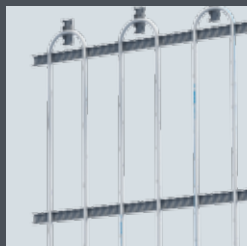


Uponor

Build on comfort  
with Uponor heating  
and cooling systems



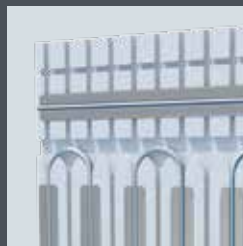
# Select your Uponor wall heating/cooling system for your construction project



## **Uponor Fix wet construction system**

The high-quality PE-Xa pipes are mounted directly on the masonry

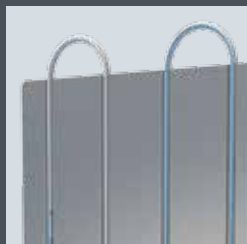
Page 3



## **Uponor Siccus dry construction system**

Profiles thermal insulation bearing element with heat conducting lamellas for even heat distribution

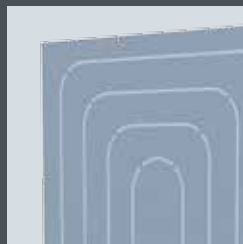
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## **Uponor Siccus SW partition wall system**

Light, ready-to-connect elements with handy dimensions for installation in partition walls

Page 5



## **Uponor Renovis dry construction system**

Gypsum plasterboard with integrated pipes. Modular and ideal for use in renovation

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## Uponor Fix wet system – cosy wall heating and cooling systems

When the task is to control the temperature of rooms cosily and inexpensively through radiant systems, Uponor Fix is a real all-rounder. Depending on the selected pipe dimension, it can be installed and operated for heating and cooling on the wall or – if mainly cooling is required – also as a ceiling system. Ceiling and wall applications can be combined freely. The Uponor Fix wet construction system thus provides double benefits: pleasantly cool in summer, pleasantly warm in winter and flexible enough for temperature jumps in spring and autumn.

### Uponor Fix wet construction system

- Different pipe materials and dimensions with the suitable fastening rails for wall or ceiling installation can be selected
- Thinner plaster layer required than for comparable systems with thicker system pipes
- Can be regulated rapidly thanks to the thin plaster layer
- Can also be used with clay plaster
- Many years of tried-and-tested system pipes and connection techniques
- Low system temperatures, meaning that operation with regenerative energy is also possible

# Uponor Fix – universal application with only a few components



Uponor Fix is available with PE-Xa pipes having the dimensions 14 mm and 9.9 mm as well as with MLCP RED composite pipes having the dimension 14 mm. Meaning that the suitable system can be simply selected for the desired wall or ceiling design and plaster layer thickness. When laid on a wall, the wall rails are first mounted vertically at a spacing of approx. 60 cm on the substrate that is sufficiently level and load-bearing. Subsequently the Uponor heating pipe is pressed into the rails at the calculated spacing and professionally plastered.

This wall structure allows a fixed and stable bond of plaster and wall. Alternatively, Uponor Fix can also be mounted on a suitable wall insulation system. Uponor Fix can be laid on both exterior and interior walls.

**Uponor Fix is used in walls as a radiant heating/cooling system. The PE-Xa system pipes are integrated into the plaster, with the minimal plaster covering allowing very brief response times and thus rapid adaptation to changing operating states.**



*The compact Uponor Minitec connection box is integrated into the wall structure and offers direct connection possibilities for up to three heating circuits.*



*The Uponor Fix wet plaster systems can be installed simply and rapidly with the practical system accessories.*



## Uponor Siccus Wall – and walls become heating systems in next to no time

Wherever low construction heights, a low weight per unit and installation in dry wall systems are the decisive factors, Uponor Siccus is ideal. Uponor Siccus Wall is in its element wherever dry wall construction with wall heating and short construction times are required. Because no construction moisture arises.

