



# **Product Environmental Profile**

# Floor installation system closed - Series BKG



# **Company information**

### Hager

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A question concerning the Product Environmental Profile: infopep@hager.com

# **References covered**

BKG2002BL, BKG2002LA, BKG2002W3, BKG2002W3LA, BKGD200601, BKGD2006051, BKG200606, BKG2008T, BKG3002BL, BKG3002LA, BKG3002W3, BKG3002W3LA, BKGD300601, BKGD3006051, BKG300606, BKGD300801, BKGD3008051, BKG300806, BKGD300801, BKGD3008051, BKG300806, BKGD400601, BKGD4006051, BKG4002LA, BKG4002W3, BKG4002W3LA, BKGD4006061, BKGD4008051, BKG4008D1, BKG5002BL, BKG5002LA, BKG5002W3, BKG5002W3LA, BKGD500601, BKGD5006051, BKG500606, BKG5008051, BKG3008051, BKG3008051, BKG3008051, BKG3008051, BKG3008051, BKG3008051, BKG4008051, BKG4008051, BKG5008051, BKG5006051, BKG5006051, BKG5008051, B

# Methodology

PEP has been performed according to the PCR version PEP-PCR-ed4-2021 09 06 and PSR version PSR-0003-ed2.1-2023 12 08 issued by the PEP ecopassport program.

For further information, please see the website of the program www.pep-ecopassport.org

# Reference product

### Reference product identification

Floor installation system closed with blind cover BKGD 300x60 (Trunking length BKGD300601 + all necessary accessories according to PSR)

Use scenario based on :

PSR product Category : PSR-0003-ed2.1-2023 12 08
Cable management systems - Floor cable trunking systems

# **Functional unit**

Accommodate and protect the wiring along 1 metre for a Reference Service Life of the product of 20 years.

The BKG system with cross-section 16280 mm² includes the profile and accessories that are representative of standard use.

The functional unit is based on the use scenario recommended by the PCR for the category of the reference product.

### **Materials and substances**

All useful measures have been adopted to ensure that the materials used in the composition of the product do not contain any substances banned by the legislation in force at the time of marketing.

Plast	ics		Metal	Others				
	g	%		g	%		g	%
PA66	288.96	1.5%	Steel	16163.19	83.1%	Cardboard	645.78	3.3%
PE-LD	93.67	0.5%	Aluminium	1473.27	7.6%	Wood	462.91	2.4%
PA6	25.38	0.1%	Stainless steel	88.21	0.5%	Glass	111.14	0.6%
Silicon rubber	4.12	<0.1%	Zinc	0.36	<0.1%	Melamine cyanurate	44.46	0.2%
PUR	1.20	<0.1%	Silicon	0.25	<0.1%	POM	36.00	0.2%
Polyether	0.16	<0.1%				Other	3.60	<0.1%
Total mass of reference material packaging :	product w	ith raw	19442.66 g					

Total mass of reference product (Product + packaging) 18516.

18516.476659 g

# **System Boundaries**

The environmental information included in the PEP covers all the stages of the life cycle, from "cradle to grave".

Ma	nufactu	ring	Distribution	Installation		Use					End	of life		Module D		
Raw material extraction and processing	Transport to the manufacturer	Manufacturing	Distribution to the place of operation	Installation on the place of operation	Use or application of the product installed	Maintenance	Repair	Replacement	Restoration	Energy requirements during the use stage	Water requirements during the use stage	Deinstallation	Transport to the waste treatment site	Treatment of waste in view of its reuse, recovery and/or recycling	Disposal	Benefits and loads beyond the system boundaries
A1	A2	А3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	C3	C4	D
						Life	cycle s	ages								

# **Manufacturing**

These products are manufactured by a site that has received an environmental certification ISO 14001.

This phase takes into account raw materials, manufacturing processes, production offcuts and their end-of-life treatment, upstream transport of materials and sub-assemblies to the manufacturing site, and transport from the manufacturing site to the final logistics platform.

# Distribution

The packaging has been designed in accordance with current regulations. In particular, the European directive 94/62/CE relative to packaging and packaging waste.

The used packaging is 100% recyclable or recoverable. Packaging and logistic flows are continuously improved in order to reduce their impact.

This phase taken into account the transport of the finished product, including packaging, to its place of use.

### Installation

#### Installation processes

The processes to install the product are not considered in this study because of their weak impact compared to the other life cycles steps.

