ENVIRONMENTAL-PRODUCT DECLARATION

as per *ISO 14025* and *EN 15804+A1*

Owner of the Declaration	IGI - The Global Wallcoverings Association
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-IGI-20170146-IBG3-EN
Issue date	11.12.2017
Valid to	10.12.2023

Vinyl based wallcoverings on non-woven backing

IGI - The Global Wallcoverings Association

Institut Bauen und Umwelt e.V.

ECO PLATFORM EPD VERIFIED

www.ibu-epd.com | https://epd-online.com

1. General Information

IGI - The Global Wallcoverings Association

Programme holder

IBU – Institut Bauen und Umwelt e.V.
Hegelplatz 1
10117 Berlin
Germany

Declaration number

EPD-IGI-20170146-IBG3-EN

This declaration is based on the product category rules:

Wall coverings, 01.08.2021
(PCR checked and approved by the SVR)

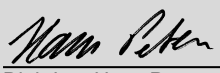
Issue date

11.12.2017

Valid to

10.12.2023

Dipl.-Ing Hans Peters
(chairman of Institut Bauen und Umwelt e.V.)



Dipl.-Ing. Hans Peters
(Managing Director Institut Bauen und Umwelt e.V.)

Vinyl based wallcoverings on non-woven backing

Owner of the declaration

IGI - The Global Wallcoverings Association
Chaussée de Louvain 426
1380 LASNE
Belgium

Declared product / declared unit

The declared unit is 1m² (square metre) decorative vinyl based wallcovering on non-woven backing including packaging.

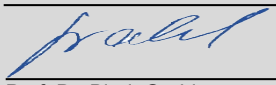
Scope:

This EPD focusses on the production, transport and disposal of a weighted average of 1m² vinyl wallcoverings on non-woven backing of participating members of the IGI - The Global Wallcoverings Association.
Non-decorative wallcoverings for a later additional treatment like painting ("whites") are included in this scope as they follow a worst case approach.
15 out of 67 IGI-members are involved in this EPD: A.S. Création Tapeten AG (DE), Anstey Wallpaper Co. Ltd. (GB), Decoprint NV(BE), Erismann & Cie. GmbH (DE), FineDecor Wallcoverings Ltd. (GB), Graham &Brown Ltd. (GB), Grandeco NV (BE),Limonta Wall (IT), Len-Tex Corporation(US), LSI Wallcovering (US),Muraspec Decorative Solutions Ltd. (GB),Roysons Corporation (US), Sirpi S.p.A.(IT), UGÉPA SA (FR), York Wallcoverings(US). The technical properties are displayed in chapter 2.3.
The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of EN 15804+A1. In the following, the standard will be simplified as *EN 15804 bezeichnet*.

Verification

The standard EN 15804 serves as the core PCR
Independent verification of the declaration and data according to ISO 14025:2011
☐ internally ☒ externally



Prof. Dr. Birgit Grahl,
(Independent verifier)

2. Product

2.1 Product description/Product definition

Vinyl wallcoverings on non-woven according to /EN 15102/ involve plasticized PVC (vinyl) and a non-woven base. A non-woven base is a substrate composed of a blend of cellulose and polyester fibres. Non-woven wallcovering is available with relief or flat vinyl designs. the vinyl on non-woven wallcovering is dimensionally stable to aqueous paste and unlike conventional wallcovering does not require a soak time. When the wallcovering is to be changed it can be stripped in its entirety by peeling the wallcovering lengths from the wall. This property as defined in /EN 235/ is strippable. For the placing on the market of the product in the EU/EFTA (with the exception of Switzerland) Regulation /(EU) No. 305/2011/ (CPR) applies. The product needs a Declaration of Performance taking into consideration /EN 15102/ and CE-marking. For the application and use the respective national provisions apply.

For the placing on the market in the USA the product has to conform to /ASTM F 1141 – 93/ Standard Specification for Wallcovering and /ASTM F 793 – 06/ Standard Classification of Wall Covering by Use Characteristics.

2.2 Application

Wallcoverings are used for the decorative wall design of interior spaces in private or commercial use.

