

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

HAGAB®

Ventilation hoods – metal-coated steel
HAGAB INDUSTRI AB



EPD HUB, HUB-1472

Published on 28.05.2024, last updated on 28.05.2024, valid until 28.05.2029.

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GENERAL INFORMATION

Manufacturer	
Manufacturer	Hagab Industri AB
Address	Industrivägen 5, Taberg
Contact details	info@hagab.com
Website	hagab.com/

EPD standards, scope and verification	
Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR version 1.1, 5 Dec 2023
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Petter Ydrestrand, HAGAB
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal certification <input checked="" type="checkbox"/> External verification
EPD verifier	Nemanja Nedic, as an authorized verifier acting for EPD Hub Limited

The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

Product	
Product name	Ventilation hoods – metal-coated steel
Additional labels	CKHA, FCHA, FJHA, FKHA, FKHB, FNHA, FSHA, THHA, TKHA, TSHA, FTHA, FTHB, KDHA, KDHB, and KDHC
Product reference	-
Place of production	Taberg, Sweden
Period for data	2023
Averaging in EPD	No averaging
Variation in GWP-fossil for A1-A3	-

Environmental data summary	
Declared unit	1 kg of coated ventilation hood
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	4,09E+00
GWP-total, A1-A3 (kgCO ₂ e)	2,39E+00
Secondary material, inputs (%)	11.6
Secondary material, outputs (%)	29.2
Total energy use, A1-A3 (kWh)	18.4
Total water use, A1-A3 (m ³ e)	0,03

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

HAGAB is one of Sweden's leading companies which develop, manufacture and sell advanced solutions for fire protection and ventilation. Since 1985, HAGAB has made everyday life easier and safer for our customers.

PRODUCT DESCRIPTION

Hagab ventilation hoods are produced locally at our manufacturing site in Taberg, south of Jönköping. We provide different types of ventilation hoods depending on the specific requirements including supply air, exhaust air and a combination of both. Our products meet the demands of both performance and esthetical properties.

We offer ventilation hoods in a wide range of sizes and materials including, hot-dip galvanized, Zink-Magnesium, Aluminium-Zink and stainless steel. We also offer our customers the flexibility to order a ventilation hood in a specialized size or material. With our powder coating facility, we offer the customer to receive the ventilation hood in a wide range of different colours.

For all standard product sizes and weights see the table in Appendix A.

Further information can be found at <https://hagab.com/>.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	100%	Europe
Minerals	-	
Fossil materials	-	
Bio-based materials	-	

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0.466

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg of coated ventilation hoods
Mass per declared unit	1 kg
Functional unit	-
Reference service life	-

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

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PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
x	x	x	x	x	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstr./demol.	Transport	Waste processing	Disposal	Reuse

Modules not declared = MND. Modules not relevant = MNR.

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. The raw materials consist of coated steel and are transported approximately 350 km distance where a Euro 6 lorry is assumed. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facility are included in this stage.

The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission. Further, the electricity for punching, bending and heating is accounted for based on the part of the yearly volume of products in the factory. A scrap factor of 20% is assumed for the punching where the scrap metal is sent to recycling. The finished product is packed on an appropriate wooden pallet for the specific size, plastered, and anchored with plastic strips.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurring from final product delivery to the construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions. The ventilation hoods are mostly sold locally therefore 150 km transportation by Euro 6 lorry is assumed.

The product is assumed to be installed by crane; therefore, fuel consumption is accounted for. A5 involves waste treatment of packaging where 33% of the plastering packaging is assumed to be recycled, 43% incinerated for

energy recovery and 24% sent to landfill based on EuroPal (2023). The waste treatment of the pallet is modelled according to Eurostat & PSR-0014 v2 (2023) where 30% are recycled, 30% incinerated for energy recovery and 40% are sent to landfill. A transport distance of 50 km is assumed.

