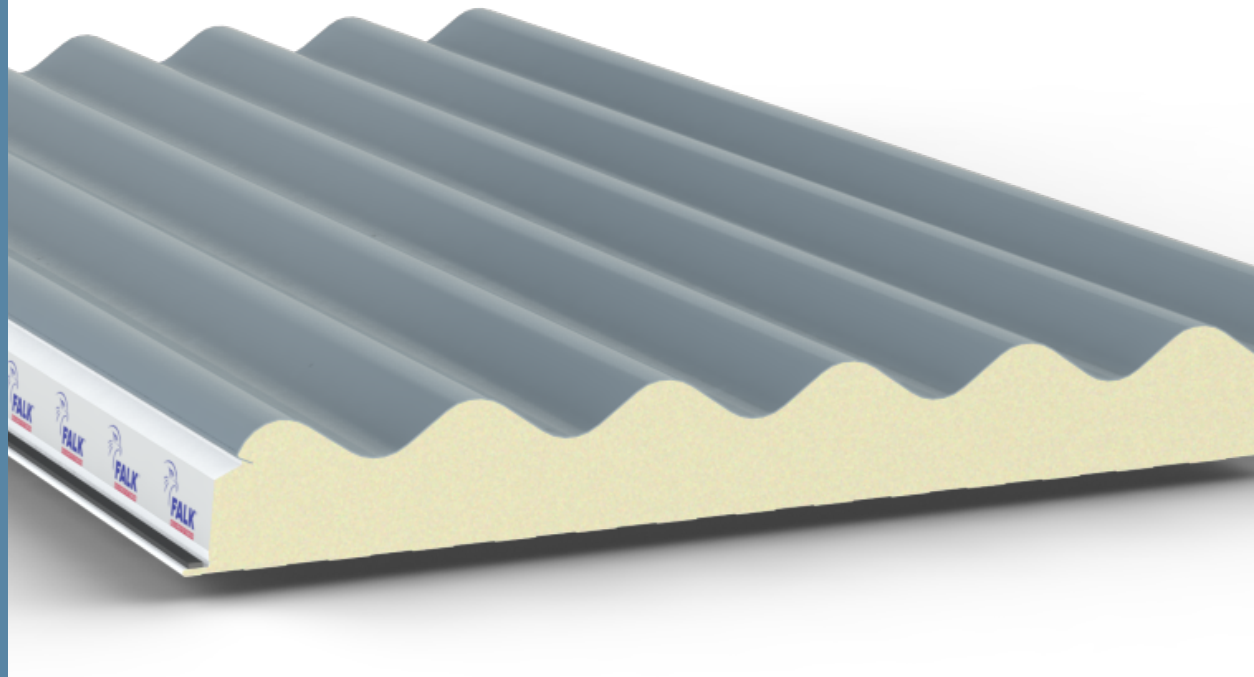
Result summary

FALK 1000 GL CradleCore® - 120mm sandwichpanel

FALK Bouwsystemen BV

Calculation number:	EPD-NIBE-20201012-7759
Generation on:	15-10-2021
Issue date:	13-10-2021
Valid until:	13-10-2026
Status:	verified

R<THiNK



1 FALK 1000 GL CradleCore® - 120mm sandwichpanel

1.1 COMPANY INFORMATION / DECLARATION OWNER

Manufacturer: FALK Bouwsystemen BV

Production Location: Falk Bouwsystemen BV

Address: Neonstraat 23, 6718 WXEde

E-mail: info@falkbouwsystemen.nl

Website: www.falkbouwsystemen.nl

1.2 EPD INFORMATION

Calculation number: EPD-NIBE-20210929-21799

Date of issue: 13-10-2021

End of validity: 13-10-2026

Version NIBE's EPD Application: v2.0

Version database: v3.06 (20210927)

PCR: NMD Determination method Environmental performance Construction works v1.0 July 2020 incl. amendment oct '20 + feb '21 + okt '21 & EN15804+A2

1.3 VERIFICATION OF THE DECLARATION

CEN standard EN 15804:2012 serves as the core PCR.

