



Approval body for construction products and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and Laender Governments



European Technical Assessment

ETA-08/0262 of 17 October 2017

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the European Technical Assessment:

Trade name of the construction product

Product family to which the construction product belongs

Manufacturer

Manufacturing plant

This European Technical Assessment contains

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of

This version replaces

Deutsches Institut für Bautechnik

SFS intec Flat Roof Fasteners

Fasteners for flexible roof waterproofing systems

SFS intec AG FasteningSystems Rosenbergsaustraße 10 9435 HEERBRUGG SCHWEIZ

Factory 1 to factory 15, factory 18 to factory 23

114 pages including 109 annexes which form an integral part of this assessment

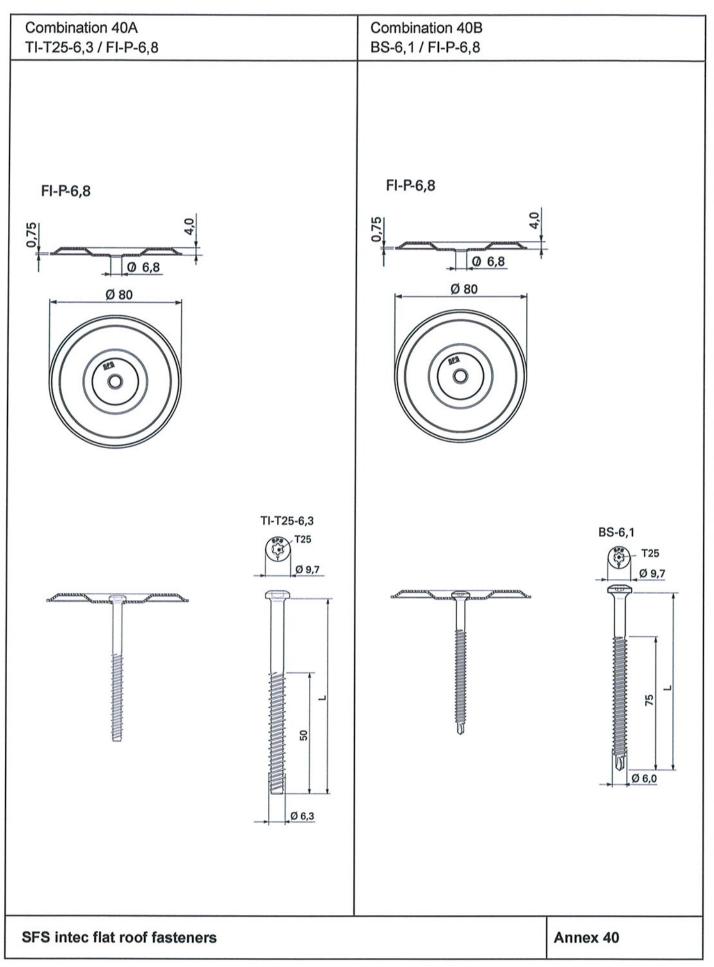
ETAG 006, used as EAD according to Article 66 Paragraph 3 of Regulation (EU) No 305/2011.

