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**Izolacijske sendvič plošče s kovinsko oblogo z dvojno plastjo za strešno kritino in obloge - Okoljske deklaracije za proizvode - Pravila za kategorije proizvodov za izolacijske sendvič plošče s kovinsko oblogo z dvojno plastjo za strešno kritino in obloge, ki dopolnjujejo EN 15804**

Double skin metal faced insulating sandwich panels for roofing and cladding - Environmental Product Declarations - Product category rules complementary to EN 15804 for double skin metal faced insulating sandwich panels for roofing and cladding

Sandwichelemente mit beidseitigen Metalldeckschichten für Bedachungen und Bekleidungen - Umweltproduktdeklarationen - Produktkategorieregeln ergänzend zur EN 15804 für Sandwichelemente mit beidseitigen Metalldeckschichten für Bedachungen und Bekleidungen

Panneaux sandwich isolants double peau à parement métallique pour couverture et bardage - Déclarations environnementales de produits - Règles de catégorie de produit complémentaires à l'EN 15804 pour les panneaux sandwich isolants double peau à parement métallique pour couverture et bardage

**Ta slovenski standard je istoveten z: prEN 18159**

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**DRAFT**  
**prEN 18159**

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English Version

Double skin metal faced insulating sandwich panels for  
roofing and cladding - Environmental Product  
Declarations - Product category rules complementary to  
EN 15804 for double skin metal faced insulating sandwich  
panels for roofing and cladding

Sandwichelemente mit beidseitigen  
Metalldeckschichten für Bedachungen und  
Bekleidungen - Umweltproduktdeklarationen -  
Produktkategorieregeln ergänzend zur EN 15804 für  
Sandwichelemente mit beidseitigen  
Metalldeckschichten für Bedachungen und  
Bekleidungen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 128.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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COMITÉ EUROPÉEN DE NORMALISATION  
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## Contents

Page

European foreword .....	4
Introduction .....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions .....	6
4 Symbols, subscripts and abbreviations .....	7
5 General aspects.....	8
5.1 Objectives of the Complementary PCR.....	8
5.2 Types of EPD with respect to life cycle stages covered .....	8
5.3 Comparability of EPD for construction products .....	8
5.4 Additional environmental information .....	8
5.4.1 General.....	8
5.4.2 Additional impact indicators.....	8
5.4.3 Additional information on carbon offset, carbon storage and delayed emissions .....	9
5.4.4 Additional information not derived from LCA .....	9
5.4.5 Ownership, responsibility and liability for the EPD.....	9
5.5 Communication formats.....	9
6 Product Category Rules for LCA.....	9
6.1 Product category .....	9
6.2 Life cycle stages and their information modules to be included .....	9
6.2.1 General.....	9
6.2.2 A1-A3, Product stage, information modules .....	9
6.2.3 A4-A5, Construction process stage, information modules.....	10
6.2.4 B1-B5, Use stage, information modules related to the building fabric .....	10
6.2.5 B6-B7, use stage, information modules related to the operation of the building .....	10
6.2.6 C1-C4, End-of-life stage, information modules.....	10
6.2.7 D, Benefits and loads beyond the system boundary, information module .....	10
6.2.8 End of life and use of secondary material .....	10
6.3 Calculation rules for the LCA .....	12
6.3.1 Functional or declared unit.....	12
6.3.2 Functional unit.....	12
6.3.3 Declared unit .....	12
6.3.4 Reference service life (RSL) .....	12
6.3.5 System boundaries .....	12
6.3.6 Criteria for the exclusion of inputs and outputs.....	13
6.3.7 Selection of data .....	13
6.3.8 Data requirements .....	13
6.3.9 Developing product level scenarios .....	13
6.3.10 Units.....	13
6.4 Inventory analysis .....	13
6.4.1 Collecting data.....	13
6.4.2 Calculation procedures.....	13
6.4.3 Allocation of input flows and output emissions .....	13
6.4.4 Information on the biogenic carbon content .....	14
6.5 Impact assessment .....	14
6.5.1 General.....	14

