# Overlay® Plus Enhanced – Low-Profile

Data Sheet

PRODUCT INSTALLATION INFORMATION

ISSUE 1 – OCTOBER 2025


## Over The Floor Systems

Underfloor heating that goes over the floor.

For existing solid or timber deck floors - Polypipe's unique Overlay® underfloor heating range of low-profile systems are installed over the existing floor. This makes them ideal for renovation and new build, whole house, and single room projects.

- Low Build Height of 18mm
- 15% better performance compared to gypsum-based systems
- Robust and lightweight
- Quick and easy to install
- Suitable for tiling directly onto

# Overlay® Plus Enhanced – Low-Profile

Data Sheet

PRODUCT INSTALLATION INFORMATION

ISSUE 1 – OCTOBER 2025


**Depending on the type of substrate, the Polypipe Overlay® Plus Enhanced or Polypipe Overlay® Plus Acoustic Enhanced can be fixed with a continuous bed of flexible tile adhesive or screws and rebated washers.**

**It is essential that the floor onto which the panels will be fixed are flat and exhibit no movement. This means that you will need to ensure the floor is levelled to SR1 or better (no more than 3mm deviation over a 2 Metre straight edge). The subfloor must be clean, structurally sound, and free of debris. An uneven floor must first be made flat, refer to the Polypipe & Ardex UK Installation Guide for further information on the correct floor preparation of these types of floors.**

For structurally sound concrete floors it is typically more convenient to prime and use a continuous bed of flexible tile adhesive, whereas on most timber floors (but not traditional 'old style' wooden floorboards) screws and washers is a convenient and faster fixing method. In this instance, ensure the timber is sound, solid and free from deflection as it must be able to withstand both dynamic and additional dead loads.

When laying the panels onto a thin even layer of flexible tile adhesive – this method may take a little longer and create slightly more height however it does provide superior decoupling properties which is preferable on some older floors as this system will absorb lateral expansion/contraction movement.

A 10mm notched trowel should be used to cover the floor with an even layer of flexible tile adhesive, ensuring no cavities remain beneath the panels. The panels should then be firmly pressed down and made level. Any foot traffic should be avoided until the panels are suitably bonded to the substrate.

When looking to use the rebated washers and screws method 12 fixings per panel should be used aligned as 4 fixings down one long side (about 2cm in from the edge), another row of 4 down the middle and 4 down the other side. The fixings should comprise screws which penetrate 20mm min into the substrate and very importantly, the screws must be used with rebated washers.

# Overlay® Plus Enhanced – Low-Profile

Data Sheet

PRODUCT INSTALLATION INFORMATION

ISSUE 1 – OCTOBER 2025

## Edge Expansion Requirements

The purpose of installing edge expansion strips around the room's perimeter is to allow for the free expansion of the Overlay® Plus system when levelling compound or tiles are used.
When installing the edge expansion strip this has a self-adhesive backing for easy application. Place this around any walls and fixed structures like columns, steps, and doors. In addition, the edge expansion strip includes a plastic apron that prevents levelling compound from seeping out around the edges of the room and potentially lifting the panels. The edge expansion strip should be installed in addition to perimeter insulation as required by building regulations if applicable, especially when using levelling compounds or tiles.

### Step 1: Laying the first panel

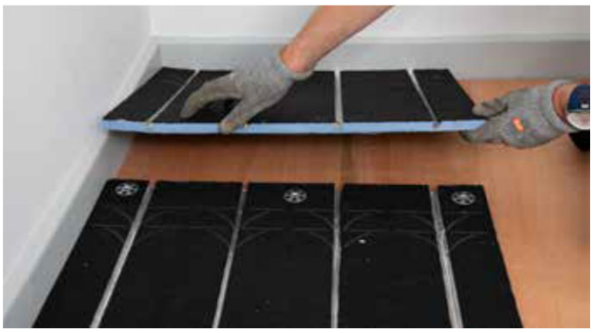
Start by fixing one panel to the floor in a corner of the room with the end of the panel that has the return bends up against the wall having prepared the floor based on the chosen fixing method as detailed previously.