Uponor Siccus Wall consists of a laying plate, heat conducting lamellas made of aluminium and the tried-and-tested Uponor Comfort Pipe PLUS PE-Xa pipes or optionally also with the dimensionally-stable Uponor composite pipes. Thanks to its compatible system components, the Siccus Wall system can be combined optimally with the Siccus underfloor heating. This allows large heating or alternatively cooling areas to be realized even in small rooms with a relatively high heat requirement, such as bathrooms. The Uponor Siccus laying plate furthermore contributes towards thermal insulation of the wall surface thanks to its thermal resistance of  $0.622 \text{ m}^2\text{K/W}$ .

### Uponor Siccus Wall dry construction system

- Rapid building progress through dry mortarless construction
- Heat conducting lamellas ensure even heat distribution
- Thanks to low system weight can be used on practically any wall
- Lower heat losses through integrated insulating layer
- Brief heating-up time and rapid regulation
- Can optionally be used with Uponor Comfort Pipe PLUS PE-Xa pipes or composite pipes

**Uponor Siccus Wall is the optimal dry mortarless construction solution for walls that are to be used for heating. Thanks to its low weight it fulfils the requirements that are placed on lightweight construction during renovation.**



## Uponor Siccus SW – integrating wall heating systems simply into partition walls

Thanks to Uponor Siccus SW partition wall elements, lightweight walls, such as room partitions or subsequently erected intermediate walls, can be used simply and without much effort as room heating and/or cooling systems. This allows, for example additional wall heating/cooling surfaces to be created – also during energy-specific retrofit – for even more efficient use of regenerative heat generators.

The pre-mounted elements with the already integrated system pipes are customised to the usual profile distances in partition walls (625 mm, to DIN 18181) and can therefore be integrated lightly into the partition walls. Subsequently the walls are covered with conventional drywall boards. Thanks to the low element weight of about 2.4 kg/unit, one-person mounting is possible.

### Uponor Siccus SW dry construction system

- Subsequently erected partition walls also become efficient heating/cooling surfaces through Siccus SW
- Light prefabricated elements with integrated Uponor Comfort Pipe PLUS pipes 4 x 2 mm and handy dimensions for one-person mounting
- Norm-compliant partition spacing of 625 mm to DIN 18181
- Brief heating-up time and rapid regulation
- Can be used both in new buildings as well as in renovation work for heating/cooling.

**Thanks to the installation of Uponor Siccus SW partition walls become heat transfer surfaces. Uponor Siccus SW allows clear separation of the various functions. Uponor Siccus SW can be used both for heating and for cooling in different building types.**



## Uponor Renovis dry system – modular and energy-efficient

Especially when renovating the subsequent installation of a radiant heating/cooling system is often very difficult or impossible to realise in wet construction. This is where Uponor Renovis has its strengths.

Thanks to its dry mortarless construction and its modular structure Uponor Renovis is outstandingly suitable for the energetic (partial) renovation and upgrading of existing buildings. In this context Uponor Renovis fulfils two requirements at the same time: on the one hand it ensures cosy room temperatures throughout the year as a heating/cooling panel, on the other hand the surface of the panels can be used directly for the substrate for the new wall covering. Since Uponor Renovis only requires very low operating temperatures of approximately 35 °C, it is the perfect heating system in combination with alternative heat generators such as condensing boilers, heat pumps and solar heating support.

Thanks to its large heat-transferring surface, Uponor Renovis is also very suitable for cooling rooms in summer, for example in combination with a reversible heat pump. If a brine water heat pump with geothermal probes is used, the water temperature in the geothermal probe is often enough to cool the rooms sufficiently without additional cooling energy.

### Uponor Renovis dry construction system

- Ready-to-connect gypsum plasterboard 15 mm with integrated pipe register of Uponor PE-Xa pipe
- High heating outputs
- Heating panel and new wall/ceiling surface in one
- Mounting on common CD Profiles 60/27, optionally with customer installed insulating layer
- Simple interconnection of individual modules by means of Tichelmann ring circuits
- Uponor PE-Xa pipings in the modules and as supply lines with Q&E connection technique

# Uponor Renovis – the solution for energetic retrofit



**The Uponor Renovis radiant heating/cooling system consists of a gypsum plasterboard in which the Uponor PE-Xa pipes have already been integrated in the factory. It allows the temperature control of rooms via walls and ceilings in dry mortarless construction. An extensive Uponor range of products is available for professional interconnection of the panels in accordance with the Tichelmann principle.**

The elements can be mounted with a substructure consisting of common CD Profiles 60/27 onto almost any substrate to the wall – like a drywall panel. After the connection joints have been filled and ground, the Renovis elements can simply be processed further.

