References

Brusaporto apartments



Uponor involvement

- 1,800 sqm of Uponor Minitec panels | 1,800 sqm of XPS insulation | 18,000 meters of pipe | Uponor Vario M heating circuits

Turn old into new – with Uponor Minitec

Two apartment buildings in Brusaporto, Italy, offer a high level of living comfort after renovation – also thanks to the Uponor Minitec underfloor heating system. With its low installation height, it is ideally suited for retrofitting.
Which heating system is the right one to bring two residential buildings from the 1960s up to modern standards? This was the question facing the owner of the AREA 2.4 property complex in the northern Italian town of Brusaporto. The complex is located in a very quiet area of the town, which is about nine km from Bergamo. It is away from traffic and noise, at the foot of the Brusaporto hill, in a large private park. Both buildings – House 2 and House 4 – each comprise twelve three-bedroom flats with a total area of around 2,100 square metres. During the renovation, the owner placed great emphasis on providing the future tenants with the highest possible level of living comfort: The flats are spacious and elegant. They were equipped with complete kitchens and furnished bathrooms, either as open-space or hidden-kitchen variants. The old heat generator – a 460 kW high-temperature methane gas boiler – was replaced by four condensing boilers with of 35 kW each.

Project Facts:

Location Brusaporto, Italy	Floor space 2100 sqm	Completion 2021
Building Type Multifamily homes	Product systems Radiant Heating & Cooling	Number of floors 3
Address Via Cantalupa 4, 24060 Brusaporto – Bergamo	Website https://www.area2punto4.it/	Project Type Renovation

Partners

Building owner:
private

Building services planning:

Dario Lecchi, Bolgare – Bergamo

Building services installation:
OP Termoidraulica, Cenate Sotto –
Bergamo

optermoidrauilca.com

Good performance with low installation height

This high demand for comfort naturally also applied to the heat distribution. Originally, a classic underfloor heating system was planned. In joint discussions, the client, construction company, specialist planner p.i. Dario Lecchi, installer Paolo Oppizzi and Diego Bossini, Account Manager at Uponor, then made a different decision: they chose the Uponor Minitec solution – a wet construction system with a particularly low installation height, specially designed for retrofitting underfloor heating. "The Minitec system is very thin, but still offers a high thermal output and good sound insulation – the acoustic aspect in particular was very important to the client," says planner Dario Lecchi from Bolgare. The installation company OP Termoidraulica from Cenate Sotto was also very satisfied with the chosen product: "The system is really very easy and quick to install, which is always important in view of the schedule and the budget. I would use it again and recommend it to anyone who does our work," explains installer Paolo Oppizzi. In addition, the project team was able to achieve the desired energy class B with Uponor Minitec. A building in this class consumes less than 50 KW/h of heat per square metre per year, with five cubic metres of natural gas per square metre expected annually.

Many layers on 34 millimetres
Uponor Minitec package with XPS thermal and acoustic insulation with low thickness screed is a certified system. Its good characteristic values are the result of close cooperation between the Uponor, Isolmant and Knauf brands. To combine thermal and sound insulation, the IsolTile acoustic mat from Isolmant is laid first, followed by the XPS extruded polystyrene insulation with a compressive strength of 400 Kpa. The Minitec panels from Uponor are glued on top of this. They consist of a self-adhesive foil element and PE-Xa 9.9 mm system pipes – these are particularly robust and flexible pipes that also allow narrow bending strips. In combination with the self-levelling screed Knauf NE425, this creates a system with a total thickness of 34 mm that achieves a noise reduction value of 21 dB.

Positive feedback
A total of 1,800 sqm of Minitec panels, 1,800 sqm of XPS insulation and 18,000 metres of pipe have been installed in the AREA 2.4 building complex. After laying the heating circuits, the pipe ends were connected to the Uponor Vario M heating circuit distributor. Like any underfloor heating system, the Minitec system is quick to regulate – resulting in a high level of user comfort – and very energy efficient due to the low system temperatures. Uponor was on hand to advise the team throughout the project.

Brusaporto apartments gallery

















The reference in Brusaporto is another result of our many years of collaboration with the Dario Lecchi planning office. Uponor Minitec convincingly fulfilled the client's requirements. The planners and installers were very satisfied, and for me too it was an all-round successful construction site," says Diego Bossini, Account Manager at Uponor in Italy.