MBS | MBZ

SELF-TAPPING SCREW FOR MASONRY







TIMBER AND PVC DOORS/WINDOWS

The countersunk head (MBS) allows PVC window frames to be installed without damaging the frame. The cylindrical head (MBZ) is able to penetrate and remain embedded in timber frames.

IFT CERTIFICATION

Strength values in different substrates tested in cooperation with the Institute for Window Technology (IFT) in Rosenheim.

HI-LOW THREADING

The HI-LOW thread allows for safe fastening even near the edges of the support, thanks to the reduced tension induced on the material, ideal for frames.

DIAMETER [in]	0.24 0.30 0.63
LENGTH [in]	2 1/16 2 1/16 9 19/36 15 3/4
EXPOSURE CONDITION	ECI ORY
ATMOSPHERIC CORROSIVITY	C1 C2
WOOD CORROSIVITY	11 12
MATERIAL	Zn electrogalvanized carbon steel



CODES AND DIMENSIONS

MBS - countersunk screw

d_1	CODE	L		
[mm] [in]		[mm]	[in]	
	MBS7552	52	2 1/16	100
	MBS7572	72	2 13/16	100
	MBS7592	92	3 5/8	100
7,5	MBS75112	112	4 7/16	100
0.30	MBS75132	132	5 3/16	100
TX 30	MBS75152	152	6	100
	MBS75182	182	7 3/16	100
	MBS75212	212	8 3/8	100
	MBS75242	242	9 1/2	100

MBZ - cylindrical head

d ₁	CODE	L		pcs
[mm] [in]		[mm]	[in]	
	MBZ7552	52	2 1/16	100
	MBZ7572	72	2 13/16	100
	MBZ7592	92	3 5/8	100
7,5	MBZ75112	112	4 7/16	100
0.30	MBZ75132	132	5 3/16	100
TX 30	MBZ75152	152	6	100
	MBZ75182	182	7 3/16	100
	MBZ75212	212	8 3/8	100
	MBZ75242	242	9 1/2	100

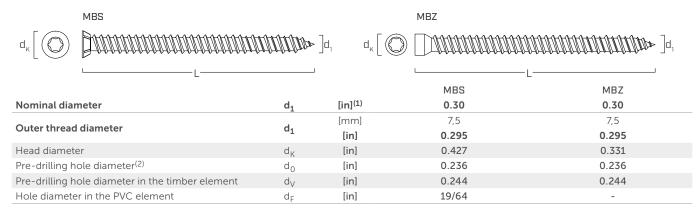


FIELDS OF USE

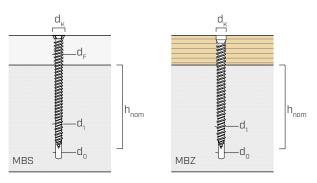
Fastening of timber (MBZ), PVC and aluminium (MBS) window frames on the following supports:

- solid and perforated brick
- solid and perforated concrete
- lightweight concrete
- autoclaved aerated concrete

GEOMETRY AND PARAMETERS OF INSTALLATION



 $^{^{(1)}}$ The nominal diameter of the screw is converted into imperial units and rounded up to the nearest decimal point.



screw diameter d_1

 d_{K} head diameter d_0

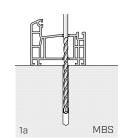
diameter of pre-drilling hole concrete/brickwork pre-drilling hole diameter in the timber element d_V

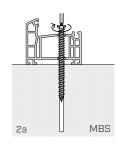
 d_F hole diameter in the PVC element

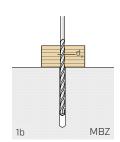
nominal anchoring depth h_{nom}

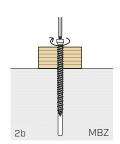
INSTALLATION











STRUCTURAL VALUES

BRICKS

		pull-out	compression	shear	shear with lever arm ⁽¹⁾
			→ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	→ h _{nom}	b h _{nom}
Type of support	h _{nom,min}	N _{Rk,p}	N_{Rk}	V_{Rk}	$V_{Rk,b}$
	[in]	[lbf]	[lbf]	[lbf]	[lbf]
Solid brick	1.57	70	2028	659	481
Hollow brick	2.36	_(2)	29	299	128

Characteristic values tested at IFT ROSENHEIM®.

CONCRETE

Type of support	h _{nom,min}	$N_{Rk,p}$
	[in]	[lbf]
Concrete ⁽³⁾	1.18	200
Lightweight concrete	3.15	32
Autoclaved aerated concrete	3.15	25

The recommended withdrawal values are obtained considering a safety coefficient of 3.

 $^{^{(1)}}$ The screws were tested considering a lever arm of b = 0.79 in.

⁽²⁾Value not available.

⁽³⁾C20/25 grade concrete.