TYPE III ENVIRONMENTAL DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

SOLID WOOD PANELS

KOKPARSTRADE 98 SIA

Publication date:	Geographical scope:
07.03.2023	EU

A TYPE III ENVIRONMENTAL DECLARATION should provide current information and may be updated if conditions change.

GENERAL INFORMATION

MANUFACTURER INFORMATION

Manufacturer	Kokparstrade 98 SIA
Address	Dizkoki, Allazu pagasts, Siguldas novads, LV-2154 Latvia
Contact details	info@kokparstrade98.lv
Website	www.kp98.lv

PRODUCT IDENTIFICATION

Product name	Solid wood panels
Place(s) of production	Dizkoki, Allazu pagasts, Siguldas novads, LV-2154 Latvia
CPC code	314 Boards and panels

The Type III environmental declaration owner has sole ownership, liability, and responsibility for the declaration. Construction products Type III environmental declaration may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

Type III environmental declaration standards	This Type III environmental declaration is in accordance with EN 15804+A2 and ISO 14025 standards.
Product category rules	The CEN standard EN 15804 serves as the core PCR.
Declaration author	K. Zudrags / BM Certification SIA
Declaration verification	Independent verification of this Type III environmental declaration and data, according to ISO 14025: ☐ Internal certification ☑ External verification
Validity date	07.03.2023
Verifier	Prof. V. Koci
Publishing date	28.02.2023

PRODUCT INFORMATION

PRODUCT DESCRIPTION

Production of defect-free, finger-jointed edge-glued pine solid wood panels with a wide range of dimensions, profiles and finishes produced by Kokparstrade 98 SIA average moisture content 10 % and density 450 kg/m3.

PRODUCT APPLICATION

Solid wood panels can be used for stairs, doors, windows, joineries of structures, interior – exterior facade coating and furniture and shelving application.

TECHNICAL SPECIFICATIONS

		Solid wood panels
Moisture content	%	10
Thickness	mm	12 … 42
Widths	mm	120 … 1200
Lengths	mm	1200 … 6000
Density (MC – 10%)	kg/m3	450
Surface quality	Planed	

PRODUCT STANDARDS

Kokparstrade 98 SIA maintains Chain of Custody certifications according to the requirements of standards PEFC International - Chain of custody certification system 2020 (Cert.No BMCERT-PEFC-COC-00044) and FSC-STD-40-004 v3.1 (Cert. No SCS-COC-007888).

ADDITIONAL TECHNICAL INFORMATION

Further information can be found at www.kp98.lv .

PRODUCT RAW MATERIAL COMPOSITION

Product and Packaging Material	Weight, kg	Post-consumer %	Renewable %	Country Region of origin
Pine (Pinus sylvestris)	450		100	EU
Glue	21.4			EU

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	0	
Minerals	0	
Fossil materials	4.5	EU
Bio-based materials	95.5	EU

SUBSTANCES, REACH - VERY HIGH CONCERN

The product contains no REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

PRODUCT LIFE-CYCLE

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes and losses during electricity transmission.

A1: During the reviewed period solid wood panels are produced from kiln dried pine (Pinus Sylvestris) sawntimber as well as unseasoned pine sawntimber. All raw material purchased from Baltic producers.

A2: The average distance calculated for the period of 1 year is used and the freight lorries of 16-32 metric tons have been used in calculations.

A3: During the production process all materials are dried to the moisture content 10%. Afterwards all the natural or mechanical damages and defects are cutted-off from the sawntimber and defect-free timber pieces cut in length and size are finger jointed. The glue is applied on edges and finger jointed timber pieces are glued in a board. The last step - calibration to thickness and packaging of ready product.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurring from final product delivery to the construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

PRODUCT USE AND MAINTENANCE (B1-B7)

This declaration does not cover the use phase.
Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

