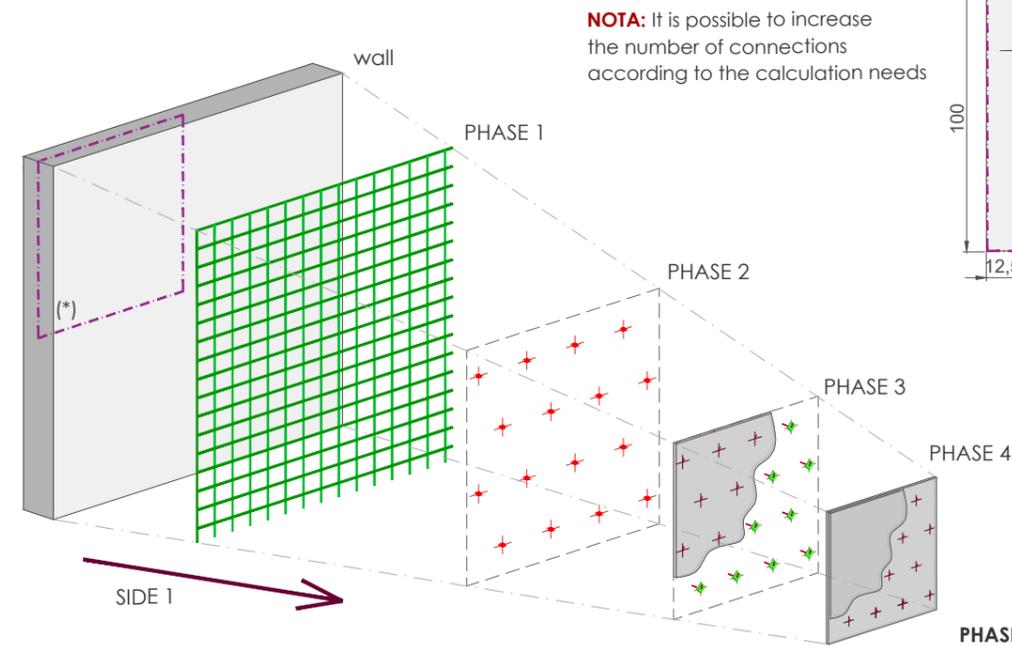


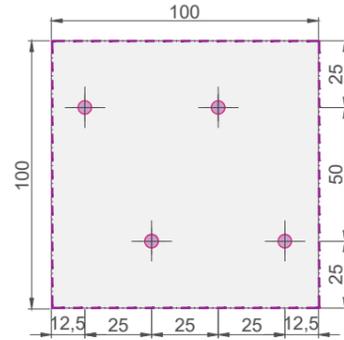
WORKING PHASES - CRM REINFORCEMENT ON ONE SIDE

Perspective view



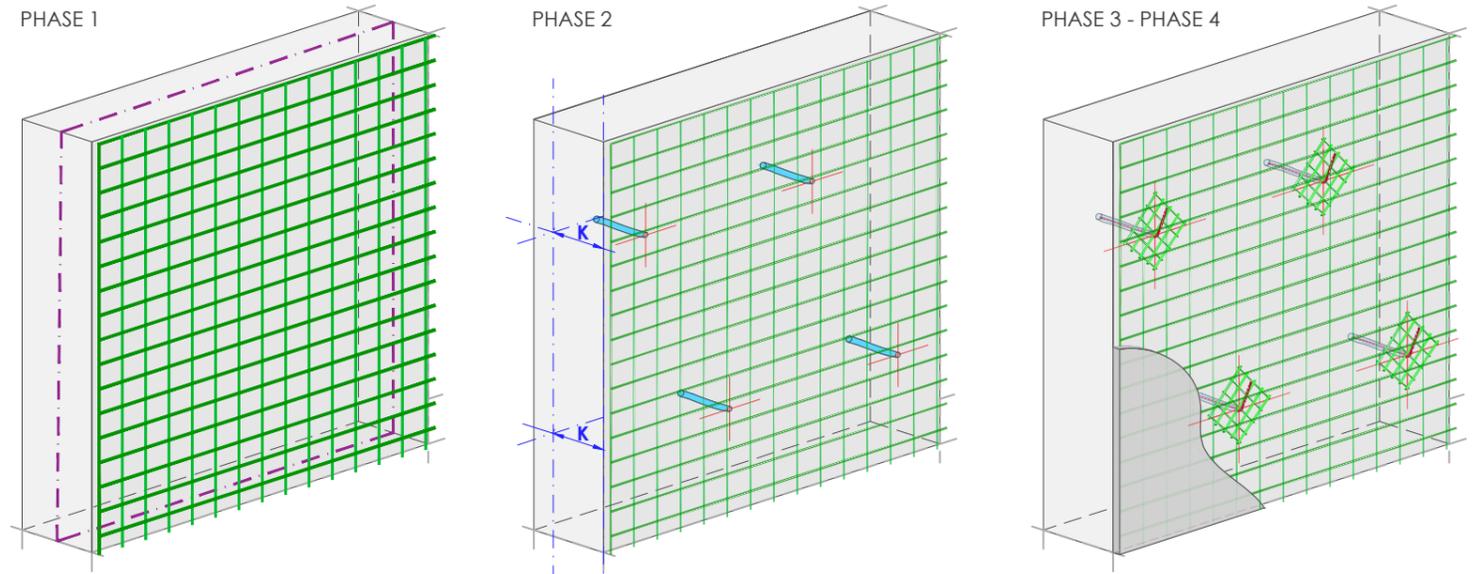
NOTA: It is possible to increase the number of connections according to the calculation needs

