

Environmental Product Declaration (EPD)

Summary

Declaration code: EPD-VT-0.6.1



Hörmann Alkmaar B.V.

Loading Systems

Loading Technology



Basis:

DIN EN ISO 14025
EN15804

company-EPD
Environmental
Product Declaration

Date of issue:
22.02.2018

Next revision:
22.02.2023



[www.ift-rosenheim.de/
erstelte-epds](http://www.ift-rosenheim.de/erstellte-epds)

Environmental Product Declaration (EPD)

Summary



Declaration code: EPD-VT-0.6.1

Programme operator	ift Rosenheim GmbH Theodor-Gietl-Straße 7-9 83026 Rosenheim		
LCA specialist	Life Cycle Engineering Experts Berliner Allee 58 64295 Darmstadt		
Declaration holder	Hörmann Alkmaar B.V. Robbenkoog 20 Postbus 9120 NL-1800 GC Alkmaar		
Declaration code	EPD-VT-0.6.1		
Designation of the declared product	Loading Technology composed of dock leveller, dock seal, pedestal, accessories and loading house		
Scope	Hörmann loading technology in or in front of the building for efficient, safe and protected loading and unloading for industrial or commercial applications.		
Basis	This EPD was prepared on the basis of EN ISO 14025:2011 and EN 15804:2012+A1:2013. In addition the "General guideline for elaboration of type III environmental product declarations" applies. This Declaration is based on the PCR Document „Verladesysteme“ PCR-VS-1.1: 2013.		
Validity	Date of issue: 22.02.2018	Last revision: 22.02.2018	Next revision: 22.02.2023
	This verified company Environmental Product Declaration applies solely to the specified products and is valid for a period of 5 years from the date of issue according to EN 15804.		
LCA basis	The LCA was prepared in accordance with DIN EN ISO 14040 and DIN EN ISO 14044. The base data include both data collected at Hörmann Alkmaar B.V. and generic data from the "GaBi 8" database. LCA calculations were based on the "cradle to gate with options" life cycle (e.g. raw materials production).		
Notes on publication	The "Conditions and Guidance on the Use of ift Test Documents" apply. The declaration holder assumes full liability for the underlying data, certificates and verifications.		
			
Prof. Ulrich Sieberath Director of Institute		Florian Stich External verifier	

Note: For further information please see the detailed version of the EPD.

Results per m ² loading house (part 1 of 2)																
Environmental impacts	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global warming potential (GWP)	kg CO ₂ -Äqv.	150	0,384	1,24	-	1,05E-03	118	-	-	-	-	0,785	0,31	0,062	0,359	-65,90
Ozone depletion potential (ODP)	kg R11-Äqv.	6,00E-07	1,27E-13	4,04E-14	-	1,23E-15	7,45E-10	-	-	-	-	3,49E-11	1,03E-13	2,74E-12	3,13E-13	-3,00E-07
Acidification potential of soil and water (AP)	kg SO ₂ -Äqv.	0,589	1,62E-03	1,16E-04	-	1,15E-06	0,41	-	-	-	-	2,24E-03	1,81E-03	1,76E-04	1,79E-03	-0,179
Eutrophication potential (EP)	kg PO ₄ ³⁻ -Äqv.	0,071	4,04E-04	2,53E-05	-	5,21E-07	0,059	-	-	-	-	2,03E-04	4,58E-04	1,59E-05	2,44E-04	-0,013
Photochemical ozone creation potential (POCP)	kg C ₂ H ₄ -Äqv.	0,076	-5,98E-04	9,55E-06	-	9,80E-08	0,048	-	-	-	-	1,43E-04	-8,02E-04	1,12E-05	1,41E-04	-0,026
Abiotic depletion potential - non-fossil resources (ADP - elements)	kg Sb-Äqv.	3,22E-04	3,04E-08	1,50E-08	-	1,94E-10	3,30E-04	-	-	-	-	3,00E-07	2,46E-08	2,36E-08	1,08E-07	-5,93E-04
Abiotic depletion potential - fossil resources (ADP – fossil fuels.)	MJ	2,28E+03	5,23	0,233	-	6,12E-03	2,05E+03	-	-	-	-	8,38	4,23	0,658	3,90	-721
Use of ressources	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Use of renewable primary energy - excluding renewable primary energy resources used as raw materials	MJ	0	0	0	-	0	0	-	-	-	-	0	0	0	0	0
Use of renewable primary energy resources used as raw materials (material use)	MJ	0	0	0	-	0	0	-	-	-	-	0	0	0	0	0
Total use of renewable primary energy resources (primary energy and renewable primary energy resources used as raw materials) (energy + material use)	MJ	92,40	0,263	0,049	-	4,32E-04	44,90	-	-	-	-	4,70	0,213	0,369	0,472	-26,30
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials.	MJ	0	0	0	-	0	0	-	-	-	-	0	0	0	0	0
Use of non-renewable primary energy resources used as raw materials (material use)	MJ	0,42	0	0	-	0	0	-	-	-	-	0	0	0	0	0
Total use of non-renewable primary energy resources (primary energy and non-renewable primary energy resources used as raw materials) (energy + material use)	MJ	2,28E+03	5,25	0,259	-	6,41E-03	2,08E+03	-	-	-	-	13,80	4,24	1,08	4,04	-749
Use of secondary materials	kg	0	0	0	-	0	0	-	-	-	-	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	-	0	0	-	-	-	-	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	-	0	0	-	-	-	-	0	0	0	0	0
Use of net fresh water	m ³	14,40	0,022	0,027	-	2,79E-03	5,29	-	-	-	-	3,57	0,018	0,28	0,223	-1,26



