SBM

ZBM

SBM | ZBM

SELF-TAPPING SCREW FOR MASONRY

- Appropriate for direct fastening on compact and semi-solid materials: natural stone, concrete, solid bricks and hollow bricks
- The countersunk head (SBM) allows PVC window frames to be installed without damaging the frame
- The cylindrical head (ZBM) is able to penetrate and remain embedded in timber frames
- Strength values in different substrates tested in cooperation with the Institute for Window Technology (IFT) in Rosenheim
- The HI-LOW thread allows secure fastening even close to the edges of the support

ENVIRONMENT	SC2 C2
MATERIAL	Zn ELECTRO PLATED

SBM

countersunk screw

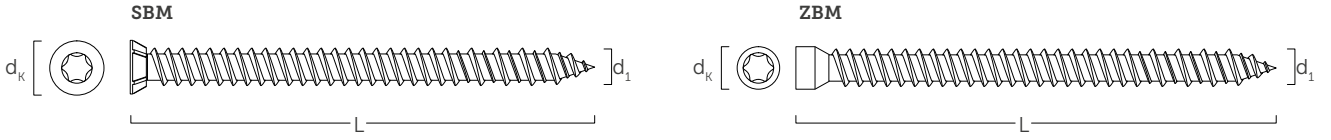
d_1 [mm] *[in]*	d_K [mm] *[in]*	CODE	L [mm]	L *[in]*	pcs
7,5 *0.30* TX 30	10,85 *0.427*	MBS7552	52	*2 1/16*	100
		MBS7572	75	*2 15/16*	100
		MBS7592	92	*3 5/8*	100
		SBM75112	112	*4 7/16*	100
		SBM75132	132	*5 3/16*	100
		SBM75152	152	*6*	100
		SBM75182	182	*7 3/16*	100
		MBS75212	212	*8 3/8*	100
		MBS75242	242	*9 1/2*	100

ZBM

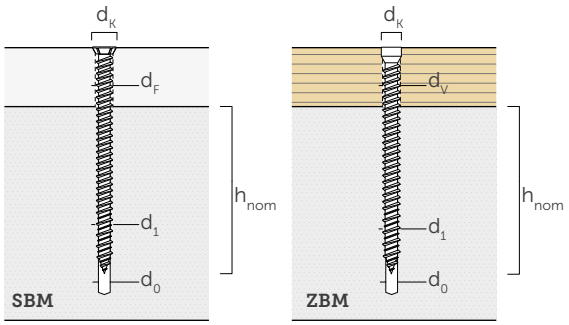
cylindrical head screw

d_1 [mm] *[in]*	d_K [mm] *[in]*	CODE	L [mm]	L *[in]*	pcs
7,5 *0.30* TX 30	8,4 *0.331*	MBZ7552	52	*2 1/16*	100
		MBZ7572	75	*2 15/16*	100
		MBZ7592	92	*3 5/8*	100
		ZBM75112	112	*4 7/16*	100
		ZBM75132	132	*5 3/16*	100
		ZBM75152	152	*6*	100
		ZBM75182	182	*7 3/16*	100
		MBZ75212	212	*8 3/8*	100
		MBZ75242	242	*9 1/2*	100

GEOMETRY

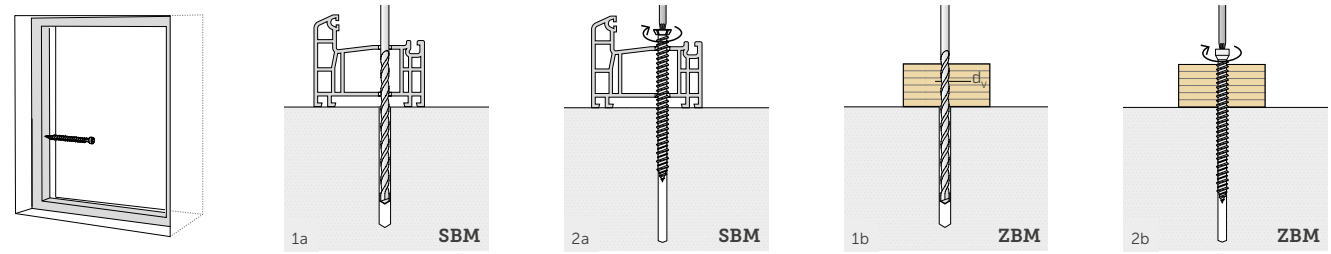


			SBM	ZBM
nominal diameter	**d_1**	**[mm]**	**7,5**	**7,5**
head diameter	d_K	[mm]	10,85	8,4
diameter of pre-drilling hole concrete/brickwork	d_0	[mm]	6,0	6,0
pre-drilling hole diameter in the timber element	d_V	[mm]	6,2	6,2
hole diameter in the PVC element	d_F	[mm]	7,5	-



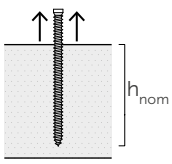
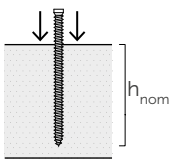
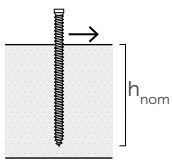
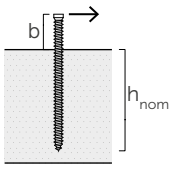
d_1	screw diameter
d_K	head diameter
d_0	diameter of pre-drilling hole concrete/brickwork
d_V	pre-drilling hole diameter in the timber element
d_F	hole diameter in the PVC element
h_{nom}	nominal anchoring depth

INSTALLATION



STRUCTURAL VALUES

BRICKS

		pull-out	compression	shear	shear with lever arm[1]
					
type of support	**$h_{nom,min}$ [mm]**	**$N_{Rk,p}$ [kN]**	**N_{Rk} [kN]**	**V_{Rk} [kN]**	**$V_{Rk,b}$ [kN]**
Solid brick	40	0,31	9,02	2,93	2,14
Hollow brick	60	-[2]	0,13	1,33	0,57

Characteristic values tested at IFT ROSENHEIM®.
[1]The screws were tested considering a lever arm of b = 20 mm.
[2]Value not available.

CONCRETE

type of support	**$h_{nom,min}$ [mm]**	**$N_{Rk,p}$ [kN]**
C20/25 grade concrete	30	0,89
Lightweight concrete	80	0,17
Autoclaved aerated concrete	80	0,11

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