BRAVOLL® TIT 60/5-20

Picture

Description

Insulation plastic anchor used for mechanical fastening of rigid thermal insulation boards made of expanded polystyrene (EPS) and mineral wool (MW) of thermal insulation systems (ETICS).

Insulation washer with recess for reduced thermal bridges, for fixing insulation boards into wood and steel base materials.
The product can be supplied as a complete anchor with Torx head screws for wood and thin gauge steel sheets (TS15 with hardened tip) and steel (VR15 with self-drilling tip).
Both types are treated against corrosion (15 Kesternich cycles).

Technical data

Washer diameter d_p:	60 mm
Minimum embedment h_{nom}:	20 - 40 mm
Anchor body material:	shock-resistant polypropylene
Approval:	090-006720 TZUS Czech Republic
With TS15 screws:	wood, chipboard, steel up to 0.88mm thickness
With VR15 screws:	wood, chipboard, steel up to 2 x 1.25mm thickness

Features

- Euro VR15 and TS15 screws can be installed into most base materials without any pre-drilling
- Quick and easy installation
- Installation without pre-drilling possible into most base materials
- Special plate surface for optimum render adhesion
- Limited thermal transmission
- Can be used in connection with the extension washers PTH IT

Anchor type BRAVOLL®	Code	Washer diameter d_p (mm)	Qty per carton (pcs)
TIT 60/5-20	10081	60	400

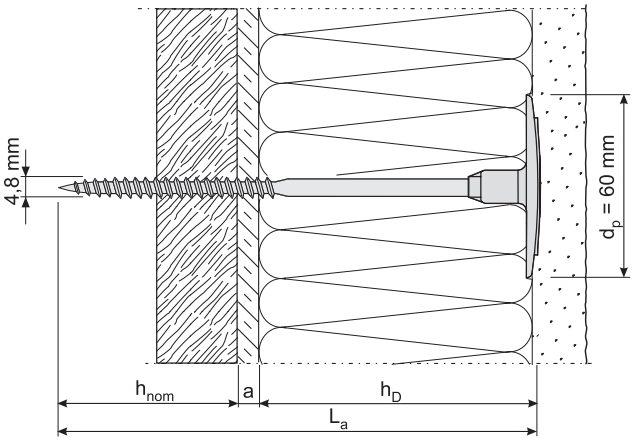
Material	Minimum base material thickness d (mm)	Minimum embedment depth h_{nom} (mm)
Spruce wood	20	30
Chipboard	18	30
Trapezoidal steel sheet	0.75	30

Length range

Screw EURO VR15	Code	Screw length (mm)	Anchor length L_a (mm)	Screw-in depth h_{nom} (mm)	Ins. thickness h_{nom} (mm)	Pcs/ carton
4.8x60	49060	60	70	20-40	30-50	500
4.8x80	49080	80	90	20-40	50-70	500
4,8x100	49100	100	110	20-40	70-90	500
4.8x120	49120	120	130	20-40	90-110	500
4.8x140	49140	140	150	20-40	110-130	500

Screw EURO TS15	Code	Screw length (mm)	Anchor length L_a (mm)	Screw-in depth h_{nom} (mm)	Ins. thickness h_{nom} (mm)	Pcs/ carton
4,8x60	48060	60	70	20-40	30-50	200
4,8x80	48080	80	90	20-40	50-70	200
4,8x100	48100	100	110	20-40	70-90	200
4,8x120	48120	120	130	20-40	90-110	200
4,8x140	48140	140	150	20-40	110-130	500
4,8x160	48160	160	170	20-40	130-150	500
4,8x180	48180	180	190	20-40	150-170	500
4,8x200	48200	200	210	20-40	170-190	500

Drawing

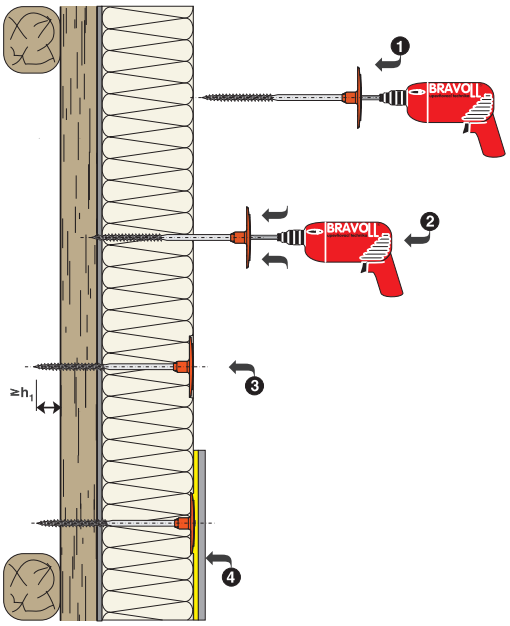


Anchor length calculation

$$L_a \geq h_D + h_{nom} + \max a$$

- d_p - Washer diameter
- L_a - Anchor length
- h_D - Insulation material thickness
- h_{nom} - Minimum embedment length in the base material
- h - Thickness of base material
- a - Gluing mortar thickness + facade surface flatness tolerance

Installation



- Place the washer and the screw onto a screwdriver with a Torx bit
- Pierce the insulation material with the screw down to the base material
- The installation should be performed with an electric screwdriver (maximum 350 rpm, ideally with electronic regulator) and the Torx-screw-cap.
- Stop screwing (maximum 350 rpm) when the washer becomes flush or between 0 and 2 mm below the surface of the insulation material.
- Within 6 weeks the anchors should be covered by the other ETICS components (for UV protection).
- Installation must be done at a temperature > 0° C.