Uponor Renovis consists of only a few perfectly matched components. The main components are the only 15-mm thick Renovis panels in three sizes with the already integrated PE-Xa heating pipes 9.9 x 1.1 mm. During the dimensioning of the pipe lengths, the lengths required for connection to the supply line have already been taken into consideration. The supply line is usually laid according to the Tichelmann principle and also consists of PE-Xa pipes.

Uponor Q&E fittings are used for the connection and interconnection of the pipes. This is a connecting technique of Uponor, in which the pipe end with locking ring is widened mechanically, and then pushed onto the fitting. There it shrinks back to the fitting contour by itself thanks to the "memory effect" and seals. Uponor Renovis is completed by an extensive range of distribution and regulation components that are, for the greater parts, also used in other radiant heating/cooling systems of Uponor.



*Uponor Renovis panels for use as individual heating and cooling panels, for installation on walls or ceilings in buildings, equally suited for renovation and new buildings. Mounting on standard profile structure CD 60/27.*



*Uponor Renovis connection set For connecting Uponor Renovis panels to the low-temperature heating system by means of Quick & Easy connection technology, for example in accordance with the Tichelmann principle.*



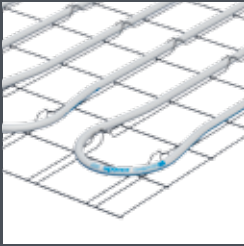
*Uponor Quick & Easy connection technology with the M12 widening tool*



*Uponor Fluvia T Push-12 mini pump groups for individual rooms and small heating surfaces. Room temperature regulation optionally via thermostat head with capillary room temperature sensor or Uponor room sensor (wire-based or wireless) with thermal drive. Ideal for connecting the radiant heating to an existing high temperature system.*



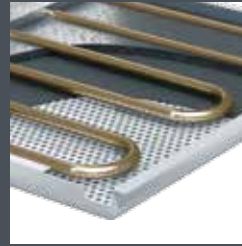
# Select your Uponor ceiling heating/cooling system for your construction project



## Uponor Contec (TABS)

Modules for thermal activation of concrete components, as Contec ON near to the surface and controllable

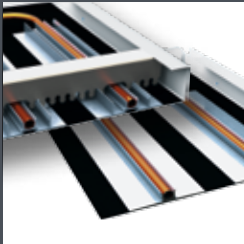
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## Uponor Varicool Carbon A

Panelled ceiling elements for high cooling loads. With integrated pipe registers, embedded in a matrix of expanded natural graphite

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## Uponor Varicool Spectra

Heating/cooling elements for closed metal ceilings or as freely suspended ceiling sails

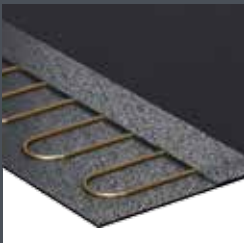
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## Uponor Comfort Panel

Ready-to-connect panelled ceiling heating/cooling elements. Also for subsequent installation in standard panelled ceiling constructions

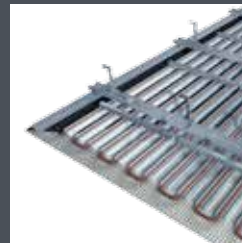
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## Uponor Varicool Carbon S

Seamless heating/cooling ceilings with heat conducting layer made of expanded natural graphite

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## Uponor Varicool Uni

Heating/cooling system as gypsum plasterboard ceilings with jointless surface

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## Uponor Renovis

Ready-to-connect gypsum plasterboard elements with integrated pipings for wall and ceiling dry construction during renovation

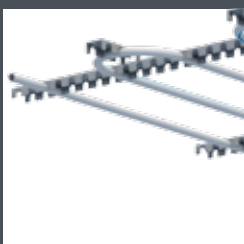
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## Uponor Teporis

Gypsum plasterboard elements with integrated pipings and rear heat insulation for suspended ceilings

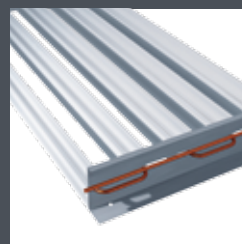
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## Uponor Fix 9.9