PRODUCT USE AND MAINTENANCE (B1-B7)

The environmental impact of the use phase for this product can be neglected therefore this phase has not been included in the analysis. Further, air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

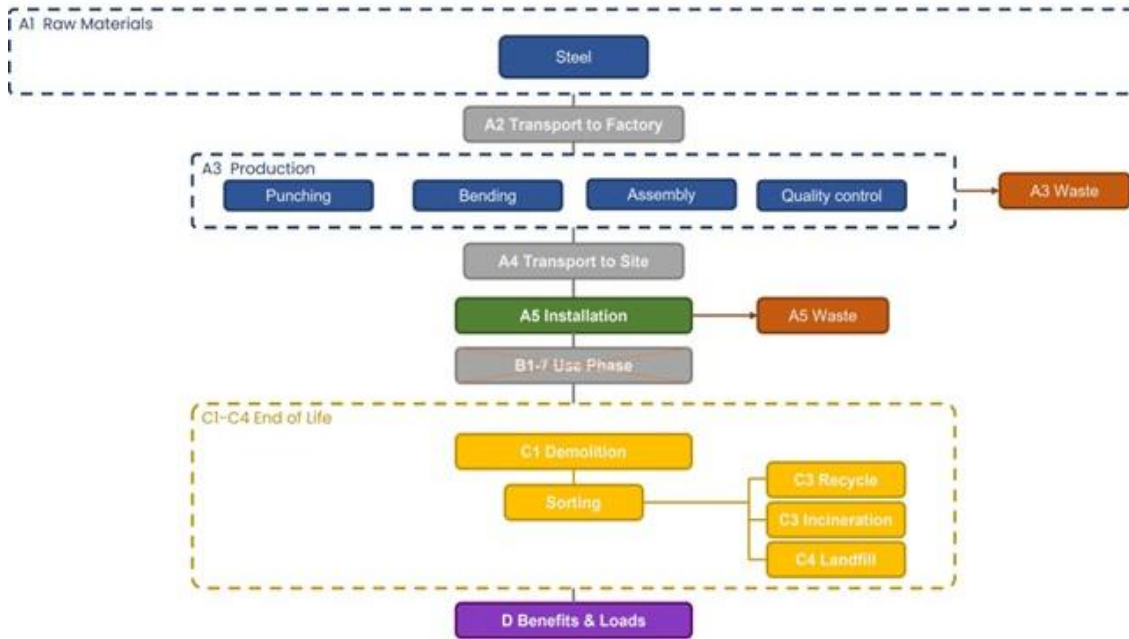
C1 covers the energy used for deconstructing the product where construction equipment is assumed to be involved, therefore fuel consumption is accounted for. C2 involves the transportation of waste which is assumed to be 50 km with a Euro 6 lorry. C3 covers the sorting and pressing of iron scrap. C4 includes the waste disposal processes where 95% of the steel is assumed to be recycled and 5% put in landfill, based on national and EU statistics. D includes the loads from recycling the steel and the benefit of avoiding virgin production of steel.

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LIFE CYCLE DIAGRAM



LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw materials and energy consumption. All inputs and outputs of the unit processes, for which data is available, are included in the calculation.

There is no neglected unit process more than 1% of total mass or energy flows. The module-specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging materials	No allocation
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of average	No averaging
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3	-

The EPD data are based on steel with a mix of three different coatings, including hot-dip galvanised, Zink-Magnesium and stainless steel which are weighted according to yearly sales volume. The table in Appendix A displays the weight of every standard product which is used to translate the result of this EPD to a specific product size.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. Ecoinvent v3.8 and One Click LCA databases were used as sources of environmental data.