Independent verification of the declaration. according to EN ISO 14025:2010.

☐ Internal ☑ External

De LCA voldoet aan het gestelde in de Bepalingsmethode Milieuprestatie bouwwerken, versie 1.0 (juli 2020). Daardoor wordt ook voldaan aan de EN-15804+A1 en A2, en de onderliggende ISO 14440/44 en ISO 21930. De LCA is zowel uitgevoerd als conform de EN 15804 set A1 data als de set A2 data.



Third party verifier: Kamiel Jansen, Review by Primum

1.4 DECLARED UNIT

m2 sandwichpanel

One square meter of roof or wall cladding with a Rc-value of at least 6,29 m2K/W (NTA 8800) and a fire-resistance class B-s2, d0. The EPD includes 1 layer of framework, fasteners, finishing and maintenance. The framework must meet the strength requirements for the relevant facade or roof cladding. The thickness excluding battening is specified as dimension 1.

1 FALK 1000 GL CradleCore® - 120mm sandwichpanel

1.5 SCOPE OF DECLARATION

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	MND	MND	MND	MND	X	X	X	X	X

(X = included, MND = module not declared)

1 FALK 1000 GL CradleCore® - 120mm sandwichpanel

1.6 PRODUCT DESCRIPTION

FALK 1000 GL sandwich panel with circular CradleCore® insulation core.

This sandwich panel, made by Dutch manufacturer FALK Bouwsystemen, can be used for roof and facade. The FALK 1000 GL wall panel has two profiled steel sheets. The CradleCore® insulation core is placed between these sheets, which allows for a high Rc-value up to 6,29 m2K/W (NTA 8800) to be reached. The FALK 1000 GL can be used as roof panel and wall panel. Due to our large line of coatings and colours, the aesthetic panel has a unique character. The sandwich panel is so powerful that in several situations a span of 4 metres can be reached. The panel can be installed horizontally and vertically.

What makes FALK CradleCore® sandwich panels unique, is the fact that they come with a circularity statement, by means of, a return guarantee or repurchase guarantee. By selecting CradleCore®, valuable commodities remain available for future generations. Additionally, the building owner also benefits from a very attractive LCA-score, since waste streams are the foundation for a new product. Working width 1000 mm.

Core material: CradleCore® - Circular IsoFR (PIR) insulation core

Interior coating: FALK Matt White (other coatings available upon request)

Exterior coating: Colorcoat HPS200 ULTRA & Colorcoat Prisma® (other coatings available upon request)

Colors and warranties: Colorcoat HPS 200 ULTRA & Colorcoat Prisma

Minimal length: 2.500 mm (shorter upon request)

Maximum length: 20.000 mm

Rc-value: 6,29 m2K/W (NTA 8800) (at 120 mm core thickness)

Fire resistance of wall and facade applications: EW30, EW60, EI30 and EI60, depending on the selected core thickness.

Company certifications: BES 6001, ISO9001 and ISO 14001.

Product certifications: Allgemeine bauaufsichliche Zulassung & FM & Airtightness.

1.7 DESCRIPTION OF THE MANUFACTURING PROCESS

Manufacturing of sandwich panels takes place at continuously working production plants. The production speed depends, among other things, on the type of production, and sandwich panel thickness. The process starts by decoiling the steel coils. During this step, the Corona-treatment is also applied. After that, the steel is molded into the desired profile. After molding, the surface is preheated, and primer is applied. Subsequently, the liquid PIR-foam is placed onto the sheet. During the next step, the panel goes into the double belt where the foam hardens and attaches to both sheets. After the panel comes out of the double belt, a sealing tape is applied. After that, the panel is cut to size, cooled in the cooling zone, stacked, and packed. Ultimately, the products are shipped to the customer.

