



TekTherm™ AK200

Material Specification

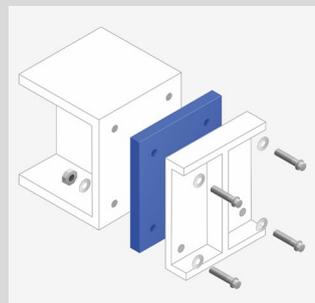
TekTherm™ AK200 is a medium duty structural thermal break, offering good thermal insulation properties and compressive strength.

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.

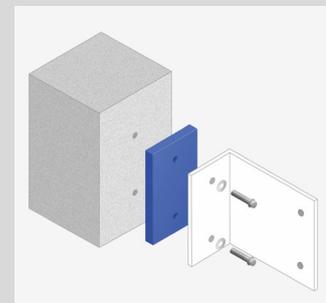


Applications

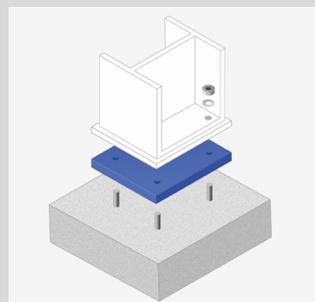
- Steel to Steel
- Steel to Concrete
- Concrete to Concrete
- Steel to Timber
- Balconies
- Canopies
- Brise-soleil
- Roof Plant enclosures
- Façade Systems
- Balustrading
- Parapets
- Man-safe systems
- Staircases
- Building Maintenance Units



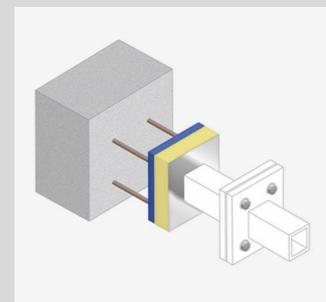
Steel to Steel Connection



Brickwork to Cladding Connection



Column Base Connection



Steel to Concrete Connection



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+01 (951) 519-9855

+353 (0)1 401 6554

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Compressive Strength at 23°C (73°F)	Unit	Value	Test Standard
Characteristic	MPa (PSI)	105.4 (15,287)	ISO 826
Design	MPa (PSI)	84.3 (12,226)	ISO 826

Mechanical Properties

Flexural Strength	MPa (PSI)	115 (16,679)	ISO 178:2001
E-modulus	MPa (PSI)	4100 (594,657)	ISO 527-1
Elongation at Break	%	>20	ISO 527-1
Compressive Modulus	MPa (PSI)	3000 (43,511)	ISO 604:2002
Shear Strength	MPa (PSI)	76 (11,000)	ASTM D732

Physical Properties

Density	g/cm ³ (lb/ft ³)	1.15 (72)	ISO 1183
Water Absorption 24h 23°C (24h 73°F)	%	0.95 (max)	ISO 1606
Moisture Absorption (Saturation)	%	7	ISO 62:1999

Thermal Properties

Operating Temperature	°C (°F)	-40 +160 (-40 +320)	
Coefficient of Linear Thermal Expansion	°C-1	8x10 ⁻⁵	ISO 11359-2
Thermal Conductivity	W/m. K (BTU/Hr/ft ² /in/°F)	0.184 (1.28)	ISO 12667
Flame Retardance	°C	HB	IEC 60695-11-10

Thicknesses Available

Width 1,000mm (39") x Length 2,000mm (79")	mm (")	6 (0.236)	
Width 1,220mm (48") x Length 2,000mm (79")	mm (")	10 (0.393), 12 (0.472), 16 (0.629), 20 (0.787), 25 (1)	

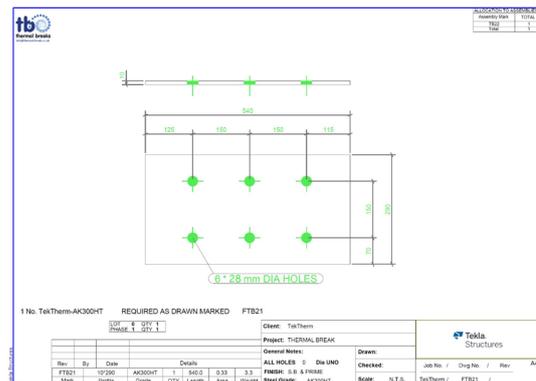
Supply Chain Responsibilities

- 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.

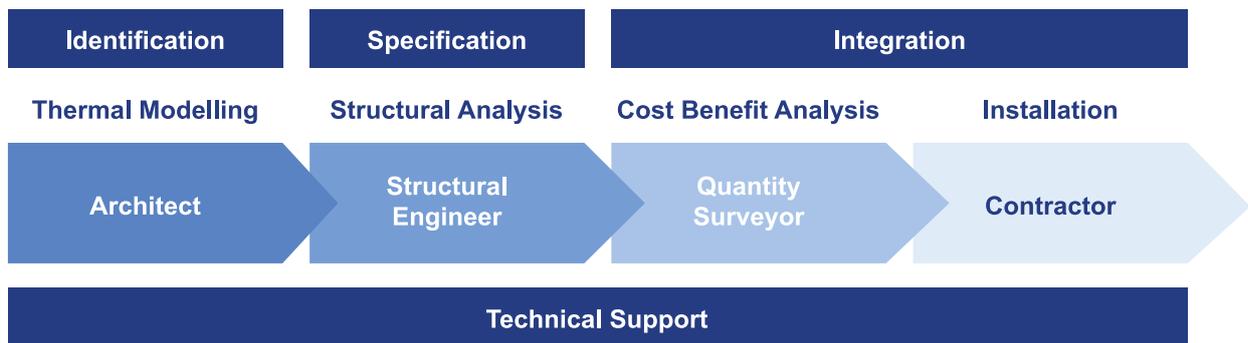
Benefits

- 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

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.group>

Thermal Breaks Group will notify ICTT of any changes to material composition.

Updated 19/02/2024



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