2.3 Technical Data

In accordance with /EN 233/, the following technical (structural) data can be declared on delivery:
In accordance with /EN 233/, the following technical (structural) data can be declared on delivery:

Constructional data

Name	Value	Unit
Measures by categories /EN 233/	category 1 - 3	-
Straightness and parallelism in mm. according to /EN 12956/	equal or less than 1	-
Washability according to /EN 12956/	Spongeable to extra-scrubbable	-
Colour fastness to light according to /EN ISO 105-B02/	3 - 6	-
Migration of heavy metals and certain other elements to /EN 12149/	fulfills the norm	-
Vinyl chloride monomer (VCM) content max. < 0,2 mg/m² according to /EN 12149/	fulfills the norm	-
Emissions of formaldehyde max. < 120 mg/kg according to /EN 12149/	fulfills the norm	-

In case of multiple answers, values need to be examined depending on the manufacturer.

Products manufactured for the USA need to be be in accordance with /ASTM F 793-0-06/ Table 1 Classification Criteria.

Depending on whether products are intended for the European or US markets, the following performance data must be declared.
1a:Product according to the CPR, based on /EN 15102/:
Performance data of the product in accordance with the Declaration of Performance with respect to its Essential Characteristics according to /EN 15102/

or:

1b
Performance Category I, II, III, IV, V or VI as described in Table 1 of /F 793-0-06/ have to be declared.

2.4 Delivery status

The products declared are provided within the following dimensions:

Width metres		Length metres	
Min.	Max.	Min.	Max.
0,06	1,50	1,00	150,00

This table contains the range of all wallcoverings examined. For more precise information please contact the specific manufacturer.

2.5 Base materials/Ancillary materials

The weighted average of the primary product components is shown in the following table, in percentage:

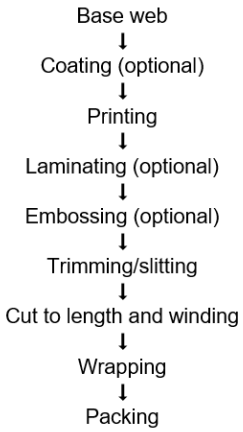
Name	Value	Unit
Non-Woven (paper 80%, PET 20%)	35	%
PVC plastisol	32	%
Inks	14	%
Chemicals and auxiliary materials	11	%
Packaging	8	%
Sum	100	%

Pallets were considered as part of the packaging.

It cannot be ruled out that individual wallcoverings may contain small amounts of substances that are included in the SVHC candidate list. This can be attributed, for example, to the contents of used waste paper. Depending on the manufacturer and wallcovering, different flame retardants, biocides and plasticizers can be used.
Further information can be obtained from the respective manufacturer.

2.6 Manufacture

The manufacturing process can be described with the help of the following graphic:



The order of manufacture may change and can slightly deviate for different producers.

2.7 Environment and health during manufacturing

Compliance with statutory health and safety for personnel is ensured. Further, the energy and environmental management is certified for some members according to /ISO 14001/ and /ISO 50001/.

For greater detail please contact the specific manufacturer.

2.8 Product processing/Installation

Depending on the manufacturers suggestion, the adhesive is applied to the back of the wallcovering or the substrate using a wallpaper brush or short-napped roller. The wallcovering is pressed against the wall and is cut along the top and bottom edge to fit the wall.

2.9 Packaging

Product is wrapped in polyolefin film, packed in corrugated cardboard boxes and palletised.

2.10 Condition of use

There are no special features to be noted within the limits of normal and customary usage.

2.11 Environment and health during use

No environmental problems can be expected when the product is handled and used properly.

2.12 Reference service life

Given the wallcovering is professionally installed, the reference service life is 10 years according to the German Sustainable Building Assessment System (BNB).

2.13 Extraordinary effects

Fire

The fire performance according to /EN 13501/ is shown in the following table:

Fire protection

Name	Value
Building material class	B-D
Burning droplets	s1-s3
Smoke gas development	d0-d2

This table contains the range of all wallcoverings examined. For more precise information please contact the specific manufacturer.

For USA information on fire performance according to /ASTM E 84/ Test method for Surface Burning Characteristics of Building Materials.

Water

Product is not water resistant. There is no risk of a hazardous environmental impact in the event of water flooding

Mechanical destruction

There is no risk of a hazardous environmental impact following unforeseen mechanical destruction.

