the mortar mass before this starts to set. This was resolved for the omega sections by means of the devices in Utility Model No. 200401484.

When carrying out the positioning of the said versatile actuator means foreseen in Utility Model No. 200700993, since the mentioned devices are not appropriate, the solution has been adopted to position the means in orderly fashion on a template. After positioning the versatile actuator means they are gripped simultaneously and inserted through the non-visible face of the panel recently formed in the mould, and remaining in said position until the mortar acquires sets sufficiently for the panel to be stripped.

Description of the invention

According to an aspect, there is provided an installation for manufacturing a prefabricated cement mortar with a prestressed biaxial reinforcement, said panel having versatile actuator means suitable for handling and/or securing said panel to the structure of a building, said versatile actuator means being embedded into the mass of cement mortar of said panel, without projecting from any of the faces thereof, and said versatile actuator means comprising, on one end, retention means for embedding said versatile actuator means in the set mass of cement mortar of said panel and, on the other end opposite the former, anchoring means both for elements for handling said panel and for elements for securing said panel to the structure of a building, wherein said installation comprises an arrangement for handling said versatile actuator means during the process of manufacturing said panel; said arrangement comprising: a fixed base structure for holding said versatile actuator means before the process of embedding said versatile actuator means into the mass of cement mortar of said panel; said fixed base structure comprising a plurality of stable seat elastic arrangements distributed over said fixed base structure, each of said seat elastic arrangements being configured for receiving one of said versatile actuator means ; and a movable frameworks comprising gripping arrangements, said gripping arrangements being distributed over said framework so that said gripping arrangements and said stable seat elastic arrangements are aligned with each other, and said gripping arrangements being configured for simultaneously gripping said versatile actuator means and, due to the movement of said framework, drawing said versatile actuator means from said stable seat elastic arrangements of said fixed base structure.

According to an embodiment, an~~In order to carry out the task explained above the~~ anchor positioning equipment in pre-fabricating reinforced mortar panels has been developed~~, which is the aim of the invention~~, comprising, on the one hand, a fixed base structure intended to support horizontally a plurality of stable seat elastic arrangements that are suitable for positioning therein an equal plurality of versatile actuator means and, on the other hand, movable frameworks that include, in orderly fashion to coincide with the stable seat elastic arrangements located on the fixed base structure for positioning said versatile actuator means, gripping arrangements for gripping the versatile actuator means that grip them as in each case one of said movable frameworks is tightly positioned against the fixed base structure and, due to their movable condition, remove from the stable seat elastic arrangements on the fixed base structure the versatile actuator means that are positioned on said elastic arrangements.

One feature of the ~~invention~~embodiment consists of the fact that the stable seat elastic arrangements are made up of a fixed base body and a movable seat body for the versatile actuator means with a lower part that slides on the inside of the former and another upper part that is exterior to the said fixed body and forms a seating tray for an elastic plate that forms a flat hollow for fitting the retention means for retaining the versatile actuator means in the set mass of cement mortar.

Another characteristic related to the above lies in the fact that the fixed base body includes fixed in the inside thereof a guide bushing for sliding the movable body and a radial finger in cantilever arrangement the point of which, moving along the

inside of a short groove on said movable body, determines the limits of movement of the latter when loaded by a spring located between said fixed body base and the tray of the movable body and/or by stress applied on said tray.

Also, a characteristic of the ~~invention~~embodiment is the fact that the movable framework has as many fixed guides, distributed along the ledger and tie beams covered by the actual movable framework and integral with it, as there are seating devices on the fixed structure, housing in a sliding manner, although occasionally fixed, a gripping rod having gripping means for gripping at one end of the versatile actuator means, while near the other end, ending in a frustoconical shape, it has a wide semitoric groove.

Other characteristics associated to the above lie in the fact that the gripping rod is included by its gripping end to one end of the versatile actuator means located on the stable seat elastic arrangements of the fixed base structure and that the gripping rods when they act on the versatile actuator means are loaded by releasable means that immobilize them with respect to the corresponding guide and retention support, at least when interacting with said versatile actuator means.

The ~~invention~~embodiment contemplates the characteristic whereby some of the releasable gripping arrangements act as traction means for the traction of the movable framework with respect to the reinforced mortar panel once it is at the stripping stage.

Also, the ~~invention~~embodiment has a characteristic related to the one above whereby the gripping arrangements acting as traction means for stripping the panel are associated with a fork restraint that can be inserted into the wide groove of the gripping rod of the gripping arrangement.

Finally, the ~~invention~~embodiment contemplates the fact that the movable framework holds a metallic reinforcement which, arranged to be applied against the surface of the layer of cement mortar, is connected to a terminal of high frequency electricity endothermic effect generator, while another terminal of the same generator is connected to the mould which shapes the thick layer of mortar cement so as to accelerate the setting of said mortar, without thereby excluding that the heavy metallic reinforcement of the movable framework, although acting as an upper reinforcement in a high frequency endothermic system, at all events acts to shape the surface of the layer of cement mortar that will form the non-visible face of the panel and will close the mould to prevent water from evaporating from the mortar as it sets.

CLAIMS

1. – Installation for manufacturing a prefabricated cement mortar with a prestressed biaxial reinforcement, said panel having versatile actuator means suitable for handling and/or securing said panel to the structure of a building, said versatile actuator means ~~(6)~~ being embedded into the mass of cement mortar of said panel, without projecting from any of the faces thereof, and said versatile actuator means comprising, on one end, retention means for embedding said versatile actuator means in the set mass of cement mortar of said panel and, on the other end opposite the former, anchoring means both for elements for handling said panel and for elements for securing said panel to the structure of a building, wherein said installation comprises an arrangement for handling said versatile actuator means during the process of manufacturing said panel; said arrangement comprising:

a fixed base structure for holding said versatile actuator means before the process of embedding said versatile actuator means into the mass of cement mortar of said panel; said fixed base structure comprising a plurality of stable seat elastic arrangements distributed over said fixed base structure, each of said seat elastic arrangements being configured for receiving one of said versatile actuator means ; and

a movable frameworks comprising gripping arrangements, said gripping arrangements being distributed over said framework so that said gripping arrangements and said stable seat elastic arrangements are aligned with each other, and said gripping arrangements being configured for simultaneously gripping said versatile actuator means and, due to the movement of said framework, drawing said versatile actuator means from said stable seat elastic arrangements of said fixed base structure.