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Authorised and notified according to Article 29 of the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011

European Technical Assessment ETA-25/1032 of 2025/11/25

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:	Rockpanel Premium A2 with undercut anchor
Product family to which the above construction product belongs:	Prefabricated mineral wool boards with organic or inorganic finish and with specified fastening system
Manufacturer:	ROCKWOOL B.V. Industrieweg 15 NL-6045 JG Roermond Tel. +31 475 353000
Manufacturing plant:	ROCKWOOL B.V. / Rockpanel Konstruktieweg 2 NL-6045 JD Roermond
This European Technical Assessment contains:	14 pages including 4 annexes which form an integral part of the document
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:	European Assessment Document (EAD) 090001-01-0404 for Prefabricated compressed mineral wool boards with organic or inorganic finish and with specified fastening system
This version replaces:	

II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of product

General
Rockpanel Premium A2 is made from prefabricated compressed Rockwool panels with thermo-hardening synthetic binders. The boards are fastened to an aluminium subframe. Fastening to the aluminium is carried out with a concealed anchoring system.
Mechanical fasteners and sub-construction are specified by the ETA-holder.

The physical properties of the panels are indicated in Table 1.

Table 1:

Property:	**Value**
Thickness, nominal	11 mm
Length, max	3050 mm
Width, max	1250 mm
Density, nominal	1250 kg/m^3
Bending strength, length and width	$f_{05} \geq 25.5$ N/mm^2
Modulus of elasticity	m(E) $\geq$ 4740 N/mm^2
Thermal conductivity EN 10456	0.55 W/(m·K)
Cumulative dimensional change %	Length: 0.064 Width: 0.064
Coefficient of thermal expansion, length and width	$\alpha = 9.7$ (10^{-6} °K^{-1})
Coefficient of moisture expansion 23°C/50% RH to 92% RH, length and width	0.206 mm/m after 4 days

Finishes
The finish is indicated in Table 2. The coating is provided in several colours and designs.

The Rockpanel Premium A2 includes the ProtectPlus finish i.e. the panels are surface treated on one side with water-borne primer and a water-borne coloured paint, which has been provided with an extra anti-graffiti clear coat on top of the colour paint.

Table 2:

Rockpanel Premium A2: (water-borne polymer emulsion coating with anti-graffiti clear coat)	Clear coat or Clear coat with wood texture “Woods” e.g.: Teak, Maple or stone texture "Stones" e.g.: Mineral Chalk, Basalt Anthracite or clear coat with metallic particles e.g. Metallics Aluminium, Brilliant Karbo, Chameleon

Colourfastness
The colourfastness of the panels is indicated in Table 3.

Table 3:

Property	**Value (ISO 105 A02)**
Colour fastness after 5000 hours artificial weathering (TR010 climate class S)	Rockpanel Premium A2: 4 or better

Subframes
The panels are attached to the building by fixing to a subframe of aluminium.

The minimum thickness of the aluminium profiles is 1.5 mm. The aluminium is AW-6060, AW-6063, AW-6005A or equivalent according to EN 755-2. The $R_m/R_{p0,2}$ value is $\geq$ 170/140 for profile T6 and $\geq$ 195/150 for profile T66.

Joints
The horizontal joints between the panels are open with a width between 8 and 10 mm.

Fasteners for the concealed anchoring system
Secret fixing clips are attached to the back of the panels by means of two SFS TU-S 6x13 blind fasteners (no 1.4401 according to EN 10088) for each clip.
Horizontal channel profiles are fixed to the vertical ‘T’ and or ‘L’ profiles.

The maximum fixing distances and hole diameter, appear from Table 11 and Table 12 of the ETA.

Design value of the axial load appears from Annex 3, Table 13 of the ETA.

2 Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

The boards are intended for external cladding according to Figure 1. The cladding on the primary vertical aluminium sub-construction and horizontal channel profiles with mechanically fixed boards shall be carried out with ventilated cavities at the back.

The provisions made in this European Technical Assessment are based on an assumed intended working life of the kit of 50 years.

In addition, for aluminium support systems intended to be used for facades:
In some member states national climate conditions may reduce the service life of the aluminium support system to 35 years or more.

An additional assessment of the aluminium support system might be necessary to comply with Member State regulations or administrative provisions.

