



TekTherm™ AK300HT

Material Specification

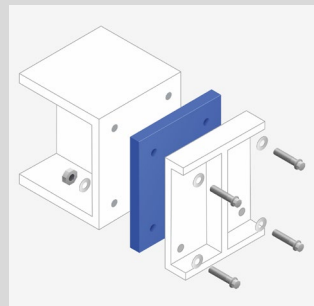
TekTherm™ AK300HT has the highest level of compressive strength and thermal insulation of all available products and can meet demanding application specifications.

TekTherm™ AK300HT has been independently tested and certified so specifiers and customers know they are buying a quality product. We can supply this in cut pads, strips or in any other shape within the parameters of the material (2,440mm x 1,220mm).

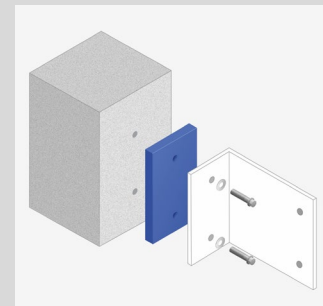


Applications

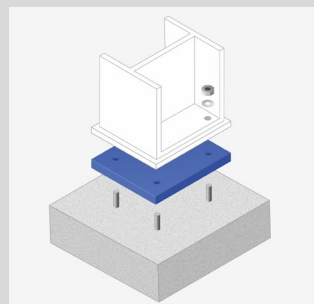
- Steel to Steel
- Steel to Concrete
- Concrete to Concrete
- Steel to Timber
- Balconies
- Canopies
- Brise-soleil
- Roof Plant enclosures
- Façade Systems
- Balustrading
- Parapets
- Man-safe systems
- Staircases
- Building Maintenance Units



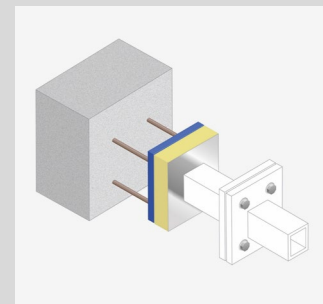
Steel to Steel Connection



Brickwork to Cladding Connection



Column Base Connection



Steel to Concrete Connection

Mechanical Properties	Unit	Value	Test Standard
Flexural strength	MPa	170	ISO 178
Modulus of elasticity	MPa	10000	ISO 178
Compressive strength at 200°C	MPa	90	ISO 604
Design Compressive strength at 23°C	MPa	198	ISO 826
Friction Coefficient	/	0.15	ASTM D1894

Physical Properties

Density	g/cm3	1.5 (+/-0.1)	ISO 1183
Water Absorption (24h 23°C)	%	0.49	ISO 12087

Electrical Properties

Electrical strength	kV/mm	21	IEC 60243-1
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Thermal Properties

Operating temperature	°C	-180 +200	
Coefficient of linear expansion //	1.0E-6 / K	20	DIN 53752
Thermal conductivity	W/m.K	0.1332	DIN 52612
Flame retardancy		V0	UL94

Thicknesses Available

Width 1,220mm x Length 2,400mm	mm	6, 10, 12, 15, 20 & 25	
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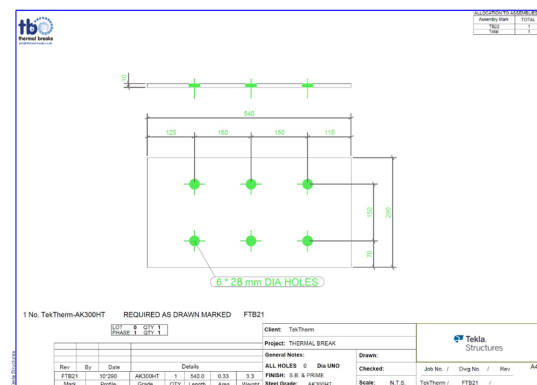
Supply Chain Responsibilities

- Thermal Modelling – Architect
- Structural Evaluation – Structural Engineer
- Cost Evaluation – QS
- Installation – Contractor

Quotations

The below information is required for quotations

- Material spec - TekTherm™ AK200, AK300HT or AK-FR
- Pad dimensions
- Thickness
- Number and size of holes
- Quantity
- Delivery Address



RoHS Directive

Hazardous products listed in the EU-directive 2011/65/EU (ROHS-directive), §4 section 1, are not used as ingredients in this material.

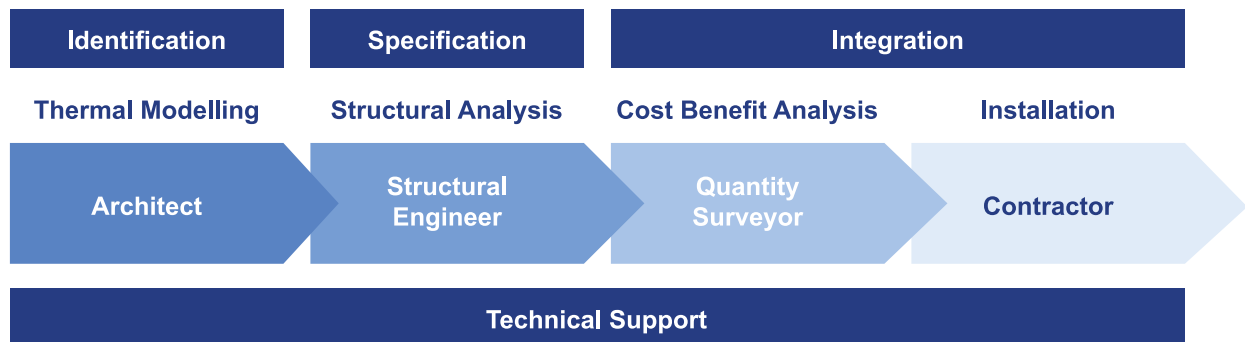
Benefits

- Asbestos free
- Low heat conductivity
- Excellent tolerances with respect to parallelism
- Long life expectancy > 50 years
- (dependent on operating conditions)
- Low water absorption
- Good hydrocarbon stability
- Good chemical stability
- Excellent mechanical durability
- Very good electrical properties
- UL 94-V0

We aim to deliver all orders within 5 working days however we are well versed with industry requirements and therefore will always turn these around in the shortest time possible. Please call us if you have an urgent requirement and we will arrange your order to be expedited.

On and Off-Site Support

We are here to discuss your application and assist you in selecting the right thermal break materials to meet your project specification.



Tekla Plugin available for Thermal Breaks Ltd.

This plugin tool provides easy and efficient design and detailing of our Thermal Break plates within structural steel framed buildings.

Available from <https://thermal-breaks.co.uk>

Updated 17/04/2021



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