6.5.2	Core environmental impact indicators.....	14
6.5.3	Additional environmental impact indicators.....	14
7	Content of the EPD.....	14
7.1	Declaration of general information .....	14
7.2	Declaration of environmental indicators derived from LCA .....	14
7.2.1	General .....	14
7.2.2	Rules for declaring LCA information per module .....	14
7.2.3	Indicators describing environmental impacts based on Life Cycle Impact Assessment (LCIA).....	14
7.2.4	Indicators describing resource use and environmental information based on Life Cycle Inventory (LCI).....	14
7.2.5	Information on biogenic carbon content.....	15
7.3	Scenarios and additional technical information.....	15
7.3.1	General .....	15
7.3.2	Construction process stage .....	15
7.3.3	B1-B7 use stage .....	15
7.3.4	End-of-life.....	15
7.4	Additional information on release of dangerous substances to indoor air, soil and water during the use stage.....	15
7.4.1	Indoor air.....	15
7.4.2	Soil and water .....	15
7.5	Aggregation of information modules .....	16
8	Project report.....	16
8.1	General .....	16
8.2	LCA-related elements of the project report .....	16
8.3	Documentation on additional information .....	16
8.4	Data availability for verification .....	16
9	Verification and validity of an EPD.....	16
	Annex A (normative) Requirements and guidance on the reference service life.....	17
	Annex B (informative) Waste .....	18
	Annex C (normative) Impact categories and related indicators, methodologies and characterization factors (CF).....	19
	Annex D (informative) End of life formulae.....	20
	Annex E (informative) Schemes to be applied for data quality assessment of generic and specific data.....	21
	Annex F (informative) Illustration of material flows of sandwich panels .....	22
	Annex G (informative) Default data for transport (module A4).....	23
	Annex H (normative) Default data for installation (module A5).....	25
	Annex I (normative) Default data for deconstruction (module C1) .....	26
	Annex J (informative) Default data for transport (module C2).....	27
	Annex K (informative) Default rates of reuse, recycling and losses.....	28
	Annex L (informative) Interpolation rules.....	29
	Annex M (informative) Selection of Additional Environmental Indicators.....	30
	Bibliography .....	32

## **prEN 18159:2025 (E)**

### **European foreword**

This document (prEN 18159:2025) has been prepared by Technical Committee CEN/TC 128/SC 11/WG 10 “Double skin metal faced insulating sandwich panels for roofing and cladding”, the secretariat of which is held by NBN.

This document is currently submitted to the CEN Enquiry.

This document is intended to be used in conjunction with EN 15804:2012+A2:2019 and EN 16783:2017.

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**Document Preview**

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<https://standards.itih.ai/catalog/standards/sist/ad691205-e6bf-435a-97c2-c28348e3d6b2/osist-pren-18159-2025>

## Introduction

As in EN 15804:2012+A2:2019, in addition:

This document provides rules for Environmental Product Declarations (EPD) for metal faced insulating sandwich panels for structural and non-structural purposes in building envelopes. These sandwich panels consist of a thermal insulating core, e.g. of mineral wool or polyurethane, between outer layers of metal. Both sides of the core are bonded firmly to the two outer layers.

This document complements the core product category rules for all construction products and services as established in EN 15804:2012+A2:2019.

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## prEN 18159:2025 (E)

### 1 Scope

This document provides product category rules (c-PCR), that are complementary to EN 15804:2012+A2:2019, for Type III environmental declarations for sandwich panels within the scope of prEN 14509-1:2024 and prEN 14509-2:2024, which are used for non-structural and structural purposes in building envelopes and for sandwich panels with perforated faces and with core materials others than defined in prEN 14509-1:2024 and prEN 14509-2:2024.

Manufactured on industrial plant, double skin metal faced insulating sandwich panels are designed to be laid with overlapping edges in the following applications:

- roofs and discontinuous roofing,
- outer walls and wall cladding,
- walls (incl. partition walls) and (suspended) ceilings inside the building envelope

This document is intended to be used for cradle-to-gate with options or cradle to grave assessment according EN 15804, 5.2.

NOTE The assessment of social and economic performances at product level is not covered by this document.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

prEN 14509-1:2024, *Factory-made double skin metal faced insulating sandwich panels — Part 1: Self-supporting applications*

prEN 14509-2:2024, *Factory-made double skin metal faced insulating sandwich panels — Part 2: structural applications*

EN 15804:2012+A2:2019,<sup>1</sup> *Sustainability of construction works — Environmental product declarations — Core rules for the product category of construction products*

EN 16783:2017, *Thermal insulation products – Environmental Product Declarations (EPD) – Product Category Rules (PCR) complementary to EN 15804 for factory made and in-situ formed products*

EN ISO 9229:2020, *Thermal insulation — Vocabulary (ISO 9229:2020)*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15804:2012+A2:2019 and the following apply.

#### 3.1

##### core

layer of material, having thermal insulating properties, which is bonded between two metal faces

Note 1 to entry: Panels with special edge details in the longitudinal joints might utilize different core materials from the main insulating core (e.g. for improved fire performance) if these edge details have no influence on the mechanical performance of the panel.