Wet plaster rail system for ceiling heating/cooling system with minimal plaster thickness

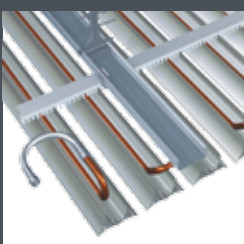
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## Uponor Varicool Opti Y

Predominantly convective high-output lamella system for cooling rooms. Optionally visible or concealed mounting above grid ceilings

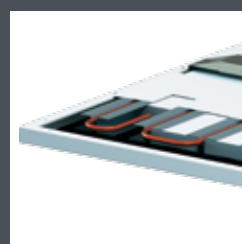
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## Uponor Varicool Softline 4

High-output ceiling cooling system as design elements without separate ceiling cladding

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## Uponor Varicool Velum

Elegant and compact heating and cooling ceiling sails. With excellent acoustic features for echo reduction

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## Uponor Contec – building temperature control with thermally active concrete components

Concrete components such as concrete ceilings can be used for inexpensive cooling or heating of multi-storey buildings, such as office and commercial buildings. Uponor Contec registers through which water flows are inserted into the concrete ceiling to thermally activate the components. In the process Uponor Contec does not only use the ceiling surfaces for heat exchange, but also the storage capability of the concrete ceiling for time-delayed "loading" of the ceiling with regeneratively gained cooling, for example through the reverse cooling with cold outdoor air overnight. The resultingly cooled ceiling can then absorb heat from the building again during the day.

Concrete core activation is suitable for buildings with a low to medium-sized cooling load in order to counteract heating up in summer. In buildings with medium-sized to high cooling loads the concrete core activation can be used to cover the base load with the aim of dimensioning any air-conditioning unit additionally needed for the minimum air exchange smaller.

### Uponor Contec concrete core activation

- Structural element piping system for new office and commercial buildings
- Higher thermal comfort throughout the year at lower investment and operating costs
- Optimal possibilities for using regenerative energy sources
- Conforms to the sustainability certificates for buildings, for example LEED, BREEAM and DGNB

# Uponor Contec – innovative, eco-friendly and inexpensive

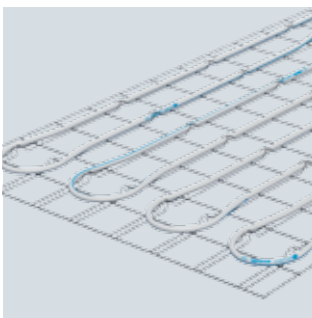


The Uponor Contec modules consist of special pipe bearing mats with formed-in pipe clips that are equipped in the factory with the rugged PE-Xa pipe 20 x 2.3 mm. Each Uponor Contec module contains already integrated connecting lines for connection to the distribution line or to a distributor. In the planning phase the surfaces to be used of the respective building project are determined and equipped with suitable Contec modules. Modules in different sizes are available in order to adapt to the respective circumstances of a building project.

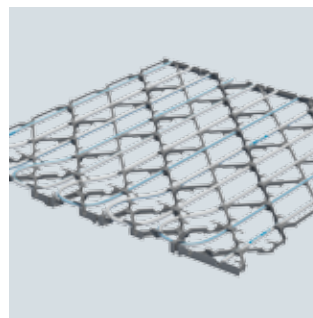


The near-surface system Uponor Contec ON can be used as a stand-alone system or in combination with Uponor Contec in order to compensate peak loads or when a room-specific regulation of individual rooms or zones is required. The near-surface concrete core activation Uponor Contec ON responds rapidly to load changes and allows relatively high cooling and heating outputs. In addition it is possible to integrate thermal socket connectors Contec TS as well into the ceiling. The sophisticated design of the socket connectors makes it possible to subsequently connect ceiling sails to the operational system, without having to drain the piping system.

