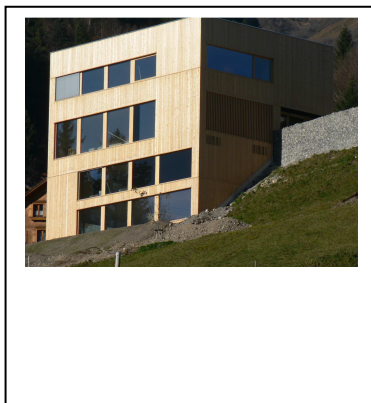


Evaluation ENERBUILD-Tool – existing buildings

Communal Center St. Gerold



1 Basic information about the building

Name of the building	Communal Center St. Gerold
Address of the building	A-6722 St. Gerold, Faschinastraße 84, Austria
Owner/investor	Municipality of St. Gerold
Year of construction	2008/2009
Building type	Communal center
Building method	Wood construction
Number of buildings	1
Number of levels above earth	4
Number of levels underground	0
Kind of the public use	Kindergarten, administration, commerce
Effective area for public use in m ² (net)	527
Additional private uses	-
Effective area for private use in m ² (net)	-
Total effective area in m ²	527
Source of energy for heating	Biomass
Heating system	Biomass
Water heating system	Biomass
Date of the building evaluation	-

2 Execution of the building evaluation with the ENERBUILD tool

Responsible Organisation: Spektrum GmbH, A-6850 Dornbirn, Austria

Contact person: DI Dr. Karl Torghele

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Email: karl.torghele@spektrum.co.at

Temperature for thermal comfort in summertime: 0% > 25 °C

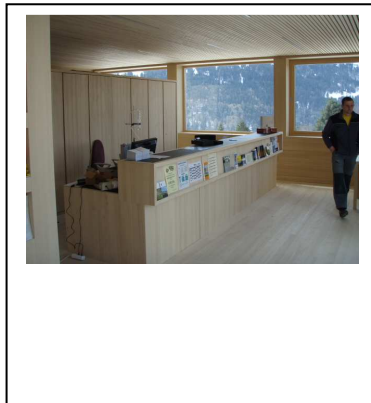
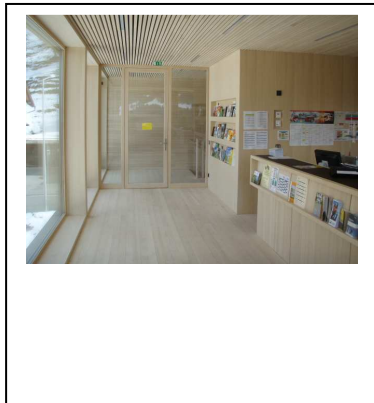
Local limits for heating demand: 14 kWh/m²

3 Results



Criteria

Nr.	Title	Must criteria (M); Minimum standard	max. points	Points
A	Quality of location and facilities		max. 100	47
A 1	Access to public transport network		50	12
A 2	Ecological quality of site		50	35
B	Process and planning quality		max. 200	200
B 1	Decision making and determination of goals		25	25
B 2	Formulation of verifiable objectives for energetic and ecological measures	M	20	20
B 3	Standardized calculation of the economic efficiency	M	40	35
B 4	Product-management - Use of low-emission products		60	60
B 5	Planning support for energetic optimization		60	60
B 6	Information for users		25	25
C	Energy & Utilities (Passive house)		max. 350	350
C 1	Specific heating demand (PHPP)	M	100	100
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	155
D 1	Thermal comfort in summer		150	65
D 2	Ventilation - non energetic aspects		50	40
D 3	Daylight optimized (+ lightening optimized)		50	50
E	Building materials and construction		max. 200	194
E 1	OI _{3-TGH-IC} ecological index of the thermal building envelope (respectively OI ₃ of the total mass of the building)		200	194
Sum			max. 1000	946



4 Conclusions from the building evaluation with the ENERBUILD-Tool

a) Generally

From the beginning, this project was planned as a sustainable passive house. Special efforts were made in using regional wood (Weißtanne) and healthy building materials as in the building also a kindergarden is housed.

b) About the planning process

Special efforts in the planning process were necessary to ensure the possibility of using regional available – not industrial produce wood.

c) About the building itself

Except the retaining wall the building is totally constructed of wood. Even the core for the evaluator is made of wood.

The building is certified as an Passivehouse. The Building won several prices as an example for sustainable public buildings.

d) About the evaluation process

No relevant Problems in the evaluation process because the project was a part of Nachhaltig:Bauen in der Gemeinde – a special service for municipalities in developing sustainable buildings.

5 Suggestions for improvement of the ENERBUILD-Tool

1. Quality Management in calculation of Energy Demand necessary respectively recommended (maybe give points for a QM-System)
2. Reduce Points for access to public transport network – to much weight in rural areas