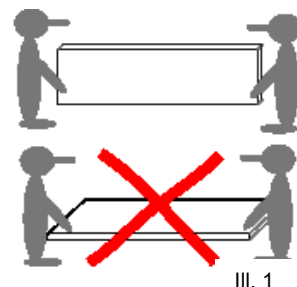


WEM Dry-Wall System

General notes Use only original WEM connection pipes and press fittings, otherwise you will lose your guarantee for the system. For connections to other systems, use press-fit screw fittings.

Storage and transport Protect the panels against moisture!
Avoid deflection (transport the panels in upright position, see illustration 1!)
Do not set down WEM Climate Panels on connecting pipes!
If thick plaster layers (10 mm and more) are applied, provide for forced drying!



III. 1

Prerequisites The wall to be covered should have sufficient strength and stiffness to bear the WEM Climate Panels. Moreover, the surface ought to be sufficiently flat and even to prevent distortion of the WEM Climate Panels when fixing them to the wall. Uneven walls can be levelled with levelling plaster or a timber batten frame.

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 W/m²K without additional thermal insulation measures.

Our Clay Panels and Climate Panels are not suitable for exposure to splashing water or for installation underneath tiles. In these cases, Climate Grids or the Climate Pipe System should be used in combination with hydraulic mortar.

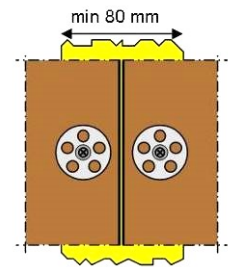
WEM Climate Panels and WEM Clay Panels should not be installed at temperatures below 5 °C. If there is a high humidity content in the air (e.g. due to screed laying) the WEM Climate Panels must be heated up to 35 °C at least and sufficient ventilation must be ensured.

Heavy loads are to be fixed to the wall structure or substructure.

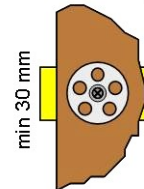
In new buildings, the Climate Panels should be fitted prior to the installation of the flooring (screed or dry flooring), to make sure that the connecting pipes can be integrated in the later flooring structure. If the floor is already installed (e.g. in restoration projects), the pipes can be covered with a baseboard or with plaster. In general, the Climate Panels can be installed in any position. If the connecting pipes are exposed on the wall or ceiling, fit clay panels in the empty spaces up to the connection pipes. Remaining gaps are filled with WEM Universal Clay Plaster or remainders of the Clay Panels soaked in water.

Sub base/ preparations

The Panels are fixed with screws at the provided fastening points to an even subsurface or a substructure. The length and type of the screws depends on the subsurface (e.g. SPAX® screws 5 x 50 mm) A substructure can be created with timber battens or metal studs. When installing a timber substructure, the battens underneath the butt joints should have a minimum width of 80 mm (III. 2). When fitting the battens in transverse direction, a width of 30 mm should be observed (III. 3). When using metal studs, we recommend bracing the structure by clamping a batten into the profile.



III. 2

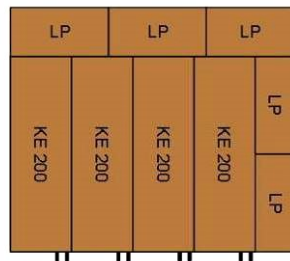


III. 3

Substructure

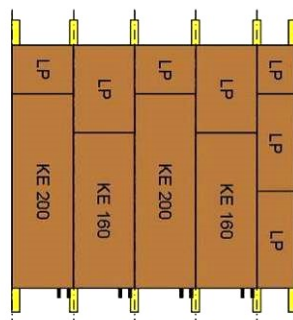
Solid sub base on a wall or ceiling

LP = Clay Panel
KE = Climate Panel

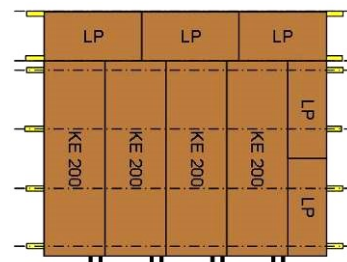


Installation on the wall

Vertical substructure

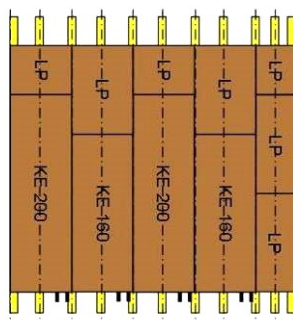


Horizontal substructure

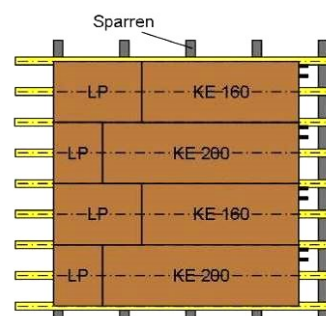


Installation on the ceiling / roof pitch

Vertical installation of battens and panels



Horizontal installation of battens and panels



Installation on a wall

Two fitters are needed to fit WEM Climate Panels to a wall.

We recommend fitting a wooden beam at the desired installation level with a distance of at least 5 cm to the floor (III. 5). You can set the panels down onto the beam for fastening.



