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European Technical Assessment Body
for construction products



European Technical Assessment

ETA-05/0038
of 13 November 2025

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

SPIT UDZ

Product family to which the construction product belongs

Fasteners for use in concrete for redundant non-structural systems

Manufacturer

Société Spit
Route de Lyon
26501 BOURG-LES-VALENCE
FRANKREICH

Manufacturing plant

Workshop 5

This European Technical Assessment contains

9 pages including 3 annexes which form an integral part of this assessment

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of

EAD 330747-00-0601, Edition 06/2018

This version replaces

ETA-05/0038 issued on 16 December 2016

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Specific Part

1 Technical description of the product

The SPIT UDZ is an anchor made of galvanised steel which is pushed into a drilled hole and anchored by deformation controlled expansion.

The product description is given in Annex A

2 Specification of the intended use in accordance with the applicable European Assessment Document

The performances given in Section 3 are only valid if the anchor is used in compliance with the specifications and conditions given in Annex B.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the anchor of at least 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

3.1 Safety in case of fire (BWR 2)

| Essential characteristic | Performance |
|--------------------------|--------------|
| Reaction to fire | Class A1 |
| Resistance to fire | See Annex C2 |

3.2 Safety in use (BWR 4)

| Essential characteristic | Performance |
|--|--------------|
| Characteristic resistance for all load directions and modes of failure for simplified design | See Annex C1 |
| Durability | See Annex B1 |

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with European Assessment Document EAD No. 330747-00-0601, the applicable European legal act is: [97/161/EC].

The system to be applied is: 2+

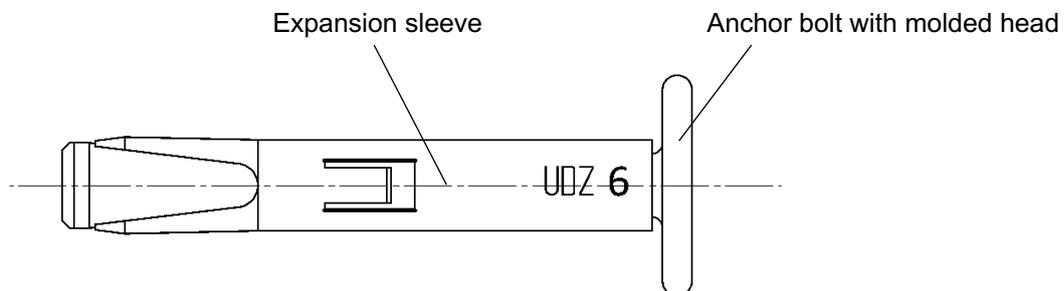
5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

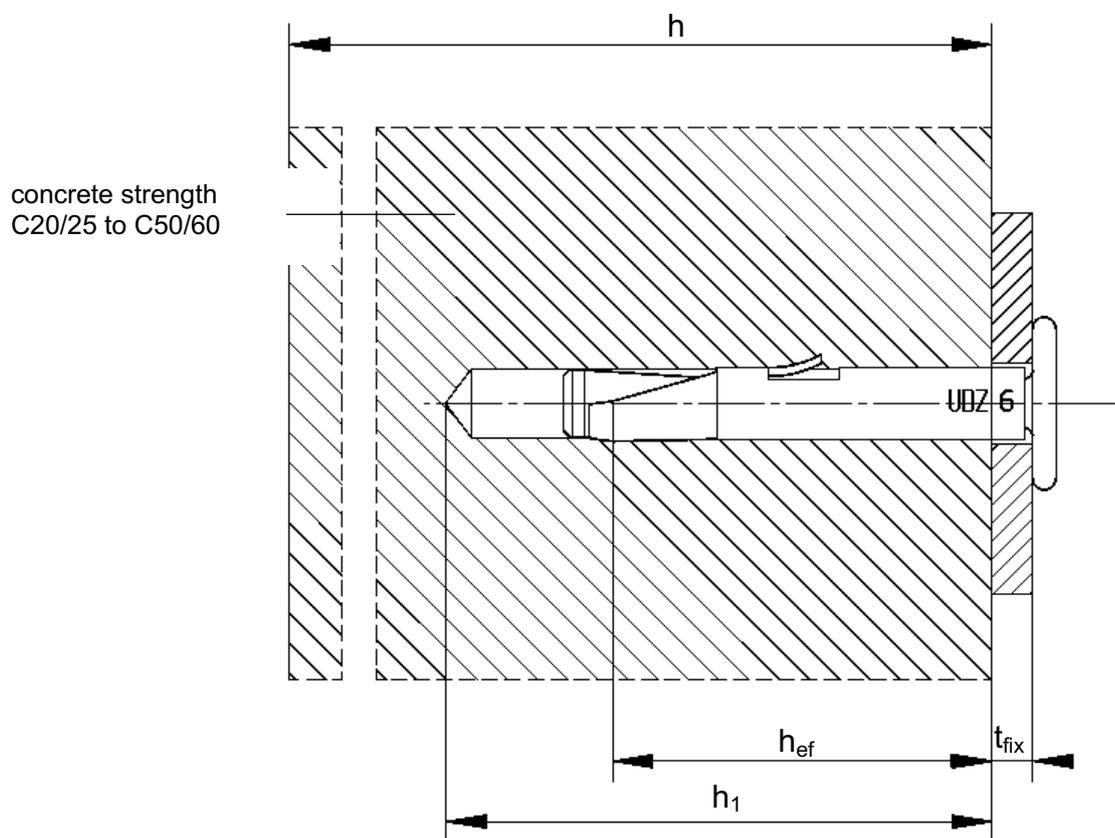
Issued in Berlin on 13 November 2025 by Deutsches Institut für Bautechnik

