High Efficiency Light Panel (HELP), a new wood-base panels system.

The aim of the project is to develop a construction system known as High Efficiency Light Panel (HELP). Consists of a set of innovative solutions based on a mixture of lightweight timber framing and cross laminated timber (CLT), for the manufacture of "Zero Emission" walls, slabs and roofs.

There is an improvement of the structural capacity of the construction system that allows more height (3-4 floors) than with the traditional lightweight building. The positioning of a three-layer or CLT board on the inside of the walls acts directly as a vapour barrier, saving the cost of installation.

The new building solutions are based on wooden or wood-base panels which will be subjected to tests, analytical calculations and numerical approximations for their structural, thermal, acoustic, watertight and fire resistance characterization. In addition, its environmental characterization (CO2, reutilization) will be carried out.
A solution with the new construction system has been defined for use in slabs, walls and roofs. Spreadsheets have been developed to obtain thermal transmissivity, surface and interstitial condensations, sound absorption and structural capacity.

DETALJER

VEDENS URSPRUNG

Skog

TRäTYP

Rundvirke

TYP AV TRä

Sawn timber, KVH

PåVERKAN På MILJö & BIOLOGISK MåNGFALD

Positive

EKONOMISK EFFEKT

Positive: decreased building time

KOMMERSIELL POTENTIAL

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NAV

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EKONOMISK PåVERKAN

Increase of the load-bearing capacity of the building by 30% approximately

SPECIFIKA KUNSKAPSBEHOV

High knowledge needed about similar construction systems

MOBILISERINGSPOTENTIAL

10-20 m3 / house

HåLLBARHETS POTENTIAL - VäRDE

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ENKEL IMPLEMENTERING

Medium

ENKEL IMPLEMENTERING - UTVäRDERING

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NYCKEL FöRUTSäTTNINGAR

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TYP AV EVENEMANG DäR DENNA BPI HAR PRESENTERATS

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EFFEKT ANTAL ANSTäLLDA

Positive: increased efficiency of materials

KOSTNADER FöR IMPLEMENTERING (EURO - €)

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MER INFORMATION

UTMANING SOM ADRESSERAS

--

DOMäN

Industri for träbyggnation

TYPE AV LöSNING

--

NYCKELORD

--

DIGITAL LöSNING

Nej

INNOVASION

Ja

UPPHOVSLAND

Spanien

POTENTIAL

Nationell

START OCH SLUTåR

2017 - 2018

REFERENCES AND RESOURCES

HEMSIDA (HUVUDSIDA)

http://www.mabitat.es

PROJEKTETS HEMSIDA

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PROJEKTREFERENS

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RESURSER

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PROJEKT SOM DETTA FACTSHEET SKAPATS INOM

Rosewood

DATUM FöR INLäGG

13 sep 2019

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

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