ETA-08/0262 issued on 25 April 2013

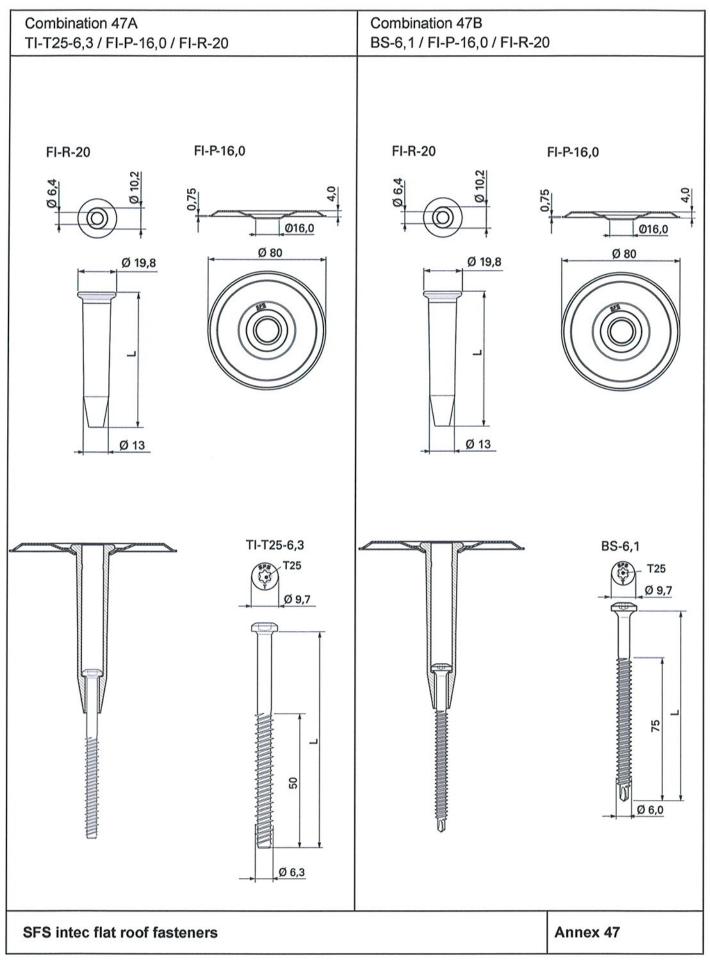
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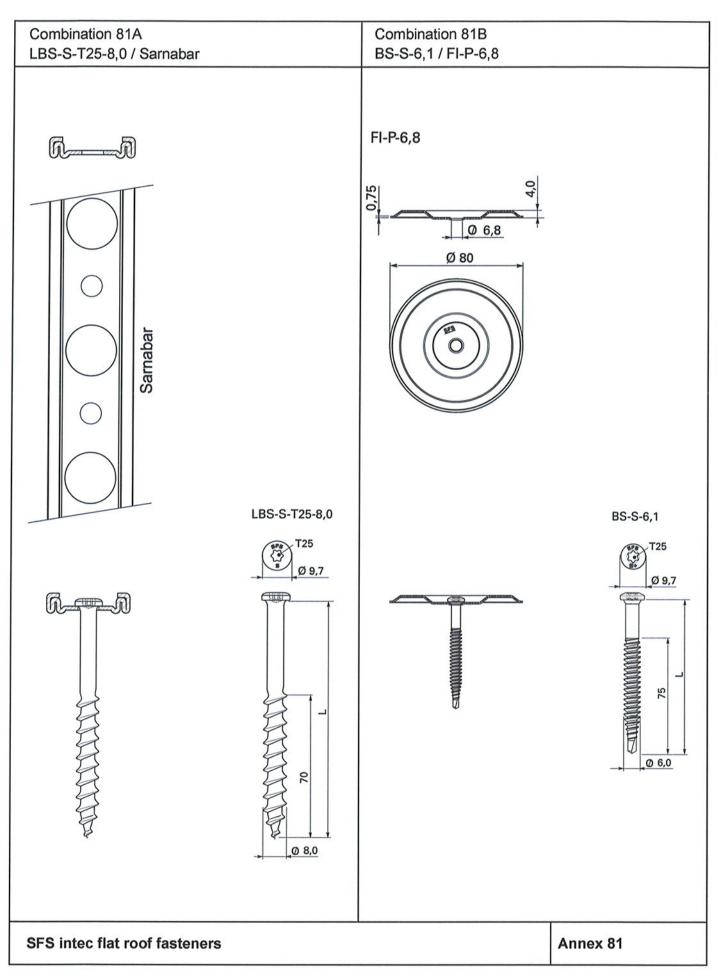