The indications given on the working life cannot be interpreted as a guarantee given by the producer or Assessment Body, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

Characteristic	Assessment of characteristic
3.2 Safety in case of fire (BWR 2)	
Reaction to fire	The aluminium profiles are classified as Euroclass A1 Classification of panel: See Table 4
3.3 Hygiene, health and the environment (BWR 3)	
Dangerous substances	No performance assessed Formaldehyde concentration 0.0105 mg/m^3, Formaldehyde class E1. The used fibres are not potential carcinogenic No biocides are used in the Rockpanel boards No flame retardant is used in the boards No cadmium is used in the boards.
Water vapour permeability	No performance assessed
Water permeability incl. joints for non-ventilated applications	No performance assessed
Drainability	No performance assessed

3.4 Safety and accessibility in use (BWR 4)

In absence of national regulations, the design values X_d may be calculated as indicated in the ETA (see Table 13). Below the safety factors are listed which have been used in the calculation of the design values.

Pull-out resistance of boards	**TU-S blind fastener** Fastener specification according to Table 5. Annex 3 Table 13 row *(7)* contains the design value of the pull-out strength
Wind load resistance	**TU-S blind fastener** Fastener specification according to Table 5. Annex 3 Table 13 row *(9)* contains the average wind load resistance (N/m²). Kit failure due to conus failure of the concealed fixing. Maximum deformations in the wind load tests for M/E/C: 21/19/26 (E/C: span 750/600 and for M: span 750/520)
Design value of axial loads Design value X_d obtained by dividing the characteristic value X_k by a partial factor γ_m : $X_d = X_k / \gamma_m$ The design value X_d of a material property can be expressed in general terms as $X_d = \eta * X_k / \gamma_m$	**TU-S blind fastener** The design value of the axial load $X_d = X_k / \gamma_m$ for the combination TU-S anchor and 11 mm Premium A2 boards can be found in Annex 3 Table 13 row *(14)*. The following material factors have been used: For Rockpanel: $\gamma_m = 1.6$ The conversion factor η depends on the fixing type Concealed fixing: $\eta = 0.61$ for hangers located in the 'centre' and 'edges' or the panel. $\eta = 0.51$ for hangers located in the corner of the panel

Characteristic	Assessment of characteristic
Characteristic shear strength fixing clip with two anchors	Load 0° Secret fixing clip in the 'Corner': 3279 N Load 60° relative to the plane of the panel: 973 N Load 30° relative to the plane of the panel: 1441 N
Deformation shear	Secret fixing clip with two anchors: 2.5 mm
Impact resistance	See Table 6 and Annex 4 Table 14 for Use category
Wind load resistance	See Table 8 and 9, for the locations see Table 10
Mechanical resistance	See section 1, Table 1

3.8 Aspects of durability

Resistance to hygrothermal cycles	Pass
Dimensional stability	See Table 7
Immersion in water without UV	Not relevant
Humidity and NaCl	Not relevant
Humidity and SO_2	Not relevant
Resistance to Xenon Arc exposure	Pass

Reaction to fire

Table 4. Euroclass classification of construction with Rockpanel Premium A2
The panels have been classified in accordance with EN 13501-1 with the following parameters

Fixing method	Ventilated or non-ventilated	Vertical aluminium profiles
Mechanically fixed	Ventilated with ≥ 20 mm cavity	A2-s1,d0

Field or application
Further to the limitations described in section 1 of the ETA, the following field of application applies.

Euroclass classification
The classification mentioned in Table 4 is valid for the following end use conditions.

Mounting:
- Mechanically fixed to an aluminium subframe by means of an undercut anchor.
- The panels are backed with min. 50 mm mineral wool insulation with density 30-70 kg/m^3 according to EN 13162 with a cavity between the panels and the insulation.

Substrates:
- Concrete walls, masonry walls.

Insulation:
- Ventilated constructions: The subframe is backed with min. 50 mm mineral wool insulation with density 30-70 kg/m3 according to EN 13162 with a cavity of minimal 20 mm between the panels and the insulation.
- Results are also valid for all greater thickness of mineral wool insulation layer with the same density and the same or better reaction to fire classification.
- Results are also valid for the panels without insulation, if the substrate chosen according to EN 13238 is made of panel with Euroclass A1 or A2 (e.g. fibre-cement panels).