Total energy usage of the line: Electricity 2.942.369 kW/h Gas: 103.451 m3

Production waste: Loss (scrap, approximately 2% which is used for circular processing)

Emission during production: pentane loss during foaming

1 FALK 1000 GL CradleCore® - 120mm sandwichpanel

1.8 RESULTS (SOLID PART)

Environmental effects	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
ADPE	Kg Sb	6.57E-6	8.58E-6	1.18E-5	3.80E-6	2.90E-6	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.32E-6	3.21E-6	2.24E-9	3.39E-6	4.16E-5
ADPF	Kg Sb	1.19E-1	4.10E-3	1.02E-2	1.09E-3	1.13E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.79E-4	1.22E-3	2.67E-5	-6.96E-2	7.81E-2
GWP	Kg CO2 Equiv.	2.07E+1	6.26E-1	1.24E+0	1.49E-1	1.93E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.15E-2	2.47E-1	1.96E-3	-1.27E+1	1.22E+1
ODP	Kg CFC-11 Equiv.	6.40E-7	1.04E-7	7.58E-8	2.64E-8	2.14E-7	0.00E+0	0.00E+0	0.00E+0	0.00E+0	9.14E-9	2.24E-8	6.48E-10	-1.77E-7	9.15E-7
POCP	Kg Ethene Equiv.	9.69E-3	6.77E-4	8.36E-4	8.97E-5	1.45E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.11E-5	1.46E-4	2.08E-6	-6.37E-3	6.55E-3
AP	Kg SO2 Equiv.	4.78E-2	1.17E-2	3.27E-3	6.54E-4	1.01E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.27E-4	1.61E-3	1.45E-5	-2.57E-2	4.97E-2
EP	Kg PO43- Equiv.	7.54E-3	1.36E-3	5.29E-4	1.28E-4	2.14E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	4.45E-5	3.45E-4	2.72E-6	-3.08E-3	9.02E-3
HTP	kg 1.4 DB	4.01E+0	3.22E-1	2.67E-1	6.26E-2	5.58E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.17E-2	1.79E-1	7.99E-4	-1.76E+0	3.66E+0
FAETP	kg 1.4 DB	6.27E-2	6.41E-3	5.27E-3	1.83E-3	8.36E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	6.33E-4	2.68E-3	1.99E-5	-1.48E-2	7.30E-2
MAETP	kg 1.4 DB	1.97E+2	2.73E+1	1.83E+1	6.58E+0	2.87E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.28E+0	1.56E+1	6.83E-2	-4.50E+1	2.51E+2
TETP	kg 1.4 DB	2.07E-2	9.95E-4	4.82E-3	2.21E-4	1.42E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	7.67E-5	5.97E-4	2.37E-6	1.52E-1	1.80E-1
AP	mol H+ eqv.	6.68E-2	1.47E-2	4.14E-3	8.70E-4	1.41E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.01E-4	1.99E-3	1.90E-5	-3.54E-2	6.75E-2
GWP-total	kg CO2 eqv.	2.13E+1	6.31E-1	1.27E+0	1.50E-1	1.96E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.20E-2	1.78E-1	1.97E-3	-1.30E+1	1.26E+1
GWP-b	kg CO2 eqv.	-1.87E-2	-2.49E-5	8.67E-3	6.92E-5	1.40E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.40E-5	-9.52E-3	-2.60E-5	1.51E-1	1.33E-1
GWP-f	kg CO2 eqv.	2.13E+1	6.31E-1	1.26E+0	1.50E-1	1.96E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.20E-2	1.87E-1	2.00E-3	-1.31E+1	1.24E+1
GWP-luluc	kg CO2 eqv.	1.24E-2	3.65E-4	7.09E-4	5.50E-5	5.04E-4	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.90E-5	2.13E-4	8.80E-7	4.80E-3	1.91E-2
ETP-fw	CTUe	2.94E+2	6.32E+0	1.41E+1	2.02E+0	2.00E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	6.99E-1	5.99E+0	3.12E-2	-2.10E+2	1.32E+2

