

Uponor

# Build on Uponor with Comfort Port

Preassembled manifold cabinets  
for time- and cost-efficient installation



# Prefabricated and ready for installation on the building site

Uponor Comfort Ports are ideally suited for use in multi-family-houses or other residential buildings with high size of apartments due to enormous time and cost savings. Assembled according to customer specifications the Comfort Ports are delivered ready-to-install to the building site. Reduction of installation time, pre-wired actuators and control units, or marking of loops are only few of the advantages of pre-assembling in Uponor factory which avoids significantly installation errors on site.

**One package for the entire Comfort Port instead of 30 individual packages for each distributor**

The cabinets and the packaging are labelled with name of location and the relevant construction site, so they can be commissioned and installed quickly and without risk of confusion.

## Uponor Comfort Ports

- Saving installation costs and time on site
- Improved site efficiency due to optimized material flow
- Quality assurance through standardized prefabrication in the factory
- Avoid installation errors on site
- Secure selection of the required components
- Secure price-calculation

Comfort Ports are available for all common mounting situations, and upon request, also with additional fittings, such as heat meters and room control components from the Uponor Smatrix range.

Save hundreds of handling steps by using Uponor Comfort Ports



# High quality for long-term safety



- 1** On-wall and in-wall distribution cabinets made of galvanized steel sheet, for on-wall-installation with a depth of 140 mm and in-wall installation with depth of 80 and 110 mm.
- 2** Integrated spirit level for easy levelling (only one person required).
- 3** Preassembled Uponor Smart S stainless-steel manifold or Uponor Vario M polyamide manifold, manifold bar with integrated valves, connection right or left with flat sealing supply with- or without flow indicator (lockable, 0 – 5 l/min) for balancing and shutoff, return valves prepared for connection to actuator 230 V (1087763), or 24 V (1077778) integrated air&fill&drain vents in supply and return. Primary flat sealing G1, secondary loop connection G $\frac{3}{4}$ " eurocone. Loop pitch 50 mm; header pitch 200 mm. Max. operating pressure: 6 bar by temperature 60 °C. Number of heating loops: 2 – 15 at (Vario M Manifold), or 2 – 16 (Smart S Manifold).
- 4** Configurable with Uponor Smatrix room temperature control, wired or wireless-controlled, with Autobalancing function.
- 5** Preassembled earthed power socket.
- 6** Choice of 4 different connection sets.

- Smart S manifold made of stainless steel or...
- Vario M Manifold made of reinforced polyamide
- With / without flow indicators
- Choice of connection sets for heat meter
- Cabinet door made of steel sheet or plastic, white painted
- Uponor Smatrix room temperature control (wired or wireless)
- Thousands of possible configurations available

Clear benefit in terms of time and cost efficiency for skilled installers, who are often under time and cost pressure.

# Unpack, connect and you're done

## **Saving 2.5 hours of installation and set-up time**

due to prefabrication of manifolds, connection and metering sets, cabinets and complete installation and wiring of the control units and actuators. Easy assembly of the ready-to-install due to tool-free levelling (spirit level).

## **Avoid error sources on site**

due to installation and wiring of the control components. All actuators are allocated to the right rooms or zones. Labels are applied to the right actuators. Factory tests of the actuators ensure that installation can proceed without error: plug and play! For the electrical connection, only a power supply cable needs to be connected to the factory-fitted earthed power socket.