2.14 Re-use phase

The product is not re-usable.

2.15 Disposal

Wallcoverings are subject to the waste code 170904 (mixed construction and demolition waste other than those mentioned in 170901, 170902 and 170903) in accordance with the /European Waste Catalogue/ (/EWC/).
Wallcoverings can therefore be disposed of as normal household waste, that is in the dustbin or in additional refuse sacks. Used wallcoverings should not be placed in the waste paper bank. Most household waste is incinerated or landfilled depending on regional legal regulations in the EU or in the US.

2.16 Further information

For further information please visit www.igiwallcoverings.org.

3. LCA: Calculation rules

3.1 Declared Unit

The declared unit is 1 m² of wallcovering including packaging. The model is based on a weighted average of the produced square metres of each participating manufacturer.

Declared unit

Name	Value	Unit
Declared unit	1	m^2
Grammage	0.223	kg/m²
Conversion factor to 1 kg	0.223	-

For IBU core EPDs (where clause 3.6 is part of the EPD): for average EPDs, an estimate of the robustness of the LCA values must be made, e.g. concerning variability of the production process, geographical representativeness and the influence of background data and preliminary products compared to the environmental impacts caused by actual production.

3.2 System boundary

Type of the EPD: cradle to gate - with Options.
The EPD is considered as a declaration of an average product as calculated from the output of several manufacturers (2b).

Module A1-3, A4 and A5

The product stage begins with the consideration of the production of the necessary raw materials and energies including all corresponding upstream processes as well as transport. Furthermore, the entire production phase was investigated, including the treatment of production waste until reaching the end- of-waste status (EoW). In addition, distribution transport and installation in the building were taken into account.

Module C2-C4

The modules include the environmental impacts of the waste treatment until reaching the end-of-waste status (EoW) including the associated transport at the end of the product life cycle.

Module D

Calculation of potential benefits through the generated energy (electric & thermic) by the incineration processes in the life cycle stages in A5 C3 and C4.
The burdens resulting from the waste-to-energy plants are assigned in module C3 or C4 in case of landfill gas combustion.

3.3 Estimates and assumptions

'Non-woven' lacks information on the proportions of cellulose and polyester. According to one manufacturer it contains 80% cellulose and 20% polyester (PET). These proportions were applied to all other non-woven carrier materials.

Most solvents were modelled as a generic mix of solvents.

Even though this EPD is also valid for 'whites', they are not part of the average which is responsible for the results in chapter 5. 'Whites' are not decorative wallcoverings yet, because there is a final production step (e.g. painting) missing. As a result, 'whites' have less environmental impact than comparable decorative wallcoverings with similar weights.

3.4 Cut-off criteria

Some materials that contributed less than 0.2% to the total weight of the average wallcovering were cut off. In total, this is less than 1% of all mass inputs. No energy consumption was neglected.

3.5 Background data

For modeling the lifecycle, the software system for holistic balancing /GaBi/ was used. All background data records relevant for production and disposal were almost exclusively taken from various /GaBi/ supplementary databases or rarely also from /ecoinvent/ (v.2.2). The data records included in the databases are documented online.

3.6 Data quality

Data collection for the investigated products was carried out on the basis of evaluations of the internal production and environmental data, the collection of LCA-relevant data within the supply chain as well as through the measurement of relevant energy supply data. The collected data were checked for plausibility and consistency. A good representation is to be assumed.
The data were collected in 2016 and refer to the calendar year 2015.

3.7 Period under review

The LCA data were collected for the calendar year 2015.

3.8 Geographic Representativeness

Land or region, in which the declared product system is manufactured, used or handled at the end of the product´s lifespan: Belgium

3.9 Allocation

Potential benefits resulting from the thermal utilization of the packaging waste (module A5) as well as from the energetic utilization of the wallcoverings at the end of life (module C3 and C4) are allocated to module D.

3.10 Comparability

Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to *EN 15804* and the building context, respectively the product-specific characteristics of performance, are taken into account.