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Head of Section

beglaubigt:
Ziegler



Installed fastener



SPIT UDZ

Product description
Product and installed anchor

Annex A1

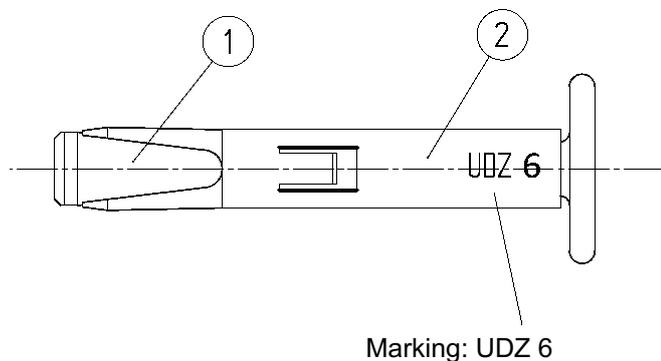


Table 1: Designation and materials

| Part | Designation | Material galvanised $\geq 5 \mu\text{m}$ according to EN ISO 4042:2022 |
|------|------------------|---|
| 1 | Expansion sleeve | Steel C45 (material 1.0503 according to EN 10083-2:2006) |
| 2 | Anchor bolt | Steel C10C (material 1.0214 according to EN 10263-2:2017) $f_{yk} \geq 500 \text{ N/mm}^2$, $f_{uk} \geq 580 \text{ N/mm}^2$ |

Table 2: Installation parameters

| Anchor size | | | | UDZ 6 |
|---|-----------|--------|------|-------|
| Effective anchorage depth | h_{ef} | \geq | [mm] | 30 |
| Nominal diameter of drill bit | d_0 | = | [mm] | 6 |
| Maximum cutting diameter of drill bit | d_{cut} | \leq | [mm] | 6,45 |
| Thickness of fixture | t_{fix} | \leq | [mm] | 5 |
| Depth of drill hole | h_1 | \geq | [mm] | 45 |
| Minimum thickness of member | h_{min} | = | [mm] | 80 |
| Minimum spacing | s_{min} | = | [mm] | 200 |
| Minimum edge distance | c_{min} | = | [mm] | 100 |
| Diameter of clearance hole in the fixture | d_f | \leq | [mm] | 7 |

SPIT UDZ

Product description
Designation, material and installation parameters

Annex A2

Specifications of intended use

Anchorage subject to:

- Static and quasi-static loads.
- Only to be used for redundant non-structural applications, according to EN 1992-4:2018.
- Fire exposure: concrete strength classes C20/25 to C50/60.

Base materials:

- Compacted reinforced or unreinforced normal weight concrete without fibres according to EN 206:2013+A2:2021.
- Concrete strength classes C20/25 to C50/60 according to EN 206:2013+A2:2021.
- Cracked or uncracked concrete.

Use conditions (Environmental conditions)

- Anchorages subject to dry internal conditions.

Design:

- Anchorages are designed under the responsibility of an engineer experienced in anchorages and concrete work.
- Verifiable calculation notes and drawings are prepared taking account of the loads to be anchored. The position of the anchor is indicated on the design drawings (e. g. position of the anchor relative to reinforcement or to supports, etc.).
- Anchorages under static or quasi-static actions or under fire exposure are designed in accordance with: EN 1992-4:2018, Design method C.
- In case of requirements to resistance to fire local spalling of the concrete cover must be avoided.

Installation:

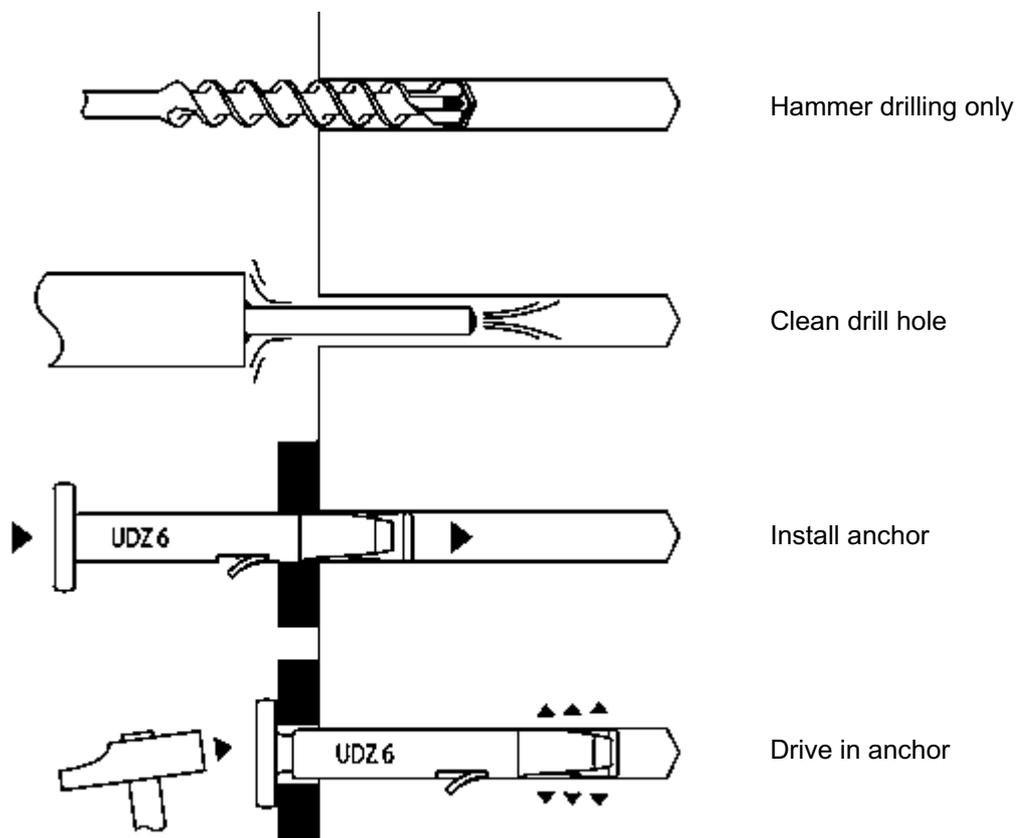
- Hole drilling by hammer drilling only
- Anchor installation carried out by appropriately qualified personnel and under the supervision of the person responsible for technical matters of the site.
- In case of aborted hole: new drilling at a minimum distance away of twice the depth of the aborted hole or smaller distance if the aborted hole is filled with high strength mortar and if under shear or oblique tension load it is not the direction of the load application.

SPIT UDZ

Intended use
Specifications

Annex B1

Installation Instructions



SPIT UDZ

Intended use
Installation instructions

Annex B2

Table 3: Design method C: Characteristic values

| Anchor size | | | UDZ 6 |
|---|--------------------|------|-------|
| Any load direction | | | |
| Characteristic resistance in C20/25 to C50/60 | F_{Rk} | [kN] | 1,5 |
| Characteristic edge distance | $c_{cr} = c_{min}$ | [mm] | 100 |
| Characteristic spacing | $s_{cr} = s_{min}$ | [mm] | 200 |
| Partial factor | $\gamma_M^{1)2)}$ | - | 1,5 |
| Shear load with lever arm | | | |
| Characteristic bending resistance | $M^0_{Rk,S}$ | [Nm] | 4,5 |
| Partial factor for steel failure | $\gamma_{MS}^{1)}$ | - | 1,5 |

- 1) In absence of other national regulations
2) The partial factor $\gamma_2 = \gamma_{inst} = 1,0$ is included.

Table 4: Displacements

| Anchor Size | | | UDZ 6 |
|-----------------------------|--------------------|------|-------|
| Tension load | N | [kN] | 0,6 |
| Displacement | δ_{N0} | [mm] | 0,8 |
| | $\delta_{N\infty}$ | [mm] | 1,2 |
| Shear load | V | [kN] | 0,7 |
| Displacements ¹⁾ | δ_{V0} | [mm] | 1,3 |
| | $\delta_{V\infty}$ | [mm] | 1,95 |

- 1) Additional displacements under shear loads occur if there is a hole clearance.

SPIT UDZ

Performances
Characteristic resistance under static and quasi-static loading
Displacements

Annex C1

Table 5: Characteristic values under fire exposure in concrete C20/25 to C50/60 in any load direction

| Fire-resistance-class | Anchor Size | | | UDZ 6 |
|------------------------------|-----------------------------|-------------|------|--------------|
| R30 | Characteristic resistance | $F_{Rk,fi}$ | [kN] | 0,45 |
| R60 | Characteristic resistance | $F_{Rk,fi}$ | [kN] | 0,36 |
| R90 | Characteristic resistance | $F_{Rk,fi}$ | [kN] | 0,26 |
| R120 | Characteristic resistance | $F_{Rk,fi}$ | [kN] | 0,26 |
| R30 – R120 | Spacing | $s_{cr,fi}$ | [mm] | 200 |
| | Edge distance ¹⁾ | $s_{cr,fi}$ | [mm] | 150 |

¹⁾ In case of fire attack from more than one side, the edge distance shall be $c \geq 300$ mm.

SPIT UDZ

Performances
Characteristic resistance under fire exposure

Annex C2