### Step 2 Laying the panels

Lay the next panel ensuring you line up the grooves in the panel with those of the first panel, then continue to lay the first row of panels using short lengths of pipe to help with panel alignment.

### Step 3:

When you get close to the end of the first row ensure that the end of the panel that has the return bends is up against the wall as shown in step 1 and if necessary, cut the Overlay™ Plus Enhanced floor panel to fit and complete the first row.



### Cutting the panels

Panels can be cut using a sharp knife and a metal ruler.


### Step 4:

Once you have completed the first row begin the process again, with the second row, making sure to stagger the panels in a brickwork pattern. Continue the process until the room is complete.

### Step 5: Laying the pipe

Starting from your manifold position and allowing enough pipe for connections, lay the pipe into the grooves of the Overlay® Plus Enhanced floor panels or Overlay® Plus Enhanced Transition panels in accordance with your underfloor heating plan.

### Step 6: Accessing the end return bends & connection channels

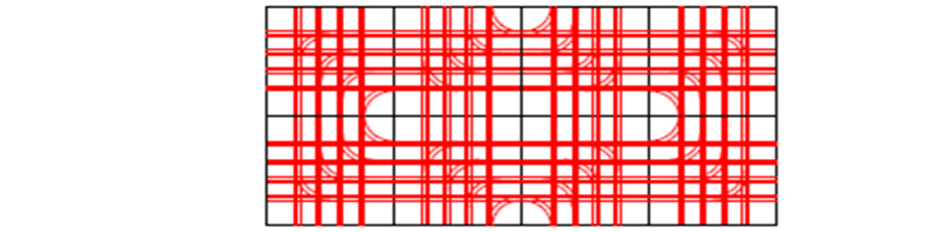
To return the pipe at the end of the Overlay Plus Enhanced Panels back into the room cut the fleece covering the bends to accesses the required channel to continue the circuit.


### Step 7: Laying the Multi-Directional Transition Panels

The multi-directional transition panels should be installed in areas where 3 or more circuits are running around perimeter walls to get to their starting positions or in high pipe traffic areas such as where the manifold is positioned to aid with the distribution of the connection pipes to each room which will be key to the overall layout.

Pipe grooves in the Transition Panels are at 50mm centres, matching the manifold port spacings for ease of alignment. Each pipe groove can easily be accessed by cutting the fleece covering the groove. Panels can easily be cut to suit any pipe distribution layout whilst matching the pipe grooves of the Overlay® Plus Enhanced Panels.

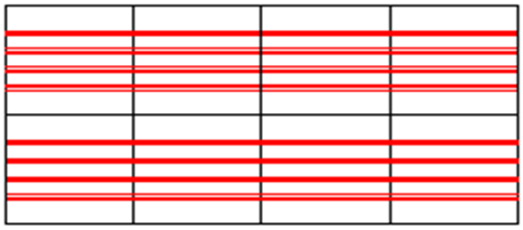

**Overlay® Plus Enhanced Multi-Directional Transition Panels: Examples of some suggested layouts of how the Multi-Directional Transition Panels can be used for pipe traffic to and from the manifold or within large rooms with multiple circuits are shown below.**



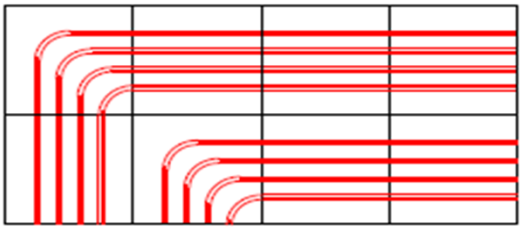
OVERLAY PLUS & OVERLAY PLUS ACOUSTIC CORNER PANEL CONCEPT VERSION 2

OVERLAY PLUS MULTI-DIRECTIONAL TRANSITION PANEL WHEN CUT FOR STRAIGHT PIPE TRAFFIC RUNS EXAMPLE 1 (2 CIRCUITS)