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CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	3,50E+00	7,33E-02	-1,18E+00	2,39E+00	3,08E-02	1,99E+00	MND	MND	MND	MND	MND	MND	MND	2,07E-01	8,15E-03	2,08E-02	2,64E-04	-1,85E+00
GWP – fossil	kg CO ₂ e	3,53E+00	7,32E-02	4,91E-01	4,09E+00	3,08E-02	3,10E-01	MND	MND	MND	MND	MND	MND	MND	2,07E-01	8,14E-03	2,08E-02	2,63E-04	-1,85E+00
GWP – biogenic	kg CO ₂ e	-2,43E-02	2,77E-05	-1,68E+00	-1,70E+00	0,00E+00	1,68E+00	MND	MND	MND	MND	MND	MND	MND	3,79E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP – LULUC	kg CO ₂ e	8,46E-04	2,93E-05	6,25E-03	7,12E-03	1,14E-05	3,85E-05	MND	MND	MND	MND	MND	MND	MND	2,06E-05	3,26E-06	2,73E-05	2,49E-07	-2,95E-04
Ozone depletion pot.	kg CFC ₁₁ e	2,87E-08	1,70E-08	4,76E-08	9,32E-08	7,09E-09	4,77E-08	MND	MND	MND	MND	MND	MND	MND	4,42E-08	1,89E-09	2,57E-09	1,07E-10	-7,19E-08
Acidification potential	mol H ⁺ e	7,73E-03	2,08E-04	2,60E-03	1,05E-02	1,31E-04	2,30E-03	MND	MND	MND	MND	MND	MND	MND	2,15E-03	2,31E-05	2,64E-04	2,48E-06	-7,57E-03
EP-freshwater ²⁾	kg Pe	4,78E-06	5,23E-07	2,80E-05	3,33E-05	2,52E-07	1,25E-06	MND	MND	MND	MND	MND	MND	MND	6,85E-07	5,81E-08	1,12E-06	2,76E-09	-7,62E-05
EP-marine	kg Ne	1,78E-03	4,15E-05	6,55E-04	2,48E-03	3,88E-05	1,02E-03	MND	MND	MND	MND	MND	MND	MND	9,51E-04	4,62E-06	5,58E-05	8,57E-07	-1,55E-03
EP-terrestrial	mol Ne	1,89E-02	4,61E-04	7,28E-03	2,67E-02	4,28E-04	1,10E-02	MND	MND	MND	MND	MND	MND	MND	1,04E-02	5,13E-05	6,45E-04	9,43E-06	-1,81E-02
POCP (“smog”) ³⁾	kg NMVOCe	6,26E-03	1,77E-04	2,65E-03	9,09E-03	1,37E-04	3,04E-03	MND	MND	MND	MND	MND	MND	MND	2,87E-03	1,97E-05	1,77E-04	2,74E-06	-9,24E-03
ADP-minerals & metals ⁴⁾	kg Sbe	7,06E-05	2,65E-07	4,54E-06	7,54E-05	7,23E-08	1,80E-07	MND	MND	MND	MND	MND	MND	MND	1,05E-07	2,94E-08	2,80E-06	6,05E-10	-3,53E-05
ADP-fossil resources	MJ	3,30E+01	1,09E+00	1,69E+01	5,10E+01	4,63E-01	3,11E+00	MND	MND	MND	MND	MND	MND	MND	2,78E+00	1,21E-01	2,82E-01	7,22E-03	-1,60E+01
Water use ⁵⁾	m ³ e depr.	3,12E+01	5,10E-03	6,31E-01	3,18E+01	2,07E-03	3,69E-02	MND	MND	MND	MND	MND	MND	MND	7,48E-03	5,67E-04	5,47E-03	2,29E-05	-3,35E-01

1) GWP = Global Warming Potential.

2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e.

3) POCP = Photochemical ozone formation.

4) ADP = Abiotic depletion potential.

5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

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ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	1,74E-08	5,90E-09	3,61E-08	5,94E-08	3,55E-09	5,99E-08	MND	MND	MND	MND	MND	MND	MND	5,76E-08	6,56E-10	3,45E-09	4,99E-11	-1,23E-07
Ionizing radiation ⁶⁾	kBq U235e	2,77E-02	5,72E-03	7,10E-01	7,43E-01	2,20E-03	1,56E-02	MND	MND	MND	MND	MND	MND	MND	1,28E-02	6,36E-04	3,15E-03	3,27E-05	6,68E-02
Ecotoxicity (freshwater)	CTUe	6,15E+00	9,09E-01	1,13E+01	1,84E+01	4,16E-01	2,03E+00	MND	MND	MND	MND	MND	MND	MND	1,67E+00	1,01E-01	1,28E+00	4,71E-03	-6,61E+01
Human toxicity, cancer	CTUh	2,77E-09	2,79E-11	2,13E-09	4,93E-09	1,02E-11	9,43E-11	MND	MND	MND	MND	MND	MND	MND	6,41E-11	3,11E-12	3,91E-11	1,18E-13	1,57E-08
Human tox. non-cancer	CTUh	5,79E-09	8,90E-10	9,47E-09	1,62E-08	4,12E-10	2,33E-09	MND	MND	MND	MND	MND	MND	MND	1,21E-09	9,90E-11	1,75E-09	3,08E-12	-4,44E-08
SQP ⁷⁾	-	3,67E+00	7,74E-01	1,37E+02	1,41E+02	5,33E-01	7,76E-01	MND	MND	MND	MND	MND	MND	MND	3,62E-01	8,61E-02	5,67E-01	1,54E-02	-5,79E+00

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

7) SQP = Land use related impacts/soil quality.

