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<i>isofast</i> [®]	Product code	Page
Austenitic stainless steel	LBS-S-T25	► 5.3
Carbon steel	LBS-T25	► 5.5

<i>isotak</i> [®]	Product code	Page
Austenitic stainless steel Plastic sleeve	LBS-S-T25 R45	► 5.7
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Austenitic stainless steel	LBS-S-T25	► 5.12
Carbon steel	LBS-T25	► 5.14

LBS fastening system: the specialist for aerated concrete

Existing buildings sometimes have aerated concrete as substructure. SFS intec offers for this special application a tailor-made fastening solution. With the LBS system, the total roof

build-up can be fastened securely into the substructure. The LBS is part of the *isofast*®, *isotak*® and *isoweld*™ system.

The convincing advantages of the LBS fastening systems



- Special thread design and diameter prevents overtorque and results in good pullout resistance
- Easy to install without pre-drilling
- Maximum corrosion resistance
- Available in austenitic stainless steel
- A "treadfast" fastener and sleeve combination ensures that the system is safe to walk on
- Equally suitable for new buildings and renovation work

Meeting the challenges of aerated concrete

The aerated concrete's light-weight nature and its structure bring special challenges to the fastening task on a flat roof. Reasonable pullout values are not possible with a standard fastening system. This is why SFS intec developed a special fastener for applications on aerated concrete: The LBS. Its exceptional thread design with a big diameter allows good pullout values. Furthermore, it prevents overtorquing in the setting process.

The austenitic stainless steel version fulfils highest corrosion requirements and meets another challenge of aerated concrete applications.



isofast® LBS-S-T25



Technical information

Application

For the fastening of waterproof membrane and insulation to aerated concrete with min. quality class P 3.3 (DIN 4223-1).

For aerated concrete substrate applications we recommend the use of fasteners manufactured from austenitic stainless steel, grade AISI 304, European Standard 1.4301 due to the high moisture absorption capability of this material.

Material

Fastener

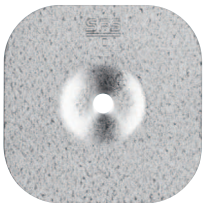
- LBS-S-T25
Austenitic stainless steel, grade AISI 304, European Standard 1.4301, grade A2

Stress plates

- ID-70x70 / IF/IG-C-82x40 / IRD-82x40
Steel 1,0 mm, zinc plated
Resistance at 15 cycles Kesternich test according to ETAG 006 - D.3.1. and FM Approval Standard 4470 requirements

Stress plates

ID-70x70



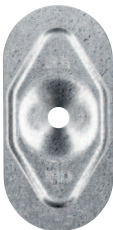
- Stress plate for insulation, hole diameter 7,5 mm

IF/IG-C-82x40



- Stress plate for membrane and insulation on hard substrates, hole diameter 7,5 mm

IRD-82x40



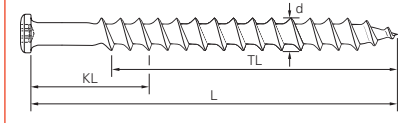
- Stress plate for membrane and insulation, hole diameter 7,5 mm

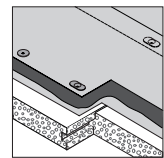
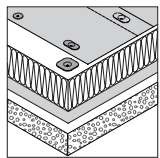
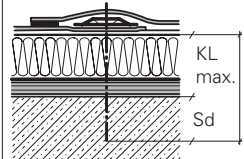
Tools and accessories

Recommendation for installation

- Power screwdriver
 - 300 - 700 rpm
 - Min. 500 W
- Battery tool
 - 300 - 700 rpm
 - Approx. 18 V
 - Battery with approx. 2,5 Ah
- Do not use a percussion tool.

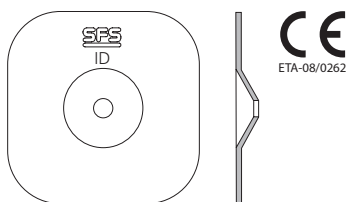
Order information

	T25 Ø 9,7 mm 	
KL clamping length M magazine loaded d thread diameter L length TL thread length t thickness of structure All measures in mm		

