EARTHQUAKE-RESISTANT MODULAR WOODEN FACILITY

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New type of structural modular wall made of wood and composite wooden panels to be deployed in non-residential buildings with a temporary plan which perhaps need to be disassembled and reassembled.

Protection: Italy (opportunity for seeking patent protection internationally)

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INVENTION

The invention claims the realisation of wooden facilities comprising **prefabricated modules** with external connections housed in pre-holes on the wooden structure. The structure and the foundations are connected to drystone by plates and screws. It guarantees that the foundation modules are **recoverable, movable and reusable**, rather demolished or disposed of as in other conventional technologies. The walls are made using basic "void" modules in which insulation materials might be inserted in order to **modify important properties of the building,** such as, for example, mass, thermal and acoustic insulation. It is a site- and customer-specific solution not requiring disassembling of the structure or its elements. Finally, innovation allows to **enhance the seismic resistance** of the building, by adding passing bars in pre-existing holes, without any need to carry out building work on site.

APPLICATIONS

- Temporary buildings;
- Easily movable/remounted buildings;
- Emergency facilities;
- Low environmental impact buildings.

ADVANTAGES

- Easy, quick and low cost assembly, disassembly and reassembly;
- Facility's surface and height flexibility;
- No additional costs of industrialisation and prefabrication;
- Reduction of C&D waste and total restoration of the site.

CONTACTS

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