ENVIRONMENTAL PRODUCT DECLARATION

as per /ISO 14025/ and /EN 15804/

Owner of the Declaration	KALZIP®
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-KAL-20160282-IBC1-EN
ECO EPD Ref. No.	ECO-00000573
Issue date	09.03.2017
Valid to	08.03.2023

Aluminium Standing Seam Roofing and Wall Cladding System
KALZIP®

Institut Bauen und Umwelt e.V.

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

ECO PLATFORM EPD EN 15804 VERIFIED

1. General Information

KALZIP®

Aluminium Standing Seam Roofing and Wall Cladding System

Programme holder
IBU - Institut Bauen und Umwelt e.V.
Panoramastr. 1
10178 Berlin
Germany

Owner of the Declaration
Kalzip GmbH
August-Horch-Str. 20-22
56070 Koblenz
Germany

Declaration number
EPD-KAL-20160282-IBC1-EN

Declared product / Declared unit
Aluminium standing seam roofing and wall cladding system. This EPD refers to 1 m2 system comprising 1 mm standing seam made of aluminium, 200 mm rock wool insulation, 1.75 E-180 clips made of plastic-sheathed steel, an SKBitumen vapour barrier and 3.5 connecting elements made of stainless steel.

This Declaration is based on the Product Category Rules:
Aluminium roofing and cladding systems, 07.2014
(PCR tested and approved by the SVR)

Scope:
This EPD refers to the manufacture, transport and disposal of a representative product with its maximum environmental impacts (*worst-case scenario*) for a range of products (standing seam roofing and wall cladding system) offered by Kalzip. The various technical characteristics are depicted in section 2.3. The product is manufactured in Koblenz, Germany, from where the products are directly supplied to customer construction sites.

The owner of the Declaration shall be liable for the underlying information and evidence; IBU shall not be liable with respect to manufacturer information, LCA data and evidence.
This document is translated from the German Environmental Product Declaration into English. It is based on the German original version EPD-KAL-20160282-IBC1-DE. The verifier has no influence on the quality of the translation.

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.

Issue date
09.03.2017

Valid to
08.03.2023

Verification

The CEN Norm /EN 15804/ serves as the core PCR
Independent verification of the declaration according to /ISO 14025/
☐ internally ☒ externally

Prof. Dr.-Ing. Horst J. Bossenmayer
(President of Institut Bauen und Umwelt e.V.)

Dr. Burkhart Lehmann
(Managing Director IBU)

Angela Schindler
(Independent verifier appointed by SVR)

2. Product

2.1 Product description / Product definition

The aluminium standing seam system is a roofing and wall system made of profiled thin sheet metal which can be manufactured in the plant or by mobile roll-forming at the project site. Several sheet width and height profiles are available for complying with the various draft specifications and demands on scope. Furthermore, a choice of material surfaces and surface treatments is available. The profiled sheets can be supplied in straight, convex- or concave-rounded, free, conical or conical-rounded form.
The system under review (sheet aluminium with galvanised surface) represents the system with the greatest environmental impacts to enable this EPD to cover the range of possible variants manufactured by Kalzip.

Directive (EU) No. 305/2011 (CPR) applies for placing the product on the market in the EU/EFTA (with the

exception of Switzerland). The product requires a Declaration of Performance taking consideration of /EN 14782:2006/ Self-supporting metal sheet for roofing, external cladding and internal lining – Product specification and requirements and /EN 14783:2013/ Fully-supported metal sheet and strip for roofing, external cladding and internal lining – Product specification and requirements, and CE marking.
Use is governed by the respective national regulations.

2.2 Application

The aluminium profiled roof sheets are profiled sheets which are joined by mechanically crimping the standing seams and used as external cladding for roofing and walls.
As warm or cold roof designs, the profiled sheets are suitable for all roof shapes and pitches of min. 1.5 degrees as well as for all supporting constructions and support structures. They can be used for both new and refurbishment projects. The constructive design is aligned towards the respective application and can be adapted to the U-values and sound reduction values required by the building by choosing the suitable insulation thickness. Roll-formed profiled sheets are used in a variety of construction applications. Typical applications include building shells and interior linings.

