ENVIRONMENTAL PRODUCT DECLARATION (EPD) FOR BUILDING | CONSTRUCTION PANELS CELENIT L2, L2/C, F2, F2/C AND FOR ACOUSTIC | DESIGN PANELS CELENIT AB/F, L2AB25, L2ABE25, L2ABE25C PRODUCED BY CELENIT S.P.A.

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Programme operator: EPD International AB
EPD Programme: The International EPD® System, www.environdec.com
PCR: 2019:14 Construction products version 1.0
Geographical scope: Global
EPD registration number: S-P-02276
Date of publication (issue): 2021-01-22
Date of validity: 2026-01-21

EPD in accordance with ISO 14025:2010 and EN 15804:2012+A2:2019

SUMMARY

1 PROGRAMME RELATED INFORMATION

This EPD is developed under the program The International EPD ® System, in compliance with the General Program Instruction version 3 for the EPD development and the Product Category Rules for "Construction products" 2019:14 version 1.0.

More information about the International EPD ® System is available on the website:
https://www.environdec.com/

2 PRODUCT RELATED INFORMATION

2.1 THE COMPANY

CELENIT has made of sustainability its mission, producing, since 1963, thermal and acoustic insulating panels consisting of natural raw materials: wood, cement, marble powder and water. It deals with solutions of thermal and acoustic insulation, from the production of panels, up to technical support for designers and companies. CELENIT is also the name to identify the mixture at the core of all products, i.e. the mineralised fir wood wool bound with Portland cement.

The BUILDING | CONSTRUCTION division identifies the products for thermal and acoustic insulation for roofs, external walls, dividing partitions and concrete structures, both for traditional or innovative building. The ACOUSTIC | DESIGN division identifies high quality products for visible sound-absorbing coverings, with functional design and excellent acoustic performance.

The company is located in Onara di Tombolo (Padua, Italy), where all CELENIT panels are produced.

2.2 THE PRODUCTS

CELENIT wood wool panels are made of spruce wood coming from sustainable management forests (PEFC™ or FSC®) and mineral binders mainly Portland cement, white or grey, and marble powder.

The mix of the mentioned raw materials, the density of the mixture and the inclusion of additional layers/elements give the panels specific technical properties which make them very versatile multi-purpose products for many building applications.

The cellular structure of wood gives the insulation panel lightness and elasticity. The gaps between the fibres gives sound absorption and excellent ability to adhere to all forms of mortar. The presence of Portland cement gives high resistance to water and frost and superior mechanical properties such as resistance to bending and compression and high fire resistance.

The products included in the present EPD are composite panels where a layer of CELENIT is coupled with another layer and they are classified in two different divisions. **BUILDING | CONSTRUCTION** regards products for roofs applications and consisting of CELENIT N coupled with rockwool, **CELENIT L2** or wood fibre, **CELENIT F2** and products specific for external insulation covering, consisting of CELENIT N/C coupled with rockwool, **CELENIT L2/C** or wood fibre, **CELENIT F2/C. ACOUSTIC | DESIGN** division is specific for sound absorbing applications and regards panels selected for their

aesthetic quality, with white Portland cement; **CELENIT AB/F** is EI 60 fire resistant, consisting of a layer of CELENIT AB coupled to 15 mm thick fire rated plasterboard; **CELENIT L2AB25** and **CELENIT L2ABE25** are made up of respectively CELENIT AB or ABE 25 mm thick coupled to a layer of mineral wool with non-woven glass fibre. **CELENIT L2ABE25C** consists of CELENIT ABE 25 mm thick, coupled to a layer of mineral wool.

The products are compliant to the **EN 13168** standard "Thermal insulation products for buildings. Factory made wood wool (WW) products" and to the **EN 13964** "Suspended ceilings. Requirements and test methods".

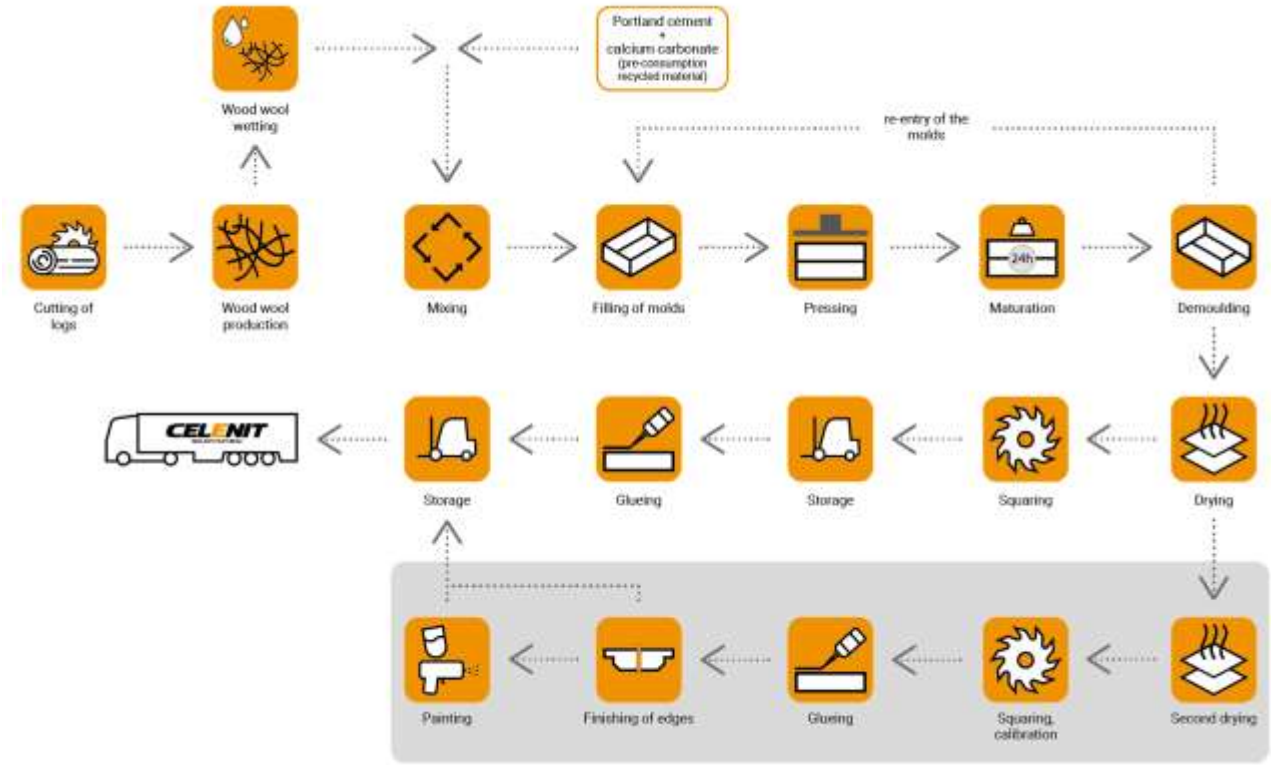

Figure 1: Production process of the panels.

The production process consists in the cutting of fir trunks (timber spruce trunks) and in the production of the wood wool which is wet with water plus the addition of additives (calcium chloride and calcium formate). The wet wood wool is in a second step mixed with Portland cement (grey or white) and calcium carbonate and then distributed on moulds which are previously wet with linear alkylate. The mixture is pressed and the cured. A calibration is eventually performed (only for acoustic panels or panels to be plastered) before the squaring process. After the first squaring the panels continue for the gluing processes where the layer of rockwool, wood fibre or plasterboard is coupled. Then there is the finishing of the edge and the eventual painting. Panels can be provided both painted and not painted.

The CPC code of products covered by this EPD is 547 "Building completion and finishing services" and 546 "Installation services".

2.2.1 TECHNICAL CHARACTERISTICS OF THE PRODUCTS

Table 1 summarizes the differences between the products analysed.

Table 1: Summary of technical differences between the analysed products

		WOOD WOOL LAYER						COMPOSITE LAYER	
Division	Name	Thickness [mm]	Cement		Texture			Material	Thickness [mm]
			Grey	White	Extra-thin 1 mm	Thin 2mm	Standard 3 mm		
BUILDING CONSTRUCTION	CELENIT L2	50	▪				▪	rockwool	60 to 160
	CELENIT L2/C	25	▪				▪		40 to 180
	CELENIT F2	50	▪				▪	wood fibre	60 to 160
	CELENIT F2/C	25	▪				▪		40 to 180
ACOUSTIC DESIGN	CELENIT AB/F	25		▪		▪		fire rated board	15
	CELENIT L2AB25	25		▪		▪		rockwool with non-woven glass fibre,	18 - 25 - 40
	CELENIT L2ABE25	25		▪	▪				18 - 25 - 40
	CELENIT L2ABE25C	25		▪	▪			rockwool	25 - 50 - 75 100 - 125

2.2.1.1 BUILDING | CONSTRUCTION PANELS

Composite thermal and acoustic insulating panels, coupled with rockwool (Figure 2 and Table 2 to Table 3). CELENIT L2 is for roof applications and made of CELENIT N/C 50 mm plus a rockwool layer from 60 to 180 mm. CELENIT L2/C is specific for external insulation covering and made of CELENIT N/C 25 mm plus rockwool layer from 40 to 180 mm.

Composite thermal and acoustic insulating panels, coupled with, coupled with wood fibre (Figure 3 and Table 4 t0 Table 5). CELENIT L2 is for roof applications and made of CELENIT N/C 50 mm plus a rockwool layer from 60 to 180 mm. CELENIT L2/C is specific for external insulation covering and made of CELENIT N/C 25 mm plus a wood fibre panel layer from 40 to 180 mm.

Figure 2: Picture of CELENIT L2 (left, representative for 150 mm thick) and L2/C (right, representative for 85 mm thick)

Figure 3: Picture of CELENIT F2 (left, representative for 150 mm thick) and F2/C (right, representative for 85 mm thick)

Table 2: Characteristics of BUILDING | CONSTRUCTION panel L2

CELENIT L2							
Width of wood wool	mm	3					
Thickness (EN 823)	mm	110 50/60	130 50/80	150 50/100	170 50/120	190 50/140	210 50/160
Length (EN 822)	mm	1200					
Width (EN 822)	mm	600					
Weight (EN 1602)	kg/m^2	25,1	27,3	29,5	31,7	33,9	36,1
Declared thermal conductivity (EN 12667)	W/mK	WW 0,065 MW 0,038					
Declared thermal resistance (EN 12667)	m^{2}K/W	2,35	2,85	3,40	3,90	4,45	4,95
Compressive strength (EN 826)	kPa	≥ 50					
Water vapour transmission (EN 13168 - 4.3.8)	-	WW 5 MW 1					
Reaction to fire (EN 13501-1)	-	Euroclass B-s1, d0					
Specific heat	kJ/kgK	WW 1,81 MW 1,03					

Table 3: Characteristics of BUILDING | CONSTRUCTION panel L2/C

CELENIT L2/C									
Width of wood wool	mm	3							
Thickness (EN 823)	mm	65 25/40	85 25/60	105 25/80	125 25/100	145 25/120	165 25/140	185 25/160	205 25/180
Length (EN 822)	mm	1200							
Width (EN 822)	mm	600							
Weight (EN 1602)	kg/m^2	16,4	18,6	20,8	23,0	25,2	27,4	29,6	31,8
Declared thermal conductivity (EN 12667)	W/mK	WW 0,065 MW 0,038							
Declared thermal resistance (EN 12667)	m^{2}K/W	1,40	1,95	2,45	3,00	3,50	4,05	4,60	5,10
Compressive strength (EN 826)	kPa	≥ 50							
Water vapour transmission (EN 13168 - 4.3.8)	-	WW 5 MW 1							
Reaction to fire (EN 13501-1)	-	Euroclass B-s1, d0							
Specific heat	kJ/kgK	WW 1,81 MW 1,03							