<sup>1</sup> As impacted by EN 15804:2012+A2:2019/AC:2021



**3.2****face**

flat, lightly profiled or profiled thin metal sheet bonded to the core

**3.3****mineral wool (MW)**

insulating wool produced from molten stone, slag or glass

[SOURCE: EN 13162:2012+A1:2015]

**3.4****stone wool (SW)**

insulating wool produced from molten stone

**3.5****glass wool (GW)**

insulating wool produced from molten glass

**3.6****phenolic foam (PF)**

insulating foam produced from PF

[SOURCE: EN 13166:2012+A2:2016]

**3.7****expanded polystyrene (EPS)**

insulating foam produced from EPS

[SOURCE: EN 13163:2012+A2:2016]

**3.8****extruded polystyrene foam (XPS)**

insulating foam produced from XPS

[SOURCE: EN 13164:2012+A1:2015]

**3.9****polyurethane (PU)**

insulating rigid foam produced from PUR or PIR

[SOURCE: EN 13165:2012+A2:2016]

**4 Symbols, subscripts and abbreviations**

For the purposes of this document, the abbreviations given in prEN 14509-1:2024, prEN 14509-2:2024, EN ISO 9229:2020, EN 16783:2017 and EN 15804:2012+A2:2019 and the following apply.

**prEN 18159:2025 (E)**

For the purposes of this document, the following symbols, subscripts and abbreviations apply.

EPD	Environmental product declaration
PCR	Product category rules
LCA	Life cycle assessment
LCI	Life cycle inventory analysis
LCIA	Life cycle impact assessment
RSL	Reference service life
c-PCR	Complementary product category rules
CF	Characterization factor
ND	Not declared

**5 General aspects****5.1 Objectives of the Complementary PCR**

As in EN 15804:2012+A2:2019.

**5.2 Types of EPD with respect to life cycle stages covered**

As in EN 15804:2012+A2:2019.

**5.3 Comparability of EPD for construction products**

As in EN 15804:2012+A2:2019.

**5.4 Additional environmental information****5.4.1 General**

As in EN 15804:2012+A2:2019.

**5.4.2 Additional impact indicators**

As in **EN 15804:2012+A2:2019**, in addition:

For faces, the following additional environmental impact indicators in EN 15804:2012+A2:2019 should not be declared in the EPD except if mandatory in a country or market for declaration where the EPD is intended to be used:

- Eco-toxicity (Freshwater)
- Human toxicity, cancer effects
- Human toxicity, non-cancer effects

NOTE 1 Under the current EN15804:2012+A2:2021 the additional indicators are optional, due to high uncertainties and limited experience with the indicator.

The additional impact indicator designated in EN 15804:2012+A2:2021 as 'Potential incidence of disease due to Particulate Matter emissions (PM)' should not be declared when doubt has been identified about the reliability of source data.

NOTE 2 See also Annex M.

### **5.4.3 Additional information on carbon offset, carbon storage and delayed emissions**

As in EN 15804:2012+A2:2019.

### **5.4.4 Additional information not derived from LCA**

As in EN 15804:2012+A2:2019.

## **5.5 Ownership, responsibility and liability for the EPD**

As in EN 15804:2012+A2:2019.

## **5.6 Communication formats**

As in EN 15804:2012+A2:2019.

# **6 Product Category Rules for LCA**

## **6.1 Product category**

The product category referred to in this document includes all sandwich panels considered within the scope of prEN 14509-1:2024 and prEN 14509-2:2024 which are used for structural and non-structural purposes in building envelopes and for sandwich panels with perforated faces and with core materials others than defined in prEN 14509-1:2024 and prEN 14509-2:2024.

Face materials (e.g. steel, stainless steel, aluminium, copper) and core materials (e.g. PU, SW, GW, PF, XPS, EPS) have to be specified in an EPD.

## **6.2 Life cycle stages and their information modules to be included**

### **6.2.1 General**

As in EN 15804:2012+A2:2019, in addition:

For faces, impacts from transport in all life cycle modules shall be included where relevant. Specific impact data shall be calculated from actual distances and transport modes when they are known.

For core materials, general information on life cycle stages is given in EN 16783:2017.

An illustration of material flows is given in Annex F.

### **6.2.2 A1-A3, Product stage, information modules**

As in EN 15804:2012+A2:2019.

A separated declaration of module A1-A3 is not compulsory. For a distribution of processes between A1 and A3 details are given in Table 1.