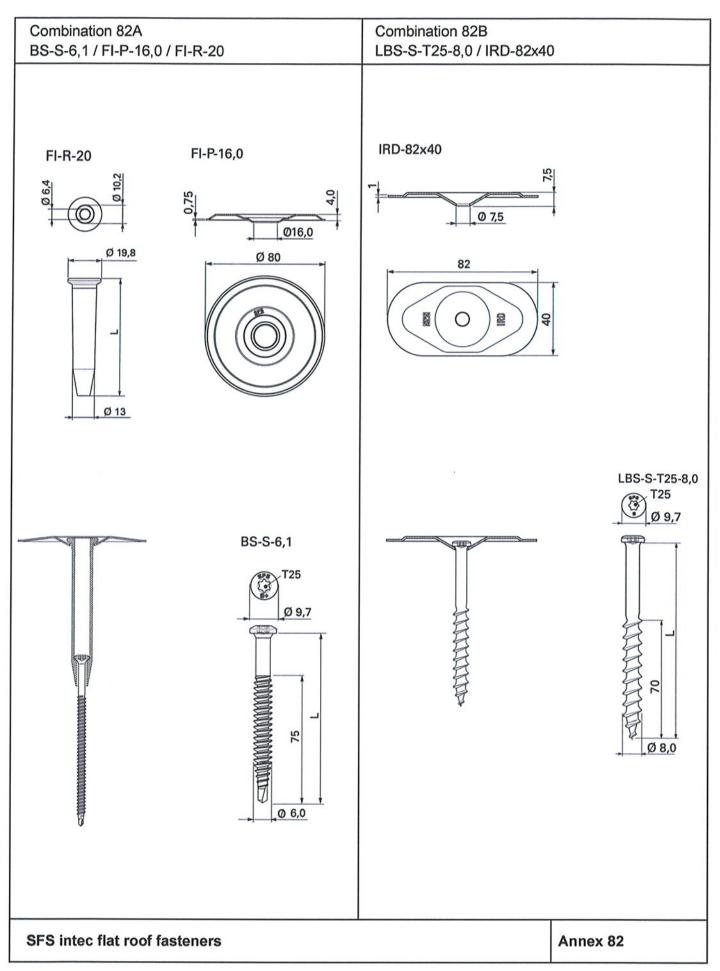
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Combination	S flat ro	Steel sheets S320GD ¹⁾ EN 10346 t ≥ [mm]									Steel s S35 EN 10 t≥[t	0GD 0346	Steel sheets Perforated Steel sheets S420GD S320GD EN 10346 S320GD t ≥ [mm] EN 10346			Aluminium shee R _m ≥195 N/mm	
	Fastener	Stress Plate / Sleeve / Bar	0,50	0,63	0,70	0,75	0,80	0,88	1,00	1,25	1,50	0,70	1,00	0,65	0,75	t ≥0,75 mm	t≥0,60 mm
11A	BS-6,7	R75	- 72	-	-		-	-	-		-	-	-	-	-	0,87	-
11B	BS-6,7	TPS	-	-	-			-	-			-	-		-	0,87	
12A	BS-S-6,7	R45	-	-	-	-	-	-	-		•	-	-	-	-	0,87	
12B	BS-S-6,7	R75		-	-	-	-	-	-	•	•	-	-	-	-	0,87	-
13A	BS-S-6,7	TPS		-	-	-	-	-	-	•	•	-	-	-	-	0,87	-
13B	TPR-L-6,3	IRD-82x40	0,99 ²⁾	-	-	-	-	-			-	-	-	-	•	-	0,69 ²⁾
28B	BS-4,8	Sarnafast Tube SFT-50	-	1,09	1,34	1,52	1,66	1,66	1,66	1,66	-	1,44	1,66	1,39	1,66	-	-
29A	BS-4,8	Sarnabar Tube SBT-20 / Sarnabar		1,09	1,34	1,52	1,67	1,91	2,09	2,09		1,44	2,09	1,39	1,74	-	
29B	BS-S-4,8	Sarnafast Tube SFT-50		0,87	1,09	1,24	1,38	1,61	1,66	-	-	-	-		-	-	-
30A	BS-S-4,8	Sarnabar Tube SBT-20 / Sarnabar	-	0,87	1,09	1,24	1,38	1,61	1,96	-	-	-	-	-	-	-	-
30B	Sarnafast SF-4,8	Sarnafast KT-82x40	-	1,09	1,34	1,52	1,67	1,91	2,27	3,15	-	1,44	2,27	1,39	1,74	-	-
31A	Sarnafast SF-4,8	Sarnafast DT-70x70		1,09	1,34	1,52	1,67	1,91	2,27	3,15	-	1,44	2,27	1,39	1,74	-	
31B	Sarnafast SBF-6,0	Sarnafast Tube SFT-50	-	1,17	1,38	1,53	1,63	1,66	1,66	1,66	-	1,58	1,66	1,57	1,66	-	
32A	Sarnafast SBF-6,0	Sarnabar Tube SBT-20 / Sarnabar	-	1,17	1,38	1,53	1,63	1,80	2,04	2,10	-	1,58	2,10	1,57	1,92	-	-
35A	IF2-6,1	IRD-82x40	-	1,11		-	-	-	1,16	-	-	-	-	~	-	-	
35B	IF2-6,1	ID-70x70	-	1,11	-	-	-	-	1,16	-	-	-	-		-	-	-
39A	BS-4,8	FI-P-6,8	-	1,09	1,34	1,52	1,67	1,91	2,27	2,29	-	1,44	2,27	1,39	1,74	-	-
39B	BS-S-4,8	FI-P-6,8	•	0,87	1,09	1,24	1,38	1,61	1,96	-	-	-	-			-	-
40B	BS-6,1	FI-P-6,8	-	1,17	1,38	1,53	1,63	1,80	2,04	2,83		1,58	2,19	1,57	1,92	-	
44B	Sarnafast SBF-6,0	FI-P-6,8		1,17	1,38	1,53	1,63	1,80	2,04	2,83	-	1,58	2,19	1,57	1,92	-	