Table 4: Characteristics of BUILDING | CONSTRUCTION panel F2

CELENIT F2							
Width of wood wool	mm	3					
Thickness (EN 823)	mm	110 50/60	130 50/80	150 50/100	170 50/120	190 50/140	210 50/160
Length (EN 822)	mm	1200					
Width (EN 822)	mm	600					
Weight (EN 1602)	kg/m^2	25,1	27,3	29,5	31,7	33,9	36,1
Declared thermal conductivity (EN 12667)	W/mK	WW 0,065 WF 0,037					
Declared thermal resistance (EN 12667)	m^{2}K/W	2,35	2,90	3,45	4,00	4,55	5,05
Compressive strength (EN 826)	kPa	≥ 75					
Water vapour transmission (EN 13168 - 4.3.8)	-	WW 5 WF 3					
Reaction to fire (EN 13501-1)	-	Euroclass B-s1, d0					
Specific heat	kJ/kgK	WW 1,81 WF 2,00					

Table 5: Characteristics of BUILDING | CONSTRUCTION panel F2/C

CELENIT F2/C									
Width of wood wool	mm	3							
Thickness (EN 823)	mm	65 25/40	85 25/60	105 25/80	125 25/100	145 25/120	165 25/140	185 25/160	205 25/180
Length (EN 822)	mm	1200							
Width (EN 822)	mm	600							
Weight (EN 1602)	kg/m^2	16,4	18,6	20,8	23,0	25,2	27,4	29,6	31,8
Declared thermal conductivity (EN 12667)	W/mK	WW 0,065 WF 0,037							
Declared thermal resistance (EN 12667)	m^{2}K/W	1,45	2,00	2,55	3,05	3,60	4,15	4,70	5,25
Compressive strength (EN 826)	kPa	≥ 75							
Water vapour transmission (EN 13168 - 4.3.8)	-	WW 5 WF 3							
Reaction to fire (EN 13501-1)	-	Euroclass B-s1, d0							
Specific heat	kJ/kgK	WW 1,81 WF 2,00							

2.2.1.2 ACOUSTIC | DESIGN PANELS

Composite sound absorbing panel, coupled with plasterboard (Figure 4 and Table 6) CELENIT AB/F is for EI 60 fire resistant ceilings, consisting of a layer of CELENIT AB25 mm coupled to a layer of fire rated plasterboard, 15 mm thick.

Figure 4: CELENIT AB/F

Composite sound absorbing panels, coupled with rockwool covered by non-woven glass (Figure 5 and Table 7 and Table 8). CELENIT L2AB25 and CELENIT ABE25 are made of respectively CELENIT AB and CELENIT ABE 25 mm coupled to a layer of mineral wool with non-woven glass fibre 18, 25 or 40 mm thick.

Figure 5: Picture of textures of CELENIT L2AB25 and L2ABE25 (from left to right)

Composite sound absorbing panel, coupled with rockwool (Figure 6 and Figure 9). CELENIT ABE25 is made of CELENIT ABE 25 mm thick coupled to a layer of mineral wool 25 to 125 mm thick.

Figure 6: Picture of CELENIT L2ABE25/C

Figure 7: Picture of textures of CELENIT ABE and AB (from left to right)

Table 6: Characteristics of ACOUSTIC | DESIGN panel AB/F

CELENIT AB/F		
Width of wood wool	mm	2
Thickness (EN 823)	mm	40 25/15
Length (EN 822)	mm	1200
Width (EN 822)	mm	600
Weight (EN 1602)	kg/m^2	25
Declared thermal conductivity (EN 12667)	W/mK	WW 0,070 Plasterboard 0,20
Declared thermal resistance (EN 12667)	m^{2}K/W	0,40
Reaction to fire (EN 13501-1)	-	Euroclass B-s1, d0
Light reflection (EN 13964 - 4.9)	%	50,7 (nature) – 74,0 (white painted S05/15)

Table 7: Characteristics of ACOUSTIC | DESIGN panel L2AB25

CELENIT L2AB25				
Width of wood wool	mm	2		
Thickness (EN 823)	mm	43 25/18	50 25/25	65 25/40
Length (EN 822)	mm	1200		
Width (EN 822)	mm	600		
Weight (EN 1602)	kg/m^2	13,2	14,1	15,6
Declared thermal conductivity (EN 12667)	W/mK	WW 0,070 MW 0,037		
Declared thermal resistance (EN 12667)	m^{2}K/W	0,80	1,00	1,40
Reaction to fire (EN 13501-1)	-	Euroclass B-s1, d0		
Light reflection (EN 13964 - 4.9)	%	50,7 (nature) – 74,0 (white painted S05/15)		

Table 8: Characteristics of ACOUSTIC | DESIGN panel L2ABE25

CELENIT L2ABE25				
Width of wood wool	mm	1		
Thickness (EN 823)	mm	43 25/18	50 25/25	65 25/40
Length (EN 822)	mm	1200		
Width (EN 822)	mm	600		
Weight (EN 1602)	kg/m^2	13,2	14,1	15,6
Declared thermal conductivity (EN 12667)	W/mK	WW 0,075 MW 0,037		
Declared thermal resistance (EN 12667)	m^{2}K/W	0,80	1,00	1,40
Reaction to fire (EN 13501-1)	-	Euroclass B-s1, d0		
Light reflection (EN 13964 - 4.9)	%	50,7 (nature) – 74,0 (white painted S05/15)		

Table 9: Characteristics of ACOUSTIC | DESIGN panel L2ABE25C

CELENIT L2ABE25C						
Width of wood wool	mm	1				
Thickness (EN 823)	mm	50 25/25	75 25/50	100 25/75	125 25/100	150 25/125
Length (EN 822)	mm	2000 - 1200				
Width (EN 822)	mm	600				
Weight (EN 1602)	kg/m^2	14,7	17,2	19,7	22,2	24,7
Declared thermal conductivity (EN 12667)	W/mK	WW 0,075 MW 0,037				
Declared thermal resistance (EN 12667)	m^{2}K/W	1,00	1,65	2,35	3,00	3,70
Reaction to fire (EN 13501-1)	-	Euroclass B-s1, d0				
Light reflection (EN 13964 - 4.9)	%	50,7 (nature) – 74,0 (white painted S05/15)				

2.2.2 PRODUCT COMPOSITION AND RECYCLED CONTENT

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Table 10 and Table 11 report the product composition for all analysed products. CELENIT panels do not contain SVHC.

Table 10: Bill of Materials (BoM) of BUILDING | CONSTRUCTION composite panels

Material/component	CELENIT L2 210 mm (50+160)	CELENIT L2/C 205 mm (25+180)	CELENIT F2 210 mm (50+160)	CELENIT F2 205 mm (25+180)
CELENIT N/C 50	50%	-	50%	-
CELENIT N/C 25	-	36%	-	36%
Rockwool	49%	63%	-	-
Fiberwood	-	-	49%	63%
Vinyl glue	1%	1%	1%	1%
CELENIT N/C composition				
Cement	37%			
Wet wood wool (80% wood, 20% water)	47,30%			
Calcium carbonate*	15%			
Calcium formate	0,30%			
Calcium chloride	0,20%			
Plus form synt (linear alkylate)	0,20%			
Painting (only for painted version)	0,4 kg/m2			
Packaging material	**For all CELENIT composite panels (kg/kg of CELENIT composite panel)**			
Plastic straps	0,00117			
Cardboard angular	0,00321			
Cardboard box	0,0133			
Plastic film	0,00321			
Pallet	0,186			

** See 2.2.2.1*

Figure 8: In order from left to right, picture of CELENIT L2, L2/C, F2 and F2/C

Table 11: Bill of Materials (BoM) of ACOUSTIC | DESIGN composite panels

Material/component	CELENIT AB/F	CELENIT L2AB25 65 mm (25+40)	CELENIT L2ABE25 65 mm (25+40)	CELENIT L2ABE25C 150 mm (25+125)
CELENIT AB25	47%	77%	-	-
CELENIT ABE25	-	-	77%	48%
Rockwool covered by glass tissue layer	-	21%	21%	-
Rockwool	-	-	-	50%
Plasterboard	51%	-	-	-
Vinyl glue	-	2%	2%	-
Polyurethane glue	-	-	-	2%
Glue based on silicates and ceramic components	2%	-	-	-
CELENIT AB and ABE composition				
Cement	37%			
Wet wood wool	47,30%			
Calcium carbonate*	15%			
Calcium formate	0,30%			
Calcium chloride	0,20%			
Plus form synt (linear alkylate)	0,20%			
Painting (only for painted version)	0,4 kg			
Packaging material	**For all CELENIT composite panels (kg/kg of CELENIT composite panel)**			
Plastic straps	0,00117			
Cardboard angular	0,00321			
Cardboard box	0,0133			
Plastic film	0,00321			
Pallet	0,186			

** See 2.2.2.1*

Figure 9: In order from left to right, picture of CELENIT AB/F, L2AB25, L2ABE25, L2ABE25/C

2.2.2.1 RECYCLED CONTENT

Calcium carbonate is a pre-consumer material recovered from the marble extraction. In compliance to 14021, it is considered a recycled material.

2.2.3 ADDITIONAL INFORMATION ON RELEASE OF DANGEROUS SUBSTANCES TO SOIL. WATER AND LAND DURING THE USE STAGE

CELENIT wood wool panels are not dangerous for the human health: they are tested for the determination of formaldehyde release (according to the EN 717-1 standard) obtaining the E1 class. Furthermore, they do not contain asbestos and they are tested for the VOC emissions in the Eurofins Product Testing A/S and Istituto Giordano laboratories. The lab tests point out that the values are compliant with the most stringent regulatory requirements. These aspects together with a production process with reduced emissions to air and lower energy consumption have enabled the panels to obtain the ANAB-ICEA (Italian standard for green building) and natureplus® certifications. Recycled materials are used in the manufacturing such the calcium carbonate, which is the residual powder from the marble's extraction. For all these reasons, CELENIT panels can be used in projects that require building sustainability certificates such as Leed, Itaca protocol, SBtool, Breeam.

3 ENVIRONMENTAL PRODUCT DECLARATION

3.1 METHODOLOGY

The study behind the present EPD has been performed according to the state of art of the LCA methodology, with specific reference to the construction sector, in accordance to the following standard and guidelines:

- EN ISO 14040:2006 Environmental management -- Life cycle assessment -- Principles and framework
- EN ISO 14044:2006 Environmental management -- Life cycle assessment -- Requirements and guidelines
- EN 15804:2012+A2:2019 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.
- General Programme Instructions (GPI) for the International EPD® VERSION 3.01
- The International EPD® System Product Category Rules (PCRs) for construction products 2019:14. version 1
- The International EPD® System Product Category Rules (PCRs) for thermal insulation products, C-PCR-005 (To PCR 2019:14), version 2019-12-20

The EPD is mainly addressed to the business-to-business communication. The data elaboration has been performed with the Gabi software, version 9.2.1.68. The database used are the most updated ones implemented in Gabi software. More in detail, main database used is ts. The Life Cycle Impact Assessment (LCIA) method used is the Environmental Footprint method as implemented in the EN 15804:2012+A2:2019.

3.2 DECLARED UNIT

The declared unit is 1 m^2 of panel, plus its packaging.

