ENVIRONMENTAL PRODUCT DECLARATION

In agreement with ISO 14025:2006
PRODUCT CATEGORY RULES AND PCR BASIC MODULE 2012:01 Ver. 2.01.
CONSTRUCTION PRODUCTS AND CPC Division 54 CONSTRUCTION SERVICES

ENVIRONMENTAL PRODUCT DECLARATION OF HETEROGENEOUS WATERPROOFING MEMBRANES

REV. 1 Date 23rd June 2017
Number: 3013EPD-17-0256

Organization:	Fatra, a.s.	Registration No. / VAT 27465021 / CZ27465021
Address	tř. T. Bati 1541 763 61 Napajedla Czech Republic	
Statutory body	Ing. Petr Bláha, head of Fatra,a.s.	
EPD representative	Ing. Gordana Paravanová, Ph.D. Manager for certification process,	
Contact	Phone: +420 577502345 E-mail: gordana.paravanova@fatra.cz	www.fatra.cz

Product:	Heterogeneous waterproofing membranes
Use:	PVC Waterproofing membranes for roofing and insulations of ground and underground constructions
Product lifetime /years/:	The products are under warranty for 20 years.
Hazardous substance contents:	~~Yes~~/No
UN CPC:	369 Other plastics products

1 PROGRAMME RELATED INFORMATION

1.1 NAME OF THE PROGRAMME AND PROGRAMME OPERATOR

Programme operator for this EPD is The International EPD®system.

International EPD®system
International EPD Consortium (IEC)
Postal address: Vasagatan 15-17, SE-111 20 Stockholm, Sweden
E-mail: info@environdec.com
www: www.environdec.com

1.2 THE REFERENCE PCR DOCUMENT

The reference documents for this EPD are General Programme Instructions and Product Category Rules 2012:01 Version 2.01: Construction Products and CPC Division 54: Construction Services. Product Category Rules (PCR) are specified for certain information modules "cradle-to-gate", so called core modules. The structure and aggregation level of the core modules is defined by the United Nation Statistics Division - Classification Registry CPC codes (http://unstats.un.org).

1.3 REGISTRATION NUMBER

The registration number of this EPD is: 3013EPD-17-0256

1.4 DATE OF PUBLICATION AND VALIDITY

The publication date of this EPD is: 23.6.2017
This EPD is valid until: 22.6.2022

1.5 GEOGRAPHICAL SCOPE OF APPLICATION OF EPD

The geographical scope of this EPD is fully international.

1.6 INFORMATION ABOUT THE YEAR OR REFERENCE PERIOD OF THE UNDERLYING DATA TO THE EPD

The reference period to this EPD is year 2015. Data shown below refers to 2015 and have been collected directly from the Fatra, a.s. Other general data used were taken from the ILCD and Ecoinvent database.

1.7 REFERENCE TO THE WEBSITE

More information related to The International EPD® System programme is available at www.environdec.com.

2 PRODUCT RELATED INFORMATION

Trade name of product: **heterogeneous waterproofing membranes Fatrafol 810, 810/V, 813/V, 814, Ekoplan 819/V, 807, 807/V, 818/V-UV**

Fatrafol 810, 810/V, Ekoplan 819/V are identified first of all for making the one-layer coating coverings of flat roofs.

FATRAFOL 814 is identified for waterproofing of not gated terraces of dwelling houses and balconies as treat-type- layer.

The **FATRAFOL 807/V** membrane is identified for adhesion systems. The membrane can be adhered directly onto a construction of a roofing mantle, which fulfils requirements for flatness (fibre-cement plates */under „cetris" name/,* vibrated concrete, etc.), possibly onto a suitable waterproof layer beginning treated by heat.

FATRAFOL 818/V (818/V-UV) is identified for providing the one layer coating of flat roof coverings being loaded with aggregates, functional or vegetative layers. It is not suitable for mechanical anchoring of the coating coverings without added loading layer.