This phase only take into account the impact of the packaging waste treatment, and the impact of the product waste treatment generated during the installation phase as specified in the applicable rules for this product category (3% profile losses during installation)

### Installation elements (non delivered with the product)

Elements non delivered with the product and needed to install the product are not considered.

### Use

F	Power loss / load dependent								
Active	mode	Inactive mode							
Watt	% of time	Watt	% of time						
0	0%	0	100%						

Power consumption / not load dependent									
Active Sle	ve Sleep phase Passive Sleep phase Turn off phase								
Watt	% of time	Watt	% of time	Watt	% of time				
0	0%	0	0%	0	100%				

For the considered scenario, the product has no energy consumption.

Energy model of the use phase :

None

Consumables and maintenance :

None

### **End of life**

Considering the complexity of the recycling channels for electric and electronic equipment impacts, we rely mainly on ESR modules (datasets for WEEE product end of life).

The recycling potential of the product is: 88%. The calculation of this rate is based on the method of the IEC/TR 62635.

### **Environmental impacts**

Evaluation of the environmental impact covers the following life cycle stages: raw materials + manufacturing (RMM), distribution (D), installation (I), use (U) and end of life (EoL).

All calculations are done with EIME software version 6.2.3 with the database version CODDE® 2024-04 .

Indicators set : Indicators for PEF EF 3.1 (Compliance: PEP ed.4, EN15804+A2) v2.0

PEP representative of the covered products marketed in: Europe

Energy models considered for each phase

Manufacturing	Distribution	Installation	Use	End Of Life
A1-A3	A4	A5	B1-B7	C1-C4
Germany	Europe	Europe	None	Europe

### **Environmental impact indicators**

Indicators	Unit	Manufacturing A1-A3	Distribution A4	Installation A5	Use B1-B7	End Of Life C1-C4	GLOBAL	Module D
Acidification (PEF-AP)	mole H+ eq	3.79E-01	2.07E-02	2.82E-03	0.00E+00	7.19E-02	4.75E-01	-6.65E-02
Climate change - Total (PEF-GWP)	kg CO2 eq.	8.55E+01	3.26E+00	8.06E-01	0.00E+00	1.64E+01	1.06E+02	-1.16E+01
Climate change-Biogenic (PEF-GWPb)	kg CO2 eq.	-3.44E-01	0.00E+00	9.03E-02	0.00E+00	7.60E-01	5.06E-01	1.26E-01
Climate change-Fossil (PEF-GWPf)	kg CO2 eq.	8.58E+01	3.26E+00	7.16E-01	0.00E+00	1.57E+01	1.05E+02	-1.17E+01
Climate change-Land use and land use change (PEF-GWPlu)	kg CO2 eq.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ecotoxicity, freshwater (PEF-CTUe)	CTUe	5.97E+03	2.14E+00	9.97E+00	0.00E+00	2.11E+02	6.20E+03	3.35E+01
EF-particulate Matter (PEF-PM)	Incidence of diseases	3.02E-06	1.68E-07	2.79E-08	0.00E+00	8.05E-07	4.02E-06	-1.15E-06
Eutrophication, freshwater (PEF-Epf)	kg P eq.	2.39E-04	1.23E-06	1.56E-05	0.00E+00	4.14E-04	6.69E-04	-5.68E-03
Eutrophication marine (PEF-Epm)	kg N eq.	5.06E-02	9.70E-03	7.58E-04	0.00E+00	1.42E-02	7.53E-02	-9.92E-03
Eutrophication, terrestrial (PEF-Ept)	mole of N eq.	5.50E-01	1.06E-01	6.73E-03	0.00E+00	1.57E-01	8.20E-01	-1.24E-01
Human toxicity, cancer (PEF-CTUh-c)	CTUh	1.89E-07	5.74E-11	2.74E-08	0.00E+00	2.87E-08	2.45E-07	-1.54E-07
Human toxicity, non-cancer (PEF-CTUh-nc)	CTUh	8.35E-07	1.11E-09	1.44E-08	0.00E+00	4.53E-07	1.30E-06	-3.84E-07
Ionising radiation, human health (PEF-IR)	kg Bq U235 eq.	1.74E+01	7.96E-03	7.98E-02	0.00E+00	1.49E+00	1.90E+01	5.90E-01
Land use (PEF-LU)	No dimension	6.28E-02	0.00E+00	1.38E+00	0.00E+00	4.64E+01	4.78E+01	-9.36E+00
Ozone depletion (PEF-ODP)	kg CFC-11 eq.	3.88E-06	5.01E-09	5.67E-08	0.00E+00	1.81E-06	5.75E-06	-9.90E-09
Photochemical ozone formation - human health (PEF-POCP)	kg of NMVOC eq.	1.91E-01	2.68E-02	1.78E-03	0.00E+00	4.34E-02	2.63E-01	-7.09E-02
Resource use, fossils (PEF-ADPf)	MJ	3.44E+03	4.56E+01	9.62E+00	0.00E+00	2.48E+02	3.74E+03	-7.19E+01
Resource use, minerals and metals (PEF-ADPe)	kg Sb eq	1.06E-03	1.29E-07	1.56E-06	0.00E+00	5.29E-05	1.11E-03	-2.95E-04
Water use (PEF-WU)	m3 eq.	3.53E+01	1.24E-02	1.48E+02	0.00E+00	4.97E+03	5.16E+03	-2.68E+03