3.3 SYSTEM BOUNDARY

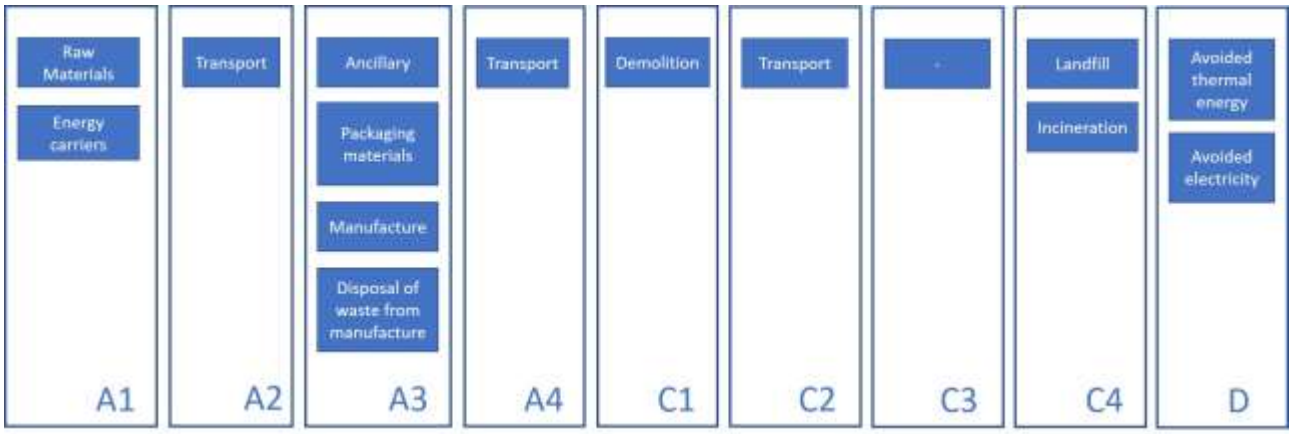
The EPD is a Cradle to Gate with options, modules C1-C4 and module D, as represented in Table 12 and in showed in Figure 10. Modules A5 and B1 to B7 are excluded as they are strongly dependent on the specific application case.

Table 12: Life cycle stages included in the study

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE	END-OF-LIFE STAGE				BENEFITS and LOADS BEYOND SYSTEM BOUNDARY
A1	A2	A3	A4	A5	B1 to B7	C1	C2	C3	C4	D
Raw Material Supply	Transport	Manufacturing	Transport	Construction/Installation	Use. Maintenance. Repair. Replacement. Refurbishment. Operational energy use. Operational water use	Deconstruction/Demolition	Transport	Waste processing	Disposal	Reuse. Recycling potential
X	X	X	X	ND*	ND*	X	X	X	X	X

* Module Not Declared

Figure 10: Representation of the system boundary of the study



The following stages are included in the study:

Raw Materials supply (A1). Production of raw materials used in the products as well as the production of energy carriers used in the production process.

Transport to the factory (A2). Transport to the factory of raw materials, packaging materials and ancillary

Manufacturing of the panels (A3). *It includes the following production phases:*

- Cutting of the wood trunks and implementation of the wet wood wool (including calcium chloride and calcium formate)
- Mixture implementation by adding Portland cement and calcium carbonate
- Moulding and pressing
- Curing
- Demoulding
- Drying
- Calibration (only for ACOUSTIC | DESIGN panels and CELENIT N/C)
- Squaring

Module A3 also includes the production of primary packaging and of the ancillary materials and the treatment of waste generated from the manufacturing processes are accounted for. Moreover, the module also includes the transport of CELENIT monolayer panels from the site to the suppliers performing the coupling with additional layers and the way back to CELENIT's site of the CELENIT composite (coupled) panels.

Transport to the user (A4)

Demolition/Deconstruction (C1)

Transport from collection to waste processing and disposal site (C2)

Waste processing (C3): No impacts are accounted for in this module, as the waste is assumed to not be treated for recycling

Disposal (C4): landfill and incineration with energy recovery

Module D: benefit due to the avoided production of thermal energy and electricity from incineration in module C4.

The reference year of the study is 2019.

3.4 MAIN ASSUMPTIONS. CUT-OFFS. BACKGROUND DATA INFORMATION AND SCENARIOS

3.4.1 DATA QUALITY

Specific data used for all CELENIT's processes are based on the production year 2019. All background data used in the study are from LCI database and are not older than 5 years. With specific reference to the electricity used in the manufacturing processes, the electricity mix of the specific electricity supplier is used.

3.4.2 ALLOCATION

The allocation is made in accordance with the provisions of EN 15804. Energy and resources (water and ancillary) in input and waste and emissions in output from the site are allocated to the overall production of CELENIT boards (used in all CELENIT panels produced in 2019) based on the mass.

3.4.3 CUT-OFFS CRITERIA

The construction of the manufacturing site (capital goods) in not included.

Raw and packaging materials are fully included as well as the energy for manufacturing. In the same way, all manufacturing waste (including hazardous waste) and air emissions are accounted for with the following exclusions:

- Production and disposal of packaging of additional layers and glue used for coupling.
- Packaging used by CELENIT to send CELENIT monolayer panels to suppliers performing the coupling.

3.4.4 BACKGROUND DATA INFORMATION

For the majority of the raw materials as well as for the packaging for the finished products a European production is considered. Raw materials road transport is assumed on a truck Euro 4 (> 32 t) with an utilisation ratio of 61%.

3.4.5 SCENARIOS FOR OPTIONAL MODULES

For the scenario for the transport towards clients, the average considered distance is reported in Table 13. Distances by transport means are based on the location of CELENIT's clients.

Table 13: Distance and transport means considered for module A4 for the ACOUSTIC | DESIGN panels and for BUILDING | CONSTRUCTION panels

Transport information for module A4		
Transport mean	**Utilisation ratio - %**	**Distance travelled - km**
ACOUSTIC | DESIGN panels		
Diesel truck. Euro IV. > 32 t	61	1200
Container ship. 5.000 to 200.000 dwt payload capacity. ocean going	70	500
BUILDING | CONSTRUCTION panels		
Diesel truck. Euro IV. > 32 t	61	800
Container ship. 5.000 to 200.000 dwt payload capacity. ocean going	70	50

When panels are applied with disassembly techniques as for example false ceilings or wall coverings, they can be potentially reused at their end of life, e.g. as insulation layer, however, this is currently an uncommon scenario. For the present EPD, a demolition process is assumed and demolition waste is considered to undergo an average final treatment mix, including incineration or landfill, according to the rates reported in Table 14. The scenario does not include any waste processing. For the demolition process a diesel consumption of 0,039 MJ/kg is considered. Table 15 reports transport information considered for module C2.

Table 14: Demolition waste treatment accounted for the End-of-life - module C4

End-of-life – demolition waste treatment (C4)	
Incineration with energy recovery	45%
Landfill	55%

Table 15: Distance and transport means applied for the End-of-life - module C2

End-of-life – transport information for module C2		
Transport mean	**Utilisation ratio - %**	**Distance travelled - km**
Diesel truck. Euro IV. > 32 t	61	100

For module D. European electricity mix and European thermal energy from natural gas are considered to account for benefits from incineration occurring in C4.

3.5 PARAMETERS DESCRIBING THE ENVIRONMENTAL IMPACT

Environmental parameters reported in the following tables are:

- Climate Change (tot) – GWPtot [kg CO^2 eq];
- Climate Change (fossil) – GWPf [kg CO^2 eq];
- Climate Change (biogenic) – GWPb [kg CO^2 eq];
- Climate Change (land use change) – GWPluc [kg CO^2 eq];
- Ozone Depletion – ODP [kg CFC11 eq];
- Acidification terrestrial and freshwater – AP [Mole of H+ eq.]
- Eutrophication freshwater – EPfr [kg P eq.]
- Eutrophication marine – Epmar [kg N eq.]
- Eutrophication terrestrial – Epter [Mole of N eq.]
- Photochemical ozone formation - human health – POCP [kg NMVOC eq.]
- Resource use. mineral and metals – ADPe [kg Sb eq.]
- Resource use. energy carriers – ADPf [MJ]
- Water scarcity – WS [m^3 world equiv.]

The Global Warming Potential – GWP [kg CO^2 eq] is reported too. The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide emissions and uptake and biogenic carbon stored in the product. The results of indicator WS, ADPf and ADPe shall be used with care as the uncertainty on this results are high or as there is limited experience with them.

The following additional environmental impact indicators are excluded from the present EPD:

- Respiratory inorganics
- Ionising radiation
- Ecotoxicity freshwater
- Cancer human health effects
- Non-cancer human health effects
- Land use

3.5.1 BUILDING | CONSTRUCTION PANELS

Table 16: Environmental profile of BUILDING | CONSTRUCTION panel L2. Reference product thickness is 210 mm: CELENIT N/C 50 mm + rockwool thickness 160 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 110 mm, made of CELENIT N 50 mm + rockwool thickness 60 mm (minimum thickness).

Impact category	*Environmental profile of BUILDING | CONSTRUCTION panel CELENIT L2*							
	A1-A3		A4	C1	C2	C3	C4	D
	210 mm (50+160)	110 mm (50+60)	210 mm (50+160)	210 mm (50+160)	210 mm (50+160)	210 mm (50+160)	210 mm (50+160)	210 mm (50+160)
GWPtot [kg CO_2 eq]	2,16E+01	1,93E+00	1,07E-01	2,34E-01	2,16E+01	0,00E+00	1,55E+01	-5,27E+00
GWPf [kg CO_2 eq]	2,94E+01	1,92E+00	1,11E-01	2,33E-01	2,94E+01	0,00E+00	7,23E+00	-5,26E+00
GWPf [kg CO_2 eq]	-7,85E+00	-3,27E-03	-4,93E-03	-4,02E-04	-7,85E+00	0,00E+00	8,30E+00	-1,17E-02
GWPluc [kg CO^2 eq]	3,41E-02	1,56E-02	8,67E-04	1,91E-03	3,41E-02	0,00E+00	1,43E-03	-3,20E-03
GWPb [kg CO_2 eq]	4,64E-08	2,33E-16	1,29E-17	2,83E-17	4,64E-08	0,00E+00	5,99E-15	-4,72E-14
AP [Mole of H+ eq]	2,15E-01	1,20E-02	5,37E-04	2,74E-03	2,15E-01	0,00E+00	1,06E-02	-6,81E-03
GWPluc [kg CO_2 eq]	5,67E-05	5,86E-06	3,25E-07	7,16E-07	5,67E-05	0,00E+00	2,19E-06	-5,89E-06
EPmar [kg N eq]	3,34E-02	5,71E-03	2,49E-04	1,38E-03	3,34E-02	0,00E+00	3,80E-03	-1,82E-03
Ozone Depletion – ODP [kg CFC11 eq]	7,17E-01	6,32E-02	2,76E-03	1,52E-02	7,17E-01	0,00E+00	4,68E-02	-1,95E-02
POCP [kg NMVOC eq]	9,80E-02	1,11E-02	7,01E-04	2,52E-03	9,80E-02	0,00E+00	1,01E-02	-5,26E-03
AP [Mole of H+ eq.]	3,94E-06	1,39E-07	7,68E-09	1,69E-08	3,94E-06	0,00E+00	1,01E-07	-7,80E-07
ADPf [MJ]	3,19E+02	2,59E+01	1,43E+00	3,13E+00	3,19E+02	0,00E+00	1,28E+01	-8,87E+01
EPfr [kg P eq.]	2,99E+00	1,73E-02	9,57E-04	2,10E-03	2,99E+00	0,00E+00	2,57E+00	-4,61E-01
GWP [kg CO_2 eq]	2,94E+01	1,94E+00	1,12E-01	2,35E-01	2,94E+01	0,00E+00	7,24E+00	-5,26E+00

Table 17: Environmental profile of BUILDING | CONSTRUCTION panels L2/C - Reference product thickness is 205 mm: CELENIT N/C 25 mm + rockwool thickness 180 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 65 mm, made of CELENIT N/C 25 mm + rockwool thickness 40 mm (minimum thickness).

