

# Frame fixing URDL

Universal frame fixing for secure hold even in unstable building materials. Approved for concrete, masonry, and fire protection.



## Long Description

The universal long-shaft dowel for secure fastening even in unstable building materials. Suitable for concrete, solid and perforated building materials. For medium and high loads. Approved for concrete, masonry and fire protection. Available product variants: countersunk head (T) and hexagon head (FUS). Available in stainless steel (R/A4) and electro-galvanised steel (zp). Selectable product features: drill diameter 8/10 and effective length 10-160 mm. Set in through-hole mounting. Features secure anchoring, Upat nylon quality and universal use. Used, for example, for fastening facade constructions, wooden substructures and screen brackets.

## Characteristics

- Certification/Approval: ETA redundant in cracked concrete, ETA redundant in masonry, fire resistance
- Building materials: Concrete, solid construction, hollow construction
- Load range in concrete: Tension load 1.39-1.79kN, shear load 3.2-6.17kN
- Load range in masonry: Tension load, shear load, and oblique load 0.09-1.71kN
- Material: Zinc plated steel (zp), stainless steel (R/A4)
- Variant: Countersunk head (T), hexagon head (FUS)
- Feature: Drill diameter 8/10, usable length 10-160mm

## Applications

- Façade construction
- Wooden substructures
- Screen brackets
- Cable channels
- Beam anchorage
- Windows
- Lighting strips
- Mirror cabinet
- Door frames
- Ceiling suspension

## Advantages

- Secure anchoring: ETA approval option 1 cracked concrete and masonry for redundant non-structural systems and, fire protection test
- Upat nylon quality: Robust - durable - recyclable
- Universal application: When the building material is unknown, the frame anchor URDL is a good choice due to its expansion and knotting function
- Firm hold: The anchorage depth of 70mm ensures a firm hold even in unstable building materials, making the URDL versatile

## Materials

### Approved for:

- Perforated & Solid bricks
- Aerated concrete
- Lightweight concrete hollow blocks
- Calcium silicate perforated & Solid bricks
- Thermal insulation blocks
- Full blocks made of lightweight and normal concrete
- Concrete  $\geq$  C12/15

### Also suitable for:

- Natural stone with dense structure
- Full gypsum boards

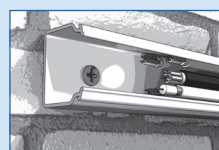
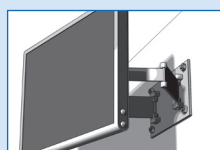


Straight to the product



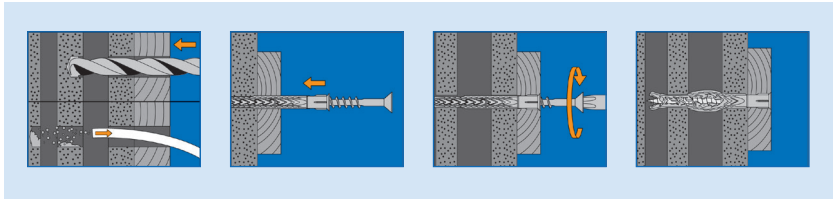
[upat.com/en-urdll](https://upat.com/en-urdll)