## **Optimum material flow and service**

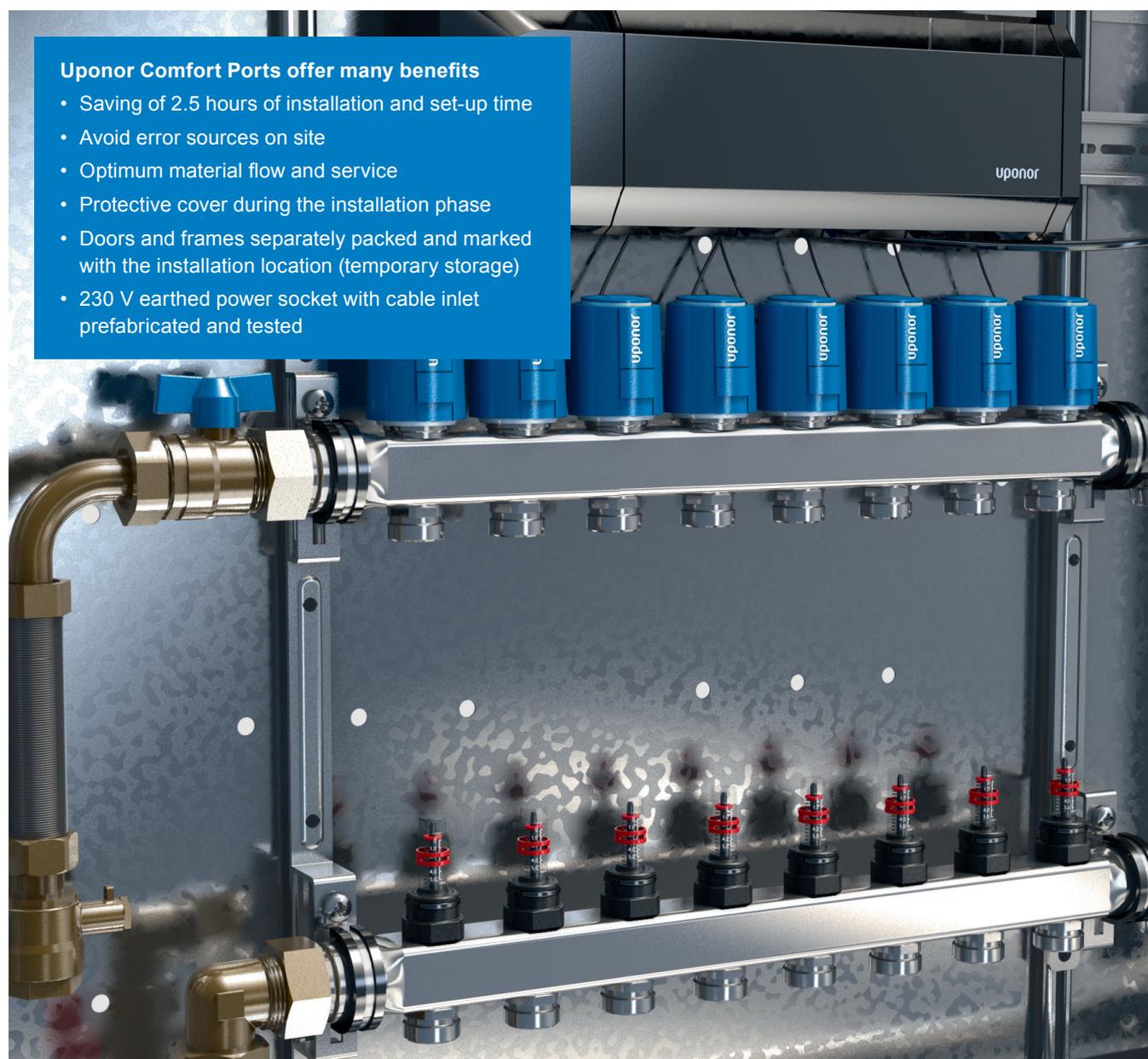
One package for the entire distribution station instead of 30 individual packages for each distributor simplify the flow of materials on the building site. The manifold cabinet and packaging are labelled with the installation location according to the customer specification, so that they can be installed quickly and without risk of confusion.

## **Protection of the installation**

The protective cover protects the manifold cabinet against dust and dirt during construction. Front door and frame, which are only needed for later closing, are well protected in an outer packaging.

