

## Quick Facts:

### Location:

Corvo Island, Azores,  
Portugal

### Client:

End user

### Nature of Project:

Residential

### About the client:

Middle-aged farming couple investing life savings to build their dream house.

### System specifications:

- 100W/m<sup>2</sup> heating mats,
- 2cm thick insulation boards,
- Warmup® XSTAT thermostats, white

Warmup is the only underfloor heating accredited by all these leading institutions:



## Warmup brings warmth to one of the world's tiniest islands



### The Challenge

The result of a collapsed volcano, the crater-island suffered from an ongoing battle with humidity that caused accelerated mould growth in local properties. In addition, the new house would be fitted with tiled floors which would be unpleasantly cold when winter sets in.

### The Solution

100W/m<sup>2</sup> Warmup® undertile heating mats were installed under the tile floors and laid onto 2cm thick insulation boards to maximise heating efficiency while Warmup® XSTAT thermostats were the designated heating control for the system.

### The Result

The underfloor heating successfully kept the humidity at bay. At the same time, it ensured the tiled floors did not remain chilly in winter. The thermostats were easy to use and offered great individual control in the respective rooms, enhancing heating efficiency and enabling cost savings.



# CORVO ISLAND - Portugal

## System Specifications

### Products Used



#### PFM matting system (PFM)

Warmup® mat systems are perfect for heating up a large or regular-shaped room. Just 2mm thin, this multi-strand core, double-insulated element is the toughest and thinnest wire you can buy. Installation is as quick and simple as rolling out the mat with pre-spaced wired. Sturdy fibreglass mesh gives it extra durability while super-sticky double-sided tape allows secure installation. Multiple heaters can be combined to cover larger areas.

#### Technical data:

- Operating voltage 230V: 50Hz
- Width: 500mm (0.5 metre)
- Mat thickness: 3mm
- Inner/Outer Insulation: Advanced Fluoropolymer
- Output rating: 100W/m<sup>2</sup>, 150 W/m<sup>2</sup> and 200 W/m<sup>2</sup>
- Single 3m long 'cold tail' connection lead
- Approvals: ASTA BEAB, CE, KEMA & GS
- Lifetime Warranty & SafetyNet™ Installation Guarantee



#### WARMUP® Insulation Boards

Using Warmup® insulation boards with underfloor heating can lower your running costs by as much as 50% while reducing your carbon footprint. In fact, they can pay for themselves in as little as 2 and a half years.

#### Technical data:

- Board Dimensions: 1250mm x 600mm
- Board Thicknesses: 6mm, 10mm (standard), 20mm, 50mm
- Able to withstand a load of 30 tonnes per square metre
- U Values (W/m K): 6mm-4.50, 10mm-2.70, 20mm 1.35, 50mm-0.54
- Water Absorption (Capillary): Nil
- Class "O" / "B1" fire rated
- High soundproofing properties
- No primer required when used in conjunction with underfloor heating



#### Warmup® XSTAT programmable thermostat

Warmup® XSTAT is a flush mounted, dual-sensor digital thermostat so easy to program that there is hardly any need to read the instruction booklet!

#### Technical data:

- Supply voltage: 230V: 50Hz
- Output relay SPST or 1A inductive load: 16A, 3,600W
- Built-in interrupter: 2-pole, 16A
- Temperature range: 0 / +40 °C
- Limitation of range: +5 / +55 °C
- Ambient temperature during operation: 0/+40°C
- On/off differential: 0.4°C
- Sensor type: NTC, 3 m
- Dimensions (H/W/D): 86 x 86 x 34 mm
- XSTAT Clock function: 4-events program/7 days
- XSTAT Housing: IP 20
- XSTAT Size of display (H/W): 26 x 39 mm
- XSTAT Installation depth: 14mm
- Approvals: CE, ASTA BEAB
- Available in white and graphite

### Product Application

