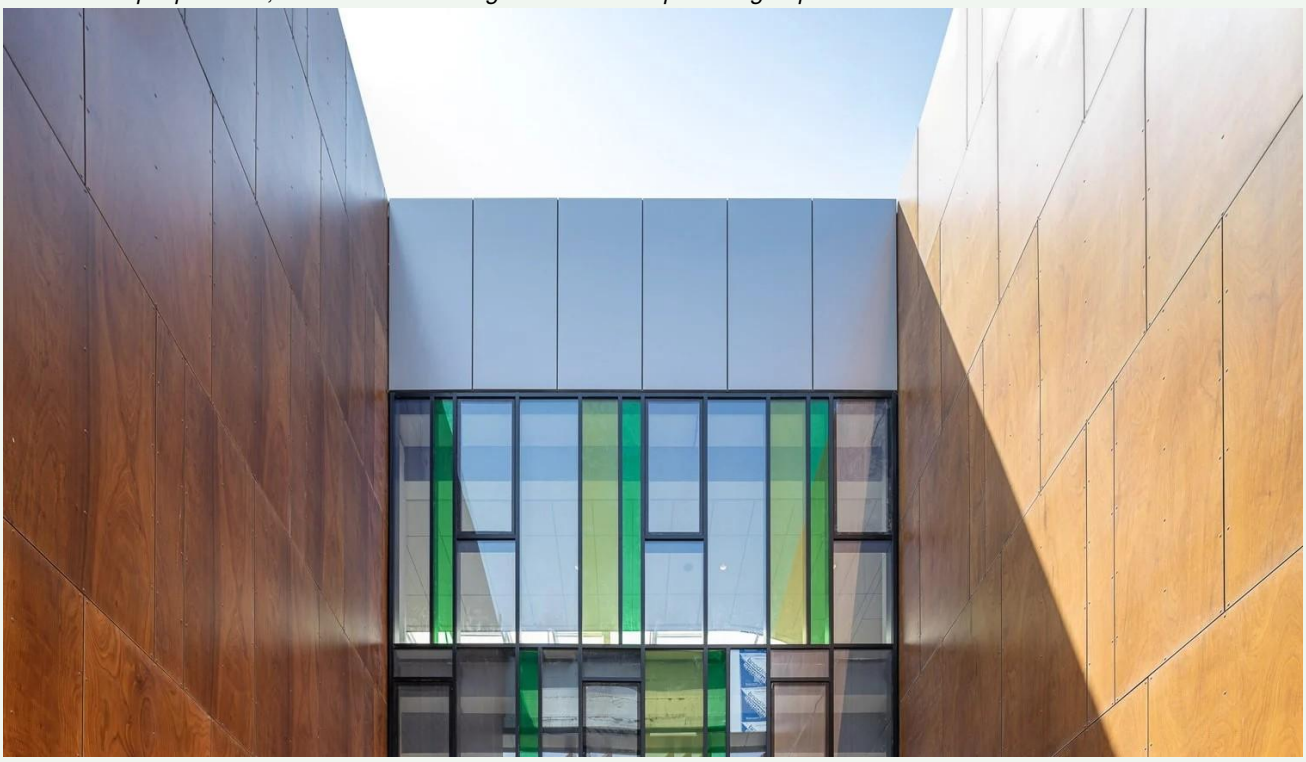
Environmental Product Declaration

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

GRCLAD-B and GRCLAD-W

Glass-Reinforced Core Cladding Panels

EPD of multiple products, based on the average results of the product group



From **Parklex Prodema Int.**

PARKLEX PRODEMA

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	EPD-IES-0024333
Publication date:	2025-06-18
Valid until:	2030-06-17

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com

General information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	info@environdec.com

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product category rules (PCR): PCR 2019:14 Construction products (EN 15804:A2) Version 1.3.4
PCR review was conducted by: PCR review was conducted by: The Technical Committee of the International EPD®System. See www.environdec.com/TCfor a list of members. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat www.environdec.com/contact.
Life Cycle Assessment (LCA): IK Ingeniería Av. Cervantes 51,Edif. 10, panta 5, dpto. 48970 Basauri, Bizkaia (Spain)
Independent third-party verification of the declaration and data, according to ISO 14025:2006: ☒ External ☐ Internal Covering ☐ EPD process certification ☒ EPD verification by accredited certification body
Third-party verification: CERTINALIA S.L.U. is an approved certification body accountable for the third-party verification. Auditor: Eva Larzabal eva.larzabal@certinalia.com The certification body is accredited by: ENAC nº125/C-PR283 accreditation.
Procedure for follow-up of data during EPD validity involves third party verifier: ☒ Yes ☐ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD: Parklex Prodema Int.
Description of the organisation:
Parklex Prodema Int. is a company dedicated to the manufacture of high-density composite panels for exteriors and interiors applications. They are extremely resistant to atmospheric changes in humidity and temperature.