Impact category	*Environmental profile of BUILDING | CONSTRUCTION panel CELENIT L2/C*							
	A1-A3		A4	C1	C2	C3	C4	D
	205 mm (25+180)	65 mm (25+40)	205 mm (25+180)	205 mm (25+180)	205 mm (25+180)	205 mm (25+180)	205 mm (25+180)	205 mm (25+180)
GWPtot [kg CO_2 eq]	2,37E+01	1,70E+00	9,43E-02	2,06E-01	2,37E+01	0,00E+00	1,37E+01	-4,64E+00
GWPf [kg CO_2 eq]	2,89E+01	1,69E+00	9,78E-02	2,05E-01	2,89E+01	0,00E+00	6,37E+00	-4,63E+00
GWPf [kg CO_2 eq]	-5,22E+00	-2,88E-03	-4,34E-03	-3,54E-04	-5,22E+00	0,00E+00	7,31E+00	-1,03E-02
GWPluc [kg CO^2 eq]	3,27E-02	1,37E-02	7,63E-04	1,68E-03	3,27E-02	0,00E+00	1,26E-03	-2,81E-03
GWPb [kg CO_2 eq]	3,30E-08	2,05E-16	1,13E-17	2,49E-17	3,30E-08	0,00E+00	5,28E-15	-4,15E-14
AP [Mole of H+ eq]	2,30E-01	1,06E-02	4,73E-04	2,41E-03	2,30E-01	0,00E+00	9,36E-03	-5,99E-03
GWPluc [kg CO_2 eq]	4,90E-05	5,16E-06	2,86E-07	6,30E-07	4,90E-05	0,00E+00	1,93E-06	-5,18E-06
EPmar [kg N eq]	3,29E-02	5,03E-03	2,20E-04	1,22E-03	3,29E-02	0,00E+00	3,34E-03	-1,60E-03
Ozone Depletion – ODP [kg CFC11 eq]	7,56E-01	5,56E-02	2,43E-03	1,34E-02	7,56E-01	0,00E+00	4,12E-02	-1,72E-02
POCP [kg NMVOC eq]	9,49E-02	9,78E-03	6,17E-04	2,22E-03	9,49E-02	0,00E+00	8,89E-03	-4,63E-03
AP [Mole of H+ eq.]	3,36E-06	1,22E-07	6,76E-09	1,49E-08	3,36E-06	0,00E+00	8,93E-08	-6,86E-07
ADPf [MJ]	3,22E+02	2,28E+01	1,25E+00	2,76E+00	3,22E+02	0,00E+00	1,13E+01	-7,81E+01
EPfr [kg P eq.]	2,56E+00	1,52E-02	8,42E-04	1,85E-03	2,56E+00	0,00E+00	2,26E+00	-4,06E-01
GWP [kg CO_2 eq]	2,89E+01	1,71E+00	9,86E-02	2,06E-01	2,89E+01	0,00E+00	6,37E+00	-4,63E+00

Table 18: Environmental profile of BUILDING | CONSTRUCTION panels F2 - Reference product thickness is 210 mm: CELENIT N/C 50 mm + wood fibre thickness 160 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 110 mm, made of CELENIT N 50 mm + wood fibre thickness 60 mm (minimum thickness)

Impact category	*Environmental profile of BUILDING | CONSTRUCTION panel CELENIT F2*							
	A1-A3		A4	C1	C2	C3	C4	D
	210 mm (50+160)	110 mm (50+60)	210 mm (50+160)	210 mm (50+160)	210 mm (50+160)	210 mm (50+160)	210 mm (50+160)	210 mm (50+160)
GWPtot [kg CO_2 eq]	-1,68E+01	1,34E+00	1,93E+00	1,07E-01	2,34E-01	0,00E+00	4,53E+01	-5,27E+00
GWPf [kg CO_2 eq]	2,12E+01	1,33E+00	1,92E+00	1,11E-01	2,33E-01	0,00E+00	7,23E+00	-5,26E+00
GWPf [kg CO_2 eq]	-3,80E+01	-2,27E-03	-3,27E-03	-4,93E-03	-4,02E-04	0,00E+00	3,81E+01	-1,17E-02
GWPluc [kg CO^2 eq]	3,80E-02	1,08E-02	1,56E-02	8,67E-04	1,91E-03	0,00E+00	1,43E-03	-3,20E-03
GWPb [kg CO_2 eq]	4,64E-08	1,62E-16	2,33E-16	1,29E-17	2,83E-17	0,00E+00	5,99E-15	-4,72E-14
AP [Mole of H+ eq]	5,79E-02	8,34E-03	1,20E-02	5,37E-04	2,74E-03	0,00E+00	1,06E-02	-6,81E-03
GWPluc [kg CO_2 eq]	6,04E-05	4,07E-06	5,86E-06	3,25E-07	7,16E-07	0,00E+00	2,19E-06	-5,89E-06
EPmar [kg N eq]	2,40E-02	3,96E-03	5,71E-03	2,49E-04	1,38E-03	0,00E+00	3,80E-03	-1,82E-03
Ozone Depletion – ODP [kg CFC11 eq]	2,64E-01	4,38E-02	6,32E-02	2,76E-03	1,52E-02	0,00E+00	4,68E-02	-1,95E-02
POCP [kg NMVOC eq]	6,87E-02	7,71E-03	1,11E-02	7,01E-04	2,52E-03	0,00E+00	1,01E-02	-5,26E-03
AP [Mole of H+ eq.]	4,66E-06	9,62E-08	1,39E-07	7,68E-09	1,69E-08	0,00E+00	1,01E-07	-7,80E-07
ADPf [MJ]	2,67E+02	1,79E+01	2,59E+01	1,43E+00	3,13E+00	0,00E+00	1,28E+01	-8,87E+01
EPfr [kg P eq.]	2,87E+00	1,20E-02	1,73E-02	9,57E-04	2,10E-03	0,00E+00	2,57E+00	-4,61E-01
GWP [kg CO_2 eq]	2,12E+01	1,34E+00	1,94E+00	1,12E-01	2,35E-01	0,00E+00	7,24E+00	-5,26E+00

Table 19: Environmental profile of BUILDING | CONSTRUCTION panels F2/C - Reference product thickness is 205 mm: CELENIT N/C 25 mm + wood fibre thickness 180 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 65 mm, made of CELENIT N/C 25 mm + wood fibre thickness 40 mm (minimum thickness).

Environmental profile of BUILDING | CONSTRUCTION panel CELENIT F2/C								
Impact category	**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
	205 mm (25+180)	**65 mm (25+40)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**
GWPtot [kg CO_2 eq]	-1,95E+01	-3,75E+00	1,70E+00	9,43E-02	2,06E-01	0,00E+00	4,56E+01	-4,64E+00
GWPf [kg CO_2 eq]	1,97E+01	8,63E+00	1,69E+00	9,78E-02	2,05E-01	0,00E+00	6,37E+00	-4,63E+00
GWPf [kg CO_2 eq]	-3,92E+01	-1,24E+01	-2,88E-03	-4,34E-03	-3,54E-04	0,00E+00	3,92E+01	-1,03E-02
GWPluc [kg CO^2 eq]	3,70E-02	1,41E-02	1,37E-02	7,63E-04	1,68E-03	0,00E+00	1,26E-03	-2,81E-03
GWPb [kg CO_2 eq]	3,30E-08	2,70E-08	2,05E-16	1,13E-17	2,49E-17	0,00E+00	5,28E-15	-4,15E-14
AP [Mole of H+ eq]	5,32E-02	2,40E-02	1,06E-02	4,73E-04	2,41E-03	0,00E+00	9,36E-03	-5,99E-03
GWPluc [kg CO_2 eq]	5,31E-05	2,70E-05	5,16E-06	2,86E-07	6,30E-07	0,00E+00	1,93E-06	-5,18E-06
EPmar [kg N eq]	2,24E-02	9,76E-03	5,03E-03	2,20E-04	1,22E-03	0,00E+00	3,34E-03	-1,60E-03
Ozone Depletion – ODP [kg CFC11 eq]	2,45E-01	1,07E-01	5,56E-02	2,43E-03	1,34E-02	0,00E+00	4,12E-02	-1,72E-02
POCP [kg NMVOC eq]	6,20E-02	2,95E-02	9,78E-03	6,17E-04	2,22E-03	0,00E+00	8,89E-03	-4,63E-03
AP [Mole of H+ eq.]	4,18E-06	2,02E-06	1,22E-07	6,76E-09	1,49E-08	0,00E+00	8,93E-08	-6,86E-07
ADPf [MJ]	2,64E+02	9,66E+01	2,28E+01	1,25E+00	2,76E+00	0,00E+00	1,13E+01	-7,81E+01
EPfr [kg P eq.]	2,43E+00	1,36E+00	1,52E-02	8,42E-04	1,85E-03	0,00E+00	2,26E+00	-4,06E-01
GWP [kg CO_2 eq]	1,97E+01	8,64E+00	1,71E+00	9,86E-02	2,06E-01	0,00E+00	6,37E+00	-4,63E+00

3.5.2 ACOUSTIC | DESIGN PANELS

Table 20: Environmental profile of ACOUSTIC | DESIGN panels AB/F – Thickness 40 mm

