



# TekTherm™ AK200

## Material Specification

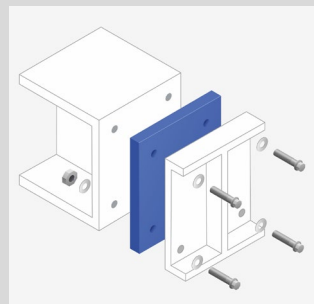
TekTherm™ AK200 is a medium duty structural thermal breaks which offer good thermal insulation properties and compressive strength.

TekTherm™ AK200 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.

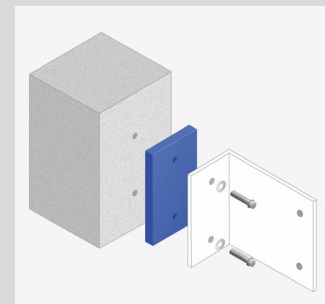


## Applications

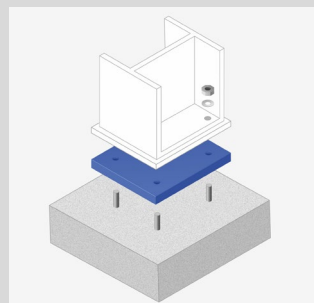
- Steel to Steel
- Steel to Concrete
- Concrete to Concrete
- Steel to Timber
- Balconies
- Canopies
- Brise-soleil
- Roof Plant enclosures
- Façade Systems
- Balustrading
- Parapets
- Man-safe systems
- Staircases
- Building Maintenance Units



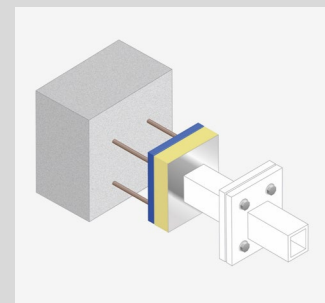
Steel to Steel Connection



Brickwork to Cladding Connection



Column Base Connection



Steel to Concrete Connection

Mechanical Properties	Unit	Value	Test Standard
Flexural strength	MPa	115	ISO 178:2001
Compressive strength	MPa	109	ISO 826
E-modulus	MPa	4100	ISO 527-1
Elongation at break	%	>20	ISO 527-1
Compressive modulus	MPa	3000	ISO 604:2002
Charpy Impact Strength	KJ/m2	-	ISO 180:2000

Physical Properties	Unit	Value	Test Standard
Density	g/cm3	1.15	ISO 1183
Water Absorption (24h 23oC)	%	0.95 (max)	ISO 1606
Moisture absorption (saturation)	%	7	ISO 62:1999

Electrical Properties	Unit	Value	Test Standard
Dielectric strength	kV/mm	25	IEC 60243-1

Thermal Properties	Unit	Value	Test Standard
Operating temperature	°C	-40 +160	
Coefficient of linear thermal expansion	°C-1	8x10-5	ISO 11359-2
Thermal conductivity	W/m. K	0.184	ISO 12667
Flame retardance	°C	HB	IEC 60695-11-10

Thicknesses Available	Unit	Value	Test Standard
Width 1,000mm x Length 2,000mm	mm	6	
Width 1,220mm x Length 2,000mm	mm	10, 12, 16, 20 & 25	

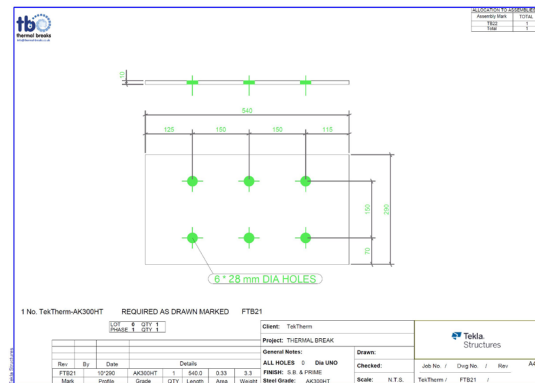
## Supply Chain Responsibilities

- 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.

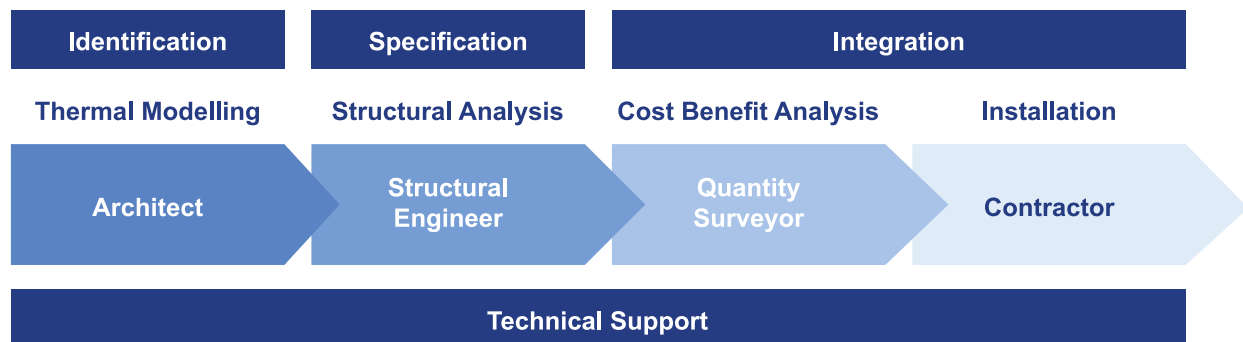
## Benefits

- Asbestos free
- Low heat conductivity
- Excellent tolerances with respect to parallelism
- Long life expectancy >25 years
- Low water absorption
- Good hydrocarbon stability
- Good chemical stability
- Excellent mechanical durability
- Very good electrical properties

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 17/05/2021



0800 6444 949 info@thermal-breaks.co.uk

Page 3 of 3