Subframe:
- Test results are only valid for an aluminium subframe.

Fixings:
- The results are also valid when using smaller mounting distances.

Cavity:
- Unfilled.
- The depth of the cavity is minimum 20 mm.
- Test results are also valid for other higher thicknesses of air space between the back of the board and the insulation behind the subframe.

Joints:
- Joints are open.
- The result from a test with an open horizontal joint is also valid for the same type of panel used in applications with horizontal joints closed by steel or aluminium profiles.
- Maximum joint width 10 mm.

The classification is valid for the following product parameters:

Thickness
- Nominal 11 mm

Density
- Nominal 1250 kg/m3

Aspects related to the performance of the product

All materials shall be manufactured by ROCKWOOL B.V. or by subcontractors under the responsibility of ROCKWOOL B.V.

The European Technical Assessment is issued for the product on the basis of agreed data/information, deposited with ETA-Danmark, which describes the product that has been assessed and judged. Changes to the product or production process, which could result in this deposited data/information being incorrect, should be notified to ETA-Danmark before the changes are introduced. ETA-Danmark will decide whether or not such changes affect the ETA and consequently the validity of the CE marking on the basis of the ETA and if so whether further assessment or alterations to the ETA, shall be necessary.

Installation details and application details for the man on site are given by ROCKWOOL B.V. / Rockpanel in the manufacturer's application guide technical dossier which forms part of the documentary material for this ETA. On every pallet label and/or on the protective film of every board the website is printed which guides the end user to the most actual information.

The boards are in general mounted with a joint width of between 5 and 10 mm.

If junctions are to be sealed, only durable sealants should be used with a good adhesion on the edges of the boards and a good UV-stability. To prevent sticking to the subframe, a PE-film or tape can be used.

The boards for external cladding shall not be fixed over building or settlement joints. Where settlement joints are located in the building the same movements of the building and substructure shall be possible in the external cladding.

The holes for the undercut anchors are drilled into the panels not less than 80 mm from a horizontal edge and not less than 80 mm from a vertical edge (centre from the two fixings). For correct drilling a 6.0 mm blind hole drill with depth control must be used.

4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base

4.1 AVCP System

According to the decision 2003/640/EC of the European Commission as amended, the system(s) of assessment and verification or constancy of performance (see Annex V to Regulation (EU) No 305/2011) is 1, since there is a clearly identifiable stage in their production which results in an improvement of fire performance due to the limiting of organic material.

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

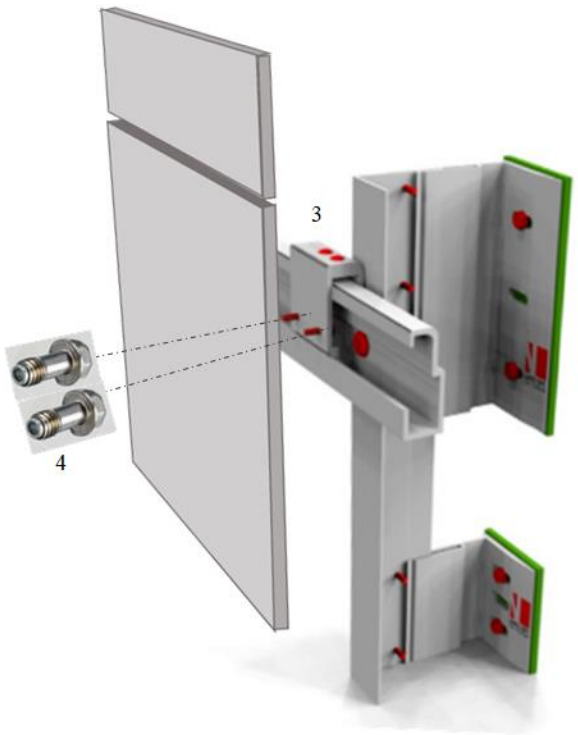
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark prior to CE marking.