## Application examples



# Frame fixing URDL

## Assembly



## Product variants

| Product         | Art.-No. (zp) | Art.-No. (R) | Drive        | Drill diameter | Anchor length | Material         | Max. fixture thickness | Min. drill hole depth for through fixings | Sales unit (zp) | Sales unit (R) |
|-----------------|---------------|--------------|--------------|----------------|---------------|------------------|------------------------|-------------------------------------------|-----------------|----------------|
| URDL 8x80 FUS   | 546767        | 546771*      | TX30 / SW 10 | 8              | 80            | Galvanised steel | 10                     | 90                                        | 100             | 100            |
| URDL 8x100 FUS  | 546768        | 546772*      | TX30 / SW 10 | 8              | 100           | Galvanised steel | 30                     | 100                                       | 50              | 50             |
| URDL 8x120 FUS  | 546769*       | 546773*      | TX30 / SW 10 | 8              | 120           | Galvanised steel | 50                     | 120                                       | 50              | 50             |
| URDL 8x140 FUS  | 546770*       | 546774*      | TX30 / SW 10 | 8              | 140           | Galvanised steel | 70                     | 150                                       | 50              | 50             |
| URDL 10x80 FUS  | 546789        | 546796       | TX40 / SW 13 | 10             | 80            | Galvanised steel | 10                     | 90                                        | 50              | 50             |
| URDL 10x100 FUS | 546790        | 546797       | TX40 / SW 13 | 10             | 100           | Galvanised steel | 30                     | 110                                       | 50              | 50             |
| URDL 10x120 FUS | 546791        | 546798*      | TX40 / SW 13 | 10             | 120           | Galvanised steel | 50                     | 130                                       | 50              | 50             |
| URDL 10x140 FUS | 546792        | 546799       | TX40 / SW 13 | 10             | 140           | Galvanised steel | 70                     | 150                                       | 25              | 25             |
| URDL 10x160 FUS | 546793        | 546800*      | TX40 / SW 13 | 10             | 160           | Galvanised steel | 90                     | 170                                       | 25              | 25             |
| URDL 10x200 FUS | 546794        | 546801*      | TX40 / SW 13 | 10             | 200           | Galvanised steel | 130                    | 210                                       | 25              | 25             |
| URDL 10x230 FUS | 546795        | 546802       | TX40 / SW 13 | 10             | 230           | Galvanised steel | 160                    | 240                                       | 25              | 25             |
| URDL 8x80 T     | 546759        | 546763       | TX30         | 8              | 80            | Galvanised steel | 10                     | 90                                        | 100             | 100            |
| URDL 8x100 T    | 546760        | 546764       | TX30         | 8              | 100           | Galvanised steel | 30                     | 100                                       | 50              | 50             |
| URDL 8x120 T    | 546761        | 546765       | TX30         | 8              | 120           | Galvanised steel | 50                     | 120                                       | 50              | 50             |
| URDL 8x140 T    | 546762        | 546766*      | TX30         | 8              | 140           | Galvanised steel | 70                     | 150                                       | 50              | 50             |
| URDL 10x80 T    | 546775        | 546782       | TX40         | 10             | 80            | Galvanised steel | 10                     | 90                                        | 50              | 50             |
| URDL 10x100 T   | 546776        | 546783       | TX40         | 10             | 100           | Galvanised steel | 30                     | 110                                       | 50              | 50             |
| URDL 10x120 T   | 546777        | 546784       | TX40         | 10             | 120           | Galvanised steel | 50                     | 130                                       | 50              | 50             |
| URDL 10x140 T   | 546778        | 546785       | TX40         | 10             | 140           | Galvanised steel | 70                     | 150                                       | 50              | 50             |
| URDL 10x160 T   | 546779        | 546786       | TX40         | 10             | 160           | Galvanised steel | 90                     | 170                                       | 50              | 50             |
| URDL 10x200 T   | 546780        | 546787       | TX40         | 10             | 200           | Galvanised steel | 130                    | 210                                       | 25              | 25             |
| URDL 10x230 T   | 546781        | 546788*      | TX40         | 10             | 230           | Galvanised steel | 160                    | 240                                       | 25              | 25             |

Stainless steel (R/A4): For external atmospheric exposure and to permanently damp internal conditions, if no particular aggressive conditions exists

Zinc plated steel (zp/gvz): For dry internal conditions. Furthermore can be used outdoors if the head is shielded from moisture and rain to prevent water from entering the anchor shaft

Countersunk head (T): For visually appealing and flush-mounted installation

Hexagon head (FUS): For secure application of torque from the outside even in small installation spaces

\* Note: Available upon request. Not part of the standard product range.