Unequivocal identification of the product according to the CPC classification system: CONSTRUCTION PRODUCTS AND CPC Division 54 CONSTRUCTION SERVICES, 369 other plastics products

2.1 SPECIFICATION OF THE COMPANY

The Heterogeneous PVC waterproofing membranes are produced in Fatra, a.s. třída Tomáše Bati 1541, 763 61 Napajedla, Czech Republic.
Registration No. / VAT No.: 27465021 / CZ27465021
The company is recorded in the Company Register kept by the Regional Court in Brno, Section B, File 4598.
Main activity of the Company is production of PVC based floor coverings and Waterproofing membranes.Fatra, a.s. is a company having ISO 9001: quality certificate and ISO 14001 – environmental certificate. For Fatrafol 810, 810/V, 807, 807/V Fatra has BRE certificate.

2.2 TECHNICAL DESCRIPTION OF THE PRODUCT

This EPD covers all Fatra, a.s. PVC heterogeneous waterproofing membranes names FATRAFOL 810/V,807/V, 818/V, 814, Ekoplan 819/V and Fatrafol 810,807 produced by the same technological procedure.

2.3 DECLARED UNIT

According to the EN 15804+A1 and PCR the declared unit is 1 m^2 of floor coverings.

2.4 DESCRIPTION OF UNDERLYING LCA-BASED INFORMATION

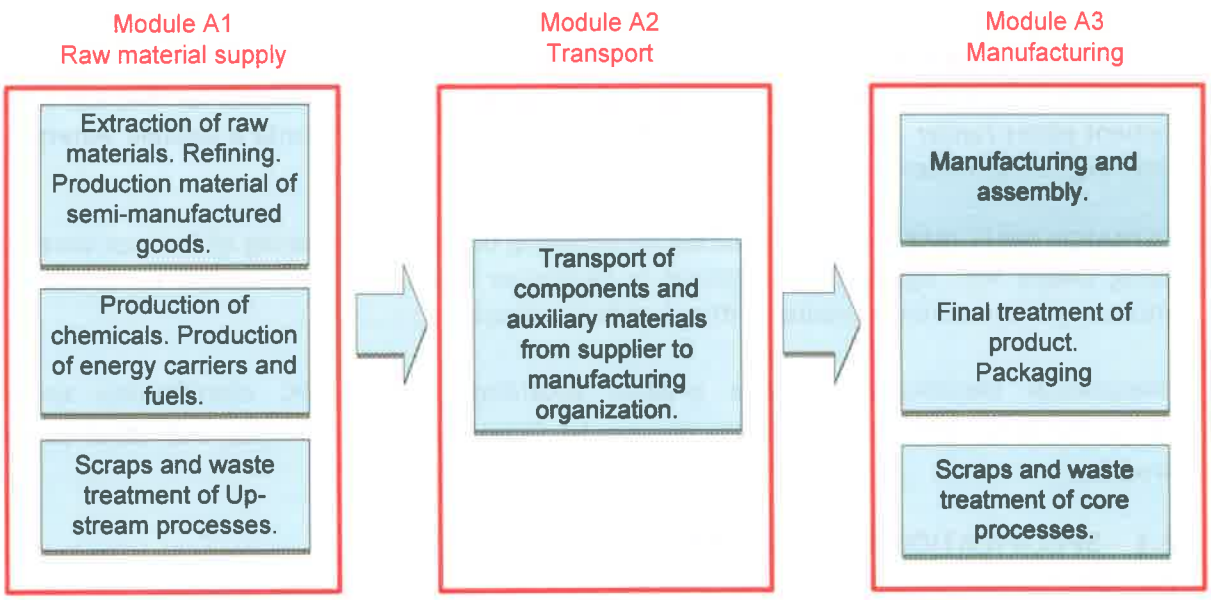
2.4.1 SYSTEM BOUNDARIES

System boundaries of this EPD are cradle to gate. Based on EN 15804+A1 The International EPD® system has adopted an LCA calculations procedure which is separated into different life cycle stages, so called modules A1, A2 and A3:

- Module A1: Upstream processes including energy production
- Module A2: Transport of inputs to producer
- Module A3: Core processes including infrastructure and waste processing

Schematic description of system boundaries consisting of up-steam module processes, core processes and down-stream processes is shown on following figure.

