

Title (en)
Process of strengthening masonry walls

Title (de)
Verfahren zur Verstärkung von Mauerwerkswänden

Title (fr)
Procédé de renforcement de murs en maçonnerie

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Application
EP 00670005 A 20000705

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Abstract (en)
The present invention refers to a process of strengthening a stone or brick masonry wall, degraded (or not) by weathering or by seismic activity and that consists in simultaneously applying the following elements to the wall: a) confining ties (10) that pass through the thickness of the wall preferentially along a previously cleaned joint. They are made from an elongated cylindrical tie-rod (14) that is threaded at one or both ends and that fastens two circular anchoring and strength distribution plates (12), each one possessing a cylindrical casing (13) for the housing of the tie-rod's head or of a tightening nut; b) a laminate superficial strengthening membrane (20), made of a composite material of glass or carbon fibres soaked in an epoxy resin, and made from an adhesive gauze (22), a distribution element (23), and a covering web (24), is applied to one or both surfaces of the wall. In simpler cases it is possible to eliminate the confinement ties. When the opposed walls of a construction can be braced by adequately designed members, the composite laminate can be applied only on the external faces. The present invention can be especially used in the repair of buildings, with the aim of giving them an adequate resistance, especially to seismic activity. <IMAGE>

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