# Frame fixing URDL

## Load table

Permissible loads<sup>1)2)</sup> of a single anchor as part of a multiple fixing of non-structural systems

For the design, the entire assessment ETA-17/0811 must be considered.

| Type                                                           |                   |      | URDL 8      | URDL10      |
|----------------------------------------------------------------|-------------------|------|-------------|-------------|
| Anchor diameter                                                | $d_0$             | [mm] | 8           | 10          |
| Anchoring depth                                                | $h_{ef}$          | [mm] | 70          | 70          |
| <b>Anchoring in concrete <math>\geq</math> C16/20</b>          |                   |      |             |             |
| Permissible tensile load $N_{perm}$                            |                   | [kN] | 1.39        | 1.79        |
| Permissible shear load $V_{perm}$                              | zp                | [kN] | 3.2         | 4.4         |
| Permissible shear load $V_{perm}$                              | R                 | [kN] | 4.51        | 6.17        |
| Minimum member thickness                                       | $h_{min}$         | [mm] | 140         | 140         |
| Characteristic edge distance                                   | $c_{cr,N}$        | [mm] | 105         | 105         |
| Characteristic spacing distance                                | a bzw. $s_{cr,N}$ | [mm] | 75          | 90          |
| Minimum spacing distance                                       | $s_{min}$         | [mm] | 90          | 100         |
| Minimum edge distance                                          | $c_{min}$         | [mm] | 90          | 100         |
| <b>Anchoring in masonry</b>                                    |                   |      |             |             |
| Permissible load in solid brick                                | Mz                | [kN] | 0,86 - 1,14 | 0,57 - 1,43 |
| Permissible load $F_{perm}^{3)}$ in solid sand-lime brick      | KS                | [kN] | 1.57        | 1.71        |
| Permissible load $F_{perm}^{3)4)}$ in perforated brick         | HLz               | [kN] | 0,09 - 0,26 | 0.09        |
| Permissible load $F_{perm}^{3)}$ in perforated sand-lime brick | KSL               | [kN] | 1.43        | 1.57        |
| Minimum member thickness                                       | $h_{min}$         | [mm] | 110 - 370   | 110 - 370   |
| Minimum edge distance (single anchor)                          | $c_{min}$         | [mm] | 120 - 185   | 120 - 185   |
| Minimum spacing distance (anchor group) vertical to the edge   | $s1_{min}$        | [mm] | 240 - 370   | 240 - 370   |
| Minimum spacing distance (anchor group) parallel to the edge   | $s2_{min}$        | [mm] | 480 - 740   | 480 - 740   |
| Minimum edge distance (anchor group)                           | $c_{min}$         | [mm] | 75 - 125    | 75 - 125    |
| <b>Anchoring in aerated concrete</b>                           |                   |      |             |             |
| Permissible load $F_{perm}^{3)}$ in aerated concrete           | ACC               | [kN] | 0.1         | 0.17        |
| Minimum member thickness                                       | $h_{min}$         | [mm] | 240         | 240         |
| Minimum edge distance (single anchor)                          | $c_{min}$         | [mm] | 120         | 120         |
| Minimum spacing distance (anchor group) vertical to the edge   | $s1_{min}$        | [mm] | 240         | 240         |
| Minimum spacing distance (anchor group) parallel to the edge   | $s2_{min}$        | [mm] | 480         | 480         |
| Minimum edge distance (anchor group)                           | $c_{min}$         | [mm] | 120         | 120         |

<sup>1)</sup> The partial safety factors for resistance regulated in the assessment, as well as a partial safety factor for action of  $\gamma_L = 1.4$ , are taken into account.

<sup>2)</sup> Valid for temperatures in the anchoring base up to +50 °C (or temporarily up to +80 °C). For long-term temperatures up to +30 °C, higher permissible loads are possible.

<sup>3)</sup> Valid for tensile, shear, and oblique pull at any angle. For combinations of tensile and shear loads as well as bending moments, see the assessment.

<sup>4)</sup> Refers to the stones of the respective category regulated in the approval, the highest permissible load, and the installation instructions, which must be evaluated depending on the stone properties.