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Annex 96

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SFS intec flat roof fasteners

Combination	S flat ro	Steel sheets S320GD ¹⁾ EN 10346 t ≥ [mm]									1 San 2 San 2	0GD 0346		0GD 0346	Perforated Steel sheets S320GD EN 10346	Aluminium sheets R _m ≥ 195 N/mm ²	
_	Fastener	Stress Plate / Sleeve / Bar	0,50	0,63	0,70	0,75	0,80	0,88	1,00	1,25	1,50	0,70	1,00	0,65	0,75	t ≥0,75 mm	t ≥ 0,60 mr
75B	Sarnafast SBF-6,0	Sarnabar	-	1,17	1,38	1,53	1,63	1,80	2,04	2,91	-	1,58	2,19	1,57	1,92	-	
76A	Sarnafast SBF-S-6,0	Sarnabar	-	1,21	1,47	1,66	1,81	2,04	2,39	-	-	-	-		-	-	-
76B	IR2-4,8	Sarnabar	-	1,09	1,34	1,52	1,67	1,91	2,27	3,15	-	1,44	2,27	1,39	1,74	-	
81B	BS-S-6,1	FI-P-6,8	-	1,21	1,47	1,66	1,81	2,04	2,39	-	-	-	-	-	-	-	-
82A	BS-S-6,1	FI-P-16,0 / FI-R-20	-	1,21	1,47	1,66	1,81	2,04	2,17	-	-	-			-	-	-
85A	TPR-L-6,3	FI-P-6,8	0,99 ²⁾	-	-	-	-	-	-	-		-		-	-	-	0,69 ²⁾
87B	TPR-L-6,3	IL-C-82x40	0,99 ²⁾	-	-	-	-	-	-	-	-	-			-	-	0,69 ²⁾
88A	BS-4,8	IPF45 / FI-R-20	-	1,09	1,34	1,52	1,67	1,91	2,21	2,21	-	1,44	2,21	1,39	1,74	-	-
88B	BS-4,8	IPF45 / FI-R-20	-	1,09	1,34	1,52	1,67	1,91	2,21	2,21	-	1,44	2,21	1,39	1,74	-	-
89A	BS-4,8	Isolfast SQT	-	1,09	1,34	1,45	1,45	1,45	1,45	1,45	-	1,44	1,45	1,39	1,45	-	-
89B	Sarnafast SF-4,8	IF/IG-C-82x40	-	1,09	1,34	1,52	1,67	1,91	2,27	3,15	-	1,44	2,27	1,39	1,74	-	-
90B	Sarnafast SBF-6,0	Sarnaweld disc 6,8	-	1,17	1,38	1,53	1,63	1,80	2,04	2,83		1,58	2,19	1,57	1,92	-	-
91A	Sarnafast SBF-6,0	Sarnaweld disc 16 / Sarnabar Tube SBT-20	-	1,17	1,38	1,53	1,63	1,80	2,04	2,17		1,58	2,17	1,57	1,92		-
91B	Sarnafast SBF-S-6,0	Sarnabar disc 6,8	-	1,21	1,47	1,66	1,81	2,04	2,39	-	-	-		-		-	-
92A	Sarnafast SBF-S-6,0	Sarnaweld disc 16 / Sarnabar Tube SBT-20	-	1,21	1,47	1,66	1,81	2,04	2,17			-				-	-
92B	IR2-S-4,8	Sarnabar	-	0,90	1,13	1,29	1,43	1,62	1,97	-	-	-	-			-	-
93A	IR3-4,8	Sarnabar	-	-	-		-	-	1,26	2,00	2,63		-		•	-	•
94A	IR2-4,8	Sarnafast KT-82x40	-	1,09	1,34	1,52	1,67	1,91	2,27	3,15		1,44	2,27	1,39	1,74		
94B	BSF-N-6,1	RH45	-	1,17	1,38	1,53	1,54	1,54	1,54	1,54	-	1,54	1,54	1,54	1,54	-	-