1 FALK 1000 GL CradleCore® - 120mm sandwichpanel

PM	disease incidence	4.61E-7	3.23E-8	2.96E-8	1.35E-8	3.18E-7	0.00E+0	0.00E+0	0.00E+0	0.00E+0	4.68E-9	2.61E-8	3.59E-10	-2.29E-7	6.57E-7
EP-m	kg N eqv.	1.19E-2	3.75E-3	8.33E-4	3.06E-4	5.54E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.06E-4	4.47E-4	6.26E-6	-6.82E-3	1.60E-2
EP-fw	kg P eqv.	8.65E-4	3.89E-6	5.76E-5	1.51E-6	3.39E-5	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.24E-7	5.46E-5	3.58E-8	-2.76E-4	7.41E-4
EP-T	mol N eqv.	1.48E-1	4.16E-2	1.02E-2	3.38E-3	6.13E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.17E-3	5.24E-3	6.91E-5	-6.32E-2	2.07E-1
HTP-c	CTUh	4.64E-8	3.29E-10	7.04E-10	6.54E-11	1.79E-9	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.27E-11	1.85E-10	7.87E-13	-2.62E-8	2.33E-8
HTP-nc	CTUh	1.37E-7	5.91E-9	2.31E-8	2.21E-9	1.31E-8	0.00E+0	0.00E+0	0.00E+0	0.00E+0	7.65E-10	8.07E-9	2.49E-11	6.82E-7	8.72E-7
IR	kBq U235 eqv.	3.75E-1	3.64E-2	3.80E-2	9.48E-3	7.85E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.28E-3	1.15E-2	2.29E-4	-5.55E-2	4.96E-1
SQP	Pt	3.82E+1	3.55E+0	3.77E+0	1.96E+0	3.58E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	6.80E-1	4.73E+0	1.18E-1	-1.19E+1	4.47E+1
ODP	kg CFC 11 eqv.	4.30E-7	1.31E-7	7.89E-8	3.31E-8	2.57E-7	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.15E-8	2.53E-8	8.16E-10	-6.11E-8	9.07E-7
POCP	kg NMVOC eqv.	4.26E-2	1.09E-2	3.59E-3	9.65E-4	1.69E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.34E-4	1.41E-3	2.01E-5	-2.59E-2	5.09E-2
ADP-f	MJ	1.72E+2	8.56E+0	1.93E+1	2.26E+0	2.12E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	7.84E-1	2.54E+0	5.59E-2	-8.24E+1	1.45E+2
ADP-mm	kg Sb-eqv.	6.50E-6	8.58E-6	1.18E-5	3.80E-6	2.90E-6	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.32E-6	3.20E-6	2.24E-9	3.43E-6	4.16E-5
WDP	m3 world eqv.	3.15E+0	1.94E-2	3.09E-1	8.09E-3	1.31E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.80E-3	2.95E-2	2.59E-3	-1.61E+0	2.04E+0

ADPE=Depletion of abiotic resources-elements | **ADPF**=Depletion of abiotic resources-fossil fuels | **GWP**=Global warming | **ODP**=Ozone layer depletion | **POCP**=Photochemical oxidants creation | **AP**=Acidification of soil and water | **EP**=Eutrophication | **HTP**=Human toxicity | **FAETP**=Ecotoxicity. fresh water | **MAETP**=Ecotoxicity. marine water (MAETP) | **TETP**=Ecotoxicity. terrestric | **AP**=Acidification (AP) | **GWP-total**=Global warming potential (GWP-total) | **GWP-b**=Global warming potential - Biogenic (GWP-b) | **GWP-f**=Global warming potential - Fossil (GWP-f) | **GWP-luluc**=Global warming potential - Land use and land use change (GWP-luluc) | **ETP-fw**=Ecotoxicity, freshwater (ETP-fw) | **PM**=Particulate Matter (PM) | **EP-m**=Eutrophication marine (EP-m) | **EP-fw**=Eutrophication, freshwater (EP-fw) | **EP-T**=Eutrophication, terrestrial (EP-T) | **HTP-c**=Human toxicity, cancer (HTP-c) | **HTP-nc**=Human toxicity, non-cancer (HTP-nc) | **IR**=Ionising radiation, human health (IR) | **SQP**=Land use (SQP) | **ODP**=Ozone depletion (ODP) | **POCP**=Photochemical ozone formation - human health (POCP) | **ADP-f**=Resource use, fossils (ADP-f) | **ADP-mm**=Resource use, minerals and metals (ADP-mm) | **WDP**=Water use (WDP)