**Uponor Contec is used for the thermal activation of building components made of concrete (TABS). This allows these components to be used for heating and cooling purposes.**



*The Uponor Contec TS modules are prefabricated object-specifically in different sizes in the factory and can be inserted into almost any concrete ceiling and wall structure.*



*The Uponor Contec ON plastic special pipe carrier guarantees the exact height of the pipe in a level of a few millimeters above the ceiling underside. At the same time it acts as the spacer for the lower reinforcement.*



*Uponor Contec TS thermal socket connectors for the combination of Contec concrete core activation with additionally thermally active ceiling sails or high-output cooling ceiling elements.*



*With Contec TS ceiling sails can also be connected subsequently to the piping system without the pipe having to be emptied.*



## Uponor Varicool Carbon A – heating and cooling on graphite basis

Uponor Varicool Carbon A is a water-supported high-output heating and cooling ceiling system. The heating/cooling register consists of pipes that are embedded in a matrix of expanded natural graphite and are connected securely with the ceiling cladding. The system operates mainly in accordance with the radiation principle which offers high room comfort, optimal energy efficiency and a draught-free feel-good atmosphere.

The ceiling system is characterised by manifold application and design options. It is preferably used in office and commercial buildings, in sales outlets as well as in training and conference rooms with high thermal loads.

### Uponor Varicool Carbon A

- Architecturally appealing ceiling surfaces
- Combination of thermally active and passive ceiling areas possible
- Optimally suited for renewable energy sources, through higher system temperatures in cooling cases or lower system temperatures in heating cases
- Combination with lights of different designs as well as other ceiling installations and structures such as sprinklers are possible without problems
- Up to 20% lower configuration compared to conventional cooling ceilings, and thus reduced system costs possible



## Uponor Varicool Spectra – heating/cooling ceiling system as a closed metal ceiling

Uponor Varicool Spectra is a water-supported heating and cooling ceiling system at which the heating/cooling register can be connected securely through an innovative magnetic connection (Uponor Varicool Spectra M) or through a bonding connection (Uponor Varicool Spectra K) with the ceiling cladding. The system operates as a closed metal cooling ceiling mainly in accordance with the radiation principle which offers high room comfort, optimal energy efficiency and a draught-free feel-good atmosphere. In addition good room acoustics result from a specially developed acoustic fleece that is bonded into the perforated ceiling cladding.

The ceiling system is characterised by manifold application and design options. It is preferably used in office and commercial buildings, in sales outlets as well as in training and conference rooms, as well as treatment rooms in hospitals.

### Uponor Varicool Spectra

- Architecturally appealing ceiling surfaces
- Good heating and cooling outputs through outstanding heat transfer between profile system and ceiling cladding
- Combination of thermally active and passive ceiling areas possible
- High degree of sound absorption through perforated metal ceiling boards with acoustical fleece
- Optimally suitable for renewable energy sources, for example geothermal energy and heat pumps
- Combination with lights of different designs as well as other ceiling installations and structures such as sprinklers are possible without problems

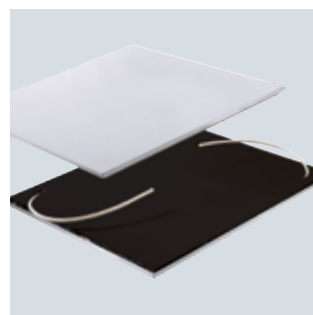


## Uponor Comfort Panel – optimal cosiness

The Uponor Comfort Panel is a thermally active ceiling panel system installed in suspended ceilings. It is used in new buildings as well as renovations, for cooling but also heating. The thermally active panels are inserted easily and rapidly into a visible metal rail substructure like at a conventional grid ceiling and connected at the pipe end with each other. Ceiling areas without thermal activation are covered with visually identical passive panels.

### Uponor Comfort Panel

- Cooling output up to 92.5 W/m<sup>2</sup> at 10 K sub-temperature possible
- Simple and rapid mounting
- Compatible with existing metal rail constructions
- Homogeneous view of ceiling from below



*Visually appealing view from below and above with the connection points*  
 625-mm grid or  
 615 x 1240 mm (two-field grid) or  
 615 x 615 mm (one-field grid)  
 600-mm grid or  
 590 x 1190 mm (two-field grid)  
 or 590 x 590 mm (one-field grid)



## Uponor Varicool Carbon S – the jointless high-output system for heating and cooling

Uponor Varicool Carbon S is a water-supported heating/cooling ceiling system that mainly operates in accordance with the radiation principle. Joint- and direction-less ceiling surfaces can be created with this design for particular architectural demands.