4. LCA: Scenarios and additional technical information

Transport to the building site (A4)

Name	Value	Unit
Truck transport	27	t payload
Transport distance	445	km
Train transport	726	t payload
Transport distance	7	km
Ship transport	27500	dwt payload
Transport distance	261	km
Cargo plane transport	65	t payload
Transport distance	47	km
Capacity utilisation (including empty runs)	80 - 90	%

Because many different countries are involved, there were always global data sets used to model the transport distances.

Reference service life

Name	Value	Unit
Reference service life	10	a

End of life (C1-C4)

Name	Value	Unit
Incineration	97	%
Landfilling	3	%

For the calculation of this LCA landfilling is chosen for the US and incineration for the EU. Different disposal routes are available but not taken into account for this industry average LCA.

Reuse, recovery and/or recycling potentials (D), relevant scenario information

In module D the potential benefits of the thermal combustion of the wallcoverings (C3) and their packaging (A5) as well as the incineration of landfill gases (C4) are displayed.

5. LCA: Results

In this section, the LCA results for 1 m² wallcoverings are presented. It should be borne in mind that the LCA results only indicate possible effects.

Indicators used for evaluation:
The CML (Centrum voor Milieukunde) methodology with the characterization factors in version 2001 - April 2013 is used to evaluate the possible environmental effects of the wallcoverings. The following impact categories are evaluated:
Global warming potential (**GWP**), Degradation potential of the stratospheric ozone layer (**ODP**), Acidification potential of soil and water (**AP**), Eutrophication potential (**EP**), Photochemical ozone creation potential (**POCP**), Potential for abiotic degradation of non-fossil resources (**ADPE**), Potential for abiotic degradation of fossil fuels (**ADPF**)
The fresh water consumption corresponds to the "Blue Water" consumption according to "The Water Footprint Assessment Manual, 2011".

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE NOT DECLARED; MNR = MODULE NOT RELEVANT)

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
X	X	X	X	X	MND	MND	MNR	MNR	MNR	MND	MND	MND	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A1: 1m² vinyl wallcoverings on non-woven backing

Parameter	Unit	A1-A3	A4	A5	C2	C3	C4	D
GWP	kg CO_2 eq	4.47E-01	4.27E-02	1.71E-02	1.42E-03	3.44E-01	2.71E-03	-1.05E-01
ODP	kg CFC11 eq	2.05E-09	1.39E-14	4.17E-15	1.15E-15	4.2E-11	1.86E-15	-2.08E-12
AP	kg SO_2 eq	1.38E-03	1.5E-04	3.91E-06	8.7E-06	2.58E-04	2.46E-06	-1.68E-04
EP	kg PO_4^3 eq	2.22E-04	3.1E-05	1.15E-06	2.21E-06	1.54E-05	2.81E-06	-1.75E-05
POCP	kg Ethen eq	1.49E-04	2.5E-06	3.37E-07	-3.84E-06	6.83E-06	7.22E-07	-1.56E-05
ADPE	kg Sb eq	8.02E-07	1.68E-09	4.31E-10	1.28E-10	7.11E-08	1.67E-10	-2.1E-08
ADPF	MJ	1.04E+01	5.9E-01	6.56E-03	1.96E-02	3.35E-01	1.11E-02	-1.45E+00

GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A1: 1m² vinyl wallcoverings on non-woven backing

Parameter	Unit	A1-A3	A4	A5	C2	C3	C4	D
PERE	MJ	3.43E+00	5.68E-03	3.09E-01	1.01E-03	1.31E-01	2.63E-03	-2.8E-01
PERM	MJ	1.51E+00	0	-3.08E-01	0	-7.1E-02	-1.76E-03	0
PERT	MJ	4.94E+00	5.68E-03	8.76E-04	1.01E-03	6E-02	8.69E-04	-2.8E-01
PENRE	MJ	8.35E+00	5.92E-01	1.36E-01	1.97E-02	8.2E-01	2.22E-02	-1.77E+00
PENRM	MJ	3.13E+00	0	-1.29E-01	0	-4.47E-01	-1.07E-02	0
PENRT	MJ	1.15E+01	5.92E-01	7.3E-03	1.97E-02	3.73E-01	1.16E-02	-1.77E+00
SM	kg	1.43E-02	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0
FW	m^3	3.31E-02	1.1E-05	4.32E-05	1.87E-06	8.42E-04	3.68E-07	-4E-04