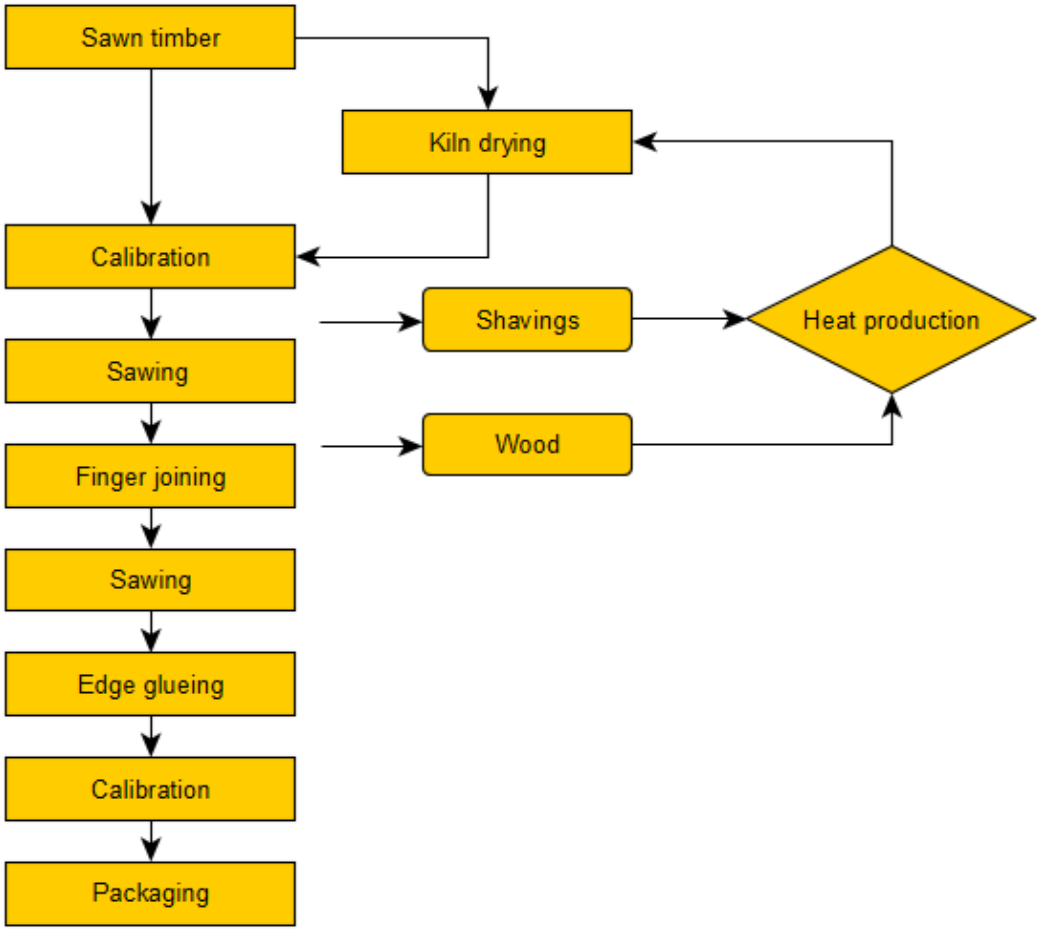
C1 Panels can be used in different ways and applications. The Solid wood panels can be fixed by furniture (e.g. screws, metal plate and anchors) and be easily loosened; timber can be disassembled by hand using electrical hand tools or special technical units.

C2. The transport distance from the de-construction site to recovery facility is considered to be about 100km by EURO 5 freight vehicle. C3 Wood chipping.

C3. The solid wood panels after removal estimated to be chipped and reused for energetic recovery as fuel.

C4 The 10% of the wood panel is considered as loses during the processing.

MANUFACTURING PROCESS



LIFE-CYCLE ASSESSMENT

LIFE-CYCLE ASSESSMENT INFORMATION

Period for data	2021

DECLARED AND FUNCTIONAL UNIT

Declared unit **Functional unit**	one cubic meter
Mass per declared unit	450 kg
Reference service life	The product can reach over 100 years' service life in appropriate service.

