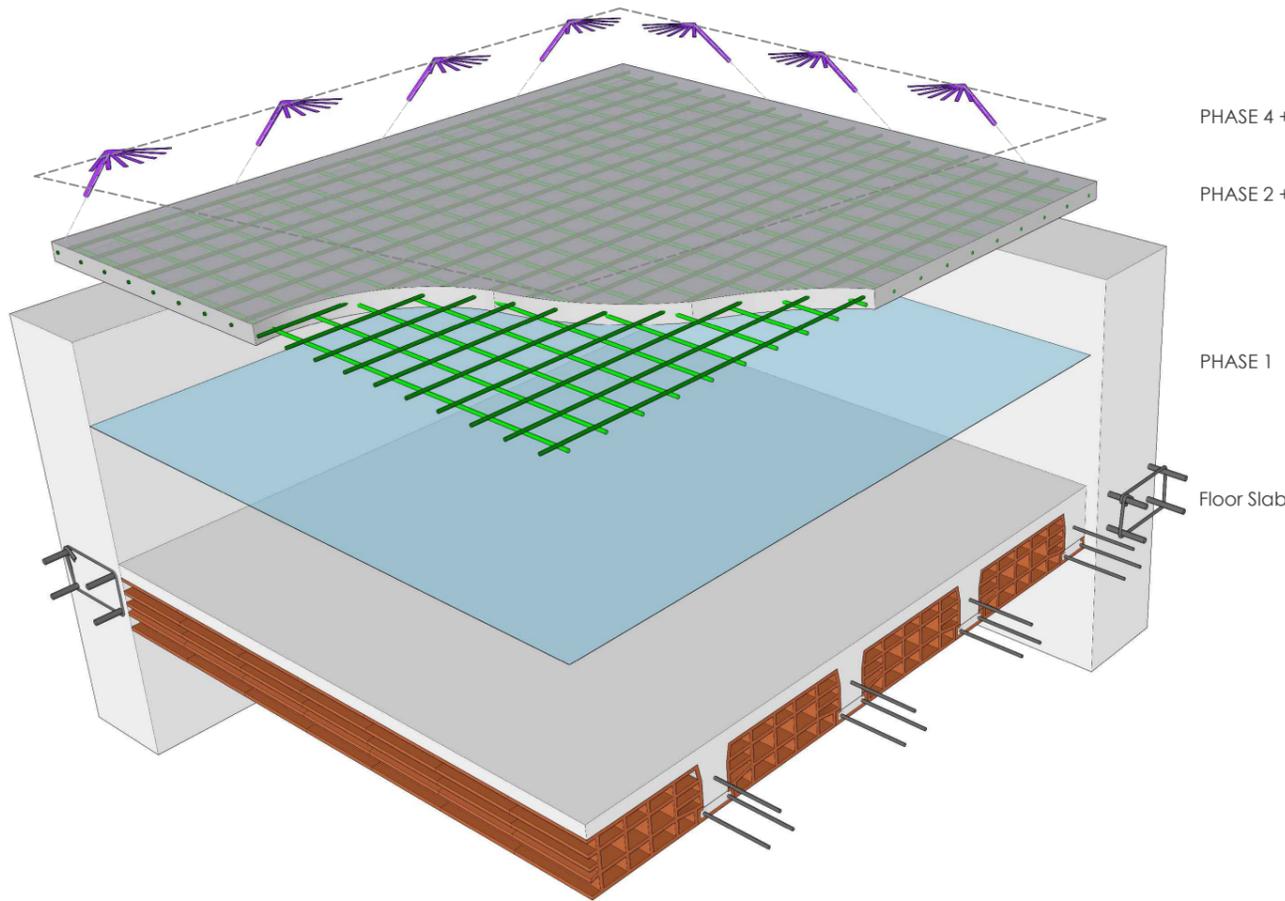


WORK PHASES - CRM REINFORCEMENT ON FLOOR SLAB EXTRADOS
PERSPECTIVE VIEW



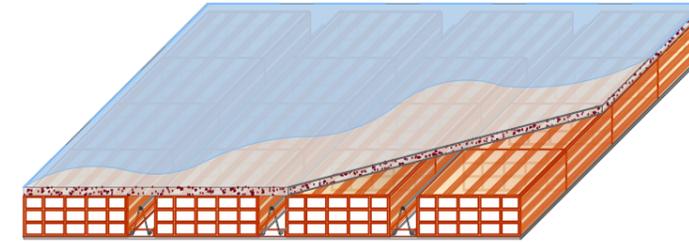
PHASE 4 + PHASE 5

PHASE 2 + PHASE 3

PHASE 1

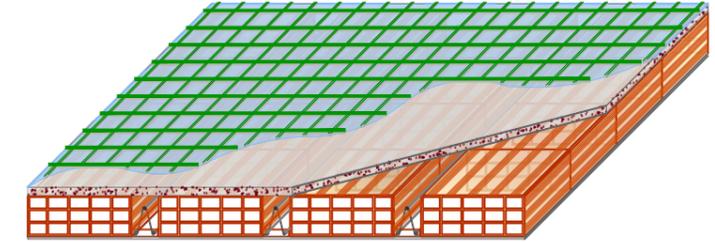
Floor Slab

WORKING PHASES FOR REINFORCEMENT OF FIBER CEMENT FLOOR SLAB EXTRADOS WITH CRM SYSTEM
Isometric view



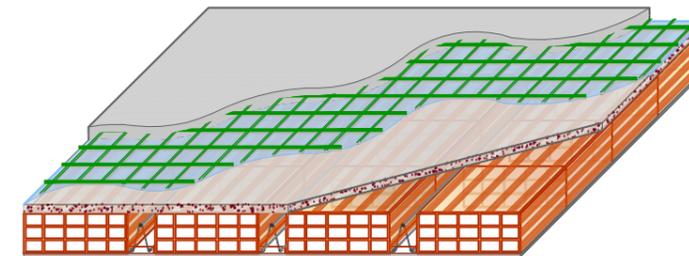
PHASE 1

Full-surface application of two-component adhesive on the floor after preparing the substrate by removing the floor and underlayment



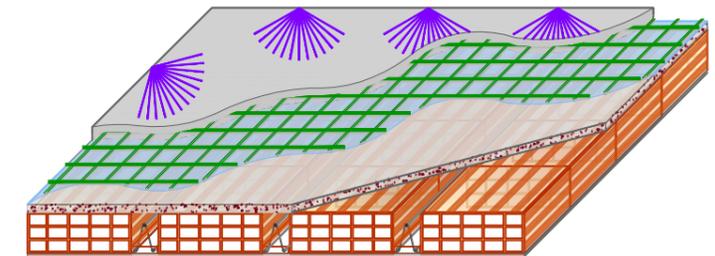
PHASE 2

Installation of preformed GFRP mesh across the entire floor surface, with the mesh arranged orthogonally to the floor joists, ensuring proper alignment by employing suitable systems to maintain the mesh position in line with the new slab.



