

# **Area of Application**

ESSVE Drop-in anchors EDA/EDA-K are designed to anchor in concrete and natural stone. Suitable areas of applications include temporary installation, fixing of suspended ceilings, cable trays, pipes, etc. The dimensions M8 and M10 are also ideal for fixing in hollow core elements.

## **Description**

Drop-in anchors EDA/EDA-K consist of a sleeve which is threaded and tapered internally. There is a cone-shaped wedge in the

sleeve.

When installing the wedge is knocked down to the bottom using ESSVE Punch EDA. The lower slotted section of the drop-in anchor expands and is pressed firmly into the drill hole. Drop-in anchor EDA has a straight design and is available in bright zinc plated, 5 µm and stainless acid proof A4 designs. Drop-in anchor EDA-K is equipped with a collar and is available in bright zinc-plated, 5 µm, design.





#### Installation

1. Drill holes with as set out in Technical data.

2. Blow the hole clean and push-in the drop-in anchor. For EDA-K the by 15 mm to avoid blo-

wing clean.

3. Knock down the wed- 4. Screw on the detail ge using the ESSVE drilling depth is extended is level with the drop-in

using an appropriate bolt. punch until mandrel collar Installation is complete.

# **Specification**

|                      | Yellow zinc plated | Stainless steel                |
|----------------------|--------------------|--------------------------------|
| Material             | Steel              | Stainless acid proof steel, A4 |
| Surface treatment    | Yellow zinc plated | -                              |
| Corrosion categories | C1                 | C5                             |

## **Corrosivity and Safety class**

| Corrosion categories | Safety class 1 | Safety class 2 |
|----------------------|----------------|----------------|
| C1                   | 5 μm           | 5 μm           |
| C2                   | A4             | A4             |
| C3-C4                | A4             | A4             |
| C5                   | A4             | A4             |

#### Practical load capacity and technical data

Incl. Safety factors according to the Boverket's General Guidelines 1993:1, Type approval of fixings.

If necessary, and as part of our technical support, pull-out testing can be conducted for specific objects.

## For installation in uncracked concrete ≥ C20/25

|     | M8  | M10                            | M12  | M16  | M20  |   |
|-----|-----|--------------------------------|--|--|--|---|
| 190 | 360 | 450                            | 720  | 1190   | 1380   | (kg)  |
| 210 | 260 | 330                            | 470  | 1110   | 1540   | (kg)  |
|     | 360 | 430                            |  |  |  | (kg)  |
|     | 490 | 530                            |  |  |  | (kg)  |
| 60  | 80  | 100                            | 120  | 160  | 200  | (mm)  |
| 120 | 160 | 200                            | 240  | 320  | 400  | (mm)  |
|     | 210 | 210 260<br>360<br>490<br>60 80 | 210 260 330<br>360 430<br>490 530<br>60 80 100 | 210 260 330 470<br>360 430<br>490 530<br>60 80 100 120 | 210 260 330 470 1110<br>360 430 490 530<br>60 80 100 120 160 | 210 260 330 470 1110 1540   360 430   490 530   60 80 100 120 160 200 |

## **Design Load values**

For calculation in accordance with Eurocode. For questions, contact ESSVE technical support.



# For installation in uncracked concrete ≥ C20/25

| Dimension  | M6  | M8  | M10 | M12 | M16  | M20  |      |  |  |
|--|-----|-----|-----|-----|------|------|------|--|--|
| Tension load   | 2,6 | 4,9 | 6,1 | 9,8 | 16,1 | 18,6 | (kN) |  |  |
| Shear load   | 2,9 | 3,6 | 4,5 | 6,4 | 15   | 20,8 | (kN) |  |  |
| Tension load <sup>1</sup>  |     | 4,9 | 5,9 |     |      |      | (kN) |  |  |
| Shear load <sup>1</sup>  |     | 6,6 | 7,2 |     |      |      | (kN) |  |  |
| Minimum Edge distance  | 60  | 80  | 100 | 120 | 160  | 200  | (mm) |  |  |
| Minimum spacing  | 120 | 160 | 200 | 240 | 320  | 400  | (mm) |  |  |
| <sup>1</sup> Applies to EDA-K for installation in Hollow core slabs HD/f |     |     |     |     |      |      |      |  |  |

# Fire rating

Min. installation depth of 40 mm.

M8 and M10 are approved for fire rating R 90 for a load of 1.0 kN.

# **Drop-in anchor EDA, bright zinc-plated ESSBOX**



| Item no. | Designation | Lengt<br>h<br>mm | Bolt<br>dim.<br>mm | Drill<br>mm | Drill<br>depth<br>mm | Inst.<br>depth<br>mm | Inscrew.<br>length<br>Min/max<br>mm | Max<br>tighte-<br>ning<br>torque<br>Nm | ESSBOX size | Qty/<br>pack. | Pack./<br>large<br>pack. |
|----------|-------------|------------------|--------------------|-------------|----------------------|----------------------|-------------------------------------|--|-------------|---------------|--------------------------|
| 408004   | EDA M8      | 30               | M8                 | 10          | 35                   | 30                   | 8-14                                | 8                                      | 203         | 100           | 8                        |
| 408006   | EDA M10     | 40               | M10                | 12          | 45                   | 40                   | 10-15                               | 15                                     | 203         | 50            | 8                        |
| 408008   | EDA M12     | 50               | M12                | 15          | 55                   | 50                   | 12-20                               | 35                                     | 304         | 50            | 4                        |
| 408011   | EDA M16     | 65               | M16                | 20          | 75                   | 65                   | 16-25                               | 60                                     | 203         | 20            | 8                        |