Figure 1 System boundaries



Based on PCR (IEC 2012) the downstream module was not included into system boundaries. Transport of final product to a costumer is also excluded.

2.4.2 DATA QUALITY

All relevant data are of specific quality. Data used for calculation were relevant for year 2015. Data set needed for calculation is complete.

2.4.3 LCA STUDY

The LCA calculations rules used for this declaration follow the overall requirements for The International EPD® System. These rules follow the international standards ISO 14040 and ISO 14044 with respect to EN 15804+A1. The product system for this LCA has been described by using specific data when available; generic data have been used in accordance with PCR and GPI requirements. Underlying LCA study used for this EPD was complete and covering all relevant inputs. For LCA study site specific data from producer were used. The LCA was conducted in year 2017. Underlying LCA study was elaborated by LCA studio, www.lcastudio.cz.

2.5 CONTENT OF MATERIALS AND CHEMICAL SUBSTANCES

The heterogeneous waterproofing membranes consist of polyvinyl chloride, stabilizers, low-temperature and polymeric plasticisers, etc. and dispersing agent and glass and/or other material based textile mesh. Detailed composition of product is Fatra, a.s. secret and cannot be published. The packaging for transport is PE film.

3 ENVIRONMENTAL PERFORMANCE-RELATED INFORMATION

All environmental performance is reported per declared unit 1 m^2 of ground coverings.

3.1 USE OF NATURAL RESOURCES

Following tables report the main consumption of resources for Heterogeneous waterproofing membranes life cycle. Dominant material resource used is crude oil. Use of resources in MJ/D.U. is expressed. All energy data are expressed as net caloric value.

Table 1 Resource (MJ) and electricity consumption associated with heterogeneous waterproofing membranes Fatrafol 807,807/V production. Data are aggregated (A1-A3) and referred to D.U.

Parameters	807	A1	A2	A3
Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]	3,74	3,74	0,01	-0,01
Use of renewable primary energy resources used as raw materials [MJ]	0,00	0,00	0	0
Total use of renewable primary energy resources [MJ]	3,74	3,74	0,01	-0,01
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]	89,6	89,7	0,15	-0,29
Use of non-renewable primary energy resources used as raw materials [MJ]	6,34	6,34	0	0
Total use of non-renewable primary energy resources [MJ]	95,9	96,0	0,15	-0,29
Use of secondary material [kg]	1,36	1,36	0	0
Use of renewable secondary fuels [MJ]	0	0	0	0
Use of non-renewable secondary fuels [MJ]	0	0	0	0
Use of net fresh water [m^3]	2,78	2,79	0,00	-0,02

Table 2 Resource (MJ) and electricity consumption associated with heterogeneous waterproofing membranes Fatrafol 810, 810/V production. Data are aggregated (A1-A3) and referred to D.U.

Parameters	810
Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]	4,13
Use of renewable primary energy resources used as raw materials [MJ]	0,00
Total use of renewable primary energy resources [MJ]	4,13
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]	141,0
Use of non-renewable primary energy resources used as raw materials [MJ]	15,66
Total use of non-renewable primary energy resources [MJ]	156,7
Use of secondary material [kg]	0
Use of renewable secondary fuels [MJ]	0
Use of non-renewable secondary fuels [MJ]	0
Use of net fresh water [m^3]	2,67

Table 3 Resource (MJ) and electricity consumption associated with heterogeneous waterproofing membranes Fatrafol 813/V production. Data are aggregated (A1-A3) and referred to D.U.

