Farrat
ENGINEERS ON A MISSION

Data Sheet

STRUKTRA® TBK Structural Thermal Breaks

STRUKTRA® TBK is our premium grade material with very high compressive strength characteristics combined with a very low thermal conductivity.

Farrat only use Structural Thermal Break materials specifically developed for use within the building envelope.

STRUKTRA® TBK is fully certified to ensure that designers and clients have confidence in the product when used in structural connections. STRUKTRA® TBK can be supplied as cut to size pads or strips, with a bespoke number of holes precision waterjet cut, according to the customer's requirements or specification.

Structural Applications

Farrat Structural Thermal Breaks are high performance thermal insolators used between horizontal and vertical connections of internal and external elements to prevent thermal or cold bridging.

STRUKTRA® TBK can be used in a wide variety of applications where there is a structural requirement for thermal insolation:

- Steel to Steel
- Steel to Concrete/Masonary
- Steel to Timber
- Concrete to Concrete

STRUKTRA® TBK can be used in new build and refurbishment projects within the following building element examples:

- Facade system connections to primary frames
- Brise soleil and signage
- Roof plant enclosures - columns
- Roof parapets
- Connection of external to internal primary building elements
- Balconies
- Staircases
- Isolation of sub-structure and basement elements
- Man-safe systems
- Connections to existing structures

For more information on using STRUKTRA® TBK (including standard details), please see the following Farrat Technical Brochure:

> Farrat Structural Thermal Breaks

and sign up to our knowledge hub.

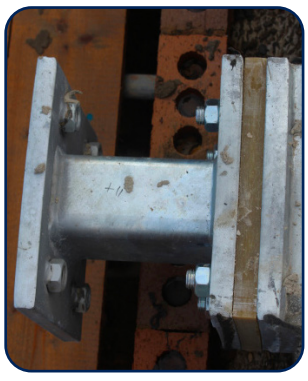
STRUKTRA® TBK

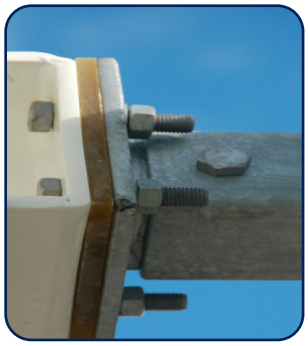
A high-strength, low thermal conductivity Structural Thermal Break material.

Certifications & Accreditations:

BBA bre DStV Deutscher Stahlbau-Verband ETA-22/0333

STRUKTRA® TBK Site Applications:





Material Properties

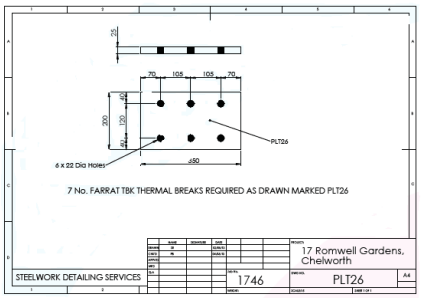
PROPERTIES	FARRAT TBK		NOTES
Compressive strength	Characteristic fck	312 MPa	BS EN 1990 Equation (D.1)
	Design, fcd	250 MPa	BS EN 1993-1-8 (YM2 = 1.25) (UK NA)
Elastic modulus		5178 MPa	
Thermal conductivity / Resistance		0,187 W/mK	
Density		1465 kg/m3	
Water Absorption		0.14%	
Long term creep		20%	% Increase of initial strain (Serviceability Limit State)

THICKNESS	TOLERANCE	MAX. SHEET SIZE
5mm	0 / +0,2mm	2400mm x 1200mm
10mm	0 / +0,2mm	
15mm	0 / +0,2mm	
20mm	0 / +0,3mm	
25mm	0 / +0,3mm	

Quotations

The following information is required for a quotation:

- Material Type - Farrat TBF, Farrat TBK or Farrat
- TBL
- Plate Dimensions
- Plate Thickness
- Number and size of Holes
- Quantity
- Delivery Postcode



Orders & Manufacturing

Farrat Structural Thermal Breaks are bespoke products so early procurement is recommended. We aim to start manufacturing within 3 working days from an order being placed. Prior to fabrication a fully dimensioned drawing is normally required for each type of plate with a unique project reference. Prior to delivery all Farrat Structural Thermal Breaks are labelled with the fabricator's drawing reference. Fabrication is undertaken in accordance with our ISO 9001 and ISO14001 accreditations.