

### Note on English translation / Hinweise zur englischen Fassung

This is a translation of the product data sheet valid in Germany.

All stated details and properties are in compliance with the regulations of the German standards and building regulations. They are only applicable for the specified products, system components, application rules, and construction details in connection with the specifications of the respective certificates and approvals.

Knauf Gips KG denies any liability for applications outside of Germany as this requires changes acc. to the respective national standards and building regulations.

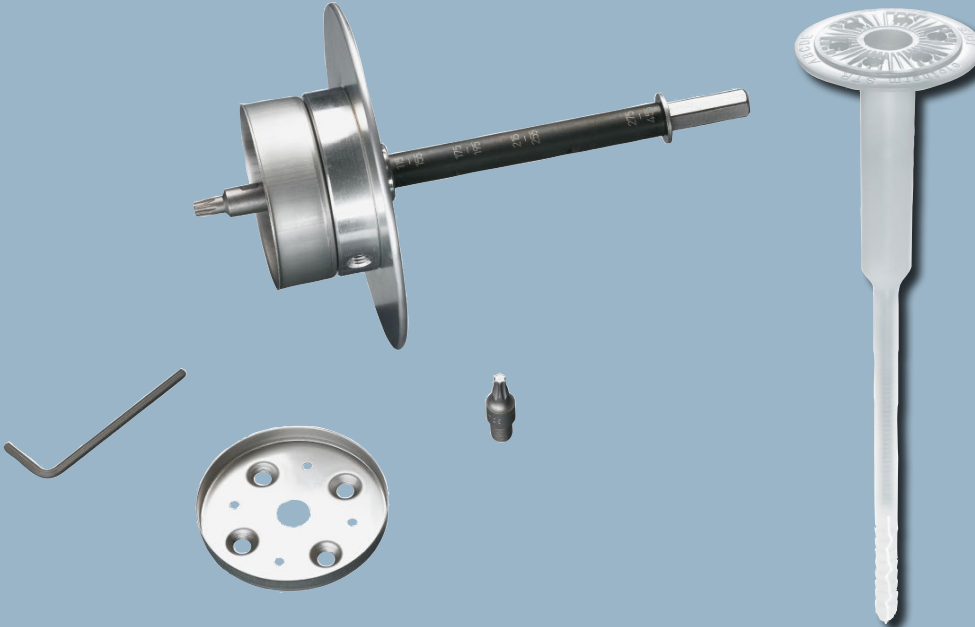


Plaster and Façade Systems

P389b.de

Product Data Sheet

2020-06



# Schraubdübel STR U 2G anchor

Screw-in anchor for anchoring WARM WALL systems

## Product description

Screw-in anchor for countersunk and surface fixed installation for Knauf WARM WALL systems. The dowel shank consists of hi-grade synthetic with a predefined crumple zone.

Rondelles made of EPS (white/grey) and mineral wool as well as plugs made of EPS and the matching insulation discs are available.

## Storage

Store in a dry place.

## Quality

In compliance with ETA-04/0023, the product is subject to initial type testing and continuous factory production control and is marked with the CE marking.

Furthermore, the Schraubdübel STR U 2G anchor features a general type certification Z-21.2-1769, that governs the use in ETICS insulation materials taking the national regulations into consideration.

## Properties and added value

- Cost effective dowel lengths thanks to the minimum anchoring depth of just 25 mm (65 mm with aerated concrete)
- Safety guaranteed by the high characteristic load capability
- 100% setting control, non-anchored dowels are immediately recognizable
- For countersunk and surface fixed installation
- For use with EPS, mineral wool, wooden fibre insulation boards and high performance insulation materials
- For extra thick insulation material thicknesses up to 400 mm
- Permanent compression pressure
- Preinstalled screw for fast installation

### Field of application

Schraubdübel STR U 2G anchor is suitable for structurally relevant anchoring of Knauf WARM WALL system insulation materials. Countersunk installation with rondelles or surface fixed insulation using plugs is possible. When dowel plate VT 2G is used in mineral wool insulation panels, the increased loads can be absorbed by a 90 mm diameter dowel plate when the anchor is countersunk at the same time. The load bearing characteristics in EPS insulation materials can also be improved decisively.

Can be used for all conventional anchoring substrates such as concrete, solid masonry and hollow masonry block, lightweight aggregate concrete and aerated concrete (Use categories A, B, C, D and E). Schraubdübel STR U 2G anchors can also be used for weather shells (triple-layer panels).

### Types

#### Dowel length selection

The dowel length to be used is dependent on the thickness of the insulation materials. The dowel must be anchored to a depth of at least 25 mm in the supporting wall substrate (for aerated concrete 65 mm). Old render and adhesive remnants must be added to this length.

#### Dowel arrangement

The required quantities are based on the system approval taking the DIN EN 1991-1-4 and DIN EN 1991-1-4/NA into consideration. Further information on the dowel quantity and arrangement can be found in the relevant data sheets for the Knauf WARM WALL systems.

#### Drill holes

The drill hole diameter must be at 8 mm. Drill holes must be drilled at right angles to the substrate, but the impact or hammer drill action may not be used with vertical coring brick.

The drill holes with countersunk installation must be selected at least 25 mm deeper and for surface fixed installation at least 10 mm deeper than the length of the dowel in the anchoring substrate. Remove drill dust completely from the borehole.

