ROCKWOOL B.V. / Rockpanel Konstruktieweg 2 NL-6045 JD Roermond www.rockpanel.com



DECLARATION OF PERFORMANCE

No. 0764-CPR-0317 - UK - vs02

1. Unique identification code of the product type: Rockpanel A2 finish Colours (9 mm), Rockpanel A2 finish Structures (9 mm) and Rockpanel A2 finish ProtectPlus (9 mm).

2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11 (4): Backside print on the board.

3. Intended use / es Internal and external wall and ceiling finishes.

4. Manufacturer

ROCKWOOL B.V. Industrieweg 15 NL-6045 JG Roermond, Netherlands Tel.: +31 475 353 353

5. System or systems of AVCP (assessment and verification of constancy of performance of the construction product) as set out in Annex V (amended by: OJ L 157, 27.5.2014, p. 76–79): System 1 for reaction to fire and system 2+ for other characteristics

6. European Assessment Document:

EAD 090001-00-0404 for Prefabricated compressed mineral wool boards with organic and inorganic finish and with specified fastening system.

No. 0764 - CPR - 0317 of date 2024-07-02

European Technical Assessment:	ETA-13/0340 of 2024-05-27
Technical Assessment Body	ETA-Danmark A/S Göteburg Plads 1, DK-2150 Nordhavn, Denmark Tel.: +45 72 24 59 00 Fax.:+45 72 24 59 04 Internet: <u>www.etadanmark.dk</u>
Notified Body:	Materialprüfanstalt für das Bauwesen Nienburger Strasse 3, D-30167 Hannover, Germany Notified Body 0764 Tel.: +49 511 762 3104 Fax.:+49 511 762 4001 Internet: <u>www.mpa-bau.de</u>
and issued:	Certificate of Constancy of performance

7. Characteristics of the product

The Rockpanel A2 Colours panels are surface treated with water-borne primer layers and a water-borne coloured paint on one side, in a range of colours.

The Rockpanel A2 Structures panels are surface treated with water-borne polymer emulsion paint layers on one side, in a range of colours.

The Rockpanel A2 ProtectPlus panels are surface treated with water-borne primer layers, a water-borne coloured paint which has been provided with an extra anti-graffiti clear coat on the colour paint. The finishes "Woods", "Stones", "Chameleon" and "Textured" contain an additional design layer on top of the coloured paint.

The physical properties of 'Rockpanel A2 (9 mm) are indicated below:

Thickness	9 mm
length, max	3050 mm
width, max	1250 mm
density nominal	1250 kg/m³
bending strength	length and width $f_{05} \ge 25,5 \text{ N/mm}^2$
Modulus of Elasticity	m(Ē) ≥ 4740 N/mm²
Thermal conductivity	0.55 W/(m.K)

Clause 8 contains the performances of Rockpanel A2 (9 mm).

8. Declared performance

Table 1 – Euro-class classification of different constructions with Rockpanel A2 (9 mm) boards

Essential characteristics		Basic requirements for construction works BR2 – Safety in case of fire		
Harmonised technical specification		ETA-13/0340 issued on 2024-05-27 EN 13501-1		
Performance				
Fixing method	Ventilated or non-ventilated	Vertical wooden subframe	Vertical aluminium or steel subframe	
-		A2 (9mm) finish Colours, Structures and ProtectPlus		
	Ventilated		A2-s1,d0 Open 6 mm horizontal joint	
Mechanically fixed	Ventilated, plank application width ≥ 100 mm, with 9 mm windboard in front of insulation		A2-s1,d0 Open 6 mm horizontal joint	
	Ventilated, with EPDM gasket on the battens [a]	A2-s2,d0 Open 6 mm horizontal joint		

[a] width of the gasket 15 mm at both sides wider than the batten.

Field of application

The following field of application applies.

Euroclass classification

The classification mentioned in table 1 is valid for the following end use conditions:

Mounting

- Mechanically fixed to a wooden or metal subframe.
- The panels are backed with minimum 50 mm mineral wool insulation with density 30-70 kg/m³ according to EN 13162 with a cavity between the panels and the insulation (mechanically fixed).
- The windboard mentioned in table 1 is specified minimum A2 (according EN 13501-1) and K110 (according EN 13501-2) and placed between the subframe and the insulation.

