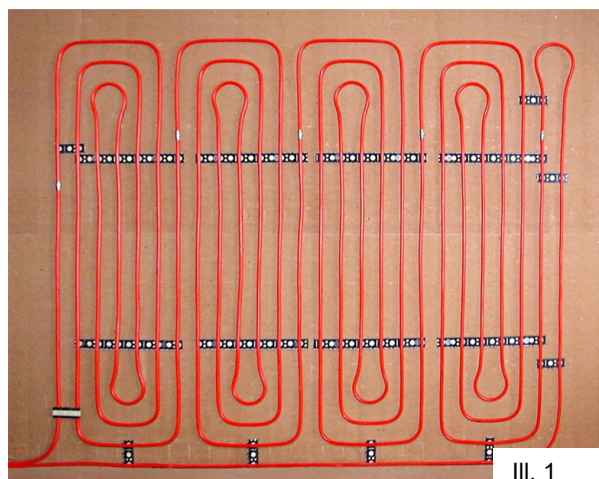


WEM Wet-Wall Heating System

(Climate Grid and Climate Pipe System)

- General notes** We will only warrant for the trouble-free functioning of the heating system if original WEM connection pipes and press-fit fittings are used. For connections to other systems, use press-fit screw fittings.
- Storage and transport** Protect the components against mechanical damage and avoid any deflections.
- Prerequisites** The wall surfaces to install the heating system should have sufficient strength to accommodate the WEM Climate Grid and the plaster coat and should comply with the corresponding structural requirements.
The wall surfaces must provide for sufficient adhesion of the plaster.
The thermal protection of the building should be checked for compliance with the German Energy Saving Ordinance EnEV in its currently applicable version. For reasons of energy conservation, it is not recommended fitting a wall heating to exterior walls with a U-value $> 0.5 \text{ W/m}^2\text{K}$ without additional thermal insulation measures.
WEM Climate Grids and WEM Climate Pipes should not be installed at temperatures below 5°C .
- Fitting of the climate grids** Calibrate and deburr the first WEM Climate Grid and fasten it to the wall surface using the provided toothed rails. Shorten the second WEM Climate Grid to the appropriate length, if required, calibrate and fasten it next to the first one. Connect it to the first grid using a press-fit fitting.



Add additional WEM Climate Grids as required. Lay connecting pipes from the water supply of the first grid and from the return flow of the last grid to the heating manifold and connect them. The wall heating is now ready for flushing and pressure testing.

When fitting the pipes, observe a minimum bending radius of 80 mm, when bending them by hand, and of 64 mm, when using a spiral spring!

Connect not more than six WEM Climate Grids in series!

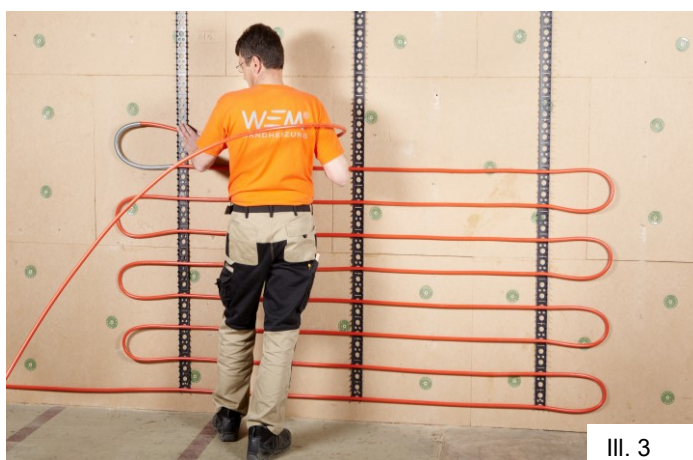
Installation of the WEM Climate Pipe System

Fasten the toothed rails to the respective wall sections perpendicular to the pipe run. The fastening points on the toothed rails should have a max. distance of 100 cm to each other. Lead the WEM Composite Pipe from the manifold into the room, lay it according to the intended layout on the wall surface to be heated and fasten it to the toothed rails. Use a pipe decoiler to prevent twisting of the pipe when unwinding it.