#### Dowel plates

In case of MW Volamit 040 use the additional dowel plates with a diameter of 140 mm. Other dowel plates such as the VT 2G can be used in dependence on the insulation material approval. Further technical information can be found in the system data sheet P323.de Knauf WARM WALL Plus.

### Dowel placement

In case of countersunk installation the dowel and its dowel plate are initially pushed flat against the surface. Using the STR U installation tool a cut is made into the insulation material when screwing in the dowel and the dowel plate is countersunk at the same time by about 20 mm. Apply surface fixed insulation material rondelles.

Surface fixed installation is performed using screw bit T 30. The dowel plates are subsequently sealed using the STR plugs.



*For countersunk installation the cut-outs are sealed with STR rondelles.*

*Surface fixed Schraubdübel STR U 2G anchors are sealed with STR plugs.*

### Technical data

Description	Unit	Value
Dowel diameter	mm	8
Dowel plate diameters	mm	60
Drill hole depth, countersunk installation $h_1$	mm	50 (90 for aerated concrete)
Drill hole depth, surface fixed installation $h_2$	mm	35 (75 for aerated concrete)
Anchoring depth $h_{ef}$	mm	25 (65 for aerated concrete)
Use categories acc. to ETA-04/0023	Categories	A,B,C,D,E
Point thermal transmission coefficient, countersunk installation, Chi	W/K	0.001
Point thermal transmission coefficient, surface fixed installation, Chi	W/K	0.002

Use categories acc. to ETAG 014	Substrate	Permissible service loads (ETA-04/0023)
A	Concrete (C12/15)	1.50 kN/dowel
	Concrete (C16/20)	1.50 kN/dowel
	Concrete (C50/60)	1.50 kN/dowel
B	Solid brick	1.50 kN/dowel
	Limestone blocks	1.50 kN/dowel
	Solid brick/blocks made of light concrete	0.60 kN/dowel
C	Sand-lime perforated bricks	1.50 kN/dowel
	Vertical coring bricks	1.20 kN/dowel
	Hollow blocks made of light concrete	0.60 kN/dowel
D	Lightweight aggregate concrete (compressive strength $\geq 6$ N/mm <sup>2</sup> )	0.90 kN/dowel
E	Aerated concrete (P2-P7)	0.75 kN/dowel

### Product range

Article designation and length mm	Packaging unit Pieces / package	Use categories A-D Insulation layer thickness in mm		Category E Insulation layer thickness in mm		Material number
		New building <sup>1)</sup>	Renovation <sup>2)</sup>	New building <sup>1)</sup>	Renovation <sup>2)</sup>	
Schraubdübel STR U 2G 115	100	80	60 <sup>3)</sup>	–	–	00268019
Schraubdübel STR U 2G 135	100	100	80	60 <sup>3)</sup>	–	00268021
Schraubdübel STR U 2G 155	100	120	100	80	60 <sup>3)</sup>	00268022
Schraubdübel STR U 2G 175	100	140	120	100	80	00268023
Schraubdübel STR U 2G 195	100	160	140	120	100	00268024
Schraubdübel STR U 2G 215	100	180	160	140	120	00268026
Schraubdübel STR U 2G 235	100	200	180	160	140	00268028
Schraubdübel STR U 2G 255	100	220	200	180	160	00268030
Schraubdübel STR U 2G 275	100	240	220	200	180	00268031
Schraubdübel STR U 2G 295	100	260	240	220	200	00268032
Schraubdübel STR U 2G 315	100	280	260	240	220	00268033
Schraubdübel STR U 2G 335	100	300	280	260	240	00268034
Schraubdübel STR U 2G 355	100	320	300	280	260	00268035
Schraubdübel STR U 2G 375	100	340	320	300	280	00268036
Schraubdübel STR U 2G 395	100	360	340	320	300	00268037
Schraubdübel STR U 2G 415	100	380	360	340	320	00268038
Schraubdübel STR U 2G 435	100	400	380	360	340	00268039
Schraubdübel STR U 2G 455	100	420	400	380	360	00268040

<sup>1)</sup> New building with 10 mm adhesive

<sup>2)</sup> Old building with 10 mm adhesive and 20 mm old render

<sup>3)</sup> Surface fixed only

## Accessories

Article Designation	Packaging unit Pieces / package	Material number	Remark
STR plugs	500	00131272	For surface fixed installation
STR rondelle EPS white	100	00098922	For countersunk installation with and without VT 2G
STR rondelle EPS grey	100	00131271	For countersunk installation with and without VT 2G
STR rondelle MW	100	00253102	For countersunk installation with and without VT 2G
STR U installation tool	1	00098924	Tool for countersunk installation
STR U spare part set	1	00098925	Set: 3 cutters and 3 screw bits
Dowel plates SBL 140 plus	100	00240214	For surface fixed installation with MW Volamit 040
Dübelteller VT 2G dowel plate	100	00521896	For countersunk installation with mineral wool caps



### Observe safety data sheet!

For safety data sheets and CE marking see  
[pd.knauf.de](http://pd.knauf.de)



Videos for Knauf systems and products can be found under the following link:

[www.youtube.com/knauf](http://www.youtube.com/knauf)



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