Parameters	813/V
Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]	3,91
Use of renewable primary energy resources used as raw materials [MJ]	0,00
Total use of renewable primary energy resources [MJ]	3,91
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]	124,1
Use of non-renewable primary energy resources used as raw materials [MJ]	17,61
Total use of non-renewable primary energy resources [MJ]	141,7
Use of secondary material [kg]	0
Use of renewable secondary fuels [MJ]	0
Use of non-renewable secondary fuels [MJ]	0
Use of net fresh water [m^3]	1,58

Table 4 Resource (MJ) and electricity consumption associated with heterogeneous waterproofing membranes Fatrafol 814 production. Data are aggregated (A1-A3) and referred to D.U.

Parameters	814
Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]	6,86
Use of renewable primary energy resources used as raw materials [MJ]	0,00
Total use of renewable primary energy resources [MJ]	6,86
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]	220,1

Parameters	814
Use of non-renewable primary energy resources used as raw materials [MJ]	27,82
Total use of non-renewable primary energy resources [MJ]	247,9
Use of secondary material [kg]	0
Use of renewable secondary fuels [MJ]	0
Use of non-renewable secondary fuels [MJ]	0
Use of net fresh water [m^3]	3,46

Table 5 Resource (MJ) and electricity consumption associated with heterogeneous waterproofing membranes Fatrafol 818/V-UV production. Data are aggregated (A1-A3) and referred to D.U.

Parameters	818/V-UV
Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]	4,57
Use of renewable primary energy resources used as raw materials [MJ]	0
Total use of renewable primary energy resources [MJ]	4,57
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]	141,8
Use of non-renewable primary energy resources used as raw materials [MJ]	16,87
Total use of non-renewable primary energy resources [MJ]	158,6
Use of secondary material [kg]	0
Use of renewable secondary fuels [MJ]	0
Use of non-renewable secondary fuels [MJ]	0
Use of net fresh water [m^3]	2,29

Table 6 Resource (MJ) and electricity consumption associated with heterogeneous waterproofing membranes Ekoplan 819/V production. Data are aggregated (A1-A3) and referred to D.U.

Parameters	819/V
Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]	2,70
Use of renewable primary energy resources used as raw materials [MJ]	0,00
Total use of renewable primary energy resources [MJ]	2,70
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]	145,8
Use of non-renewable primary energy resources used as raw materials [MJ]	7,51
Total use of non-renewable primary energy resources [MJ]	153,3
Use of secondary material [kg]	0,917
Use of renewable secondary fuels [MJ]	0
Use of non-renewable secondary fuels [MJ]	0
Use of net fresh water [m^3]	1,74

3.2 POTENTIAL ENVIRONMENTAL IMPACTS

Characterization factors are those prescribed in the CML 2001 methodology for calculating environmental impact as required by EPD® programme in GPI. The environmental impacts per declared unit are presented in following tables:

Table 7 Impact category results of environmental results of heterogeneous waterproofing membranes Fatrafol 807, 807/V production life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	807, 807/V
Abiotic Depletion (ADP elements) [kg Sb-Equiv.]	0,009
Abiotic Depletion (ADP fossil) [MJ]	63,711
Acidification Potential (AP) [kg SO2-Equiv.]	0,033
Eutrophication Potential (EP) [kg Phosphate-Equiv.]	0,010
Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.) [kg DCB-Equiv.]	2,053
Global Warming Potential (GWP 100 years) [kg CO2-Equiv.]	5,280
Global Warming Potential excl. biogenic carbon (GWP 100 years) [kg CO2-Equiv.]	5,320
Human Toxicity Potential (HTP inf.) [kg DCB-Equiv.]	3,268
Marine Aquatic Ecotoxicity Pot. (MAETP inf.) [kg DCB-Equiv.]	6028,685
Ozone Layer Depletion Potential (ODP, steady state) [kg R11-Equiv.]	3,48E-08
Photochem. Ozone Creation Potential (POCP) [kg Ethene-Equiv.]	0,005
Terrestric Ecotoxicity Potential (TETP inf.) [kg DCB-Equiv.]	0,025