III. 2

The spacing of the installed pipes should be 15 cm at least (every third pipe clip on the rail). Depending on the available surface area you can lay the pipe with a larger spacing.



III. 3

When fitting the pipes, observe a minimum bending radius of 80 mm, when bending them by hand, and of 64 mm, when using a spiral spring!

The pipe length in one heating circuit must not exceed 90 metres!

At the end of the heating circuit, lead the pipe back to the manifold and connect it with a screw fitting.

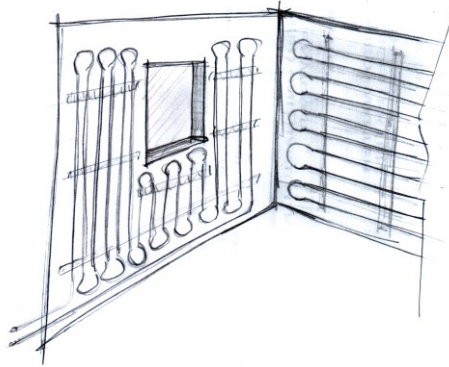
The WEM Wall Heating is now ready for flushing and pressure testing.



III. 4

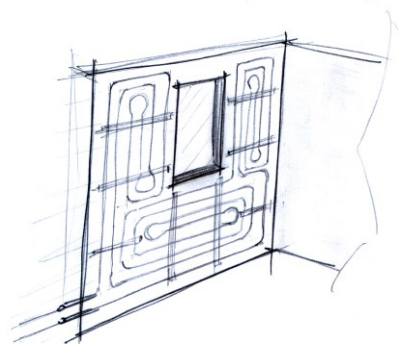
**Typical
layout
patterns**

Serpentine



III. 5

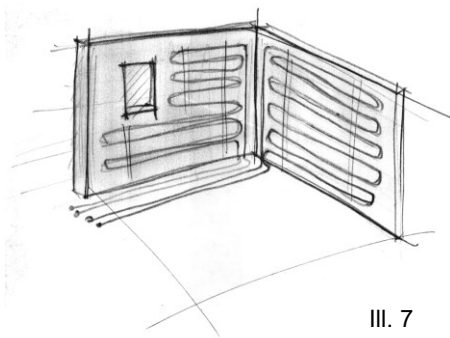
Spiral



III. 6

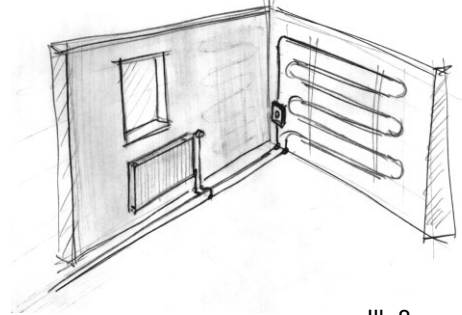
**System
variants**

**WEM Wall Heating or WEM Wall
Cooling**



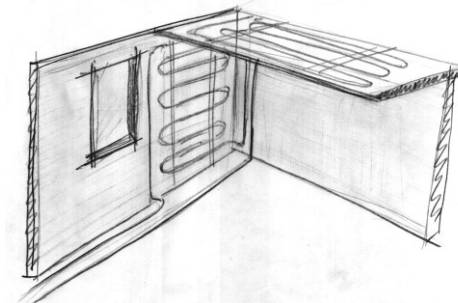
III. 7

**WEM Wall Heating combined with
conventional radiators**



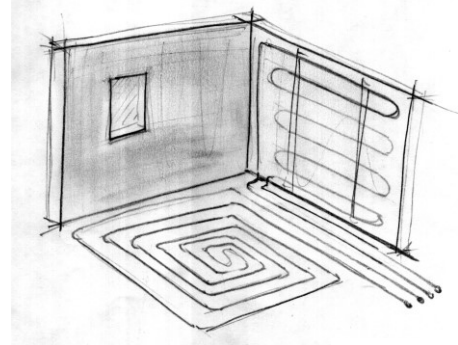
III. 8

**WEM Wall Heating/Cooling combined
with WEM Ceiling Heating/Cooling**



III. 9

**WEM Wall Heating combined with
Underfloor Heating**



III. 10

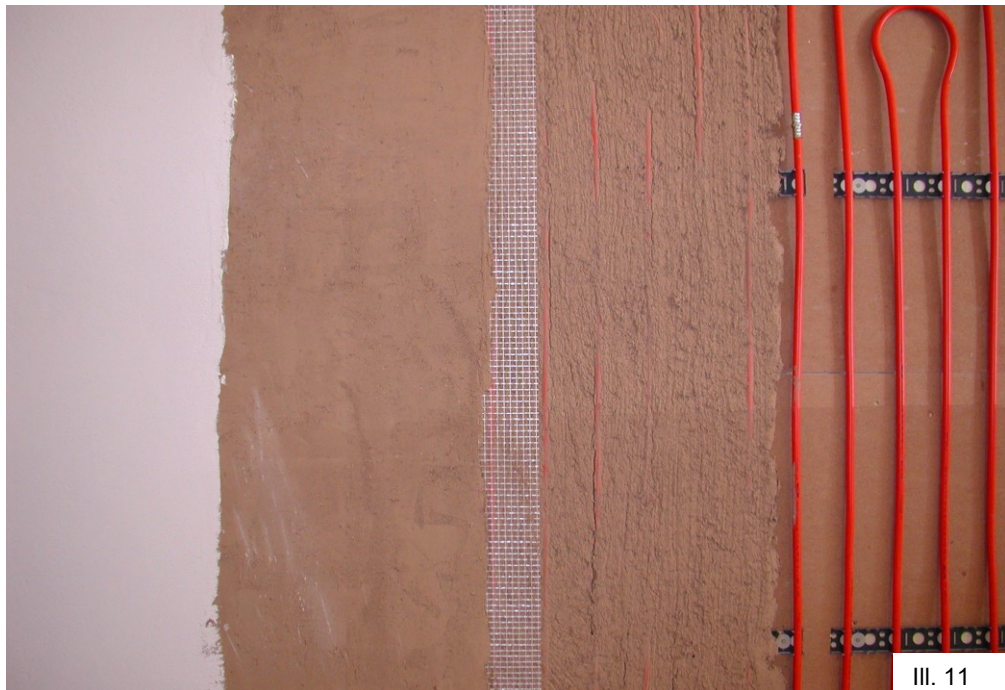
Plastering

For plaster work, the specifications of the plaster manufacturer and the generally acknowledged rules of engineering should be observed.

To achieve the specified heating power, you should use WEM Clay or Lime Plaster. We cannot specify values for products of other manufacturers.

The sub base must have a sufficient load-bearing capacity!

In splash water areas and on surfaces that will be covered with tiles, a suitable plaster should be used!



III. 11

Depending on the sub base, apply one or several coats of WEM Clay or Lime Universal Plaster and skim it over the pipe surfaces. Let the plaster dry completely. Apply subsequently another coat of plaster and lay a reinforcing fabric into the moist plaster (wet the surface beforehand, if required).

Overlap the fabric mats at the joints by 10 cm at least. At transitions to unheated surfaces, apply fabric over a width of at least 25 cm beyond the heated surface.

Only clay plasters may be dried with the radiant heating!

Let the plaster dry thoroughly and finish the entire wall surface with WEM Clay or Lime Fine Finish Plaster. You can apply a paint coat subsequently. To preserve the positive properties of the clay, we recommend WEM FarbTon Clay Paint for finishing.