



Demo Factsheet for IEA ES Task 43

“Storage for renewables and flexibility through standardized use of building mass”, Subtask D



Picture of Demo building

Building Name

Fröschl Haus

Location/Country

Hall in Tirol, Austria

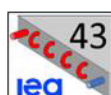
Submitting contact information

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Building information

Building type

- ☒ New construction
- ☐ Renovation/retrofit
- ☐ Prototype/Test building

Year of construction

*for renovation year of renovation

2021

Usage category

*e.g. residential, office, tertiary etc.

office, grocery store

Total conditioned floor area [m²]

*total area conditioned with heat and/or cold

8.792 m²

Total energy consumption [kWh/m²a] and supply temperatures [°C]

*Electricity refers to the energy supply systems. If possible, exclude household electricity.

Heating	Klicken oder tippen Sie hier, um Text einzugeben.	temperature	32/28 °C
Hot water	Klicken oder tippen Sie hier, um Text einzugeben.	temperature	Flow/Return
Cooling	Klicken oder tippen Sie hier, um Text einzugeben.	temperature	17/20 °C
Electricity	Klicken oder tippen Sie hier, um Text einzugeben.		

Energy supply systems

*please list all supply systems (e.g. heat pumps, boilers, the electricity grid), including power ratings for locally deployed technologies

Heat:	2 x 178 kW water-water heat pumps
Cold:	passive cooling with ground water, split AC for server
Electricity:	grid, 70 kWp PV on flat roof

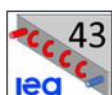
Installed energy storage systems

* please list all energy storage options besides activated building mass, including their capacities (e.g. hot water buffer, battery etc.)

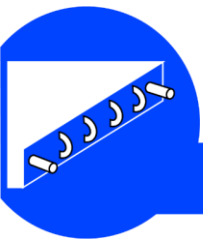
Heat:	5.000 liter hot water buffer
Cold:	Klicken oder tippen Sie hier, um Text einzugeben.
Electricity:	Klicken oder tippen Sie hier, um Text einzugeben.

Other conditioning systems besides TABs [multiple choice]

- ☒ Radiators
- ☒ Conventional floor heating
- ☒ Other:
split AC
- ☐ Ventilation
- ☐ Wall heating



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Dimension of total installed thermal activated building mass [m^2/m^3]

*use one or both of the metrics depending on which information is available

Area [m^2]:

3.700 m^2

Volume [m^3]:

Klicken oder tippen Sie hier, um Text einzugeben.

Location of thermal activated building mass integration

- ☐ Floor
- ☐ Wall
- ☒ Ceiling
- ☐ Other:

Klicken oder tippen Sie hier, um Text einzugeben.

Material(s) used

concrete (30 cm thick slab, 40 cm at ceiling of ground floor)

Functional role of thermal activated building mass [multiple choice]

- ☒ Heating
- ☒ Cooling
- ☐ Energy storage

Is the thermal activated building mass used for flexibility services?

- ☒ No. Because of:
 - ☐ No need for additional storage
 - ☒ Lack of awareness or lack of information on the topic
 - ☐ Lack of social acceptance
 - ☐ Technical feasibility
 - ☒ Financial feasibility
 - ☐ Other reasons

- ☐ Yes. Please describe the use case below:

Klicken oder tippen Sie hier, um Text einzugeben.

Optional additional information

*e.g. further details about the building and its function, feedback from users, residents or owners, project homepage, studies or other information that is not covered by the factsheet