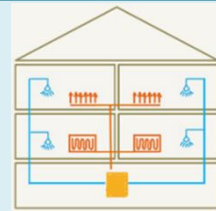


PL001 Heat Pump in the Heart of Poland

On this construction, heat is sourced via boreholes from 200m in the ground.



A1

Key facts

Buildings

Location	<i>Turek, Poland</i>
Construction	<i>2022</i>
Project type	<i>newly done</i>
Heat distribution	<i>underfloor (anhydrite screed)</i>
Heated space	<i>1150 m²</i>
No. of apartments	<i>24</i>
Level of insulation	<i>good</i>

Heat pump and source

Number of	<i>1</i>
Operation mode	<i>-</i>
Installed power	<i>44kW</i>
Heat source	<i>ground</i>
Storage	<i>750l + 300l</i>

Heating system

Heat demand	<i>30,43 kW / (m²a)</i>
Heating temperature	<i>18-24°C</i>

Domestic hot water

Type of system	<i>e.g. central, mix</i>
Max. temperature	<i>54°C</i>

Other information

Coefficient of Performance	<i>-</i>
Refrigerant	<i>R410A</i>
Boreholes	<i>6 x 200m</i>

Lessons learned

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In this new building in Turek, in the very center of Poland, a *Termia Mega* Heat Pump (inverter pump) was installed. It is being sourced by ground heat via means of six 200m deep boreholes. The exit temperature at this depth is circa 12°C. 24 apartments receive both Space Heating and Domestic Hot Water (DHW). For DHW, Fresh Water Stations are installed in each individual apartment.

Within the dwellings, Space Heating is distributed via underfloor heating (anhydrite screed).

