



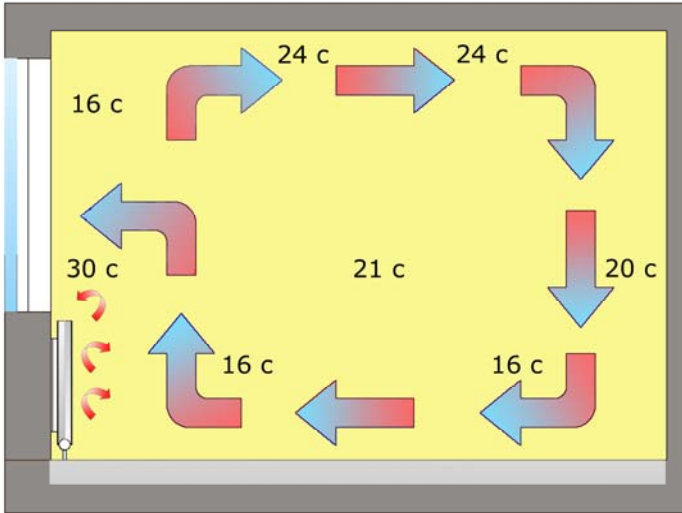
**SUPERIOR UNDERFLOOR HEATING & COOLING SYSTEMS**

Concorde House, Concorde Way, Segensworth North, Fareham, Hampshire PO15 5RL

Tel: 01489 581787 Fax: 01489 576444

Email: sales@warmafloor.co.uk Web: [www.warmafloor.co.uk](http://www.warmafloor.co.uk)

**How underfloor heating works**



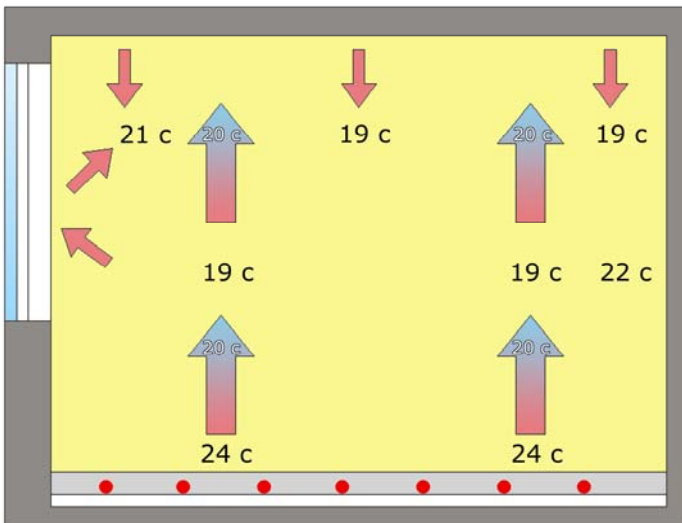
**Systems with radiators**

Radiators distribute heat by convection currents which can result in draughts and hot spots. The floor will be the coldest zone of the room as hot air rises and the space above your head will be the warmest part of the room.

Radiators transfer heat into a room largely by convection from a hot metal surface. Because the surface of the radiator .

is small in comparison to the volume of the room, it needs a high heat input and doesn't spread the heat evenly.

Convection currents circulate allergens, dust particles, fumes and germs which are then distributed around the building contributing to an unhealthy atmosphere



**Underfloor heating**

Underfloor heating systems are simple to install, low maintenance and cost-effective to run. The room is heated mostly by radiation, the most natural and comfortable form of heating, creating an even, comfortable environment with no hot or cold draughts.

Rooms with high ceilings Such as churches, sports halls or industrial units, gain even greater benefits.

With radiator systems *some* of the heat is immediately wasted as it rises to the ceiling. With an underfloor heating system the heat is concentrated at floor level where it is most needed.

*In rooms with large areas underfloor heating is the only way to heat the centre of the floor area effectively*

**Floor Surface temperatures**

Floor surface temperatures should not exceed certain levels otherwise discomfort and damage to the floor can occur. The maximum recommended temperatures are occupied areas 29°C  
Peripheral areas 35°C  
Bathrooms 33°C

The floor surface temperatures will vary according to the heat output requirements of the room or building.

**Floor Coverings**

Floor coverings such as carpet, underlay and timber reduce the floor heat output. Please check with us to confirm suitability. Some floor coverings especially timber and vinyl floors have a

recommended maximum floor surface or sub floor temperature that they can operate at, if a higher temperature is used it can damage the floor covering. Manufacturers data sheets should be checked to confirm the coverings suitability.