

Hackaton Nancy 2019-03-21



MetsäWood

GROUP 1

Clément

Lorène

Yiqing

Jean-Luc

MODULE STUDY

Key Benefits : Cost, Labor, Quality, Time, Processing optimisation, unique product used with its variations.

Optimizing strategy by integrating a unique system through **off-site** research, design, testing, and prototyping.

Avoid the metallic platin, so gain time on the site.

Materials :



LVL Kerto-Q

Material with optimal mechanical resistance.

THE SOLUTION

Inspiration :

Traditional Japanese houses were all designed on a simple pattern : **the tatami** 91 x 182cm (basic unit). Being able to multiply a simple shape enables different uses for spaces. Considering various cultural habits, our different layouts creates a unique home for everyone.



Figure 1 Traditional tatami living room

Our main design is based on a very simple module. 1.50 x 3m. The latter can be multiplied as desired. We designed 4 « families » : Bathroom, kitchen, room and an empty volume (to extend volumes, design corridors etc).

DESCRIPTION SYSTEM

The different modules can be organized to create various spaces, various ambiances.

Fully opened : common spaces for all students (co-working space, library, chill space etc)

Half opened : common kitchen and bathroom and private room (like house share, co-working space)

Private appartement : All uses privatized for one student

The arrangement will allow to create open space on the outside (rooftop).

Common circulation : It's constituted by one basic module assembled with the others

Assemblage : The assembly technic is developed beforehand, to optimize the time of construction on the site. The different modules will be plugged one in the other easily. There is no metallic assemblage, only wood-wood assembly used with the CNC. So we avoid to have a mechanical fixation post on the site.

Outside face : we will use pre-mounted face with additional insulation, zinc finishing, and the windows, more the waterproofing and airtightness film

Technical gridles : There are positioned between the private and the common space to keep a quick technical access