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

DECLARATION OF PERFORMANCE

No. *0764-CPR-0317 – DK – 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, edition May 2015.

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: www.etadanmark.dk
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: www.mpa-bau.de
and issued:	**Certificate of Constancy of performance** **No. 0764 – CPR – 0317 of date 2024-07-02**

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} ≥ 25,5 N/mm²
Modulus of Elasticity	m(E) ≥ 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*

<table>
<tr><td colspan="2">Essential characteristics</td><td colspan="2">Basic requirements for construction works
BR2 – Safety in case of fire</td></tr>
<tr><td colspan="2">Harmonised technical specification</td><td colspan="2">ETA-13/0340 issued on 2024-05-27
EN 13501-1</td></tr>
<tr><td colspan="4">Performance</td></tr>
<tr><td rowspan="2">Fixing method</td><td rowspan="2">Ventilated or non-ventilated</td><td>Vertical wooden subframe</td><td>Vertical aluminium or steel subframe</td></tr>
<tr><td colspan="2">A2 (9mm) finish Colours, Structures and ProtectPlus</td></tr>
<tr><td rowspan="3">Mechanically fixed</td><td>Ventilated</td><td></td><td>A2-s1,d0
Open 6 mm horizontal joint</td></tr>
<tr><td>Ventilated, plank application width ≥ 100 mm, with 9 mm windboard in front of insulation</td><td></td><td>A2-s1,d0
Open 6 mm horizontal joint</td></tr>
<tr><td>Ventilated, with EPDM gasket on the battens [a]</td><td>A2-s2,d0
Open 6 mm horizontal joint</td><td></td></tr>
</table>

[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 $K_1$10 (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/m^3 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

Table 2 *– Performance – Water vapour permeability and water permeability*

Essential characteristics	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 3** – Performance – Release of dangerous substances*

Essential characteristics	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 characteristics		BR4 – Safety in use			
Harmonised technical 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 **'Instantaneous'** [c]. For hole diameters fixings see table 5*					
Property	9 mm boards	Span in mm [b]		$X_d = X_k / \gamma_M$ in N	Table in ETA
		a fixing	b board	Middle / Edge/ Corner	
Design value of the axial load $X_d = X_k / \gamma_M$	**Rivet** fixing in metal [e]	600	600	468 / 304 / 200	10
	Screw fixing in aluminium [e]	600	600	371 / 162 / 136	10-1
	Screw fixing in steel [e]	600	600	407 / 174 / 72	10-2
	Screw fixing on timber [a] [e] With the use of gaskets	600	600	C18 [d]: 591 / 357 / 193 C24 [d]: 591 / 357 / 193	10-3

[a] with $\alpha \geq 30°$: α 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} 'DS EN 1995-1-1:DK NA:2010; For 'service class' **2** ["ventilated structures protected against precipitation"] and 'load-duration class' '**Instantaneous**' [Table 2.2 DS / EN 1995-1-1 DK NA:2010-05]*

[d] Strength class EN 338
[e] for specifications fixings see table 8a, 8b, 8c and 8d

Note (according to DS EN 1995-1-1 NA:2010-05 §2.3.1.3 (3)P): Service class 2 "ventilated structures protected against precipitation, e.g. ventilated roof structures". EN 1995-1-1: In service class 2 the average moisture content in most softwoods will not exceed 20%

***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 in use			
Harmonised technical specification		ETA-13/0340 issued on 2024-05-27 EN 14592:2008+A1:2012 (E)			
*For service class **3** (see 'Note') and load-duration class **'Instantaneous'** [c]. For hole diameters fixings see table 5*					
Property	9 mm boards	Span in mm [b]		$X_d = X_k / \gamma_M$ in N	Table in ETA
		a fixing	b board	Middle / Edge/ Corner	
Design value of the axial load $X_d = X_k / \gamma_M$	**Rivet** fixing in metal [e]	600	600	468 / 304 / 200	10
	Screw fixing in aluminium [e]	600	600	371 / 162 / 136	10-1
	Screw fixing in steel [e]	600	600	407 / 174 / 72	10-2
	Screw fixing on timber [a] [e] With the use of gaskets	600	600	C18 [d]: 537 / 357 / 193 C24 [d]: 578 / 357 / 193	10-3

