

Description of innovation

Innovation	
Title	New modular construction system based on panels fixed to each other and pieces of heavy wooden framework.
Picture	
Domain	Timber construction
Source of wood	Stemwood
Location	Spain.
Implementers	Amatex
Actual status	Started
Approach	The project aims to develop new models of prefabricated ultra-lightweight panels consisting of a combination of solid wood products, wood-based products and the use of thermal and acoustic insulation. The application of a tongue and groove system to assemble panels to each other and solid pieces of traditional heavy wooden framework, emulating a semi-heavy framework, will allow the development of a new innovative construction system aimed at modular construction, quick assembly and with enormous versatility and adaptation to different designs and types of construction.
Main results	The structural characterisation of the panels will be carried out by means of mechanical laboratory tests, as well as thermal, acoustic and watertightness characterisation by analytical means.
Lessons learned	Just started
Contact information	amatex@amatex.es
Link to website	www.amatex.es
Code	IN_ES_04

Innovation assessment

Region	Spain
Time scale	2018 - 2020
Mobilization Potential	5-10 m3 / building
Kind of wood concerned	Sawn timber, glued laminated timber, wood-cement boards, particle boards, OSB
Sustainability Potential	Very positive
Impact on environment & biodiversity	Positive
Ease of implementation	Difficult
Economic impact	Possibility of modular construction
Job effect	Positive: increased efficiency of materials
Income effect	Positive: decreased building time
Specific knowledge needed	None
Costs of implementation	House building cost decreased in 30%
Technical readiness level	Technology validated in lab
Key information for adoption	Building quality lightly decreased