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USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy ⁸⁾	MJ	2,35E+00	1,58E-02	1,40E+01	1,63E+01	5,22E-03	3,23E-02	MND	MND	MND	MND	MND	MND	MND	1,59E-02	1,76E-03	5,00E-02	6,27E-05	-1,35E+00
Renew. PER as material	MJ	3,02E-01	0,00E+00	1,47E+01	1,50E+01	0,00E+00	-1,47E+01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of renew. PER	MJ	2,65E+00	1,58E-02	2,87E+01	3,14E+01	5,22E-03	-1,47E+01	MND	MND	MND	MND	MND	MND	MND	1,59E-02	1,76E-03	5,00E-02	6,27E-05	-1,35E+00
Non-re. PER as energy	MJ	3,26E+01	1,09E+00	1,59E+01	4,96E+01	4,63E-01	3,11E+00	MND	MND	MND	MND	MND	MND	MND	2,78E+00	1,21E-01	2,82E-01	7,22E-03	-1,61E+01
Non-re. PER as material	MJ	1,55E-01	0,00E+00	3,23E+00	3,38E+00	0,00E+00	-3,23E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of non-re. PER	MJ	3,27E+01	1,09E+00	1,91E+01	5,29E+01	4,63E-01	-1,23E-01	MND	MND	MND	MND	MND	MND	MND	2,78E+00	1,21E-01	2,82E-01	7,22E-03	-1,61E+01
Secondary materials	kg	1,16E-01	3,71E-04	5,56E-02	1,72E-01	1,29E-04	1,37E-03	MND	MND	MND	MND	MND	MND	MND	1,09E-03	4,13E-05	3,14E-04	1,52E-06	1,07E+00
Renew. secondary fuels	MJ	1,28E-02	4,08E-06	4,96E-01	5,09E-01	1,30E-06	6,20E-06	MND	MND	MND	MND	MND	MND	MND	3,56E-06	4,54E-07	1,63E-05	3,96E-08	-1,71E-04
Non-ren. secondary fuels	MJ	6,99E-03	0,00E+00	0,00E+00	6,99E-03	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	9,51E-03	1,39E-04	1,69E-02	2,65E-02	6,00E-05	2,94E-04	MND	MND	MND	MND	MND	MND	MND	1,69E-04	1,55E-05	1,65E-04	7,90E-06	-3,87E-03

8) PER = Primary energy resources.

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END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	1,20E-01	1,24E-03	3,35E-02	1,55E-01	6,14E-04	4,28E-03	MND	MND	MND	MND	MND	MND	MND	3,72E-03	1,38E-04	1,92E-03	0,00E+00	-6,18E-01
Non-hazardous waste	kg	3,24E-01	2,20E-02	8,37E-01	1,18E+00	1,01E-02	8,86E-01	MND	MND	MND	MND	MND	MND	MND	2,62E-02	2,45E-03	6,12E-02	5,00E-02	-3,03E+00
Radioactive waste	kg	2,24E-04	7,50E-06	1,65E-04	3,96E-04	3,10E-06	2,07E-05	MND	MND	MND	MND	MND	MND	MND	1,96E-05	8,34E-07	1,65E-06	0,00E+00	5,34E-06