2.3 Technical Data

Constructional data

Name	Value	Unit
Used alloys for the skin	/EN AW /3004/, /3005/, /3105/, /6025/	-
Minimum pitch	15	°
Thermal conductivity	0.19	W/(mK)
Water vapor diffusion equivalent air layer thickness	1500	m
Airborne sound reduction (Rw(C;Ctr)	53	dB

Product performance values in line with the Declaration of Performance in terms of its essential properties in accordance with /EN 14782:2006/ Self-supporting metal sheet for roofing, external cladding and internal lining – Product specification and requirements and /EN 14783:2013/ Fully-supported metal sheet and strip for roofing, external cladding and internal lining – Product specification and requirements, and CE marking.

2.4 Delivery status

The declared standing seam profiled sheet is also supplied as long sheets in project-based dimensions in lengths of over 30 metres, widths of up to 600 mm, and usually with a thickness of 1 mm.

2.5 Base materials / Ancillary materials

Average percentages by mass of Kalzip *worst-case* aluminium roofing and wall cladding:

Product component	% by mass
Rock wool	58.9%
Aluminium	27.6%
Bitumen	8.4%
Steel	1.9%
Zinc	1.8%
Polyamide	1.4%

2.6 Manufacture

The aluminium sheets are profiled in-plant at the production facility in Germany (electronically-controlled process). 0.121 MJ electricity and 0.015 kg lubricants are required per 1 m² during profiling. The standing seam profiled sheet is stucco-embossed. The insulation materials and other materials are bought in and assembled on the construction site.

2.7 Environment and health during manufacturing

The company is certified in accordance with /DIN ISO 9001:2008/, /DIN ISO 14001:2004/ and /BS OHSAS 18001:2007/, and strictly observes the Tata Steel /Health & Safety Management System/ (THSMS).

2.8 Product processing/Installation

The standing seam profiled sheets are installed by a network of qualified installation companies in accordance with the Assembly Directive. The standing seam profiled sheets are positively joined using a crimping machine.

2.9 Packaging

The Kalzip aluminium profiled sheets are packed in plastic foil and basic timber strapping before loading onto trucks for Transport.

2.10 Condition of use

No changes during the use phase compared to the manufacturing state.

2.11 Environment and health during use

No changes during the use phase compared to the manufacturing state.

2.12 Reference service life

The roofing system has an assumed reference service life of 50 years. A reference service life (RSL) taking consideration of ISO 15686 could not be established with the result that a useful life was applied from the BBSR Table “Useful life of components for life cycle assessments in accordance with the Sustainable Building assessment system (BNB)”.

2.13 Extraordinary effects

Fire

The Kalzip aluminium standing seam roofing system is non-flammable.

Fire resistance class: to /EN 13501-1/ = A1

/L 235/19/ Profiled sheets made of aluminium or aluminium alloys are classified by the European Commission as products which satisfy the

requirements of “external fire performance” without further Analysis.

Water
Water does not have any negative impacts on the product System.

Mechanical destruction
Owing to its lightweight design, there is no risk in the event of an earthquake. Furthermore, the system was tested and calculated for projects in regions at risk of hurricanes.

2.14 Re-use phase
The following possibilities arise in terms of material composition:

Material recycling
The product system can be partially recycled. The materials suitable for material recycling involve the aluminium from sheets and modular click rails as well as the steel contained in fixing materials.

Energy recovery
The materials suitable for energy recovery primarily comprise the plastic and wood materials, and bitumen contained in the packaging.

Landfilling
The rock wool is landfilled.

2.15 Disposal
The waste key codes in accordance with the European Waste Catalogue and the List of Wastes Directive /AVV/ are listed below for the individual product components.

Packaging waste
The following packaging waste incurred through installation in the building is directed towards energy recovery:

/EWC 15 01 02/ Plastic packaging
/EWC 15 01 03/ Wooden packaging

Product waste
All materials are directed to an energy recovery or metallurgical recycling process.