Results per m ² loading house (part 2 of 2)																
Waste categories	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0,077	0	0	-	0	0,066	-	-	-	-	0	0	0	0	-4,49E-03
Non-hazardous waste disposed (municipal waste)	kg	314,00	0,019	0,056	-	1,36E-03	164	-	-	-	-	3,38	0,015	0,266	19,40	-180
Radioactive waste	kg	0,018	7,16E-06	1,04E-05	-	1,16E-07	8,04E-03	-	-	-	-	2,14E-03	5,79E-06	1,68E-04	5,56E-05	-0,011
Components for re-use	kg	0	0	0	-	0	0	-	-	-	-	0	0	0	0	0
Materials for recycling	kg	0	0	0	-	0	0	-	-	-	-	0	0	0	0	0
Materials for energy recovery	kg	0	0	0	-	0	0	-	-	-	-	0	0	0	0	0
Exported energy (electricity)	MJ	0	0	0	-	0	0	-	-	-	-	0	0	0	-0,105	0
Exported energy (thermal energy)	MJ	0	0	0	-	0	0	-	-	-	-	0	0	0	-0,239	0

Summary

Results per kg dock leveller (part 1 of 2)																
Environmental impacts	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global warming potential (GWP)	kg CO ₂ -Äqv.	2,50	0,06	5,96E-03	-	1,87E-06	1,92	-	-	0,108	-	0,0123	4,87E-03	5,51E-05	5,69E-03	-1,15
Ozone depletion potential (ODP)	kg R11-Äqv.	2,41E-11	1,96E-14	2,5E-15	-	2,21E-18	2,28E-11	-	-	1,8E-14	-	5,47E-13	1,61E-15	2,45E-15	1,64E-15	-1,29E-11
Acidification potential of soil and water (AP)	kg SO ₂ -Äqv.	8,21E-03	2,51E-04	7,96E-06	-	2,07E-09	5,63E-03	-	-	3,66E-04	-	3,52E-05	2,84E-05	1,57E-07	9,33E-06	-3,46E-03
Eutrophication potential (EP)	kg PO ₄ ³⁻ -Äqv.	6,57E-04	6,26E-05	2,74E-07	-	9,33E-10	4,23E-04	-	-	2,77E-05	-	3,19E-06	7,19E-06	1,43E-08	1,29E-06	-2,64E-04
Photochemical ozone creation potential (POCP)	kg C ₂ H ₄ -Äqv.	1,25E-03	-9,24E-05	1,52E-07	-	1,76E-10	7,44E-04	-	-	2,49E-05	-	2,25E-06	-1,26E-05	1,00E-08	7,42E-07	-4,60E-04
Abiotic depletion potential - non-fossil resources (ADP - elements)	kg Sb-Äqv.	9,22E-05	4,71E-09	2,62E-09	-	3,49E-13	1,64E-05	-	-	1,80E-08	-	4,72E-09	3,86E-10	2,11E-11	5,78E-10	-9,24E-06
Abiotic depletion potential - fossil resources (ADP – fossil fuels.)	MJ	30,10	0,81	0,01	-	1,09E-05	21,60	-	-	1,03	-	0,132	0,066	5,87E-04	0,02	-13,0
Use of ressources	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Use of renewable primary energy - excluding renewable primary energy resources used as raw materials	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of renewable primary energy resources used as raw materials (material use)	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Total use of renewable primary energy resources (primary energy and renewable primary energy resources used as raw materials) (energy + material use)	MJ	1,05	0,041	1,93E-03	-	7,76E-07	1,02	-	-	0,405	-	0,0737	3,35E-03	3,29E-04	2,49E-03	-0,612
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials.	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of non-renewable primary energy resources used as raw materials (material use)	MJ	0,0301	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Total use of non-renewable primary energy resources (primary energy and non-renewable primary energy resources used as raw materials) (energy + material use)	MJ	30,90	0,813	0,011	-	1,15E-05	22,20	-	-	1,05	-	0,216	0,066	9,69E-04	0,021	-13,40
Use of secondary materials	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of net fresh water	m ³	3,75	3,37E-03	9,42E-04	-	5,01E-06	0,541	-	-	2,45	-	0,056	2,76E-04	2,50E-04	1,18E-03	-0,326



Results per kg dock levellers (part 2 of 2)																