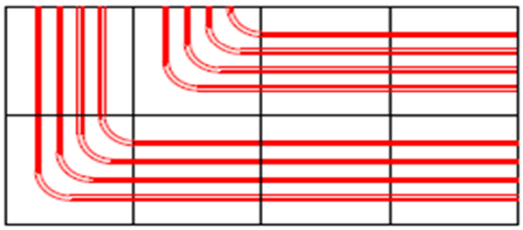
OVERLAY PLUS MULTI-DIRECTIONAL TRANSITION PANEL FOR STRAIGHT PIPE TRAFFIC RUNS EXAMPLE 2 (4 CIRCUITS)



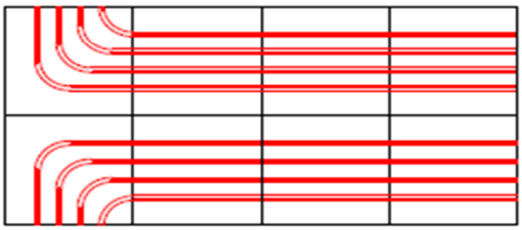
OVERLAY PLUS MULTI-DIRECTIONAL TRANSITION PANEL FOR PIPE TRAFFIC RUNS EXAMPLE 3 (4 CIRCUITS)



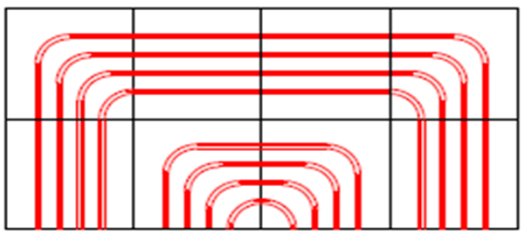
OVERLAY PLUS MULTI-DIRECTIONAL TRANSITION PANEL FOR PIPE TRAFFIC RUNS EXAMPLE 4 (4 CIRCUITS)



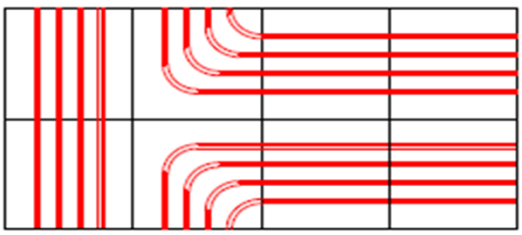
OVERLAY PLUS MULTI-DIRECTIONAL TRANSITION PANEL FOR PIPE TRAFFIC RUNS EXAMPLE 5 (4 CIRCUITS)



OVERLAY PLUS MULTI-DIRECTIONAL TRANSITION PANEL FOR PIPE TRAFFIC RUNS EXAMPLE 6 (4 CIRCUITS)



OVERLAY PLUS MULTI-DIRECTIONAL TRANSITION PANEL FOR PIPE TRAFFIC RUNS EXAMPLE 7 (4 TO 6 CIRCUITS)



