

Section 1. PRODUCT DESCRIPTION

UNIVERSAL PLUG WITH COUNTERSUNK HEAD SCREW – SFXP

Universal plug SFXP comprises sleeve made of polyamide and countersunk head hardened-steel screw with protective zinc coating. It is designed for fixing of light-duty interior finish systems and lightweight installations on all building substrates. The sleeve has ribs and stabilising fins which prevent rotation of sleeve during installation and provide initial fixation in the substrate. Unique shape of the sleeve allows for installation in both solid materials (by expansion of the sleeve) and materials with voids (by shape fixation provides a “knot” formation).

Types of substrates on which universal plug SFXP can be installed:

- Concrete
- Solid clay brick and sand-lime brick
- Hollow clay brick
- Hollow sand-lime brick
- Autoclaved aerated concrete
- Fibre-cement board, plasterboard

Universal plugs hold National Technical Assessment:
ITB-KOT-2021/1847 edition 1



Reduced diameter of the bottom part
- facilitates installation in the drill hole.



Special ribs
- a new solution which holds the sleeve firmly in place.



Unique shape
- ensures a “knot” is formed, which makes the plug sit firmly in the void.



Increased collar diameter
- prevents the plug from sinking into the substrate.

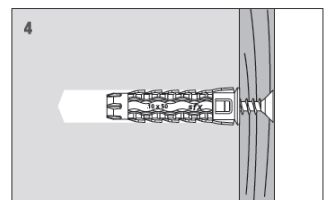
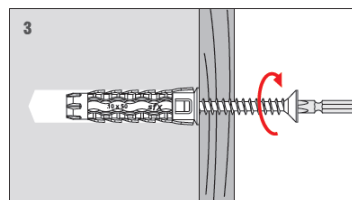
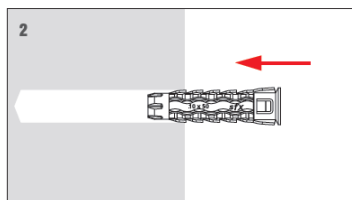
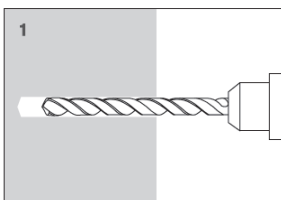


Special anti-rotation fins
- prevent rotation in the substrate during installation.



Section 2. METHOD OF INSTALLATION

1. Original plugs delivered by the manufacturer can be used only
2. Before installation identify a substrate in which the plug will be installed and compare loads which the plug will carry to resistance values given in National Technical Assessment
3. Select an adequate length of the plug so that expansion zone is in the construction material of the wall (thickness of member being fixed matches max. usable length of the plug – t_{fix})
4. Use proper method of drilling according to a substrate type (holes in brickwork substrate made of hollow or autoclaved aerated concrete blocks should be drilled using a drill without impact)
5. Diameter of drilled holes should match diameter of the plugs used
6. Drilled holes in substrates of solid materials should be deeper by min. 10mm compared to the plug anchorage depth
7. Clean the holes in solid materials of drillings with a back and forth motion of the drill at a reduced speed
8. Then insert the plug into a drilled hole, and drive the screw through the element being fixed until it completely penetrates the sleeve (pre-fastening installation)



MATERIALS WITH VOIDS (e.g. hollow clay brick)



SOLID MATERIALS (e.g. concrete, aerated concrete)



