

## PRODUCT DESCRIPTION



Self adhering, low profile floor heating mat for installation immediately under ceramic tiles or natural stone.

Raychem QuickNet 90 is sold as complete pack consisting of a pre-terminated floor heating cable installed on a fiber glass mat and a SENZ WIFI timer thermostat.

QuickNet 90 is the ideal floor heating system to increase the comfort at home and in the office as well as in your showroom or entrance hall.

QuickNet 90 can also be installed under wooden or engineered wooden floors.



## ADVANTAGES

### The design phase

Ideal heating system during early autumn or spring time as well as the perfect complementary heating system (for example in bathroom as additional heating to a towel dryer)

Extremely low installation height ca. 3,5 mm

Ideal for renovation

Can be used in shower areas

Compatible with all stable subfloors e.g. concrete, anhydrite, plaster, ceramic subfloor

Following floorings can be applied: Tiles, marble, stones: max. 30 mm thickness

Parquet floors, engineered wood or vinyl floors with maximal thermal resistance (R-value) of 0,15 m<sup>2</sup>K/W

### The installation phase

Fast and easy due to self adhering mat

Due to the low profile no issue with heights of existing doors neither with floor level of existing stairs

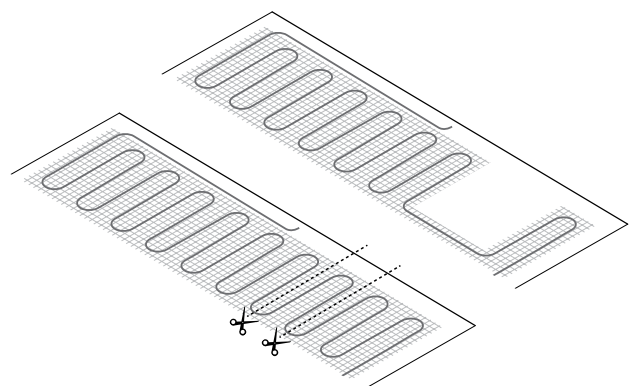
Due to the dual conductor cable only one cold lead connection which enables easy lay-out and installation of the mats

Several heating mat sizes available to fit in all the rooms

Cable easily detachable from the mat with only 2 cuts in the mat.

Loose cable can then be used to go around obstacles.

Cable is protected by the mat during installation phase



## The application

Ideal heating for comfort in your bathroom, kitchen and conservatory

Extra low energy consumption and possibility to control and monitor from a distance with the WIFI enabled and EcoDesign compliant touchscreen SENZ WIFI timer thermostat

No measurable electro-magnetic fields due to the dual conductor heating cable

Long life and maintenance free



## TECHNICAL DATA

|                               |                                                           |
|-------------------------------|-----------------------------------------------------------|
| Nominal power                 | 90 W/m <sup>2</sup>                                       |
| Voltage                       | 230 Vac                                                   |
| Max. Exposure Temperature     | 90°C                                                      |
| Min. Installation Temperature | +5°C                                                      |
| Heating cable                 | Low smoke, zero halogen                                   |
| Cold lead                     | 1x 2,5 m cold lead; Cross section 3 x 1,0 mm <sup>2</sup> |
| Mat                           | Self adhering fiber glass mat                             |
| Wet room                      | Approved; ELCB 30mA required                              |
| Circuit breaker               | C13 A with max heating mat surface till 33 m <sup>2</sup> |
| Approvals                     | VDE<br>SEMKO<br>CE                                        |

## RELATED RAYCHEM PRODUCTS

### SENZ WIFI

SENZ WIFI is top class WIFI enabled Touchscreen thermostat with the following features:

- Energy Efficient and EcoDesign compliant:
  - Electronic room temperature control with weekly schedule
  - Adaptive start control
  - Open window detection
  - Distance control and monitoring
- Ease of installation:
  - Intuitive setup-wizard
- APP controlled from anywhere:
  - Programming the 3 Economic modes has never been easier than through an APP
  - Switching between program modes can be done from anywhere with the APP
  - Temporary adjustments on the normal schedule like BOOSTING the temperature for desired period of time or overriding the schedule until the next scheduled event
  - Controlling the entire home (up to 32 zones) with the APP
  - Holiday mode is combining the best of both worlds lowering down energy consumption while adding a high level of comfort. Your floor will be back at comfortable temperature right before you enter the home