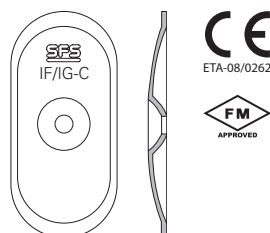
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		Type	d	L		
● Stainless steel   		LBS-S-T25-	8,0x	65	5	 Sd (Setting depth): min. 60 mm Thread length TL: Fastener length 65 mm: TL = 57 mm Fastener length 85-185 mm: TL = 70 mm Insulation compressive strength at 10% compression min. 0,07 N/mm². Availability on request. Please consult your SFS representative for further information.
		LBS-S-T25-	8,0x	85	25	
		LBS-S-T25-	8,0x	105	45	
		LBS-S-T25-	8,0x	125	65	
		LBS-S-T25-	8,0x	145	85	
		LBS-S-T25-	8,0x	165	105	
		LBS-S-T25-	8,0x	185	125	

Stress plates

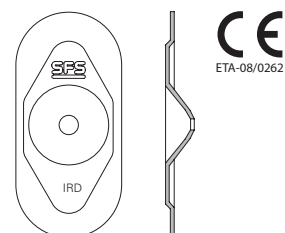
ID-70X70



IF/IG-C-82X40



IRD-82X40



isofast® LBS-T25**Technical information****Application**

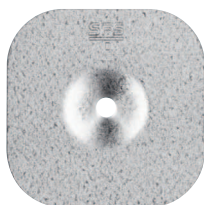
For the fastening of waterproof membrane and insulation to aerated concrete with min. quality class P 3.3 (DIN 4223-1).

Material**Fastener**

- LBS-T25
- Case hardened carbon steel
- Durocoat® corrosion protection:
- Resistance at 15 cycles Kesternich test according to ETAG 006 - D.3.1. and FM Approval Standard 4470 requirements
- Environment-friendly, free of chromium VI

Stress plates

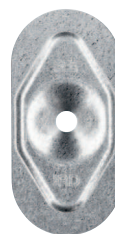
- ID-70x70 / IF/IG-C-82x40 / IRD-82x40
- Steel 1,0 mm, zinc plated
- Resistance at 15 cycles Kesternich test according to ETAG 006 - D.3.1. and FM Approval Standard 4470 requirements

Stress plates**ID-70x70**

- Stress plate for insulation, hole diameter 7,5 mm

IF/IG-C-82x40

- Stress plate for membrane and insulation on hard substrates, hole diameter 7,5 mm

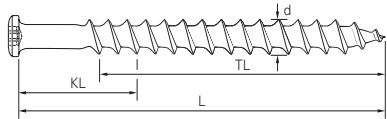
IRD-82x40

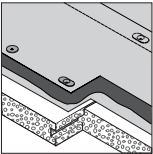
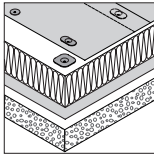
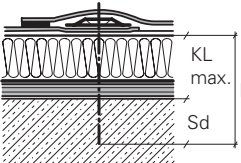
- Stress plate for membrane and insulation, hole diameter 7,5 mm

Tools and accessories**Recommendation for installation**

- Power screwdriver
 - 300 - 700 rpm
 - Min. 500 W
- Battery tool
 - 300 - 700 rpm
 - Approx. 18 V
 - Battery with approx. 2,5 Ah
- Do not use a percussion tool.

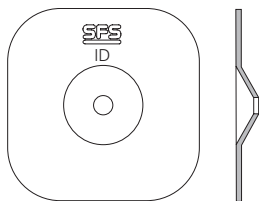
Order information

	T25 Ø 9,7 mm 	
KL clamping length M magazine loaded d thread diameter L length TL thread length t thickness of structure All measures in mm		

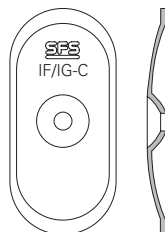
Product / Application	Approval	Order code LBS-T25- 8,0x 65			KL	Application information
		Type	d	L		
■ Carbon steel   		LBS-T25-	8,0x	65	5	 Sd (Setting depth): min. 60 mm Thread length TL: Fastener length 65 mm: TL = 57 mm Fastener length 85-185 mm: TL = 70 mm Insulation compressive strength at 10 % compression min. 0,07 N/mm².
		LBS-T25-	8,0x	85	25	
		LBS-T25-	8,0x	105	45	
		LBS-T25-	8,0x	125	65	
		LBS-T25-	8,0x	145	85	
		LBS-T25-	8,0x	165	105	
		LBS-T25-	8,0x	185	125	

Stress plates

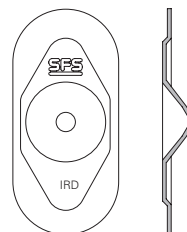
ID-70X70



IF/IG-C-82X40



IRD-82X40



isotak® LBS-S-T25 / R45



Technical information

Application

For the fastening of waterproof membrane and insulation to aerated concrete with min. quality class P 3.3 (DIN 4223-1).