### **Uponor Comfort Ports offer many benefits**

- Saving of 2.5 hours of installation and set-up time
- Avoid error sources on site
- Optimum material flow and service
- Protective cover during the installation phase
- Doors and frames separately packed and marked with the installation location (temporary storage)
- 230 V earthed power socket with cable inlet prefabricated and tested



# Electrical wiring included

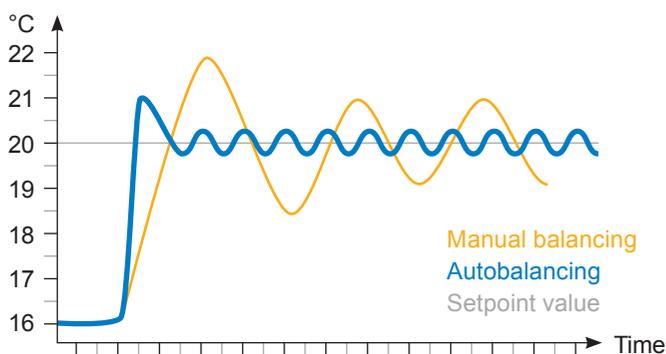
## Pre-wired Uponor Smatrix Controls including Autobalancing function

Smatrix is a fully equipped control system for radiant heating and cooling with supply temperature control as function of room temperature.

The unique Autobalancing technology eliminates the need for manual balancing of the loops. The smart system accurately determines and controls the exact energy needed for an optimal room temperature. The result is a high comfort of under-floor heating and cooling by reduced energy consumption.

### Comfort Ports can be optionally delivered with pre-wired Uponor Smatrix control technology:

- Uponor Smatrix optimizes the energy efficiency of radiant heating and cooling system
- The Smatrix Wave PLUS version manages wireless control and remote control, whether you're at home or on the road
- The innovative Autobalancing feature ensures the simplest possible installation, set-up and operation



The Uponor Smatrix auto-balance feature saves energy and costs.

While the manual hydraulic balancing only takes account on initial conditions, the Autobalancing function automatically adjusts the temperature changes in the system or room, without any need for complex recalculation or adjustment by installer.

You win time, energy and costs – you win comfort.

	Basic functions			Comfort functions				Setting				
	Autobalancing	Cooling function	Modular design	U@home	SMS module	Trend visualisation	Comfort setting	Data backup	Supply diagnostics	Heat pump module SE	Room bypass	Room check
<b>Smatrix Wave PLUS</b> Radio thermostat with touchscreen operation	■	■	■	■	■	■	■	■	■	■	■	■
<b>Smatrix Wave</b> Radio room control	■	■	■		■							
<b>Smatrix Base</b> 24 V cabled individual room temperature control	■	■	■		■							
<b>Base</b> 230 V cabled individual room temperature control												

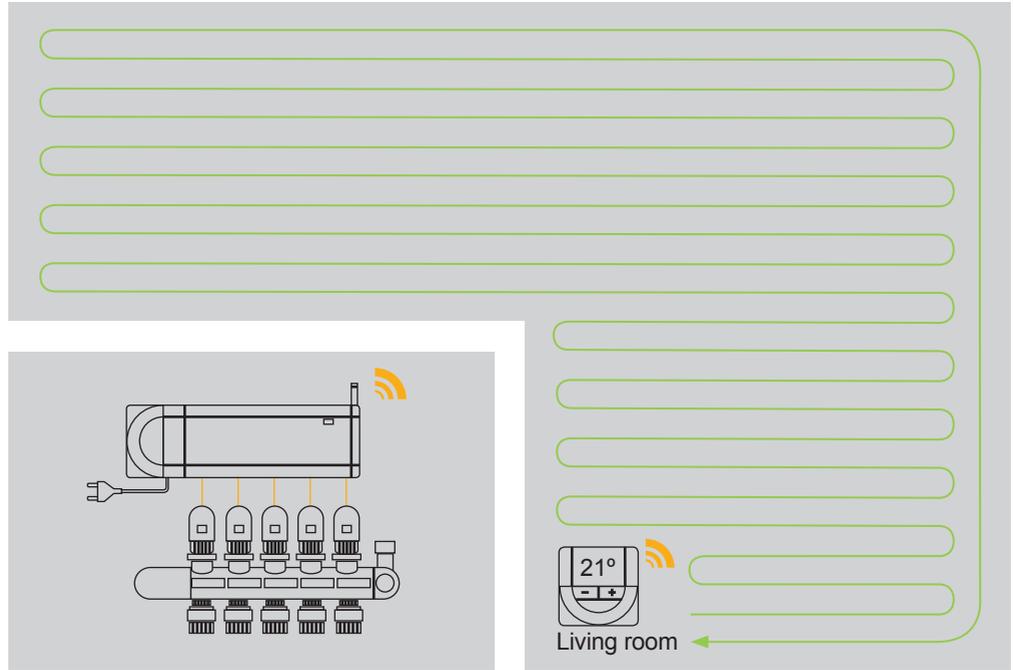
Overview of Uponor Smatrix control technology and available functions.

