

## Technical Paper

# The Easiest Way to Efficient Floor Heating

### Floor Heating Fast and Easy

Installing floor heating has never been faster or easier. Danfoss SpeedUp can be installed quickly to give controllable, energy-efficient heat and more satisfied customers.

Floor heating is growing in popularity as an energy-saving and cost-efficient way of heating buildings. But messy, time-consuming installation combined with the slow reaction time remains the biggest drawbacks in traditional 'screed' floor heating systems. These disadvantages do that many people do not install floor heating, which can save them energy and thereby cost.

Danfoss SpeedUp overcomes these disadvantages by using a prefabricated system of polystyrene heat panels and easy-bend pipes. And it can cut the time, it takes to install one square metre of dry floor heating than it takes with traditional screed floor heating, significantly.



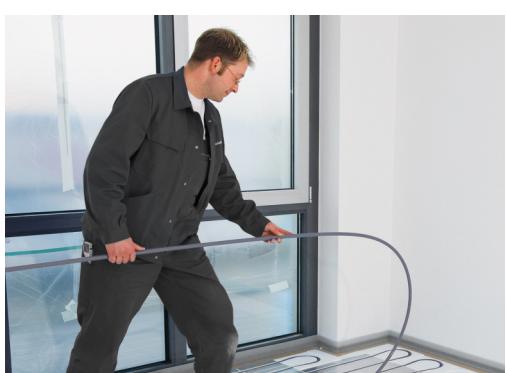
### Easy to Install

Danfoss SpeedUp is a so-called 'dry' system that avoids the use of screed. Instead, it uses polystyrene panels with a pre-glued aluminium plate covering the whole surface to give optimum heat disperse.

The heat panels, measuring 100 cm x 50 cm, are so light, you can handle them on your own. And because they come pre-scored, you can easily break pieces off to adjust them for size.

Once the panels are in, simply snap the composite pipes into the ohm-shaped grooves to hold them in place.

Once in place, you can use all kinds of floor surfaces more or less directly on the panels - solid or laminated wood flooring, tiles or carpet. In some cases you need a load bearing layer, but still you only have total installation below 5 cm.



### Fast to Warm Up and Cool Down

Because the water pipes are in close contact with the flooring surface, it takes only 30 minutes to heat up the floor surface, compared to hours for a traditional screed system that first has to heat a 50mm layer of screed. That means you are able to control your floor heating in an optimum way and gain up to 15% energy savings.

Using the Danfoss' CF2 wireless control systems for controlling your SpeedUp floor heating is ideal, it gives you the possibility of set back periods which optimizes energy savings and gives you the optimal comfort. The CF2 room thermostat are available in four models with a range of functions, it's easy to find a model to meet your needs. The CF2 is simple to position or relocate, and the user-friendly remote control allows easy access to all functions.



*CF2 room thermostat with infrared detection of floor surface temperature*

### For Renovation Projects

When it comes to renovating properties, builders often don't consider underfloor heating – despite requests from homeowners – because of the difficulties in installing traditional wet systems. But with a low installation height of 5 cm, Danfoss SpeedUp is ideal for renovations. Further the SpeedUp system can be combined with all heat sources also heat pumps, solar energy and biomass.

All these advantages are combined with Danfoss' support, technical knowhow and components to ensure the best floor heating solution for you and your customers.



*Only 5 cm in construction height including floor finish!*

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