Our first determination is to provide the world of architecture with exclusive materials that will enable architects to design warm, beautiful and comfortable spaces that improve the quality of life of their users. Efficient buildings dressed in the elegance of natural wood.

Environmental Management System Certificate	UNE−EN ISO 14001 GA−2002/070
Ecodesign Management Systems Certification	UNE−EN ISO 14006 ED−0009/2010
Forest product custody chain Management Systems Certificate	PEFC / AEN-PEFC-COC-0003 FSC / AEN-COC-000450

Name and location of production site(s):
Parklex Prodema Int.
Bº San Miguel 9, 20250 Legorreta (Gipuzkoa) Spain

Contact :
Fernando Encio
Quality & Environment System Manager
Email: fernando.encio@parklexprodema.com
More information: https://www.parklexprodema.com

Product information

Product name: GRCLAD

Product description: This Environmental Product Declaration (EPD) provides a life cycle assessment of the GRCLAD-B and GRCLAD-W cladding systems, specifically developed for ventilated façades that must meet stringent fire safety regulations.

Both systems feature a fiberglass-reinforced core impregnated with mineral-filled synthetic resins, ensuring a non-combustible performance.

The GRCLAD-B model offers a range of decorative panels with super-textured finishes in various colours, while the GRCLAD-W model features a natural, maintenance-free wood veneer surface.

An advanced outer layer on both models protects the panels from solar radiation, weathering, and surface contamination, ensuring long-term durability and aesthetic integrity.

UN CPC code: 31449 - Other fibreboard

LCA information

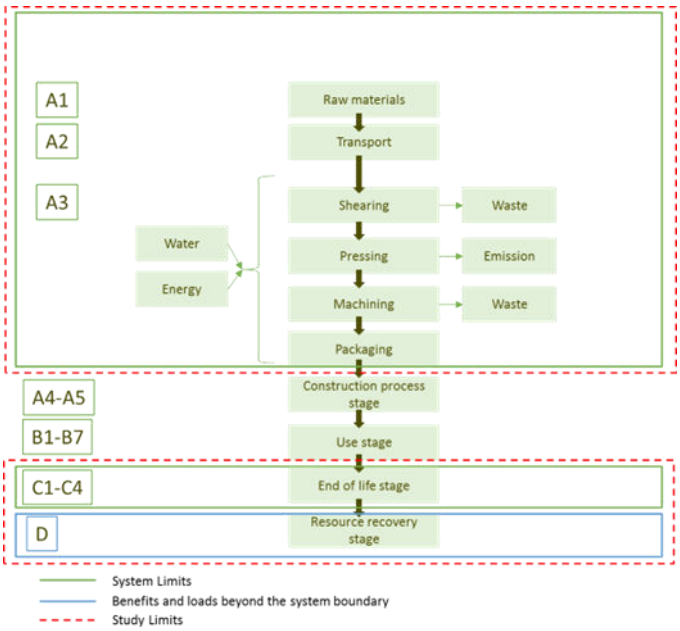
Declared unit: The declared unit is the baseline reference for which all information is collected. In this study, the declared business unit "1m^2 of board" of the following typologies:

EXTERNAL USE BOARDS	
GRCLAD – B 6,4mm	11,08 kg
GRCLAD – W 6,4mm	11,31 kg

Reference service life: Not relevant for this EPD.
Geographical scope: The geographical scope of this EPD is global.
Time representativeness: The data collection from factory (primary data) and electricity mixes are from 2024. In this study, no datasets older than 10 years were used.
Database(s) and LCA software used: All the data used to model the process and obtain the Life Cycle Inventory are specific data and have been obtained by measurements made during the period from 2024. They are representative of the different processes implemented during the manufacturing process. The data has been measured directly at the company's own premises. In addition, the most complete and highest quality European life cycle inventory database, Ecoinvent 3.10, has been used, as this database contains the most extensive and updated information and its scope coincides with the geographical, technological and temporal area of the project. The LCA was modelled with Simapro 9.3.0.3.

Description of system boundaries: According to the standard EN 15804_2012+A2_2020 (MARCH 2020) and PCR 2019:14 CONSTRUCTION PRODUCTS (version 1.3.4) the system boundary is cradle to gate with modules C1–C4 and module D (A1–A3 + C + D). The life cycle stages A4-A5, B1-B7 were excluded from the LCA study.

