

New modular construction system based on panels fixed to each other and pieces of heavy wooden framework.



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.

Just started

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.

## DETAILS

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### ORIGIN OF WOOD

Forest

### TYPE OF WOOD

Stemwood

### KIND OF WOOD CONCERNED

Sawn timber, glued laminated timber, wood-cement boards, particle boards, OSB

### IMPACT ON ENVIRONMENT & BIODIVERSITY

Positive

### INCOME EFFECT

Positive: decreased building time

### EXPLOITATION POTENTIAL

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### HUB

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### ECONOMIC IMPACT

Possibility of modular construction

### SPECIFIC KNOWLEDGE NEEDED

None

### MOBILIZATION POTENTIAL

5-10 m3 / building

### SUSTAINABILITY POTENTIAL - VALUE

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### EASE OF IMPLEMENTATION

Difficult

### EASE OF IMPLEMENTATION - EVALUATION

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### KEY PREREQUISITES

Building quality lightly decreased

### TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

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### JOB EFFECT

Positive: increased efficiency of materials

### COSTS OF IMPLEMENTATION ( EURO - € )

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## MORE DETAILS

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### CHALLENGE ADDRESSED

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### KEYWORDS

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### COUNTRY OF ORIGIN

Spain

### DOMAIN

Wood construction industry

### DIGITAL SOLUTION

No

### SCALE OF APPLICATION

National

### TYPE OF SOLUTION

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### INNOVATION

Yes

### START AND END YEAR

2018 - 2020

## CONTACT DATA

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### OWNER OR AUTHOR

amatex@amatex.es

### REPORTER

## REFERENCES AND RESOURCES

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### MAIN WEBSITE

<http://www.amatex.es>

### PROJECT WEBSITE

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### PROJECT REFERENCE

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### RESOURCES

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**PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED**

Rosewood

**POST DATE**

13 Sep 2019

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