



TECHNICAL DATA SHEET

EJOTHERM[®] S1

1. PRODUCT DESCRIPTION

Universal screw anchor consisting of plastic anchor with plastic plate and pre-mounted plastic screw.
European Technical Assessment (ETA)

2. FIELD OF APPLICATION

For flush mounting of insulation boards in KEIM ETIC-Systems according to system approval:
Z-33.43-185; Z-33.4.1-45; Z-33.41-188; Z-33.46-1187

Generally approved by the building authorities for: exterior walls; window and door reveals; interior walls; ceiling surfaces, indoors; basement ceilings

Generally approved by the building authorities as per: .

Suitable for: Masonry or concrete, rendered and unrendered; ETICS upgrade system.

Can also be used for flush surface installation of insulation boards in KEIM room climate systems

3. PRODUCT PROPERTIES

- Efficient setting times
- especially economical
- easy to use
- Universally applicable, suitable for all substrates (use category A, B, C, D, E)
- suitable for all insulation panel thicknesses and kinds
- Reliable setting control through use of the associated tool
- thermal bridge free

MATERIAL CHARACTERISTICS:

- | | |
|--|-----------------|
| - Use categories according to ETA: | A, B, C, D, (E) |
| - Dowel length: | 60 - 460 mm |
| - Plate diameter: | 60 mm |
| - Panel thickness: | 20 - 420 mm |
| - Dowel diameter: | 8 mm |
| - Anchorage depth: | 30 mm (50 mm) |
| - Drill hole depth, recessed installation: | - |
| - Drill hole depth, flush installation: | 40 mm (60 mm) |
| - Point-related heat transfer coefficient (chi value): | 0.000 W/K |
| - Colour shade: | black/white |

4. APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION:

To use the anchor on substrates that do not fall into the approved use categories, anchor pull-out tests must be carried out on the building and documented.

Check the adhesion of the insulation panels after at least 3 days. Insulation panels that are not bonded or damaged must be replaced.

APPLICATION CONDITIONS:

Ambient and substrate temperature during application and drying from min. 0 °C to max. 40 °C. Do not apply in direct sunlight or on sun-heated substrates. Protect surfaces from direct sun, wind and rain during and after application.

APPLICATION:

The use of system-specific tools for optimal anchor installation is recommended. Combinable with the dowel plates ejotherm VT 90 and ejotherm SBL 140 plus.

DOWELING:

Anchoring is carried out in glued and dowelled ETIC systems using ETICS fasteners approved by the general building authorities or by the European authorities according to DIN EN 1991-1-4/NA. The required dowel quantity depends on the building height and the respective wind zone in which the object is located. For further information, please refer to our ETICS Technical Guide, Chapter #8, ETICS Wind Suction Loads. In only glued ETIC systems, constructive anchoring with suitable ETICS anchors is permissible. In the base area, the perimeter and base insulation panels can additionally be mechanically fastened with ETICS fasteners approved by the building authorities. The minimum number of fasteners is 4 fasteners /m². In the area of the vertical structural sealing (up to 150 mm above ground level), the insulation panels must not be dowelled. The insulation panel may also be used as a basement ceiling insulation panel: Without fire protection requirements: The insulation panels may only be glued to new substrates up to a maximum weight per unit area of 15 kg/m² (including any final coating). In the case of insufficiently load-bearing substrates (old substrates) or if the permissible weight per unit area is exceeded, dowelling is carried out using ETICS anchors approved by the general building authorities or by the European authorities. Minimum number of anchors: 2 anchors per insulation board cut. With fire protection requirements: If necessary, dowel with the basement ceiling insulation screw DDS-Z and the basement ceiling insulation washer DDT. ejotherm® S1 may also be used in KEIM room air conditioning systems: In the case of subsequent tiling work, the panels are additionally fastened through the mesh with suitable screw anchors and finished with another layer of Universalputz.

5. PACKAGING / TECHNICAL DATA

Dowel length [mm]	Panel thickness [mm]	Drill hole depth, flush installation	Drill hole depth, recessed installation	Pieces per unit
60	20**	40 mm (60 mm)*	-	100
80	40**	40 mm (60 mm)*	-	100
100	60**	40 mm (60 mm)*	-	100
100	60	40 mm (60 mm)*	-	100
120	80	40 mm (60 mm)*	-	100
140	100	40 mm (60 mm)*	-	100
160	120	40 mm (60 mm)*	-	100
180	140	40 mm (60 mm)*	-	100
200	160	40 mm (60 mm)*	-	100
220	180	40 mm (60 mm)*	-	100
240	200	40 mm (60 mm)*	-	100
260	220	40 mm (60 mm)*	-	100
280	240	40 mm (60 mm)*	-	100
300	260	40 mm (60 mm)*	-	100
320	280	40 mm (60 mm)*	-	100
340	300	40 mm (60 mm)*	-	100
360	320	40 mm (60 mm)*	-	100
380	340	40 mm (60 mm)*	-	100
400	360	40 mm (60 mm)*	-	100
420	380	40 mm (60 mm)*	-	100
440	400	40 mm (60 mm)*	-	100

RELATED PRODUCTS

Product name	Pieces per unit	Type of container
Dübelteller ejothem VT 90	100	carton
Dübelteller ejothem SBL 140 Plus	100	carton

* Use category A, B, C, D, (E); Standard values for new building substrates; ** ejothem® S1 short

ORDER SIZE

Order length of fastener = insulation material thickness + layer thickness of adhesive mortar + possibly existing thickness of old render + anchorage depth

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CHARACTERISTIC LOADS

Use categories according to ETA	Characteristic loads [kN]
A	1.5
A	1.4
B	1.5
B	1.5
C	1.5
C	1.5
C	0.9
D	0.9
E	0.75

ASSEMBLY TOOLS

ejothem® S1-tool Pro

ejothem® S1-tool

6. STORAGE

max. storage time	Storage conditions
no maximum storage time	dry protect against weathering

7. DISPOSAL

Waste code: 17 09 04

8. SAFETY INSTRUCTIONS

No particular indications.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release the purchaser and processor from the obligation to convince themselves of the suitability of our products for the intended application with due care, which is general practice in trade and crafts. The general rules of construction technology must be observed. We reserve the right to make modifications to improve the product or its application. This edition supersedes all earlier editions.

