EPD Loading Technology, Summary

Environmental **P**roduct **D**eclaration
in accordance with DIN ISO 14025 and EN 15804

Loading Technology (Company EPD)

Hörmann Alkmaar B.V.







Declaration code
EPD-VT-0.6

April 2012

Environmental Product Declaration in accordance with ISO 14025 and EN 15804 Summary

Loading Technology

Programme operator	**ift Rosenheim GmbH** Theodor-Gietl-Strasse 7-9 D-83026 Rosenheim	
Holder of the declaration	Hörmann Alkmaar B.V. Robbenkoog 20 Postbus 9120 NL-1800 GC Alkmaar	Hörmann Legnica Sp. z o.o. Osla 1C 59-706 Gromadka
Declaration code	EPD-VT-0.6	
Designation of 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.	

Ulrich Sieberath

Signature of Director of Institute, ift Rosenheim GmbH

Bernd Strufe

Signature of Verifier

The environmental impacts of the individual components (dock leveller, dock seal, pedestal, accessories and loading house) listed below, shall be added up depending on the composition of the respective loading technology.

Basis

- ISO 14025:2006
- EN 15804:2012

Allgemeiner Leitfaden zur Erstellung von Typ III Umweltproduktdeklarationen (Guidance on preparing Type III Environmental Product Declarations)

The Declaration is based on the PCR Document "Verladesysteme“ (Loading systems) PCR-VS-1.1 : 2011

Validity

This verified Environmental Product Declaration applies solely to the specified products and is valid for a period of 5 years from the date of issue.

The declaration holder assumes full liability for the underlying data, certificates and verifications.

Date of issue:
01 April. 2012

Next revision:
01 April 2017

LCA basis

The LCA was prepared in accordance with EN ISO 14040 and EN ISO 14044. The data base includes the data gathered from the production sites of Hörmann Alkmaar B.V. and Hörmann Legnica SP. z. o.o as well as the generic data derived from the "GaBi 5“ data base. LCA calculations were based on the "cradle to grave“ life cycle including all upstream processes (e.g. raw material extraction, etc.).

The LCA was prepared by "Life Cycle Engineering Experts GmbH".

Notes on publication

The "Conditions and Guidance on the Use of **ift** Test Documents“ apply.