/EWC 17 02 03/ Plastic
/EWC 17 04 02/ Aluminium
/EWC 17 04 04/ Zinc
/EWC 19 10 01/ Iron and steel waste
/EWC 17 03/ Bituminous mixtures, coal tar and tarred products
/EWC 17 06/ Insulation materials and construction materials containing asbestos

2.16 Further information
Contact data is available on the back of this Declaration. More detailed product information is available online: www.kalzip.de

3. LCA: Calculation rules

3.1 Declared Unit
This EPD refers to 1 m^2 aluminium standing seam roofing and wall cladding system.

Declared unit

Name	Value	Unit
Declared unit	1	m^2
Weight unpacked	14.27	kg
Packaging	1.059	kg
Total weight	15.38	kg
Conversion factor to 1 kg (excl. packaging)	0.07	-

3.2 System boundary
Type of EPD: Cradle to gate – with options

Modules A1-A3
The product stage involves production of the requisite raw materials including all of the upstream chains as well as the requisite procurement transport. Production of the declared unit also took consideration of the requisite auxiliaries and consumables as well as their upstream chains. For the product, this means that the environmental impacts of zinc-alloyed aluminium, steel (screws and clips), polyamide (clips), bitumen and rock wool are attributed to the declared product.
The manufacture of packaging material (wood and plastic foil), electricity (German power mix) and lubricants for in-plant production are also included.

Module A4
This module considers the ecological impact of transporting the declared unit from the plant gate to the construction site.

Module A5
No efforts associated with installation were taken into consideration. The environmental impacts of combustion of the plastic and wood packaging materials are indicated.

Module C2
This module includes transport to waste treatment or disposal.

Module C3
This module includes the environmental impacts of waste treatment (recycling or energy recovery) of the product at the *End of Life*. Aluminium and steel are melted and re-used; bitumen is energetically recycled.

Module C4
This module includes the environmental impacts of landfilling the rock wool contained in the product.

Module D
This module comprises the efforts associated with recycling and the avoidable environmental impacts of aluminium and steel contained in the product.
The energy generation loads avoided are also indicated resulting from energy recovery from the combustible materials (packaging, wood and bitumen).

3.3 Estimates and assumptions
The effort associated with galvanising the aluminium (energy and chemicals) was covered by assessing the energy effort and added to the environmental impacts of the requisite volume of zinc.
Instead of steel screws, only the volume of unprocessed steel used was assessed.
The zinc from the alloy and the plastic contained in the

clips are not recovered but rather melted along with the aluminium and/or steel during the recycling process. The generic data set used for bitumen roofing does not indicate whether it involves a self-adhesive product. It can be assumed that this is not the case which is why this process is simplified on account of the lack of adhesive.

Where available, the manufacturer's data was used for calculating the secondary share of aluminium used. A value of 20% secondary aluminium was assumed for the manufacturers for whom no secondary share is available. When multiplied by the volumes used, this results in secondary shares of 39% aluminium for the roofing and wall cladding system.

3.4 Cut-off criteria

In accordance with the operating data records, no flows were excluded and the cut-off criteria were observed in connection with the use of generic background data as per /EN 15804/.
The declaration for Module B was excluded as the product does not cause any environmental impacts during its service life.

3.5 Background data

Primary data was made available by Kalzip.
Background data originates from the Gabi data base /GaBi 7.3/.

3.6 Data quality

Where possible, operating data for all products manufactured by Kalzip was applied.
Average country-specific background data sets were applied for other components (rails). The data was collated under consistent methodical and boundary conditions.
With one exception, the background data sets from the GaBi data bases used for the LCA are no more than 10 years old. This exception involves the polyamide contained in the fixing Clips.

3.7 Period under review

The data refers to the manufacturing processes for 2015.

3.8 Allocation

Zinc-alloyed aluminium clippings are incurred in Modules A1-A3, which are sold. This is followed by an economic allocation of the loads in accordance with the clippings price and the theoretical price of aluminium after the process stage.

3.9 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. The data base used involves the GaBi data base, version 7.3..

4. LCA: Scenarios and additional technical information

Procurement transport (A2)
Procurement transport is by truck (total weight of 40 tonnes, max. payload of 27 tonnes; EURO 0 to EURO 4) and a capacity utilisation of 85% including empty runs.
The transport distance is 9,290.47 km.
All of the suppliers were recorded disproportionately in establishing the transport distance.