Waste categories	U	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	1,59E-04	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Non-hazardous waste disposed (municipal waste)	kg	10,49	2,90E-03	9,14E-03	-	2,43E-06	8,39	-	-	0,467	-	0,053	2,40E-04	2,30E-04	0,099	-5,25
Radioactive waste	kg	3,10E-04	1,11E-06	4,24E-07	-	2,07E-10	2,70E-04	-	-	6,08E-06	-	3,36E-05	9,06E-08	1,49E-07	3,01E-07	-1,65E-04
Components for re-use	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Materials for recycling	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Materials for energy recovery	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Exported energy (electricity)	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	-7,60E-03	0
Exported energy (thermal energy)	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	-0,018	0

Summary

Results per kg dock seal (part 1 of 2)																
Environmental impacts	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global warming potential (GWP)	kg CO ₂ -Äqv.	4,67	6,54E-03	0,177	-	2,09E-03	2,09E-03	-	-	0,027	-	0,012	4,87E-03	4,11E-04	0,635	-1,62
Ozone depletion potential (ODP)	kg R11-Äqv.	3,61E-10	2,17E-15	3,8E-14	-	2,46E-15	2,09E-03	-	-	5,91E-14	-	5,47E-13	1,61E-15	1,83E-14	1,45E-14	-1,93E-11
Acidification potential of soil and water (AP)	kg SO ₂ -Äqv.	0,0165	2,76E-05	1,82E-05	-	2,31E-06	2,09E-03	-	-	5,40E-05	-	3,53E-05	2,84E-05	1,17E-06	5,31E-05	-6,01E-03
Eutrophication potential (EP)	kg PO ₄ ³⁻ -Äqv.	1,19E-03	6,87E-06	3,73E-06	-	1,04E-06	2,09E-03	-	-	6,61E-06	-	3,19E-06	7,20E-06	1,06E-07	1,06E-05	-4,09E-04
Photochemical ozone creation potential (POCP)	kg C ₂ H ₄ -Äqv.	1,41E-03	-1,02E-05	1,47E-06	-	1,96E-07	2,09E-03	-	-	3,41E-06	-	2,25E-06	-1,26E-05	7,47E-08	5,21E-06	-4,80E-04
Abiotic depletion potential - non-fossil resources (ADP - elements)	kg Sb-Äqv.	4,14E-05	5,18E-10	1,69E-09	-	3,89E-10	2,09E-03	-	-	1,03E-06	-	4,71E-09	3,86E-10	1,57E-10	5,41E-09	-1,50E-05
Abiotic depletion potential - fossil resources (ADP – fossil fuels.)	MJ	58,2	0,09	0,032	-	0,012	2,09E-03	-	-	0,141	-	0,131	0,066	4,39E-03	0,1	-19,13
Use of ressources	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Use of renewable primary energy - excluding renewable primary energy resources used as raw materials	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of renewable primary energy resources used as raw materials (material use)	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Total use of renewable primary energy resources (primary energy and renewable primary energy resources used as raw materials) (energy + material use)	MJ	13,0	4,48E-03	5,69E-03	-	5,76E-06	0,465	-	-	21,46	-	0,074	3,34E-03	2,46E-03	0,018	-5,28
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials.	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of non-renewable primary energy resources used as raw materials (material use)	MJ	5,52	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Total use of non-renewable primary energy resources (primary energy and non-renewable primary energy resources used as raw materials) (energy + material use)	MJ	61,7	0,089	0,038	-	0,013	0,013	-	-	0,153	-	0,216	0,066	7,20E-03	0,11	-22,0
Use of secondary materials	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of net fresh water	m ³	54,8	3,70E-04	4,50E-03	-	5,59E-03	1,01	-	-	186	-	0,0560	2,76E-04	1,86E-03	0,01	-10,46