System diagram:



Manufacturing process:

The manufacturing process takes place over 5 steps:
1.Raw material reception and selection. In some cases, shearing is necessary to achieve appropriate dimensions.
2.Preparing packages, joining different layers of film and paper to be pressed later on.
3.Pressing.
4.Machining the boards, adjusting them to client requirements with an automatic saw.
5.Packaging the end product with the different protective layers required and final product is stored until dispatch.

Author of the Life Cycle Assessment:
IK ingeniería
Av. Cervantes 51,Edif. 10, panta 5, dpto.
48970 Basauri, Bizkaia (Spain)

Data quality
The environmental impact of the panels has been calculated. It is based on the international standards established for the development of environmental product declarations, such as ISO 14025 for the preparation of the environmental product declaration, ISO 14040 and ISO 14044 for the preparation of the life cycle analysis, EN 15804:2012+A2:2020 (MARCH 2020) and the Product Category Rules PCR - "2019:14 Construction products " (Version 1.3.4).

Data has been collected from 2024 and is representative of that year. Data for raw material supply, transport to fabrication plant and production (A1-A3) is based on specific consumption data for the factory at Legorreta. Generic background datasets were used for the downstream processes. SimaPro v9.3.0.3. software was used to prepare the life cycle analysis together with the Ecoinvent 3.10 database. Characterization factors from EN15804: 2012 + A2:2019. The geographical coverage is global. Technological coverage is typical or average. The Characterisation Factors correspond to those set out in "EN 15804 Reference Package EF 3.1.

Assumptions
The modularity principle, as well as the polluter-payer principle have been followed. The following assumptions have been made in this EPD:

- ✓ It does not include the manufacturing processes of the capital goods or spare parts and/or maintenance with a life of more than three years.
- ✓ The environmental impact of infrastructure for general management, office, and headquarters operations is not included.
- ✓ The impact caused by people (common activities, travel for work...) will not be considered.
- ✓ It does not include the consumption of natural gas for sanitary hot water from showers and heating system for the comfort of people.
- ✓ The processes associated with fuel production are intrinsically included in the indicators in ECOINVENT's database used in carrying out the LCA.
- ✓ The environmental impact of external transport has been calculated using lorries from the ECOINVENT 3.10 database, EURO 6. These lorries have been selected to reflect the most realistic scenario possible.

Cut-off rules
The standard ISO 14025 and the PCR -"2019:14 CONSTRUCTION PRODUCTS" indicate that the life cycle inventory data should include a minimum of 95% of the total inputs (materials and energy) for each stage. This cut-off rule does not apply for hazardous materials and substances. No such cut-off criteria have been taken into account in this study.

Allocation.
Where necessary, such us auxiliary materials, water, waste generation, emissions and energy consumption, an allocation based in mass has been used.

Greenhous gas emission from the use of electricity in the manufacturing phase

Electricity mix	Amount	Units
Specific electricity mix	0,249	Kg CO2-eqv/kWh

LCA Scenarios and additional technical information

Dismantling/demolition (module C1):
Since they are not products with a structural use, the energy consumption of this phase is considered not relevant.

Transport (module C2):
With a collection rate of 100%, the transports are carried out by lorry (EURO 6) over 50 km.

Waste processing (modules C3 and C4):
A recycling ratio of 43,53 %, energy recovery ratio of 41,79 %, incineration ratio of 13,78 % and a landfilled ratio of 0,9% is considered in accordance with the publication of the H2020 project ”Absorbing the Potential of Wood Waste in EU Regions and Industrial Bio-based Ecosystems — BioReg” document ”D1.1 EUROPEAN WOOD WASTE STATISTICS REPORT FOR RECIPIENT AND MODEL REGIONS” for europe (https://ec.europa.eu/research/participants/documents/downloadPublic?documentIds=080166e5bf1792ce&appId=PPGMS). These percentages are representative of the areas where the product is marketed.

In module C3 the boards waste treatment (chipping) is considered. In module C4 the impact of incineration process and the landfilling.

Recyclability potentials (module D):
Module D contains credits from the recycling and energy recovery of the boards in module C3. For the recycling process is considered that the board is collected and recycled for use in substitution of virgin wood chips. For energy recovery, use in substitution electricity and natural gas to produce heat.