Transport to construction site (A4)
Procurement transport is by truck (total weight of 34-40 tonnes / payload of 27 tonnes; EURO 4) and a capacity utilisation of 85% including empty runs.
The average transport distance is 450 km.
Comprehensive distribution throughout Germany was assumed when calculating the transport distance.

Construction installation process (A5)
Packaging for disposal as waste treatment is transported by truck (total weight of 20-26 tonnes / payload of 17.3 tonnes; EURO 3) and a capacity utilisation of 50% including empty runs.
The transport distance to the disposal company is 75 km.

Transport to EoL (C2)
Transport for waste treatment is by truck (total weight of 20-26 tonnes / payload of 17.3 tonnes; EURO 3) and a capacity utilisation of 50% including empty runs.
The transport distance to the disposal company is 75 km.

Transport to construction site (A4)

Name	Value	Unit
Transport distance	450	km
Capacity utilisation (including empty runs)	85	%

Reference service life

Name	Value	Unit
Reference service life	50	a

End of life (C1-C4)

Name	Value	Unit
Recycling	4.16	kg
Landfilling	8.4	kg

Re-use, recovery and recycling potential (D), relevant scenario specifications
Module D includes the efforts associated with recycling the primary aluminium as well as the environmental impacts avoided during the manufacture of primary aluminium. This is supplemented by the loads avoided in the generation of electricity and heat to the sum of the energy volumes generated from packaging waste in Module A5.

5. LCA: Results

The environmental impacts were calculated using CML 2001, version April 2013.

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

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: 1m² Aluminium standing seam roofing and wall cladding system

Parameter	Unit	A1-A3	A4	A5	C2	C3	C4	D
GWP	[kg CO_2-Eq.]	3.78E+1	3.25E-1	1.95E+0	9.76E-2	2.81E+0	5.09E-1	-2.07E+1
ODP	[kg CFC11-Eq.]	3.07E-8	1.50E-12	7.22E-11	3.89E-13	4.92E-11	1.03E-10	2.15E-8
AP	[kg SO_2-Eq.]	1.81E-1	1.42E-3	2.34E-4	6.13E-4	3.46E-4	7.16E-4	-9.81E-2
EP	[kg $(PO_4)^{3-}$-Eq.]	1.57E-2	3.47E-4	4.94E-5	1.55E-4	5.27E-5	1.10E-4	-5.71E-3
POCP	[kg ethene-Eq.]	1.17E-2	-4.85E-4	1.81E-6	-2.57E-4	3.14E-5	1.86E-4	-5.98E-3
ADPE	[kg Sb-Eq.]	9.72E-4	2.17E-8	1.78E-8	6.82E-9	3.76E-8	4.23E-8	-1.24E-5
ADPF	[MJ]	4.64E+2	4.48E+0	4.39E-1	1.34E+0	1.02E+0	1.57E+0	-2.22E+2

Caption	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 - RESOURCE USE: 1m² Aluminium standing seam roofing and wall cladding system

Parameter	Unit	A1-A3	A4	A5	C2	C3	C4	D
PERE	[MJ]	1.45E+2	2.55E-1	1.90E+1	8.09E-2	3.44E-1	1.22E-1	-1.12E+2
PERM	[MJ]	1.90E+1	0.00E+0	-1.90E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PERT	[MJ]	1.64E+2	2.55E-1	5.69E-2	8.09E-2	3.44E-1	1.22E-1	-1.12E+2
PENRE	[MJ]	5.03E+2	4.50E+0	6.96E-1	1.34E+0	3.26E+1	1.64E+0	-2.64E+2
PENRM	[MJ]	3.18E+1	0.00E+0	-6.96E-1	0.00E+0	-3.11E+1	0.00E+0	0.00E+0
PENRT	[MJ]	5.35E+2	4.50E+0	5.07E-1	1.34E+0	1.47E+0	1.64E+0	-2.64E+2
SM	[kg]	1.60E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.56E+0
RSF	[MJ]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
NRSF	[MJ]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
FW	[m^3]	3.99E-1	6.38E-4	4.63E-3	1.75E-4	6.19E-3	-3.09E-3	-2.86E-1