Results per kg dock seal (part 2 of 2)																
Waste categories	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	1,37E-03	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Non-hazardous waste disposed (municipal waste)	kg	9,53	3,20E-04	5,12E-03	-	2,72E-03	2,72E-03	-	-	0,38	-	0,053	2,40E-04	1,77E-03	0,18	-5,38
Radioactive waste	kg	1,38E-03	1,2 E-07	2,40E-06	-	2,31E-07	2,31E-07	-	-	4,36E-06	-	3,00E-05	9,06E-08	1,10E-06	3,53E-06	-1,14E-03
Components for re-use	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Materials for recycling	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Materials for energy recovery	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Exported energy (electricity)	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	-1,4	0
Exported energy (thermal energy)	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	-3,4	0

Summary

Results per kg pedestal (part 1 of 2)																
Environmental impacts	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global warming potential (GWP)	kg CO ₂ -Äqv.	2,23	5,97E-03	4,23E-03	-	2,97E-06	85,50	-	-	4,02	-	0,0123	4,87E-03	0,0616	7,55E-03	-1,15
Ozone depletion potential (ODP)	kg R11-Äqv.	1,97E-11	1,98E-15	1,3E-16	-	3,48E-18	1,03E-09	-	-	8,87E-12	-	5,47E-13	1,61E-15	2,74E-12	9,47E-16	-1,06E-11
Acidification potential of soil and water (AP)	kg SO ₂ -Äqv.	6,91E-03	2,52E-05	2,65E-07	-	3,27E-09	0,196	-	-	8,10E-03	-	3,52E-05	2,84E-05	1,76E-04	5,18E-06	-3,54E-03
Eutrophication potential (EP)	kg PO ₄ ³⁻ -Äqv.	5,80E-04	6,28E-06	5,88E-08	-	1,47E-09	0,0171	-	-	9,92E-04	-	3,19E-06	7,20E-06	1,59E-05	7,41E-07	-2,89E-04
Photochemical ozone creation potential (POCP)	kg C ₂ H ₄ -Äqv.	1,24E-03	-9,30E-06	2,73E-08	-	2,77E-10	0,0370	-	-	5,12E-04	-	2,25E-06	-1,26E-05	1,12E-05	4,18E-07	-4,95E-04
Abiotic depletion potential - non-fossil resources (ADP - elements)	kg Sb-Äqv.	8,73E-05	4,73E-10	3,07E-11	-	5,5E-13	5,24E-05	-	-	1,55E-04	-	4,72E-09	3,86E-10	2,36E-08	3,36E-10	-4,57E-07
Abiotic depletion potential - fossil resources (ADP – fossil fuels.)	MJ	25,5	0,0813	4,69E-04	-	1,73E-05	1,65E+03	-	-	21,2	-	0,132	0,066	0,66	0,011	-13
Use of ressources	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Use of renewable primary energy - excluding renewable primary energy resources used as raw materials	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of renewable primary energy resources used as raw materials (material use)	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Total use of renewable primary energy resources (primary energy and renewable primary energy resources used as raw materials) (energy + material use)	MJ	0,963	4,09E-03	9,84E-05	-	1,22E-06	69,8	-	-	3,22E+03	-	0,0737	3,34E-03	0,369	1,41E-03	-0,519
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials.	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of non-renewable primary energy resources used as raw materials (material use)	MJ	0,118	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Total use of non-renewable primary energy resources (primary energy and non-renewable primary energy resources used as raw materials) (energy + material use)	MJ	26,10	0,0816	5,26E-04	-	1,82E-05	1,72E+03	-	-	22,9	-	0,216	0,0666	1,08	1,16E-02	-13,30
Use of secondary materials	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Use of net fresh water	m ³	0,318	3,38E-04	5,82E-05	-	7,91E-06	37,4	-	-	2,79E+04	-	0,0561	2,76E-04	0,28	6,81E-04	-0,153



