

Houffalize salt shed

by [Charline Lefèvre](#) / 2023-02-22 18:12:14 / Belgique / 575 / 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 /



265 000 €

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 neo-vernacular 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

<https://www.ts-construct.be/>

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

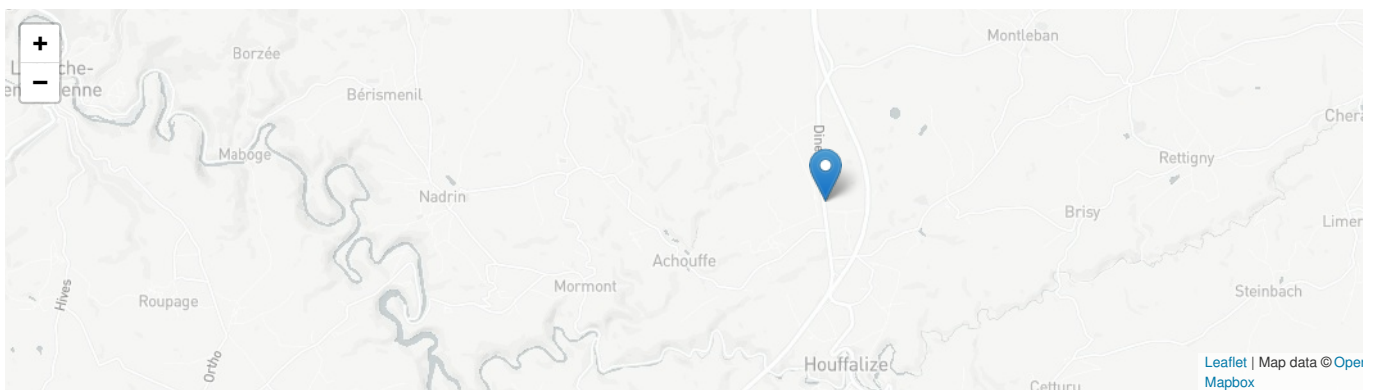
Contest

Reasons for participating in the competition(s)

Constructed mainly of wood, the building is part of an ecological logic centered on the use of a structural material storing carbon. In addition, it is naturally resistant to the aggressive environment that salt imposes, which makes it particularly suitable for the situation.

The simple geometry of the project makes it a sort of standard structure that can be adapted to a large number of situations. The dimensions can easily be adapted while maintaining the design principles and satisfy a large number of cases.

Wood is compatible with a large number of storable dry products and is just waiting for the opportunity to conquer the agro-industrial sector.



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