

# Steel Connect C6

Anti-collapse connector for concrete.

The Steel Connect C6 steel screw, combined with the Steel Connect R washer, ensures the fastening of GFRP Glass Net meshes to the floor slabs for dry anti-collapse prevention interventions.



1. Shape designed to ensure optimal grip
2. Certified performance on concrete
3. High level of durability
4. Easy to install

## Areas of application

### → Use

- Dry anti-collapse prevention system for brick and cement floor slabs in combination with GFRP meshes from the Glass Net range

## Instructions for use

### → Preparation of substrates

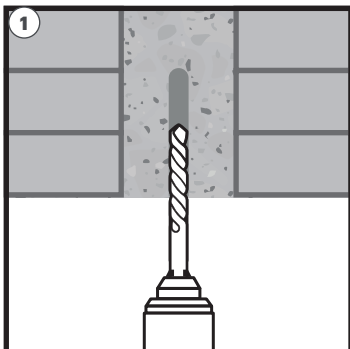
Proceed with the removal of any damaged plasters/renders and damaged portions of brick courses. The designer will assess whether it is possible to carry out volumetric reconstruction or strengthening of damaged concrete beams using Geolite thixotropic mineral geo-mortar as indicated in the respective product technical sheets, by means of:

- Geosteel SRG systems (Geosteel steel meshes combined with Geolite thixotropic inorganic matrix)
- Geosteel SRP systems (Geosteel steel meshes combined with Geolite Gel thixotropic organic matrix).

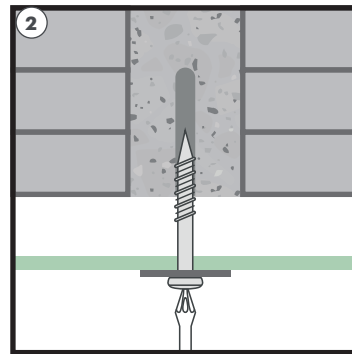
### → Application

Connection on reinforced concrete beams:

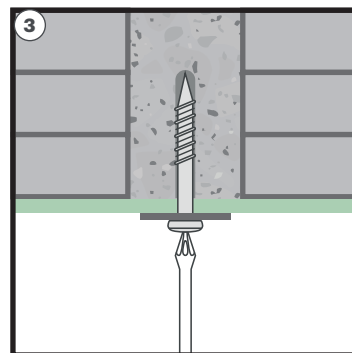
- ① Using a roto-percussion drill, drill 5 mm-bores in the beams, with a depth 5 mm greater than the length of the chosen screw, for the subsequent installation of Steel Connect C6. The quantity and spacing of the connectors should be as indicated by a qualified technician; it is recommended to use at least 4 connectors per m<sup>2</sup>.



- ② Position the Glass Net fiberglass mesh on the intrados of the floor, in a direction orthogonal to the layout of the reinforced concrete beams.



- ③ Install the dry mechanical anchoring made with Steel Connect C6 of the appropriate length using a drill screwdriver and fix the connection system to the mesh with the appropriate Steel Connect R washer. Ensure additional connections along the overlap area between adjacent meshes.

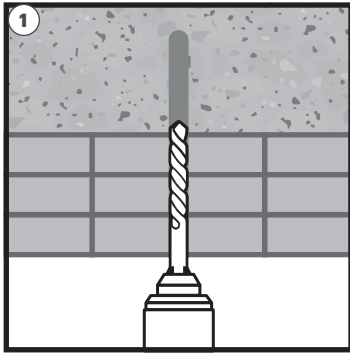


### Anchoring on the slab:

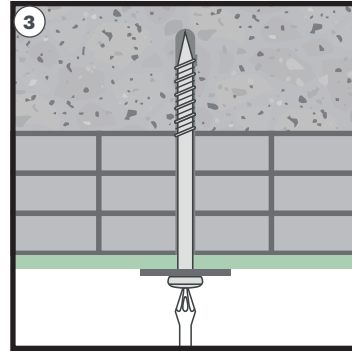
Where it is not possible to create a direct connection on the concrete beams, the connection can be made by anchoring to the slab itself.