Results per kg pedestal (part 2 of 2)																
Waste categories	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	3,86E-05	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Non-hazardous waste disposed (municipal waste)	kg	9,84	2,95E-04	1,11E-04	-	3,85E-06	191,0	-	-	57,1	-	0,0531	2,40E-04	0,266	0,052	-5,15
Radioactive waste	kg	2,35E-04	1,11E-07	2,27E-08	-	3,27E-10	0,0291	-	-	6,55E-04	-	3,36E-05	9,08E-08	1,68E-04	1,80E-07	-1,30E-04
Components for re-use	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Materials for recycling	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Materials for energy recovery	kg	0	0	0	-	0	0	-	-	0	-	0	0	0	0	0
Exported energy (electricity)	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	-0,012	0
Exported energy (thermal energy)	MJ	0	0	0	-	0	0	-	-	0	-	0	0	0	-0,03	0

Results per kg accessories (part 1 of 2)																
Environmental impacts	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global warming potential (GWP)	kg CO ₂ -Äqv.	2,28	6,00E-03	0,021	-	1,39E-05	-	-	-	-	-	0,012	0,048	2,00E-04	0,37	-1,15
Ozone depletion potential (ODP)	kg R11-Äqv.	6,10E-10	1,90E-15	3,16E-15	-	8,33E-18	-	-	-	-	-	5,49E-13	1,61E-15	9,28E-15	8,03E-15	-8,57E-12
Acidification potential of soil and water (AP)	kg SO ₂ -Äqv.	7,90E-03	2,54E-05	2,80E-06	-	7,83E-09	-	-	-	-	-	3,52E-05	2,84E-05	5,96E-07	2,83E-05	-3,70E-03
Eutrophication potential (EP)	kg PO ₄ ³⁻ -Äqv.	6,80E-04	6,33E-06	5,66E-07	-	3,52E-09	-	-	-	-	-	3,18E-06	7,18E-06	5,38E-08	5,79E-06	-3,20E-04
Photochemical ozone creation potential (POCP)	kg C ₂ H ₄ -Äqv.	1,03E-03	9,38E-06	2,18E-07	-	6,64E-10	-	-	-	-	-	2,25E-06	1,26E-05	3,79E-08	2,82E-06	-5,00E-04
Abiotic depletion potential - non-fossil resources (ADP - elements)	kg Sb-Äqv.	5,18E-06	4,70E-10	2,86E-10	-	1,31E-12	-	-	-	-	-	4,71E-09	3,86E-10	8,00E-11	3,00E-09	-5,69E-08
Abiotic depletion potential - fossil resources (ADP – fossil fuels.)	MJ	32,13	0,082	4,00E-03	-	4,13E-05	-	-	-	-	-	0,13	0,066	2,23E-03	0,052	-13,59
Use of ressources	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Use of renewable primary energy - excluding renewable primary energy resources used as raw materials	MJ	0	0	0	-	0	-	-	-	-	-	0	0	0	0	0
Use of renewable primary energy resources used as raw materials (material use)	MJ	0	0	0	-	0	-	-	-	-	-	0	0	0	0	0
Total use of renewable primary energy resources (primary energy and renewable primary energy resources used as raw materials) (energy + material use)	MJ	1,06	4,10E-03	7,30E-04	-	2,93E-06	-	-	-	-	-	0,0738	3,34E-03	1,25E-03	0,01	-1,03
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials.	MJ	0	0	0	-	0	-	-	-	-	-	0	0	0	0	0
Use of non-renewable primary energy resources used as raw materials (material use)	MJ	2,67	0	0	-	0	-	-	-	-	-	0	0	0	0	0
Total use of non-renewable primary energy resources (primary energy and non-renewable primary energy resources used as raw materials) (energy + material use)	MJ	30,77	0,0824	4,64E-03	-	4,34E-05	-	-	-	-	-	0,216	0,0668	3,66E-03	0,0576	-14,0
Use of secondary materials	kg	0	0	0	-	0	-	-	-	-	-	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	-	0	-	-	-	-	-	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	-	0	-	-	-	-	-	0	0	0	0	0
Use of net fresh water	m ³	0,84	3,40E-04	5,10E-04	-	1,89E-05	-	-	-	-	-	0,056	2,70E-04	9,40E-04	5,50E-03	-0,793



