

Capatect-Universaldübel 053

Washer anchor dowel for fastening insulation boards within Capatect ETICS A and B; European and German approvals



Product Description

Field of Application

Approved fastener for Capatect insulation boards as part of Capatect ETICS* A and B in substrates type A to E (see below) and concrete claddings. For optimised installation with reduced heat loss value in combination with Capatect-Universaldübel-PS-Stopfen (polystyrene plug) or Capatect-Universaldübel-Rondelle (MW for ETICS A or ES for ETICS B).
Minimum thickness of insulation boards: ≥ 60 for surface-flush installation and ≥ 80 for countersunk installation on compressible insulation boards.

*ETICS / External Thermal Insulation Composite System
British term: External Wall Insulation (EWI) systems
Amer. term: EIFS / Exterior Insulation Finishing System

Material Properties

Capatect-Universaldübel 053 consists of the anchor shank and the washer plate. shank $\varnothing 8$ mm, with pre-assembled, galvanized double thread screw. washer $\varnothing 60$ mm. The washer can either be arranged flush with the surface of insulation boards or be arranged sunk in compressible insulation boards.

Heat loss value X ("Chi"):

- Installed flush with the surface and screw covered with PS plug: $X = 0.002$ [W/K].
- Installed countersunk and disc covered with corresponding type of Capatect-Universaldübel-Rondelle: $X = 0.001$ [W/K].
- Safe anchorage and mounting control in most common wall building materials
- Time-saving, dust free application without milling cutter

Colours
Product No.

carbon grey / anthracite
053



TECHNICAL INFORMATION NO. 053

Product Type and Wall Categories	Product No.	Length [mm]
Capatect - Universaldübel 053 European Technical Approval: ETA-04/0023 German National Approval: ABZ-21.2-1769; Categories of usage according to ETA for wall building materials: A = Concrete B = Solid stones C = Perforated bricks D = Lightweight aggregate concrete E = AAC / Cellular concrete** Claddings ≥ 40 mm and < 100 mm	053/115	115
	053/135	135
	053/155	155
	053/175	175
	053/195	195
	053/215	215
	053/235	235
	053/255	255
	053/275	275
	053/295	295
	053/315 *	315
	053/335 *	335
	053/355 *	355
	053/375 *	375
053/395 *	395	
Units (per carton): 100		
* Non-stock items		
Anchorage depth $h_v \geq 25$		
** Anchorage depth in category E (AAC/cellular concrete): $h_v \geq 65$ mm		
Consumption: See national regulations and corresponding lists within Caparol ETICS manual depending on: <ul style="list-style-type: none"> • Type of insulation board • Thickness of insulation board • Substrate • Height of construction 		

Accessories:

Product Name	Product No.	Packaging Units/Carton
Capatect-Universaldübel-Tool Vario Complete set for installation/mounting, consisting of: 1 setting tool for screwing/countersink, incl. Torx T30 bit and long cutting sheet metal 1 short cutting sheet metal 1 bit Torx T25 short (for countersunk or flush/plain installation) 1 Allen key SW3	053/02	1
Capatect-Universaldübel-Rondelle PS Suitable for filling deepenings in EPS insulation boards	052/01	100
Capatect-Universaldübel-Rondelle MW Suitable for filling deepenings in mineral wool (MW) insulation boards	052/04	100
Capatect-Universaldübel-PS-Stopfen EPS plug for covering the screw channel of plate anchors, suitable for EPS and MW insulation boards	052/05	500
Capatect-Universaldübel-Ersatzteilkit Kit of spare parts, containing 3 spare blades and 3 bits TX30 short	052/03	5
Capatect-Universaldübel-Austauschset Vario Containing 3 long spare blades, carrier, variable shaft and Allen keys SW3 + SW4	053/06	1

Note

Enlargement of the washer

Product-No.	Anchor Plate, Washer Ø [mm]	to be used for*
153/14	140	Capatect-LS Fassadendämmplatte VB 101
153/VT90	90	Capatect-MW Fassadendämmplatte DUO plus 119 Capatect-MW Fassadendämmplatte 149 EXTRA Capatect-MW Fassadendämmplatte 149 EXTRA L
*only surface-flush installation possible		

Application

Substrate Preparation

The thermal insulation boards must show an absolutely planar (even) surface and have to be well fixed along the edges. See application manual.

Installation

Mounting of Capatect-Universaldübel 053 after sufficient curing of adhesive mortar (approx. 1 day at 18 °C).

Note: For anchorage depth in bearing wall see table. When fixing insulation boards onto existing ETICS, wood-wool boards, existing render/plaster coatings or similar non-load bearing intermediate, use anchors with shaft length according to the situation.

Dowel Length Shaft Length

115 - 155 mm	=	40 mm (as Universaldübel 052)
175 - 195 mm	=	60 mm
215 - 255 mm	=	80 mm
≥ 275 mm	=	120 mm

Drill exactly horizontal dowel holes (Ø 8 mm) into the load bearing substrate using suitable hammer drill. Drill **without** any hammer effect for vertically perforated clay bricks, perforated sand-lime bricks, solid lightweight concrete blocks and hollow blocks. Hole depth see below! Thoroughly remove all bore dust. Put dowel into drill hole.

a) Surface-Flush Mounting

Hole depth: In solid wall (Cat. A-D): ≥ 35 mm, in AAC / cellular concrete (Cat. E): ≥ 75 mm
Screw with a standard drill using adjustable shaft and bit Torx T30 (without guide washer) until the anchor plate is flush with the surface. Cover the screw via PS gap pad.

b) Countersunk Mounting

Hole depth: In solid wall (Cat. A-D): ≥ 50 mm, in AAC / cellular concrete (Cat. E): ≥ 90 mm.
Remove the splint pin of Universaldübel-Tool Vario (attachable tool) and adjust to match the correct dowel length. Variation of settings are made by axial shifting the carrier element on the adjusting shaft. Use short cutting blade for insulation boards d = 80 mm and long blade for insulation boards d > 80 mm. Note: Only touch the guide washer when adjusting the tool - do not touch the cutting blade!

Drive the center screw with moderate speed into the dowel using a standard drill in combination with the Capatect-Universaldübel-Tool Vario with bit Torx T30. The surface of insulation board will be circular cut around the anchor washer (approx. 20 mm deep) while countersunk the anchor into the insulation board.

Stop screwing when limit stop washer gets in contact with the surface of the board; do not screw further on!

If the dowel cannot be well fixed in the wall - caused by bad substrate condition, it cannot be sunk. In this case place another dowel nearby, but in sufficient distance in order to achieve adequate adhesive strength. Insert Universaldübel-Rondelle (PS or MW).

Advice

Approval

Germany: Z-21.2-1769
EU: ETA-04/0023

Customer Service Centre

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