Caption	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

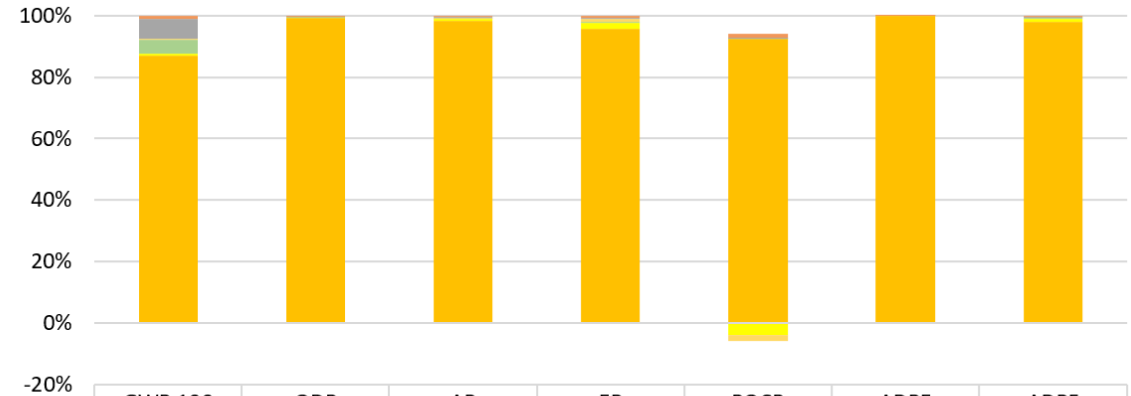
RESULTS OF THE LCA – OUTPUT FLOWS AND WASTE CATEGORIES: 1m² Aluminium standing seam roofing and wall cladding system

Parameter	Unit	A1-A3	A4	A5	C2	C3	C4	D
HWD	[kg]	1.89E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
NHWD	[kg]	9.74E+0	3.78E-4	4.32E-3	1.30E-4	3.03E-3	8.31E+0	-5.41E+0
RWD	[kg]	2.77E-2	6.43E-6	2.69E-5	2.04E-6	1.83E-4	2.91E-5	-1.66E-2
CRU	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MFR	[kg]	9.30E-2	0.00E+0	0.00E+0	0.00E+0	4.16E+0	0.00E+0	0.00E+0
MER	[kg]	0.00E+0	0.00E+0	1.06E+0	0.00E+0	1.20E+0	0.00E+0	0.00E+0
EEE	[MJ]	0.00E+0	0.00E+0	2.49E+0	0.00E+0	3.43E+0	0.00E+0	0.00E+0
EET	[MJ]	0.00E+0	0.00E+0	5.80E+0	0.00E+0	7.93E+0	0.00E+0	0.00E+0

Caption	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; EEE = Exported thermal energy

In Module D, ODP indicates a positive value which is attributable to the process of aluminium Recycling.

6. LCA: Interpretation



	GWP 100	ODP	AP	EP	POCP	ADPE	ADPF
C4	5.09E-01	1.03E-10	7.16E-04	1.10E-04	1.86E-04	4.23E-08	1.57E+00
C3	2.81E+00	4.92E-11	3.46E-04	5.27E-05	3.14E-05	3.76E-08	1.02E+00
C2	9.76E-02	3.89E-13	6.13E-04	1.55E-04	-2.57E-04	6.82E-09	1.34E+00
A5	1.95E+00	7.22E-11	2.34E-04	4.94E-05	1.81E-06	1.78E-08	4.39E-01
A4	3.25E-01	1.50E-12	1.42E-03	3.47E-04	-4.85E-04	2.17E-08	4.48E+00
A1 A3	3.78E+01	3.07E-08	1.81E-01	1.57E-02	1.17E-02	9.72E-04	4.64E+02

The result is almost entirely dominated by the product stage (Modules A1-A3). Disposal and transport modules are practically irrelevant.
The primary cause of environmental impacts in all impact categories is usually in the upstream processes. This concerns, in particular, the manufacture of aluminium which displays the highest absolute and relative share in all impact categories while the other materials have a comparably low impact.