Results per kg accessories (part 2 of 2)																
Waste categories	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	1,30E-04	0	0	-	0	-	-	-	-	-	0	0	0	0	0
Non-hazardous waste disposed (municipal waste)	kg	11,22	2,90E-04	1,00E-03	-	9,22E-06	-	-	-	-	-	0,0532	2,40E-04	9,01E-04	0,075	-5,83
Radioactive waste	kg	2,17E-04	1,13E-07	2,49E-07	-	7,83E-10	-	-	-	-	-	3,36E-05	9,08E-08	5,69E-07	1,97E-06	-3,20E-04
Components for re-use	kg	0	0	0	-	0	-	-	-	-	-	0	0	0	0	0
Materials for recycling	kg	0	0	0	-	0	-	-	-	-	-	0	0	0	0	0
Materials for energy recovery	kg	0	0	0	-	0	-	-	-	-	-	0	0	0	0	0
Exported energy (electricity)	MJ	0	0	0	-	0	-	-	-	-	-	0	0	0	-0,68	0
Exported energy (thermal energy)	MJ	0	0	0	-	0	-	-	-	-	-	0	0	0	-1,65	0

Imprint

LCA preparation by

Life Cycle Engineering Experts
Berliner Allee 58
64295 Darmstadt

Programme operator

ift Rosenheim GmbH
Theodor-Gietl-Str. 7-9
83026 Rosenheim
Phone: 0 80 31/261-0
fax: 0 80 31/261 290
email: info@ift-rosenheim.de
www.ift-rosenheim.de

Declaration holder

Hörmann Alkmaar B.V. Robbenkoog 20
Postbus 9120
NL-1800 GC Alkmaar

Notes

This EPD is mainly based on the work and findings of the Institut für Fenstertechnik e.V., Rosenheim (ift Rosenheim) and specifically on the ift-Guideline NA.01/1 – Guidance on the Preparation of Type III Environmental Product Declarations.

The publication and all of its parts are protected by copyright. Any utilisation outside the confined limits of the copyright provisions is not permitted without the consent of the publishers and is punishable. In particular, this applies to any form of reproduction, translations, storage on microfilm and the storage and processing in electronic systems.

Layout

ift Rosenheim GmbH - 2015

Pictures (first page)

Hörmann Alkmaar B.V.

© ift Rosenheim, 2018



ift Rosenheim GmbH
Theodor-Gietl-Str. 7-9
83026 Rosenheim
phone: +49 (0) 80 31/261-0
fax: +49 (0) 80 31/261-290
email: info@ift-rosenheim.de
www.ift-rosenheim.de