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

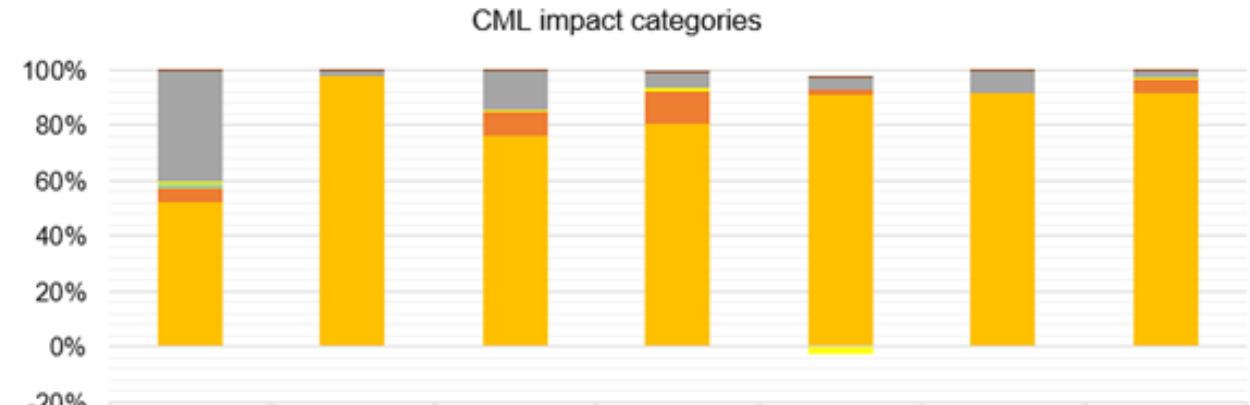
RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A1: 1m² vinyl wallcoverings on non-woven backing

Parameter	Unit	A1-A3	A4	A5	C2	C3	C4	D
HWD	kg	2.09E-05	4.67E-09	7.09E-11	1.03E-09	2.26E-09	5.07E-11	-4.42E-10
NHWD	kg	3.79E-02	9.45E-06	1.62E-03	1.56E-06	1.08E-01	1.22E-02	-6.63E-04

RWD	kg	4.25E-04	6.73E-07	2.94E-07	4.07E-08	1.5E-05	1.75E-07	-1.28E-04
CRU	kg	0	0	5.64E-03	0	0	0	0
MFR	kg	5.74E-03	0	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0
EEE	MJ	0	0	2.35E-02	0	3.43E-01	7.01E-04	0
EET	MJ	0	0	5.36E-02	0	8.25E-01	0	0

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; EEE = Exported electrical energy; EET = Exported thermal energy

6. LCA: Interpretation



	GWP	ODP	AP	EP	POCP	ADPE	ADPF
C4	2,71E-03	1,86E-15	2,46E-06	2,81E-06	7,22E-07	1,67E-10	1,11E-02
C3	3,44E-01	4,20E-11	2,58E-04	1,54E-05	6,83E-06	7,11E-08	3,35E-01
C2	1,42E-03	1,15E-15	8,70E-06	2,21E-06	-3,84E-06	1,28E-10	1,96E-02
A5	1,71E-02	4,17E-15	3,91E-06	1,15E-06	3,37E-07	4,31E-10	6,56E-03
A4	4,27E-02	1,39E-14	1,50E-04	3,10E-05	2,50E-06	1,68E-09	5,90E-01
A1-A3	4,47E-01	2,05E-09	1,38E-03	2,22E-04	1,49E-04	8,02E-07	1,04E+01