Substrates:

• Concrete walls, masonry walls, timber framing and a wall made of metal frame e.g. LWSF.

Insulation:

- Ventilated constructions: The subframe is backed with minimum 50 mm mineral wool insulation with density 30-70 kg/m³ according to EN 13162 with a cavity of minimum 20 mm for metal subframes and 28 mm for timber subframes between the panels and the insulation.
- Results are also valid for all greater thicknesses of mineral wool insulation layers with the same density and the same or better reaction to fire classification.
- Results are also valid for the same type of panel used without insulation, if the substrate chosen according to EN 13238 is made of panel with Euro-class A1 or A2 (e.g. fibre-cement panel).

Subframe:

- Vertical softwood battens without fire retardant treatment, thickness minimum 28 mm.
- Test results are also valid for the same type of panel with a metal subframe.
- Test results are also valid for the same type of panel with vertical LVL battens, without fire retardant treatment, thickness minimum 27 mm.

Fixings:

- Results are also valid with higher density of the fixing devices.
- Test results are also valid for the same type of panel fixed by rivets made of the same material of screws and vice versa.

Cavity:

- Unfilled
- The depth of the cavity is minimum 20 mm for a metal subframe, and 28 mm for a timber subframe.
- Test results are also valid for other higher thickness of air space between the back of the board and the insulation behind the subframe.

Joints:

- Horizontal joints can be open or closed with an aluminium profile. For metal subframes the vertical joints are without a gasket backing. For timber subframes the vertical battens are with an EPDM foam gasket (3 mm non compressive thickness).
- 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.
- Max joint width: 8 mm.

The classification is also valid for the following product parameters:

Thickness:	Nominal 9 mm
Density:	Nominal 1250 kg/m ³

Essential characterist	ics BR3 – Hygiene, Health and environment	
Property	Declared values	Harmonised technical specification
Water vapour permeability	NPD, No performance declared	ETA-13/0340 issued on 2024-05-27
Water permeability	NPD, No performance declared	ETA-13/0340 issued on 2024-05-27

 Table 2 – Performance – Water vapour permeability and water permeability

Table 3 – Performance – Release of dangerous substances

Essential characte	ristics BR3 – Hygiene, Health and environment	BR3 – Hygiene, Health and environment			
Property	Product specification	Harmonised technical specification			
Dangerous substances	The kit does not contain/release dangerous substances specified in TR 034, dated April 2013*), except 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.	ETA-13/0340 issued on 2024-05-27			

*) In addition to the specific clauses relating to dangerous substances contained in this European Technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

Table 4a – Performance – Design value of the axial load for mechanical fixing 9 mm 'Rockpanel A2' boards
Subframe: solid wood / metal

Essential chara	cteristics	BR4 – Safety i	n use			
Harmonised teo	chnical specification	ETA-13/0340 issued on 2024-05-27 EN 14592:2008+A1:2012 (E)				
For service clas	ss 2 (see 'Note') and load	-duration class '	Instantane	ous' [c]. For	hole diameters fixings see t	able 5
Dranarty	9 mm boards		Span ir	1 mm [b]	$X_d = X_k / \gamma_M$ in N	Table
Property	9 mm boards		a fixing	b board	Middle / Edge/ Corner	in ETA
Desire	Rivet fixing in metal [e]		600	600	468 / 304 / 200	10
Design value of the axial	Screw fixing in aluminiu	ım [e]	600	600	371 / 162 / 136	10-1
load	Screw fixing in steel [e]		600	600	407 / 174 / 72	10-2
$X_d = X_k / \gamma_M$	With the use of gaskets		600	600	C18 [d]: 591 / 357 / 193 C24 [d]: 591 / 357 / 193	10-3
[a] with $a \ge 30^{\circ}$: a is the angle between the screw axis and the grain direction [b] see Table 6a [c] $k_{mod} = 1.10$ in accordance with Table 3.1 – 'Values of k_{mod} 'BS EN 1995-1-1:2004+A1:2008; For 'service class' 2 [NA to BS EN 1995-1-1:2004+A1:2008 Table NA.2 "External uses where member is protected from direct wetting"] and 'load- duration class 'Instantaneous' [Table NA.1 NA to BS EN 1995- 1-1:2004+A1:2008]		[e] for spec Note (acco Service cla materials c humidity of weeks per	rding to BS E ss 2 is chara orresponding the surround	ngs see table 8a, 8b, 8c and 8d iN 1995-1-1:2004+A1:2008 §2.3 cterised by a moisture content ir to a temperature of 20°C and th ing air only exceeding 85% for a ce class 2 the average moisture	n the ne relative a few	

