

Hangar à sel de Houffalize

by Charline Lefèvre / () 2023-02-22 18:12:14 / Belgique / ⊚ 174 / ► FR



Year of commitment: 2020

CO2 Impact : Storage of 80 tonnes of CO2

Water cycle: Rain water, Risk management/Resilience, Used water recycling, Desalinization

Circular economy and waste management: Eco-Design, Industrial Ecology, Bio-based materials

Biodiversity & Ecosystems: / Carbon capture /



Builder
TS Construct

GENERAL INFORMATION

Located in the heart of the Belgian Ardennes, in a rural setting where coniferous forests and agricultural clearings punctuate the landscape, the salt shed project tends to echo the agricultural warehouses structuring the horizon. Thus, the project approaches a traditional volumetry whose codes are reinterpreted in a neovernacular approach, transcending the ancestral construction principles of the silvicultural halls of the region.

The large size of the project summoned by its use becomes a singular silhouette on the scale of the site. Thus, the materiality softens the incidence of the hangar on the horizon working the transparency of the elevation. The facades are adorned with polycarbonate in a diaphane approach playing on the ambiguity of its transparency and its reflection: its presence is experienced both from the inside and from the outside like a stained glass window.

At night, as snow sweeps the plains, the building comes alive and acts as a reassuring lantern in the darkness. In the middle of the storm, the building lights up with the ballet of dispersal vehicles.

From the constructive point of view, the project is spontaneously revealed in a frugal sincerity - a hangar is above all a protected structure. Entering into resonance with the silvicultural character of the region, the wooden structure is revealed both inside and outside, reinforcing the integration of the project in its context. In addition to this architectural bias, wood also refers to a practical response. Indeed, its natural properties make it less sensitive to an environment as aggressive as that of the storage of spreading salt.

In the end, this project tries, with humility, to offer a building that transcends its simple functionality. A bright and pleasant space paying real attention to spatial quality, too often set aside in industrial design.

Progress Status

Delivered

Data Reliability

Self-declared

Funding Type

Public

Website Enterprise / Infrastructure

Sustainable Development

Attractiveness:

The project as a whole has been designed so that it can be replicated in other places and under other conditions. The concept of reproducibility was at the heart of the reflections and makes it possible to rationalize the impacts of the design.

Aside from the concrete foundation which constitutes its base, the building is made up of wooden elements assembled by metal connection devices. These are therefore dry assemblies. This guarantees the dismantling of the building. The parts that compose it can thus more easily be reused or recycled at the end of the building's life.

Well Being:

The wooden structure brings a very appreciable warmth for the users of the site and the passers-by.

Social Cohesion :

The wooden structure, through its exceptional character, brings together the different users of the project.

Preservation / Environmental Improvement :

The structure was designed as a large lantern, a landmark in the heart of the environment.

Resilience

The structure is calculated to withstand the most violent storms. Its design allows CLT buttresses and retaining walls to be used in plan to resist lateral loads. The ductility of wood makes the structure very resilient.

Responsible use of resources:

The entire superstructure is made of wood. This material, in addition to allowing a much lower carbon impact than other conventional materials during its production, transformation, transport, etc., allows carbon storage over the long term.

Governance

Public Service of Wallonia

Holder Type: Local Authority

TS Construct

Builder Type: Construction Industry Manager / Dealer Type: Public

Sustainable Solutions

wooden structure

Description:

As they grew, the trees that built this structure absorbed carbon to grow and flourish. Once cut, shaped and set up, the wood retains the carbon it has absorbed as it grows and will retain it throughout its lifetime.

If ever the structure were to be destroyed, the wood would be reused and recycled, and would continue its role of storing carbon.

This allows wood to have a negative carbon footprint. Essential when one wishes to build thinking about future generations.

- Infrastructure
- Low-carbon materials/ infrastructure

Company (es) Website:

Company (es) Website:

Company (es) Website:

Photo credit

Antoine Richez

Contest

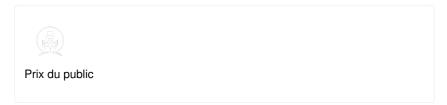
Reasons for participating in the competition(s)

Construit principalement en bois, le bâtiment s'insère dans une logique écologique centrée sur l'utilisation d'un matériau structurel stockant le carbone. De plus, il est naturellement résistant à l'environnement agressif qu'impose le sel, ce qui le rend particulièrement adapté à la situation.

La géométrie simple du projet en fait une sorte de structure-type qu'il est possible d'adapter à un grand nombre de situations. On peut facilement adapter les dimensions en conservant les principes de conception et satisfaire à un grand nombre de cas.

Le bois est compatible avec un grand nombre de produits secs stockables et n'attend que l'opportunité de conquérir le secteur agro-industriel.

Building candidate in the category







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