Impact category		*Environmental profile of ACOUSTIC | DESIGN panel CELENIT AB/F*						
		A1-A3 40 mm (25+15)	A4 40 mm (25+15)	C1 40 mm (25+15)	C2 40 mm (25+15)	C3 40 mm (25+15)	C4 40 mm (25+15)	D 40 mm (25+15)
GWPtot [kg CO_2 eq]	Not painted	3,69E+00	2,09E+00	7,40E-02	1,62E-01	0,00E+00	1,07E+01	-3,64E+00
	Painted	4,74E+00	2,18E+00	7,70E-02	1,68E-01	0,00E+00	1,12E+01	-3,79E+00
GWPf [kg CO_2 eq]	Not painted	8,60E+00	-3,28E-03	-3,40E-03	-2,78E-04	0,00E+00	5,73E+00	-8,09E-03
	Painted	9,64E+00	2,16E+00	7,99E-02	1,67E-01	0,00E+00	5,20E+00	-3,78E+00
GWPb [kg CO_2 eq]	Not painted	-4,92E+00	-3,28E-03	-3,40E-03	-2,78E-04	0,00E+00	5,73E+00	-8,09E-03
	Painted	-4,92E+00	-3,41E-03	-3,54E-03	-2,89E-04	0,00E+00	5,96E+00	-8,41E-03
GWPluc [kg CO_2 eq]	Not painted	1,35E-02	1,62E-02	5,99E-04	1,32E-03	0,00E+00	9,86E-04	-2,21E-03
	Painted	1,42E-02	1,68E-02	6,23E-04	1,37E-03	0,00E+00	1,03E-03	-2,30E-03
ODP [kg CFC11 eq]	Not painted	3,12E-08	2,50E-16	8,89E-18	1,95E-17	0,00E+00	4,14E-15	-3,26E-14
	Painted	3,16E-08	2,60E-16	9,25E-18	2,03E-17	0,00E+00	4,31E-15	-3,39E-14
AP [Mole of H+ eq]	Not painted	2,42E-02	1,57E-02	3,71E-04	1,89E-03	0,00E+00	7,34E-03	-4,70E-03
	Painted	2,62E-02	1,64E-02	3,86E-04	1,97E-03	0,00E+00	7,64E-03	-4,89E-03
EPfr [kg P eq.]	Not painted	3,55E-05	6,10E-06	2,25E-07	4,94E-07	0,00E+00	1,51E-06	-4,07E-06
	Painted	4,23E-05	6,34E-06	2,34E-07	5,14E-07	0,00E+00	1,57E-06	-4,23E-06
EPmar [kg N eq]	Not painted	9,41E-03	6,78E-03	1,72E-04	9,54E-04	0,00E+00	2,62E-03	-1,26E-03
	Painted	9,99E-03	7,05E-03	1,79E-04	9,92E-04	0,00E+00	2,73E-03	-1,31E-03
EPpter [Mole of N eq]	Not painted	1,03E-01	7,49E-02	1,91E-03	1,05E-02	0,00E+00	3,24E-02	-1,35E-02
	Painted	1,09E-01	7,79E-02	1,98E-03	1,09E-02	0,00E+00	3,37E-02	-1,40E-02
POCP [kg NMVOC eq]	Not painted	2,77E-02	1,39E-02	4,84E-04	1,74E-03	0,00E+00	6,98E-03	-3,64E-03
	Painted	2,99E-02	1,45E-02	5,04E-04	1,81E-03	0,00E+00	7,26E-03	-3,78E-03
ADPe [kg Sb eq]	Not painted	2,02E-06	1,46E-07	5,30E-09	1,17E-08	0,00E+00	7,01E-08	-5,39E-07
	Painted	2,23E-06	1,52E-07	5,52E-09	1,21E-08	0,00E+00	7,29E-08	-5,60E-07
ADPf [MJ]	Not painted	9,58E+01	2,79E+01	9,85E-01	2,17E+00	0,00E+00	8,88E+00	-6,13E+01
	Painted	1,17E+02	2,90E+01	1,02E+00	2,25E+00	0,00E+00	9,23E+00	-6,38E+01
WS [m^3 world eq]	Not painted	1,40E+00	1,80E-02	6,61E-04	1,45E-03	0,00E+00	1,77E+00	-3,18E-01
	Painted	1,35E+00	1,88E-02	6,88E-04	1,51E-03	0,00E+00	1,84E+00	-3,31E-01
GWP [kg CO_2 eq]	Not painted	8,61E+00	2,10E+00	7,74E-02	1,62E-01	0,00E+00	5,00E+00	-3,64E+00
	Painted	9,66E+00	2,18E+00	8,05E-02	1,69E-01	0,00E+00	5,20E+00	-3,78E+00

Table 21: Environmental profile of ACOUSTIC | DESIGN panels L2AB25 and L2ABE25 - Reference product thickness is 65 mm: CELENIT AB or ABE 25 mm + rockwool thickness 40 mm (maximum thickness).). The maximum impact variation is reported for A1-A3, registered for the thickness 43 mm, made of CELENIT AB or ABE 25 mm + rockwool thickness 18 mm (minimum thickness).

Impact category	*Environmental profile of ACOUSTIC | DESIGN panels CELENIT L2AB25 and L2ABE25*								
		A1-A3		A4	C1	C2	C3	C4	D
		65 mm (25+40)	43 mm (25+18)	65 mm (25+40)	65 mm (25+40)	65 mm (25+40)	65 mm (25+40)	65 mm (25+40)	65 mm (25+40)
GWPtot [kg CO_2 eq]	Not painted	4,69E+00	2,64E+00	1,31E+00	4,62E-02	1,01E-01	0,00E+00	8,11E+00	-2,28E+00
	Painted	5,74E+00	3,69E+00	1,39E+00	4,92E-02	1,08E-01	0,00E+00	8,32E+00	-2,42E+00
GWPf [kg CO_2 eq]	Not painted	9,70E+00	7,62E+00	1,30E+00	4,80E-02	1,00E-01	0,00E+00	3,12E+00	-2,27E+00
	Painted	1,07E+01	8,66E+00	1,38E+00	5,11E-02	1,07E-01	0,00E+00	3,32E+00	-2,42E+00
GWPb [kg CO_2 eq]	Not painted	-5,03E+00	-4,98E+00	-2,05E-03	-2,13E-03	-1,74E-04	0,00E+00	4,99E+00	-5,05E-03
	Painted	-5,02E+00	-4,98E+00	-2,18E-03	-2,26E-03	-1,85E-04	0,00E+00	4,99E+00	-5,38E-03
GWPluc [kg CO_2 eq]	Not painted	1,21E-02	9,89E-03	1,01E-02	3,74E-04	8,23E-04	0,00E+00	6,16E-04	-1,38E-03
	Painted	1,28E-02	1,05E-02	1,08E-02	3,98E-04	8,76E-04	0,00E+00	6,56E-04	-1,47E-03
ODP [kg CFC11 eq]	Not painted	2,76E-08	2,69E-08	1,56E-16	5,56E-18	1,22E-17	0,00E+00	2,59E-15	-2,04E-14
	Painted	2,80E-08	2,73E-08	1,66E-16	5,91E-18	1,30E-17	0,00E+00	2,75E-15	-2,17E-14
AP [Mole of H+ eq]	Not painted	5,24E-02	3,33E-02	9,83E-03	2,32E-04	1,18E-03	0,00E+00	4,59E-03	-2,94E-03
	Painted	5,44E-02	3,54E-02	1,05E-02	2,47E-04	1,26E-03	0,00E+00	4,89E-03	-3,13E-03
EPfr [kg P eq.]	Not painted	2,53E-05	2,27E-05	3,81E-06	1,40E-07	3,09E-07	0,00E+00	9,45E-07	-2,54E-06
	Painted	3,21E-05	2,95E-05	4,06E-06	1,50E-07	3,29E-07	0,00E+00	1,01E-06	-2,71E-06
EPmar [kg N eq]	Not painted	1,10E-02	8,62E-03	4,24E-03	1,08E-04	5,96E-04	0,00E+00	1,64E-03	-7,85E-04
	Painted	1,16E-02	9,19E-03	4,51E-03	1,15E-04	6,35E-04	0,00E+00	1,75E-03	-8,35E-04
EPpter [Mole of N eq]	Not painted	1,88E-01	1,26E-01	4,68E-02	1,19E-03	6,57E-03	0,00E+00	2,02E-02	-8,44E-03
	Painted	1,94E-01	1,33E-01	4,98E-02	1,27E-03	6,99E-03	0,00E+00	2,15E-02	-8,98E-03
POCP [kg NMVOC eq]	Not painted	3,37E-02	2,70E-02	8,70E-03	3,03E-04	1,09E-03	0,00E+00	4,36E-03	-2,27E-03
	Painted	3,58E-02	2,91E-02	9,26E-03	3,22E-04	1,16E-03	0,00E+00	4,64E-03	-2,42E-03
ADPe [kg Sb eq]	Not painted	1,82E-06	1,64E-06	9,12E-08	3,31E-09	7,29E-09	0,00E+00	4,38E-08	-3,37E-07
	Painted	2,03E-06	1,85E-06	9,71E-08	3,53E-09	7,76E-09	0,00E+00	4,66E-08	-3,58E-07
ADPf [MJ]	Not painted	9,83E+01	7,39E+01	1,74E+01	6,15E-01	1,35E+00	0,00E+00	5,55E+00	-3,83E+01
	Painted	1,20E+02	9,56E+01	1,85E+01	6,55E-01	1,44E+00	0,00E+00	5,91E+00	-4,08E+01
WS [m^3 world eq]	Not painted	1,38E+00	1,24E+00	1,13E-02	4,13E-04	9,09E-04	0,00E+00	1,11E+00	-1,99E-01
	Painted	1,32E+00	1,19E+00	1,20E-02	4,40E-04	9,67E-04	0,00E+00	1,18E+00	-2,12E-01
GWP [kg CO_2 eq]	Not painted	9,71E+00	7,63E+00	1,31E+00	4,84E-02	1,01E-01	0,00E+00	3,12E+00	-2,27E+00
	Painted	1,08E+01	8,67E+00	1,39E+00	5,15E-02	1,08E-01	0,00E+00	3,33E+00	-2,42E+00

Table 22: Environmental profile of ACOUSTIC | DESIGN panels L2ABE25C - Reference product thickness is 150 mm: CELENIT ABE 25 mm + rockwool thickness 125 mm (maximum thickness).). The maximum impact variation is reported for A1-A3, registered for the thickness 50 mm, made of CELENIT ABE 25 mm + rockwool thickness 25 mm (minimum thickness).

Impact category		*Environmental profile of ACOUSTIC | DESIGN panel CELENIT L2ABE25C*							
		A1-A3		A4	C1	C2	C3	C4	D
		150 mm (25+125)	50 mm (25+25)	150 mm (25+125)	150 mm (25+125)	150 mm (25+125)	150 mm (25+125)	150 mm (25+125)	150 mm (25+125)
GWPtot [kg CO_2 eq]	Not painted	1,50E+01	3,62E+00	2,10E+00	7,43E-02	1,62E-01	0,00E+00	1,08E+01	-3,66E+00
	Painted	1,60E+01	4,67E+00	2,19E+00	7,73E-02	1,69E-01	0,00E+00	1,12E+01	-3,80E+00
GWPf [kg CO_2 eq]	Not painted	2,02E+01	8,62E+00	2,09E+00	7,71E-02	1,61E-01	0,00E+00	5,02E+00	-3,65E+00
	Painted	2,12E+01	9,66E+00	2,17E+00	8,02E-02	1,68E-01	0,00E+00	5,22E+00	-3,79E+00
GWPb [kg CO_2 eq]	Not painted	-5,25E+00	-5,01E+00	-3,29E-03	-3,42E-03	-2,79E-04	0,00E+00	5,76E+00	-8,12E-03
	Painted	-5,24E+00	-5,00E+00	-3,42E-03	-3,55E-03	-2,90E-04	0,00E+00	5,99E+00	-8,45E-03
GWPluc [kg CO_2 eq]	Not painted	2,12E-02	1,06E-02	1,62E-02	6,01E-04	1,32E-03	0,00E+00	9,90E-04	-2,22E-03
	Painted	2,18E-02	1,12E-02	1,69E-02	6,25E-04	1,38E-03	0,00E+00	1,03E-03	-2,31E-03
ODP [kg CFC11 eq]	Not painted	3,13E-08	2,74E-08	2,51E-16	8,92E-18	1,96E-17	0,00E+00	4,16E-15	-3,27E-14
	Painted	3,17E-08	2,78E-08	2,61E-16	9,28E-18	2,04E-17	0,00E+00	4,32E-15	-3,40E-14
AP [Mole of H+ eq]	Not painted	1,48E-01	4,28E-02	1,58E-02	3,73E-04	1,90E-03	0,00E+00	7,37E-03	-4,72E-03
	Painted	1,50E-01	4,48E-02	1,64E-02	3,88E-04	1,97E-03	0,00E+00	7,67E-03	-4,91E-03
EPfr [kg P eq.]	Not painted	3,80E-05	2,39E-05	6,12E-06	2,26E-07	4,96E-07	0,00E+00	1,52E-06	-4,08E-06
	Painted	4,48E-05	3,07E-05	6,37E-06	2,35E-07	5,16E-07	0,00E+00	1,58E-06	-4,25E-06
EPmar [kg N eq]	Not painted	2,15E-02	9,45E-03	6,80E-03	1,73E-04	9,58E-04	0,00E+00	2,63E-03	-1,26E-03
	Painted	2,21E-02	1,00E-02	7,08E-03	1,80E-04	9,96E-04	0,00E+00	2,74E-03	-1,31E-03
EPpter [Mole of N eq]	Not painted	4,85E-01	1,54E-01	7,52E-02	1,92E-03	1,05E-02	0,00E+00	3,25E-02	-1,36E-02
	Painted	4,91E-01	1,60E-01	7,82E-02	1,99E-03	1,10E-02	0,00E+00	3,38E-02	-1,41E-02
POCP [kg NMVOC eq]	Not painted	6,49E-02	2,98E-02	1,40E-02	4,86E-04	1,75E-03	0,00E+00	7,01E-03	-3,65E-03
	Painted	6,70E-02	3,19E-02	1,45E-02	5,06E-04	1,82E-03	0,00E+00	7,29E-03	-3,80E-03
ADPe [kg Sb eq]	Not painted	2,68E-06	1,71E-06	1,47E-07	5,32E-09	1,17E-08	0,00E+00	7,04E-08	-5,41E-07
	Painted	2,89E-06	1,93E-06	1,52E-07	5,54E-09	1,22E-08	0,00E+00	7,32E-08	-5,62E-07
ADPf [MJ]	Not painted	2,20E+02	8,47E+01	2,80E+01	9,89E-01	2,17E+00	0,00E+00	8,91E+00	-6,15E+01
	Painted	2,41E+02	1,06E+02	2,91E+01	1,03E+00	2,26E+00	0,00E+00	9,27E+00	-6,40E+01
WS [m^3 world eq]	Not painted	2,05E+00	1,29E+00	1,81E-02	6,64E-04	1,46E-03	0,00E+00	1,78E+00	-3,20E-01
	Painted	2,00E+00	1,24E+00	1,88E-02	6,90E-04	1,52E-03	0,00E+00	1,85E+00	-3,33E-01
GWP [kg CO_2 eq]	Not painted	2,02E+01	8,63E+00	2,10E+00	7,77E-02	1,63E-01	0,00E+00	5,02E+00	-3,65E+00
	Painted	2,13E+01	9,67E+00	2,19E+00	8,08E-02	1,69E-01	0,00E+00	5,22E+00	-3,80E+00

