

# Window frame screws FFSZ and FFS

The economical special screw for window installation

5



Window frames

## Applications

- Window frames made of wood, plastic and aluminium
- Door frames
- Squared timbers

## Advantages

- Screw installation without plug for economical processing.
- The small drill bit diameter of 6 mm allows for efficient series installation.
- The continuous thread ensures a stress-free fixing of the frame in the substrate.
- The high-low-thread at the screw tip as well as several cutting notches reduce the amount of force required for screwing

in the screws. The installation process can be completed without excessive effort.

- With two head types applicable for all common frame materials.
- According to the ift Rosenheim suitable for the fixation of a plastic window in brick masonry.

## Certificates



Test Report No.: 14-000559-PR02

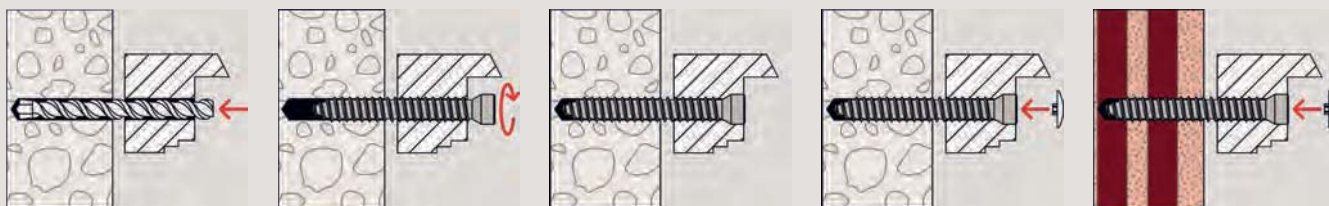
## Building materials

- Concrete
- Vertically perforated brick
- Hollow blocks made from lightweight concrete
- Perforated sand-lime brick
- Solid sand-lime brick
- Solid brick made from lightweight concrete
- Solid brick
- Aerated concrete

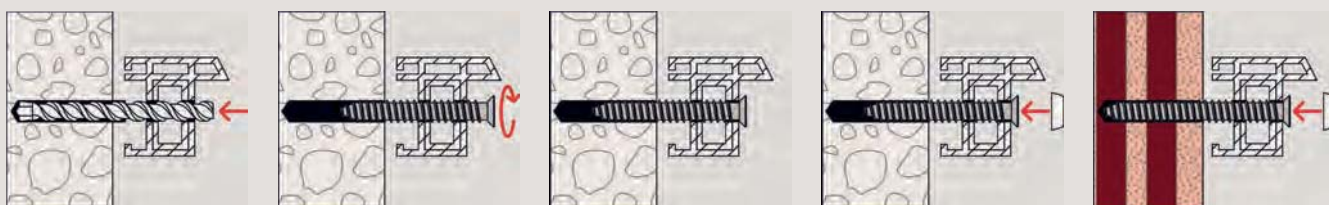
## Functioning

- Note the drill hole and screw-in depths for the different building materials listed in the table.
- Cylinder head screws are recommended for recessed installation in wooden profiles.
- Flat head screws are recommended for installation in plastic and aluminium profiles.

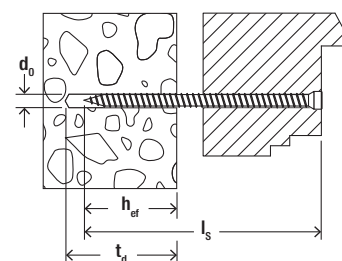
### Installation FFSZ



### Installation FFS



5



Anchorage depth  $h_{ef}$   
 $h_{ef} \geq 30$  mm in concrete  
 $h_{ef} \geq 40$  mm in solid brick  
 $h_{ef} \geq 60$  mm in perforated brick / aerated concrete

$t_d$ : drill hole depth  $\geq h_{ef} + 10$  mm

### Technical data

#### Window frame screws FFSZ

FFSZ with cylinder head

Item	Item No.	Drill hole diameter $d_0$ [mm]	Screw length $l_s$ [mm]	Drive	Head [Ø mm]	Sales unit [pcs]
FFSZ 7,5 x 52 T30	532906	6	52	T30	8	100
FFSZ 7,5 x 62 T30	532907	6	62	T30	8	100
FFSZ 7,5 x 72 T30	532908	6	72	T30	8	100
FFSZ 7,5 x 82 T30	532909	6	82	T30	8	100
FFSZ 7,5 x 92 T30	532910	6	92	T30	8	100
FFSZ 7,5 x 102 T30	532911	6	102	T30	8	100
FFSZ 7,5 x 112 T30	532912	6	112	T30	8	100
FFSZ 7,5 x 122 T30	532913	6	122	T30	8	100
FFSZ 7,5 x 132 T30	532914	6	132	T30	8	100
FFSZ 7,5 x 152 T30	532915	6	152	T30	8	100
FFSZ 7,5 x 182 T30	532916	6	182	T30	8	100
FFSZ 7,5 x 202 T30	532917	6	202	T30	8	100
FFSZ 7,5 x 212 T30	532919	6	212	T30	8	100
FFSZ 7,5 x 252 T30	532920	6	252	T30	8	100
FFSZ 7,5 x 302 T30	532921	6	302	T30	8	100

No pre-drilling in aerated concrete.

