

## Case 05 Anchoring of steel bars in concrete

Anchoring steel bars in concrete is needed when an additional structural concrete member is to be linked to existing structure or to increase the section of the existing structure. Before anchoring steel bars into concrete, data should be collected related to:

- Concrete strength in which steel bars are to be anchored
  - Class of steel used for anchoring
  - Effective load that the steel bar will be subjected to.
- Based on the above data, the choice of steel diameter, depth of anchoring and distance between anchors will be determined.



## Solution 05 *Anchoring of steel bars in concrete*

### Recommended products



### Anchoring of steel bars

The material to be used for anchoring steel bars in concrete should be capable to bond the steel bar without pulling when the load is applied.

We recommend the use of **Conrep.405 BFX**. It is a pure epoxy anchoring resin supplied in one kit of 2-component cartridges linked together with one single head.

It is specially recommended for heavy loads in rebar application and anchoring in solid concrete. It is applied as follows:

- Drill hole to correct diameter and depth (Refer to data sheet).
- Clean the drilled hole thoroughly using wire-brush and remove all dust using a manual air blower.
- Place the kit of 2 cartridges of **Conrep.405 BFX** in their appropriate dispenser gun and attach the mixing nozzle to the head.
- Discard the first 10 cm (3 triggers) until the mix has an even color.
- Inject from the base of the drilled hole while pulling upwards as the hole fills until 1/3 to 1/2 of the volume.
- Insert the rebar or thread slowly with a rotating motion until resin is overflowed on the surface. Rotate again and remove any excess of **Conrep.405 BFX** immediately.
- Refer to the technical data sheet to determine the distance between re-bars.



Horizontal Anchoring



Vertical Anchoring