very High Concern for authorisation", with a content exceeding 0.1 weight %.(<http://echa.europa.eu/candidate-list-table>). The absence of these substances is declared by the manufacturer, Scan Underlay.

## Essential characteristics (CE)

Acoustic Silence 1050, as well as the two types of stripes which are cut from Acoustic Silence 1050 (Acoustic Silence Stripe 50 and Acoustic Silence Stripe 100), are not covered by harmonised technical specifications

Further technical information can be obtained by contacting the manufacturer or on the manufacturer's website:

<https://www.scanunderlay.com/datasheets/en/datasheet-en-1050.pdf>  
<https://www.scanunderlay.com/datasheets/en/datasheet-en-50.pdf>  
<https://www.scanunderlay.com/datasheets/en/datasheet-en-100.pdf>  
<https://www.scanunderlay.com/en/products>

## Reference Service Life (RSL)

The reference service life is in accordance with EN 15804 not declared, as this environmental product declaration is based on a cradle-to-gate life cycle assessment.

## LCA background

### Declared unit

The declared unit is 1 m<sup>2</sup> under-screed insulation for the products Acoustic Silence 1050, Acoustic Silence Stripe 50 and Acoustic Silence Stripe 100.

Name	Value	Unit
Declared unit	1	m <sup>2</sup>
Conversion factor to 1 kg.	1.05 <sup>1</sup>	kg/m <sup>2</sup>

### Product illustration



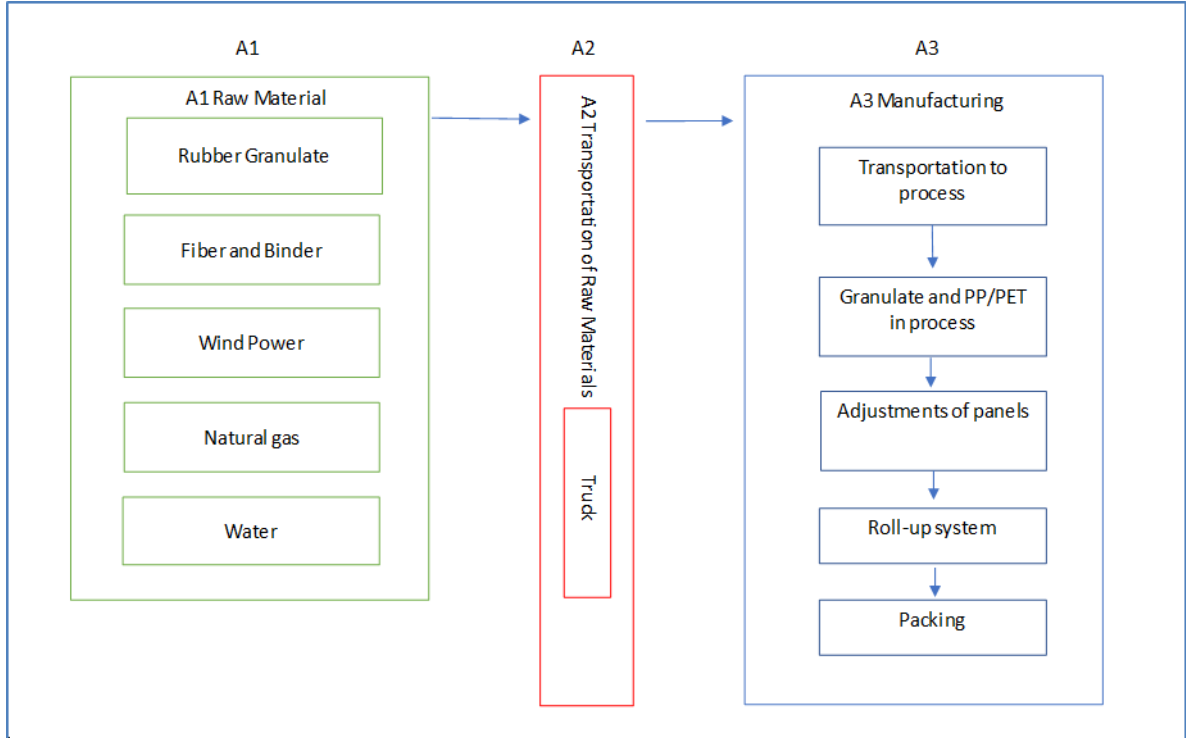
Acoustic Silence 1050, Acoustic Silence Stripe 100 and Acoustic Silence Stripe 50 (from left to right).

<sup>1</sup> +/- 50 g

PCR

This EPD is developed according to EN 15804.

**Flow diagram**



**System boundaries**

This EPD is based on a cradle-to-gate LCA, in which 100 weight % has been accounted for.

The general rules for the exclusion of inputs and outputs in the LCA follows the requirements in EN 15804, 6.3.5, where the total of neglected input flows per module shall be a maximum of 5 % of energy usage and mass and 1 % of energy usage and mass for unit processes.

The rubber granulate in the final product originates from recycled car tires. Environmental impacts from the production of the original car tires are not included. Both the reprocessing of rubber granulates from recycled car tires, as well as transport for production and disposal, respectively, is included. This approach is in accordance with EN 15804.