# Autobalancing: permanent self optimizing temperature control



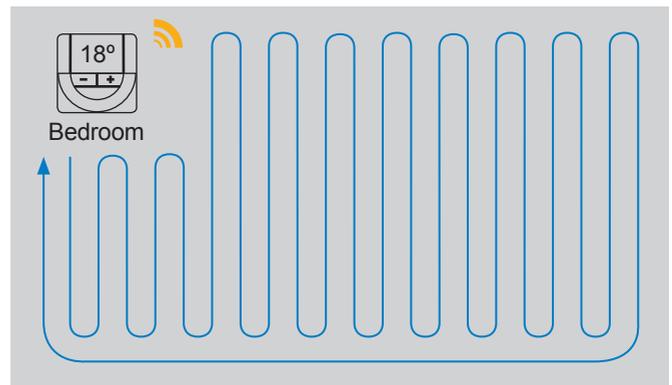
## Learning mode

open  
closed



## Balancing of short loops

open  
closed

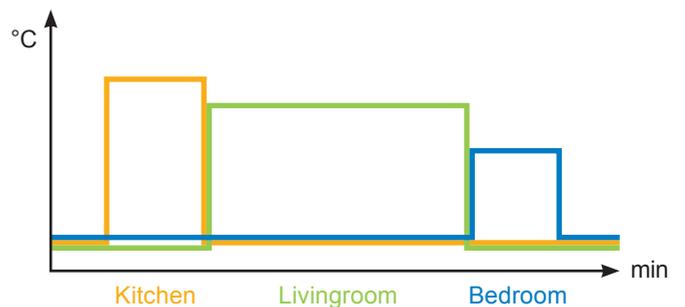


## Balancing of long loops

open  
closed

### Example: Set of Auto-balancing

All UFH loops will be automatically balanced (closed and opened) at the right time and according to the heat demand of each room.



# Variations of Comfort Port



## Variance 1

### Vertical w/o metering set

Manifold with ball valve 3/4", vertical connection.  
Height 740 – 855 mm.

Loops	Width [mm]	Config. number stainless steel	Config. number polyamide
2	410	102-41	1102-41
3	510	103-51	1103-51
4	510	104-51	1104-51
5	610	105-61	1105-61
6	610	106-61	1106-61
7	760	107-76	1107-76
8	760	108-76	1108-76
9	760	109-76	1109-76
10	910	110-91	1110-91
11	910	111-91	1111-91
12	910	112-91	1112-91



## Variance 2

### Horizontal w/o metering set

Manifold with ball valve 3/4", horizontal connection.  
Height 740 – 855 mm.

Loops	Width [mm]	Config. number stainless steel	Config. number polyamide
2	410	202-41	1202-41
3	510	203-41	1203-41
4	510	204-51	1204-51
5	610	205-51	1205-51
6	610	206-61	1206-61
7	760	207-61	1207-61
8	760	208-76	1208-76
9	760	209-76	1209-76
10	910	210-76	1210-76
11	910	211-91	1211-91
12	910	212-91	1212-91

Standard versions up to 12 loops. Special versions up to 20 loops (stainless steel) and 15 loops (polyamid) on demand.



#### Variance 3

## Vertical with metering set

Manifold with metering set 3/4", vertical connection.  
Height 740 – 855 mm.

