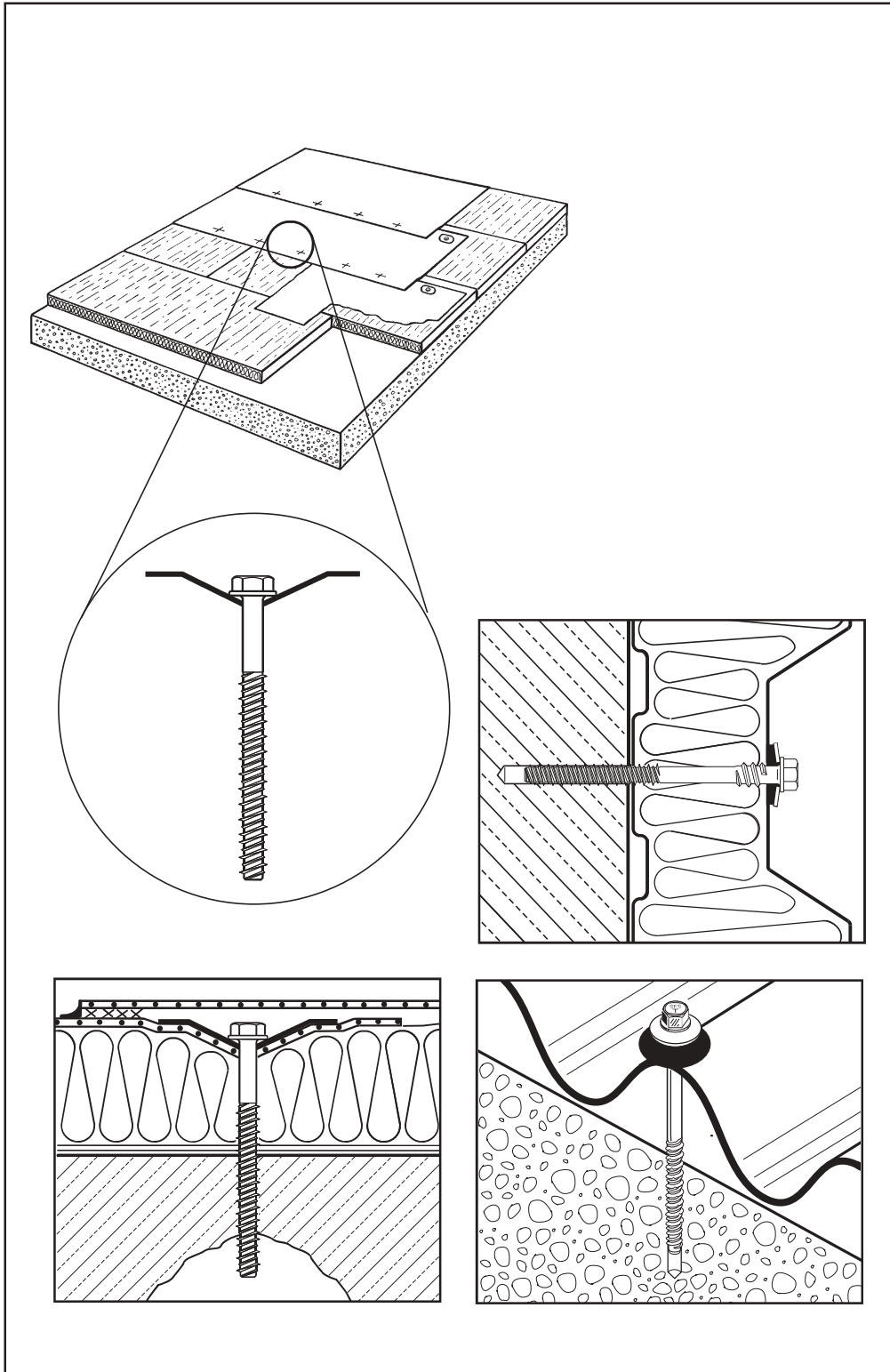


TI/TI-S
TBT-T/TBT-S
TB-T-H12

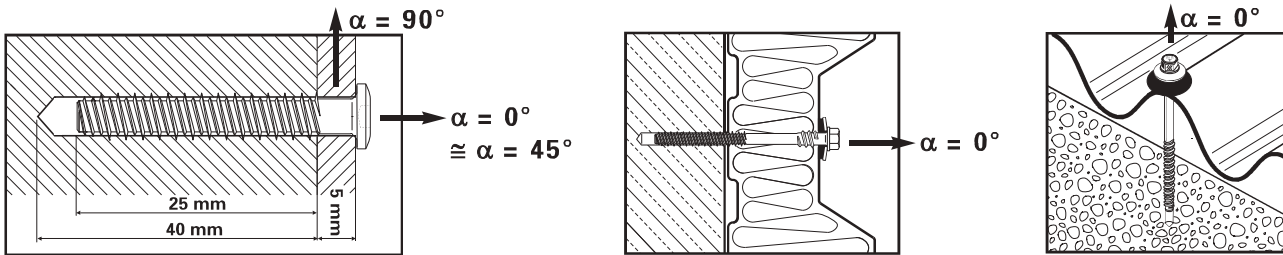
Technical data sheet for fastening systems to concrete decks and brickwork



GFF 1.50.01 E PAW/fmi

**TI/TI-S
TBT-T/TBT-S
TB-T-H12**

Characteristic fracture load F_{5%} (kN)



Direction of loading	B25 concrete		B55 concrete		Solid brick		thin concrete plate 40 mm
	$\alpha = 0^\circ$	$\alpha = 90^\circ$	$\alpha = 0^\circ$	$\alpha = 90^\circ$	$\alpha = 0^\circ$	$\alpha = 90^\circ$	$\alpha = 0^\circ$
TI *	2,4	4,0	3,0	5,0	2,1	2,4	2,0
TBT-T *	2,4	-	3,0	-	2,1	-	-
TI-S *	2,4	3,8	2,8	4,8	2,1	2,4	2,0
TBT-S *	2,4	-	2,8	-	2,1	-	-
TB-T-H12 *	2,4	-	3,0	-	2,1	-	2,0

* All datas are based on a 5,2 mm hammer drill bit. For TI-screws (C-steel) the 4,8 mm drill bit can also be used.

Recommended edge - corner - centre spacing

	Concrete	Solid brick	
Edge/corner spacing (r)	50 mm	100 mm	