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Annex 99

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SFS intec flat roof fasteners

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Combination 00A 00B 11A 11B	Fastener TI-T25-6,3 BS-6,1	Stress Plate / Sleeve / Bar FI-P-6,8	OSB3 EN 300 t≥18 mm ¹⁾	Structural Timber EN 338 / C24 t≥22 mm ²⁾	Plywood EN 636 t≥18 mm ³⁾	C12/15	C25 /20	setting	pre-drill			setting		setting	
0B 1A	TI-T25-6,3		t≥18 mm *	t≥22 mm ²¹	t ≥ 18 mm ³	C12/15	C25/30	depth ≥	diameter	P 3.3	P 4.4	setting depth ≥	LAC 6, D 1,0		pre-drill diameter
0B 1A		FI-P-6,8						[mm]	[mm]			[mm]		[mm]	[mm
1A	BS-6,1		-		-	1,83 2,73	1,83 2,83	20 30	5,0	-			-	-	-
		FI-P-6,8	1,32	2,16	2,11	0,72	1,45	32	5,0	0,35	0,58	75			
18	DT-4,8	FI-P-6,8	-	-	-	2,40	2,83	25	4,8	-		-	-	-	-
10	DT-S-4,8	FI-P-6,8	-	-	-	2,65	2,83	25	4,8	-	-	-		-	
2A	DT-6,3	FI-P-6,8	-	-	-	2,93	3,82	32	6,3	-	-	-	-	÷	
2B	DT-S-6,3	FI-P-6,8	-	-	-	2,23	3,10	32	6,3	-	-	-	-	-	
ЗА	LBS-T25-8,0	FI-P-6,8	-	-	-	-	-	-	-	0,93	1,44	60	-	-	
3B	LBS-S-T25-8,0	FI-P-6,8	-	-	-	-	-	-	-	0,93	1,44	60	-	-	
4A	TS-T25-6.0	FI-P-6.8	1 31	1.43	2 30	0,44	0,89	32	5.0	1.07	1 70	75			
			2,52	2,10	2,50	2,83	2,83	50	3,0	1,07	1,78	/3	-	-	
4B	Sarnafast SBF-6,0	FI-P-6,8	1,32	2,16	2,11	0,72	1,45	32	5,0	0,35	0,58	75	-	-	3
5A	Sarnafast SBF-S-6,0	FI-P-6,8	1,25	2,02	2,22	0,42	0,84	32	5,0	0,82	1,37	75	-	-	
5B	FB-S-T25-7,5	FI-P-6,8		-	-	-	-	-	-	-	-		0,59	50	4
6A	BS-4,8	FI-P-16,0 / FI-R-20	1,45	1,32	2,18	-	-		-	-		-		-	
6B	BS-S-4,8	FI-P-16,0 / FI-R-20	1,28	1,74	1,96	-	-	-	-	-	-		-	-	
7A	TI-T25-6 3	FI-P-16.0 / FI-R-20				1,83	1,83	20	5.0						
		1.1.20,07.1.1.20				2,17	2,17	30	5,0		_			-	
7B	BS-6,1	FI-P-16,0 / FI-R-20	1,32	2,16	2,11	0,72	1,45	32	5,0	0,35	0,58	75	-	-	
8A	DT-4,8	FI-P-16,0 / FI-R-20	-	-	-	2,17	2,17	25	4,8	-	-	-	-	-	-
