References

Perfect for property owners

Uponor involvement

- Project with 77 apartments with Smatrix Base PRO controllers in each apartment
- Modbus RTU
- Other solutions: Uponor Siccus underfloor heating system | Uni Pipe PLUS multilayer pipe for tap water | prefabricated manifold cabinets Ready Port

Perfect for property owners

Building Management system (BMS) in multi-family houses
For the Trosalund project, four multi-family houses with 77 apartments, there was a requirement for all mechanical systems to be able to connect to a building management system, which Uponor´s Smatrix control system for underfloor heating is.
A building management system, also called building automation system, enables monitoring of the building's electrical and mechanical equipment. For example, you can control all ventilation, lighting, fire, security and heating systems remotely via your computer, which makes the property management of buildings much easier. All configurations and adjustments can also be made remotely without an on-site visit.

Project Facts:

Location	Completion
Trosa, Sweden	2019
Building Type	Product systems
Multifamily homes	Control engineering
Project Type	
New building	

Partners

Installer, UFH:Södertälje ROT energi AB
www.rotenergi.se

Installer, drinking water delivery: Sandbäckens AB
www.sandbackens.se

Installation

Uponor Smatrix Base PRO is a wired control system for underfloor heating and cooling. Comfort, usability and temperature control of each individual room are achieved through combinations of the various components. Smatrix Base PRO uses the Modbus or KNX protocols to integrate into a building management system. A property manager can then remotely monitor the heating in all apartments. Uponor Smatrix Base PRO contains auto balancing, which saves energy and makes the installation faster, as no adjustments are needed to the underfloor heating.

Södertälje ROT energi AB is a new partner to Uponor. They are experts in building management systems, such as control, regulation and monitoring systems for ventilation heating and cooling systems. Nicke Olsson, installer at Södertälje ROT energy, installed the system for the properties for the Trosalund project. He had never before worked with a supplier delivering the entire plumbing and heating system such as Uponor.

> ‘‘The project went on smoothly with Uponor because of their commitment and service. Smatrix Base PRO was well suited to that project because other systems in the property, such as ventilation and heat pump, are also based on the Modbus protocol,’’ Nicke Olsson says.

In every apartment there’s a Smatrix Base PRO Controller installed. It is connected to the recessed Smatrix Base thermostats in each room. In the basement of each property there is a substation (DUC), which is the key in the building management system. The Smatrix Base PRO controller communicates with the DUC unit and enables the system to manage the heating remotely, together with other installations such as ventilation, heat pump, etc.

"A building management system is a very good solution for property managing, due to the reason that a big part of the maintenance can be done via a computer. Configuratations and adjustments can be made remotely, without the need of actually visiting the property, Nicke Olsson continues.

The solution that was of the biggest interest to this project was Uponor’s control system for underfloor heating, which is Smatrix Base PRO. It should also be noted that Uponor Siccus underfloor heating system was used for all apartments, Uponor Uni Pipe multilayer pipe for all tap water piping, and prefabricated manifold cabinets for the whole project. Sandbäckens AB was the installer for all HVAC-solutions for the properties at Trosalund.

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