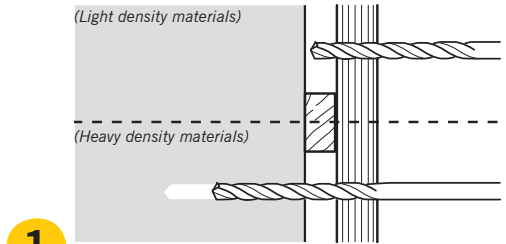


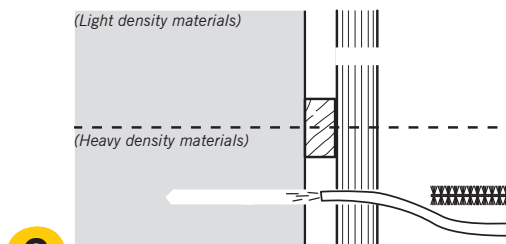
**CONCRETE SCREW**

**Installation:**

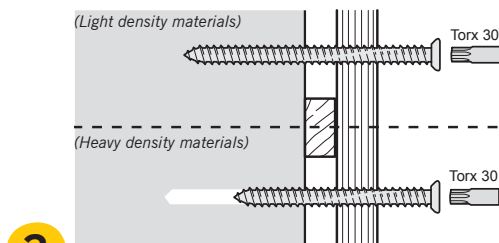
Distance screw for fixing door- and windowframes etc. in concrete, solid brick, aerated concrete and other solid materials



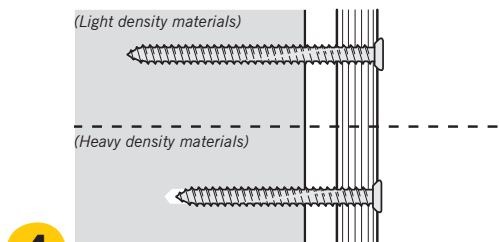
**1** Drill a 6 mm hole (in high strength concrete 6,5 mm) through the fixture and into the wall. In aerated concrete and other porous materials use without pre-drilling



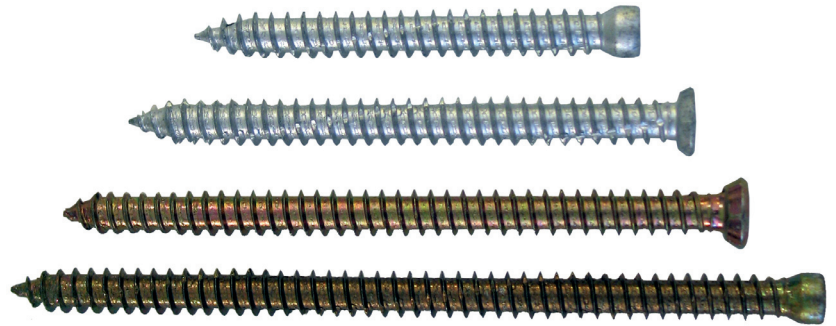
**2** Clean the drilled hole thoroughly



**3** Insert concrete Screw with power tool to recommended embedment depth



**4** The installation is finished



 **Advantages:**

- Fast and easy fixing.
- Expansion free fixing.
- Fixing without applying plug.
- Torx 30, both with countersunk and cylinder head.
- Wax treated for easy fixing.
- Milling ribs - stress-free embedment.
- Milling notches - security of anchorage.
- No pre-drilling in porous / light density materials.
- 7,5x42 mm with Panhead is especially recommended for fixing of brackets.

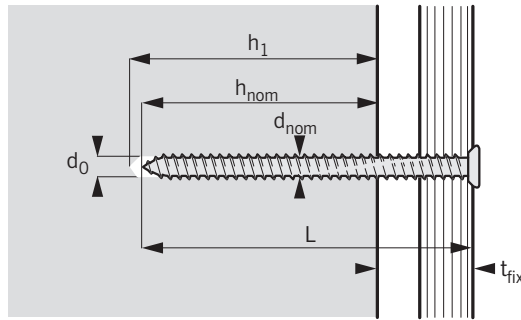
 **Materials:**

- Expandet Concrete Screw is zinc plated min. 5 µm and wax-treated.  
Expandet Concrete Screw - Ruspert® is supplied with Ruspert coating (3 layer anti-corrosive):
1. layer: 5 µm zinc.
  2. layer: Chemical anti-corrosive binding agent.
  3. layer: 10 µm ceramic coating.