LCA Scenarios for end of life

Processes	Per Declared unit	
Collection process specified by type	1,11E+01	Kg collected separatelly
	0,00E+00	Kg collected with mixed construction waste
Recovery system specified by type	0,00E+00	Kg for reuse
	2,07E-01	Kg for recycling
	1,10E-01	Kg for energy recovery
Disposal specified by type	1,06E+01	Kg for final disposal
Assumptions for scenario transportation	Lorry 16-32 metric ton, EURO6 Consumption: 0,03kg/km Distance:50 km	

Modules declared, geographical scope, share of specific data (in GWP-GHG indicator) and data variation:

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	**X**	**X**	**X**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**X**	**X**	**X**	**X**	**X**
Geography	**EU**	**EU**	**EU**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**GLO**	**GLO**	**GLO**	**GLO**	**GLO**
Specific data	>90%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	4,36%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

ND: Not declared

Content information

In the EPDs, the average result of the included products is declared, for the included modules A to C, per declared environmental performance indicator. In this option, the content declaration includes the lowest amounts of recycled and biogenic content of the covered products and their packaging, respectively. The following table shows the content declaration of the panels:

Product components	Per 1 m²		
	Weight, kg	Post-consumer material, weight-%	Renewable material, weight-%
Glass fibre	1,13E+00	0,00%	0,00%
Resins	1,96E+00	0,00%	0,00%
Mineral Filler	7,56E+00	0.00%	0,00%
Wood	2,64E-01	0,00%	100,00%
Paper	1,51E-01	0,00%	100,00%
Others	1,35E-01	0,00%	0,00%
TOTAL	1,12E+01	0,00%	3,68%
Packaging materials	**Weight, kg**	**Weight-% (versus the product)**	
Cardboard	1,67E-02	0,14%	
Plastic	4,99E-02	0,42%	
Wood	2,44E-01	2,04%	
Steel	0,00E+00	0,00%	
TOTAL	3,10E-01	2,60%	

Packaging: Product packaging includes different layers of plastic films, a sacrifice board, wooden wedges and a polyester hoop. Panels that do not meet quality standards are reused as sacrifice boards for packaging.

No substances included in the Candidate List of Substances of Very High Concern for authorization under REACH Regulations are present in the analyzed panels manufactured by PARKLEX PRODEMA, either above the threshold for registration with the European Chemicals Agency or above 0,1% (wt/wt).

Environmental Information

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

Usage of results from A1-A3 without considering the results of module C is not encouraged.

Potential environmental impact – mandatory indicators according to EN 15804:

Results per declared unit							
Indicator	**Unit**	**A1-A3**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-fossil	kg CO_2 eq.	3,93E+01	1,06E-01	0,00E+00	3,21E-03	1,08E-01	-2,17E-01
GWP-biogenic	kg CO_2 eq.	1,59E-02	1,91E-05	0,00E+00	7,60E-06	3,35E-04	-3,28E-04
GWP-luluc	kg CO_2 eq.	1,60E-02	3,54E-05	0,00E+00	9,43E-06	2,60E-05	-1,46E-03
GWP-total	kg CO_2 eq.	3,93E+01	1,06E-01	0,00E+00	3,23E-03	1,08E-01	-2,19E-01
ODP	kg CFC 11 eq.	1,23E-06	2,12E-09	0,00E+00	5,34E-11	3,36E-09	-6,78E-09
AP	mol H^+ eq.	1,27E-01	2,22E-04	0,00E+00	1,62E-05	1,19E-03	-7,22E-04
EP-freshwater	kg P eq.	5,37E-04	8,30E-07	0,00E+00	2,96E-07	3,60E-06	-3,83E-06
EP-marine	kg N eq.	4,19E-02	5,19E-05	0,00E+00	2,23E-06	2,95E-04	-1,45E-04
EP-terrestrial	mol N eq.	3,45E-01	5,74E-04	0,00E+00	2,53E-05	3,19E-03	-1,63E-03
POCP	kg NMVOC eq.	1,67E-01	3,68E-04	0,00E+00	8,42E-06	1,16E-03	-6,68E-04
ADP-minerals&metals*	kg Sb eq.	4,85E-04	3,46E-07	0,00E+00	7,66E-09	2,04E-07	-2,35E-06
ADP-fossil*	MJ	6,91E+02	1,50E+00	0,00E+00	7,32E-02	2,49E+00	-5,27E+00
WDP	m^3 deprive	1,81E+01	8,44E-03	0,00E+00	2,38E-03	-1,29E+00	-6,85E-02
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption						

** Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.*

Potential environmental impact – additional mandatory and voluntary indicators

Results per declared unit						
Indicator	**A1-A3**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[1]	3,93E+01	1,06E-01	0,00E+00	3,23E-03	1,08E-01	-2,19E-01

[1] The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.

