DEKLARACJA WŁAŚCIWOŚCI UŻYTKOWYCH

Nr 01852

1. Unique identification code of the product-type: **Ceresit Ceretherm Ceramic EPS**
2. Intended use/es: **This ETICS is intended to be used as external insulation applied on the walls of buldings. The walls are made of masonry (bricks, blocks, stones, etc.) or concrete (cast on site or as prefabricated panels.**
3. Manufacturer: **Henkel Polska Operations Sp. z o.o., ul. Domaniewska 41, 02-672 Warszawa**
4. Authorized representative: **Not relevant**
5. System/s of assessment and verification of constancy of performance: **System 2+**

6a. Harmonized standard/s: **Not relevant**

6b. European Assessment Document: **EAD 040287-00-0404**

European Technical Assessment: **ETA-23/0066 of 31/07/2023**

Technical Assessment Body: **Instytut Techniki Budowlanej**

Notified body/ies: **Instytut Techniki Budowlanej, nr 1488, Zakład Certyfikacji 1488-CPR-0700/Z**

7. Declared performance/s:

No	Essential characteristic	Assessment method					
Safety in case of fire (BWR 2)							
1.	Reaction to fire Class according to EN 13501-1	ETICS CERESIT CERETHERM CERAMIC EPS: Base adhesiwes: Ceresit CT 80, CT 83, EPS panels: Class E according to EN 13501-1, Glass fibre meshes: Ceresit CT 325, Base coats: Ceresit CT 80, CT 85, Adhesiwe for tiles: Ceresit CM 16, CM 16 PRO, CM 17 PRO, CM 22, Cladding tiles, Grouts: Ceresit CE 40, CE 43, CT 32					B – s1, d0
2.	Façade fire performance	No performance assessed					
Hygiene, health and the environment6 (BWR 3)							
3.	Water absorption of the reinforced base coad.	**Wodochłonność warstwy zbrojonej**		**After 3 minutes (kg/m²)**	**After 1 hour (kg/m²)**	**After 24 hours (kg/m²)**	
		Ceresit CT 80		0,04	0,06	0,31	
		Ceresit CT 85		0,02	0,02	0,16	
		Water absorption of the ETICS			**After 3 minutes (kg/m²)**	**After 1 hour (kg/m²)**	**After 24 hours (kg/m²)**
		Base coat Ceresit CT 80 + cladding adhesive + Cladding tiles indicated hereafter + grout	Ceramic tiles		0,01	0,00	0,01
			Natural stone tiles - granite		0,01	0,03	0,12
			Natural stone tiles - sandstone		0,84	0,74	1,41
		Base coat Ceresit CT 85 + cladding adhesive + Cladding tiles indicated hereafter + grout	Ceramic tiles		0,01	0,00	0,02
			Natural stone tiles - granite		0,01	0,03	0,12
			Natural stone tiles - sandstone		0,77	0,63	1,24
4.	Water vapour permeability (resistance to water vapour diffusion)	**Components**		**Equivalent air thickness Sd,m**		**Water vapor diffusion resistance Z,(m^2 * s * Pa)/kg**	
		Base coat Ceresit CT 83		0,04		$2.09 * 10^8$	
		Base coat Ceresit CT 80 (with reinforcement)		0,06		$3,13 * 10^8$	
		Base coat Ceresit CT 85 (with reinforcement)		0,06		$2.70 * 10^8$	
		Cladding adhesive Ceresit CM 17 PRO		0,07		$3,21 * 10^8$	
		Grout Ceresit CE 40		0,10		$5,05 * 10^8$	
		Grout Ceresit CE 43		0,08		$4,10 * 10^8$	
		Grout Ceresit CT 32		0,05		$2.42 * 10^8$	
		ETICS with maximum diffusion resistance			**EPS Thickness, mm**	**Water vapor diffusion resistance Z,(m^2 * s * Pa)/kg**	
		ETICS configuration: Base adhesive Ceresit CT 80 Base adhesive Ceresit CT 80 (with reinforcement) Cladding adhesive Ceresit CM 17 PRO. Grout Ceresit CE 40 (max. width 10 mm) Cladding tiles natural stone tiles – granite (max. thickness 20 mm) (percentage of granite tiles is 98% percentage of grout is 2%)			50	$9,96 * 10^{11}$	
					100	$1,01 * 10^{12}$	
					150	$1,03 * 10^{12}$	
					200	$1,04 * 10^{12}$	
					250	$1,06 * 10^{12}$	
					300	$1,07 * 10^{12}$	
		µEPS=60, µ ceramic tiles=40, µ granite=10000, µ sandstone=40, wg EN 10456					
5.	Accelerated ageing behavior	**Accelerated ageing behaviour Combined hygrothermal and freeze-thaw cycles.**					
		The ETICS is assessed resistant to combined hygrothermal and freeze-thaw cycles on the rig. ETICS passed the test without defects. Resistant to combined hygrothermal and freeze-thaw cycles.					
		Bond strength after combined hygrothermal and freeze-thaw cycles on the rig.					
		Insulation product	ETICS configuration		Rupture type	Bond strength after combined hygrothermal and freeze-thaw cycles, MPa	Ratio: Bond strength after combined hygrothermal and freeze-thaw cycles / bond strength in dry conditions
						Mean value / Min value	
		EPS panels	Base coat Ceresit CT 80 + cladding adhesive + Cladding tiles indicated hereafter + grout	Ceramic tiles	Failure in the insulation product	0,15 / 0,14	1,66
				Natural stone tiles - granite	Failure in the insulation product	0,16 / 0,15	1,77
				Natural stone tiles - sandstone	Failure in the insulation product	0,14 / 0,13	1,55
		EPS panels	Base coat	Ceramic tiles	Failure in the insulation product	0,15 / 0,14	1,25