3.6 INDICATORS OF RESOURCES USE

3.6.1 BUILDING | CONSTRUCTION PANELS

Table 23: Indicators of resources use for BUILDING | CONSTRUCTION panels L2 - Reference product thickness is 210 mm: CELENIT N/C 50 mm + rockwool thickness 160 mm (maximum thickness).). The maximum impact variation is reported for A1-A3, registered for the thickness 110 mm, made of CELENIT N 50 mm + rockwool thickness 60 mm (minimum thickness)

Indicators of resources use for BUILDING | CONSTRUCTION panel CELENIT L2								
Impact category	**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
	210 mm (50+160)	**110 mm (50+60)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**
Use of non renewable secondary fuels [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of secondary materials [kg]	2,70E+00	2,70E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy used as raw materials [MJ]	5,14E-09	5,14E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	1,40E+02	1,21E+02	1,44E+00	8,01E-02	1,76E-01	0,00E+00	2,03E+00	-1,67E+01
Use of non-renewable primary energy used as raw material [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	3,14E+02	1,62E+02	2,59E+01	1,43E+00	3,14E+00	0,00E+00	1,29E+01	-8,87E+01
Total use of renewable primary energy resources [MJ]	1,40E+02	1,21E+02	1,44E+00	8,01E-02	1,76E-01	0,00E+00	2,03E+00	-1,67E+01
Total use of non-renewable primary energy resources [MJ]	3,14E+02	1,62E+02	2,59E+01	1,43E+00	3,14E+00	0,00E+00	1,29E+01	-8,87E+01
Use of net fresh water [m^3]	8,13E-02	5,09E-02	1,67E-03	9,28E-05	2,04E-04	0,00E+00	6,08E-02	-1,93E-02

Table 24: Indicators of resources use for BUILDING | CONSTRUCTION panels L2/C - Reference product total thickness 205 mm: CELENIT N/C 25 mm + rockwool thickness 180 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness, made of 65 mm CELENIT N/C 25 mm + rockwool thickness 40 mm (minimum thickness).

Indicators of resources use for BUILDING | CONSTRUCTION panel CELENIT L2/C								
Impact category	**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
	205 mm (25+180)	**65 mm (25+40)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**
Use of non renewable secondary fuels [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of secondary materials [kg]	1,73E+00	1,73E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy used as raw materials [MJ]	3,29E-09	3,29E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	1,04E+02	7,76E+01	1,27E+00	7,05E-02	1,55E-01	0,00E+00	1,78E+00	-1,47E+01
Use of non-renewable primary energy used as raw material [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	3,18E+02	1,06E+02	2,28E+01	1,26E+00	2,76E+00	0,00E+00	1,13E+01	-7,81E+01
Total use of renewable primary energy resources [MJ]	1,04E+02	7,76E+01	1,27E+00	7,05E-02	1,55E-01	0,00E+00	1,78E+00	-1,47E+01
Total use of non-renewable primary energy resources [MJ]	3,18E+02	1,06E+02	2,28E+01	1,26E+00	2,76E+00	0,00E+00	1,13E+01	-7,81E+01
Use of net fresh water [m^3]	7,56E-02	3,31E-02	1,47E-03	8,17E-05	1,80E-04	0,00E+00	5,35E-02	-1,70E-02

Table 25: Indicators of resources use for BUILDING | CONSTRUCTION panels F2 - Reference product thickness is 210 mm: CELENIT N/C 50 mm + wood fibre thickness 160 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 110 mm, made of CELENIT N 50 mm + wood fibre thickness 60 mm (minimum thickness)

Indicators of resources use for BUILDING | CONSTRUCTION panel CELENIT F2								
Impact category	**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
	210 mm (50+160)	**110 mm (50+60)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**
Use of non renewable secondary fuels [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of secondary materials [kg]	2,70E+00	2,70E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy used as raw materials [MJ]	4,54E-07	1,74E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	4,43E+02	2,35E+02	1,44E+00	8,01E-02	1,76E-01	0,00E+00	2,03E+00	-1,67E+01
Use of non-renewable primary energy used as raw material [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	2,62E+02	1,43E+02	2,59E+01	1,43E+00	3,14E+00	0,00E+00	1,29E+01	-8,87E+01
Total use of renewable primary energy resources [MJ]	4,43E+02	2,35E+02	1,44E+00	8,01E-02	1,76E-01	0,00E+00	2,03E+00	-1,67E+01
Total use of non-renewable primary energy resources [MJ]	2,62E+02	1,43E+02	2,59E+01	1,43E+00	3,14E+00	0,00E+00	1,29E+01	-8,87E+01
Use of net fresh water [m^3]	8,40E-02	5,19E-02	1,67E-03	9,28E-05	2,04E-04	0,00E+00	6,08E-02	-1,93E-02

Table 26: Indicators of resources use for BUILDING | CONSTRUCTION panels F2/C - Reference product thickness is 205 mm: CELENIT N/C 25 mm + wood fibre thickness 180 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 65 mm, made of CELENIT N/C 25 mm + wood fibre thickness 40 mm (minimum thickness).

Indicators of resources use for BUILDING | CONSTRUCTION panel CELENIT F2/C								
Impact category	**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
	205 mm (25+180)	**65 mm (25+40)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**
Use of non renewable secondary fuels [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of secondary materials [kg]	1,73E+00	1,73E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy used as raw materials [MJ]	5,08E-07	1,16E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	4,45E+02	1,53E+02	1,27E+00	7,05E-02	1,55E-01	0,00E+00	1,78E+00	-1,47E+01
Use of non-renewable primary energy used as raw material [MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	2,60E+02	9,35E+01	2,28E+01	1,26E+00	2,76E+00	0,00E+00	1,13E+01	-7,81E+01
Total use of renewable primary energy resources [MJ]	4,45E+02	1,53E+02	1,27E+00	7,05E-02	1,55E-01	0,00E+00	1,78E+00	-1,47E+01
Total use of non-renewable primary energy resources [MJ]	2,60E+02	9,35E+01	2,28E+01	1,26E+00	2,76E+00	0,00E+00	1,13E+01	-7,81E+01
Use of net fresh water [m^3]	7,86E-02	3,37E-02	1,47E-03	8,17E-05	1,80E-04	0,00E+00	5,35E-02	-1,70E-02

3.6.2 ACOUSTIC | DESIGN PANELS

Table 27: Indicators of resources use for ACOUSTIC | DESIGN panel AB/F - Thickness 40 mm

Impact category		*Indicators of resources use for ACOUSTIC | DESIGN panel AB/F*						
		A1-A3 40 mm (25+15)	A4 40 mm (25+15)	C1 40 mm (25+15)	C2 40 mm (25+15)	C3 40 mm (25+15)	C4 40 mm (25+15)	D 40 mm (25+15)
Use of non renewable secondary fuels [MJ]	Not painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels [MJ]	Not painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of secondary materials [kg]	Not painted	1,80E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	1,80E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy used as raw materials [MJ]	Not painted	3,43E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	3,43E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	Not painted	8,10E+01	1,50E+00	5,53E-02	1,22E-01	0,00E+00	1,40E+00	-1,15E+01
	Painted	8,31E+01	1,56E+00	5,76E-02	1,27E-01	0,00E+00	1,46E+00	-1,20E+01
Use of non-renewable primary energy used as raw material [MJ]	Not painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	Not painted	7,07E+01	9,21E+01	2,79E+01	9,86E-01	0,00E+00	2,17E+00	8,88E+00
	Painted	9,14E+01	1,14E+02	2,90E+01	1,03E+00	0,00E+00	2,26E+00	9,24E+00
Total use of renewable primary energy resources [MJ]	Not painted	8,10E+01	1,50E+00	5,53E-02	1,22E-01	0,00E+00	1,40E+00	-1,15E+01
	Painted	8,31E+01	1,56E+00	5,76E-02	1,27E-01	0,00E+00	1,46E+00	-1,20E+01
Total use of non-renewable primary energy resources [MJ]	Not painted	7,07E+01	9,21E+01	2,79E+01	9,86E-01	0,00E+00	2,17E+00	8,88E+00
	Painted	9,14E+01	1,14E+02	2,90E+01	1,03E+00	0,00E+00	2,26E+00	9,24E+00
Use of net fresh water [m^3]	Not painted	3,13E-02	1,74E-03	6,41E-05	1,41E-04	0,00E+00	4,20E-02	-1,33E-02
	Painted	4,02E-02	1,81E-03	6,67E-05	1,47E-04	0,00E+00	4,37E-02	-1,39E-02

Table 28: Indicators of resources use for ACOUSTIC | DESIGN panels L2AB25 and L2ABE25 - Reference product thickness is 65 mm: CELENIT AB or ABE 25 mm + rockwool thickness 40 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 43 mm, made of CELENIT AB or ABE 25 mm + rockwool thickness 18 mm (minimum thickness).