## REFERENCE NUMBER

| QUICKNET 90   |                    |                           |      |        |                         |
|---------------|--------------------|---------------------------|------|--------|-------------------------|
| Product Name  | Without thermostat | With SENZ WIFI thermostat | Area | Output | Dimensions (W x L in m) |
| R-QN-N-1,0M2  | SZ18300279         | SZ18300429                | 1    | 90     | 0,5 x 2,0               |
| R-QN-N-1,5M2  | SZ18300280         | SZ18300430                | 1.5  | 135    | 0,5 x 3,0               |
| R-QN-N-2,0M2  | SZ18300281         | SZ18300431                | 2    | 180    | 0,5 x 4,0               |
| R-QN-N-2,5M2  | SZ18300282         | SZ18300432                | 2.5  | 225    | 0,5 x 5,0               |
| R-QN-N-3,0M2  | SZ18300283         | SZ18300433                | 3    | 270    | 0,5 x 6,0               |
| R-QN-N-3,5M2  | SZ18300284         | SZ18300434                | 3.5  | 315    | 0,5 x 7,0               |
| R-QN-N-4,0M2  | SZ18300285         | SZ18300435                | 4    | 360    | 0,5 x 8,0               |
| R-QN-N-4,5M2  | SZ18300286         | SZ18300436                | 4.5  | 405    | 0,5 x 9,0               |
| R-QN-N-5,0M2  | SZ18300287         | SZ18300437                | 5    | 450    | 0,5 x 10,0              |
| R-QN-N-6,0M2  | SZ18300288         | SZ18300438                | 6    | 540    | 0,5 x 12,0              |
| R-QN-N-7,0M2  | SZ18300289         | SZ18300439                | 7    | 630    | 0,5 x 14,0              |
| R-QN-N-8,0M2  | SZ18300290         | SZ18300440                | 8    | 720    | 0,5 x 16,0              |
| R-QN-N-9,0M2  | SZ18300291         | SZ18300441                | 9    | 810    | 0,5 x 18,0              |
| R-QN-N-10,0M2 | SZ18300292         | SZ18300442                | 10   | 900    | 0,5 x 20,0              |
| R-QN-N-12,0M2 | SZ18300293         | SZ18300443                | 12   | 1080   | 0,5 x 24,0              |

## SUBFLOOR PREPARATION

The subfloor should be clean, stable and rigid, without cracks or adhesion-reducing substances. Large cracks in the subfloor should be filled prior to laying the mat.

Uneven surfaces will need to be levelled prior to installation. With cement plaster and anhydrite plaster, one should ensure that the substance has dried sufficiently according to the applicable norms. Anhydrite plaster should be smoothened and dust free. With quickly solidifying plaster, one should follow the suppliers instructions.

Apply a layer of tile glue primer (dependent on subfloor) to the floor before installing the mat to ensure good adhesion of the QuickNet to the subfloor.

The heating cable should not be installed under bath tubs, shower cabins, surface covering furniture, etc. The heating cable should not be installed where holes will be drilled in the floor.

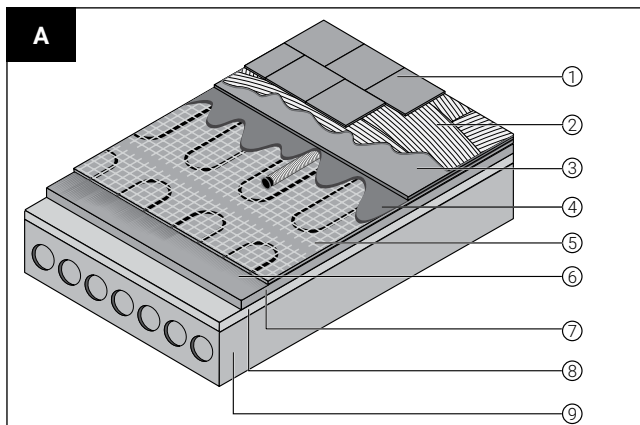
Applicable norms, rules and data sheets as well as instructions and manuals are to be followed!

## INSTALLATION INSTRUCTION

The QuickNet cold lead is inserted in a flexible tubing and connected to the connection box. QuickNet 90 shall always be controlled by an electric underfloor heating thermostat with external floor sensor and compliant with the EcoDesign directive (like the NRG-DM, GREEN LEAF or SENZ WIFI). The thermostat sensor, which is also protected in a flexible tubing (3m included with R-QN-N), is positioned centrally between two heating cable runs and as close as possible to the final floor covering.

