

# Variotherm Modular Wall Heating

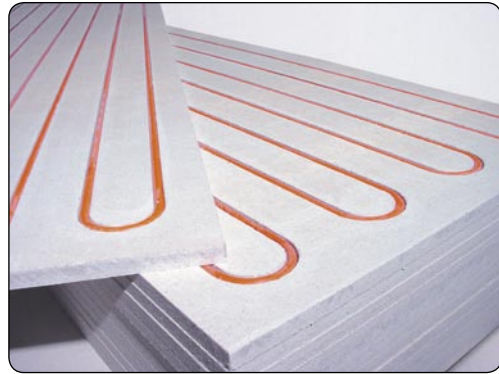
## Radiant wall heating for for dry wall construction

### INTRODUCTION

**Variotherm Modular Wall Heating** combines heating and wall in one. The complete, ready to use modules are ideally suited for dry wall construction. They can be used according to your individual needs as panel dimensions may be adjusted flexibly. Fast and simple installation leaving no mess is guaranteed.

Operating with low temperature the Variotherm Modular Wall Heating system is very economical. Close contact of the Variomodular Pipe and the gypsum fibre panel guarantee fast heating and greatest possible efficiency.

Variotherm Moduar Wall Heating is the perfect solution for wood frame construction, prefabricated homes and attic expansions combining heating and finished wall in one.



### ADVANTAGES

- Ideally suited for wood frame constructions, prefabricated homes und attic expansions
- Large-area low temperature system provides excellent energy saving
- Heating and wall in one piece - ready to use panels
- This panel system guarantees absolute flexibility. Four Modular Panels fulfill almost any building requirements
- Original FERMACELL gypsum fibre panels (certified by the Austrian Institute for Healthy and Ecological Building)
- Quick heating of gypsum fibre panels due to close connection to the Variomodular Pipe
- Fast and simple installation leaving no big mess
- Unique on the market: The Variomodular Pipe was specifically designed for dry wall heatings
- Ideal for attics: In summer cold water circulation converts the wall heating into wall cooling
- Variomodular Pipes can easily be identified with Variotherm pipe locator. (Hanging of pictures etc.)
- Technically sound system relying upon more than 25 years of experience in the field of building ecological and economical heating systems
- 10 year-warranty with warranty certificate

### GENERAL

Variotherm wall heating can be found in blocks of flats, family homes, nurseries, schools, hotels, offices and production facilities - in fact everywhere, where people wish to enjoy the organically healthy radiant heating which these systems produce. How you shape the wall is up to you. From the invisibly integrated wall heating to decorative ledges and cornices, lots of architectural solutions are possible.

Variotherm Wall Heating increases the human comfort level considerably. They produce longwaved horizontal infrared radiant

heat which provides ultimate comfort, just like warmth from the Sun, which is also radiant heat. Unlike heat from conventional heating systems radiant heat does not travel upwards and dust circulation is avoided. Variotherm Wall Heating is thus ideal for your comfort and provides a healthy room climate.

As a large-surface low temperature system Variotherm wall heating uses the ability of walls to store heat, which provides great energy savings and can be ideally combined with all alternative energy systems such as heat pumps, solar installations

### COOLING

With Variotherm wall heating you can also create a super ambient climate in summer. How? Simply by letting cold water circulate through your wall heating system. Immediately your wall heating turns into organically healthy wall cooling.

Without all the troublesome dust and air which are raised by conventional air-conditioning systems. With Variotherm wall cooling you can enjoy a feeling of well-being in summer, which you will otherwise only experience in the natural, cool shade of a mighty tree.

The organically harmonious and physically beneficial Variotherm wall cooling works as follows: the walls are

cooled by the circulation of cold water. The human body automatically emits warmth to the cool walls. As a result heat stored within the body is reduced in a biologically compatible way, and you experience a pleasantly cool sensation.

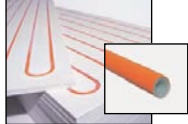
Conventional air-conditioning units use a lot of energy. They have to circulate large amounts of air in order to cool a room. This generates an aggressive kind of cold which can cause a temperature shock when people enter the room. The dust stirred up by the air-conditioned circulating air and the mites it contains are extremely detrimental to health.

Instead of cooling the air, Variotherm

wall cooling in contrast cools the human body by drawing off its warmth. This is much healthier and also creates a much more pleasant sensation. In flats under the roof Variotherm wall cooling always ensures an ideal ambient climate, even during hot weather.

Variotherm wall cooling operates at minimal energy input. It cools not the air but the heat stored in the human body. This is more effective, healthier and considerably cheaper. A long-term comparison has shown that our wall cooling has much lower operating costs than conventional air-conditioning systems.

## COMPONENTS & INSTALLATION



Modular panels with integrated Variomodular Pipe

Modular Panel 18 mm (*see left*)  
4 different panel sizes cover all kinds of individual building needs. Specially shaped channels are sunk into building biology institute tested FERMACELL® gypsum fibre panels. Variomodular pipe is pressed into these channels. It is fully integrated into the gypsum fibre panels.

Pre-inserted Variomodular Pipe  
11.6 x 1.5 (*see left*)  
Specifically designed 5-layer composite pipe. 11.6 m outer diameter and 1.5 mm pipe wall thickness minimize pipe friction loss. 100% impermeable to oxygen and water vapour diffusion. Its close contact with the gypsum fibre panels heats them more quickly and efficiently.



Joint adhesive



Drywall fastening screws



Calibration devices

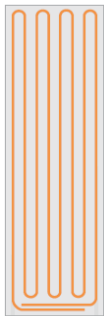


Pressing connections  
11.6 x 11.6 mm, 11.6 x 16 mm

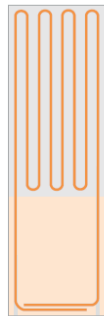


Variomodular Pipe 16 x 2 mm with ready fixed insulations as supply pipe

4 different panel sizes cover almost any building needs. Offering a complete solution (heating and wall in one) installation is fast and simple leaving no big mess.



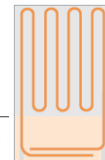
MWH-F206  
Width: 0,625 m  
Height: 2 m  
Heating Surface: 1,25 m<sup>2</sup>



MWH-F206V  
Width: 0,625 m  
Height: 2 m  
Heating Surface: 0,75 m<sup>2</sup>

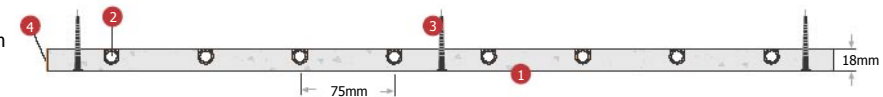


MWH-F203  
Width: 0,31 m  
Height: 2 m  
Heating Surface: 0,62 m<sup>2</sup>



MWH-F106V  
Width: 0,625 m  
Height: 1 m  
Heating Surface: 0,44 m<sup>2</sup>

Modular Wall Heating  
1 Gypsum fibre panels 18 mm  
2 Variomodular Pipe 11.6 x 1.5 mm  
3 Drywall screws  
4 Joint adhesive



\* For cutting and fitting of Modular Panels (e.g. for window parapets and sockets)



Assembly of Modular Panels



Application of joint adhesive



Cutting/Calibrating of pipes



Pressing, ready



Heating Circuit Distributor



Variotherm Room Temperature Controls

## HANGING PICTURES

Variotherm has a simple solution: firstly, the spacing between heating pipes is precise (77mm for EasyFlex Wall Heating and 75mm cm for Modular Wall Heating). And secondly they supply a pipe finder which reliably shows where the pipes are and which areas are free.