Issued in Copenhagen on 2025-11-25 by

Thomas Bruun
Managing Director, ETA-Danmark

Annex 1
Pre-fabricated compressed mineral wool boards with organic or inorganic finish

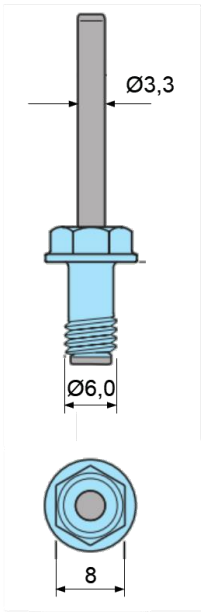
Figure 1. Ventilated intended use on vertical aluminium subframe and horizontal channel profiles by means of secret fixing clips.



3. Secret fixing clip
4. Undercut anchor

Annex 2
Fastener specification

Table 5. TU-S 6x13 blind fastener specification for secret fixing clip

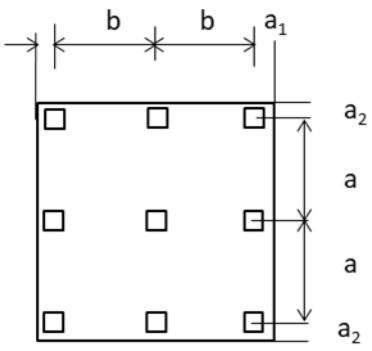
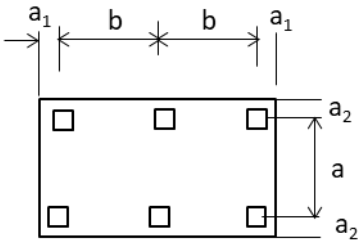


Manufacturer	SFS intec
Code	TU-S 6x13 [a] TU-S 6x11 [b]
Body	Stainless steel material number 1.4401 in accordance with EN 10088
Mandrel	Electro-galvanized carbon steel

[a]: thickness (Table 12): t = 5 mm
[b]: thickness (Table 12): t = 3 mm

Annex 3
Performance

Impact resistance

Table 6. Use category and shatter properties of Rockpanel Premium A2 with concealed anchoring system							
Lay-out of the panels							
a_1/a_2	Edge distance (mm)		80/80	80/80	80/80	80/80	
b	Secret fixing clip (mm)		750	520	750	520	
a	Horizontal profiles (mm)		520	600	600	600	
			Impact category				
Body	H2	Hard body [3 J]	I				
	H3	Hard body [10 J]	I				
	S2	Soft body [60 J]	I				
	S3	Soft body [300 J]	II				
	S4	Soft body [400 J]	I	fail	I	I	

Dimensional stability

Table 7. Deformation Rockpanel Premium A2 in accordance with EN 438-2		
	Premium A2, 11 mm	
Characteristic	Length of the board	Width of the board
Deformation	0.061 %	0.066 %
Dry heat 23°C / 50% to 23°C / 0% (mm/m)	-0.240	-0.290
Coefficient of thermal expansion (10^{-6} °K^{-1})	9.7	9.7
Coefficient of moisture expansion 42% change RH (mm/m) 50% to 92% RH after 4 days	0.204	0.207

Wind load resistance

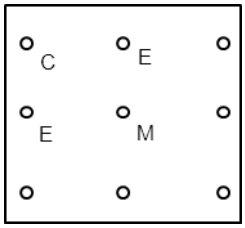
Table 8.	Test results average failure load panel fixing N/m² Positions according to Table 10		
	M	E	C
Secret fixing clip with two TU-S blind fasteners	3446	2632	3474

Table 9.	Test results average strength panel fixing N Positions according to Table 10		
	M	E	C
Secret fixing clip with two TU-S blind fasteners	2681	1018	601

Annex 3
continued

Fixing positions

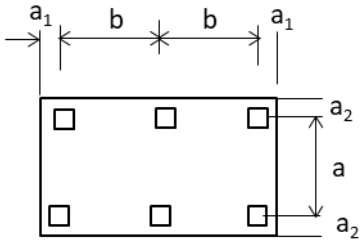
Table 10. Fixing positions M / E / C used in this document



