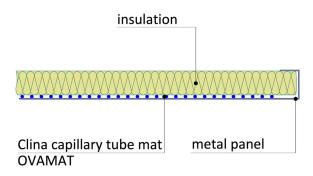
## **INSTALLATION GUIDELINE**

## HEATING/COOLING CEILING | METAL PANEL CEILING WITH CAPILLARY TUBE MATS



The capillary tube mat is fixed on the inside of the metal panel, usually with glue. The metal panels are inserted in a suspended ceiling grid and equipped with an insulating material. On the visible side you get a perforated or unperforated metal panel grid ceiling for the removal or supply of sensitive heat loads to a large extent via radiation, partly by convection.



## **Dry construction**

## Plant engineering

- installation of the substructure/grid system (rail system) according to the ceiling type, panel dimensions and the manufacturer's instructions
- 2. installation of the piping or supply lines for the Clina capillary tube mats in the ceiling void
- **3.** gluing capillary tube mats into the metal panels
  - apply adhesive to the back of the capillary tube mat using a roller
  - insert mats and press on using a clean roller
  - place insulation on top
  - smaller openings (e.g. for cables) can be made by simply pulling the capillaries apart up to a diameter of approx. 100 mm

- **4.** hooking in or inserting the metal panels
- 5. connection of the capillary tube mats (metal panels) to each other as well as connection to the supply and return lines/ceiling sub-distributors is made using a push-lock system with flexible hoses
- 6. filling and leak test
  - leak test using compressed air at 3 bar
  - filling the system with system medium and leak test according to Clina guideline CR02 "Filling, venting and leak test" at 10 bar
  - fill out test report
  - during further work the system remains under the test pressure of 10 bar

7. closing of the ceiling