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	4,13E-02	0,00E+00	2,00E-01	2,41E-01	0,00E+00	3,80E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	9,50E-01	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,86E-01	MND	MND	MND	MND	MND	MND	MND	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	4,51E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	1,21E-01	7,25E-02	4,84E-01	6,77E-01	3,05E-02	3,35E-01	MND	MND	MND	MND	MND	MND	MND	2,05E-01	8,07E-03	2,05E-02	2,58E-04	-1,75E+00
Ozone depletion Pot.	kg CFC _{1,1} e	5,03E-09	1,34E-08	4,00E-08	5,85E-08	5,62E-09	3,78E-08	MND	MND	MND	MND	MND	MND	MND	3,50E-08	1,50E-09	2,08E-09	8,43E-11	-8,04E-08
Acidification	kg SO ₂ e	5,86E-04	1,71E-04	2,04E-03	2,80E-03	1,01E-04	1,64E-03	MND	MND	MND	MND	MND	MND	MND	1,53E-03	1,90E-05	2,13E-04	1,87E-06	-6,12E-03
Eutrophication	kg PO ₄ ³⁻ e	1,99E-04	3,68E-05	1,14E-03	1,38E-03	2,31E-05	1,78E-03	MND	MND	MND	MND	MND	MND	MND	3,55E-04	4,10E-06	7,05E-05	4,03E-07	-3,14E-03
POCP ("smog")	kg C ₂ H ₄ e	2,94E-05	8,62E-06	2,15E-04	2,53E-04	3,96E-06	4,42E-05	MND	MND	MND	MND	MND	MND	MND	3,35E-05	9,59E-07	8,07E-06	7,84E-08	-1,06E-03
ADP-elements	kg Sbe	3,30E-06	2,59E-07	4,51E-06	8,07E-06	7,00E-08	1,75E-07	MND	MND	MND	MND	MND	MND	MND	1,03E-07	2,88E-08	2,80E-06	5,96E-10	-3,53E-05
ADP-fossil	MJ	1,38E+00	1,09E+00	1,91E+01	2,16E+01	4,63E-01	3,11E+00	MND	MND	MND	MND	MND	MND	MND	2,78E+00	1,21E-01	2,82E-01	7,22E-03	-1,61E+01

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliance with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? [Read more online](#)

This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

Nemanja Nedic, as an authorized verifier acting for EPD Hub Limited
28.05.2024



ENVIRONMENTAL PRODUCT DECLARATION

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APPENDIX A: PRODUCT VARIATIONS

As mentioned in earlier sections, the table in this appendix can be used to convert the results of the LCA presented in this EPD to all the below ventilation hoods that are available at HAGAB. The environmental impact for each unique article can thus be calculated by multiplying the results presented in this EPD by the weight of the specific article.

CKHA			FCHA			FJHA		
Article nr	Size øD	Weight [kg]	Article nr	Size øD	Weight [kg]	Article nr	Size øD	Weight [kg]
CK010	100	0,5	FC040	400	24	FJ012	125	1,3
CK012	125	0,6	FC050	500	36	FJ016	160	3
CK016	160	0,8	FC063	630	54	FJ020	200	4
CK020	200	1	FC080	800	93	FJ025	250	6
CK025	250	1,5	FC100	1000	173	FJ031	315	10
CK031	315	2,5	FC125	1250	235	FJ040	400	15
CK040	400	4	FC150	1500	340	FJ050	500	22
CK050	500	5				FJ063	630	33,5
CK063	630	6				FJ080	800	75
						FJ100	1000	95
						FJ125	1250	120

TKHA			FKHB			FNHA		
Article nr	Size	Weight [kg]	Article nr	Size	Weight [kg]	Article nr	Size øD	Weight [kg]
TK03	3	5,4	FKB03	3	5,4	FN010	100	1
TK04	4	8,8	FKB04	4	8,8	FN012	125	1
TK05	5	13	FKB05	5	13	FN016	160	2
TK06	6	18	FKB06	6	18	FN020	200	3
TK07	7	25	FKB07	7	25	FN025	250	7
TK08	8	31	FKB08	8	31	FN031	315	7
TK09	9	39	FKB09	9	39	FN040	400	12
TK10	10	47	FKB10	10	47	FN050	500	20
TK11	11	50	FKB11	11	50	FN063	630	32
TK12	12	67	FKB12	12	67	FN080	800	12
TK13	13	79	FKB13	13	79	FN100	1000	12
TK14	14	91	FKB14	14	91	FN125	1250	112
TK15	15	103	FKB15	15	103			
TK16	16	119	FKB16	16	119			
TK17	17	130	FKB17	17	130			