1 FALK 1000 GL CradleCore® - 120mm sandwichpanel

Parameter	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
PERE	MJ	8.97E+0	7.66E-2	1.19E+0	2.83E-2	4.07E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	9.81E-3	3.71E-1	1.43E-3	-2.94E-2	1.10E+1
PERM	MJ	0.00E+0	0.00E+0	1.93E-2	0.00E+0	5.80E-4	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-9.96E-4	1.89E-2
PERT	MJ	8.97E+0	7.66E-2	1.21E+0	2.83E-2	4.08E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	9.81E-3	3.71E-1	1.43E-3	-3.04E-2	1.10E+1
PENRE	MJ	2.07E+2	9.09E+0	2.04E+1	2.40E+0	2.32E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.32E-1	2.70E+0	5.96E-2	-2.46E+0	2.63E+2
PENRM	MJ	0.00E+0	0.00E+0	2.45E+0	0.00E+0	7.34E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-6.38E-1	1.88E+0
PENRT	MJ	2.07E+2	9.09E+0	2.28E+1	2.40E+0	2.33E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.32E-1	2.70E+0	5.96E-2	-3.09E+0	2.65E+2
SM	Kg	4.75E-1	0.00E+0	9.50E-3	0.00E+0	1.45E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	4.99E-1
RSF	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
NRSF	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
FW	M3	1.44E-1	6.74E-4	1.32E-2	2.76E-4	5.66E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	9.55E-5	8.07E-4	6.00E-5	-1.28E-3	1.63E-1
HWD	Kg	8.23E-4	1.31E-5	2.90E-5	5.73E-6	6.71E-5	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.99E-6	3.07E-6	3.94E-8	-1.61E-6	9.42E-4
NHWD	Kg	1.79E+0	2.20E-1	1.31E-1	1.43E-1	1.09E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	4.97E-2	7.38E-2	3.67E-1	-1.44E-3	2.88E+0
RWD	Kg	3.97E-4	5.83E-5	4.36E-5	1.49E-5	1.20E-4	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.15E-6	1.46E-5	3.65E-7	-6.48E-7	6.53E-4
CRU	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MFR	Kg	0.00E+0	0.00E+0	1.39E-1	0.00E+0	2.32E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	6.94E+0	0.00E+0	0.00E+0	7.31E+0
MER	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EE	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.92E-1	8.92E-1
EET	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.64E-1	5.64E-1
EEE	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.28E-1	3.28E-1
SP	**s€**	**s€ 1,72**	**s€ 0,12**	**s€ 0,11**	**s€ 0,02**	**s€ 0,21**	**s€ 0,00**	**s€ 0,00**	**s€ 0,00**	**s€ 0,00**	**s€ 0,01**	**s€ 0,04**	**s€ 0,00**	**s€ -0,94**	**s€ 1,29**

PERE=renewable primary energy ex. raw materials | **PERM**=renewable primary energy used as raw materials | **PERT**=renewable primary energy total | **PENRE**=non-renewable primary energy ex. raw materials | **PENRM**=non-renewable primary energy used as raw materials | **PENRT**=non-renewable primary energy total | **SM**=use of secondary material | **RSF**=use of renewable secondary fuels | **NRSF**=use of non-renewable secondary fuels | **FW**=use of net fresh water | **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 | **EE**=Exported energy | **EET**=Exported Energy Thermic | **EEE**=Exported Energy Electric