Table 8 Impact category results of environmental results of heterogeneous waterproofing membranes Fatrafol 810, 810/V production life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	810,810/V
Abiotic Depletion (ADP elements) [kg Sb-Equiv.]	0,012
Abiotic Depletion (ADP fossil) [MJ]	83,887
Acidification Potential (AP) [kg SO2-Equiv.]	0,051
Eutrophication Potential (EP) [kg Phosphate-Equiv.]	0,014
Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.) [kg DCB-Equiv.]	2,626
Global Warming Potential (GWP 100 years) [kg CO2-Equiv.]	6,934
Global Warming Potential excl. biogenic carbon (GWP 100 years) [kg CO2-Equiv.]	7,062
Human Toxicity Potential (HTP inf.) [kg DCB-Equiv.]	4,158
Marine Aquatic Ecotoxicity Pot. (MAETP inf.) [kg DCB-Equiv.]	7611,985
Ozone Layer Depletion Potential (ODP, steady state) [kg R11-Equiv.]	6,35E-08
Photochem. Ozone Creation Potential (POCP) [kg Ethene-Equiv.]	0,010
Terrestric Ecotoxicity Potential (TETP inf.) [kg DCB-Equiv.]	0,016

Table 9 Impact category results of environmental results of heterogeneous waterproofing membranes Fatrafol 813/V production life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	813/ V
Abiotic Depletion (ADP elements) [kg Sb-Equiv.]	2,80E-05
Abiotic Depletion (ADP fossil) [MJ]	70,177
Acidification Potential (AP) [kg SO2-Equiv.]	0,044

Parameters	813/ V
Eutrophication Potential (EP) [kg Phosphate-Equiv.]	0,004
Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.) [kg DCB-Equiv.]	0,053
Global Warming Potential (GWP 100 years) [kg CO2-Equiv.]	6,195
Global Warming Potential excl. biogenic carbon (GWP 100 years) [kg CO2-Equiv.]	6,330
Human Toxicity Potential (HTP inf.) [kg DCB-Equiv.]	0,341
Marine Aquatic Ecotoxicity Pot. (MAETP inf.) [kg DCB-Equiv.]	878,011
Ozone Layer Depletion Potential (ODP, steady state) [kg R11-Equiv.]	3,52E-08
Photochem. Ozone Creation Potential (POCP) [kg Ethene-Equiv.]	0,009
Terrestric Ecotoxicity Potential (TETP inf.) [kg DCB-Equiv.]	0,007

Table 10 Impact category results of environmental results of heterogeneous waterproofing membranes Fatrafol 814 production life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	814
Abiotic Depletion (ADP elements) [kg Sb-Equiv.]	3,70E-05
Abiotic Depletion (ADP fossil) [MJ]	133,658
Acidification Potential (AP) [kg SO2-Equiv.]	0,076
Eutrophication Potential (EP) [kg Phosphate-Equiv.]	0,007
Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.) [kg DCB-Equiv.]	0,153
Global Warming Potential (GWP 100 years) [kg CO2-Equiv.]	10,961
Global Warming Potential excl. biogenic carbon (GWP 100 years) [kg CO2-Equiv.]	11,188
Human Toxicity Potential (HTP inf.) [kg DCB-Equiv.]	0,666
Marine Aquatic Ecotoxicity Pot. (MAETP inf.) [kg DCB-Equiv.]	1125,832
Ozone Layer Depletion Potential (ODP, steady state) [kg R11-Equiv.]	8,78E-08
Photochem. Ozone Creation Potential (POCP) [kg Ethene-Equiv.]	0,015
Terrestric Ecotoxicity Potential (TETP inf.) [kg DCB-Equiv.]	0,015