Use of resources

Results per declared unit							
Indicator	**Unit**	**A1-A3**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	3,68E+01	2,57E-02	0,00E+00	1,68E-02	5,19E-02	-2,48E+00
PERM	MJ	2,23E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,91E+01	2,57E-02	0,00E+00	1,68E-02	5,19E-02	-2,48E+00
PENRE	MJ	6,82E+02	1,50E+00	0,00E+00	7,32E-02	2,49E+00	-5,27E+00
PENRM	MJ.	9,08E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	6,91E+02	1,50E+00	0,00E+00	7,32E-02	2,49E+00	-5,27E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m^3	4,28E-01	2,08E-04	0,00E+00	6,12E-05	-3,01E-02	-1,93E-03
Acronyms	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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water						

Waste production

Results per functional or declared unit							
Indicator	**Unit**	**A1-A3**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed	kg	6,43E+00	2,18E-03	0,00E+00	2,19E-04	4,38E-03	-7,11E-03
Non-hazardous waste disposed	kg	3,34E+01	4,61E-02	0,00E+00	1,39E-02	3,82E+01	-1,53E-01
Radioactive waste disposed	kg	1,01E-03	4,82E-07	0,00E+00	5,13E-07	8,17E-07	-2,98E-05

Output flows

Results per functional or declared unit							
Indicator	**Unit**	**A1-A3**	**C1**	**C2**	**C3**	**C4**	**D**
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	1,81E+00	0,00E+00	0,00E+00	2,07E-01	0,00E+00	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,33E+00
Exported energy, thermal	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,17E-01

Information on biogenic carbon content

Resultados por unidad declarada		
	Unit	**Amount**
Biogenic carbon content in product	kg C	1,85E-01
Biogenic carbon content in packaging	kg C	1,19E-01

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Additional information

More information can be found in the following webpage:
https://www.parklexprodema.com

Information related to Sector EPD

This is an individual EPD®

Differences versus previous versions

This is the first version of the EPD®.

References

- General Programme Instruction of the International EPD®System. Version 4.0.
- LCA report of the study and the LCIs of the products mentioned in the EPD.
- ISO 14020:2000 Environmental labels and declarations-General principles.
- ISO 14025:2010 Environmental labels and declarations-Type III Environmental Declarations-Principles and procedures.
- ISO 14040:2006 Environmental Management-Life Cycle Assessment-Principles and framework.
- ISO 14044:2006 Environmental Management-Life Cycle Assessment-Requirements and guidelines.
- PCR 2019:14 Construction products (EN 15804: A2) version 1.3.4
- EN 15804:2012+A2:2019/AC:2021 Sustainability of construction works-Environmental Product Declarations-Core rules for the product category of construction products

VERIFICATION STATEMENT CERTIFICATE

CERTIFICADO DE DECLARACIÓN DE VERIFICACIÓN

Certificate No. / Certificado nº: EPD00906

CERTINALIA S.L.U., confirms that independent third-party verification has been conducted of the Environmental Product Declaration (EPD) on behalf of:
CERTINALIA S.L.U., confirma que se ha realizado verificación de tercera parte independiente de la Declaración Ambiental de Producto (DAP) en nombre de:

PARKLEX PRODEMA INT. S.L.U.
Bº San Miguel 9
20250 LEGORRETA (Gipuzkoa) - SPAIN

for the following product:
para el siguiente producto:

GRCLAD-B and GRCLAD-W Glass-reinforced core cladding panels
Paneles de revestimiento con núcleo reforzado con fibra de vidrio GRCLAD-B y GRCLAD-W

with registration number **EPD-IES-0024333** in the International EPD® System *(www.environdec.com).*
*con número de registro **EPD-IES-0024333** en el Sistema International EPD® (www.environdec.com).*

it´s in conformity with:
es conforme con:

- **ISO 14025:2010 Environmental labels and declarations. Type III environmental declarations.**
- **General Programme Instructions for the International EPD® System v.4.0.**
- **PCR 2019:14 Construction products (EN 15804:A2) v1.3.4.**
- **UN CPC 31449 Other fibreboard.**

Issued date / *Fecha de emisión:*	18/06/2025
Update date / *Fecha de actualización:*	18/06/2025
Valid until / *Válido hasta:*	17/06/2030
Serial Nº / *Nº Serie:*	EPD0090600-E

Carlos Nazabal Alsua
Manager

This certificate is not valid without its related EPD.
Este certificado no es válido sin su correspondiente EPD.

This certificate is subject to modifications, temporary suspensions and withdrawals by CERTINALIA.
El presente certificado está sujeto a modificaciones, suspensiones temporales y retiradas por CERTINALIA.

The validity of this certificate can be checked through consultation in www.certinalia.com.
El estado de vigencia del certificado puede confirmarse mediante consulta en www.certinalia.com.

EPD®

www.environdec.com