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PRODUCT DATA SHEET – KPK

Section 1. PRODUCT DESCRIPTION

FRAME PLUG WITH HEX HEAD SCREW – KPK

Sleeves of frame plug are made of polyamide with a specially shaped zinc-plated hex head screw. Frame plug is designed for fixing of wood members (square timber, planks, battens), ventilated façade members and steel members (profiles, sheets). Frame plug is characterized by very high resistance and problem-free installation in various materials.

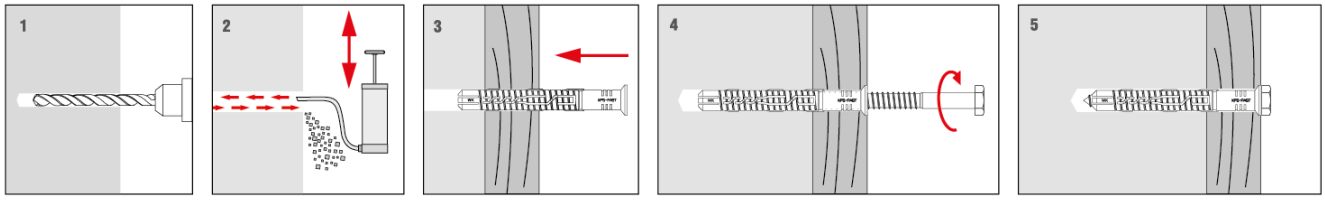
Types of substrates on which frame plug KPK can be installed:

- **Solid clay brick**
- **Porous block**
- **Autoclaved aerated concrete**

Frame plugs KPK hold National Technical Assessment: ITB-KOT-2018/0528 Rev. 2

Section 2. METHOD OF INSTALLATION

1. Original frame 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 Product Data Sheet or 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 until it completely penetrates the sleeve
9. Forceful tightening of the screw can result in its failure which is not covered by the manufacturer's warranty
10. While the plug is being installed the temperature should be higher than 0°C (this applies to substrate temperature)



Section 3. TECHNICAL DATA

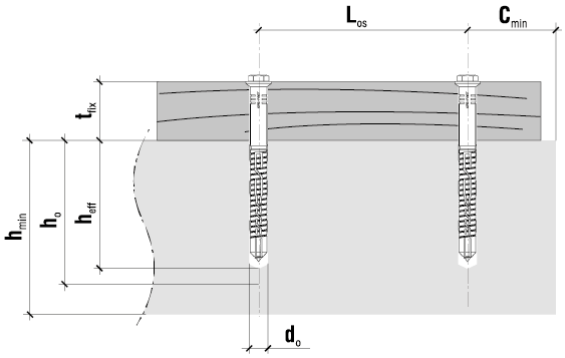
TECHNICAL PARAMETERS		
Parameter	Unit	Value
Plug diameter	d_k [mm]	12
Hole/drill diameter	d_0 [mm]	12
Effective anchorage depth	h_{eff} [mm]	70
Drilled hole depth	h_0 [mm]	80
Wrench size	[-]	SW-13
Sleeve material	[-]	PA - polyamide
Screw material	[-]	Zinc-plated steel
National Technical Assessment	[-]	ITB-KOT-2018/0528

RESISTANCE		
Substrate type	Design resistance [kN]	
	KPK	
	$N_{R,d}$	$V_{R,d}$
Solid clay brick (1)	0,6	1,2
Porous block (2)	0,48	0,96
Autoclaved aerated concrete (3)	0,45	0,72

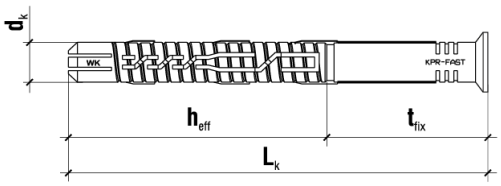
(1) class 25 according to PN-EN 771-1+A1:2015

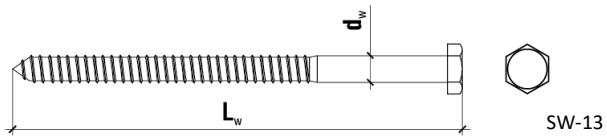
(2) class 15 according to PN-EN 771-1+A1:2015, with wall thickness 12mm

(3) type 600 and class 4 according to PN-EN 771-4+A1:2015



INSTALLATION PARAMETERS			
Substrate type	Min. substrate thickness	Min. distance from edge	Min. axial distance
	h_{min} [mm]	c_{min} [mm]	L_{os} [mm]
Solid clay brick	105	140	210
Porous block	105	140	210
Autoclaved aerated concrete	105	140	210





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 x L_k [mm]	d_w x L_w [mm]	t_{fix} [mm]	[-]	[pcs]
KPK-12100	12x100	8x100	30	SW-13	25
KPK-12120	12x120	8x120	50	SW-13	25
KPK-12140	12x140	8x140	70	SW-13	25
KPK-12160	12x160	8x160	90	SW-13	25
KPK-12180	12x180	8x180	110	SW-13	25
KPK-12200	12x200	8x200	130	SW-13	25

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.