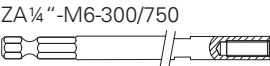
Material

- | | |
|--|--------------------------------|
| ■ Fastener | ■ R45 |
| ■ LBS-S-T25 | High quality polypropylene, PP |
| Austenitic stainless steel, grade
AISI 304, European Standard 1.4301,
grade A2 | |

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Tools and accessories

Accessories



T25-32-M6



ZH-11-RING



- For the manual installation of isotak® fasteners and sleeves

Recommendation for installation

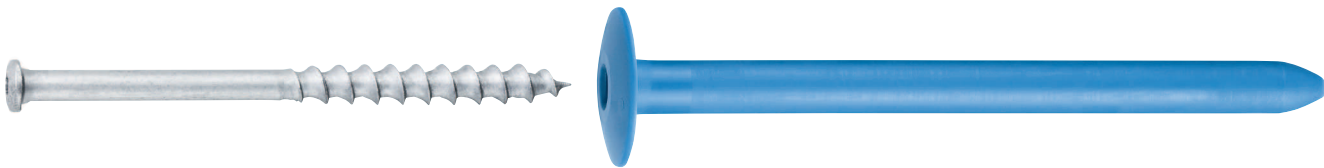
- Power screwdriver
 - 300 - 700 rpm
 - Min. 500 W
- Battery tool
 - 300 - 700 rpm
 - Approx. 18 V
 - Battery with approx. 2,5 Ah
- Do not use a percussion tool.

Order information

	T25 Ø 9,7 mm	
KL clamping length M magazine loaded d thread diameter L length TL thread length t thickness of structure All measures in mm		

Product / Application		Order code			KL	Application information
		Approval	Type	d	L	
● Stainless steel			LBS-S-T25-	8,0x	105	min. 15 mm Sd Sd (Setting depth): min. 60 mm Thread length TL: Fastener length 105-185 mm: TL = 70 mm Availability on request. Please consult your SFS representative for further information.
			LBS-S-T25-	8,0x	125	
			LBS-S-T25-	8,0x	145	
			LBS-S-T25-	8,0x	165	
			LBS-S-T25-	8,0x	185	
● Plastic			R	45x	15	KL see combination table
			R	45x	35	
			R	45x	65	
			R	45x	85	
			R	45x	105	
			R	45x	135	
			R	45x	165	
			R	45x	185	
			R	45x	195	
			R	45x	225	
			R	45x	255	
			R	45x	285	
			R	45x	325	
			R	45x	365	
			R	45x	405	
			R	45x	485	
			R	45x	565	
			R	45x	645	
			R	45x	705	

isotak® LBS-T25 / R45



Technical information

Application

For the fastening of waterproof membrane and insulation to aerated concrete with min. quality class P 3.3 (DIN 4223-1).

Material

Fastener

■ LBS-T25

Case hardened carbon steel
Durocoat® corrosion protection:
Resistance at 15 cycles Kesternich
test according to ETAG 006 - D.3.1.
and FM Approval Standard 4470
requirements
Environment-friendly, free of
chromium VI

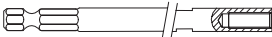
■ R45

High quality polypropylene, PP

Tools and accessories

Accessories

ZA¼"-M6-300/750



T25-32-M6



ZH-11-RING



■ For the manual installation of
isotak® fasteners and sleeves

Recommendation for installation

■ Power screwdriver

- 300 - 700 rpm
- Min. 500 W

■ Battery tool

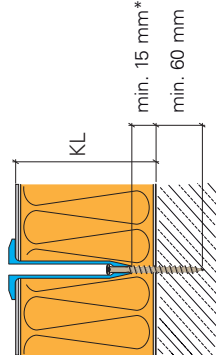
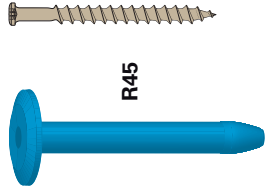
- 300 - 700 rpm
- Approx. 18 V
- Battery with approx. 2,5 Ah

■ Do not use a percussion tool.