Table 4b – Performance – Design value of the axial load for mechanical fixing 9 mm 'Rockpanel A2' boards Subframe: solid wood / metal

Essential characteristics BR4 – Safety		n use				
Harmonised tee	nonised technical specification ETA-13/0340 issued on 2024-05-27 EN 14592:2008+A1:2012 (E)					
For service clas	ss 3 (see 'Note') and load	-duration class 'i	Instantane	ous' [c]. For	⁻ hole diameters fixings see t	able 5
Droporty	0 mm beerde		Span ir	ı mm [b]	$X_d = X_k / \gamma_M$ in N	Table
Property	9 mm boards		a fixing	b board	Middle / Edge/ Corner	in ETA
Design value	Rivet fixing in metal [e]		600	600	468 / 304 / 200	10
Design value of the axial	Screw fixing in aluminiu	m [e]	600	600	371 / 162 / 136	10-1
load	Screw fixing in steel [e]		600	600	407 / 174 / 72	10-2
$X_d = X_k / \gamma_M$	Screw fixing on timber [fixing on timber [a] [e] 600 600	600	C18 [d]: 537 / 357 / 193	10-3	
,	With the use of gaskets				C24 [d]: 578 / 357 / 193	
[a] with $\alpha \ge 30^{\circ}$: α is the angle between the screw axis and the grain direction [b] see Table 6a		[d] Strength class BS EN 338 [e] for specifications fixings see table 8a, 8b, 8c and 8d				
[D] see Table 6a [C] $k_{mod} = 0.90$ in accordance with Table 3.1 – 'Values of k_{mod} 'BS EN 1995-1-1:2004+A1:2008; For 'service class' 3 [NA to BS EN 1995-1-1:2004+A1:2008 Table NA.2 "External uses fully exposed"] and 'load-duration class 'Instantaneous' [Table NA.1 NA to BS EN 1995-1-1:2004+A1:2008]		Service cla	ss 3 is chara sture content	N 1995-1-1:2004+A1:2008 §2.3 cterised by climatic conditions le s than in service class 2 (compa	ading to	

Table 4c – Performance – Design value of the axial load for mechanical fixing 9 mm 'Rockpanel A2' boards	
Subframe: solid wood / metal	

Essential chara	acteristics	BR4 – Safety i	n use			
Harmonised tee	chnical specification	ETA-13/0340 issued on 2024-05-27 EN 14592:2008+A1:2012 (E)				
For service class 2 (see 'Note') and load-duration class 'Permanent [c]. For hole diameters fixings see table 5				5		
Duran anti-	O mana h o o ndo		Span ir	n mm [b]	$X_d = X_k / \gamma_M$ in N	Table
Property	9 mm boards		a fixing b board Mi 600 600 600 600 600 600 600 600 600 600 600 C1	Middle / Edge/ Corner	in ETA	
Destinguishes	Rivet fixing in metal [e]		600	600	468 / 304 / 200	10
Design value of the axial	Screw fixing in aluminiu	ım [e]	600	600	371 / 162 / 136	10-1
load	Screw fixing in steel [e]		600	600	407 / 174 / 72	10-2
$X_d = X_k / \gamma_M$	Screw fixing on timber With the use of gaskets		600 600 C18 [d]: 358 / 357 / 193 C24 [d]: 385 / 357 / 193	10-3		
[a] with $\alpha \ge 30^{\circ}$: α is the angle between the screw axis and the grain direction [b] see Table 6a [c] $k_{mod} = 0.60$ in accordance with Table 3.1 – 'Values of k_{mod} 'BS EN 1995-1-1:2004+A1:2008; For 'service class' 2 [NA to BS EN 1995-1-1:2004+A1:2008 Table NA.2 "External uses		[d] Strength class BS EN 338 [e] for specifications fixings see table 8a, 8b, 8c and 8d Note (according to BS EN 1995-1-1:2004+A1:2008 §2.3.1.3 (3)P): Service class 2 is characterised by a moisture content in the materials corresponding to a temperature of 20°C and the relative				
	vhere member is protected from direct wetting"] and 'load- luration class 'Permanent' [Table NA.1 NA to BS EN 1995-1- l:2004+A1:2008]					