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in the product, kg C	205
Biogenic carbon content in packaging, kg C	4.14

SYSTEM BOUNDARY

This Type III environmental declaration covers the cradle to gate with modules scope with the following modules; A1 (Raw material supply), A2 (Transport) and A3 (Manufacturing), as well as C1 (Deconstruction), C2 (Transport at end-of-life), C3 (Waste processing) and C4 (Disposal). In addition, module D - benefits and loads beyond the system boundary are included.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	D	D
x	x	x	MND	MND	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x	x	x
Geography, by two-letter ISO country code or regions.																		
EU	EU	EU	EU	EU	-	-	-	-	-	-	-	EU	EU	EU	EU	EU		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstr./demol.	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules not declared = MND. Modules not relevant = MNR.

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in EN 15804:2012+A2:2019 and the applied PCR. The study does not exclude any hazardous materials or substances.

The study includes all major raw materials and energy consumption. All inputs and outputs of the unit processes for which data is available for are included in the calculation. There is no neglected unit process of more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation.

In this study, as per EN 15804, allocation is conducted in the following order;

1. Allocation should be avoided.
2. Allocation should be based on physical properties (e.g. mass, volume) when the difference in revenue is small.
3. Allocation should be based on economic values.

Allocation used in Ecoinvent 3.6 environmental data sources follows the methodology ‘allocation, cut-off by classification’. This methodology is in line with the requirements of the EN 15804 -standard.

ENVIRONMENTAL IMPACT DATA

Note: additional environmental impact data may be presented in annexes.

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total	kg CO_2e	-9.04E2	2,85E1	3,28E2	-5.48E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,18E-1	7,36E0	6,92E3	6,73E1	-4,92E2
GWP – fossil	kg CO_2e	1,22E2	2,85E1	7,48E1	2,25E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,11E-1	7,35E0	6,53E0	4,62E-1	-4,89E2
GWP – biogenic	kg CO_2e	-1.01E3	2E-2	2,53E2	-7.57E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	6,56E-3	3,95E-3	6,89E3	6,69E1	-2,97E0
GWP – LULUC	kg CO_2e	6,76E-1	1E-2	8,4E-2	7,80E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	4,91E-4	2,65E-3	1,27E-3	1,15E-4	-2,29E-1
Ozone depletion pot.	kg CFC_{-11}e	9,61E-6	6,51E-6	1.01E-5	2.62E-5	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,77E-8	1,67E-6	5,25E-7	6,23E-8	-2,95E-5
Acidification potential	mol H^+e	7,17E-1	8,79E-2	4.33E-1	1.24E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,17E-3	2,11E-2	7,37E-2	9,16E-3	-3,84E0
EP-freshwater[3)]	kg Pe	8,10E-3	2,41E-4	2.30E-3	1,06E-2	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,27E-5	6,25E-5	8,73E-5	1,62E-2	-2,98E-2
EP-marine	kg Ne	2,04E-1	1,95E-2	7,59E-2	2,99E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,53E-4	4,19E-3	3,49E-2	4,62E-3	-4,38E-1
EP-terrestrial	mol Ne	3,30E0	2,16E-1	8,43E-1	4,36E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,89E-3	4,68E-2	3,71E-1	4,69E-2	-5,19E0
POCP (“smog”)	kg NMVOCe	7,54E-1	7,89E-2	2,56E-1	1,01E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	4,74E-4	1,79E-2	9,12E-2	2,16E-2	-1,42E0
ADP-minerals & metals	kg Sbe	1,82E-3	7,37E-4	2,38E-4	2,80E-3	MND	MND	MND	MND	MND	MND	MND	MND	MND	6,49E-7	2,03E-4	8,61E-5	4,83E-6	-6,42E-4
ADP-fossil resources	MJ	2,52E3	4,33E2	1,20E3	4,15E3	MND	MND	MND	MND	MND	MND	MND	MND	MND	4,35E0	1,11E2	5,74E1	4,52E0	-5,62E3
Water use[2)]	m^3e depr.	4,12E1	1,45E0	1,31E1	5,58E1	MND	MND	MND	MND	MND	MND	MND	MND	MND	5,13E-2	3,64E-1	-5,07E0	-1,15E-2	-5,05E1

1) GWP = Global Warming Potential; EP = Eutrophication potential; POCP = Photochemical ozone formation; ADP = Abiotic depletion potential. 2) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. 3) Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO_4e.