PHASE 3

Application of additive-enriched mortar, to a thickness equal to h^3

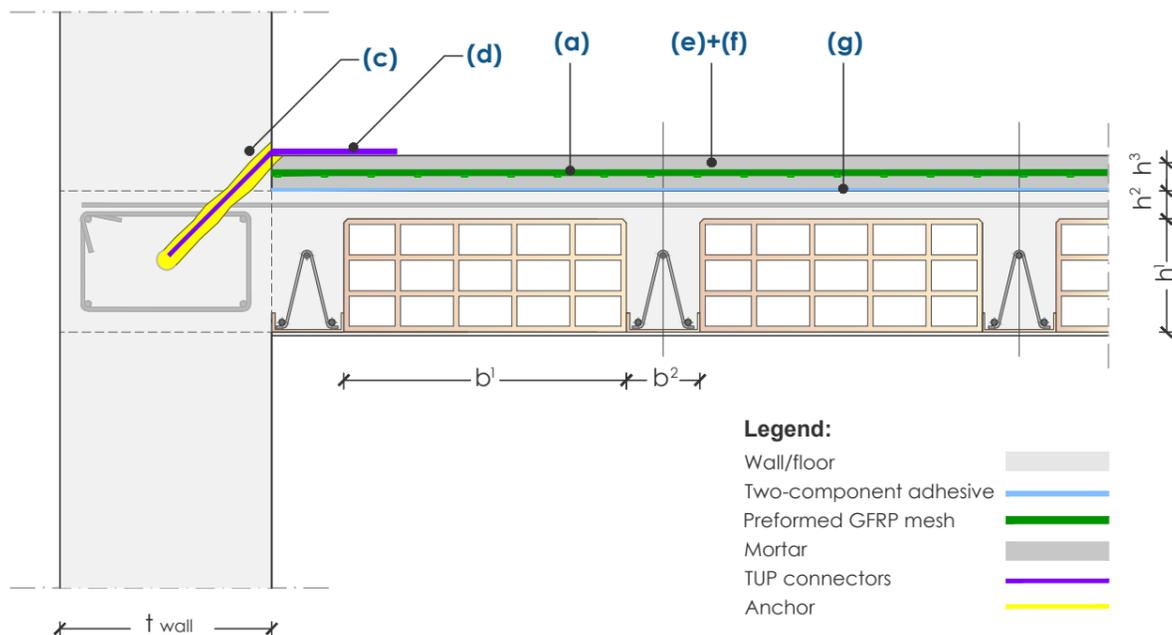


PHASE 4 - 5

Once the mortar has hardened, drill holes at a 45° angle along the perimeter walls, with a spacing no greater than 50 cm. After cleaning the holes with compressed air, proceed with the installation of connectors using two-component chemical anchors.

SECTION DETAIL

scale 1:10



Legend:

- Wall/floor
- Two-component adhesive
- Preformed GFRP mesh
- Mortar
- TUP connectors
- Anchor

DESCRIPTION OF WORKS

The intervention involves preparing the substrate by removing the flooring and underlayment down to the existing slab. Subsequently, the works for reinforcement implementation are divided into the following phases:

1. Application of two-component adhesive **INTEGRA RIPRESA - RP 415** across the entire floor surface;
2. Installation of **FBMESH** mesh across the entire floor surface, ensuring proper alignment by employing suitable systems to maintain the mesh position in line with the new slab;
3. Application of **STRUCTURE STEEL FLUID - SF 100 IN** mortar with anti-shrinkage additive **INTEGRA SPECIAL - SRA 513**;
4. Drilling holes along the perimeter walls at the locations of the joist supports;
5. Injection into the previously drilled holes with two-component chemical anchor **INTEGRA FIXA VINYL15** and installation of connectors **FB - TUP10 - CHT1A** with the ends protruding on the hardened mortar, by laminating the wires with the same resin used for anchoring.

NOTES:

1. It is recommended to arrange the mesh pattern perpendicular to the floor joists with a minimum overhang of 20 cm.
2. Depending on the calculation requirements, it is possible to install suitable connection systems between the new reinforced slab and the existing structure.
3. h^3 thickness of the new slab to be determined based on structural and calculation requirements.

IDENTIFICATION OF CRM MATERIALS

- (a) **FBMESH** (Preformed GFRP mesh)
- (b) **FBCONL** ("L" shaped connectors in preformed GFRP)
- (c) **INTEGRA FIXA VINYL 15** (Two-component chemical anchor)
- (d) **FB-TUP10-CHT1A** (Fiber-reinforced composite material bar)
- (e) **STRUTTURA STEEL FLUID - SF 100 IN** (Pre-mixed fluid cementitious mortar (HPC))
- (f) **INTEGRA SPECIAL - SRA 513** (Shrinkage-reducing additive)
- (g) **INTEGRA RIPRESA - RP 415** (Two-component adhesive)

The measurements are expressed in centimeters unless otherwise specified

