

# **ROCKPANEL Tack-S**

## **ELASTIC ADHESIVE SYSTEM**

#### **BENEFITS**

- Hidden attachment method
- European approval
- Quick and easy installation
- Optimal stress distribution

#### PRODUCT

ROCKPANEL Tack-S is a structural adhesive system specially developed for bonding Rockpanel board material.

#### **APPLICATIONS**

The product is suitable for bonding ROCKPANEL board material in applications such as façade cladding, fascias, eaves, soffits and canopies.

#### **PROPERTIES ROCKPANEL TACK-S**

- Solvent- and isocyanate-free.
- Lasting high elasticity.
- Good moisture- and weather-resistance.

#### CERTIFICATION

- Listed in European Technical Assessment 07/0141 for ROCKPANEL boards.
- Bonded ROCKPANEL boards, Rockclad and ProtectPlus, 8 mm thick, are categorized as European fire class B-s2, d0.

#### **ROCKPANEL ADHESIVE SYSTEM**

The system consists of the following components:

- ROCKPANEL Tack-S: adhesive.
- Primer MSP: primer for the back side of the Rockpanel board.
- Liquid 1: cleaner for the surface of ROCKPANEL strips, (type Rockclad (7Y or 9Y) or ProtectPlus)
- Prep M: primer for the surface of the aluminium supporting structure.
- FoamTape: mounting tape for initial bonding and also serves as a spacer to ensure consistent thickness of adhesive.

#### INFORMATION FOR THE DESIGNER

#### SUBFRAME REQUIREMENTS

#### **CAVITY SPACE AND VENTILATION**

The subframe for façade applications must be vertical and ventilated. The gap between the back side of the boards and the underlying structure must be at least 40 mm. For more information, see www.rockpanel.co.uk

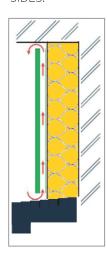
#### **CHOICE OF MATERIAL**

Timber battens smoothly planed on all four sides with a durability class and moisture content corresponding to the conditions listed in the Certificates are suitable. Aluminium alloy and material thickness corresponding to the Certificates. For more information, see the European Technical Assessment for the material concerned.

#### **DIMENSIONS OF WOODEN BATTENS**

ROCKPANEL 8 mm strips (Rockclad (7Y or 9Y) or ProtectPlus) are mechanically attached to the battens. The minimum width dimensions of the battens depend on the function of the supporting strut. See also the section with details on the ROCKPANEL adhesive system.

batten for joint connection (a)
remaining battens
Minimum supporting strut thickness
ROCKPANEL STRIP MUST EXTEND AT LEAST 15 MM ON BOTH SIDES.



#### **SELF WEIGHT OF BOARDS**

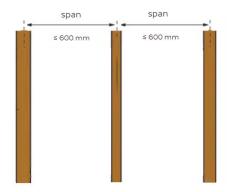
Average value for shear strength (self weight of board): 5,250 N/m<sup>1</sup> adhesive bead. The self-weight load of the board is not a criterion for failure.

#### WIND LOAD

Characteristic value of stress (wind load):  $4,290 \text{ N/m}^1$  adhesive bead. Calculation of wind suction according to EN 1991–1–4. The ETA gives a characteristic tensile strength for the adhesive bond of 0.33 N/mm². For a 13 mm wide adhesive bead this corresponds to 4,290 N/m1. The tensile strength of the board bond is not definitive in the wind calculation for a total safety  $y_m y_f$  of 3.

#### **SUPPORT DISTANCES**

For the maximum support distances see http://www.rock-panel.co.uk/ $\rightarrow$ processing  $\rightarrow$  fixing distances.



#### **SOFFIT OR CANOPY APPLICATIONS**

For soffit or canopy constructions different fixing distances are recommended. For this application ROCKPANEL Group recommends reducing the batten spacing to approximately 70% of the spacing used for façade bonding. For batten spacing >300 mm, support may be needed until the adhesive has cured

#### **CONSUMPTION ESTIMATE PER 100 M<sup>2</sup>**

approx. 61/2 m.

Surface area of ROCKPANEL board	quantity	standard	
		packaging	
FoamTape	12	25 metre roll	
ROCKPANEL Tack-S	50	290 ml	
		cartridge	
Primer MSP	6	500 ml tin	
(back side of ROCKPANEL)			
Liquid 1 (ROCKPANEL strip	1	1000 ml tin	
Prep M (metal)	2	500 ml tin	
Adhesive consumption per cartridge per linear metre:			

#### **STRUCTURAL SAFETY**

Figure 1 shows drawings of the basic principle for adhesion to aluminium profiles and mechanically fixed ROCKPANEL strips on wooden battens. Drawing 1-204b shows the vertical joint with ROCKPANEL strip on timber battens.

