CONSOLIDATION WITH INSERTION OF DIATONS

Consolidation of walls and masonry facings

APPLICATION DATA SHEET

Consolidation and reinforcement of masonry walls by means of widespread reticulation of steel fiber diatons:

1. removal of inconsistent parts;
2. drilling;
3. preparation of connection systems;
4. joints grouting

1) REMOVAL OF INCONSISTENT PARTS

Removal of any existing plaster, digging of joints and elimination of all incosistent parts that can affect good anchoring of the mortar.
Possible reconstruction of missing or particularly damaged parts of wall.

2) DRILLING

Horizontal drilling of joints with rotating diamond probes in order to avoid dangerous vibrations. The number of holes is to be defined according to the project needs by the competent technician.
Saturation wash of the substrate.

3) PREPARATION OF CONNECTION SYSTEMS

Cut to size of a strip of unidirectional fabric consisting of steel wires like Kimisteel GLV 650, its length has to be 80 cm + wall thickness + 80 cm, rolling up the central part of the fabric to form a sort of rod with improved adherence to lock with plastic strap. Insert the connector and grout with Limepor 100 GEL based mortar.
Fraying of the extremities of the fabric band by cutting them parallel to the strands.
Radial opening of the steel wires and placement between the mortar joints.
To obtain a continuous reticulate, make the connection of the connectors adjacent to each other by overlapping the strands inherent in the joints of mortar. Overlap should be of 20 cm at least.

4) JOINTS GROUTING

Grouting the joints with lime-based structural mortar M10 Limepor PMP in order to incorporate the steel fabric

POSSIBLE ALTERNATIVES

- As an alternative to Kimisteel GLV 650 you can use: Kimisteel INOX 800, with stainless steel filaments.

- As an alternative to Limepor PMP it is possible to use: Basic MALTA M15, based on natural hydraulic lime and Ecopozzolan or Tectoria M15, totally free of cement.

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