## Accessories

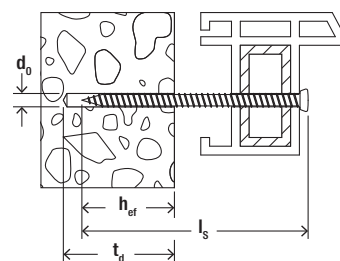
### Cover cap FFSZ-A



FFSZ-A

Item	Item No.	Colour	Cap [Ø mm]	Cap height [mm]	Match	Sales unit [pcs]
FFSZ-A W	538708	white	14	2,2	FFSZ - cylinder head	100
FFSZ-A BR	538709	brown	14	2,2	FFSZ - cylinder head	100

5



Anchorage depth  $h_{ef}$   
 $h_{ef} \geq 30$  mm in concrete  
 $h_{ef} \geq 40$  mm in solid brick  
 $h_{ef} \geq 60$  mm in perforated brick / aerated concrete

$t_d$  : drill hole depth  $\geq h_{ef} + 10$  mm

## Technical data

### Window frame screws FFS



FFS with flat head

Item	Item No.	Drill hole diameter $d_0$ [mm]	Screw length $l_s$ [mm]	Drive	Head [Ø mm]	Sales unit [pcs]
FFS 7,5 x 42 T30	532922	6	42	T30	11,5	100
FFS 7,5 x 52 T30	532923	6	52	T30	11,5	100
FFS 7,5 x 62 T30	532925	6	62	T30	11,5	100
FFS 7,5 x 72 T30	532927	6	72	T30	11,5	100
FFS 7,5 x 82 T30	532928	6	82	T30	11,5	100
FFS 7,5 x 92 T30	532930	6	92	T30	11,5	100
FFS 7,5 x 102 T30	532931	6	102	T30	11,5	100
FFS 7,5 x 112 T30	532932	6	112	T30	11,5	100
FFS 7,5 x 122 T30	532934	6	122	T30	11,5	100
FFS 7,5 x 132 T30	532935	6	132	T30	11,5	100
FFS 7,5 x 152 T30	532941	6	152	T30	11,5	100
FFS 7,5 x 182 T30	532942	6	182	T30	11,5	100
FFS 7,5 x 202 T30	532943	6	202	T30	11,5	100
FFS 7,5 x 212 T30	532944	6	212	T30	11,5	100
FFS 7,5 x 252 T30	532945	6	252	T30	11,5	100
FFS 7,5 x 302 T30	532946	6	302	T30	11,5	100

## Accessories

## Cover cap FFS-A



FFS-A

Item	Item No.	Colour	Cap [Ø mm]	Cap height [mm]	Match	Sales unit [pcs]
FFS-A W	061560	white	15	4,8	FFS - flat head	100
FFS-A BR	061561	brown	15	4,8	FFS - flat head	100

## Loads

5

## Window frame screws FFSZ and FFS

Recommended loads<sup>1)</sup> of a single screw.

Type		FFSZ			FFS			
Screw diameter		[mm]	7.5			7.5		
Anchorage depth	$h_{ef} \geq$	[mm]	30	40	60	30	40	60
Recommended loads in concrete $\geq$ C20/25								
Tension load $N_{rec}$		[kN]	1.00	-	-	1.00	-	-
Shear load $V_{rec}$		[kN]	0.70	-	-	0.70	-	-
Minimum edge distance <sup>2)</sup>	$c_{min}$	[mm]	30	-	-	30	-	-
Recommended loads in masonry								
Tension load $N_{rec}$ in solid brick	$\geq$ Mz 12	[kN]	-	0.40 <sup>3)</sup>	0.80	-	0.40 <sup>3)</sup>	0.80
Shear load $V_{rec}$ in solid brick	$\geq$ Mz 12	[kN]	-	0.30 <sup>3)</sup>	0.70	-	0.30 <sup>3)</sup>	0.70
Tension load $N_{rec}$ in solid sand-lime brick	$\geq$ KS 12	[kN]	-	1.00	-	-	1.00	-
Shear load $V_{rec}$ in solid sand-lime brick	$\geq$ KS 12	[kN]	-	0.60	-	-	0.60	-
Tension load $N_{rec}$ in vertically perforated brick	$\geq$ Hlz 12	[kN]	-	-	0.25 <sup>3)</sup>	-	-	0.25 <sup>3)</sup>
Shear load $V_{rec}$ in vertically perforated brick	$\geq$ Hlz 12	[kN]	-	-	0.40 <sup>3)</sup>	-	-	0.40 <sup>3)</sup>
Minimum edge distance <sup>2)</sup>	$c_{min}$	[mm]	-	40	40	-	40	40
Recommended loads in aerated concrete								
Load <sup>4)</sup> $F_{rec}$ in aerated concrete	$\geq$ AAC 2	[kN]	-	-	0.10 <sup>5)</sup>	-	-	0.10 <sup>5)</sup>
	$\geq$ AAC 4	[kN]	-	-	0.25 <sup>5)</sup>	-	-	0.25 <sup>5)</sup>
Minimum edge distance <sup>2)</sup>	$c_{min}$	[mm]	-	-	40	-	-	40

<sup>1)</sup> Required safety factors are considered.As a single screw counts e.g. a screw with a spacing  $s \geq 3 \times h_{ef}$  and an edge distance  $c \geq 1.5 \times h_{ef}$ .<sup>2)</sup> Minimal possible edge distance while reducing the recommended loads.<sup>3)</sup> Rotary drilling.<sup>4)</sup> Valid for tensile load, shear load and oblique load under any angle.<sup>5)</sup> Without pre-drilling.