[a] with $\alpha \geq 30°$: α is the angle between the screw axis and the grain direction
[b] see Table 6a
*[c] k_{mod} = 0.90 in accordance with Table 3.1 – 'Values of k_{mod}' DS EN 1995-1-1 DK NA:2010-05; For 'service class' **3** ["External uses fully exposed"] and 'load-duration' class '**Instantaneous**' [Table 2.2 DS EN 1995-1-1 DK NA:2010-05]*

[d] Strength class EN 338
[e] for specifications fixings see table 8a, 8b, 8c and 8d

Note (according to DS EN 1995-1-1 DK NA:2010-05 §2.3.1.3 (3)P): Service class 3 is characterised by climatic conditions leading to higher moisture contents than in service class 2 (compare 'Note' in Table 4a).

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

Essential characteristics	BR4 – Safety in use			
Harmonised technical 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*				
Property	9 mm boards	Span in mm [b]		$X_d = X_k / \gamma_M$ in N	Table
		a fixing	b board	Middle / Edge/ Corner	in ETA
Design value of the axial load $X_d = X_k / \gamma_M$	**Rivet** fixing in metal [e]	600	600	468 / 304 / 200	10
	Screw fixing in aluminium [e]	600	600	371 / 162 / 136	10-1
	Screw fixing in steel [e]	600	600	407 / 174 / 72	10-2
	Screw fixing on timber [a] [e] With the use of gaskets	600	600	C18 [d]: 358 / 357 / 193 C24 [d]: 385 / 357 / 193	10-3

[a] with $\alpha \geq 30°$: 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} 'DS EN 1995-1-1:DK NA:2010; For 'service class' **2** ["ventilated structures protected against precipitation"] and 'load-duration class' '**Permanent**' [Table 2.2 DS / EN 1995-1-1 DK NA:2010-05]*
[d] Strength class EN 338
[e] for specifications fixings see table 8a, 8b, 8c and 8d

Note (according to DS EN 1995-1-1 NA:2010-05 §2.3.1.3 (3)P): Service class 2 "ventilated structures protected against precipitation, e.g. ventilated roof structures". EN 1995-1-1: In service class 2 the average moisture content in most softwoods will not exceed 20%.

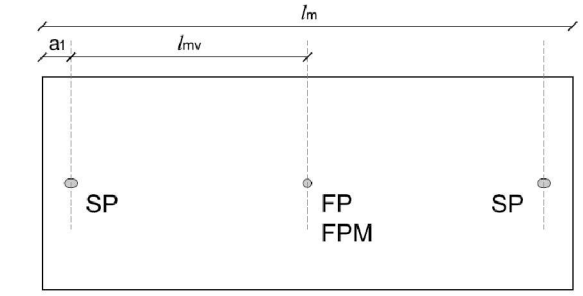
***Table 5** – Performance mechanical fixings – Hole diameters for 'Rockpanel A2' boards*

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

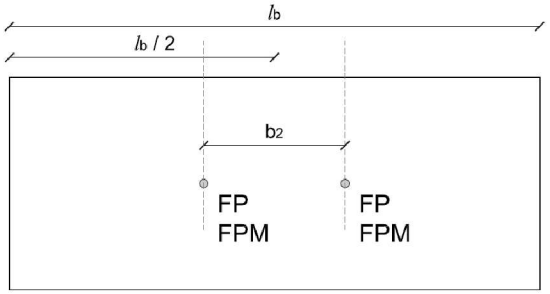
[a] for specifications fixings see table 9a and 9b.
[b] with the use of a centring sleeve