III. 4

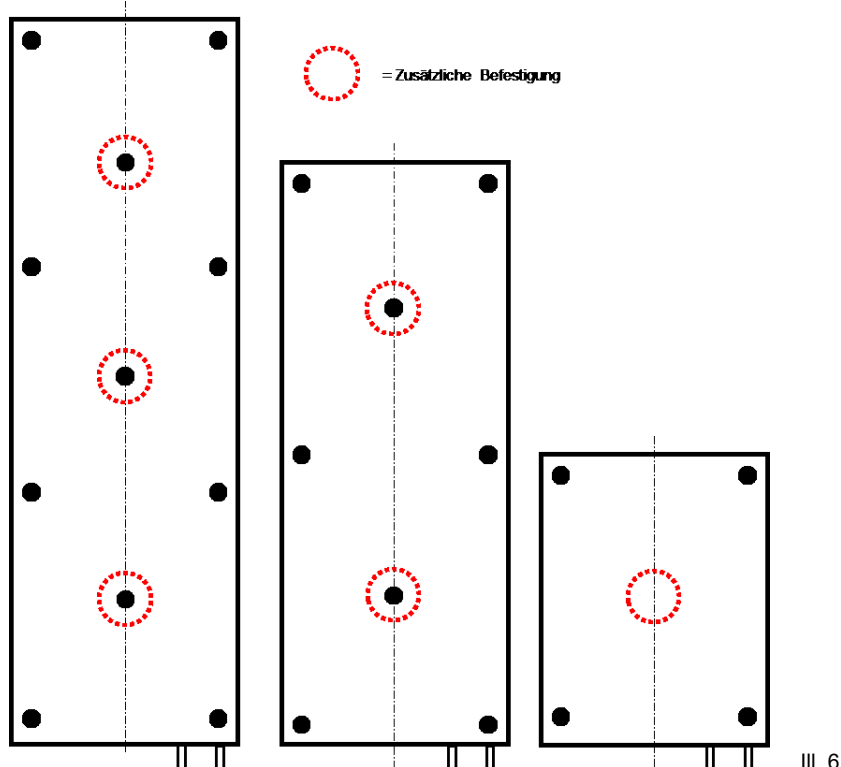


III. 5

Fix the Panels with screws at the cast-in disk fasteners (III. 4). To fasten the panel in additional fixing points, use the disk fasteners and make sure not to damage any pipes inside the panel. The pipe layout can be traced on the surface.

Installation on a ceiling or roof pitch

When installing Climate Panels on roof pitches or ceilings, additional fastening points are required (III. 6). WEM Clay Panels are fastened with five screws at least. The WEM disk fasteners are used in each case.



III. 6

At least three fitters are required to fit the panels on ceilings or roof pitches if no hoisting equipment is available (lifting platform or similar device) (III. 7)).



III. 7

Connecting the WEM Climate Panels to each other

Cut the pipe to size, deburr and calibrate it prior to the installation!

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

The WEM Climate Panels are connected to each other with WEM Composite Metal Pipes. Cut a pipe section to the required length and press two elbows onto the ends of the pipe. Subsequently, push the pipe section onto the pipe ends of the WEM Climate Panels and fit it by pressing.



III. 8



III. 9

Lay connecting pipes from the water supply of the first panel and the return flow of the last panel to the manifold and connect them. Insulate the connecting pipes if necessary.

The wall heating is now ready for flushing and pressure testing.

Make sure that you observe the general rules of dry-wall construction.

Connect not more than five WEM Climate Panels in series!

Levelling of the surfaces

Use the Clay Panels to raise the wall or ceiling surface to the level of the installed WEM Climate Panels.



III.10

Each WEM Clay Panel is fastened with at least four screws using the provided disc fasteners.

On ceilings and roof pitches, five fastening points per panel are required.



You can cut the Clay Panels to size with a piercing saw or a cutting disk. (Make sure that you wear protection glasses and a breathing mask because of the dust emission and ensure good ventilation, if possible). Otherwise, scribe the textile covers on both sides of the panels with a knife and break the panels off at the cutting edges



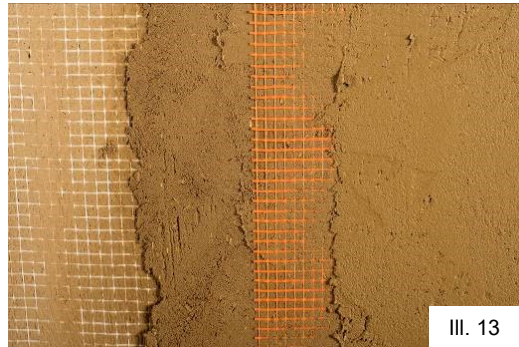
III. 11



III. 12

Smoothing and reinforcing

Seal the entire wall surface with WEM Fine Finish Plaster, apply a coat of 4 mm thickness, moisten the wall beforehand, if required. Lay the WEM Reinforcing Fabric into the plaster when it is still pasty and apply subsequently a second coat of fine finish plaster of 4 mm thickness.



III. 13



III. 14

Overlap the fabric layers by at least 10 cm at the joints. A single plaster coat must not exceed a thickness of 10 mm.

Finishing

The entire wall or ceiling surface (heating surfaces + levelled surfaces) is finished as desired.

To preserve the positive properties of the clay we recommend WEB FarbTon Clay Paint for finishing.

If you cannot integrate the connecting pipes of wall heating panels into the floor structure, embed them with plaster or cover them with a baseboard.



III. 15