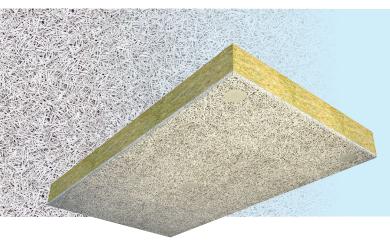
# **KNAUFINSULATION**

# HERAKLITH® TEKTALAN A2 SMARTTEC



# **PRODUCT DESCRIPTION**

Heraklith<sup>®</sup> Tektalan A2 SmartTec is a cement-bonded wood wool panel combined with a rock mineral wool insulation slab, used for the thermal & acoustic performance and the decorative finish of structural soffits.

It is non-combustible with a Euroclass A2,s1-d0 reaction to fire classification and can provide a fire resistance of up to 180 minutes to concrete floors.

# BENEFITS

- Available as standard in nature tone, or in any RAL colour upon request.
- Aesthetically pleasing; finished with bevelled edges.
- Manufactured from mineral wool which provides the best levels of sound absorption and reduction compared to other mainstream insulants.
- Quick installation on site as only 2 fixings required per panel (where the overall thickness is greater than 100mm)\*.
- Can be used as an alternative solution in structural soffits.
- \* If fire resistance is required, 5 fixings need to be used

### CERTIFICATIONS, ACCREDITATIONS AND INDUSTRY STANDARDS



## **APPLICATIONS**



Exposed soffit floors



# SPECIFICATIONS





### PERFORMANCE

### HERAKLITH® TEKTALAN A2 SMARTTEC

### THERMAL (W/mK)



#### FIRE CLASSIFICATION



SOUND ABSORPTION

Alpha w: max 1.0

Thickness (mm)	Composition mm (HW/SW)	<b>R<sub>D</sub></b> (m <sup>2</sup> K/W)	<b>Weight</b> (kg/m²)	<b>Length</b> (mm)	Width (mm)	Panels Per Pallet	Pallet (m²)
225	10/215	6.40	28.50	1000	600	5	3.00
200	10/190	5.65	25.00	1000	600	5	3.00
175	10/165	4.95	22.50	1000	600	6	3.60
150	10/140	4.20	20.00	1000	600	7	4.20
125	10/115	3.45	17.50	1000	600	8	4.80
100	10/90	2.75	16.00	1000	600	11	6.60
75	10/65	2.00	13.00	1000	600	14	8.40
50	10/40	1.25	11.50	1000	600	22	13.20

All dimensions are nominal.

Options					
Fibre Width	1.0mm				
Colour	Any colour				

### SOUND ABSORPTION COEFFICIENT\*

Panel type	Frequency (Hz)	125	250	500	1000	2000	4000	Alpha w	NRC **	Absorption Class
Heraklith® Tektalan A2 SmartTec [2mm], 50mm	αs (1/1 octave)	0.20	0.70	1.00	1.00	0.80	0.60	0.80	0.90	0.89
Heraklith® Tektalan A2 SmartTec [1mm], 50mm	αs (1/1 octave)	0.25	0.75	1.00	1.00	0.95	0.80	0.95	0.95	0.94

Sound absorption tests have been executed in accordance with the norm ISO 11654/ASTM-C423.

\* Mounted directly to concrete.

\*\* Noise Reduction Coefficient.



# ADDITIONAL INFORMATION

### Application

Heraklith® Tektalan A2 SmartTec is used specifically developed for the thermal insulation, acoustic performance and decorative finish of walls and ceilings. Heraklith® Tektalan A2 SmartTec is non-combustible with a Euroclass A2, s1-d0 reaction to fire classification.

### Standards and certification

The rock mineral wool element of Heraklith® Tektalan A2 SmartTec is manufactured in accordance with BS EN 13162, ISO 50001 Energy Management Systems. The wood wool element is manufactured in accordance with EN 13168:2012+A1WW-EN 13168-L2-W1-T1-S2-P2-CS(10/Y)200-Cl3, ISO 50001 Energy Management Systems, ISO 14001 Environmental Management Systems, ISO 45001 Occupational Health and Safety Management Systems and ISO 9001 Quality Management Systems.

### **Thermal Modelling**

The U-value of a proprietary built element (rainscreen façade/ masonry cavity wall/garage soffit etc.) or system is dependent on the material properties and the degree of thermal bridging in the system. Calculations should be created using 2D or 3D modelling programs which comply with the methodologies detailed in BS EN ISO 6946 or BS EN ISO 10211 and using guidance from BR443.

We offer simplified calculations to BS EN ISO 6946 and where required numerically modelled U-value calculations using software that is compliant with BS EN ISO 10211.

#### **System Testing**

Knauf Insulation maintains declared product characteristics and qualities which are defined in detail in its Declaration of Performances (DoPs) and product literature. The product literature also includes information relating to Knauf Insulation's requirements and recommendations for installation of its products when being used as part of a system. Any party using, or planning to use, our products in a system (with or without system testing) where performance may be dependent on product characteristics not declared on our DoPs or our product literature, must contact our Technical Service Team.

Knauf Insulation will not accept liability for any failure in system performance due to product characteristics not declared on DoPs or product literature, or not agreed in a Service Level Agreement. In such an event, any warranty given in relation to those products will be invalidated.

### **Real Performance**

Glass and rock mineral wool are easier to install correctly than other insulants, such as rigid boards, because they adapt to any slight imperfections in the substrate and knit together, eliminating any air gaps. Mineral wool is engineered to adapt to any imperfections, and any settlement/movement over time, so it maintains close contact and preserves thermal performance for the life of the building.

Evidence shows the absence of air gaps is crucial to achieving real performance in the relevant application. Any insulation material that doesn't deliver 'as-built' thermal performance is failing in its primary purpose, and therefore presents an unnecessary risk as the construction industry seeks to close the performance gap.

### **Durability**

Heraklith® Tektalan A2 SmartTec is odourless, rot proof, nonhygroscopic, don't sustain vermin and will not encourage the growth of fungi, mould or bacteria. The product will have a life equivalent to that of the wall structures in which it is incorporated.

#### **Sustainability**

The overall environmental performance of our products is reported in their EPDs (Environmental Product Declarations) which are available on our website. EPDs are available for all our products in accordance with ISO 14025, ISO 21930 and EN 15804+A2.

### Handling and Storage

Heraklith® Tektalan A2 SmartTec should be stored properly and handled in such a way as to ensure that the product remains clean and undamaged.

The shrink-wrapped pallets used for the supply of Heraklith® Tektalan A2 SmartTec is designed for short-term protection only. For longer term protection on site, the product should either be stored indoors or under cover and off the ground. Heraklith® Tektalan A2 SmartTec should not be left permanently exposed to the elements.

If the main hood is removed or damaged, the panels should be kept under cover indoors or protected from the elements by a weatherproof cover. In coastal locations where weather is more extreme and bird damage is more common, use additional covering or store indoors.

The product must be protected from prolonged exposure to sunlight, and stored dry and flat.

Heraklith® Tektalan A2 SmartTec is easy to handle; care should be exercised to avoid crushing its edges or corners. If damaged, the product should be discarded. Damaged, contaminated or wet products must not be used.

During construction exposed areas of panels should always be covered at the end of a day's work or in heavy rain. Polyethylene covers should be used to provide protection and prevent work from becoming saturated.

### Knauf Insulation Ltd

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