1 FALK 1000 GL CradleCore® - 120mm sandwichpanel

1.9 RESULTS (SCALABLE PART)

Environmental effects	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
ADPE	Kg Sb	5.00E-4	1.14E-5	6.41E-6	2.93E-6	3.48E-5	0.00E+0	0.00E+0	0.00E+0	0.00E+0	9.71E-7	5.82E-4	0.00E+0	-8.47E-4	2.92E-4
ADPF	Kg Sb	2.94E-1	3.27E-3	2.42E-3	8.43E-4	1.60E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.79E-4	2.13E-1	0.00E+0	-4.72E-1	5.71E-2
GWP	Kg CO2 Equiv.	3.03E+1	4.45E-1	2.42E-1	1.15E-1	1.80E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.80E-2	2.40E+1	0.00E+0	-4.91E+1	7.86E+0
ODP	Kg CFC-11 Equiv.	5.16E-6	7.90E-8	1.96E-8	2.03E-8	2.58E-7	0.00E+0	0.00E+0	0.00E+0	0.00E+0	6.74E-9	2.95E-6	0.00E+0	-7.62E-6	8.78E-7
POCP	Kg Ethene Equiv.	2.66E-2	2.69E-4	7.01E-2	6.92E-5	3.37E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.29E-5	1.25E-2	0.00E+0	-9.36E-2	1.94E-2
AP	Kg SO2 Equiv.	1.63E-1	1.96E-3	1.55E-3	5.04E-4	9.55E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.67E-4	1.41E-1	0.00E+0	-2.54E-1	6.35E-2
EP	Kg PO43- Equiv.	2.85E-2	3.85E-4	-1.10E-4	9.91E-5	1.48E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.28E-5	1.85E-2	0.00E+0	-5.66E-2	-7.72E-3
HTP	kg 1.4 DB	1.56E+1	1.88E-1	1.46E-1	4.83E-2	9.34E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.60E-2	1.32E+1	0.00E+0	-2.35E+1	6.58E+0
FAETP	kg 1.4 DB	2.03E-1	5.47E-3	1.39E-3	1.41E-3	2.15E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	4.67E-4	4.63E-1	0.00E+0	-6.49E-1	4.72E-2
MAETP	kg 1.4 DB	7.36E+2	1.97E+1	2.30E+1	5.07E+0	7.21E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.68E+0	1.52E+3	0.00E+0	-1.25E+3	1.12E+3
TETP	kg 1.4 DB	5.74E-2	6.63E-4	4.66E-4	1.71E-4	4.60E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.66E-5	8.17E-2	0.00E+0	-1.26E-1	1.91E-2
AP	mol H+ eqv.	2.00E-1	2.60E-3	2.38E-3	6.71E-4	1.25E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.22E-4	1.97E-1	0.00E+0	-3.11E-1	1.03E-1
GWP-total	kg CO2 eqv.	3.22E+1	4.49E-1	2.31E-1	1.16E-1	1.87E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.84E-2	2.44E+1	0.00E+0	-5.21E+1	7.24E+0
GWP-b	kg CO2 eqv.	2.90E-1	2.07E-4	-9.61E-3	5.34E-5	9.60E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.77E-5	-8.01E-2	0.00E+0	-5.85E-1	-3.75E-1
GWP-f	kg CO2 eqv.	3.19E+1	4.49E-1	2.40E-1	1.16E-1	1.86E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.83E-2	2.45E+1	0.00E+0	-5.15E+1	7.61E+0
GWP-luluc	kg CO2 eqv.	1.85E-2	1.65E-4	8.86E-5	4.24E-5	9.46E-4	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.40E-5	1.07E-2	0.00E+0	-2.97E-2	7.83E-4
ETP-fw	CTUe	2.77E+3	6.04E+0	-8.37E+0	1.56E+0	1.01E+2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.15E-1	4.40E+2	0.00E+0	-3.81E+3	-4.98E+2