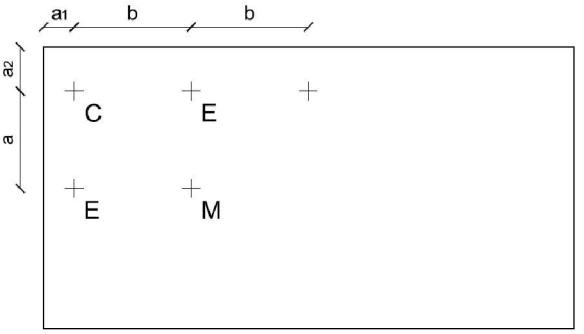
***Table 6a** – Performance fixings according to table 4 and 5 with the required edge distances, maximum distances and horizontal installation of boards.*

Essential characteristics	BR4 – Safety in use
Harmonised technical specification	ETA-13/0340 issued on 2024-05-27 Table 5, 5-1, 5-2 and 5-3



FPM:





FP/SP [b]	'Fixed hole' FP and 'slotted holes' SP (according to table 5) in the middle of the vertical part of the board All the other fixings points are 'moving points'
l_m	Length max 3050 mm
l_{mv}	'moving length' ≤ 1510 mm
l_b	Length of the board
b_2	Max. 600 mm; b_2 in the central area of the board length l_b
FPM [b]	Creating a fixed point by the use of a sleeve FPM

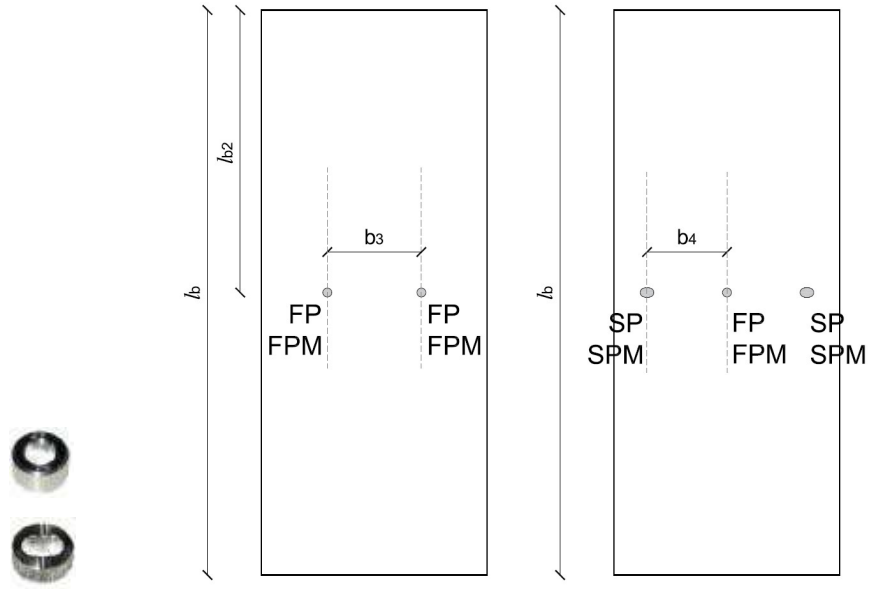
Fixing type	b_{max}	a_{max}	a_1	a_2
Rivet [a]	600	600	≥ 20	≥ 50
Screw for metal	600	600	≥ 20	≥ 50
Screw for timber	600	600	≥ 15	≥ 50

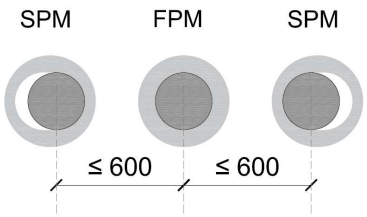
		Drill hole according to Table 5	Sleeve
Subframe Aluminium	FPM – Sleeve [a] [b]	8 mm	Ø8 x 7,5 – drill hole Ø5.1
	FP – 'Fixed point' FP (according to Table 5) in central area of the vertical edge of the board.		