			Ceresit CT 85 + cladding adhesive + Cladding tiles indicated hereafter + grout	Natural stone tiles - granite	Failure in the insulation product	0,15	0,14	1,25
				Natural stone tiles - sandstone	Failure in the insulation product	0,15	0,13	1,25

Safety and accessibility in use (BWR 4)

6. Wind load resistance — No relevant

7. Impact resistance

Impact resistance

	Base coat Ceresit CT 80 + cladding adhesive + Cladding tiles indicated hereafter + grout			Base coat Ceresit CT 85 + cladding adhesive + Cladding tiles indicated hereafter + grout		
	Ceramic tiles	Natural stone tiles - granite	Natural stone tiles - sandstone	Ceramic tiles	Natural stone tiles - granite	Natural stone tiles - sandstone
	Hard body impact					
H1 (1 J)	-	-	-	-	-	-
H2 (3 J) H3 (10 J)	Skin not deteriorated	Skin not deteriorated	Skin not deteriorated	Skin not deteriorated	Skin not deteriorated	Skin not deteriorated
	Soft body impact					
S1 (10 J) S 3 (300 J)	-	-	-	-	-	-
S2 (60 J) S 4 (400 J)	Skin not deteriorated	Skin not deteriorated	Skin not deteriorated	Skin not deteriorated	Skin not deteriorated	Skin not deteriorated
	Use Category					
	Category I	Category I	Category I	Category I	Category I	Category I
	Category I; a zone readily accessible at ground level to the public and vulnerable to hard body ompacts but not subjected to abnormally rough use.					

8. Bond strength

Bond strength between the base adhesive and the substrate.

Substrate	Base adhesive	Conditioning before the test	Rupture type	Bond strength (kPa)
Concrete	Ceresit CT 80	Initial state (dry conditions)	100 % cohesive failure in the base adhesive	≥ 250
		2 days immersion in water and 2 horus drying		≥ 80
		2 days immersion in water and min 7 days drying		≥ 250
Concrete	Ceresit CT 83	Initial state (dry conditions)	100 % cohesive failure in the base adhesive	≥ 250
		2 days immersion in water and 2 horus drying		≥ 80
		2 days immersion in water and min 7 days drying		≥ 250