Table 5 – Performance mechanical fixings – Hole diameters for 'Rockpanel A2' boards

Essential characteristics	BR4 – Safety in use			
Harmonised technical specification	ETA-13/0340 issued	on 2024-05-27		
Fixing type [a]	Fixed hole	Moving hole	Slotted hole	Board dimension considered
Rivet	5.1	8.0	5.1 * 8.0	1200 * 3050
Screw for aluminium	5.8	10.0 [b]	N.A.	1200 * 3050
Screw for steel	4.3	8.0	4.3 * 8.0	1200 * 3050
Screw for timber	3.2	6.0	3.4 * 6.0	1200 * 3050

[a] for specifications fixings see table 9a and 9b. [b] with the use of a centring sleeve

Essential characteristics	BR4 – Safety in use					
larmonised technical specification	ETA-13/0340 issued	on 2024-05-27 Table \$				
a1 lmv		, FP/SP [b]	holes' 5) in ti part o	hole' FP SP (acco he middle f the boar	ording to e of the v rd	table ertica
				e other fix ng points'		nts are
•	, in the second	l _m	Lengt	h max 30	50 mm	
SP FF FF	P SP PM	<i>I</i> mv	'movir	ng length	<u>≤ 1510</u>	mm
FPM: 9						
//b	,	/ lb	Lenat	h of the b	oard	
/ <u>l</u> b/2		b ₂		600 mm;	-414	
			b₂ in t board	he centra length <i>l</i> b		
, b2		FPM [b]	Creati	ng a fixe f a sleeve	d point b	y the
aı b b						
		Fixing type	b _{max}	a _{max}	a ₁	a ₂
56		Rivet [a]	600	600	≥ 20	≥ 5
		Screw for metal	600	600	≥ 20	≥ 5
a + +		Screw for timber	600	600	≥ 15	≥ 5
E M						
		Drill hole according t Table 5	0	Sleeve		
	FPM – Sleeve [a] [b]	8 mm		Ø8 x 7, Ø5.1	5 – drill I	nole
Subframe Aluminium	FP – 'Fixed point' FP (according to Table 5) in central area of the vertical edge of the board.					cal

Table 6a – Performance fixings according to table 4 and 5 with the required edge distances, maximum distances and horizontal installation of boards.

[b]: Subframe aluminium

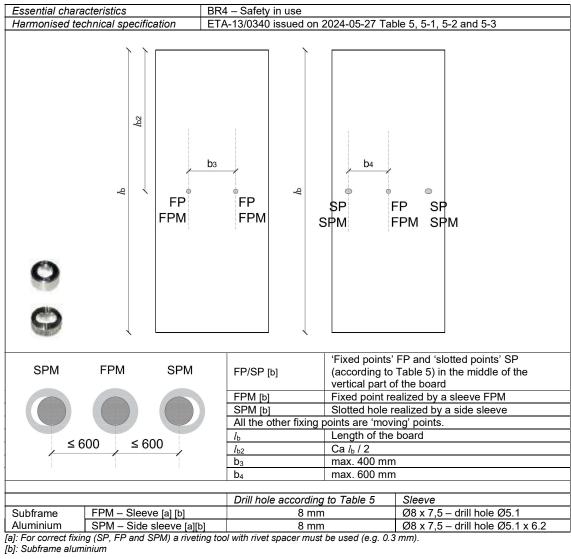


Table 6b – Performance fixings according to table 4 and 5 with the required edge distances, maximum distances and vertical installation of boards.