(*) Front view connector layout 4 connectors/m²



WORKING PHASES FOR 1 m2 OF WALL REINFORCED ON ONE SIDE WITH CRM SYSTEM

Isometric view



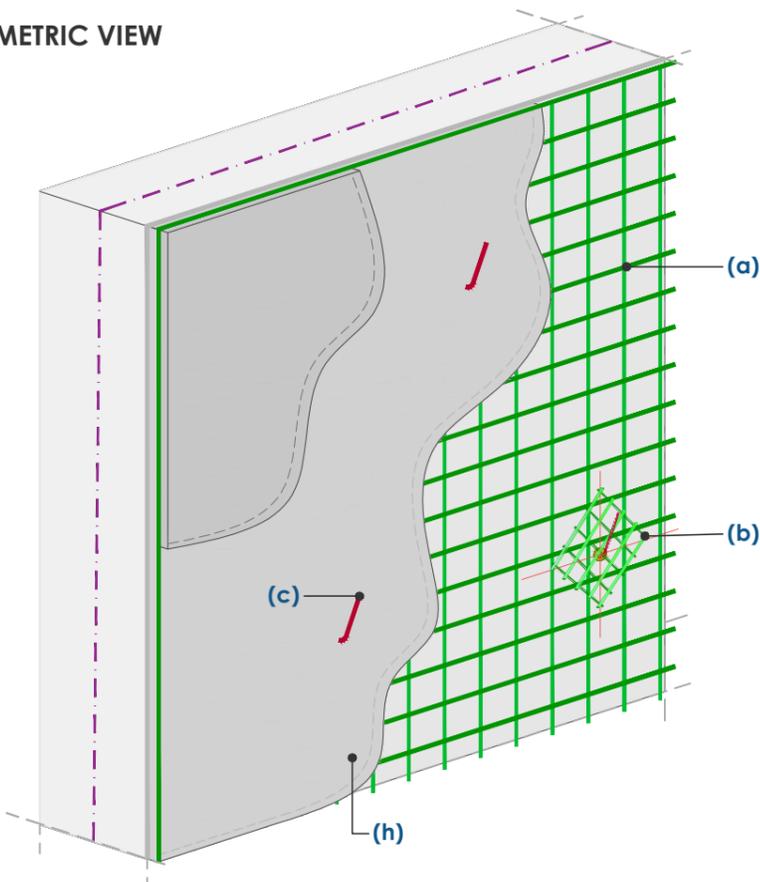
- PHASE 1 - Preformed GFRP mesh
- PHASE 2 - Drilling the holes
- PHASE 3 - Connectors in GFRP and mortar
- PHASE 4 - Mortar

Installation of preformed GFRP mesh for tracing holes and shaping at the openings.

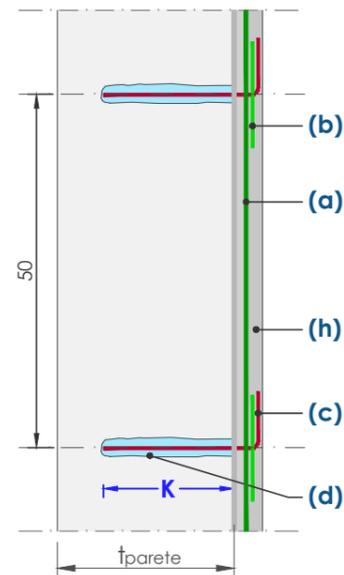
Execution of non-through Ø12 holes for a length K equal to 3/4 of the wall thickness t_{wall} and cleaning with compressed air.

Filling of the holes, installation of GFRP connectors and patches. Application of mortar.

ISOMETRIC VIEW



SECTION DETAIL



Legend:

- Wall
- Render coat
- GFRP mesh
- "L" shaped connector
- Distribution pad
- Mortar

DESCRIPTION OF WORKS:

The intervention involves the preparation of the support by removing existing layers and subsequent reconstruction of damaged parts of the wall, completing the preparation with the application of the render coat.

Subsequently, the works for the reinforcement are articulated in the following phases:

1. Installation on the middle plane of the plaster of **FBMESH** mesh and **FBANG** angular elements with overlap of 15/20 cm at the joints and corners. Tracing on the wall of the position of the holes and shaping of the mesh at the openings;
2. Drilling of the holes with a rotary drill;
3. Injection of the previously drilled holes with two-component chemical anchor **INTEGRA FIXA VINYL15** and installation of **FBFAZ33X33** distribution pad with **FBCONL** connector;
4. Proceed with the application of the mortar plaster **MATERIA/EPOCA** with a thickness of 3 cm after wetting the surface to refusal without causing water stagnation.

NOTE: Depending on the thermo-hygrometric conditions, it is recommended to wet the wall the day before applying the plaster.

IDENTIFICATION OF CRM MATERIALS

- (a) **FBMESH** (Preformed GFRP mesh)
- (b) **FBFAZ33X33T96AR** (Preformed GFRP distribution pad)
- (c) **FBCONL** (preformed GFRP "L" shaped connector)
- (d) **INTEGRA FIXA VINYL 15** (Two-component chemical anchor)
- (e) **FBANG** (preformed GFRP right-angle element)
- (f) **FB-TUP10-VARIA/2A** (Fiberglass composite reinforced bar)
- (g) **FB-HBAR10** (Austenitic stainless steel helical bar)
- (h) **MALTA MATERIA/EPOCA** (Pre-mixed eco-friendly lime-based plaster)

Measurements are expressed in centimeters unless otherwise specified.
For the connector installation diagram and material table, refer to table CRM10.