## Instructions for use

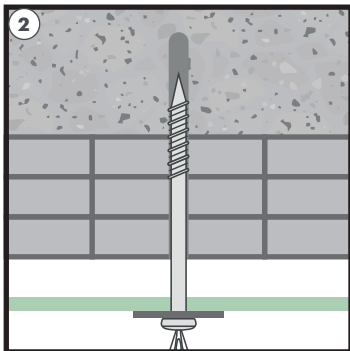
- 1 Always use Steel Connect C6 connectors of the appropriate length depending on the geometry of the floor slabs in combination with the Steel Connect R washer; take care to drill the bore through the hollow floor blocks and penetrate for at least 3.5 cm into the reinforced concrete slab



- 3 Install the dry mechanical anchoring made with Steel Connect C6 of the appropriate length using a drill screwdriver and fix the connection system to the mesh with the appropriate washer. Ensure a 100 mm overlap between adjacent meshes and provide additional connections at the overlap.



- 2 Position the Glass Net fiberglass mesh on the intrados of the floor, in a direction orthogonal to the layout of the reinforced concrete beams.



## Certificates and marks



# Abstract

Supply and installation of a dry anti-collapse prevention system for brick and concrete floor slabs, made with bi-directional FRP mesh consisting of AR fibreglass cords completely impregnated with thermosetting resin (total mass 315 g/m<sup>2</sup>) – such as the dry anti-collapse prevention system made with Glass Net 315 by Kerakoll. Characteristics of the mesh: mesh size 50x52 mm, nominal cross-sectional area 8.33 mm<sup>2</sup> (weft) and 5 mm<sup>2</sup> (warp), typical tensile strength 486.11 MPa (weft) and 567.98 MPa (warp), typical ultimate strain 2.05% (weft) and 1.88% (warp), typical tensile elastic modulus 24.67 GPa (weft) and 28.78 GPa (warp), typical knot shear strength 0.62 (weft) and 0.84 kN (warp). The connections to the floor slabs are made using 4 elements per m<sup>2</sup>, by means of a dry connection made with self-tapping steel screws for concrete with a hardened thread surface and anti-corrosion coating, CE-certified, with an external diameter of 6.1 mm and a length of 75 mm – such as Steel Connect C6-75 by Kerakoll. Technical characteristics of the connector: installation depth > 30 mm in a 5 mm-diameter pre-drilled bore and depth > 35 mm. Typical pull-out resistance 2.24 kN. The procedure will be conducted as follows: eventual preparation of the surfaces to be strengthened by complete removal of damaged plasters/renders, old paint layers and any already damaged or about to be damaged pieces of brick; possible repair and/or strengthening of damaged or damaged joists (to be accounted for separately); drilling of pilot bores (diameter: 5 mm) for the installation of the connectors; positioning of the mesh at the soffit of the floor slabs and dry anchoring using screws installed in the pre-drilled bores with appropriate washers; installation of appropriate perimeter anchoring (to be accounted for separately). The quantification is calculated per unit area of surface covered including any overlaps.

## Technical Data compliant with Kerakoll Quality Standard

Material	Steel
Diameter	6,1 mm
length	75, 120, 160, 240, 300 mm
Shelf life	unlimited
Pack	100 pcs box

## Performance

Steel Connect C6 in combination with Steel Connect R	
Installation depth 30 mm on concrete with 5 mm-diameter pre-drilled bore	
Typical pull-out resistance on concrete ≥ C12/15	R <sub>k</sub> ≥ 2,24 kN
CE-marked via ETA-23/0198 according to EAD 030351-00-0402	

# Warning

- abide by any standards and national regulations

→ when handling the material wear protective clothing and goggles, and follow the instructions regarding methods for applying the material

→ store the material under cover in a dry place, well away from substances that might damage it
- the product is an item according to the definitions of the EC Regulation No. 1907/2006 and therefore does not require a Safety Data Sheet

→ for any other issues, contact Kerakoll Technical Customer Service: + 39 0536.811.516 [www.kerakoll.com/contatti](http://www.kerakoll.com/contatti)