The structure is adapted to the wishes for flexible room design, high heating and cooling output and difficult room geometries with unvarying functionality. Uponor Varicool Carbon S allows a pleasant room climate. Lighting elements and further components, such as loudspeakers, sprinklers, etc., can be integrated into the ceiling without problems. In view of the high output capabilities only small thermally active surfaces are required. Thermally passive areas can be closed by means of common and inexpensive gypsum plasterboards.

### Uponor Varicool Carbon S

- Very high heating and cooling output through the usage of expanded neutral graphite for thermal activation
- Suitable especially for areas with very high thermal loads and highest architectural requirements
- Brief response times at homogeneous heat distribution across the surface
- Optimally suited for renewable energy sources, through higher system temperatures in cooling cases or lower system temperatures in heating cases
- Processing as for gypsum plasterboards
- Passive areas possible with common gypsum plasterboards
- Ready-to-mount boards with very low weight
- Integration of lights, air outlets, fire alarm devices, sprinklers, loudspeakers, etc. possible



## Uponor Varicool Uni – the jointless gypsum board heating/cooling system

The water-supported cooling and heating ceiling system Uponor Varicool Uni, that mainly operates in accordance with the radiation principle, is characterised by manifold application and design options. Joint- and direction-less ceiling surfaces can be created with this design for particular architectural demands. The structure is adapted to the wishes for flexible room design even at difficult room geometries with unvarying functionality.

The Uponor Varicool Uni cooling and heating ceiling system allows a pleasant room climate and excellent room acoustics. Due to the design principle the fastening profiles for the ceiling cladding are not required in the area of active cooling areas. This results in a larger ceiling surface that can be activated for higher cooling and heating outputs.

Lighting elements and further components, such as loud-speakers, sprinklers, etc., can be integrated into the ceiling.

### Uponor Varicool Uni

- High sound absorption and no draughts
- Optimally suitable for renewable energy sources
- Integration of further ceiling installations possible, for example lights, fire alarms, air outlets
- High heating and cooling outputs through the activation of the ceiling areas across the entire area





## Uponor Renovis – rapid installation at the ceiling and maximum flexibility

Uponor Renovis consists of a 15-mm thick gypsum plasterboard in which the high-quality Uponor pipes have already been integrated in the factory. The elements can be mounted with a substructure consisting of common CD profiles onto almost any surface to the ceiling – like a drywall panel. Tedious demolition work is therefore not required. This means that an existing property can be refurbished rapidly even while it is being used. After the connection joints have been filled and ground, the Uponor Renovis elements can be processed further directly.

With Uponor Renovis individual rooms can be fitted with a radiant heating. The connection with a simple Tichelmann distributor furthermore reduces the work required for designing and dimensioning the heating circuits, the regulation and the installation.

### Uponor Renovis

- Installation on all ceiling surfaces
- Integration of air outlets, light sources and other electrical devices possible
- Room comfort at low temperature of the heating system
- Can be used individually at walls and ceilings for heating and cooling



## Uponor Teporis dry plasterboards – ideal for new buildings and renovation

Uponor Teporis dry mortarless construction is a time-saving solution for the installation of panel heating and cooling systems preferably on the ceiling. Mounted on a metal or wooden substructure in dry mortarless construction the construction time is reduced notably in comparison to conventional systems. The tried-and-tested Uponor system pipe is already integrated completely into the system board for heating and cooling. A barrier located above the plasterboard prevents unwanted energy losses to the ceiling cavity. The low pipe spacing of the pipings ensures that the heating or cooling energy is emitted rapidly to the room.

### Uponor Teporis

- Heating and cooling without distracting fan noise
- Can be used both in new buildings as well as in renovation work
- Low system temperatures, meaning that operation with regenerative energy is also possible
- Fire behaviour: B-s1, d0 (tested in accordance with standard EN 13501-1:2007)



## Uponor Fix 9.9 – perfect for effective ceiling temperature control

When the task is to control the temperature of rooms cosily and inexpensively through panels, the Uponor Fix 9.9 wet system is a real all-rounder. It can be used both for heating and cooling as well as at walls and ceilings. This is particularly interesting at predominant cooling requirement. If the emphasis lies on heating, the wall surfaces are outstandingly suitable for room temperature control.