Bond strength between the adhesive and the insulation product

Insulation product	adhesive	Conditioning before the test	Rupture type	Bond strength (kPa)
EPS panels	Ceresit CT 80	Initial state (dry conditions)	100 % adhesive failure in the insulation product	≥ 80
		2 days immersion in water and 2 horus drying	Adhesive / cohesive failure in the insulation product	≥ 80
		2 days immersion in water and min 7 days drying	100 % cohesive failure in the insulation product	≥ 80
EPS panels	Ceresit CT 83	Initial state (dry conditions)	100 % adhesive failure in the insulation product	≥ 80
		2 days immersion in water and 2 horus drying		≥ 80
		2 days immersion in water and min 7 days drying	100 % cohesive failure in the insulation product	≥ 80
EPS panels	Ceresit CT 85	Initial state (dry conditions)	Adhesive / cohesive failure in the insulation product	≥ 80
		2 days immersion in water and 2 horus drying	Adhesive / cohesive failure in the insulation product	≥ 80
		2 days immersion in water and min 7 days drying	100 % cohesive failure in the insulation product	≥ 80

Bond strength between the external layers (skin and reinforced base coat) and the insulation product

Insulation product	External layers		Conditioning before the test	Rupture type	Bond strength (kPa)
EPS panels	Base coat Ceresit CT 80 + cladding adhesive + Cladding tiles indicated hereafter + grout	Ceramic tiles Natural stone tiles - granite Ceramic tiles	Initial state (dry conditions) 2 days immersion in water and 2 horus drying	Adhesive / cohesive failure in the insulation product	Min. 70
			2 days immersion in water and min 7 days drying	100 % adhesive failure in the insulation product	80
			Initial state (dry conditions)	100 % cohesive failure in the insulation product	100
		Natural stone tiles - granite Ceramic tiles	Initial state (dry conditions)	Adhesive / cohesive failure in the insulation product	90
			2 days immersion in water and 2 horus drying	100 % adhesive failure in the insulation product	80
			2 days immersion in water and min 7 days drying	100 % cohesive failure in the insulation product	110
		Natural stone tiles - granite	Initial state (dry conditions)	Adhesive / cohesive failure in the insulation product	70
			2 days immersion in water and 2 horus drying	100 % adhesive failure in the insulation product	80
			2 days immersion in water and min 7 days drying	100 % cohesive failure in the insulation product	80

Insulation product	External layers		Conditioning before the test	Rupture type	Bond strength (kPa)
					Min.
Płyty EPS	Base coat Ceresit CT 85 + cladding adhesive + Cladding tiles indicated hereafter + grout	Ceramic tiles Natural stone tiles - granite	Initial state (dry conditions)	Adhesive / cohesive failure in the insulation product	100
			2 days immersion in water and 2 horus drying	100 % adhesive failure in the insulation product	100
			2 days immersion in water and min 7 days drying	100 % cohesive failure in the insulation product	110
		Ceramic tiles Natural stone tiles - granite	Initial state (dry conditions)	Adhesive / cohesive failure in the insulation product	110
			2 days immersion in water and 2 horus drying	100 % adhesive failure in the insulation product	90

					2 days immersion in water and min 7 days drying	100 % cohesive failure in the insulation product	110
				Ceramic tiles	Initial state (dry conditions)	Adhesive / cohesive failure in the insulation product	110
					2 days immersion in water and 2 horus drying	100 % adhesive failure in the insulation product	80
					2 days immersion in water and min 7 days drying	100 % cohesive failure in the insulation product	110
9	Tensile strength of thermal insulation panel.			No performance assessed (See annex B for thermal insulation product characteristics – in case of dry conditions)			
10	Shear strength of the thermal insulation panel.						
11	Dead load behaviour			No performance assessed			
12	Pull-through resistance			Not revlevant.			
13	Pull-out resistance (foam block test)			Not revlevant.			
	Protection against noise (BWR 5)						
14	Improvement of airborne sound insulation			No performance assessed			
	Energy econom and heat retention (BWR 6)						
15	Thermal conductivity and thermal resistance.			See Annex A7.			

7. Appropriate Technical Documentation and/or Specific Technical Documentation: **Not relevant**

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Joanna Jarzyna
Chemist Product Development
AC Global PD Fasade Systems

Joanna Jarzyna
(imię i nazwisko , stanowisko)

(podpis)

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(podpis)

Stąporków, 10.10.2023

(miejsce i data wydania)