Module A5 involves the combustion of packaging materials made of wood and plastic, whereby the former is responsible for absorption of CO_2 in the data inventory of Modules A1-A3 on account of the bound atmospheric carbon during the growth phase.

Compared to Modules A1-A3, waste treatment in Module C3 is of barely any significance. This is due to the fact that aluminium recycling is allocated to Modules A1-A3 and not C3.

This involves a *worst-case* configuration of roofing and wall cladding made of aluminium. It can be assumed that the environmental impacts are lower for other possible configurations.

7. Requisite evidence

No further evidence is of relevance for this Product.

8. References

BS OHSAS 18001:2007
Occupational health and safety – Management systems – Requirements

PCR Aluminium Roofing and Facade Systems
Institut Bauen und Umwelt e.V., Berlin (pub.): Rules for Environmental Product Declarations, Aluminium Roofing and Facade Systems, July 2014

GaBi 7.3
GaBi 7.3: Software and data base for comprehensive analysis, LBP [Lehrstuhl für Bauphysik] University of Stuttgart and thinkstep AG, Leinfelden-Echterdingen, 1992 – 2015

EWC 15 01 02
Plastic packaging

EWC 15 01 03
Wood packaging

EWC 17 02 03
Plastics

EWC 17 04 02
Aluminium

EWC 17 04 04
Zinc

EWC 19 10 01
Iron and steel waste

EWC 17 03
Bituminous mixtures, coal tar and tarred products

EWC 17 06
Insulation materials and construction materials containing asbestos

EN 13501
DIN EN 13501-1:2010-01
Fire classification of construction products and building elements – Part 1: Classification with the results of tests on reaction to fire of construction products

EN 14782
DIN EN 14782:2006-03: Self-supporting metal sheets and strips for roofing, external cladding and internal lining – Product specification and requirements

EN 14783:2013
Fully-supported metal sheets and strips for roofing, external cladding and internal lining – Product specification and requirements

EN AW-3004
EN AW-3004:2011-07: Aluminium material data sheet EN AW-3004, EN AW-Al Mn1Mg1

EN AW-3005
EN AW-3005:2011-07: Aluminium material data sheet EN AW-3005, EN AW-Al Mn1Mg0.5

EN AW-3105
EN AW-3105:2011-07: Aluminium material data sheet EN AW-3105, EN AW-Al Mn0.5Mg0.5

EN AW-6025
Aluminium material data sheet EN AW-6025, EN AW-AlMg2.5SiMnCu

ISO 9001
ISO 9001:2015-09
Quality management systems – Requirements (ISO 9001:2015)

ISO 14001
ISO 14001:2009-11: Environmental management systems – Requirements with guidance for use

ISO 14040
DIN EN ISO 14040:2009-11: Environmental management – Life cycle assessment – Principles and framework conditions

ISO 14044
DIN EN ISO 14044:2006-10: Environmental management – Life cycle assessment – Requirements and guidelines

L 235/19
Commission decision of 6 September 2000 implementing the Council Directive 89/106/EEC as regards the external fire performance of roof coverings.

Institut Bauen und Umwelt
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), 2013/04
www.ibu-epd.de

/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

Publisher
Institut Bauen und Umwelt e.V.
Panoramastr. 1
10178 Berlin
Germany

Tel +49 (0)30 3087748- 0
Fax +49 (0)30 3087748- 29
Mail info@ibu-epd.com
Web **www.ibu-epd.com**

Programme holder
Institut Bauen und Umwelt e.V.
Panoramastr 1
10178 Berlin
Germany

Tel +49 (0)30 - 3087748- 0
Fax +49 (0)30 – 3087748 - 29
Mail info@ibu-epd.com
Web **www.ibu-epd.com**

Author of the Life Cycle Assessment
brands&values GmbH
Vagtstraße 48/49
28203 Bremen
Germany

Tel 042169686715
Fax 042169686716
Mail info@brandsandvalues.com
Web **www.brandsandvalues.com**

Owner of the Declaration
Kalzip GmbH
August-Horch-Str. 20
56070 Koblenz
Germany

Tel +49 (0)261 9834-0
Fax +49 (0)261 9834 100
Mail info@kalzip.com
Web **www.kalzip.com**