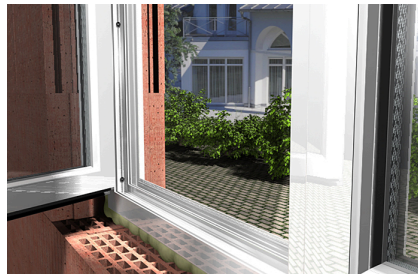


The economical special screw for window installation



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

APPROVALS



ADVANTAGES

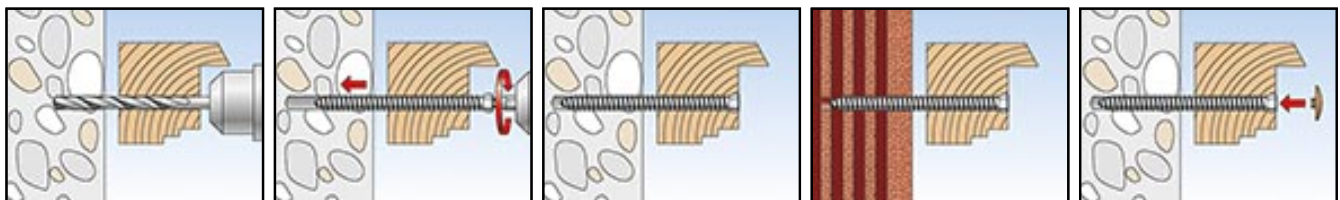
- Screw installation without plug for economical processing.
- The small drill bit diameter of 6 mm allows for efficient series installation.
- The continuous thread ensures a stress-free fixing of the frame in the substrate.
- The high-low-thread at the screw tip as well as several cutting notches reduce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

APPLICATIONS

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

FUNCTIONING

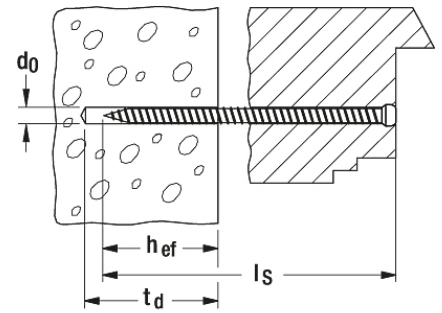
- Note the drill hole and screw-in depths for the different building materials listed in the table.
- Cylinder head screws are recommended for recessed installation in wooden profiles.
- Flat head screws are recommended for installation in plastic and aluminium profiles.



TECHNICAL DATA



Window frame screws FFSZ



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

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

LOADS

Window frame screw FFSZ and FFS

Highest recommended loads¹⁾ for a single screw.

Type	FFS 7,5 / FFSZ 7,5								
	30			40			60		
Screw diameter [mm]	7,5								
Anchoring depth $h_{ef} \geq$ [mm]	30			40			60		
	recommen- ded tensile load	recommen- ded shear load	min. edge distance	recommen- ded tensile load	recommen- ded shear load	min. edge distance	recommen- ded tensile load	recommen- ded shear load	min. dist
	$N_{rec}^{4)}$ [kN]	$V_{rec}^{4)}$ [kN]	$c_{min}^{5)}$ [mm]	$N_{rec}^{4)}$ [kN]	$V_{rec}^{4)}$ [kN]	$c_{rec}^{5)}$ [mm]	$N_{rec}^{4)}$ [kN]	$V_{rec}^{4)}$ [kN]	$c_{min}^{5)}$ [mm]
Concrete \geq C20/25 bzw. \geq B25	1,00	0,70	30	-	-	-	-	-	-
Solid sand-lime brick \geq KS 12	-	-	-	1,00	0,60	40	-	-	-
Solid brick \geq Mz 12	-	-	-	0,40 ²⁾	0,30 ²⁾	40	0,80	0,70	40
Vertical perforated brick \geq HLz 12 ²⁾	-	-	-	-	-	-	0,25	0,40	40
Aerated concrete block \geq PB2, PP2 ³⁾	-	-	-	-	-	-	0,10	0,10	40
Aerated concrete block \geq PB4, PP4 ³⁾	-	-	-	-	-	-	0,25	0,25	40

¹⁾ A single screw is, e.g. a screw with an axial spacing $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1,5 \times h_{ef}$. The required safety factors are considered with a displacement of 3 mm in case of shear loads.

²⁾ Drill method rotary drilling.

³⁾ Without pre-drilling.

⁴⁾ Without influence from edge distances and spacings.

⁵⁾ Minimal possible edge distance while reducing the recommended loads.