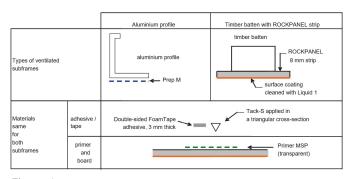
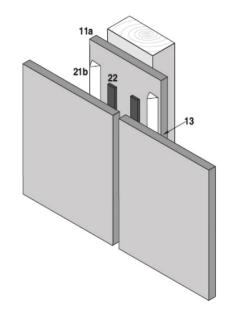


Figure 1

#### Detail 1-204B.

ROCKPANEL Tack-S adhesive system with ROCKPANEL boards bonded to mechanically fixed ROCKPANEL strips on ventilated vertical timber battens.

- 11a. 8 mm ROCKPANEL, Rockclad strip; strip mechanically attached with ROCKPANEL nails or screws
- 13. Back side treated with Primer MSP (transparent)
- 21b. Triangular Tack-S adhesive bead with a height of 9 mm
- 22. Two-sided adhesive FoamTape 3\*12 mm



#### INFORMATION FOR THE INSTALLER

#### 1. A. PRETREATMENT OF ALUMINIUM PROFILES

For aluminium supporting structures Prep M must be applied with a clean, lint- and dust-free colourless cloth or tissue. Start applying adhesive after a drying time of 10 minutes.

#### 1. B. PRETREATMENT OF SURFACE OF ROCKPANEL STRIPS

Clean the surfaces of the 8 mm ROCKPANEL strips with a clean, lint- and dust-free colourless cloth or tissue moistened with Liquid 1.

#### 2. PRIMING ROCKPANEL BOARDS

Use Primer MSP to prime the adhesive side of the panel using the special application set with rollers (not directly from the tin). A single coat of primer is adequate. Multiple layers are not permitted. For all ROCKPANEL boards remove the protective film from the front of the board before application of the primer. Prime the panels vertically (standing upright), not horizontally (lying down), to prevent the solvent in the primer from penetrating too deeply into the panels and softening the coating on the front. Pretreat the board with this primer over its entire length, in 100-150 mm wide strokes. Allow the Primer MSP to dry for at least two hours, particularly for boards with an extra ProtectPlus protective layer, such as ROCKPANEL Woods, Metallics and Chameleon. (A drying time of one hour is sufficient for ROCKPANEL Standard Colours.)

#### 3. APPLYING MOUNTING TAPE

After the primers and cleaners have dried, apply the FoamTape vertically and continuously only onto the supporting structure. Press the FoamTape and cut with a sharp knife. For the correct positioning and length of the tape, also keep in mind the dimensions and function of the supporting struts, the dimensions of the ROCKPANEL board and the required gap for the Rockpanel Tack-S. Do not remove the protective layer immediately after applying the tape.

#### 4. APPLYING ROCKPANEL TACK-S WITH SPECIAL NOZZLE

Apply Rockpanel Tack-S vertically and continuously only, after the FoamTape has been applied. Use manual or pneumatic applicator guns. Use the special nozzle to apply a triangular bead of adhesive with a height of approximately 9 mm.

If desired, cut the nozzle diagonally where indicated by the V-shaped score so you can hold the applicator as an angle.

## **5. POSITIONING ROCKPANEL BOARD**

Remove the protective layer from the FoamTape. The ROCKPANEL board must be positioned within ten minutes after application of the adhesive. Position the board by pressing it gently and adjusting if necessary. Correction is still possible until the ROCKPANEL board touches the FoamTape. For good positioning of the board, use spacers, support blocks or a horizontal positioning batten. Use a glass clamp if necessary to improve the grip. Once the panel is well positioned, it should be pressed gently with a straight rule or similar so the FoamTape is completely contacted across the back of the panel. Pressing with a rule prevents 'bulging'. Avoid compressing the FoamTape while doing this. Correction is now no longer possible. When used for soffit or canopy applications, the FoamTape can normally support the panels, but it is recommended that temporary support be used, yet compression of the FoamTape must be avoided.

#### 6. CLEANING

Remove fresh primer or adhesive residues on the ROCKPANEL board with Liquid 1 cleaner. Use a clean, lintand dust-free colourless cloth or tissue.











Step 3

Step 4



TECHNICAL DATA ROCKPANEL Tack-S	
Туре	1-component, elastic
Shore	A 40
Density	1,3 gram/ml
Skin formation (start)	15 minutes (at 20°C/RH 50%)
Hardening rate	approx. 2-3 mm/24 hrs (at 20°C/ RH 50%)
Elongation at break	200 % (DIN 53504/ISO 37)
Temperature resistance	-40/+100°C
Processing temperature	+5/+35°C
Colour	white
Storage and stability	store in a cool (+5 to +35°C) and dry place. Can be stored at least 12 months in unopened packaging.
Packaging & part number	290 ml cartridge 30131441 600 ml sausage 30131411

#### **SPECIAL NOZZLE**

A special applicator nozzle is provided with each cartridge of ROCKPANEL Tack-S. It applies a triangular bead 9 mm wide and 9 mm high. The nozzle prevents air inclusion and unnecessary loss of adhesive.