4 4 5 6 6 6 7 7 7 8	BB AA BB 5A 5A 55B 7A 7B 58A 75B 58B 58A 75B 58B 58A 75B 58B 58B 58B 58B 58B 58B 58B 58B 58B 5	BB LBS-S-T25-8,0 IA TS-T25-6,0 IB Sarnafast SBF-6,0 SA Sarnafast SBF-S-6,0 SB FB-S-T25-7,5 SA BS-4,8 SB BS-S-4,8 7A TI-T25-6,3 7B BS-6,1 SA DT-4,8	BB LBS-S-T25-8,0 FI-P-6,8 IA TS-T25-6,0 FI-P-6,8 IB Sarnafast SBF-6,0 FI-P-6,8 IB Sarnafast SBF-6,0 FI-P-6,8 IB Sarnafast SBF-5-6,0 FI-P-6,8 IB FB-S-T25-7,5 FI-P-6,8 IB FB-S-T25-7,5 FI-P-6,8 IB BS-4,8 FI-P-16,0 / FI-R-20 IB BS-5-4,8 FI-P-16,0 / FI-R-20 IB BS-6,1 FI-P-16,0 / FI-R-20	BB LBS-S-T25-8,0 FI-P-6,8 - HA TS-T25-6,0 FI-P-6,8 1,31 HB Sarnafast SBF-6,0 FI-P-6,8 1,32 HB Sarnafast SBF-6,0 FI-P-6,8 1,32 HB Sarnafast SBF-6,0 FI-P-6,8 1,25 HB Sarnafast SBF-S-6,0 FI-P-6,8 1,25 HB Sarnafast SBF-S-6,0 FI-P-6,8 1,25 HB Sarnafast SBF-S-4,0 FI-P-16,0 / FI-R-20 1,45 HB BS-4,8 FI-P-16,0 / FI-R-20 1,28 HA TI-T25-6,3 FI-P-16,0 / FI-R-20 - HB BS-6,1 FI-P-16,0 / FI-R-20 1,32 HB BS-6,1 FI-P-16,0 / FI-R-20 - HB BS-6,1 FI-P-16,0 / FI-R-20 -	BB LBS-S-T25-8,0 FI-P-6,8 - - HA TS-T25-6,0 FI-P-6,8 1,31 1,43 HB Sarnafast SBF-6,0 FI-P-6,8 1,32 2,16 HB Sarnafast SBF-6,0 FI-P-6,8 1,25 2,02 HB Sarnafast SBF-5-6,0 FI-P-6,8 1,25 2,02 HB Sarnafast SBF-5-6,0 FI-P-6,8 - - HB Sarnafast SBF-5-6,0 FI-P-6,8 1,25 2,02 HB Sarnafast SBF-5-6,0 FI-P-6,8 - - HB Sarnafast SBF-5-6,0 FI-P-16,0 / FI-R-20 1,45 1,32 HB BS-4,8 FI-P-16,0 / FI-R-20 1,28 1,74 HA TI-T25-6,3 FI-P-16,0 / FI-R-20 - - HB BS-6,1 FI-P-16,0 / FI-R-20 1,32 2,16 HA DT-4,8 FI-P-16,0 / FI-R-20 - -	BB LBS-S-T25-8,0 FI-P-6,8 - - IA TS-T25-6,0 FI-P-6,8 1,31 1,43 2,30 IB Sarnafast SBF-6,0 FI-P-6,8 1,32 2,16 2,11 IA Sarnafast SBF-6,0 FI-P-6,8 1,25 2,02 2,22 IB Sarnafast SBF-S-6,0 FI-P-6,8 - - - IA Sarnafast SBF-S-6,0 FI-P-6,8 1,25 2,02 2,22 IB SBF-S-6,0 FI-P-6,8 - - - IB FB-S-T25-7,5 FI-P-6,8 - - - IB BS-4,8 FI-P-16,0 / FI-R-20 1,45 1,32 2,18 IB BS-4,8 FI-P-16,0 / FI-R-20 1,28 1,74 1,96 VA TI-T25-6,3 FI-P-16,0 / FI-R-20 - - - VB BS-6,1 FI-P-16,0 / FI-R-20 1,32 2,16 2,11	AA LBS-T25-8,0 FI-P-6,8 - - - - - AB LBS-S-T25-8,0 FI-P-6,8 - - - - - AB LBS-S-T25-8,0 FI-P-6,8 - - - - - AA TS-T25-6,0 FI-P-6,8 1,31 1,43 2,30 0,44 AB Sarnafast FI-P-6,8 1,32 2,16 2,11 0,72 AB Sarnafast FI-P-6,8 1,25 2,02 2,22 0,42 AB SBF-S-6,0 FI-P-6,8 1,25 2,02 2,22 0,42 AB SBF-S-6,0 FI-P-6,8 1,25 2,02 2,22 0,42 AB SBF-S-6,0 FI-P-6,8 - - - - AB BS-4,8 FI-P-16,0/FI-R-20 1,45 1,32 2,18 - AB BS-4,8 FI-P-16,0/FI-R-20 1,28 1,74 1,96 - TI-T2S-6,3	AA LBS-T25-8,0 FI-P-6,8 -	AA LBS-T25-8,0 FI-P-6,8 -	AA LBS-T25-8,0 FI-P-6,8 -	AA LBS-T2S-8,0 FI-P-6,8 - - - - - - - 0,93 38 LBS-S-T2S-8,0 FI-P-6,8 - - - - - - 0,93 38 LBS-S-T2S-8,0 FI-P-6,8 - - - - - - 0,93 38 LBS-S-T2S-8,0 FI-P-6,8 1,31 1,43 2,30 0,44 0,89 32 - 0,93 38 LBS-S-T2S-6,0 FI-P-6,8 1,31 1,43 2,30 0,44 0,89 32 - 0,70 1,07 38 Sarnafast SBF-S,0 FI-P-6,8 1,32 2,16 2,11 0,72 1,45 32 5,0 0,82 38 Sarnafast SBF-S,0 FI-P-6,8 1,25 2,02 2,22 0,42 0,84 32 5,0 0,82 38 FB-S-T25-7,5 FI-P-6,8 1,25 1,32 2,18 - - -	A LBS-T25-8,0 FI-P-6,8 - - - - - - 0,93 1,44 AB LBS-5725-8,0 FI-P-6,8 - - - - - 0,93 1,44 AB LBS-5725-8,0 FI-P-6,8 - - - - - 0,93 1,44 AB TS-725-6,0 FI-P-6,8 1,31 1,43 2,30 0,44 0,89 32 5,0 0,93 1,44 AB Sarnafast FI-P-6,8 1,32 2,16 2,11 0,72 1,45 322 5,0 0,35 0,58 368 Sarnafast FI-P-6,8 1,25 2,02 2,22 0,42 0,84 32 5,0 0,82 1,37 368 FB-S-725-7,5 FI-P-6,8 1,25 2,02 2,22 0,42 0,84 32 5,0 0,82 1,37 368 FB-S-725-7,5 FI-P-6,8 1,25 1,32 2,18 - - - - - - - - - - <	AA UBS-T25-8,0 FI-P-6,8 - - - - - - - 0,93 1,44 60 8B UBS-T25-8,0 FI-P-6,8 - - - - - 0,93 1,44 60 8B UBS-T25-8,0 FI-P-6,8 - - - - - 0,93 1,44 60 8B UBS-T25-8,0 FI-P-6,8 1,31 1,43 2,30 - - 0,93 1,44 60 8B Sarnafast SBF-6,0 FI-P-6,8 1,32 2,16 2,11 0,72 1,45 32 5,0 0,35 0,58 75 8B Sarnafast SBF-6,0 FI-P-6,8 1,32 2,16 2,11 0,72 1,45 32 5,0 0,82 1,37 75 8B FB-5-725-7,5 FI-P-6,8 1,25 2,02 2,22 0,42 0,84 32 5,0 0,82 1,37 75 8B FB-	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	A UBS-T25-8,0 FI-P-6,8

