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PRODUCT DATA SHEET – LO

Section 1. PRODUCT DESCRIPTION

FRAME ANCHOR FASTENER – LO

Frame anchor fastener LO is made of carbon steel with protective zinc coating. The fastener comprises threaded pin M6 with countersunk head and PZ drive, expansion taper screwed on a threaded pin and an expansion sleeve. The fastener is designed for installation of window and door frames, steel woodwork fittings – to be used with plastic cover in a variety of colours.

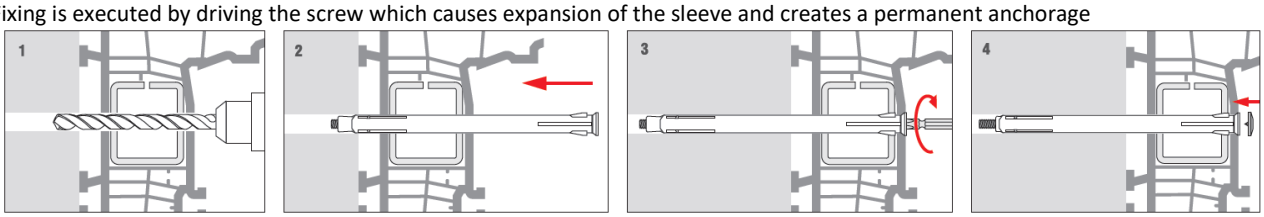
Types of substrates on which frame anchor fastener LO can be used:

- **Normal concrete**
- **Solid clay brick**
- **Vertically perforated block**
- **Calcium silicate brick**

Frame anchor fasteners hold National Technical Assessment: ITB-KOT-2017/0307

Section 2. METHOD OF INSTALLATION

1. Original anchor fasteners delivered by the manufacturer can be used only
2. Before installation identify a substrate in which the anchor fastener will be installed and compare loads which the anchor fastener will carry to resistance values given in Product Data Sheet or National Technical Assessment
3. Select an adequate length of the anchor fastener so that expansion zone is in the construction material of the wall (thickness of member being fixed matches max. usable length of the anchor fastener – t_{fix})
4. Use proper method of drilling according to a substrate type (holes in masonry substrate made of hollow blocks should be drilled using a drill without impact)
5. Diameter of drilled holes should match diameter of hole recommended by the manufacturer
6. Drilled holes in substrates of solid materials should be deeper by min. 10mm compared to the fastener 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. Fixing is executed by driving the screw which causes expansion of the sleeve and creates a permanent anchorage



Section 3. TECHNICAL DATA

TECHNICAL PARAMETERS		
Parameter	Unit	Value
Fastener diameter	d_k [mm]	10
Hole/drill diameter	d_0 [mm]	10
Effective anchorage depth	h_{eff} [mm]	30/40/60*
Drilled hole depth	h_0 [mm]	40/50/70*
Drive type	[-]	PZ-2
Screw material	[-]	Zinc-plated steel
National Technical Assessment	[-]	ITB-KOT-2017/0307

*for concrete / solid clay brick / vertically perforated block / calcium silicate brick

RESISTANCE		
Substrate type	Design resistance	
	Pull-out [kN]	Shear [kN]
Concrete C20/25 – C50/60	1,19	2,40
Solid clay brick	1,00	2,00
Vertically perforated block	0,24	0,48
Calcium silicate brick	0,24	0,48

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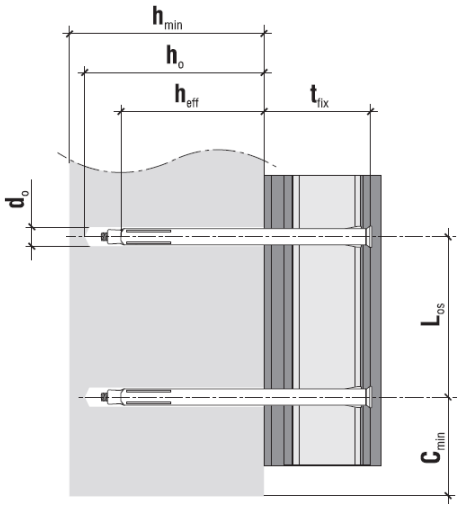
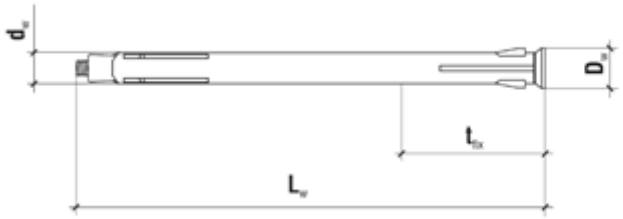


INSTALLATION PARAMETERS			
Substrate type	Min. substrate thickness	Min. distance from edge	Min. axial distance
	h_{min} [mm]	c_{min} [mm]	L_{os} [mm]
Concrete C20/25 – C50/60	80	45	250
Solid clay brick	80	60	250
Vertically perforated block	90	90	250
Calcium silicate brick	90	90	250



PZ-2

SELECTION TABLE					
Product code	Sleeve diameter and length	Screw diameter and length	Head diameter	Drive type	Number of pieces in a box
	d_k x L_k [mm]	d_w x L_w [mm]	D_w [mm]	[-]	[pcs]
LO-10072	10x72	6x87	13	PZ-2	100
LO-10092	10x92	6x107	13	PZ-2	100
LO-10112	10x112	6x127	13	PZ-2	100
LO-10132	10x132	6x147	13	PZ-2	100
LO-10152	10x152	6x167	13	PZ-2	100
LO-10182	10x182	6x197	13	PZ-2	50
LO-10202	10x202	6x217	13	PZ-2	50

Cover cap for LO frame fastener

SELECTION TABLE			
Product code	Colour	Diameter	Number of pieces in a box
	[-]	[mm]	[pcs]
ZB	white	16	100
ZBR	brown	16	100
ZCZ	black	16	100
ZSZ	grey	16	100

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.