Essential characteristics		BR4 – Safety in use		
Harmonised technical specification		ETA-13/0340 issued on 2024-05-27		
		Fixing	Failure load	Deformation
Characteristic shear		Rivets	2390 N	3.2 mm
strength mechanical	Screw for aluminium		2129 N	4.0 mm
fixings	Screw for steel		1912 N	4.0 mm
Average values		Screw for timber	2283 N	9.0 mm

	1	SFS	SFS	MBE	MBE
0		Aluminium	Stainless steel A4	Aluminium	Stainless steel
1 2 2 2 2 2	Code	AP14-50180-S	SSO-D15-50180	1290406	FN-A4-5x18 K15
	Body	Aluminium EN AW-5019 (AIMg5) in accordance with EN 755-2	Stainless steel material number 1.4578 in accordance with	Aluminium EN AW-5019 (AIMg5) in accordance with EN 755-2	Stainless steel material number 1.4578 in accordance with
			EN 10088		EN 10088
	Mandrel	Stainless steel material number 1.4541 in	Stainless steel material number 1.4541 in	Stainless steel material number 1.4541 in	Stainless steel material number 1.4541 in
1 1 1 1 × 1		accordance with EN 10088	accordance with EN 10088	accordance with EN 10088	accordance with EN 10088
	Pull-out	F _{mean,n} = 2038	F _{mean,n} = 1428	F _{mean,n} = 2318	F _{mean,n} = 1428
ÎÎ	strength	s = 95	s = 54	s = 85	s = 54
		F _{u,5} = 1882	F _{u,5} = 1339	F _{u,5} = 2155	F _{u,5} = 1339
	d ¹	5	5	5	5
	d ²	14	15	14	15
	d ³	2.7	3.25	2.7	3.25
V V	L	18	18	18	18
9	k	1.5	1.5	1.5	1.5
	Profile	Aluminium	Steel	Aluminium	Steel
U.		t ≥ 1.5 mm [d]	t ≥ 1.0 mm [a] [b]	t ≥ 1.8 mm	t ≥ 1.0 mm [a[[b]

Table 8a - Specifications mechanical fixings - Rivet aluminium or stainless steel [e]

[a]: The minimum thickness of the vertical steel profiles is 1.0 mm. The steel quality is S320GD +Z EN 10346 number 1.0250 (or equivalent for cold forming).

[b]: The minimum thickness of the vertical steel profiles is 1.5 mm. The steel quality is EN 10025-2:2004 S235JR number 1.0038. For minimum coating thickness see [c].

[c]: The minimum coating thickness dee [c]: [c]: The minimum coating thickness (Z or ZA) is determined by the corrosion rate (amount of corrosion loss in thickness per year) which depends on the specific outdoor atmospheric environment. The International Zinc association can be consulted for more information. The coating designation (classification which determines the coating mass) shall be agreed between the contractor and the building owner.

[d]: The aluminium is AW-6060 according EN 755-2. The $R_{nr}/R_{p0.2}$ value is \geq 170/140 for profile T6 and \geq 195/150 for profile T66. [e]: For correct fixing a riveting tool with rivet spacer must be used (e.g. 0.3 mm)

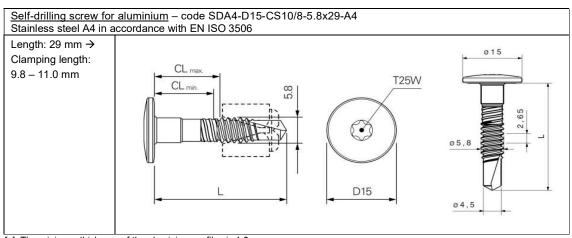


Table 8b - Specifications mechanical fixings - Self-drilling screw for aluminium

[a]: The minimum thickness of the aluminium profiles is 1.8 mm.