**Product stage (A1-A3) includes:**

- A1 – Extraction and processing of raw materials
- A2 – Transport to the production site
- A3 – Manufacturing processes

The product stage comprises the acquisition of all raw materials, products and energy, transport to the production site and internal transport at the production site, packaging and waste processing up to the "end-of-waste" state or final disposal. The LCA results are declared in aggregated form for the product stage, which means, that the sub-

modules A1, A2 and A3 are declared as one module A1-A3.

## LCA results

ENVIRONMENTAL IMPACTS PER m <sup>2</sup> ACOUSTIC SILENCE 1050, ACOUSTIC SILENCE STRIPE 100 and ACOUSTIC SILENCE STRIPE 50, A1-A3		
Parameter	Unit	A1-A3
GWP	[kg CO <sub>2</sub> -eq.]	5.11E-01
ODP	[kg CFC11-eq.]	5.29E-14
AP	[kg SO <sub>2</sub> -eq.]	8.85E-04
EP	[kg PO <sub>4</sub> <sup>3-</sup> -eq.]	1.47E-04
POCP	[kg ethene-eq.]	8.98E-05
ADPE	[kg Sb-eq.]	1.74E-07
ADPF	[MJ]	1.12E+01
Caption	GWP = Global warming potential; ODP = Ozone depletion potential; AP = Acidification potential of soil and water; EP = Eutrophication potential; POCP = Photochemical ozone creation potential; ADPE = Abiotic depletion potential for non fossil resources; ADPF = Abiotic depletion potential for fossil resources	

RESOURCE USE PER m <sup>2</sup> ACOUSTIC SILENCE 1050, ACOUSTIC SILENCE STRIPE 100 and ACOUSTIC SILENCE STRIPE 50, A1-A3		
Parameter	Unit	A1-A3
PERE	[MJ]	3.67E+00
PERM	[MJ]	1.35E+00
PERT	[MJ]	5.03E+00
PENRE	[MJ]	8.67E+00
PENRM	[MJ]	3.27E+00
PENRT	[MJ]	1.19E+01
SM	[kg]	9.42E-01
RSF	[MJ]	0.00E+00
NRSF	[MJ]	0.00E+00
FW	[m <sup>3</sup> ]	9.92E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Use of net fresh water	

\*The energy content of the packaging for the product is included here

**WASTE CATEGORIES AND OUTPUT FLOWS PER m<sup>2</sup> ACOUSTIC SILENCE 1050, ACOUSTIC SILENCE STRIPE 100 and ACOUSTIC SILENCE STRIPE 50, A1-A3**

Parameter	Unit	A1-A3
HWD	[kg]	4.61E-08
NHWD	[kg]	1.63E-02
RWD	[kg]	2.86E-04

CRU	[kg]	-
MFR	[kg]	-
MER	[kg]	-
EEE	[MJ]	-
EET	[MJ]	-

Caption HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy; - = Not assessed, as it is not relevant for A1-A3.

**Conversion factors from m<sup>2</sup> to meter stripes**

The following conversion factors can be applied to convert results from 1 m<sup>2</sup> of Acoustic Silence 1050, Acoustic Silence Stripe 50 and Acoustic Silence Stripe 100, to the different width of stripes, for Acoustic Silence Stripe 50 and Acoustic Silence Stripe 100.

Conversion factors from results for 1 m <sup>2</sup> , to meter stripes, for Acoustic Silence Stripe 50 and Acoustic Silence Stripe 100		
Product	Width of stripe	Conversion factor
Acoustic Silence Stripe 50	50 mm	0.05
Acoustic Silence Stripe 100	100 mm	0.1

**Indoor air**

The EPD does not give information on release of dangerous substances to indoor air because the horizontal standards on measurement of release of regulated dangerous substances from construction products using harmonised test methods according to the provisions of the respective technical committees for European product standards are not available.

**Soil and water**

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on measurement of release of regulated dangerous substances from construction products using harmonised test methods according to the provisions of the respective technical committees for European product standards are not available.

## References

<b>Publisher</b>	 <a href="http://www.epddanmark.dk">http://www.epddanmark.dk</a>
<b>Programme operator</b>	Danish Technological Institute Buildings & Environment Gregersensvej DK-2630 Taastrup <a href="http://www.teknologisk.dk">http://www.teknologisk.dk</a>
<b>LCA-practitioner</b>	COWI A/S Parallevej 2, DK-2800 Kongens Lyngby Susanne Vedel Hjuler E-mail: <a href="mailto:suvj@cowi.com">suvj@cowi.com</a>
<b>LCA software / background data</b>	GaBi ts 9.1 2019, including databases
<b>3<sup>rd</sup> party verifier</b>	David Althoff Palm, Ramböll Sverige AB

### General programme instructions

Version 1.9  
[www.epddanmark.dk](http://www.epddanmark.dk)

#### EN 15804

DS/EN 15804 + A1:2013 - "Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products"

#### EN 15942

DS/EN 15942:2011 – " Sustainability of construction works – Environmental product declarations – Communication format business-to-business"

#### ISO 14025

DS/EN ISO 14025:2010 – " Environmental labels and declarations – Type III environmental declarations – Principles and procedures"

#### ISO 14040

DS/EN ISO 14040:2008 – " Environmental management – Life cycle assessment – Principles and framework"

#### ISO 14044

DS/EN ISO 14044:2008 – " Environmental management – Life cycle assessment – Requirements and guidelines"