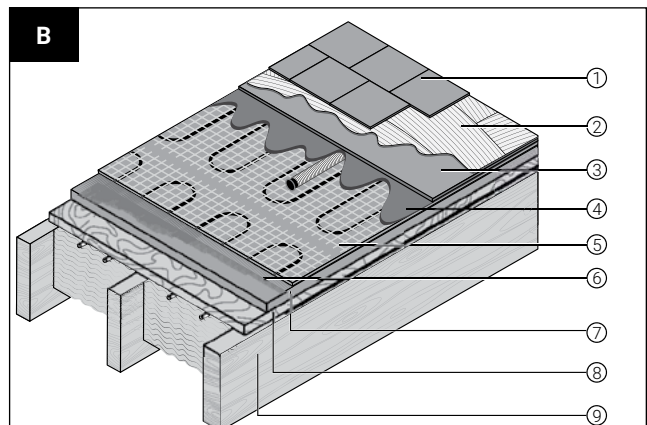
QuickNet 90 can be used under tiles and natural stone. The mat can even be embedded directly in the tile glue (in that case make sure it is embedded in at least 5mm of tile glue).

## FLOOR CONSTRUCTION FOR TILE OR NATURAL STONE



**Fig A:**

- 1 Floor covering (can be tile or natural stone)
- 2 Tile glue
- 3 (Waterproofing layer – optional for shower areas)
- 4 (Filler material – Optional)
- 5 QuickNet + Floor sensor inserted in sensor tube
- 6 Primer
- 7 Sub floor
- 8 Insulation
- 9 Bearing construction

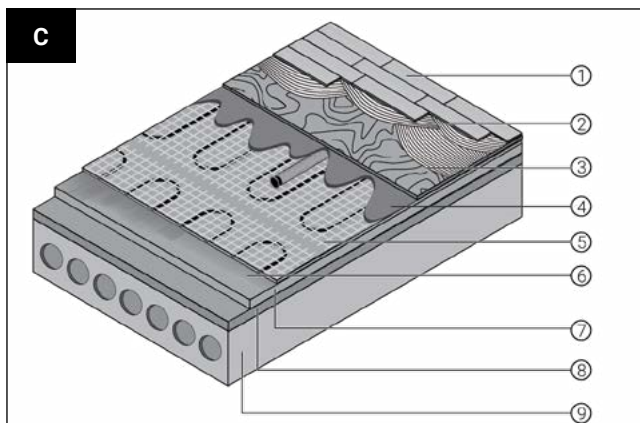


**Fig B:**

- 1 Floor covering (can be tile or natural stone)
- 2 Tile glue
- 3 (Waterproofing layer – optional for shower areas)
- 4 (Filler material – Optional)
- 5 QuickNet + Floor sensor inserted in sensor tube
- 6 Primer
- 7 Gypsum plasterboard  $\geq 13\text{mm}$
- 8 Wooden plate
- 9 Joist and insulation layer between the joists

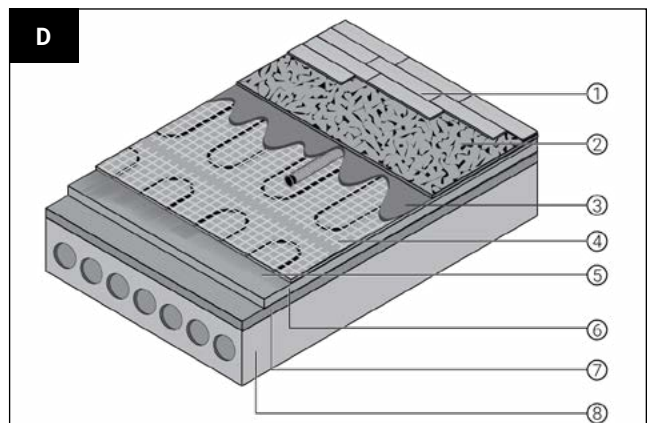
QuickNet 90 can be installed under parquet floors, engineered wooden floors or laminate floors. It then needs to be embedded in a minimum of 15mm of filler material.

## FLOOR CONSTRUCTION FOR PARQUET, LAMINATE OR ENGINEERED WOOD



**Fig C:**

- 1 Floor covering (Parquet floor)
- 2 Glue
- 3 (plywood – Optional)
- 4 Filler material (between 15 and 30mm of filler material)
- 5 QuickNet + Floor sensor inserted in sensor tube
- 6 Primer
- 7 Sub floor
- 8 Insulation
- 9 Bearing construction



**Fig D:**

- 1 Floor covering (Engineered wood installed floating)
- 2 Foam underlayment
- 3 Filler material (between 15 and 30mm of filler material)
- 4 QuickNet + Floor sensor inserted in sensor tube
- 5 Primer
- 6 Sub floor
- 7 Insulation
- 8 Bearing construction

For detailed installation instructions refer to SZ12300106 - IM-EU1252.