Indicators of resources use for ACOUSTIC | DESIGN panels CELENIT L2AB25 and L2ABE25									
Impact category		**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
		65 mm (25+40)	**43 mm (25+18)**	**65 mm (25+40)**	**65 mm (25+40)**	**65 mm (25+40)**	**65 mm (25+40)**	**65 mm (25+40)**	**65 mm (25+40)**
Use of non renewable secondary fuels [MJ]	Not painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels [MJ]	Not painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of secondary materials [kg]	Not painted	1,80E+00	3,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	1,80E+00	3,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy used as raw materials [MJ]	Not painted	3,43E-09	3,43E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	3,43E-09	3,43E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	Not painted	7,90E+01	7,61E+01	9,37E-01	3,46E-02	7,61E-02	0,00E+00	8,75E-01	-7,22E+00
	Painted	8,11E+01	7,81E+01	9,98E-01	3,68E-02	8,10E-02	0,00E+00	9,32E-01	-7,68E+00
Use of non-renewable primary energy used as raw material [MJ]	Not painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	Not painted	9,51E+01	7,09E+01	1,74E+01	6,16E-01	1,35E+00	0,00E+00	5,55E+00	-3,83E+01
	Painted	1,17E+02	9,25E+01	1,86E+01	6,56E-01	1,44E+00	0,00E+00	5,91E+00	-4,08E+01
Total use of renewable primary energy resources [MJ]	Not painted	7,90E+01	7,61E+01	9,37E-01	3,46E-02	7,61E-02	0,00E+00	8,75E-01	-7,22E+00
	Painted	8,11E+01	7,81E+01	9,98E-01	3,68E-02	8,10E-02	0,00E+00	9,32E-01	-7,68E+00
Total use of non-renewable primary energy resources [MJ]	Not painted	9,51E+01	7,09E+01	1,74E+01	6,16E-01	1,35E+00	0,00E+00	5,55E+00	-3,83E+01
	Painted	1,17E+02	9,25E+01	1,86E+01	6,56E-01	1,44E+00	0,00E+00	5,91E+00	-4,08E+01
Use of net fresh water [m^3]	Not painted	3,17E-02	2,68E-02	1,09E-03	4,01E-05	8,81E-05	0,00E+00	2,63E-02	-8,32E-03
	Painted	4,06E-02	3,58E-02	1,16E-03	4,26E-05	9,38E-05	0,00E+00	2,79E-02	-8,86E-03

Table 29: Indicators of resources use for ACOUSTIC | DESIGN panels L2ABE25C - Reference product thickness is 150 mm: CELENIT ABE 25 mm + rockwool thickness 125 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 50 mm, made of CELENIT ABE 25 mm + rockwool thickness 25 mm (minimum thickness).

Indicators of resources use for ACOUSTIC | DESIGN panel CELENIT L2ABE25C									
Impact category		**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
		150 mm (25+125)	**50 mm (25+25)**	**150 mm (25+125)**	**150 mm (25+125)**	**150 mm (25+125)**	**150 mm (25+125)**	**150 mm (25+125)**	**150 mm (25+125)**
Use of non renewable secondary fuels [MJ]	Not painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels [MJ]	Not painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of secondary materials [kg]	Not painted	3,00E+00	1,80E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	3,00E+00	1,80E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable primary energy used as raw materials [MJ]	Not painted	3,43E-09	3,43E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	3,43E-09	3,43E-09	0,00E+00	7,87E-11	1,74E-10	0,00E+00	-2,39E-08	2,43E-09
Use of renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	Not painted	9,41E+01	7,74E+01	1,51E+00	5,56E-02	1,22E-01	0,00E+00	1,41E+00	-1,16E+01
	Painted	9,62E+01	7,94E+01	1,57E+00	5,78E-02	1,27E-01	0,00E+00	1,46E+00	-1,21E+01
Use of non-renewable primary energy used as raw material [MJ]	Not painted	3,00E+00	0,00E+00	4,00E+00	5,00E+00	6,00E+00	0,00E+00	7,00E+00	8,00E+00
	Painted	3,00E+00	0,00E+00	4,00E+00	5,00E+00	6,00E+00	0,00E+00	7,00E+00	8,00E+00
Use of non-renewable primary energy. excluding renewable primary energy used as raw materials [MJ]	Not painted	2,13E+02	8,15E+01	2,40E+01	-4,01E+00	-3,82E+00	0,00E+00	1,91E+00	-6,95E+01
	Painted	2,34E+02	1,03E+02	2,51E+01	-3,97E+00	-3,74E+00	0,00E+00	-7,00E+00	-8,00E+00
Total use of renewable primary energy resources [MJ]	Not painted	9,41E+01	7,74E+01	1,51E+00	5,56E-02	1,22E-01	0,00E+00	1,41E+00	-1,16E+01
	Painted	9,62E+01	7,94E+01	1,57E+00	5,78E-02	1,27E-01	0,00E+00	1,46E+00	-1,21E+01
Total use of non-renewable primary energy resources [MJ]	Not painted	2,16E+02	8,15E+01	2,80E+01	9,90E-01	2,18E+00	0,00E+00	8,91E+00	-6,15E+01
	Painted	2,37E+02	1,03E+02	2,91E+01	1,03E+00	2,26E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water [m^3]	Not painted	5,61E-02	2,87E-02	1,75E-03	6,43E-05	1,42E-04	0,00E+00	4,22E-02	-1,34E-02
	Painted	6,50E-02	3,77E-02	1,82E-03	6,69E-05	1,47E-04	0,00E+00	4,39E-02	-1,39E-02

3.7 INDICATORS OF WASTE AND OUTPUT FLOWS

3.7.1 BUILDING | CONSTRUCTION PANELS

Table 30: Indicators of waste and output flows for BUILDING | CONSTRUCTION panels L2 - Reference product thickness is 210 mm: CELENIT N/C 50 mm + rockwool thickness 160 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 110 mm, made of CELENIT N 50 mm + rockwool thickness 60 mm (minimum thickness).

Indicators of waste and output flows for BUILDING | CONSTRUCTION panel CELENIT L2								
Impact category	**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
	210 mm (50+160)	**110 mm (50+60)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**
Hazardous waste disposed [kg]	1,85E-06	1,03E-06	1,20E-06	6,64E-08	1,46E-07	0,00E+00	8,85E-08	-3,53E-08
Non-hazardous waste disposed [kg]	7,73E+00	2,94E+00	3,95E-03	2,18E-04	4,80E-04	0,00E+00	2,20E+01	-3,81E-02
Radioactive waste disposed [kg]	8,75E-03	4,22E-03	3,20E-05	1,77E-06	3,88E-06	0,00E+00	4,51E-04	-5,69E-03
Materials for Recycling [kg]	3,27E-01	3,27E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for Energy Recovery [kg]	1,62E+01	1,12E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported electrical energy [MJ]	5,57E-03	5,57E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,99E+01	0,00E+00
Exported thermal energy [MJ]	1,13E-02	1,13E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,53E+01	0,00E+00

Table 31: Indicators of waste and output flows for BUILDING | CONSTRUCTION panels L2/C - Reference product thickness is205 mm: CELENIT N/C 25 mm + rockwool thickness 180 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 65 mm, made of CELENIT N/C 25 mm + rockwool thickness 40 mm (minimum thickness)

Indicators of waste and output flows for BUILDING | CONSTRUCTION panel CELENIT L2/C								
Impact category	**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
	205 mm (25+180)	**65 mm (25+40)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**
Hazardous waste disposed [kg]	1,81E-06	6,74E-07	1,05E-06	5,84E-08	1,29E-07	0,00E+00	7,79E-08	-3,10E-08
Non-hazardous waste disposed [kg]	8,67E+00	1,96E+00	3,48E-03	1,92E-04	4,23E-04	0,00E+00	1,93E+01	-3,36E-02
Radioactive waste disposed [kg]	9,12E-03	2,77E-03	2,82E-05	1,55E-06	3,42E-06	0,00E+00	3,97E-04	-5,01E-03
Materials for Recycling [kg]	2,09E-01	2,09E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for Energy Recovery [kg]	1,42E+01	7,31E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported electrical energy [MJ]	3,56E-03	3,56E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,75E+01	0,00E+00
Exported thermal energy [MJ]	7,23E-03	7,23E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,99E+01	0,00E+00

Table 32: Indicators of waste and output flows for BUILDING | CONSTRUCTION panels F2 - Reference product thickness is 210 mm: CELENIT N/C 50 mm + wood fibre thickness 160 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 110 mm, made of CELENIT N 50 mm + wood fibre thickness 60 mm (minimum thickness)

Indicators of waste and output flows for BUILDING / CONSTRUCTION panel CELENIT F2								
Impact category	**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
	210 mm (50+160)	**110 mm (50+60)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**	**210 mm (50+160)**
Hazardous waste disposed [kg]	1,77E-06	1,00E-06	1,20E-06	6,64E-08	1,46E-07	0,00E+00	8,85E-08	-3,53E-08
Non-hazardous waste disposed [kg]	1,34E-01	8,47E-02	3,95E-03	2,18E-04	4,80E-04	0,00E+00	2,20E+01	-3,81E-02
Radioactive waste disposed [kg]	6,38E-03	3,33E-03	3,20E-05	1,77E-06	3,88E-06	0,00E+00	4,51E-04	-5,69E-03
Materials for Recycling [kg]	3,27E-01	3,27E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for Energy Recovery [kg]	1,62E+01	1,12E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported electrical energy [MJ]	5,57E-03	5,57E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,99E+01	0,00E+00
Exported thermal energy [MJ]	1,13E-02	1,13E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,53E+01	0,00E+00

Table 33: Indicators of waste and output flows for BUILDING | CONSTRUCTION panels F2/C - Reference product thickness is 205 mm: CELENIT N/C 25 mm + wood fibre thickness 180 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 65 mm, made of CELENIT N/C 25 mm + wood fibre thickness 40 mm (minimum thickness)

Indicators of waste and output flows for BUILDING | CONSTRUCTION panel CELENIT F2/C								
Impact category	**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
	205 mm (25+180)	**65 mm (25+40)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**	**205 mm (25+180)**
Hazardous waste disposed [kg]	1,73E-06	6,55E-07	1,05E-06	5,84E-08	1,29E-07	0,00E+00	7,79E-08	-3,10E-08
Non-hazardous waste disposed [kg]	1,23E-01	5,50E-02	3,48E-03	1,92E-04	4,23E-04	1,00E+00	1,93E+01	-3,36E-02
Radioactive waste disposed [kg]	6,45E-03	2,18E-03	2,82E-05	1,55E-06	3,42E-06	2,00E+00	3,97E-04	-5,01E-03
Materials for Recycling [kg]	2,09E-01	2,09E-01	0,00E+00	0,00E+00	0,00E+00	3,00E+00	0,00E+00	0,00E+00
Material for Energy Recovery [kg]	1,42E+01	7,31E+00	0,00E+00	0,00E+00	0,00E+00	4,00E+00	0,00E+00	0,00E+00
Exported electrical energy [MJ]	3,56E-03	3,56E-03	0,00E+00	0,00E+00	0,00E+00	5,00E+00	1,75E+01	0,00E+00
Exported thermal energy [MJ]	7,23E-03	7,23E-03	0,00E+00	0,00E+00	0,00E+00	6,00E+00	3,99E+01	0,00E+00

3.7.2 ACOUSTIC | DESIGN PANELS

Table 34: Indicators of waste and output flows for ACOUSTIC | DESIGN panels AB/F - Thickness 40 mm

Indicators of waste and output flows for ACOUSTIC | DESIGN panel CELENIT AB/F								
Impact category		**A1-A3 40 mm (25+15)**	**A4 40 mm (25+15)**	**C1 40 mm (25+15)**	**C2 40 mm (25+15)**	**C3 40 mm (25+15)**	**C4 40 mm (25+15)**	**D 40 mm (25+15)**
Hazardous waste disposed [kg]	Not painted	5,78E-07	1,24E-06	4,59E-08	1,01E-07	0,00E+00	6,11E-08	-2,44E-08
	Painted	4,20E-08	1,29E-06	4,77E-08	1,05E-07	0,00E+00	6,36E-08	-2,53E-08
Non-hazardous waste disposed [kg]	Not painted	5,39E-01	4,20E-03	1,51E-04	3,32E-04	0,00E+00	1,52E+01	-2,63E-02
	Painted	5,50E-01	4,37E-03	1,57E-04	3,45E-04	0,00E+00	1,58E+01	-2,74E-02
Radioactive waste disposed [kg]	Not painted	5,39E-01	4,20E-03	1,51E-04	3,32E-04	0,00E+00	1,52E+01	-2,63E-02
	Painted	5,50E-01	4,37E-03	1,57E-04	3,45E-04	0,00E+00	1,58E+01	-2,74E-02
Materials for Recycling [kg]	Not painted	2,18E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	2,18E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for Energy Recovery [kg]	Not painted	1,12E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	1,16E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported electrical energy [MJ]	Not painted	3,71E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,37E+01	0,00E+00
	Painted	3,71E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,43E+01	0,00E+00
Exported thermal energy [MJ]	Not painted	7,55E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,13E+01	0,00E+00
	Painted	7,55E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,26E+01	0,00E+00

Table 35: Indicators of Indicators of waste and output flows for ACOUSTIC | DESIGN panels L2AB25 and L2ABE25 - Reference product thickness is 65 mm: CELENIT AB or ABE 25 mm + rockwool thickness 40 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 43 mm, made of CELENIT AB or ABE 25 mm + rockwool thickness 18 mm (minimum thickness).