PLASTERBOARD



PRODUCT DATA SHEET – SFXP

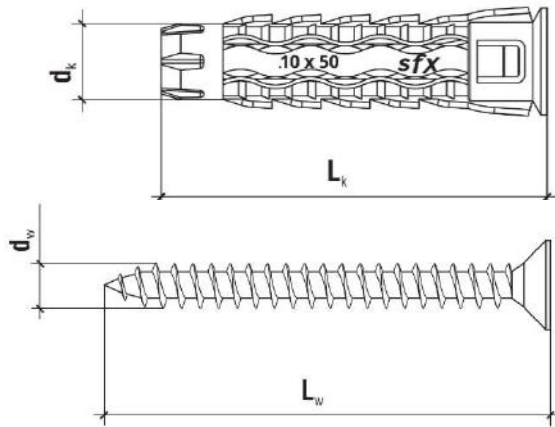
Section 3. TECHNICAL DATA

TECHNICAL PARAMETERS		
Parameter	Unit	Value
Plug diameter	d_k [mm]	5/6/8/10
Hole/drill diameter	d_0 [mm]	5/6/8/10
Effective anchorage depth**	h_{eff} [mm]	25/30/40/50*/60*
Drilled hole depth	h_0 [mm]	35/40/50/60*/70*
Drive type	[-]	PZ-2/PZ-2/PZ-2/PZ-3
Sleeve material	[-]	PA - polyamide
Screw material	[-]	Zinc-plated steel
National Technical Assessment	[-]	ITB-KOT-2021/1847 edition 1

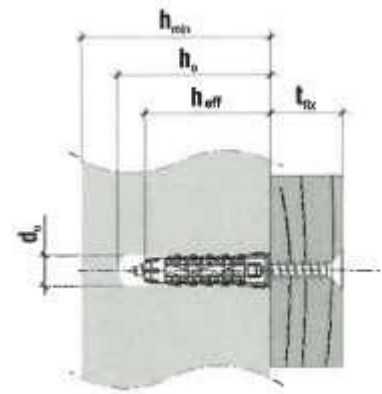
*for SFXP 10 – two anchorage depths 50/60mm

**for plasterboards and fibre-cement boards, h_{eff} = board thickness

RESISTANCE					
Substrate type	Characteristic pull-out resistance from the substrate and shear [kN]				
	5x25	6x30	8x40	10x50	10x60
Concrete C20/25 – C50/60	0,1	0,2	0,3	0,75	0,75
Solid clay brick	0,1	0,3	0,75	1,2	1,2
Solid sand-lime brick	0,1	0,3	0,9	1,5	1,5
Hollow clay brick	0,2	0,6	0,6	1,2	1,2
Hollow sand-lime brick	0,1	0,3	0,6	1,2	1,2
Autoclaved aerated concrete	0,1	0,4	0,9	0,75	0,75
Plasterboard 12.5mm	-	0,2	0,2	0,4	0,4
Plasterboard 2x12.5mm	-	-	-	0,9	0,9
Fibre-cement board 12.5mm	-	0,2	0,2	0,3	0,3



PZ-2
PZ-3



SELECTION TABLE					
Product code	Sleeve diameter and length	Screw diameter and length	Max. usable length	Drive type	Number of pieces in a box
	$d_k \times L_k$ [mm]	$d_w \times L_w$ [mm]	t_{fix} [mm]	[-]	[pcs]
SFXP-05025035	5,0x25	3,5x35	10	PZ-2	200
SFXP-05025045	5,0x25	3,5x45	20	PZ-2	200
SFXP-06030040	6,0x30	4,0x40	10	PZ-2	100
SFXP-06030050	6,0x30	4,0x50	20	PZ-2	100
SFXP-08040050	8,0x40	5,0x50	10	PZ-2	100
SFXP-08040060	8,0x40	5,0x60	20	PZ-2	100
SFXP-10050060	10x50	6,0x60	10	PZ-3	50
SFXP-10050070	10x50	6,0x70	20	PZ-3	50
SFXP-10060070	10x60	6,0x70	10	PZ-3	50
SFXP-10060080	10x60	6,0x80	20	PZ-3	50

Section 4. REMARKS

1. All previous versions of this Product Data Sheet shall cease to be valid
2. Data given in this Product Data Sheet is in accordance with current knowledge and published in good faith. KLIMAS Sp. z o.o. is not responsible for correctness and quality of the fixing if recommendations regarding method of use and installation are not followed.