Excellence in heating solutions.
ThermoSphere foil, underlay and overlay solution

The double layer of foil and easily accessible cable loops make ThermoSphere foil the most advanced electric heating foil available today. The innovative exposed cable loops and continuous earth protection ensure an easy installation and total safety.

ThermoSphere heating solutions are covered by our lifetime warranty when you register your system online.
ThermoSphere foil is designed to heat laminate, engineered timber, carpet and vinyl floor finishes

Bring the luxury and simplicity of an electric heating system to wood, carpet and vinyl floor finishes, with minimal height build up and installer friendly components.

**Efficient heat exchange foil**
The double layer of foil is specifically designed to protect the heating element and achieve an even spread of heat to the floor finish above.

**Easy cut and return installation**
Accessible cable loops simplify cut and return installation and provide abrasion protection for the heat element after installation is complete.

**Continuous earth protection braid**
Electrical safety is paramount so the ThermoSphere foil continuous earth braid protection runs the entire length of the heating cable. You can even install it in a bathroom (subject to appropriate RCD protection and compliance with local building standards).

**Low profile cold tail**
An extra malleable, low profile cold tail makes installing foil easy. The cold tail is only 4mm thick and can be concealed within the insulation.

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When installing under soft floor finishes such as vinyl, carpet and engineered timber, please be sure to consult the floor finish manufacturer for guidance on compatibility and maximum operating temperature.
thermo
Sphere
Our recommended solution

Engineered timber and laminate floor finishes

Bring the warm feeling to an engineered timber or laminate floor finish with a low floor build up of only 7mm. Extra thermal insulation can be included if required.

Compatible with ThermoSphere SmartHome Control

SHC-W-01
Other compatible floor build ups

ThermoSphere foil is a versatile system that can be used in many different floor configurations. The most common floor builds up are shown here but please call us if your requirements need special consideration.

1. Engineered timber finish on an insulated screed, floating floor

2. Low tog carpet and underlay finish, floating floor

3. Vinyl bonded floor tiles, floating floor

Laminate floor finish
Cushioning overlay
Heating foil
Cushioning underlay
Concrete substrate
Substrate insulation

Carpet floor finish
Low tog underlay
HDF overlay
Cushioning overlay
Heating foil
Cushioning underlay
Stable timber substrate

Vinyl tiles
Acrylic adhesive
HDF Overlay
Cushioning overlay
Heating foil
Cushioning underlay
Stable timber substrate

Carpet and underlay max combined
Tog rating of 2.5
4. Bonded timber finish and acoustic layer, floating floor

5. Fully bonded engineered timber solution

6. Bonded engineered timber on foil faced insulation

1. Laminate floor finish
2. Acrylic adhesive
3. Cement board overlay
4. Cushioning overlay
5. Heating foil
6. Cushioning underlay
7. Econoboard 21dB
8. Concrete substrate

1. Timber floor finish
2. Acrylic adhesive
3. Heating foil
4. Acrylic adhesive
5. Cushioning underlay
6. Acrylic adhesive
7. Stable timber substrate

1. Laminate floor finish
2. Acrylic adhesive
3. Cement board overlay
4. Cushioning overlay
5. Heating foil
6. Cushioning underlay
7. Foil faced insulation
Overlay and underlay accessories

Essential overlay and underlay systems for a long lasting floor construction

**Cushioning Underlay**
An essential cushioning underlay that should be included under foil in every installation

**HDF Overlay board**
Use HDF Overlay board over floating foil before installing carpet and vinyl finishes

**Cushioning Overlay**
An essential cushioning overlay that should be included above foil in every installation and adds a sound reduction factor too

**Cement overlay board**
Use our 12mm screed replacement board over foil in preparation for all bonded finishes such as carpet, vinyl and timber parquet

**Acoustic insulation board**
A 9mm thick acoustic insulation board made of 100% natural coconut fibres

**Acoustic insulation mat**
A 3mm thick acoustic insulation matting made from recycled rubber and waste cork granules
ThermoSphere foil 140W/m²

Bring the luxury and simplicity of an electric heating system to wood, carpet and vinyl floor finishes, with minimal height build up and installer friendly components.

<table>
<thead>
<tr>
<th>Stock Code</th>
<th>Size (m)</th>
<th>Area (m²)</th>
<th>Output (W)</th>
<th>Resistance (Ω)</th>
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<tr>
<td>WCVF-140-0100</td>
<td>2 x 0.5</td>
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Compulsory accessories for every installation

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<th>Description</th>
<th>Size</th>
<th>Unit</th>
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<tr>
<td>WCVF-CUSHU</td>
<td>Heating Foil Cushioning Underlay</td>
<td>1200 x 500 x 5mm</td>
<td>(6m²) pk 10</td>
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<tr>
<td>WCVF-CUSHO</td>
<td>Heating Foil Cushioning Overlay</td>
<td>15m x 1m</td>
<td>Roll</td>
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Optional installation accessories

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<th>Description</th>
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<tr>
<td>WCVF-HDFO</td>
<td>Heating Foil HDF Overlay Board</td>
<td>1200 x 600 x 7mm</td>
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<td>WCVF-CBHO</td>
<td>Heating Foil Cement Overlay Board</td>
<td>1200 x 600mm</td>
<td>(0.72m²) pair</td>
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<tr>
<td>FT-050</td>
<td>Fixing Tape</td>
<td>50mm x 50m</td>
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<td>GHC-ATP-01</td>
<td>Aluminium Tape</td>
<td>50mm x 50m</td>
<td>Roll</td>
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Installation overview

ThermoSphere foil is quick and easy to install. This overview gives a quick guide to the basics, but always read the instructions in full before attempting your own installation.

1. Prepare substrate
   Ensure the substrate is clean, dry, stable and free from debris

2. Install underlay
   Lay cushioning underlay to protect the foil from abrasion

3. Run cold tail to thermostat
   Ensure the electric cold tail can reach the thermostat connection point

4. Roll out the foil
   Roll out the underfloor heating foil using the cut and return technique

5. Install overlay system
   Cover the foil with a layer of cushioning overlay

6. Install floor finish
   Lay your floor finish in accordance with the manufacturers instructions

This is an illustrative guide only - some installation steps have been missed. Always read the installation guide in full before carrying out an installation. Electrical work should be carried out by a qualified professional.
Cut-and-return installation explained

Every room is different and you will usually need to modify your foil in some way to fully cover your heated area. The diagrams on this page will help you to manipulate your foil safely and avoid causing any damage during installation.

**Cutting the mesh**
- Use scissors to carefully cut the grey foil.

**Turn 180°**
- Turn the foil through 180° parallel to the first run.

**Turn 90°**
- Turn the foil through 90° for a more simple turn.

**Alternative 90°**
- Release cable from the foil for an alternative 90° turn.

**Staggered 180°**
- Remove the cable from the foil and tape in place for awkward areas such as angled walls.

**Avoid an obstacle**
- Remove the foil to avoid permanent fixtures.

**Curved fan turn**
- Cut foil into sections to make a curved fan turn.

**NEVER CUT THE HEATING CABLE!** When performing any of these foil modifications it is vital that you do not cut or damage the heating cable. Damaging the cable will void your warranty.