# Overlay® Plus Enhanced – Low-Profile

Data Sheet

PRODUCT INSTALLATION INFORMATION | ISSUE 1 – OCTOBER 2025

## Floor Covering Information

| Finish Floor Covering | Fixing Method | Optional Intermediate Layers | |
|---|---|---|---|
| Ceramic/Stone tiles | **Direct** (Ensure that the substrate is level and free from any deflection in accordance with BS 5385). Apply a flexible tile adhesive such as ARDEX X 77 or X 78 Flexible Tile Adhesive using a 10mm notched trowel fix the tiles onto the boards & after the adhesive dries, grout with ARDEX FLEX-FL Rapid-Setting Floor Grout or ARDEX FLEX-FS Standard Setting Wall and Floor Grout. For moisture-sensitive natural stone, use Ardex S 27 or S 28 Flexible Tile Adhesive these can also be used to provide quicker commissioning (48 hours). Flexible tile adhesive & grout should conform to BS EN12004. For tiles less than 100mm x 100mm please seek advice. | Using a self levelling compound such as Ardex K 40 HB or Arditex NA® or equivalent to a minimum thickness of 6mm to maximum of 10mm. Were thicker levelling compound is required this must be done prior to the installation of the panels. Should there be any unevenness in the levelled floor use Ardex Feather Finish Rapid Drying Patching & Smoothing Compound. | Apply a flexible tile adhesive such as ARDEX X 77 or X 78 Flexible Tile Adhesive putting a good bed (10mm trowel) fix the 6mm Backerboard onto the Overlay Plus boards in a brickwork formation. In order to tile onto the Backerboard use ARDEX X 77 or X 78 Flexible Tile Adhesive & after the adhesive dries, grout with ARDEX FLEX-FL Rapid-Setting Floor Grout or ARDEX FLEX-FS Standard Setting Wall and Floor Grout. |
| Solid Timber Floor | **Direct** (Ensure that the substrate is level and free from any deflection in accordance with BS8203) and use a proprietary (solvent free) product in conjunction with the finish floor manufactures recommendations. | Using a self levelling compound such as Ardex K 40 HB or Arditex NA® or equivalent to a minimum thickness of 6mm to maximum of 10mm. Were thicker levelling compound is required this must be done prior to the installation of the panels. Should there be any unevenness in the levelled floor use Ardex Feather Finish Rapid Drying Patching & Smoothing Compound. Please allow time for acclimatisation before installing to the substrate. | |
| Engineered Timber Floor | **Direct** (Ensure that the substrate is level and free from any deflection in accordance with BS8203) and use a proprietary (solvent free) product in conjunction with the finish floor manufactures recommendations. | Using a self levelling compound such as Ardex K 40 HB or Arditex NA® or equivalent to a minimum thickness of 6mm to maximum of 10mm. Were thicker levelling compound is required this must be done prior to the installation of the panels. Should there be any unevenness in the levelled floor use Ardex Feather Finish Rapid Drying Patching & Smoothing Compound. Please allow time for acclimatisation before installing to the substrate. | |
| Laminate Floors | **Direct** (Ensure that the substrate is level and free from any deflection in accordance with BS8203) and use a proprietary (solvent free) product in conjunction with the finish floor manufactures recommendations. | Using a self levelling compound such as Ardex K 40 HB or Arditex NA® or equivalent to a minimum thickness of 6mm to maximum of 10mm. Were thicker levelling compound is required this must be done prior to the installation of the panels. Should there be any unevenness in the levelled floor use Ardex Feather Finish Rapid Drying Patching & Smoothing Compound. Please allow time for acclimatisation before installing to the substrate. | |
| Carpet with Underlay | Ensure that the substrate is level and free from any deflection in accordance with BS8203. Use either a self levelling compound such as Ardex K 40 HB or Arditex NA® to a minimum thickness of 6mm to a maximum of 10mm or use a 9mm Floor Grade Plywood layer which should be glued using a suitable adhesive (solvent free) and screwed. Were thicker levelling compound is required this must be done prior to the installation of the panels. | N/A | |
| LVT's (Resilient Flooring) | Ensure that the substrate is level and free from any deflection in accordance with BS8203. Using a self levelling compound such as Ardex K 40 HB or Arditex NA® or equivalent to a minimum thickness of 10mm. Where thicker levelling compound is required, this must be done prior to the installation of the panels. Should there be any unevenness in the levelled floor use Ardex Feather Finish Rapid Drying Patching & Smoothing Compound. Using Ardex luxury vinyl tile adhesive to stick the vinyl/LVT to the floor, please allow time for acclimatisation before installing too the substrate. | Using a flexible tile adhesive such as ARDEX X 77 or X 78 Flexible Tile Adhesive putting a good bed (10mm trowel) fix the 6mm Backerboard onto the boards in a brickwork formation. Please allow time for acclimatisation before installing to the substrate. | |

# Overlay® Plus Enhanced – Low-Profile

Data Sheet

CONTACT INFORMATION

ISSUE 1 – OCTOBER 2025

**Need a quote? Why not use our FREE bespoke design service to get your project started which comes complete with CAD layout guide once purchased through one of our network of stockists.**


**Polypipe Technical & Design Office**

**+44 (0) 1709 772200**

**design@polypipe.com**

**Broomhouse Lane**
**Edlington**
**Doncaster**
**South Yorkshire**
**DN12 1ES**

**www.polypipeufh.com**