Table 11 Impact category results of environmental results of heterogeneous waterproofing membranes Fatrafol 818/ U-UV production life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	818/V-UV
Abiotic Depletion (ADP elements) [kg Sb-Equiv.]	3,62E-05
Abiotic Depletion (ADP fossil) [MJ]	88,008
Acidification Potential (AP) [kg SO2-Equiv.]	0,049
Eutrophication Potential (EP) [kg Phosphate-Equiv.]	0,004
Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.) [kg DCB-Equiv.]	0,097
Global Warming Potential (GWP 100 years) [kg CO2-Equiv.]	7,020
Global Warming Potential excl. biogenic carbon (GWP 100 years) [kg CO2-Equiv.]	7,169
Human Toxicity Potential (HTP inf.) [kg DCB-Equiv.]	0,447
Marine Aquatic Ecotoxicity Pot. (MAETP inf.) [kg DCB-Equiv.]	1052,782
Ozone Layer Depletion Potential (ODP, steady state) [kg R11-Equiv.]	7,44E-08
Photochem. Ozone Creation Potential (POCP) [kg Ethene-Equiv.]	0,009
Terrestric Ecotoxicity Potential (TETP inf.) [kg DCB-Equiv.]	0,009

Table 12 Impact category results of environmental results of heterogeneous waterproofing membranes Fatrafol 819/ V production life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	819/V
Abiotic Depletion (ADP elements) [kg Sb-Equiv.]	0,003
Abiotic Depletion (ADP fossil) [MJ]	51,828
Acidification Potential (AP) [kg SO2-Equiv.]	0,058
Eutrophication Potential (EP) [kg Phosphate-Equiv.]	0,007
Freshwater Aquatic Ecotoxicity Pot. (FAETP inf.) [kg DCB-Equiv.]	0,694
Global Warming Potential (GWP 100 years) [kg CO2-Equiv.]	6,698
Global Warming Potential excl. biogenic carbon (GWP 100 years) [kg CO2-Equiv.]	6,752
Human Toxicity Potential (HTP inf.) [kg DCB-Equiv.]	1,227
Marine Aquatic Ecotoxicity Pot. (MAETP inf.) [kg DCB-Equiv.]	2127,112
Ozone Layer Depletion Potential (ODP, steady state) [kg R11-Equiv.]	4,39E-08
Photochem. Ozone Creation Potential (POCP) [kg Ethene-Equiv.]	0,012
Terrestric Ecotoxicity Potential (TETP inf.) [kg DCB-Equiv.]	0,008

3.3 OTHER ENVIRONMENTAL INDICATORS

During use phase of vinyl floor coverings no toxic substances are released. The following indicators are also reported in the EPD per declared unit:

Table 13 Other environmental indicators describing waste categories of heterogeneous waterproofing membranes Fatrafol 807,807/Vproduction life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	807, 807/V
Non-hazardous waste [kg]	0,01
Hazardous waste [kg]	0,02
Radioactive waste [kg]	0

Table 14 Other environmental indicators describing waste categories of heterogeneous waterproofing membranes Fatrafol 810, 810/V production life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	810, 810/V
Non-hazardous waste [kg]	0,02
Hazardous waste [kg]	0,05
Radioactive waste [kg]	0

Table 15 Other environmental indicators describing waste categories of heterogeneous waterproofing membranes Fatrafol 813/V production life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	813/V
Non-hazardous waste [kg]	0,02
Hazardous waste [kg]	0,05
Radioactive waste [kg]	0,00

Table 15 Other environmental indicators describing waste categories of heterogeneous waterproofing membranes Fatrafol 814 production life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	814
Non-hazardous waste [kg]	0,02
Hazardous waste [kg]	0,05
Radioactive waste [kg]	0

Table 16 Other environmental indicators describing waste categories of heterogeneous waterproofing membranes Fatrafol 818/ V-UV production life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	818/V-UV
Non-hazardous waste [kg]	0,02
Hazardous waste [kg]	0,05
Radioactive waste [kg]	0

Table 17 Other environmental indicators describing waste categories of heterogeneous waterproofing membranes Fatrafol 819/V production life cycle. Data are aggregated (A1-A3) and referred to D.U.