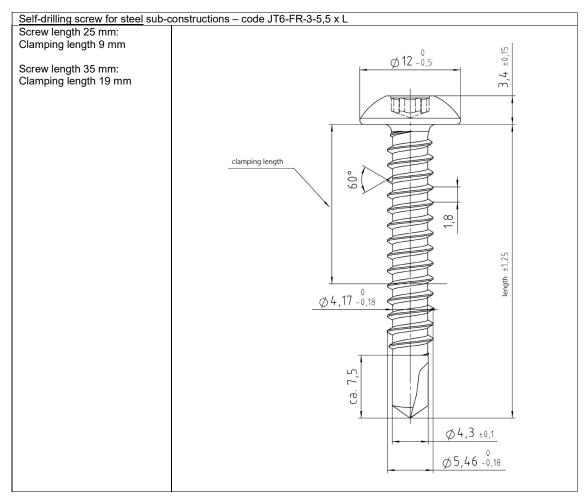


Table 8c - Specifications mechanical fixings - Self drilling screw for steel

Table 8d – Specifications mechanical fixings – Torx Screw for Timber

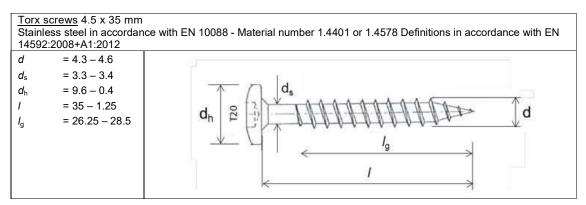


Table 9 – Performance Impact resistance

Essential characteristics	BR4 – Safety in use				
Harmonised technical specification	ETA-13/0340 issued on 2024-05-27				
Panels without a horizontal joint	Impactor		Energy	Category	
		Hard Body Steel ball 0.5 kg	1 J	11	
	Hard Body		3 J		
		Steel ball 1.0 kg	10 J		
	Soft body	Ball 3 kg	10 J		
			60 J		
	Soft body	Bag 50 kg	300 J		
Panels with a horizontal joint ready accessible and vulnerable to impacts	Hard Body Steel ball 0.5 kg Steel ball 1.0 kg	Steel ball 0.5 kg	3 J		
		10 J			
	Softbody	Poll 2 kg	10 J	111	
	Soft body	Ball 3 kg	60 J]	

Table 10 – Performance dimensional stability

Essential characteristics	BR4 – Safety in use		
Harmonised technical specification	ETA-13/0340 issued on 2024-05-27		
		Length	Width
Cumulative dimensional change [a]		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% RH difference after 4 days (mm/m)		0.204	0.207

[a]: As a consequence the minimum joint width shall be 3 mm, preferably 5 mm.

Table 11 – Resistance to hygro-thermal cycles and Xenon Arc exposure

Essential characteristics	Aspects of durability and serviceability		
Harmonised technical specification	ETA-13/0340 issued on 2024-05-27		
		Performance	
Resistance to Hygrothermal cycles		Pass	
Resistance to Xenon Arc exposure	Finish 'Colours'	ISO 105 A02: 3-4 or better	
EOTA TR010 climate class S (Technical Report 010)	Finish 'Structures'	ISO 105 A02: 3-4 or better [a]	
5000 hours artificial weathering	Finish 'ProtectPlus'	ISO 105 A02: 4 or better	

[a] Valid for the following RAL colours: 7005, 7016, 7021, 7024, 7035 and 9010

9. The performance of the product identified above is in conformity with the set of declared performances. 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:

At: Roermond, The Netherlands on:

ROCKWOOL B.V. W.J.E. Dumoulin **Technical Director Operations** DE-NL 09-09-2024

DOP in accordance with Commission Delegated Regulation (EU) No 574/2014 of 21 February 2014 amending Annex III to Regulation (EU) No 305/2011 of the European Parliament and of the Council on the model to be used for drawing up a declaration of performance on construction products, <u>http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014R0574</u>, OJ L 159, 28.5.2014, p. 41–46