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LCA results per kg dock leveller, dock seal, pedestal or accessories		Component	Manufacture A1 – A5	Use B1 – B7	End-of-life C1 – C4	Recycling potential D
Primary energy – non-renewable ($PE_{n\ renw}$) in MJ		Dock leveller	30.80	82.80	-0.39	-12.53
		Dock seal	68.45	841.00	-2.41	-7.82
		Pedestal	34.96	20.50	-0.11	-13.17
		Accessories	30.03	19.30	-2.00	-8.78
Primary energy – renewable (PE_{renw}) in MJ		Dock leveller	1.03	5.80	-0.03	0.72
		Dock seal	9.31	120.00	-0.19	0.45
		Pedestal	1.26	1.79	-0.01	0.76
		Accessories	0.82	1.18	-0.16	0.51
Global warming potential (GWP 100) in kg CO_2 equiv.		Dock leveller	2.75	5.73	0.10	-1.33
		Dock seal	4.88	50.60	0.58	-0.83
		Pedestal	2.74	1.30	0.04	-1.40
		Accessories	2.04	1.58	0.48	-0.93
Ozone depletion potential (ODP) in kg R11 equiv.		Dock leveller	1.13×10^{-8}	1.33×10^{-7}	-9.10×10^{-10}	4.26×10^{-8}
		Dock seal	6.442×10^{-8}	2.73×10^{-6}	-5.23×10^{-9}	2.66×10^{-8}
		Pedestal	1.30×10^{-8}	5.58×10^{-8}	-3.15×10^{-10}	4.48×10^{-8}
		Accessories	2.67×10^{-9}	2.81×10^{-8}	-4.35×10^{-9}	2.98×10^{-8}
Acidification potential (AP) in kg SO_2 equiv.		Dock leveller	8.30×10^{-3}	0.02	-5.85×10^{-6}	-3.18×10^{-3}
		Dock seal	0.02	0.21	-8.68×10^{-5}	-1.98×10^{-3}
		Pedestal	8.01×10^{-3}	4.97×10^{-3}	5.30×10^{-6}	-3.34×10^{-3}
		Accessories	7.31×10^{-3}	5.01×10^{-3}	-7.03×10^{-5}	-2.23×10^{-3}
Eutrophication potential (EP) in kg PO_4^{3-} equiv.		Dock leveller	6.19×10^{-4}	1.79×10^{-3}	8.75×10^{-5}	-8.78×10^{-5}
		Dock seal	1.22×10^{-3}	0.01	4.90×10^{-4}	-5.48×10^{-5}
		Pedestal	5.85×10^{-4}	5.61×10^{-4}	3.20×10^{-5}	-9.23×10^{-5}
		Accessories	6.06×10^{-4}	9.52×10^{-4}	4.08×10^{-4}	-6.15×10^{-5}
Photochem. ozone creation potential (POCP) in kg C_2H_4 equiv.		Dock leveller	1.30×10^{-3}	2.48×10^{-3}	4.85×10^{-6}	7.11×10^{-4}
		Dock seal	1.73×10^{-3}	0.01	4.53×10^{-5}	-4.44×10^{-4}
		Pedestal	1.20×10^{-3}	5.51×10^{-4}	-7.29×10^{-7}	-7.47×10^{-4}
		Accessories	1.12×10^{-3}	6.57×10^{-4}	3.71×10^{-5}	-4.98×10^{-4}
Abiotic resources depletion potential (elements) (ADP_{el}) in kg Sb equiv.		Dock leveller	9.41×10^{-5}	8.80×10^{-5}	1.78×10^{-9}	-6.40×10^{-6}
		Dock seal	9.90×10^{-6}	2.53×10^{-5}	9.77×10^{-9}	-4.00×10^{-6}
		Pedestal	8.02×10^{-5}	8.74×10^{-5}	6.81×10^{-10}	-6.73×10^{-6}
		Accessories	5.64×10^{-6}	1.16×10^{-6}	8.14×10^{-9}	-4.49×10^{-6}
Abiotic resources depletion potential – fossil (ADP_{fos}) in MJ		Dock leveller	32.51	72.10	-0.31	-14.06
		Dock seal	58.91	579.00	-1.94	-8.78
		Pedestal	33.22	17.70	-0.09	-14.79
		Accessories	29.30	17.80	-1.61	-9.86
Water consumption in m^3		Dock leveller	0.78	5.83	-0.03	-0.04
		Dock seal	14.20	170.72	-0.19	-0.19
		Pedestal	0.97	0.76	-0.01	-0.02
		Accessories	0.59	0.43	-0.15	-0.16

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LCA results per m² loading house		Manufacture A1 – A5	Use B1 – B7	End-of-life C1 – C4	Recycling potential D
Primary energy – non-renewable ($PE_{n\ renw}$) in MJ		917.80	769.00	-7.01	-204.27
Primary energy – renewable (PE_{renw}) in MJ		54.45	67.30	-0.56	11.81
Global warming potential (GWP 100) in kg CO_2 equiv.		60.48	46.10	1.82	-21.71
Ozone depletion potential (ODP) in kg R11 equiv.		5.54×10^{-8}	7.39×10^{-7}	-1.62×10^{-8}	6.94×10^{-7}
Acidification potential (AP) in kg SO_2 equiv.		0.23	0.19	-1.20×10^{-4}	-0.05
Eutrophication potential (EP) in kg PO_4^{3-} equiv.		0.03	0.03	1.55×10^{-3}	-1.43×10^{-3}
Photochem. ozone creation potential (POCP) in kg C_2H_4 equiv.		0.03	0.02	9.13×10^{-5}	-0.01
Abiotic resources depletion potential (elements) (ADP_{el}) in kg Sb equiv.		8.61×10^{-4}	7.57×10^{-4}	3.15×10^{-8}	-1.04×10^{-4}
Abiotic resources depletion potential – fossil (ADP_{fos}) in MJ		874.74	700.00	-5.55	-229.34
Water consumption in m³		19.56	25.32	-0.52	-0.76

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Notes

The basis of this EPD mainly consists of the work and insights of the Institut für Fenstertechnik e.V., Rosenheim (**ift** Rosenheim) and in particular the **ift** regulation NA-01engl/1 General instructions for the preparation of the type III Environmental Product Declarations.

Layout

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