Parameters	819/V
Non-hazardous waste [kg]	0,02
Hazardous waste [kg]	0,08
Radioactive waste [kg]	0

4 ADDITIONAL ENVIRONMENTAL INFORMATION

Fatra, a.s. has established and applied integrated management system for development, production, sales and services of products. An audit was performed, Report No. 015619. Proof has been furnished that the requirements according to ČSN EN ISO 9001:2008 and ISO 14001:2004 are fulfilled.

Obtained certificates EN ISO 9001 and 14001, and the commitment of whole company´s staff to quality give the customers a guarantee of a standard quality of products.

Fatra, a.s. has established and applied an Occupational Health & Safety Management System of Proof has been furnished that the requirements according to OHSAS 18001:2007 are fulfilled. Obtained certificates RESPONSIBLE CARE, in industry. Fatra, a.s. is oriented for enhancement of environmental, health and safety.

5 MANDATORY STATEMENT

5.1 COMPARISIONS OF EPDS WITHIN THIS PRODUCT CATEGORY

This EPD® refers to the International EPD® System and is available, on the website, www.environdec.com.

This EPD has been developed according to the PCR Construction products and CPC division 54 construction services; and EN 15804+A1:2011.

EPDs within the same product category but from different programmes may not be comparable.

5.2 VERIFICATION AND REGISTRATION

PCR was prepared by: IVL Swedish Environmental Research Institute, Swedish Environmental Protection Agency, SP Trätek, Swedish Wood Preservation Institute, Swedisol, SCDA, Svenskt Limträ AB, SSAB PCR moderator: Martin Erlandsson, IVL Swedish Environmental Research Institute, Sweden, martin.erlandsson@ivl.se PCR review was conducted by: The International EPD® System Technical Committee
Independent verification of the declaration data, according to ISO 14025: ☐ Internal X External ☐ EPD proces certification
Third party verifier: Výzkumný ústav pozemních staveb - Certifikační společnost, s.r.o. (Building Research Institute - Certification company, Ltd.) Accreditation number and body: Certification Body 3013 for products, processes, qualification and EPD

6 VALIDITY OF THE EPD

This EPD is valid for 5 years, i.e. until 22.6.2022. If any change in production causing increase of any environmental impact larger than +/- 5% the EPD shall be adjusted.

7 REFERENCES

General Programme Instructions for environmental product declarations, The international EPD® System

Product Category Rules: Construction Products and CPC Division 54: Construction Services. Product Category Rules, The international EPD® System, Stockholm

Kočí, V., Švančarová, M.: Life Cycle Assessment of PVC floor covering and waterproofing membranes produced by Fatra, a.s. Praha, LCA studio, 2017.

Author of this declaration: Vladimír Kočí, Ph.D. LCA studio

Independent verification of the declaration and data accordance to ISO 14025:2006

☐ internal ☒ external

Programme:	EPD ® system (www.environdec.com)
Verification procedure:	ISO 14025: 2006 Environmental labels and declarations – Type III environmental declarations – principle and procedures General Programme Instructions for Environmental Product Declarations, EPD, version 1.0
Product category rules (PCR):	PCR CONSTRUCTION PRODUCTS AND CPC 54 CONSTRUCTION SERVICES, version 1.1, 2013-02-21

Výzkumný ústav pozemních staveb - Certifikační společnost, s.r.o., (Building Research Institute – Certification Company, Ltd.) – Certification Body for EPD verification no. 3013 accredited by Czech Accreditation Institute made independent verification of EPD in 23rd June 2017 in agreement with ISO 14025:2006. The certificate results from the Final report no. P-3013EPD-17-0256 from 23rd June 2017 that includes certification body ascertaining and validity conditions of the certificate.

The verified EPD has reg. no. 3013EPD-17-0256.

Registration number	**3013EPD-17-0256**
Certified validity	**22.06.2022**
Contact	Výzkumný ústav pozemních staveb - Certifikační společnost, s.r.o., Pražská 810/16, 102 21 Praha 10 Czech Republic tel.: +420 271751148 fax: +420 241017241 Mgr. Barbora Vlasatá Head of Certification Body for EPD e-mail: vlasata@vups.cz

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