Loops	Width [mm]	Config. number stainless steel	Config. number polyamide
2	410	302-41	1302-41
3	510	303-51	1303-51
4	510	304-51	1304-51
5	610	305-61	1305-61
6	610	306-61	1306-61
7	760	307-76	1307-76
8	760	308-76	1308-76
9	760	309-76	1309-76
10	910	310-91	1310-91
11	910	311-91	1311-91
12	910	312-91	1312-91



#### Variance 4

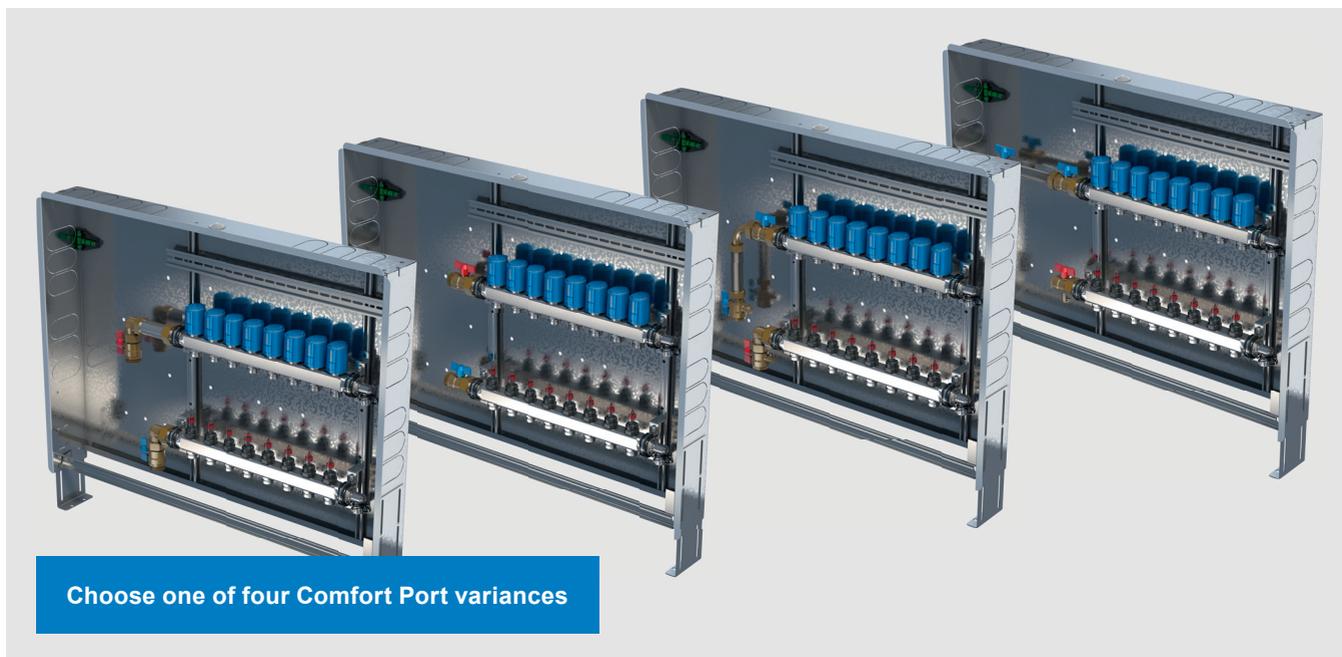
## Horizontal with metering set

Manifold with metering set 3/4", horizontal connection.  
Height 740 – 855 mm.

Loops	Width [mm]	Config. number stainless steel	Config. number polyamide
2	410	402-61	1402-61
3	510	403-61	1403-61
4	510	404-76	1404-76
5	610	405-76	1405-76
6	610	406-76	1406-76
7	760	407-91	1407-91
8	760	408-91	1408-91
9	760	409-91	1409-91
10	910	410-10	1410-10
11	910	411-10	1411-10
12	910	412-10	1412-10

Standard versions up to 12 loops. Special versions up to 20 loops (stainless steel) and 15 loops (polyamid) on demand.

# Easy configuration and ordering



## Using the template on the next page, you can configure Comfort Ports easily

- Choose manifold material and manifold size: stainless steel (2 – 20 loops), polyamide (2 – 15 loops)
- Primary connection left or right?
- Door material: steel white painted or plastic white?
- Key lock? Bend support?
- Which UFH pipes and dimensions?
- Which balancing valves?
- Which control unit?
- Manifold with flowmeters?
- Cabinet in-wall or on-wall?