[a]: For correct fixing (SP, FP and SPM) a riveting tool with rivet spacer must be used (e.g. 0.3 mm).
[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 Table 5, 5-1, 5-2 and 5-3





FP/SP [b]	'Fixed points' FP and 'slotted points' SP (according to Table 5) in the middle of the vertical part of the board
FPM [b]	Fixed point realized by a sleeve FPM
SPM [b]	Slotted hole realized by a side sleeve
All the other fixing points are 'moving' points.	
l_b	Length of the board
l_{b2}	Ca l_b / 2
b_3	max. 400 mm
b_4	max. 600 mm

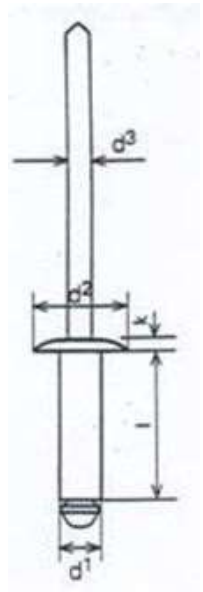
		Drill hole according to Table 5	*Sleeve*
Subframe Aluminium	FPM – Sleeve [a] [b]	8 mm	Ø8 x 7,5 – drill hole Ø5.1
	SPM – Side sleeve [a][b]	8 mm	Ø8 x 7,5 – drill hole Ø5.1 x 6.2

[a]: For correct fixing (SP, FP and SPM) a riveting tool with rivet spacer must be used (e.g. 0.3 mm).
[b]: Subframe aluminium

***Table 7** – Performance shear strength mechanical fixings*

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

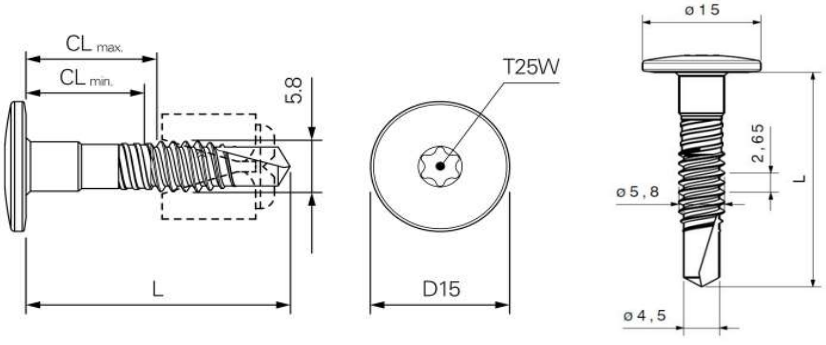
***Table 8a** – Specifications mechanical fixings – Rivet aluminium or stainless steel [e]*



	SFS Aluminium	SFS Stainless steel A4	MBE Aluminium	MBE Stainless steel
Code	AP14-50180-S	SSO-D15-50180	1290406	FN-A4-5x18 K15
Body	Aluminium EN AW-5019 (AlMg5) in accordance with EN 755-2	Stainless steel material number 1.4578 in accordance with EN 10088	Aluminium EN AW-5019 (AlMg5) in accordance with EN 755-2	Stainless steel material number 1.4578 in accordance with EN 10088
Mandrel	Stainless steel material number 1.4541 in accordance with EN 10088	Stainless steel material number 1.4541 in accordance with EN 10088	Stainless steel material number 1.4541 in accordance with EN 10088	Stainless steel material number 1.4541 in accordance with EN 10088
Pull-out strength	$F_{mean,n}$ = 2038	$F_{mean,n}$ = 1428	$F_{mean,n}$ = 2318	$F_{mean,n}$ = 1428
	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
L	18	18	18	18
k	1.5	1.5	1.5	1.5
Profile	Aluminium t ≥ 1.5 mm [d]	Steel t ≥ 1.0 mm [a] [b]	Aluminium t ≥ 1.8 mm	Steel t ≥ 1.0 mm [a[[b]

[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 (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 $R_m/R_{p0,2}$ value is ≥ 170/140 for profile T6 and ≥ 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*

Self-drilling screw for aluminium – code SDA4-D15-CS10/8-5.8x29-A4 Stainless steel A4 in accordance with EN ISO 3506	
Length: 29 mm → Clamping length: 9.8 – 11.0 mm	