Thanks to the low plaster covering, the Uponor Fix 9.9 wet system can furthermore be regulated very rapidly and simply. Ceiling and wall applications can be combined freely. The Uponor Fix wet system provides double benefits: pleasantly cool in summer, pleasantly warm in winter and flexible enough for temperature jumps in spring and autumn.

### Uponor Fix 9.9

- Low structure height and thinner plaster layer through small pipe dimension
- Universal system for the ceiling and wall mounting with only a few optimally matched system components
- Many years of tried-and-tested and rugged Uponor Comfort Pipe PE-Xa pipe
- Rapid regulation through low plaster cover
- Low system over- and undertemperatures, meaning that operation with regenerative energy is also possible



## Uponor Varicool Opti Y – the lamella cooling system for maximum cooling output

Uponor Varicool Opti Y is a predominantly convective high-output lamella system for cooling rooms. The lamella cooling elements are suitable for use as individually suspended ceiling modules, as large surface lamella ceiling or for concealed mounting above grid ceilings for rooms of all types.

Particular features are the high area-specific mainly convective cooling output and the large free ceiling cross-section. Sprinklers, smoke detectors, air outlets, lighting fittings, etc. can be installed in the intermediate areas between the lamellas. A combination with any air guidance systems is furthermore possible. The modularly structured ceiling system is also suitable for covering heating requirements.

### Uponor Varicool Opti Y

- High, silent cooling output without draughts
- Lamella spacings of 100 mm to 150 mm allow the combination with ceiling installations such as sprinklers, lighting fittings, etc.
- Can be combined with any ventilation systems
- Depending on the visual requirements visible or concealed mounting is possible
- Modules optionally available from folding frame



## Uponor Varicool Softline 4 – aluminium panelling ceiling

The heating/cooling ceiling Uponor Varicool Softline 4 is a visually very appealing aluminium panel ceiling that is conceived for standard outputs of 146 W/m<sup>2</sup> for cooling cases and 142 W/m<sup>2</sup> in heating cases for the compensation of high thermal loads. The extraordinarily high output for cooling ceilings is due on the one hand to the good thermal conductivity properties of the aluminum profiles that ensure a low temperature at the underside of the ceiling and thus high radiation heat exchange. On the other hand the relatively high share of joints favour the natural room air flow of the profiles, resulting in strengthening of the convective cooling effect.

Uponor Varicool Softline 4 is suitable as a design element for the interior design, meaning that a separate ceiling cladding is not required. The visible profiles can be powder-coated or anodized for highest demands. All colours can be selected freely in accordance with the RAL tones.

Glare-free illumination of the room is possible through the high light reflection of the profiles, in particular if metallic anodized colours are chosen.

### Uponor Varicool Softline 4

- Architecturally appealing ceiling appearance
- Can be combined with concrete core temperature control
- Very high cooling and heating output
- Can be combined with different lighting and ventilation concepts
- Acoustically advantageous through curved profile structure and joints between the profiles
- Optionally anodized or coated profile surface for highest aesthetic demands



## Uponor Varicool Velum – the elegant and compact high-performance ceiling sails

Uponor Varicool Velum heating and cooling ceiling sails combine a high cooling output with draught-less cosiness, are sound-absorbing and reflect diffuse light onto the workplace. The elegant, compact design fulfils high architectural demands and blend harmoniously into the modern office architecture.

The extremely flat Uponor Varicool Velum ceiling sail that seems to float in the room can be used for heating and cooling in accordance with the radiation principle. The mild radiation heat results in a particularly even heating of the room which is felt as particularly pleasant by humans. In cooling operation the ceiling sails acts as a radiation absorber that directly absorbs the heat to be removed from the room. The rising room area is cooled further on its surface.

### Uponor Varicool Velum

- Extremely flat structure
- High cooling output
- Utilisation of the storage mass of the concrete ceiling (hybrid ceiling sail)
- Good room acoustics through integrated sound-absorbing elements
- Pleasant draught-less room climate without dust circulation
- Visually appealing design



## Uponor Varicool Spectra – high-output ceiling sails

Thanks to the visually appealing construction and filigree realisation the "free floating" Uponor Varicool Spectra heating/cooling ceiling elements blend harmonically into their surroundings and set architectural accents. Uponor Varicool Spectra is characterised by manifold application and design options. It is used as a ceiling sail preferably in office and administrative buildings, in sales outlets as well as in training and conference rooms, either as a full-load system or as a peak-load system.

