

## Ready for use in all four walls



### **Ceiling heating**

The system offers pipe grids in different lengths and widths so that the installation in suspended ceilings or concealed can be adjusted to the individual locations. The combination of various sizes of pipe grids is of course possible and ensures best heating and cooling results in old and new buildings.

### **Wall heating**

Basic idea of the wall heating is the occupant's well-being: A thermally balanced room is to be created.

Therefore, the principle of technology is not air heating and circulation, but the output of heat radiation from tempered walls directly to the room and the person respectively. A comfortable warmth, since the temperature of heating surfaces can be low chosen because of the relatively large heating surfaces. This is an advantage compared to small hot surfaces, such as radiators.

### **Underfloor heating**

aquatherm black system, a plus for comfort. Used as underfloor heating system, the aquatherm black system allows walking barefoot in the house even in winter. Another advantage is the architectural freedom of designing the rooms. In addition to this, there are the hygienic aspects of an underfloor heating system. There are no raisings of dust. By the constant surface heat, the growth of house dust mites and formation of mould will be prevented.

## Dry construction - Lightweight partition walls in aluminium frames

**aquatherm black system** Heating element for dry construction

Field of application: Lightweight partition walls in aluminium frames

Heating capacity:

60W/m<sup>2</sup> at room temperature of 20°C

Flow temperature 35°C

Return temperature 31°C

Linear temperature difference: 13 K

Type of wall: Dry-lined walls

Covering: Fermacell board 12.5mm (can be painted, tiled or papered at once)

Field of application: Renovation and new construction

Possible dimensions for inner frame distance of 625mm:

Width: 625mm length: 2,000mm Art.-No. 5662200

Width: 625mm length: 1,000mm Art.-No. 5662100

Pipe connection: aquatherm black system plug-in system / to be welded-fused



## Roof slope with dry construction

**aquatherm black system** Heating element for dry construction

Field of application: Roof slope with dry construction

Heating capacity:

60 W/m<sup>2</sup> at room temperature of 20°C

Flow temperature 35°C

Return temperature 31°C

Linear temperature difference: 13K

Type of wall: Roof slopes

Type of ceiling: Drywall ceiling

Covering: Drywall 12.5mm, to be provided by the client

Field of application: Renovation

Possible dimensions for inner principal rafter of 360mm:

Width: 360mm

length: 2,000/2,500 and 3,000mm

Pipe connection: aquatherm black system plug-in system / to be welded-fused with 90° elbows



## Plastered walls and ceilings

**aquatherm black system** Heating element for plaster work

Field of application: heating element for the installation for plastered walls.

Heating capacity:

76 W/m<sup>2</sup> at room temperature of 20°C

Flow temperature 35°C

Return temperature 31°C

Linear temperature difference: 13 K

Type of wall: Wall with plaster work

Type of plaster work: gypsum clay or lime cement plaster 10mm covering

Field of application: renovation and new construction

Example dimension:

width: 600mm

length: 2,000mm

Pipe connection: to be welded-fused



## Suspended paneled ceilings

**aquatherm black system** Heating element for dry construction

Field of application: Heating element for thermal activation of paneled ceilings

Heating capacity in drywall panels: 78 W/m<sup>2</sup> at  $\Delta T = 13K$  (T medium - T room) (drywall-climafit)

Cooling capacity in drywall panels: 67 W/m<sup>2</sup> at  $\Delta T = 9K$  (T medium - T room) (drywall-climafit)

Heating capacity in metal panels: 79 W/m<sup>2</sup> at  $\Delta T = 13 K$  (T medium - T room)

Cooling capacity in metal panels : 78 W/m<sup>2</sup> at  $\Delta T = 10 K$  (T medium - T room)

Type of ceiling: for suspended paneled ceilings

Covering: panels made of metal or drywall to be provided by the client and as requested by the architect/building owner

Field of application: New construction and renovation

Dimensions:

Width: individually according to specifications



## Individual solutions for special requests

### Use in shower

- Comfortable warmth in the shower area
- No cold emitting tiles
- Simple assembly
- Independently adjustable to size of shower and shower fitting
- Applicable in combination with existing radiator system via single room control
- Suitable for connection to all standard underfloor heating systems
- Residual heat demand can be covered by it
- Installation possible in new and old buildings

### Use in mirror

#### Non-fogging mirror

- Thanks to the use of climasystem grids behind the mirror, the warmed mirror cannot be fogged up
- Simple assembly
- Independently adjustable to any size of mirror
- Applicable in combination with existing radiator system through single room control
- Suitable for connection to all standard underfloor heating systems
- Perfect addition to the wall heating in showers



## aquatherm black system becomes the design air-conditioning system **h2c**

Perfect room climate looks as good as this.

Together with aquatherm, HJE Systembau Eickhoff GmbH & Co. KG developed the individually designable air-conditioning system **h2c** Aluframe.climasystem. **h2c** "hot to cool" stands for an intelligent surface heating and cooling system. The **h2c** ALUFRAME.

**h2c** is an air-conditioning and heating system rolled into one. Developed on the basis of the aquatherm black system, the design air-conditioning system is integrated in a textile stretcher and can subsequently be provided on walls or under ceilings. Besides, **h2c** is also available as detached stand element, for example as partition. The system is connected to the normal heating supply. On the occasion of the EuroShop fair, the **h2c** ALUFRAME has already been honored with the innovation award for architecture and presentation in the category of "products of high architectural quality".