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

***Table 8c** – Specifications mechanical fixings – Self drilling screw for steel*

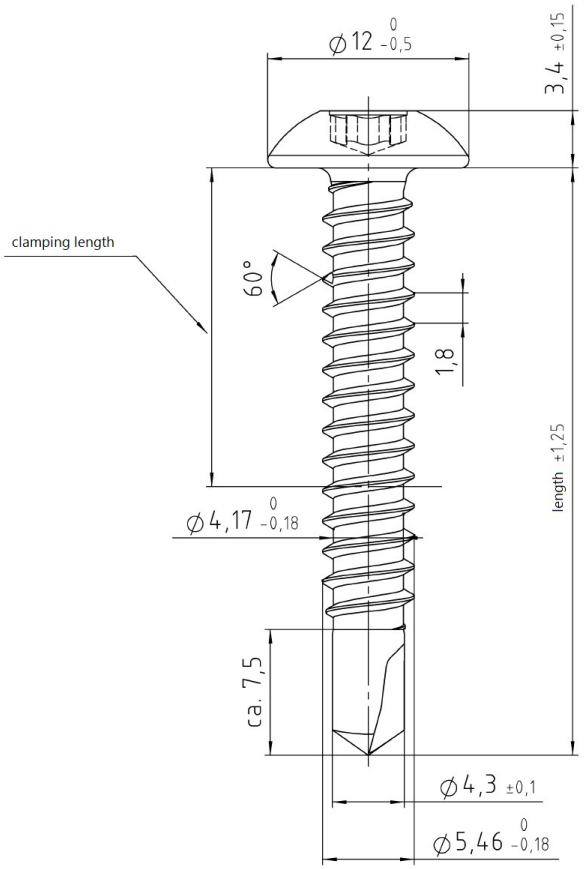
Self-drilling screw for steel sub-constructions – code JT6-FR-3-5,5 x L	
Screw length 25 mm: Clamping length 9 mm Screw length 35 mm: Clamping length 19 mm	

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

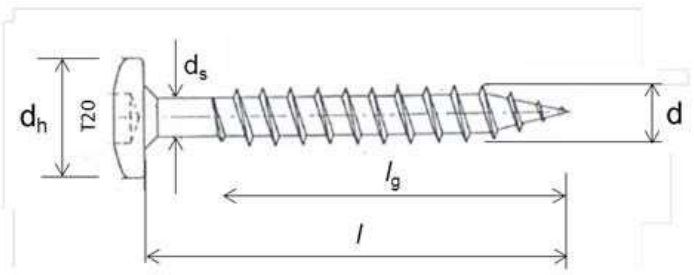
Torx screws 4.5 x 35 mm Stainless steel in accordance with EN 10088 - Material number 1.4401 or 1.4578 Definitions in accordance with EN 14592:2008+A1:2012	
d = 4.3 – 4.6 d_s = 3.3 – 3.4 d_h = 9.6 – 0.4 l = 35 – 1.25 l_g = 26.25 – 28.5	

***Table 9** – Performance Impact resistance*

Essential characteristics	BR4 – Safety in use			
Harmonised technical specification	ETA-13/0340 issued on 2024-05-27			
	Impactor		*Energy*	Category
Panels without a horizontal joint	Hard Body	Steel ball 0.5 kg	1 J	II
			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	3 J	III
		Steel ball 1.0 kg	10 J	
	Soft body	Ball 3 kg	10 J	
			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*

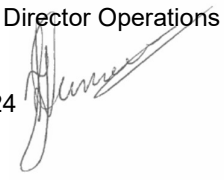
Essential characteristics	Aspects of durability and serviceability	
Harmonised technical specification	ETA-13/0340 issued on 2024-05-27	
		Performance
Resistance to Hygrothermal cycles		Pass
Resistance to Xenon Arc exposure *EOTA TR010 climate class S* *(Technical Report 010)* 5000 hours artificial weathering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

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



At: Roermond, The Netherlands

on: 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, *http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014R0574, OJ L 159, 28.5.2014, p. 41–46*