Centre spacing (a)	50 mm	100 mm	
Centre spacing A at min. edge spacing r	150 mm	250 mm	

Calculation of the recommended safe working load

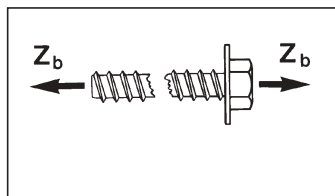
Basically fastenings are designed using recommended safe working loads relating to the product (F_{REC.}). The characteristic fracture load F_{5%} (5% Fractil value) provides the basis for the loads recommended (F_{REC.}).

- F_{5%} ≤ 95% of all fracture loads (confidence 90%).
- F_{rec.} = $\frac{F_{5\%}}{v}$
- v = Safety factor - depending on national regulations and approvals

If nothing else known SFS recommends min.:

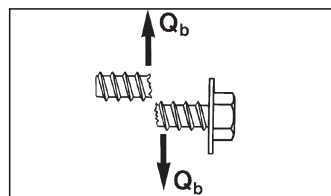
- v = 2,5 for roofing
- v = 3,0 for cladding
- v = 5,0 for over head applications

Mechanical data for the fasteners in T- and S-Steel



Tensile breaking Z_b (kN)

Material T:
16 kN
Material S:
13,5 kN



Shear breaking Q_b (kN)

Material T:
10 kN
Material S:
11 kN