



Apartment building Magnusstrasse - Zürich

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Solar thermal panels attached to the roof

Solar

What is the solution?

The heat energy required to heat the building and provide the domestic hot water is generated by a wood pellet firing system. The combustion gases from the wood pellet boiler are led through a newly created chrome steel chimney over the roof. The fuel storage room is located right next to the heating center. The heat for the rooms is visibly conducted via new risers and distributed using new radiators. These were placed on the inner walls in the area of the current old oil stoves. Horizontal heating walls were installed in the bathrooms.

Why does the solution work in terms of compatibility with conservation and technical aspects?

The solar energy thus obtained can be used both for heating the domestic hot water and for supporting the heating.

Description of the context:

The two street-side facades are subject to preservation requirements and therefore could not be changed. Otherwise, the attic and the courtyard side. Here the roof with eaves could be broken off and put back in the form of prefabricated wooden elements. In this context, the roof could be raised on the courtyard side.

Pros and cons of the solution:

The goal was to create thermally comfortable rooms while being careful with non-renewable energy sources.

Type of data available (level of information, simulation):

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Are there any related publications or pictures of the solution?



Roof view with solar panels ©V+P



Roof view with solar panels ©V+P



Roof view © M. Mobiglia SUPSI