The production stage (module A1-A3) clearly dominates the LCA results. The loads caused by the disposal stage (modules C3 and C4) become noticeable especially in creating a major impact in the global warming potential (**GWP**). Transports play a subordinate yet not insignificant role.
The main environmental impacts are in all categories located in module A1-A3 and there mostly in the generation of thermal and electric energy for general production and heating/drying processes in A3.
Besides the **GWP**, this affects mainly the acidification potential (**AP**) as well as the resource depletion of fossil fuels (**ADPF**). However, also the production of PVC, pigments and plasticizers have a major effect. The production of PVC has a relatively high share of the greenhouse potential and also has a relatively large influence on the acidification potential (**AP**), the ozone depletion (**ODP**), the depletion of fossil resources (**ADPE**) and fossil fuels (**ADPF**).
The carrier material (non-woven) has a comparatively small influence. Visible effects are found in the categories acidification potential (**AP**), eutrophication potential (**EP**) and ozone depletion (**ODP**).
Transport processes do also affect **GWP**, **AP**, **EP**, **POCP** and **ADPF**. The main reason is the combustion fuels.
The waste treatment in module C3 affects in particular the greenhouse potential (**GWP**) mainly due to the incineration of paper but also the **AP** and **ADPE** due to the incineration of PVC.

Range of the results
The individual results of the participating companies differ from the average results in the present environmental product declaration. In terms of GWP, the results may be 179% higher or 47% lower than the average for this EPD.
The main reason for the deviations are differences in the grammage of the individual wallcoverings. In addition, there are different materials used as well as varying heat and electricity consumptions depending on the manufacturer.

7. Requisite evidence

Members of the The Global Wallcoverings Association have the following certificates:

- The declared products comply with /EN 15102/.
- According to the (emission) test chamber assessment, which follows to the French measurement method /Arrêté du 19/04/11/ the wallcoverings meet the requirements of the test standard /ISO 16000/.
- Optional according to the chamber test which follows the german AgBB (Committee for health-related evaluation of building products) regulations the wallcoverings meet the requirements of test standard /ISO 16000/.
- Optional compliance with German /RAL-GZ 479/.
- Optional compliance with USA Wallcovering Association /W-101 (2013)/ paragraph 8.1 when tested by California Specification Section 01350 to criteria /CDPH/EHLB/ Standard Method V1.1 (2010).

The certificates and classifications for the various wallcoverings can be obtained from the respective manufacturers.

8. References

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Institut Bauen und Umwelt e.V., Berlin (pub.): Generation of Environmental Product Declarations (EPDs);
General Principles
for the EPD range of Institut Bauen und Umwelt e.V. (IBU), 2015/10
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/ISO 14025/
DIN EN /ISO 14025:2011-10/, Environmental labels and declarations — Type III environmental declarations — Principles and procedures

/EN 15804/
/EN 15804:2012-04+A1 2013/, Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products

ASTM E 84
ASTM E 84:2016: Standard Test Method for Surface Burning Characteristics of Building Materials

ASTM F 793
ASTM F793 / F793M-15, Standard Classification of Wall Coverings by Use Characteristics, ASTM International, West Conshohocken, PA, 2015

ASTM F1141 - 93
ASTM F1141-93(2009), Standard Specification for Wallcovering, ASTM International, West Conshohocken, PA, 2009

BNB
Lifetimes of components for life cycle analyses according to the Bewertungssystem Nachhaltiges Bauen, 2011.

CDPH/EHLB
Standard method for measuring and evaluating chemical emissions from indoor sources using environmental chambers, Version 1.1

CPR
Construction Product Regulation EU

Ecoinvent
Database for Life Cycle Assessment, version 2.2. Swiss Center for Life Cycle Inventories, St. Gallen, 2010.

EN 12149:1997
Wallcoverings in roll form - Determination of migration of heavy metals and certain other elements, of vinyl chloride monomer and of formaldehyde release

EN 12956:1999
Wallcoverings in roll form - Determination of dimensions, straightness, spongeability and washability

EN 13501-1:2007+A1:2009
Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests

EN 15102:2007+A1:2011
Decorative wall coverings - Roll and panel form

EN 233:2016
Wallcoverings in roll form - Specification for finished wallpapers, wall vinyls and plastics wallcoverings

EN 234:1997
Wallcoverings in roll form – Specification for wallcoverings for subsequent decoration

EN 235:2001
Wallcoverings - Vocabulary and symbols

EN 259-1:2001
Wallcoverings in roll form - Heavy duty wallcoverings - Part 1: Specifications

EN ISO 105-B02:2014
Textiles - Tests for colour fastness - Part B02: Colour fastness to artificial light: Xenon arc fadinglamp test.

EN ISO 14025:2006
Environmental labels and declarations — Type III environmental declarations — Principles and procedures; 2009-11.

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