1 FALK 1000 GL CradleCore® - 120mm sandwichpanel

PM	disease incidence	2.00E-6	4.04E-8	3.39E-8	1.04E-8	1.51E-7	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.45E-9	2.81E-6	0.00E+0	-3.43E-6	1.62E-6
EP-m	kg N eqv.	3.10E-2	9.18E-4	-4.35E-4	2.36E-4	1.64E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	7.83E-5	1.98E-2	0.00E+0	-7.99E-2	-2.67E-2
EP-fw	kg P eqv.	1.82E-3	4.53E-6	-1.16E-5	1.17E-6	7.50E-5	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.87E-7	5.40E-4	0.00E+0	-3.21E-3	-7.80E-4
EP-T	mol N eqv.	3.74E-1	1.01E-2	7.96E-3	2.61E-3	2.87E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.64E-4	5.35E-1	0.00E+0	-5.84E-1	3.76E-1
HTP-c	CTUh	1.05E-7	1.96E-10	-6.34E-9	5.04E-11	7.86E-9	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.67E-11	1.48E-7	0.00E+0	-5.89E-7	-3.34E-7
HTP-nc	CTUh	4.08E-6	6.61E-9	-2.10E-8	1.70E-9	1.38E-7	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.64E-10	3.75E-7	0.00E+0	-5.72E-6	-1.14E-6
IR	kBq U235 eqv.	1.31E+0	2.84E-2	5.90E-3	7.31E-3	6.96E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.42E-3	8.21E-1	0.00E+0	-2.10E+0	1.41E-1
SQP	Pt	7.83E+1	5.87E+0	1.23E+0	1.51E+0	5.32E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.01E-1	7.82E+1	0.00E+0	-1.28E+2	4.33E+1
ODP	kg CFC 11 eqv.	5.12E-6	9.91E-8	3.18E-8	2.55E-8	2.76E-7	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.46E-9	3.56E-6	0.00E+0	-7.59E-6	1.53E-6
POCP	kg NMVOC eqv.	1.16E-1	2.89E-3	1.19E-1	7.44E-4	9.33E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.47E-4	6.23E-2	0.00E+0	-2.72E-1	3.84E-2
ADP-f	MJ	6.03E+2	6.77E+0	4.15E+0	1.74E+0	3.18E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.78E-1	4.06E+2	0.00E+0	-9.79E+2	7.52E+1
ADP-mm	kg Sb-eqv.	5.00E-4	1.14E-5	6.41E-6	2.93E-6	3.48E-5	0.00E+0	0.00E+0	0.00E+0	0.00E+0	9.71E-7	5.82E-4	0.00E+0	-8.46E-4	2.92E-4
WDP	m3 world eqv.	2.68E+1	2.42E-2	7.19E-1	6.24E-3	2.23E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.07E-3	4.56E+1	0.00E+0	-4.15E+1	3.38E+1

ADPE=Depletion of abiotic resources-elements | **ADPF**=Depletion of abiotic resources-fossil fuels | **GWP**=Global warming | **ODP**=Ozone layer depletion | **POCP**=Photochemical oxidants creation | **AP**=Acidification of soil and water | **EP**=Eutrophication | **HTP**=Human toxicity | **FAETP**=Ecotoxicity. fresh water | **MAETP**=Ecotoxicity. marine water (MAETP) | **TETP**=Ecotoxicity. terrestric | **AP**=Acidification (AP) | **GWP-total**=Global warming potential (GWP-total) | **GWP-b**=Global warming potential - Biogenic (GWP-b) | **GWP-f**=Global warming potential - Fossil (GWP-f) | **GWP-luluc**=Global warming potential - Land use and land use change (GWP-luluc) | **ETP-fw**=Ecotoxicity, freshwater (ETP-fw) | **PM**=Particulate Matter (PM) | **EP-m**=Eutrophication marine (EP-m) | **EP-fw**=Eutrophication, freshwater (EP-fw) | **EP-T**=Eutrophication, terrestrial (EP-T) | **HTP-c**=Human toxicity, cancer (HTP-c) | **HTP-nc**=Human toxicity, non-cancer (HTP-nc) | **IR**=Ionising radiation, human health (IR) | **SQP**=Land use (SQP) | **ODP**=Ozone depletion (ODP) | **POCP**=Photochemical ozone formation - human health (POCP) | **ADP-f**=Resource use, fossils (ADP-f) | **ADP-mm**=Resource use, minerals and metals (ADP-mm) | **WDP**=Water use (WDP)