Indicators of waste and output flows for ACOUSTIC | DESIGN panels CELENIT L2AB25 and L2ABE25									
Impact category		**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
		65 mm (25+40)	**43 mm (25+18)**	**65 mm (25+40)**	**65 mm (25+40)**	**65 mm (25+40)**	**65 mm (25+40)**	**65 mm (25+40)**	**65 mm (25+40)**
Hazardous waste disposed [kg]	Not painted	6,11E-07	4,81E-07	7,75E-07	2,87E-08	6,30E-08	0,00E+00	3,82E-08	-1,52E-08
	Painted	7,49E-08	-5,54E-08	8,25E-07	3,05E-08	6,71E-08	0,00E+00	4,07E-08	-1,62E-08
Non-hazardous waste disposed [kg]	Not painted	1,44E+00	6,74E-01	2,63E-03	9,43E-05	2,07E-04	0,00E+00	9,49E+00	-1,65E-02
	Painted	1,45E+00	6,86E-01	2,80E-03	1,00E-04	2,21E-04	0,00E+00	1,01E+01	-1,75E-02
Radioactive waste disposed [kg]	Not painted	2,43E-03	1,71E-03	2,15E-05	7,62E-07	1,68E-06	0,00E+00	1,95E-04	-2,46E-03
	Painted	2,91E-03	2,19E-03	2,29E-05	8,12E-07	1,79E-06	0,00E+00	2,07E-04	-2,61E-03
Materials for Recycling [kg]	Not painted	2,18E-01	2,18E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	2,18E-01	2,18E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for Energy Recovery [kg]	Not painted	6,99E+00	6,20E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	7,44E+00	6,65E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported electrical energy [MJ]	Not painted	3,71E-03	3,71E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,59E+00	0,00E+00
	Painted	3,71E-03	3,71E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,15E+00	0,00E+00
Exported thermal energy [MJ]	Not painted	7,55E-03	7,55E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,96E+01	0,00E+00
	Painted	7,55E-03	7,55E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,08E+01	0,00E+00

Table 36: Indicators of Indicators of waste and output flows for ACOUSTIC | DESIGN panels L2ABE25C - Reference product thickness is 150 mm: CELENIT ABE 25 mm + rockwool thickness 125 mm (maximum thickness). The maximum impact variation is reported for A1-A3, registered for the thickness 50 mm, made of CELENIT ABE 25 mm + rockwool thickness 25 mm (minimum thickness)

Indicators of waste and output flows for ACOUSTIC | DESIGN panelsCELENIT L2ABE25C									
Impact category		**A1-A3**		**A4**	**C1**	**C2**	**C3**	**C4**	**D**
		150 mm (25+125)	**50 mm (25+25)**	**150 mm (25+125)**	**150 mm (25+125)**	**150 mm (25+125)**	**150 mm (25+125)**	**150 mm (25+125)**	**150 mm (25+125)**
Hazardous waste disposed [kg]	Not painted	1,09E-06	5,11E-07	1,24E-06	4,61E-08	1,01E-07	0,00E+00	6,14E-08	-2,45E-08
	Painted	5,57E-07	-2,54E-08	1,29E-06	4,79E-08	1,05E-07	0,00E+00	6,39E-08	-2,54E-08
Non-hazardous waste disposed [kg]	Not painted	5,49E+00	1,13E+00	4,22E-03	1,51E-04	3,33E-04	0,00E+00	1,52E+01	-2,64E-02
	Painted	5,50E+00	1,14E+00	4,39E-03	1,58E-04	3,46E-04	0,00E+00	1,58E+01	-2,75E-02
Radioactive waste disposed [kg]	Not painted	6,15E-03	2,03E-03	3,45E-05	1,22E-06	2,69E-06	0,00E+00	3,13E-04	-3,95E-03
	Painted	6,63E-03	2,51E-03	3,59E-05	1,27E-06	2,80E-06	0,00E+00	3,25E-04	-4,10E-03
Materials for Recycling [kg]	Not painted	2,18E-01	2,18E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	2,18E-01	2,18E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for Energy Recovery [kg]	Not painted	1,12E+01	6,72E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	Painted	1,17E+01	7,17E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported electrical energy [MJ]	Not painted	3,71E-03	3,71E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,38E+01	0,00E+00
	Painted	3,71E-03	3,71E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,44E+01	0,00E+00
Exported thermal energy [MJ]	Not painted	7,55E-03	7,55E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,15E+01	0,00E+00
	Painted	7,55E-03	7,55E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,27E+01	0,00E+00

3.8 INFORMATION ON BIOGENIC CARBON CONTENT

3.8.1 BUILDING | CONSTRUCTION PANELS

CELENIT L2		
Biogenic carbon content in the product [kg]	CELENIT N/C 50 mm with rockwool 160 mm	2,74E+01
	CELENIT N/C 50 mm with rockwool 60 mm	2,74E+01
Biogenic carbon content in the packaging [kg]	CELENIT N/C 50 mm with rockwool 160 mm	2,17E-01
	CELENIT N/C 50 mm with rockwool 60 mm	1,50E-01

CELENIT L2/C		
Biogenic carbon content in the product [kg]	CELENIT N/C 25 mm with rockwool 180 mm	1,75E+01
	CELENIT N/C 25 mm with rockwool 40 mm	1,75E+01
Biogenic carbon content in the packaging [kg]	CELENIT N/C 25 mm with rockwool 180 mm	1,91E-01
	CELENIT N/C 25 mm with rockwool 40 mm	9,77E-02

CELENIT F2		
Biogenic carbon content in the product [kg]	CELENIT N/C 50 mm with wood fibre 160 mm	1,40E+02
	CELENIT N/C 50 mm with wood fibre 60 mm	6,95E+01
Biogenic carbon content in the packaging [kg]	CELENIT N/C 50 mm with wood fibre 160 mm	2,17E-01
	CELENIT N/C 50 mm with wood fibre 60 mm	1,50E-01

CELENIT L2/C		
Biogenic carbon content in the product [kg]	CELENIT N/C 25 mm with wood fibre 180 mm	1,44E+02
	CELENIT N/C 25 mm with wood fibre 40 mm	4,56E+01
Biogenic carbon content in the packaging [kg]	CELENIT N/C 25 mm with wood fibre 180 mm	1,91E-01
	CELENIT N/C 25 mm with wood fibre 40 mm	9,77E-02

3.8.2 ACOUSTIC | DESIGN PANELS

CELENIT AB/F		
Biogenic carbon content in the product [kg]	Not painted	1,82E+01
	Painted	1,82E+01
Biogenic carbon content in the packaging [kg]	Not painted	1,50E-01
	Painted	1,56E-01

CELENIT L2AB25 and L2ABE25		CELENIT AB25 (and ABE25) with rockwool 40 mm	CELENIT AB25 (and ABE25) with rockwool 18 mm
Biogenic carbon content in the product [kg]	Not painted	1,82E+01	1,82E+01
	Painted	1,82E+01	1,82E+01
Biogenic carbon content in the packaging [kg]	Not painted	9,35E-02	8,29E-02
	Painted	9,96E-02	8,89E-02

CELENIT L2ABE25C		CELENIT ABE25 with rockwool 125 mm	CELENIT ABE25 with rockwool 25 mm
Biogenic carbon content in the product [kg]	Not painted	1,82E+01	1,82E+01
	Painted	1,82E+01	1,82E+01
Biogenic carbon content in the packaging [kg]	Not painted	1,50E-01	8,99E-02
	Painted	1,56E-01	9,59E-02

4 REFERENCE

Ecoinnovazione. 2020. Technical report: LCA study of acoustic and thermal panels produced by CELENIT S.p.A.

EN 15804:2012+A1:2019 “Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products”

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International EPD® System. 2019. PCR 2019:14 Construction products and construction services. version 1

International Organisation for Standardization (ISO). 2006a Environmental management – Life Cycle assessment – Principles and framework. ISO 14040:2006. Geneva

International Organisation for Standardization (ISO). 2006b Environmental management – Life Cycle assessment – Requirements and guidelines. ISO 14040:2006. Geneva

International Organisation for Standardization (ISO). 2006c Environmental labels and declarations -- Type III environmental declarations -- Principles and procedures. ISO 14025:2006. Geneva

6 ADDITIONAL INFORMATION

6.1 ADDITIONAL INFORMATION CONCERNING THE PROGRAMME AND THE EPD

EPDs within the same product category but from different programme may not be comparable.

EPDs of construction products may not be comparable if they do not comply with EN 15804. Environmental product declarations within the same product category from different programs may not be comparable. This EPD and the PCR 2019:14 "Construction products"are available on the website of The International EPD® System (www.environdec.com).

The verifier and the Programme Operator do not make any claim nor have any responsibility of the legality of the products included in the present EPD.

The LCA study and the present EPD have been issued with the technical scientific support of Ecoinnovazione S.r.l.. spin-off ENEA (http://ecoinnovazione.it/?lang=en).

6.2 ADDITIONAL INFORMATION ON THE PRODUCT AND ON THE COMPANY

To get more information about products and this environmental declaration or about CELENIT S.p.A. activities please contact: arch. Piero Svegliado (techsupport@celenit.com; ph. +39 049 5993544).

More information about technical information, safe and effective installation, use and disposal are available on the website: www.celenit.com.

7 VERIFICATION AND REGISTRATION

CEN standard EN 15804 served as core PCR	
EPD Programme:	The International EPD® System For more information – www.environdec.it
PCR:	PCR 2019:14 Construction products version 1
PCR review was conducted by:	The Technical Committee of the International EPD® System. Chair of the TC: Massimo Marino Contact: info@environdec.com
EPD Registration n°:	S-P-02276
EPD validity:	5 years
EPD valid within the following geographical area:	Global
Technical support:	Ecoinnovazione S.r.l. – spin-off ENEA Via d'Azeglio 51, 40123 Bologna www.ecoinnovazione.it
Independent verification of the declaration and data according to ISO 14025:	External
Third party verifier:	TECNALIA R&I Certification
Accredited by:	Accreditation no. 125/C-PR283 by ENAC