Thanks to the low weight of the individual parts and the practical dimensions, the cooling ceiling sails can be mounted simply and flexibly.

### Uponor Varicool Spectra

- High area-specific cooling and heating output
- Individual room temperatures through temperature control by zone at island solutions.
- High user acceptance and satisfaction
- Optimally suitable for renewable energy sources, for example geothermal energy and heat pumps
- Filigree and visually appealing design of the sails
- Can be combined with concrete core temperature control for peak-load coverage and sound absorption
- Concealed hydraulic connection of the ceiling elements into the basic ceiling via thermal socket-outlets, such as Contec TS



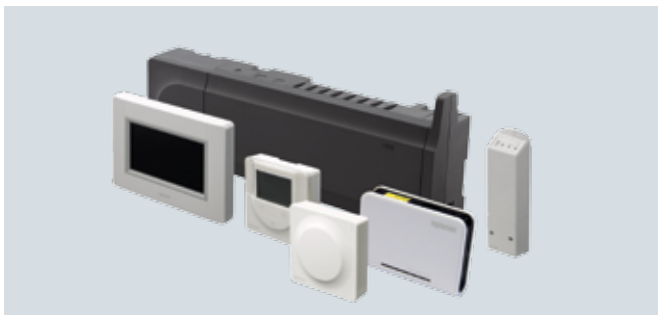


# Intelligent supplements for overall radiant heating and cooling

Because we attach great importance to the subject we have drawn up a separate brochure. There we inform about Uponor manifolds, pump groups for the supply, room temperature control via wireless and many further possibilities from the extensive range of products of the Uponor manifolds and controls technology.

## The Uponor distribution and regulating technology

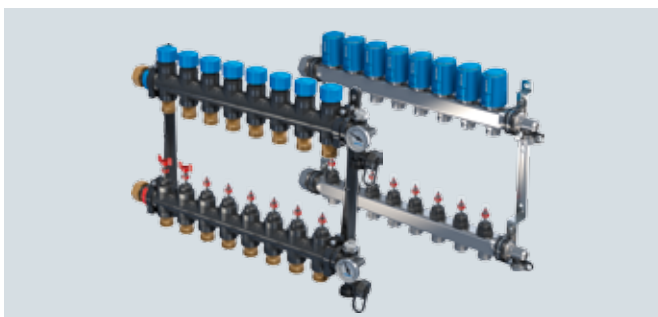
- Rapid installation, minimal cabling
- Flexibility through modular system structure
- Low maintenance level
- No manual balancing at the manifold required
- Simple and intuitive operation
- Software upgrade options
- First-class temperature control for more comfort and less energy consumption



*Uponor Smatrix – completely integrated control systems for radiant heating and cooling with intelligent room, zone and supply temperature controls. Modular and extensible systems that are easy to install and that fulfil the requirements of each and every building project. With autobalancing technology that can save up to 20 % of the energy, cooling function with condensation protection and the option of remote access through the Uponor Smatrix App.*



*Uponor Comfort Port – prefabricated manifolds to customer requirements save time and mounting costs. With our controls stations pre-mounted in the factory about 250 actions less are required on the building site. For professional handicraft businesses who are often subjected to time and cost stress during order realisation pre-mounting is a clear plus in time and cost efficiency.*



*Uponor manifolds made of plastic or stainless steel, for every application from residential construction through to industry application including connection fittings, manifold cabinet systems, controls and shut-off valves, and many more.*



*Uponor Fluvia pump groups – compact supply temperature regulating stations for any application which supply the required water temperature to the respective radiant heating/cooling systems of Uponor.*

# Uponor

Everything you need in one App:  
Uponor PRO



**Uponor Corporation**

Äyritie 20  
01510 Vantaa  
Finland

T +358 (0)20 129 211  
F +358 (0)20 129 2841

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[www.uponor.com](http://www.uponor.com)