Community hall in Schweyen

by Marie-Laure Aubriot / 2014-06-25 00:00:00 / France / 7327 / FR

Primary energy need :

158 kWhep/m².an

(Calculation method : RT 2005)

ENERGY CONSUMPTION

Economical building *Building*

< 50	A
51 à 90	B
91 à 150	C
151 à 230	D
231 à 330	E
331 à 450	F
> 450	G

Energy-intensive building

Building Type : Other building
Construction Year : 2012
Delivery year : 2012
Address 1 - street : Place de la Carrière 57720 SCHWEYEN, France
Climate zone : [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area : 345 m² Other
Construction/refurbishment cost : 673 344 €
Number of none : 1 none
Cost/m2 : 1951.72 €/m²

General information

- LQE 2013 prize winner

The municipality of Schweyen didn't have any meeting, nor convivial nor animation space. That's why the City Council proposed the construction of a building, 300 square meters large, including a multi-purpose room of 200 square meters. The City Council has also opted for an innovative building in energy control and production.

Sustainable development approach of the project owner

- LQE 2013 prize winner
The municipality of Schweyen has opted for an innovative building in energy control and production.

Hygrothermal comfort
- Inertia of the envelope
- Airtightness and reduction of thermal bridges
- Passive solar gains
- Perspirant walls

- No feeling of cold wall
- Solar shadings
- Natural night ventilation by zenith chassis

Acoustic comfort
- Building distant of residential areas
- Acoustic equalizer materials (wood flooring, suspended ceilings, wood paneling)

Visual comfort
- Natural light evenly distributed (large windows, zenith windows)
- Wide views over the surrounding landscape and framed views of the forest
- Artificial lighting: nature and temperature of sources vary depending on areas (bar, centre of the hall, indirect atmosphere ...)

Low environmental impact building site
- Remote building site
- Building site charter
- Prefabrication and dry process.

Architectural description

The municipality of Schweyen didn't have any meeting, nor convivial nor animation space. That’s why the City Council proposed the construction of a approx. 300 square meters building, including a multi-purpose room of 200 square meters.

See more details about this project

http://www.lqe.fr/home/upload/fiches/FicheSalleSchweyen.pdf

Stakeholders

Stakeholders

Function : Contractor

Commune de Schweyen (57)

Function : Designer

HAHA architectures

http://www.haha.fr/

Function : Other consultancy agency

Adam

http://www.adam-vosges.fr/Pages/accueil.php

Function :

Gama ingénierie

https://sites.google.com/a/gama-ingenierie.com/gama-ingenierie/

Function : Thermal consultancy agency

Utop

Function : Others

Qualiconsult

http://www.groupe-qualiconsult.fr/

Function : Others

Aven’r

http://www.avenr.fr/

Function : Company

Grebil

http://grebil.net.free.fr/introduction/index.html

Function : Company

Ettwiller

Function : Company

Jung & Fils

Contracting method

Separate batches

Type of market

Global performance contract

Energy

Energy consumption

Primary energy need : 158,00 kWhep/m^2.an

Primary energy need for standard building : 445,00 kWhep/m^2.an

Calculation method : RT 2005

CEEB : 0.0004

Envelope performance

More information :

- Insulation: Backfill: 60 cm glass foam. Foundations: 14 cm of extruded polystyrene in periphery of the concrete slab. Walls & roof: 36 cm bundles of straw
- Insulation: Straw, glass foam and extruded polystyrene
- Glazing: low emission double glazing, Uw 1.1
- Frontage: wooden cladding (larch)
- Floors and walls: porcelain and oiled solid oak floor, earthenware and VOC-free paints

Indicator : EN 13829 - q50 » (en m3/h.m3)

Air Tightness Value : 0,28

Renewables & systems

Systems

Heating system :

- Heat pump

Hot water system :

- No domestic hot water system

Cooling system :

- Reversible heat pump

Ventilation system :

- Single flow
- Double flow heat exchanger

Renewable systems :

- No renewable energy systems

Smart Building

BMS :

- Technical room with specific ventilation and independent access. External CABG. - Implementation of naturally durable wood (class 3) - Laminar flow hand dryers in the toilet - Referring person for adjusting installations

Environment

Environment

Urban environment

Land plot area : 345,00 m^2

Location along the forest at "reasonable" distance from the town center for a pedestrian link.

Costs

Construction and exploitation costs

Cost of studies : 87 894 €

Total cost of the building : 673 344 €

Subsidies : 375 988 €

Health and comfort

Water management

- Rain water collected in trench filter
- Permeability of traffic areas (crushed stabilized, paving stones on a bed of sand and earth-stone)
- Dual control flushing, automatic flushing urinals, flow restrictors, instantaneous water heaters under unit or close to the kitchen

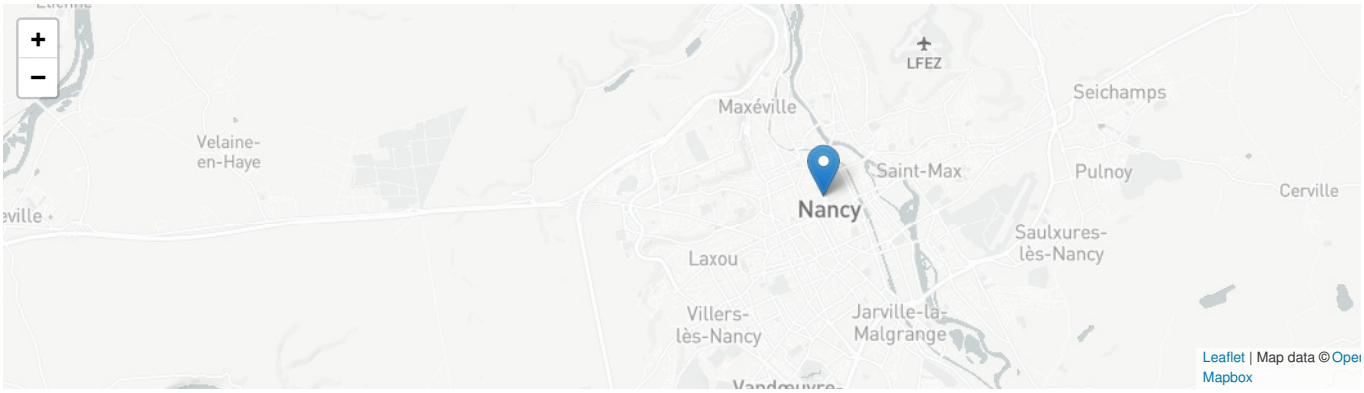
Indoor Air quality

- Internal finishings in untreated wood, VOC-free paints, earthenware and porcelain
- Double-flow CMV on CO2 sensor

Carbon

Life Cycle Analysis

Eco-design material : Wood (larch, oak); VOC-free paints; straw; glass foam



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