Materialepas - DCMP

Materialepas (DCMP – Digital Construction Material Passport) er et sæt data der beskriver og definerer egenskaber ved materialer i produktet der giver dem værdi til nyttiggørelse, genbrug og genanvendelse

Dette midlertidige dokument er ikke en officielt DCMP-rapport, men bygger på udfyldelsen af et DCMP på VENUS armaturet af Fischer Lighting i DCMP Editor.

Ejer af passet:	Fischer Lighting	
Oprettet:	18-01-2023	
Senest ændret	31-01-2023	Rev. Nr.: 01
3. parts verificeret: Ja	Verificeringsorganisation: Transition ApS	

VENUS - Fischer Lighting

The purpose of the material passport is to provide essential information about a number of key areas relating to construction products and their impact on the environment, health and resource consumption.

The material passport's potential applications include use as a basis for the selection and specification of construction products, for documentation in certification processes (DGNB, BREEAM, LEED, etc.) and for Facility Management. This guarantees that the construction product meets legal requirements (EU and Danish legislation) as well as other company-specific requirements and expectations for sustainability.

Contents

Identification

Product name	Venus
Manufacturer's Article numbers	FLK-0100980, FLK-0101417, FLK-0100894, FLK.0101047, FLX-0101196, FLK-0101052
Classifications	SFB-63, BIM7AA-636, CCS-K
Description	Venus is an antidote to the ubiquitous 60x60cm recessed ceiling light designed for modular acoustic t-rail ceilings but often also used in gypsum ceilings. This fixture is made from reclaimed housings that save up to 7,5 kg og steel per unit and comes in depths from 50-127 mm depending on the original design. No matter which type of reclaimed housing it always delivers the same look and light. The simple move to convert the square grid into a round light fitting brekas the monotomy of the grid and delivers an even lighting surface for ambient lighting conditions for offices, workplaces and the like. The electronics in the existing fixture are replaced and upgraded to LED, and additional components are added including a driver. The fixture follows the principles of Design for Disassembly. Furthermore, the product is elected, by Solar Impulse Foundation, to be among the 1000 most scalable sustainable solutions in the world.
Application	Ceiling fixture for installation in 60x60 system ceilings. The product is primarily used in office- and educational buildings.
Functional unit	pcs
Weight	6,0515 kg/pcs

Content

General

Is there a safety datasheet (SDS) available for this product?	No
Is there SDS available for one or more of the products subcomponents?	No
Is there an Environmental Product Declaration (EPD) available?	Yes
Name of the EPD provider	EPD Danmark
Name of EPD identifier	Linda Høibye
Functional unit	Pcs
Total percentage of recycled content in the product	64,6 %

Product content	Sub content	Exist at manufacturing (all stages)	Wt% of parent		Country of origin
Reused Steel Fixture		X	64,6	Is reused	Denmark
LED Board		X	8,1	-	China
	Aluminium plate	X	6,9	-	-
	Diodes	X	0,6	-	-
	Wiring	X	0,2	-	-
	Coating	X	0,3	-	-
Driver		X	1,9	-	Poland
Fixing		X	0,2	-	-
	Screws	X	0,1	-	-
	Magnets	X	0,1	-	-
	Space Nylon	X	0		
Diffuser		X	25,2	-	Taiwan
Cable		X	0,1	-	-
CE-sticker		X	0	-	-

Construction

Packaging

Returnable transport packaging	Yes
Re-usable packaging	Yes
Return Packaging	Yes
Packaging comment	Packaging of the final product consists of pallets, pallet frames and cardboard. In relation, the manufacturer offers an arrangement for a deposit on packaging.

Storage

Special storage requirements	No
Special surrounding material requirements	No
Storage comment	Indoor storage without contact with water and high humidity levels.

Operation

Special use or maintenance requirements	No
Special energy supply requirements	Yes
Reference lifetime (years)	15
Note	Reference life time is indicated accordingly to the PCR. The lifetime is potentially infinite as the different components of the light fixture can be replaced whenever the respective components lifetime has been reached. Fischer Lighting has as warranty period of 5 years of the overall product.
Critical moisture content	Yes
Operation information	Power Range 14-48W electricity Max LM (+- 10%) 7680 Colour Temp. 3000/4000 K Possibility of Human Centric Lighting, Dali and wireless controls

Indoor climate

Intended for indoor use Yes

Emission value

Testing standard	Type	Amount	Unit
Testing – day 3			
EN 16516:2017/FprA1	TVOC	< 2	µg/m^3
ISO 16000-3:2011	Formaldehyde	< 3	µg/m^3
EN 16516:2017/FprA1	VVOC	0	µg/m^3
EN 16516:2017/FprA1	SVOC	0	µg/m^3
EN 16516:2017/FprA1	TVOC	< 3	ug/m^{2}h
EN 16516:2017/FprA1	VVOC	0	ug/m^{2}h
EN 16516:2017/FprA1	SVOC	0	ug/m^{2}h
ISO 16000-3:2011	Formaldehyde	< 5	ug/m^{2}h
Testing- day 29			
ISO 16000-3:2011	Formaldehyde	< 3	µg/m^3
ISO 16000-3:2011	Formaldehyde	< 5	ug/m^{2}h
Testing – week 4			
EN 16516:2017/FprA1	TVOC	< 2	µg/m^3
EN 16516:2017/FprA1	TVOC	< 3	ug/m^{2}h

Resource potential

	Installation method	Disassembly
Installation options	Built-in ceiling panel system 60x60 - without electricity plug	Can be removed by hand or with simple tools: By releasing components by loosening brackets and screws or by tilting, pushing, pulling, lifting away, etc.
	Built-in ceiling panel system 60x60 - with electricity plug	Can be removed by hand or with simple tools: By releasing components by loosening brackets and screws or by tilting, pushing, pulling, lifting away, etc.

		Specify
Demountable without deterioration	Yes	
Procedures to protect health/ environment	No	
Disassembly of product	10. quick release/split click/ gravity	
Product consist of separate parts naturally	Yes	
Restrictions/ recommendations	Yes	It is recommended to reach out to the manufacturer if components need replacement or the fixture no longer is needed in the certain building. To be updated when QR-Code is clarified.
Take-back agreement	Yes	The manufacturer offers a take-back agreement. Contact the manufacturer for more information.
Lease option	Yes	The manufacturer offers a leasing option. Contact the manufacturer for more information.
HP 1 to HP 15 for original product	No	
HP 1 to HP 15 differs after application	No	
Material recovery possible	Yes	

Estimated future recovery potential in wt-%

Hazardous waste	0%
Landfill	0%
Energy utilization	0%
Recovered substitute product (may be included as downcycled, such as road fill, drainage, etc.)	0%

Recycling in new building – adding other (raw) materials ensures higher functional value (composites)	7,2%
Reuse in new construction – with lover functional value in buildings, decomposition, granulation, etc. but no added material	25,5%
Biodegradation, composting, returning to source without decomposition, or ecological loss of value	0%
Ready to recycle with the addition of material (similar functional value in the building)	0%
Ready to recycle after extensive cleaning (removal of mortar, paint, etc.) similar functional/economic value in the building	0%
Ready to recycle after simple cleaning with similar functional/economic value in the building	64,6%