TECHNICAL DATA Primer MSP		
Description	special water-resistant primer suitable for pretreatment of the adhesive side of ROCKPANEL boards.	
Dry substance content	approx. 40%	
Minimum drying time	2 hrs	
Maximum processing time	30 minutes	
Processing temperature	+5/+30°C	
Storage and stability	12 months after production in unopened packaging	
Packaging & part number	500 ml tin 022080	
Primer MSP can be applied with a special application set: velvet brush rollers with handle and tray. The roller ensures minimum consumption for optimal pretreatment.		

### LIQUID 1 AND PREP M

For adhesion to supporting structures, two pretreatment preparations are available: Liquid 1 for ROCKPANEL strips (mechanically fixed on wooden battens) and Prep M for aluminium profiles. Liquid 1 is also suitable for immediate removal of adhesive and primer residues.

TECHNICAL DATA Liquid 1	
For pretreatment of	surface strips
Dry substance content	0%
Colour	transparent
Minimum drying time	5 min. (at 20°C/50% RH)
Processing temperature	+5/+30°C
Storage and stability	>12 months after production in unopened packaging
Packaging & part number	1000 ml tin 022230

TECHNICAL DATA Prep M	
For pretreatment of	aluminium
Dry substance content	approx.17%
Colour	transparent
Minimum drying time	10 min. (at 20 °C/50% RH)
Processing temperature	+5/+30°C
Storage and stability	12 months after production in unopened packaging
Packaging & part number	500 ml tin 022110

TECHNICAL DATA FoamTape		
Double-sided adhesive HDPE mounting tape having a thickness of 3 mm and a width of 12 mm. It provides the initial bonding of the ROCKPANEL boards and guarantees adequate thickness and shape of the adhesive bead. FoamTape has a protective film of silicone paper on one side. FoamTape has a dense structure and is very resistant to moisture and dirt.		
Colour	grey	
Soortelijk gewicht	50 kg/m³	
Processing temperature	+5/+35°C	
Storage and stability	can be stored for 12 months	
Packaging & part number	25 metres/roll 182771	

#### **BOSTIK HOTLINE**

## Smart help + 44 (0) 1785 272625

#### **REQUEST FOR INFORMATION**

The following publications are available:

Safety Data Sheets (SDS) via http://bostiksds.thewercs.

#### **Bostik Limited**

Common Road Stafford, ST16 3EH, UK. Tel: +44 (0) 1785 272625

www.bostik.co.uk

This disclaimer is issued by Bostik Limited ("the Company") and applies to the use of any products supplied by the Company ("the Products") displayed on this Technical Data Sheet ("TDS"). Please read this disclaimer carefully before using any of the Products. Using this TDS and/or the Product constitutes your acceptance of this disclaimer. Its contents shall prevail over any directions of use and any disclaimer and/or exclusion or limitation of liability of the Company which may appear on the packaging of the Products.

This disclaimer sets out the entire financial liability of the Company (including any liability for the acts or omissions of its employees, agents and sub-contractors) to any user of the Products ("Product User") in respect of any use made or resale by the Product User, of any of the Products in this TDS. This disclaimer does not affect the Company's liability for death or personal injury arising from the Company's negligence in respect of the Products, nor its liability for fraud, or fraudulent misrepresentation, nor any other liability which cannot be excluded or limited under applicable law. The Company's total liability however arising and whether caused by tort (including negligence and breach of statutory duty), breach of contract or otherwise, arising in connection with the use made or resale by the Product User of any of the Products in this TDS shall be limited to the price paid for the Product by the Product User.

The Company shall not be liable to the Product User for any pure economic loss, loss of profit, loss of business, depletion of goodwill or otherwise, in each case whether direct, indirect or consequential, or any claims (including in respect of personal injury insofar as not caused by the Company's negligence) for consequential compensation whatsoever (howsoever caused) which arise out of or in connection with the use made or resale by the Product User of any of the Products in this TDS.

The Company shall not be liable to the Product User in relation to any loss for any use which is inappropriate or use which is otherwise than in accordance with the relevant instructions for use of the Products in this TDS or on the Product. Product Users are advised to confirm the suitability of the Products by their own tests.

This TDS covers just one of a large range of products supplied by the Company.

Full information on these products and advice on application is freely available from our fully trained staff throughout the country. In addition, specialist technical advice is available from our Technical Services Department. This TDS supersedes all previous TDSs relating to the Products, and users of it must ensure that it is the current issue. Destroy all previous TDS, and if in any doubt, contact the Company, quoting the code number in the top right hand corner on the front of this document.