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy	MJ	3,79E3	6,07E0	1,59E3	5,39E3	MND	MND	MND	MND	MND	MND	MND	MND	MND	7,26E-1	1,59E0	1,31E0	7,54E-2	-1,42E3
Renew. PER as material	MJ	1,13E4	0E0	3,91E3	1,52E4	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	-9,3E3	0E0	0E0
Total use of renew. PER	MJ	1,51E4	6,07E0	5,51E3	2,06E4	MND	MND	MND	MND	MND	MND	MND	MND	MND	7,26E-1	1,59E0	-9,3E3	7,54E-2	-1,42E3
Non-re. PER as energy	MJ	1,27E3	4,33E2	1,32E3	3,03E3	MND	MND	MND	MND	MND	MND	MND	MND	MND	4,35E0	1,11E2	5,74E1	4,52E0	-5,62E3
Non-re. PER as material	MJ	9,93E2	0E0	1,32E2	1,12E3	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Total use of non-re. PER	MJ	2,26E3	4,33E2	1,46E3	4,15E3	MND	MND	MND	MND	MND	MND	MND	MND	MND	4,35E0	1,11E2	5,74E1	4,52E0	-5,62E3

Secondary materials	kg	1,9E-1	0E0	4,78E-2	2,38E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Renew. secondary fuels	MJ	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	6,53E3	0E0	-6,53E3
Non-ren. secondary fuels	MJ	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Use of net fresh water	m^3	7,29E-1	7,73E-2	3,1E-1	1.12	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,28E-3	1,92E-2	1,15E-1	2,29E-3	-1,14E0

6) PER = Primary energy resources

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	4,75E0	4,41E-1	3,62E0	8,81E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,44E-2	1,14E-1	0E0	2,91E-2	-3,71E1
Non-hazardous waste	kg	1,3E2	3,33E1	6,93E1	2,33E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	1,01E0	7,88E0	0E0	4,41E1	-1,17E3
Radioactive waste	kg	4,71E-3	2,96E-3	5,83E-3	1,35E-2	MND	MND	MND	MND	MND	MND	MND	MND	MND	2,83E-5	7,61E-4	0E0	2,72E-5	-2,17E-2

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Materials for recycling	kg	0E0	0E0	8,42E-1	0E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Materials for energy rec	kg	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	4,10E2	0E0	4,10E2
Exported energy	MJ	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	6,53E3	0E0	6,53E3

ENVIRONMENTAL IMPACTS – GWP-GHG - THE INTERNATIONAL EPD SYSTEM

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG	kg CO_2e	-9.04E2	2,85E1	3,28E2	-5.48E2	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	2,11E-1	7,35E0	6,92E03	6,73E1	-4,89E2

8) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product as defined by IPCC AR 5 (IPCC 2013) This indicator Is almost equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.

SCENARIO DOCUMENTATION

End of life scenario documentation

Scenario parameter	Value
Recovery process – kg for energy recovery	90%
Disposal (total) – kg for final deposition	10%
Scenario assumptions e.g. transportation	100km

BIBLIOGRAPHY

ISO 14025:2010 Environmental labels and declarations – Type III environmental declarations. Principles and procedures.

ISO 14040:2006 Environmental management. Life cycle assessment. Principles and frameworks.

ISO 14044:2006 Environmental management. Life cycle assessment. Requirements and guidelines.