M: fixing in intermediate position
E: edge fixing
C: corner fixing

Table 11. Minimum edge distances and maximum distances between fastenings in mm

	b_{max}	a_{max}	a_1	a_2	d
TU-S undercut anchors	750	600	≥ 80	≥ 80	30



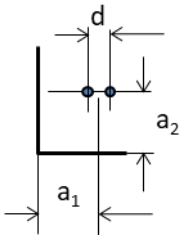
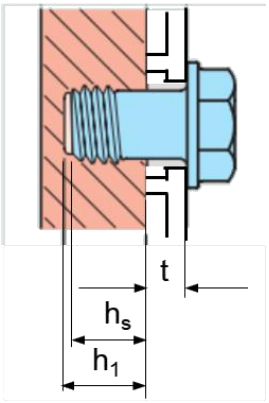
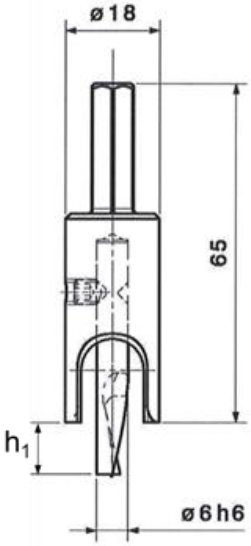


Table 12. Hole diameter and hole drill for undercut anchors





anchor	TU-S 6x13	TU-S 6x11
t [mm]	5	3
h_s [mm]	8.0	8.0
h_1 [mm]	8.5 +0.1/-0.1	
Hole diameter [mm]	6.0; tolerances +0/-0.1	HSS blind hole drill bit 6.0 mm with depth control stop

Annex 3
continued

Table 13. Characteristic axial load X_d and design value of the axial load $X_d = \eta * X_k / \gamma_m$ For a secret fixing clip fixed with two TU-S blind fasteners and Premium A2 panels [a]					
Board thickness		11 mm			*(1)*
Location of the secret fixing clip on the panel		M-middle	E-edge	C-corner	*(2)*
Axial resistance					*(3)*
	Characteristic axial resistance N	901	1175	1013	*(4)*
	Material factor Rockpanel γ_m	1.6	1.6	1.6	*(5)*
	Conversion factor η	0.615	0.614	0.509	*(6)*
	Design value X_d of the axial resistance	**346**	451	322	*(7)*
Wind suction: lowest value pull-out (panel) and pull-through (secret fixing clip)					*(8)*
	Average wind load in N/m^2	3446	2632	3474	*(9)*
	Average axial strength N	2681	1018	601	*(10)*
	Material factor Rockpanel γ_m	1.6	1.6	1.6	*(11)*
	Conversion factor η	0.615	0.614	0.509	*(12)*
	Design value X_d of the axial resistance	1030	**391**	**191**	*(13)*
Design value of the axial load $X_d = \eta * X_k / \gamma_m$ For the combination secret fixing clip and 11 mm panels N		**346**	**391**	**191**	*(14)*
Distance b for the secret fixing clip		≤ 750 mm			*(15)*
Distance a for the horizontal channel profiles		≤ 600 mm			*(16)*

[a] for correct fixing of the TU-S blind fasteners the instructions of the manufacturer must be used.

Annex 4

Impact resistance

Table 14. Impact resistance: definition of use categories	
Use category	Description
I	A zone readily accessible at ground level to the public and vulnerable to hard body impacts but not subjected to abnormally rough use. (e.g.: Façade bases in buildings sited in public locations, such as squares, schoolyards or parks. Cleaning gondolas may be used on the façade).
II	A zone liable to impacts from thrown or kicked objects, but in public locations where the height of the kit will limit the size of the impact; or at lower levels where access to the building is primarily to those with some incentive to exercise care (e.g.: Façade bases in buildings not sited in public locations (e.g. squares, schoolyards, parks) or upper façade levels in buildings sited in public locations that occasionally can be hit by a thrown object (e.g. ball, stone, etc.). Cleaning gondolas may be used on the façade).
III	A zone not likely to be damaged by normal impacts caused by people or by thrown or kicked objects (e.g.: Upper façade levels in buildings (not including base) not sited in public locations, that occasionally can be hit by a thrown object (e.g. ball, stone, etc.). Cleaning gondolas should not be used on the façade).
IV	A zone out of reach from ground level (e.g.: High façade levels that cannot be hit by a thrown object. Cleaning gondolas should not be used on the façade).

The hard body impact with steel ball represents the action from heavy, non-deformable objects, which accidentally hit the kit