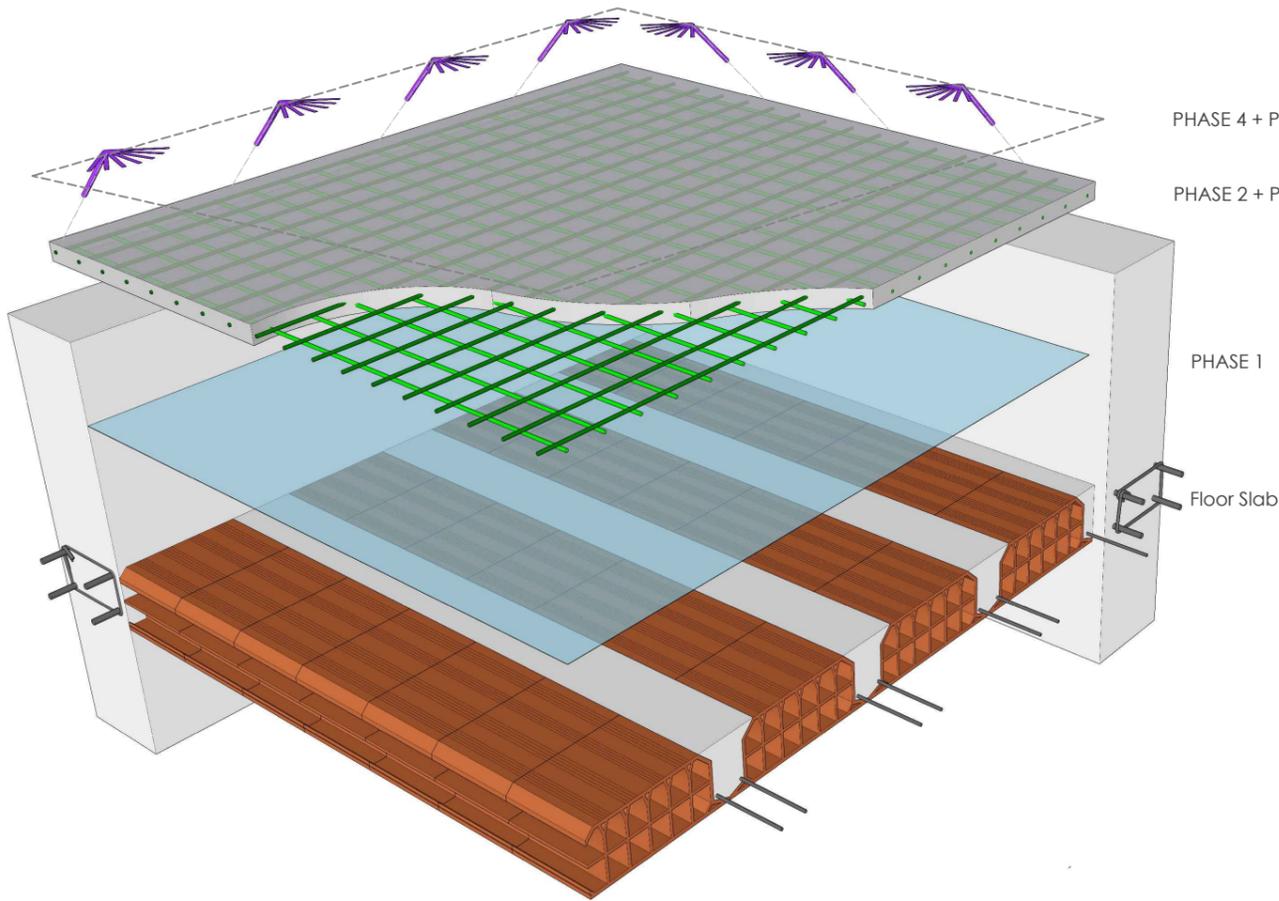


WORKING PHASES - CRM REINFORCEMENT ON FLOOR SLAB EXTRADOS  
Perspective view



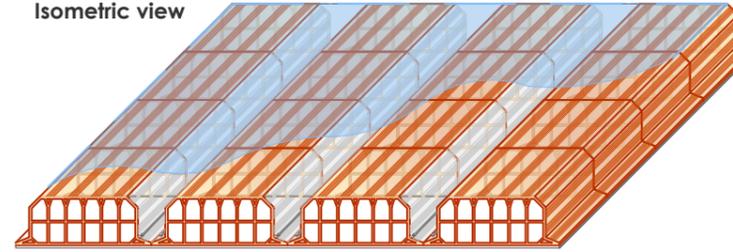
PHASE 4 + PHASE 5

PHASE 2 + PHASE 3

PHASE 1

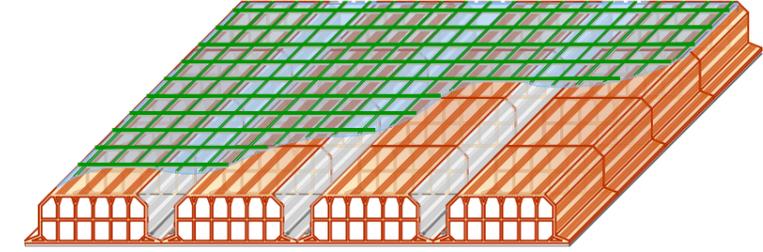
Floor Slab

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



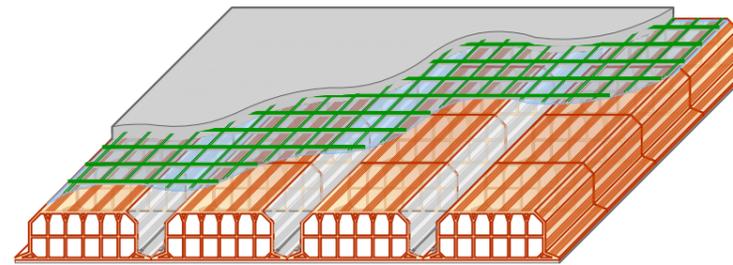
PHASE 1

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



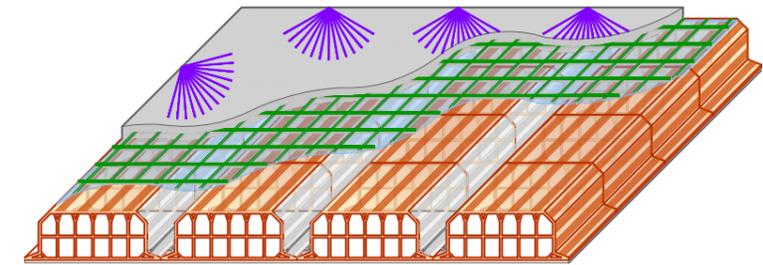
PHASE 2

Installation of preformed GFRP mesh across the entire floor surface, with the mesh pattern 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  $h^3$

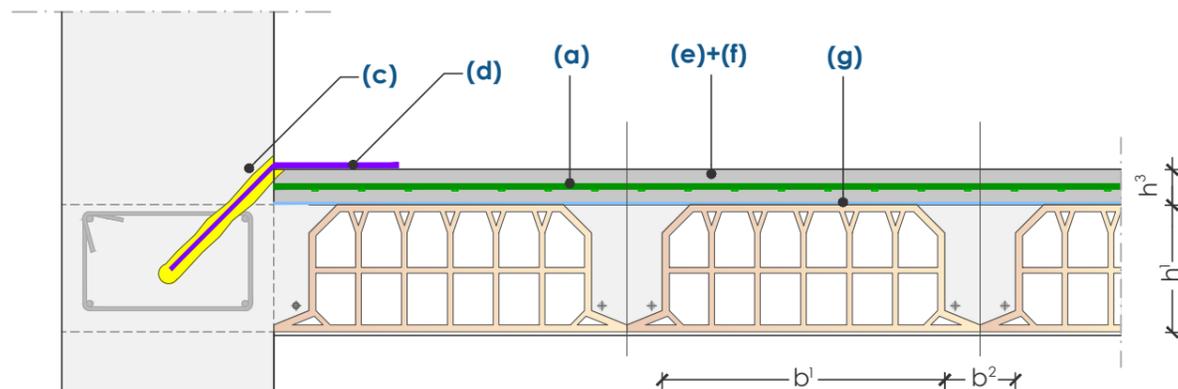


PHASE 4 - 5

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

SECTION DETAIL

scale 1:10



Legend:

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

DESCRIPTION OF WORK

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

1. Full-surface application of two-component adhesive **INTEGRA RIPRESA - RP 415** on the floor;;
2. Installation of **FBMESH** mesh across the entire floor surface, using appropriate systems to ensure the mesh is aligned with the new slab;
3. Application of **STRUTTURA STEEL FLUID - SF 100 IN** mortar with shrinkage-reducing additive **INTEGRA SPECIAL - SRA 513**;
4. Drilling holes with a rotating drill along the perimeter walls at the locations of the beam supports;
5. Injection of the previously drilled holes with two-component chemical anchor **INTEGRA FIXA VINYL15**, and installation of connector **FB-TUP10-CHT1A** with flange 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. The thickness  $h^3$  of the new slab to be defined based on structural and calculation requirements.

MATERIALS IDENTIFICATION FOR CRM

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

Measurements are expressed in centimeters unless otherwise specified.