 **Further information:**

See overleaf.

# CONCRETE SCREW



| Type                    | Dimensions                       |                     | Countersunk head <sup>▼</sup> |                      | Cylinder head <sup>▽</sup> |                      |
|-------------------------|----------------------------------|---------------------|-------------------------------|----------------------|----------------------------|----------------------|
|                         | $d_{nom}$                        | L                   |                               |                      |                            |                      |
| Expandet Concrete Screw | Outside diameter of anchor<br>mm | Anchor length<br>mm | Zinc plated                   | Ruspert <sup>®</sup> | Zinc plated                | Ruspert <sup>®</sup> |
| 7,5 x 42 *              | 7,5                              | 42                  | ✓                             |                      | ✓                          |                      |
| 7,5 x 52                | 7,5                              | 52                  | ✓                             |                      | ✓                          |                      |
| 7,5 x 62                | 7,5                              | 62                  | ✓                             |                      | ✓                          |                      |
| 7,5 x 72                | 7,5                              | 72                  | ✓                             | ✓                    | ✓                          | ✓                    |
| 7,5 x 92                | 7,5                              | 92                  | ✓                             | ✓                    | ✓                          | ✓                    |
| 7,5 x 112               | 7,5                              | 112                 | ✓                             | ✓                    | ✓                          | ✓                    |
| 7,5 x 132               | 7,5                              | 132                 | ✓                             | ✓                    | ✓                          | ✓                    |
| 7,5 x 152               | 7,5                              | 152                 | ✓                             |                      | ✓                          |                      |
| 7,5 x 182               | 7,5                              | 182                 | ✓                             |                      | ✓                          |                      |
| 7,5 x 212               | 7,5                              | 212                 | ✓                             |                      | ✓                          |                      |

\* Is also supplied with pan head. Diameter of pan head: 12,0 mm  
 ▼ Diameter of countersunk head: 12,0 mm  
 ▽ Diameter of cylinder head: 8,5 mm

| Type                                 | Fixing                    |                                 |                                  | Load Capacities             |                       |  |  |
|--------------------------------------|---------------------------|---------------------------------|----------------------------------|-----------------------------|-----------------------|--|--|
|                                      | $d_0$                     | $h_{nom}$                       |                                  | $C_{min}$                   | $S_{min}$             | $N_{Rd}$                                     | $V_{Rd}$                                   |
| Expandet Concrete Screw              | Drill hole diameter<br>mm | Embedment depth (minimum)<br>mm | Embedment depth (maksimum)<br>mm | Minimum edge distance<br>mm | Minimum spacing<br>mm | Design resistance tension<br>kN <sup>⊙</sup> | Design resistance Shear<br>kN <sup>◇</sup> |
| Concrete (20 N/mm <sup>2</sup> )     | 6                         | 30                              | 40                               | 50                          | 60                    | 2,10   | 1,80                                       |
| Solid brick (15N/mm <sup>2</sup> ) ♦ | 6                         | 40                              | 50                               | 50                          | 60                    | 1,04   | 0,85                                       |
| Aerated concrete (PP4) *             |                           | 80                              | 80                               | 50                          | 100                   | 0,62   | 0,28                                       |
| Aerated concrete (PP2) *             |                           | 60                              | 60                               | 50                          | 100                   | 0,22   | 0,08                                       |
| Sand lime brick                      | 6                         | 40                              | 50                               | 50                          | 60                    | 1,00   | 0,85                                       |

\* No pre-drilling in aerated concrete. Concrete Screw is screwed directly into the aerated concrete. Use low setting torque due to the light density of the aerated concrete.

- ♦ Drilling with reduced or without hammer action.
- ◇ Design resistance for tension is valid for a single anchor not influenced by edge distance and / or spacing.
- ◇ Design resistance for shear is valid for a single anchor not influenced by edge distance and / or spacing.

Combined resistance shall be verified if both tension and shear actions are applied. See "Principles for Fastening" page 5 (Verification Method 1).

Partial safety factor for material ( $\gamma_m$ ) is included. Partial safety factor for actions ( $\gamma_f$ ) must be applied according to national building code.

**Important:** See Expandet's "Principles for fastening" for general information on fastening as well as information on limited liability.  
 (Can be downloaded at [www.expandet.com](http://www.expandet.com))



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