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	Co				Charact	eristic axial lo	ading r	esistan	ce N _{R,k}	[kN] for	non-me	etallic su	ubstruc	tures		
	mbin	SFS intec flat roof fastener			Timber			crete 206-1		Aerated Concrete DIN 4223-1			Pumice Panel EN 1520			
	Combination	Fastener	Change Diane / Change / Day	OSB3 EN 300 t≥18 mm ¹⁾	Structural Timber EN 338 / C24	Plywood EN 636	C12/15	C25/30	setting depth ≥	pre-drill diameter	P 3.3	P 4.4	setting depth ≥	LAC 6, D 1,0	setting depth ≥	pre-drill diameter
			Stress Plate / Sleeve / Bar		t≥22 mm ²⁾	t≥18 mm ³⁾			[mm]	[mm]			[mm]		[mm]	[mm]
	818	BS-S-6,1	FI-P-6,8	1,25	2,02	2,22	-	-				-	-	-	-	-
	82A	BS-S-6,1	FI-P-16,0 / FI-R-20	1,25	2,02	2,17	-	-	-	-	-	-	-	-	-	-
	82B	LBS-S-T25-8,0	IRD-82x40	-	-	-	-	-	-	-	0,93	1,44	60	-	-	-
SFS	83A	LBS-T25-8,0	IRD-82x40	-	-	-	-	-	-	-	0,93	1,44	60	-	-	-
int	83B	LBS-T25-8,0	IF/IG-C-82x40	-		-	-		-	-	0,93	1,44	60	2	-	-
SFS intec flat roof fasteners	84A	IWF-5,2	FI-P-6,8	1,35	1,94	2,20		-		-	-	-	-	-	-11	-
	84B	IW-S-5,0	FI-P-6,8	1,08	1,12	2,04	-		-	-	-	-	-	-	-	-
	85B	DT-4,8	ID-70x70	-	-	-	2,40	2,56	25	4,8	-	-	-	-	-	-
	86A	DT-6,3	ID-70x70	-	•		2,93	3,68	32	6,3		7	5	-	-	-
	86B	DT-4,8	R75	-	-	-	1,39	1,39	25	4,8	÷	-	-		-	-
ers	87A	DT-S-4,8	R75	5 - 0	-	-	1,39	1,39	25	4,8	-	-	-	-	-	-
	88A	BS-4,8	IPF45 / FI-R-20	1,45	1,32	2,18	-	-	-	-	-	-	-	-	-	-
	88B	BS-4,8	IPF45 / FI-R-20	1,45	1,32	2,18	-	-	-	-	-	-	-	-		
	89A	BS-4,8	Isolfast SQT	1,45	1,32	1,45	-	-	-	-	-	-	-	-		-
	89B	Sarnafast SF-4,8	IF/IG-C-82x40	1,45	1,32	2,18	-	-	-	-	-		-			-
	90A	LBS-T25-8,0	Sarnabar	-		-	-	-	-	-	0,93	1,44	60			
	90B	Sarnafast SBF- 6,0	Sarnaweld disc 6,8	1,32	2,16	2,11	0,72	1,45	32	5,0	0,35	0,58	75		-	-
	91A	Sarnafast SBF- 6,0	Sarnaweld disc 16 / Sarnabar Tube SBT-20	1,32	2,16	2,11	0,72	1,45	32	5,0	0,35	0,58	75	-		
	91B	Sarnafast SBF-S- 6,0	Sarnaweld disc 6,8	1,25	2,02	2,22	0,42	0,84	32	5,0	0,82	1,37	75	•		•
Ani	92A	Sarnafast SBF-S- 6,0	Sarnaweld disc 16 / Sarnabar Tube SBT-20	1,25	2,02	2,17	0,42	0,84	32	5,0	0,82	1,37	75	-	-	-
Annex 108	2) effectiv	e setting depth (pe	enetration length of threade enetration length of threade enetration length of threade	ed part) ≥ 22 mm	minimum density = 4	00 kg/m³										

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