# Resource use indicators

Indicators	Unit	Manufacturing A1-A3	Distribution A4	Installation A5	Use B1-B7	End Of Life C1-C4	GLOBAL	Module D
Net use of fresh water	m³	8.22E-01	2.89E-04	4.19E+00	0.00E+00	1.41E+02	1.46E+02	-5.48E+01
Total use of primary energy	MJ	3.49E+03	4.56E+01	1.07E+01	0.00E+00	2.72E+02	3.82E+03	-7.47E+01
Total use of non renewable primary energy resources	MJ	3.44E+03	4.56E+01	9.62E+00	0.00E+00	2.48E+02	3.74E+03	-7.19E+01
Total use of renewable primary energy resources	MJ	5.05E+01	6.08E-02	1.03E+00	0.00E+00	2.46E+01	7.62E+01	-2.83E+00
Use of non-renewable primary energy, excluding non renewable primary energy resources used as raw materials	MJ	3.42E+03	4.56E+01	9.62E+00	0.00E+00	2.48E+02	3.73E+03	-7.19E+01
Use of non-renewable primary energy resources as raw materials	MJ	1.55E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E+01	0.00E+00
Use of non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of renewable primary energy, excluding renewable primary energy resources used as raw materials	kg	3.01E+01	6.08E-02	1.03E+00	0.00E+00	2.46E+01	5.58E+01	-2.83E+00
Use of renewable primary energy resources as raw materials	MJ	2.04E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E+01	0.00E+00
Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of secondary materials	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

#### Waste category indicators

Indicators	Unit	Manufacturing A1-A3	Distribution A4	Installation A5	Use B1-B7	End Of Life C1-C4	GLOBAL	Module D
Hazardous waste disposed	kg	8.65E+00	0.00E+00	5.63E-03	0.00E+00	-2.91E-03	8.66E+00	6.73E-18
Non-hazardous waste disposed	kg	8.75E+01	1.15E-01	1.61E-01	0.00E+00	4.19E-02	8.78E+01	1.94E-17
Radioactive waste disposed	kg	3.82E-02	8.17E-05	1.18E-05	0.00E+00	3.18E-06	3.83E-02	0.00E+00

# Output flow indicators

Indicators	Unit	Manufacturing A1-A3	Distribution A4	Installation A5	Use B1-B7	End Of Life C1-C4	GLOBAL	Module D
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	3.16E-01	0.00E+00	7.53E-02	0.00E+00	1.38E-04	3.91E-01	0.00E+00
Materials for recycling	kg	1.41E+00	0.00E+00	3.06E-04	0.00E+00	0.00E+00	1.41E+00	0.00E+00

#### Biogenic carbon content

Packaging	Unit	Cardboard	Paper	Wood	Sum
Biogenic carbon content (ratio)	%	2.80E+01	3.78E+01	3.95E+01	
Mass	kg	6.46E-01	3.21E-03	4.63E-01	1.11E+00
Biogenic carbon content (declared unit)	kg of C	1.81E-01	1.21E-03	1.83E-01	3.65E-01
Biogenic carbon content (functional unit)	kg of C	1.81E-01	1.21E-03	1.83E-01	3.65E-01
Source		ADEME	APESA/RECORD	EN 16485	

Product	Unit	Cardboard	Paper	Wood	Sum
Mass	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon content (declared unit)	kg of C	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon content (functional unit)	kg of C	0.00E+00	0.00E+00	0.00E+00	0.00E+00

# **Extrapolation rules**

The environmental impact of a system covered by the PEP ecopassport® other than the reference system for which it was drawn up can be calculated by multiplying the values of the environmental indicators by the corresponding factor for each stage of the life cycle and the total life cycle.

