

# **TherapieStützpunkt**

by Sabrina Gassner / ○ 2021-04-07 09:06:31 / International / ⊚ 8121 / **P** EN



Building Type : Other building Construction Year : 2017 Delivery year : 2017

Address 1 - street : Oberndorfer Straße 17 3251 PURGSTALL AN DER ERLAUF, Austria

Climate zone : [Dfb] Humid Continental Mild Summer, Wet All Year

Net Floor Area : 238 m² Useful area (es)
Construction/refurbishment cost : 501 480 €

Number of none : 8 none Cost/m2 : 2107.06 €/m<sup>2</sup>

#### Certifications :



### General information

### Environmental awareness, modern architecture, and health

The innovative project "TherapieStützpunkt" in Purgstall an der Erlauf (Southern Austria) was set up by the company *Holzbau Strigl GmbH* in 2017. It is a contemporary building with a barrier-free access ramp and a usable area of around 240m², distributed over 2 floors in a shell made of constructed wooden frames

Modern architecture and ecological construction are combined in this project, with wood playing a major role.

The goal for this building was to create an optimal room for every patient and every therapist and taking care of the individual treatment.

A team of freelance therapists, with a wide variety of focuses in physiotherapy, is offering many different training methods in these rooms.

This range of advanced treatment methods and progressive technology is also reflected in the building. The latest building technology and the use of natural building materials represent environmental awareness.

The company Holzbau Strigl from Lunz am See attaches particular importance to the reduction of greenhouse gases in the implementation and use of every building. The materials used for the facade are environment friendly, made of wood, and the insulation is made of cellulose. During the implementation, great attention was paid to cooperation with regional companies. Short distances also protect the environment.

### Timber construction by Holzbau Strigl:

- 32cm wooden stand construction + cellulose insulation in the intermediate chambers
- 10cm installation level filled with wood wool
- Ventilated facade for good moisture transport and weather protection
- total thickness 54cm
- U-value outer wall 0.098 W / m²K Door /

### Window construction:

- Wooden windows with triple glazing
- UW value 0.71 W / m²K Building services
- description: Air / water heat pump with comfort ventilation Drexel & Weiss X2A9
- Loxone Smart Home automation for shading and lighting

A heat-pump is used as the heating system for room heating and hot water preparation.

Heat recovery is used for the ventilation system.

### See more details about this project

https://passivehouse-database.org/index.php?lang=de#d\_5762

#### Photo credit

All picture belong to Holzbau Strigl GmbH Fotograf: Auftragsfoto.at

### Stakeholders

### Contractor

Name: Holzbau Strigl GmbH

Contact : Sabrina Gassner, sabrina.gassner[a]ecoconcept.at

### Construction Manager

Name : EcoConcept GmbH

 ${\color{red}\textbf{Contact}}: Sabrina\ Gassner, sabrina.gassner[a] ecoconcept.at$ 

#### Stakeholders

Function: Others

Wolfgang Auer Bau-und Möbeltischlerei

074872860

### Contracting method

Other methods

### If you had to do it again?

At this point we can say that this project speaks for great success from all sides. The building is so popular, many therapists want to work there and also the patients are very happy. So the building will be expanded in the near future.

# Building users opinion

Statement from Mr. Spieslehner, building user and owner:

"Our therapists feel very comfortable in the new building that was built in 2017. The well-structured and barrier-free rooms are flooded with light, and together with the natural building material wood, create a pleasant and beautiful workplace."

### Energy

### **Energy consumption**

Primary energy need: 13,00 kWhpe/m<sup>2</sup>.year

Primary energy need for standard building: 30,00 kWhpe/m<sup>2</sup>.year

Calculation method: Other

Breakdown for energy consumption: All details on the energy identification are in the documents.

### Envelope performance

#### More information:

Thermal envelope

Outer wall

32cm wooden stand construction + cellulose insulation in the intermediate chambers

10cm installation level filled with wood wool

Ventilated facade for good moisture transport and weather protection

U-value = 0.098 W / (m2K)

Basement ceiling/floor slab

20cm XPS under 25cm reinforced concrete slab

5cm EPS granules

3cm rolljet

6cm cement screed U-value = 0.128 W / (m2K)

Top, roof

2.4 cm noise

 $44\ cm$  rafters incl. Doubling + cellulose insulation in the intermediate chambers

2.4 cm economy formwork

1.5 cm plasterboard U-value = 0.096 W / (m2K)

Window frames

"Auer window", PH window by Master company Wolfgang Auer e.U., Solid wood windows in spruce with a frame thickness of 95mm U w value = 0.85 W / (m2K)

Glazing

Triple glazing filled with argon U g value = 0.5 W / (m2K) g value = 50%

Entrance

Solid wood door U d value = 0.8 W / (m2K)

## Real final energy consumption

Final Energy: 36,00 kWhfe/m<sup>2</sup>.year

### Renewables & systems

### **Systems**

#### Heating system:

Heat pump

#### Hot water system:

Heat pump

#### Cooling system:

No cooling system

#### Ventilation system:

Natural ventilation

#### Renewable systems:

- Solar photovoltaic
- Heat pump

#### Environment

### Urban environment

Purgstall an der Erlauf is a nice little town in Southern Austria and is very green.

The railway station is not far away, about a 10 min walk.

But of course, most people come to this building because they suffer from physical discomfort, so they come by car. Therefore we have a parking space directly in front of the building.

 $A\ little\ shopping\ mall\ with\ some\ restaurants\ is\ just\ 5\ minutes\ walk\ away\ from\ the\ Therapie St\"utzpunkt.$ 

#### Costs

# Construction and exploitation costs

Total cost of the building : 501 480 €

### Health and comfort

### Life Cycle Analysis

### Eco-design material :

HFC-free insulation and assembly foams / OI3 Index (OI3BG3, BZ 352.

Because of its environmentally friendly construction, this building has a reduction in CO-2 emissions. Renewable raw materials were used in the shell in particular. Disposal indicator El10 -> 23.69

### Indoor Air quality

#### Result of the airtightness test:

Measured value n50 -> 0.24 1 / h

The heat pump enables the entire house and the water to be heated with it.

Heat recovery is used as the ventilation system

### Comfort

#### Health & comfort :

#### - Accessibility:

An access ramp enables barrier-free access to the house. Also inside, everything was adjusted to meet the different needs of the patients.

- Outside area:

There is parking space for the cars of the patients and therapists directly in front of the building.

As well as several bicycle parking spaces.

- Inside:

All windows have triple glazing and this offer good insulation, both against heat and cold and against noise from outside.

#### Acoustic comfort :

The wood construction ensures a high level of comfort in the acoustics.

#### Outer wall

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Entrance

Solid wood door

U d value = 0.8 W / (m2K)

Daylight factor: All rooms have windows and are flooded with light

### Carbon

#### **GHG** emissions

GHG in use: 17,00 KgCO<sub>2</sub>/m<sup>2</sup>/year

Methodology used : OIB Richtline 6

Building lifetime: 100,00 year(s)

#### Contest

### Reasons for participating in the competition(s)

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We guarantee the exclusion of any substances harmful to the climate or other substances of concern.

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