

## Quick Facts:

**Location:**  
Madrid, Spain

**Client:**  
Estadio de Santiago  
Bernabéu

**Nature of Project:**  
Public

**About the client:** World-famous 5\* rated sports stadium. Best known for being home to the Real Madrid football team

### System specifications:

- Foil heaters
- 1cm thick insulation boards
- Warmup® XSTAT thermostats

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



## Real Madrid VIP rooms receive new heated floors from Warmup



### The Challenge

The VIP boxes are hosts to some of the most prestigious names in football and their equally privileged guests. At just 7m<sup>2</sup> in size though, there wasn't enough room for radiators.

### The Solution

To suit the wooden floors in the rooms, Warmup® Foil Heaters were installed. These were laid onto Warmup® Insulation Boards to maximise heat retention within the room. The exclusive Warmup® XSTAT thermostats were carefully selected in white to match the colours of the Real Madrid team.

### The Result

The guests can now enjoy the games in unstuffy, comfortable warmth from any part of the room, without being compromised on space or interior design.



### Products Used



#### Warmup® Foil Heaters (WLFH)

The Warmup® Foil Heater is a streamlined electric radiant floor heating system designed for use with laminate, engineered wood and other floating floors. It can be conveniently installed under the floor finish in both dry and wet areas without the need for additional earth grids. The reflective properties of the reinforced aluminium foil used in the heater help conserve heating energy.

#### Technical data:

- Construction: ECTFE wire encased in aluminium foil
- Operating voltage: 230V: 50Hz
- Output rating: 140W/m<sup>2</sup>
- Mat Width: 0.5m
- Mat Length: min 3m, max 20m
- Heating Cable Spacing: 50mm
- Cold Lead Length: 3m
- Approvals: CE, SEMKO
- 15-Year 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