Order information

	T25 Ø 9,7 mm	
KL clamping length M magazine loaded d thread diameter L length TL thread length t thickness of structure All measures in mm		

Product / Application	Approval	Order code LBS-T25- 8,0x 105			KL	Application information
		Type	d	L		
■ Carbon steel		LBS-T25-	8,0x	105		Sd (Setting depth): min. 60 mm. Thread length TL: Fastener length 105-185 mm: TL = 70 mm
		LBS-T25-	8,0x	125		
		LBS-T25-	8,0x	145		
		LBS-T25-	8,0x	165		
		LBS-T25-	8,0x	185		
● Plastic		R	45x	15		KL see combination table
		R	45x	35		
		R	45x	65		
		R	45x	85		
		R	45x	105		
		R	45x	135		
		R	45x	165		
		R	45x	185		
		R	45x	195		
		R	45x	225		
		R	45x	255		
		R	45x	285		
		R	45x	325		
		R	45x	365		
		R	45x	405		
		R	45x	485		
		R	45x	565		
		R	45x	645		
		R	45x	705		

Selection of the correct fastener and sleeve combination				
KL (mm)			Combination sleeve R45 and fastener LBS-T25-8,0xL LBS-S-T25-8,0xL	
				
* thickness vapour barrier to be considered				
KL = total roof build-up between top edge substrate and top edge membrane				
KL = thickness vapour barrier + thickness insulation + thickness membrane				
Sleeve R45xL		Fastener LBS-T25-8xL LBS-S-T25xL		
Calculation:		Type of fastener		
Example:		LBS-T25-8x105		
Roof build-up (KL) 100 mm		Sleeve length (L) 85 mm		+ 75 mm = min. length + 75 mm = 90 mm ->
30	Sleeve length 15	105:105:125:125	105:105:125:125	105
40	Sleeve length 35	105:105:125:125	105:105:125:125	105
50	Sleeve length 55	105:105:125:125	105:105:125:125	105
60	Sleeve length 75	105:105:125:125	105:105:125:125	105
70	Sleeve length 95	105:105:125:125	105:105:125:125	105
80	Sleeve length 115	105:105:125:125	105:105:125:125	105
90	Sleeve length 135	105:105:125:125	105:105:125:125	105
100	Sleeve length 155	105:105:125:125	105:105:125:125	105
110	Sleeve length 175	105:105:125:125	105:105:125:125	105
120	Sleeve length 195	105:105:125:125	105:105:125:125	105
130	Sleeve length 215	105:105:125:125	105:105:125:125	105
140	Sleeve length 235	105:105:125:125	105:105:125:125	105
150	Sleeve length 255	105:105:125:125	105:105:125:125	105
160	Sleeve length 275	105:105:125:125	105:105:125:125	105
170	Sleeve length 295	105:105:125:125	105:105:125:125	105
180	Sleeve length 315	105:105:125:125	105:105:125:125	105
190	Sleeve length 335	105:105:125:125	105:105:125:125	105
200	Sleeve length 355	105:105:125:125	105:105:125:125	105
210	Sleeve length 375	105:105:125:125	105:105:125:125	105
220	Sleeve length 395	105:105:125:125	105:105:125:125	105
230	Sleeve length 415	105:105:125:125	105:105:125:125	105
240	Sleeve length 435	105:105:125:125	105:105:125:125	105
250	Sleeve length 455	105:105:125:125	105:105:125:125	105
260	Sleeve length 475	105:105:125:125	105:105:125:125	105
270	Sleeve length 495	105:105:125:125	105:105:125:125	105
280	Sleeve length 515	105:105:125:125	105:105:125:125	105
290	Sleeve length 535	105:105:125:125	105:105:125:125	105
300	Sleeve length 555	105:105:125:125	105:105:125:125	105
310	Sleeve length 575	105:105:125:125	105:105:125:125	105
320	Sleeve length 595	105:105:125:125	105:105:125:125	105
330	Sleeve length 615	105:105:125:125	105:105:125:125	105
340	Sleeve length 635	105:105:125:125	105:105:125:125	105
350	Sleeve length 655	105:105:125:125	105:105:125:125	105
360	Sleeve length 675	105:105:125:125	105:105:125:125	105
370	Sleeve length 695	105:105:125:125	105:105:125:125	105
380	Sleeve length 715	105:105:125:125	105:105:125:125	105
390	Sleeve length 735	105:105:125:125	105:105:125:125	105
400	Sleeve length 755	105:105:125:125	105:105:125:125	105
410	Sleeve length 775	105:105:125:125	105:105:125:125	105
420	Sleeve length 795	105:105:125:125	105:105:125:125	105
430	Sleeve length 815	105:105:125:125	105:105:125:125	105
440	Sleeve length 835	105:105:125:125	105:105:125:125	105
450	Sleeve length 855	105:105:125:125	105:105:125:125	105
460	Sleeve length 875	105:105:125:125	105:105:125:125	105
470	Sleeve length 895	105:105:125:125	105:105:125:125	105
480	Sleeve length 915	105:105:125:125	105:105:125:125	105
490	Sleeve length 935	105:105:125:125	105:105:125:125	105
500	Sleeve length 955	105:105:125:125	105:105:125:125	105