

Title (en)
Modular,monocoque building structure

Title (de)
Modulare, einschalige Gebäudestruktur

Title (fr)
Structure de bâtiment monocoque modulaire

Publication
EP 0962603 A1 19991208 (FR)

Application
EP 99440125 A 19990531

Priority
FR 9807135 A 19980603

Abstract (en)
The building structure is formed by concrete monocoque modules (1), which can be assembled together in a variety of configurations. The base of each module has a unit (2) to absorb and disperse vibrations. The building structure is formed by concrete monocoque modules (1), which can be assembled together in a variety of configurations. The base of each module has a unit (2) to absorb and disperse vibrations. The vibration absorber/disperser (2) has a coupling (3) between two monocoque modules, over each other, within the mounting (4) at the lower surface of the upper module and the upper surface of the lower module. The coupling (3) is an elastomer stud, with a conical center and a number of peripheral and cylindrical hollows, with their axes parallel to the coupling axis. The coupling has pref. eight hollows, symmetrically round the axis. The stud has a central opening, as a passage for a bolt or shaft to lock adjacent modules together, with functional play between the stud and the locking bolt/shaft. The central opening is surrounded by a larger diameter opening, to prevent concrete rupture on a twist of the bolt. The vibration absorber/disperser (2) can be an elastomer stud, of variable density, within a circular and metal chamber. It has a rim base, with hollows, with a smaller diameter than the metal chamber. The metal chamber is welded to a metal plate, which rests on a hard rubber plate. The assembly is secured to the foundation (30) by an anchor, or the metal chamber floats. The upper section of the elastomer stud can be held in a circular metal chamber, welded to a larger metal chamber. The assembly of two metal chambers is locked to the reinforced concrete upper surface of the module through the metal reinforcements welded over the metal chamber.

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E04B 1/348; **E04H 9/02**

IPC 8 full level
E04B 1/348 (2006.01); **E04H 9/02** (2006.01)

CPC (source: EP US)
E04B 1/34823 (2013.01 - EP); **E04H 9/022** (2013.01 - EP US)

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