

# Variotherm Under-Floor Heating for Screeded Floors

## Energy saving radiant floor heating system

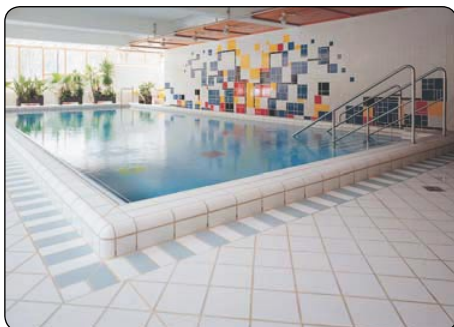
### INTRODUCTION

Newly constructed or older buildings – **Variotherm Floor Heating systems** are always an advantage. Rapidly installed they can be used anywhere spreading warmth and comfort in living rooms, sanitary and bath rooms, hallways and reception areas. They all operate as low temperature heating systems thus being highly economical and energy saving.

With Variotherm Floor Heating you will experience comfortable and warm floors –especially cold floors like stone, clinker and tile floors will never be cold again. Variotherm Floor Heating provides optimum room climate. Thanks to being operated at low temperature it is exceedingly economical and can be ideally combined with other energy efficient systems such as condensing boilers, solar heating and ground source heat pumps. Of course it is also a very flexible system.

### ADVANTAGES

- Energy-saving low temperature system
- Variotherm pipe has a guaranteed bending radius and so ensures uniform surface temperatures
- The pipe is raised above the insulation, which means the heating plaster surrounds the pipe completely
- Variotherm pipe is 100% impermeable to oxygen and water vapour diffusion
- Easy and quick installation
- Decades of trouble-free operation
- 10 years-warranty with warranty certificate
- Can be combined with other systems - eg those which are operated by calorific value, condensing boilers, heat pumps and solar heating
- Variotherm Pipe 16 x 2 keeps its bended form even at low installation temperatures
- Variotherm Pipes are firmly put in place
- The Variotherm Pipe is lifted up from the insulation and is completely embedded by the heating screed
- All systems allow complete freedom of pipe installation



### GENERAL

Stone or tiled floors bring out the best in this heating system. For all "cold" floor surfaces Variotherm floor heating is the ideal solution. It ensures the best possible warmth management and so creates a cosy living environment. Of course it is just as ideal for other floor surfaces which are suitable for floor heating.

The savings begin during assembly: Variotherm floor heating is simple and fast to install. This saves time & money. Operation is really economical, because Variotherm floor heating is operated at low temperatures. It is the ideal combination for energy-saving systems such as gas conversion technology, heat pumps and solar installations.

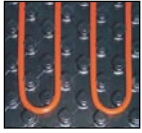
The core of the systems is the Variotherm-Pipe with aluminium core, which is considerably more robust than conventional pipes. The heating water remains clean and free from deposits.

Choose from 2 different floor systems for screed floors according to your individual building needs. In addition to the 2 types for screeded floors (VarioFix and VarioNop), there is the new VarioComp. It is ideally suited for renovation and dry floor construction and for floors where conventional screed is not an option; its structural height is only 20mm. See separate product sheet for details.

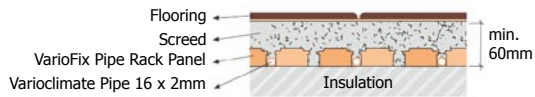
All systems come with a 10-year guarantee.

## SYSTEMS & COMPONENTS

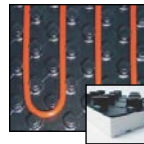
### VarioFix (with fix panel)



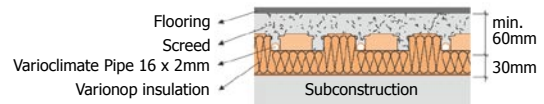
- VarioFix Panel 1400 x 800 mm (without insulation). To fasten Varioclimate Pipe, as vapour barrier and as homogenous cover for existing insulations
- Varioclimate Pipe 16 x 2 mm (5-layer-composite pipe with napped surface structure)



### VarioNop (with VarioNop insulation panel)



- VarioNop insulation panel 1400 x 800 x 53 mm (insulation thickness 30 mm) Special intermediate webs lift up the Varioclimate Pipe from the insulation and pipes are completely enclosed by heating screed. Positive connections with groove and feather ensure stable panel interconnection
- Varioclimate Pipe 16 x 2 mm (5-layer-composite pipe with napped surface structure)



### Common components



Varioclimate Pipe  
Variomodular Pipe



Compact Filling  
Compound



Heating circuit  
distributor



Variotherm  
room  
temperature  
controls