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FKHA			FSHA			THHA		
Article nr	Size	Weight [kg]	Article nr	Size	Weight [kg]	Article nr	Size	Weight [kg]
FK103	3	9	FS103	3	8	TH03-1	3	9
FK104	4	15	FS104	4	12	TH03-2	3	14
FK105	5	23	FS105	5	17	TH04-1	4	13
FK106	6	31	FS106	6	23	TH04-2	4	20
FK107	7	41	FS107	7	30	TH05-1	5	16
FK108	8	57	FS108	8	38	TH05-2	5	25
FK109	9	68	FS109	9	46	TH06-1	6	19
FK110	10	82	FS110	10	53	TH06-2	6	30
FK111	11	90	FS111	11	67	TH07-1	7	27
FK112	12	113	FS112	12	74	TH07-2	7	43
FK113	13	132	FS113	13	82	TH08-1	8	31
FK114	14	150	FS114	14	89	TH08-2	8	49
FK115	15	170	FS115	15	98	TH09-1	9	35
FK203	3	9	FS203	3	7	TH09-2	9	56
FK204	4	15	FS204	4	10	TH10-1	10	40
FK205	5	23	FS205	5	15	TH10-2	10	66
FK206	6	31	FS206	6	21	TH11-1	11	44
FK207	7	41	FS207	7	27	TH11-2	11	70
FK208	8	57	FS208	8	34	TH12-1	12	48
FK209	9	68	FS209	9	42	TH12-2	12	76
FK210	10	82	FS210	10	51	TH13-1	13	51
FK211	11	90	FS211	11	61	TH13-2	13	80
FK212	12	113	FS212	12	68	TH14-1	14	54
FK213	13	132	FS213	13	76	TH14-2	14	86
FK214	14	150	FS214	14	83	TH15-1	15	57
FK215	15	170	FS215	15	91	TH15-2	15	92
FK216	16	195	FS216	16	103			
FK217	17	211	FS217	17	113			

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TSHA			FTHB			FTHA		
Article nr	Size	Weight [kg]	Article nr	Size	Weight [kg]	Article nr	Size	Weight [kg]
TS03	3	14	FTB03	3	14	FT10036	3	14
TS04	4	20	FTB04	4	25	FT10048	4	23
TS05	5	25	FTB05	5	35	FT10510	5	34
TS06	6	30	FTB06	6	46	FT10612	6	46
TS07	7	43	FTB07	7	58	FT10714	7	56
TS08	8	50	FTB08	8	71	FT10816	8	73
TS09	9	56	FTB09	9	85	FT10918	9	85
TS10	10	63	FTB10	10	102	FT11020	10	103
TS11	11	70	FTB11	11	119	FT11122	11	120
TS12	12	76	FTB12	12	135	FT11224	12	139
TS13	13	81	FTB13	13	152	FT11326	13	157
TS14	14	88	FTB14	14	121	FT11428	14	178
TS15	15	95	FTB15	15	190	FT11530	15	199
						FT20036	3	16
						FT20048	4	25
						FT20510	5	38
						FT20612	6	52
						FT20714	7	65
						FT20816	8	78
						FT20918	9	94
						FT21020	10	112
						FT21122	11	131
						FT21224	12	152
						FT21326	13	174
						FT21428	14	199
						FT21530	15	223
						FT21632	16	251
						FT21734	17	271

KDHA			KDBH			KDHC		
Article nr	Size øD	Weight [kg]	Article nr	Size øD	Weight [kg]	Article nr	Size øD	Weight [kg]
KDA010	100	2,2	KDB010	100	2,8	KDC010	100	2,8
KDA012	125	2,6	KDB012	125	4,1	KDC012	125	4,1
KDA016	160	3	KDB016	160	5,2	KDC016	160	5,2
KDA020	200	3,8	KDB020	200	7,1	KDC020	200	7,1
KDA025	250	5,7	KDB025	250	10	KDC025	250	10
KDA031	315	8,3	KDB031	315	17,5	KDC031	315	17,5
KDA040	400	11,5	KDB040	400	22,1	KDC040	400	22,1
KDA050	500	18	KDB050	500	30,8	KDC050	500	30,8
KDA063	630	26,5	KDB063	630	47,4	KDC063	630	47,4