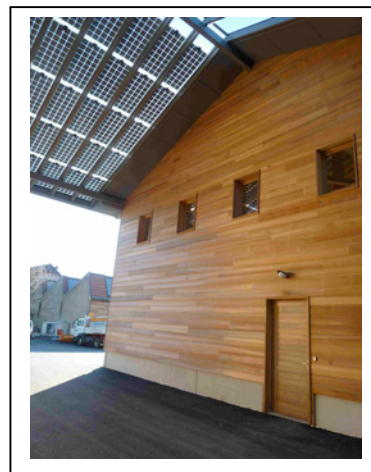
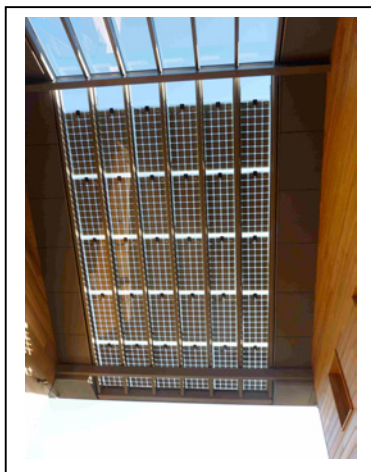


Evaluation ENERBUILD-Tool – existing buildings

Ateliers municipaux Bassens, Savoie (73), France



1 Basic information about the building

Name of the building	Ateliers municipaux de la commune de Bassens
Address of the building	Avenue de Mérande 73000 Bassens
Owner/investor	Mairie de Bassens
Year of construction	2009-2010
Building type	Tertiary
Building method	Structure with wood frame and concrete
Number of buildings	2
Number of levels above earth	2
Number of levels underground	0
Kind of the public use	Technical locals
Effective area for public use in m ² (net)	
Additional private uses	
Effective area for private use in m ² (net)	
Total effective area in m ²	345 m ²
Source of energy for heating	Gas
Heating system	Heat boiler
Water heating system	Solar thermal with auxiliary gaz
Date of the building evaluation	16/12/2010

2 Execution of the building evaluation with the ENERBUILD tool

Responsible Organisation: ASDER (Association Savoyarde de Développement des Energies Renouvelables), local energy agency

Contact person: Delphine Mugnier - Karine Le Diouron

Telephone: 04 79 85 88 50

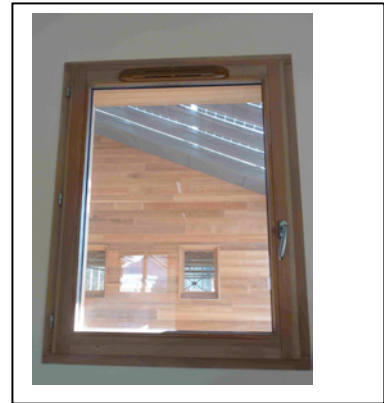
Email: delphine.mugnier@asder.asso.fr ;
karine.lediouron@asder.asso.fr

Temperature for thermal comfort in summertime: 28 °C

Local limits for heating demand: RT 2005 130 kWh/an/m²

3 Results

Nr.		Title	Must criteria (M)	max. points	evaluated points
A		Quality of location and facilities		max. 100	76
A	1	Access to public transport network		50	26
A	2	Ecological quality of site		50	50
B		Process and planning quality		max. 200	60
B	1	Decision making and determination of goals		25	10
B	2	Formulation of verifiable objectives for energetic and ecological measures	M	20	20
B	3	Standardized calculation of the economic efficiency	M	40	0
B	4	Product-management - Use of low-emission products		60	10
B	5	Planning support for energetic optimization		60	20
B	6	Information for users		25	0
C		Energy & Utilities (Passive house)		max. 350	321
C	1	Specific heating demand (PHPP)	M	100	46
C	2	Specific cooling demand (PHPP)	M	100	100
C	3	Primary energy demand (PHPP)	M	125	125
C	4	CO ₂ -emissions (PHPP)		50	50
D		Health and Comfort		max. 250	0
D	1	Thermal comfort in summer		150	0
D	2	Ventilation - non energetic aspects		50	0
D	3	Daylight optimized (+ lightening optimized)		50	0
E		Building materials and construction		max. 200	175
E	1	OI ₃ _{TGH-ic} ecological index of the thermal building envelope (respectively OI ₃ of the total mass of the building)		200	175
Sum				max. 1000	632



4 Conclusions from the building evaluation with the ENERBUILD-Tool

a) Generally

Some criterias are difficult to assess. This building is for a technical use, and doesn't fit in very well in these criteria.

b) About the planning process

It can be difficult to get certain documents needed to assess when the project already exists: for example the documents proving the decision-making, determination and definition of the initial objectives (criteria B1 and B2)

c) About the building itself

Cconsumptions' of hot water are considered negligible in this type of commercial building and then entered zero in the calculation regulations. But, on average, each technician takes a shower / day. A solar water heater was even installed only for these needs. The project is therefore advantaged, because of the failure to take account hot water consumption in calculations.

d) About the evaluation process

A tertiary building for technical use doesn't fit easily into the required criteria:

- User Handbook: The project was designed in conjunction with users, according to their requirements.
- Dynamic simulation: its cost is considered too important for the client for its interest in this type of building.

We do not have access to the data requested in the standard D2 Ventilation, air quality inside.

5 Suggestions for improvement of the ENERBUILD-Tool

General Suggestion: Proposal to differentiate criteria depending on the nature of building: social housing building, commercial building, technical building

Criterion A1: Access to public transport network access

Proposal to extend this criterion to other infrastructures valuing friendly transport (cycling and train station in particular).

Criteria B: Project Management

Proposal to add a criterion on water (management, recovery ...).

In this project, all of the following elements could have been valued:

- Recovery of rainwater: a 20 000L storage for water recovery was set up under the pavement of vehicles garage.
- Rain water retention: a retention system has been set up to water rain from the courtyard in accordance with the requirements of Chambéry Métropole (local authority).
- Water Treatment: a water treatment system of the washing area was established in accordance with the requirements of Chambéry Métropole (local authority).

Criterion D2: Ventilation, Indoor Air Quality

Proposal to split the test into 2 sub-levels

- Conservation of the criterion on the acoustic measurements but simplifying the criteria indicators.
- Adding a line on the quality of ventilation (based on the occupation of the building).
- Proposal to focus more on assessing the air quality analysis by an onsite measurement.