1 FALK 1000 GL CradleCore® - 120mm sandwichpanel

Parameter	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
PERE	MJ	3.28E+1	8.48E-2	9.60E-1	2.18E-2	3.03E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	7.24E-3	6.37E+1	0.00E+0	-5.64E+1	4.41E+1
PERM	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PERT	MJ	3.28E+1	8.48E-2	9.60E-1	2.18E-2	3.03E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	7.24E-3	6.37E+1	0.00E+0	-5.64E+1	4.41E+1
PENRE	MJ	5.50E+2	7.19E+0	1.46E+0	1.85E+0	3.13E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	6.14E-1	4.42E+2	0.00E+0	-1.05E+3	-1.25E+1
PENRM	MJ	9.41E+1	0.00E+0	3.12E+0	0.00E+0	2.92E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-4.28E-2	1.00E+2
PENRT	MJ	6.44E+2	7.19E+0	4.58E+0	1.85E+0	3.42E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	6.14E-1	4.42E+2	0.00E+0	-1.05E+3	8.76E+1
SM	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
RSF	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
NRSF	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
FW	M3	6.95E-1	8.25E-4	1.65E-2	2.12E-4	5.52E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	7.04E-5	1.09E+0	0.00E+0	-1.08E+0	7.75E-1
HWD	Kg	3.60E-4	1.72E-5	5.89E-6	4.42E-6	2.70E-5	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.46E-6	4.57E-4	0.00E+0	-5.87E-4	2.86E-4
NHWD	Kg	2.31E+0	4.30E-1	3.09E-2	1.11E-1	1.69E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.67E-2	2.22E+0	0.00E+0	-3.98E+0	1.33E+0
RWD	Kg	1.26E-3	4.45E-5	1.13E-5	1.15E-5	7.57E-5	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.80E-6	1.05E-3	0.00E+0	-2.00E-3	4.56E-4
CRU	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MFR	Kg	0.00E+0	0.00E+0	1.14E-1	0.00E+0	1.76E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.68E+0	0.00E+0	0.00E+0	5.97E+0
MER	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EE	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.32E-1	5.32E-1
EET	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.36E-1	3.36E-1
EEE	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.95E-1	1.95E-1
SP	**s€**	**s€ 4,01**	**s€ 0,05**	**s€ 0,17**	**s€ 0,01**	**s€ 0,24**	**s€ 0,00**	**s€ 0,00**	**s€ 0,00**	**s€ 0,00**	**s€ 0,00**	**s€ 3,35**	**s€ 0,00**	**s€ -6,51**	**s€ 1,33**

PERE=renewable primary energy ex. raw materials | **PERM**=renewable primary energy used as raw materials | **PERT**=renewable primary energy total | **PENRE**=non-renewable primary energy ex. raw materials | **PENRM**=non-renewable primary energy used as raw materials | **PENRT**=non-renewable primary energy total | **SM**=use of secondary material | **RSF**=use of renewable secondary fuels | **NRSF**=use of non-renewable secondary fuels | **FW**=use of net fresh water | **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 | **EE**=Exported energy | **EET**=Exported Energy Thermic | **EEE**=Exported Energy Electric

1.10 ADDITIONAL INFORMATION

Allocation

Environmental profile

Explanation of used allocation method

1 FALK 1000 GL CradleCore® - 120mm sandwichpanel

Steel coil | cold rolled, galvanised and coated (without zinc and organic coating)[Steel federation NL]	Allocation between steel products and GGBS
Steel coil | cold rolled, galvanised and coated (without zinc and organic coating)[Steel federation NL]	Allocation between steel products and GGBS

Scaling

Parameter	Value
Scaling type	Linear
Description dimension	thickness
Dimension	120.000
Scalable dimension	120.000
Unit dimension	mm