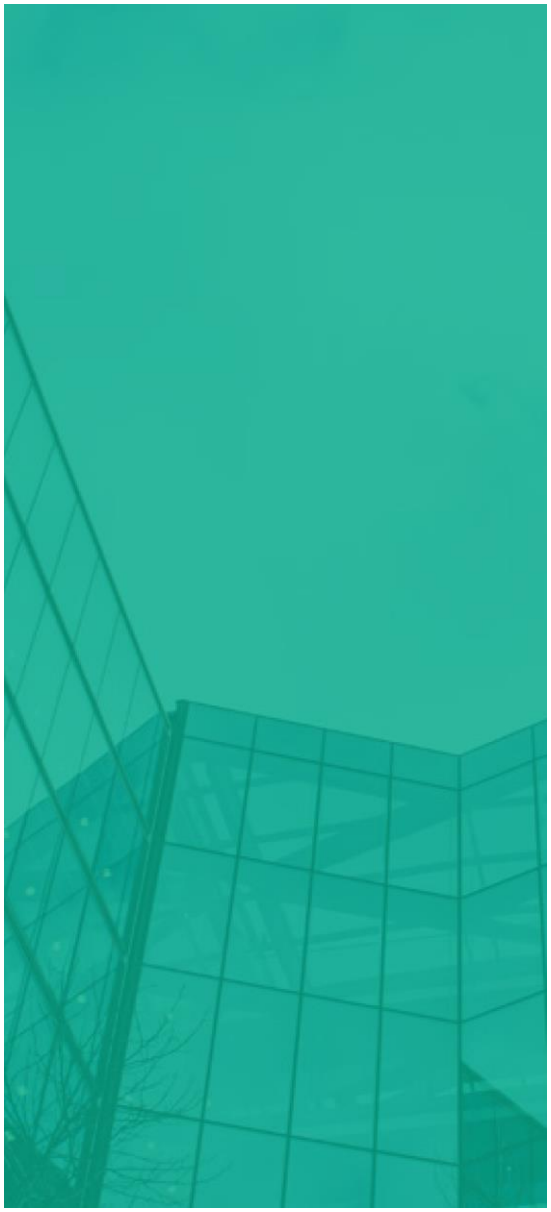
Ecoinvent database v3.6 (2019) and One Click LCA database.

EN 15804:2012+A2:2019 Sustainability in construction works – Environmental product declarations – Core rules for the product category of construction products.

Solid wood panels LCA background report 24.02.2023

EN 16449:2014 Wood and wood-based products - Calculation of the biogenic carbon content of wood and conversion to carbon dioxide

EN 16485:2014 Round and sawn timber. Environmental Product Declarations. Product category rules for wood and wood-based products for use in construction



ABOUT THE MANUFACTURER

Kokparstrade 98 has become Latvia's largest manufacturer of wooden mouldings & decorative interior finishings by combining the highest levels of quality with convenience: we constantly exceed customer expectations by offering pristine end-products that are meticulously primed, painted, and ready for home installation as soon as they leave our factory.

Most importantly, we understand the great amount of effort that homeowners put into improving the beauty and elegance of their homes, and our decorative product range reflects that understanding. We have committed to producing high value-added products, so that homeowners can add lasting value to their own beloved homes.

AUTHOR AND CONTRIBUTORS

Manufacturer	Kokparstrade 98 SIA
Type III environmental declaration author	K. Zudrags / BM Certification SIA
verifier	Prof. V.Koči
Background data	This Type III environmental declaration is based on Ecoinvent 3.6 (cut-off) and One Click LCA databases.
LCA software	The LCA and Type III environmental declaration have been created using One Click LCA Pre-Verified EPD Generator for Wood and plant-fibre based products

VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS TYPE III ENVIRONMENTAL DECLARATION

This Type III environmental declaration has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliance with EN 15804, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration,
- The Life-Cycle Assessment used in this Type III environmental declaration,
- The background report (project report) for this Type III environmental declaration.

Why does verification transparency matter? Read more online.

VERIFICATION OVERVIEW

Following independent third party has verified this specific Type III environmental declaration:

Type III environmental declaration verification information	Answer
Independent verifier	Prof. V. Koci
Verification started on	20.02.2023
Verification completed on	07.03.2023

THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Type III environmental declaration, its LCA and project report in terms of

- the data collected and used in the LCA calculations,
- the way the LCA-based calculations have been carried out,
- the presentation of environmental data in the Type III environmental declaration, and
- other additional environmental information, as present

with respect to the procedural and methodological requirements in ISO 14025:2010 and EN 15804:2012+A2:2019.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the Type III environmental declaration to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

Vladimír Kočí