System description	System	Extrapolation factor	System	Extrapolation factor
Screed flush trunking cover blind	BKG 200x60	0.72	BKGD 200x60	0.72
Screed flush trunking cover blind	BKG 300x60	1.00	*BKGD 300x60	1.00
Screed flush trunking cover blind	BKG 400x60	1.27	BKGD 400x60	1.26
Screed flush trunking cover blind	BKG 500x60	1.52	BKGD 500x60	1.52
Screed flush trunking cover blind	BKG 300x80	1.03	BKGD 300x80	1.02
Screed flush trunking cover blind	BKG 400x80	1.30	BKGD 400x80	1.30
Screed flush trunking cover blind	BKG 500x80	1.54	BKGD 500x80	1.57
Screed flush trunking with cable outlet	BKG 200x60	0.60	BKGD 200x60	0.60
Screed flush trunking with cable outlet	BKG 300x60	0.82	BKGD 300x60	0.81
Screed flush trunking with cable outlet	BKG 400x60	1.02	BKGD 400x60	1.01
Screed flush trunking with cable outlet	BKG 500x60	1.20	BKGD 500x60	1.20
Screed flush trunking with cable outlet	BKG 300x80	0.85	BKGD 300x80	0.83
Screed flush trunking with cable outlet	BKG 400x80	1.05	BKGD 400x80	1.05
Screed flush trunking with cable outlet	BKG 500x80	1.23	BKGD 500x80	1.25

System description	System	Extrapolation factor	System	Extrapolation factor
Screed flush trunking - Floor cover tray	BKG 200x60	0.63	BKGD 200x60	0.63
Screed flush trunking - Floor cover tray	BKG 300x60	0.87	BKGD 300x60	0.87
Screed flush trunking - Floor cover tray	BKG 400x60	1.10	BKGD 400x60	1.09
Screed flush trunking - Floor cover tray	BKG 500x60	1.30	BKGD 500x60	1.30
Screed flush trunking - Floor cover tray	BKG 300x80	0.90	BKGD 300x80	0.88
Screed flush trunking - Floor cover tray	BKG 400x80	1.13	BKGD 400x80	1.14
Screed flush trunking - Floor cover tray	BKG 500x80	1.33	BKGD 500x80	1.36
Screed flush trunking - Floor cover tray with cable outlet	BKG 200x60	0.56	BKGD 200x60	0.56
Screed flush trunking - Floor cover tray with cable outlet	BKG 300x60	0.75	BKGD 300x60	0.75
Screed flush trunking - Floor cover tray with cable outlet	BKG 400x60	0.94	BKGD 400x60	0.93
Screed flush trunking - Floor cover tray with cable outlet	BKG 500x60	1.11	BKGD 500x60	1.10
Screed flush trunking - Floor cover tray with cable outlet	BKG 300x80	0.78	BKGD 300x80	0.77
Screed flush trunking - Floor cover tray with cable outlet	BKG 400x80	0.97	BKGD 400x80	0.97
Screed flush trunking - Floor cover tray with cable outlet	BKG 500x80	1.13	BKGD 500x80	1.16

# Verification

Registration N°: HAGE-00912-V01.01-EN	Drafting Rules	PEP-PCR-ed4-2021 09 06		
	Supplemented by	PSR-0003-ed2.1-2023 12 08		
Verifier accreditation N°: VH35	Information and reference documents: www.pep-ecopassport.org			
Date of issue: 11-2024	Validity period:	5 years		
Independent verification of the declaration and data, in compliance with ISO 14025 : 2006				

Internal • External

The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain)

PEPs are compliant with XP C08-100-1:2016 or EN 50693:2019

The elements of the present PEP cannot be compared with elements from another program.

Document in compliance with ISO 14025 : 2006 « Environmental labels and declarations. Type III environmental declarations »



All numerical values indicated in this document may vary and depend of many factors such as the tolerance related to materials, the usage and environment conditions of the products, installation characteristics ..., real values for a product in a concrete application may therefore change.

The usage time mentioned in this document is an average duration chosen for the need of the calculations. This value cannot be assimilated to the minimum, average or real life time.

The responsibility of the company, issuing this document, can never be engaged if differences would be noticed between the values given by this document and real ones, whatever the causes and/or