

Connector V CEM-E

Shank \varnothing 14 mm - screw \varnothing 12 mm

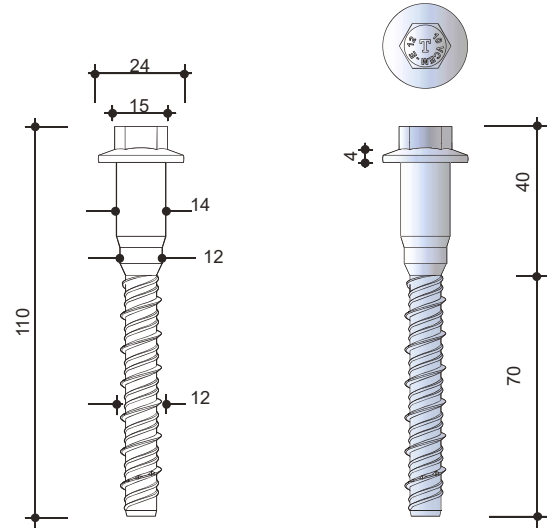
This connector offers the quickest form of installation.

The connector comprises a carbon steel screw with hi-low thread (lower part) and hexagonal head (upper part). It is fixed by dry screwing the screw 70 mm, into a specially made hole in the concrete. The head should protrude by 40 mm. Fixing is completely mechanical, as no resins or chemical additives are required. The tip of the screw has a special heat treatment that allows it to carve the concrete in the best possible way. The connection process is therefore fast, economic and clean.

Data Sheet

The **TECNARIA** screws connector is used to integrate a new concrete layer with an existing one consists of a \varnothing 12 mm shank of hardened carbon steel with a 70 mm threaded part and a 15 mm hexagonal washer head, (\varnothing 24 mm washer), for a total length of the screw of 110 mm.

Specifications: Hardened steel screw stud connector for concrete casting integration comprising a \varnothing 14 mm shank of hardened carbon steel, with 15 mm hexagonal washer head and a 60 mm long, \varnothing 12 mm threaded body, for a total length of 110 mm.



Code	Connector height
V CEM-E 14/040	40 mm

Strength of the V CEM-E connector

The VCEM-E connector is CE marked. Its shear strength is calculated using Eurocode 2 EN 1992-4 from the data given in ETA 20/0831 (CEM 12.5).

Shear resistance in case of application on a solid slab

Strength of existing concrete	Shear resistance P_{Rd}
C20/25 non-cracked	12.30 kN
C20/25 cracked	8.61 kN
C25/30 non-cracked	13.75 kN
C25/30 cracked	9.62 kN

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DoP: 20/0831
EAD 330232-00-0601



The values indicated are calculated using the Eurocode formulae and indicate the pry-out failure of the existing concrete. Shear strength P_{Rd} of the steel of connector V CEM-E: 28.50 kN.

Installation of the V CEM -E connector

Remove the existing flooring and strip any covering to the concrete joists. In the case of a floor with concrete topping, locate the joists through special probes. Anchor the connectors on the joists.

Mark the points where the connectors are to be fixed, following the guidelines (fig. 1).

- Drill a hole with an 10 mm bit to a depth of 85 mm (fig. 2).
- Remove the cement dust using a blowing or suction device in the hole (fig. 3).
- Insert the screw in the hole and tighten it all the way with an impulse driver or electric driver with clutch (fig. 4).
- Make sure not to over-tighten the screw (fig. 5)

