THDEX

Denomination: THDEX ANCHOR

Codes: THDEX, THDAV, THPAN, THTRU

Reference: FT THDEX-en

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CHARACTERISTICS

• Pilot hole needed; thread is created by the anchor during the installation process.
• Functioning by thread - concrete mechanical interlock.
• Use for medium loads.
• Direct installation, not torque wrench needed.
• It can be removed, leaving concrete surface flat.
• Use in cracked and uncracked concrete.
• Use for static or quasi-static loads.
• Suitable when reduced edge distances or anchor spacing required
• Approved for fire resistance R30 to R120
• Silver ruspert coating

APPLICATIONS

• Structural fixings in cracked and uncracked concrete in indoor conditions.
• Glazing, windows and storefronts
• Racking and shelving
• Attaching railings, handrails and ledgers (inside environment).
• Fixings of steel beams, channels, machinery, boilers, signals, stadium seatings, façade substructures, channels, etc.
• Fixings of wood structures to concrete.

View web profile:

SIZES

#6 – #16

RECOMMENDED TENSION RESISTANCES IN UNCRACKED CONCRETE [kg]

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<th>#7.5</th>
<th>#10</th>
<th>#12</th>
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BASE MATERIALS

CONCRETE

SILVER RUSPERT

DRILL CONDITION
1. RANGE

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2. INSTALLATION DATA
Critical distances are those where anchors in an anchor group are not influenced by one another with regard to tension load effects. For smaller distances, down to minimum distances, corresponding reduction coefficients must be applied.
4. PRODUCT INSTALLATION

1. DRILLING
Check the concrete base is compact and porosity is insignificant.
Suitable for wet, dry or flooded drill holes.
Use drill in hammer mode.
Drill to the specified diameter and depth values.

2. BLOW AND CLEAN
Clear the drill holes completely of dust and fragments
Use air pump and brush.

3. INSTALL
The installation shall be done through the fixture baseplate.
Anchor could be installed using a torque wrench applying the nominal installation torque or by using an electrical impact driven; power input: 500 W, torque 50 - 250 Nm (e.g: Bosch GDS 18E).
Once installed it can be verified the total length of the anchor through the letter on bolt tip.

5. RESISTANCES

Characteristic resistances for C20/25 concrete for an isolated anchor (without considering anchor-to-anchor or anchor-to-edge distance effects).
### TECHNICAL DATA SHEET

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**Page:** 5 out 6

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1 KN = 100 kg

A load safety factor of $\gamma_F = 1.4$ is recommended.

**Design example:**

Fixing a tension load of 500 kg (= 4.91 kN) in C30/37 cracked concrete using a THDEX #12 anchor.

Check to be done: Design load < Design resistance

Design load = service load * load safety factor = 4.91 * 1.4 = 6.87 kN

Design resistance = characteristic resistance * concrete coefficient / tension partial safety coefficient = 12 * 1.22 / 1.8 = 8.13 kN

Check: 6.87 < 8.13 kN: anchorage is safe

For complex anchor designs we recommend our anchor design software INDEXcal
6. OFFICIAL DOCUMENTATION

The following documents are available through our Sales Department or on our official website: www.indexfix.com

- European Technical Assessment ETA 15/0017 for use in concrete, according to ETAG 001 guideline, option 1, from #7.5 to #16
- Declaration of Performances: DoP THDEX-en
- INDEXcal: anchor calculation software.