## Further you can provide a wiring list to production to get electrical installation of actuators and room thermostats and also to get individual labels to be printed on actuators

- Name loops and room no's which have to be connected. According to the list the wiring of actuators will be done (loop no1 is always on the left side of the manifold)
- Loop names will be used for labels (placement on equivalent actuator)



### Control units:

#### Wired

- Uponor Smatrix Base 24 V
- Uponor Base Flexiboard 230V

#### Wireless

- Uponor Smatrix Wave
- Uponor Smatrix Wave PLUS

# Order Comfort Ports



Company \_\_\_\_\_ Site data / delivery address \_\_\_\_\_

Contact person \_\_\_\_\_ Site name \_\_\_\_\_

Street \_\_\_\_\_ Contact person \_\_\_\_\_

Code and city \_\_\_\_\_ Street \_\_\_\_\_

Phone \_\_\_\_\_ Code and city \_\_\_\_\_

e-mail \_\_\_\_\_

Type	Variance	Loops	Primary connection	Cabinet door material	Key lock	Bend support	Connectors for sec. pipes	Pipe dimensions	Balancing valves Uponor Vario Oventrop Hycocon Danfoss	Control unit*	Flowmeter	Cabinet on-wall or in-wall	Depth of cabinet
0 = Stainless Steel 1 = Polyamide	1 Vertical w/o metering set 2 Horizontal w/o metering set 3 Vertical with metering set 4 Horizontal with metering set	Stainless steel: 02 - 20 Polyamide: 02 - 15	L = left R = right	S = Steel, white painted K = Plastic, white	1 = yes 0 = no	1 = yes 0 = no	P = PE-Xa M = MLCP-RED 0 = none	9,9 (= 98) 14 16 17 20	UP = Uponor Balancing valves G1-G1 OS = Oventrop Hycocon static 3/4" DA = Danfoss dynamic balancing valve 3/4" 00 = No balancing valves	BA = Base Flexboard 230V SB = Smatrix Base 24V SW = Smatrix Wave, wireless SP = Uponor Smatrix Wave PLUS, wireless 00 = no controls	1 = yes 0 = no	AP = On-wall UP = In-wall	On-wall (AP): always 140 mm (= 14) In-wall (UP): 80 mm (= 80) or 110 mm (= 11)
0...1	1...4	02...20*	L...R	S...K	1...0	1...0	P...M...0	mm Dim.	UP OS, DA, 00	BA SB, SW, SP, 00	1...0	AP...UP	14...80...11
1													Anzahl
2													
3													
4													
5													
6													
7													
8													
9													

\* Wiring of the actuators see next page. Delivery time and prices on inquiry.

City, date

Signature, Stamp

# Room control wiring plan



Address will be placed on package label for better localization of delivery.

Company \_\_\_\_\_

Contact person \_\_\_\_\_

Street \_\_\_\_\_

Code and city \_\_\_\_\_

Phone \_\_\_\_\_

e-mail \_\_\_\_\_

Construction site \_\_\_\_\_

Contact person \_\_\_\_\_

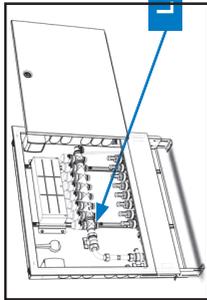
Delivery address \_\_\_\_\_

Code and city \_\_\_\_\_

**Manifold:**

Manifold-no. / Description \_\_\_\_\_

Manifold place / Floor no. \_\_\_\_\_



Note: Loop no. 1 is always located at the left valve.

Plan for Comfort Port no.: [ \_\_\_\_\_ ]

	Loop 1	Loop 2	Loop 3	Loop 4	Loop 5	Loop 6	Loop 7	Loop 8	Loop 9	Loop 10	Loop 11	Loop 12
Zone no.:												
Room name												

Please fill the wiring plan carefully. According to that the wiring and printing of labels will be done.

City, date

Signature, Stamp

# Uponor

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1089300 – Uponor SF Port IC Comfort Port – EN – ME – 03/2017