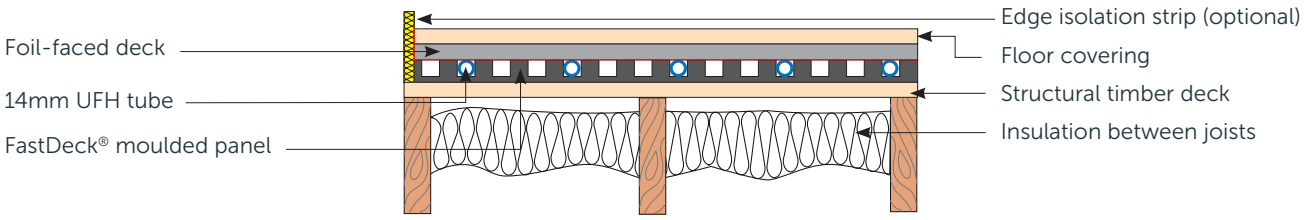
UNDERFLOOR HEATING

Nu-Heat UNDERFLOOR & RENEWABLES

Floor installation instructions

FDT14 – 14mm Fastflo® in low-profile FastDeck® moulded panels with foil-faced deck, on a timber deck

Supplied by Nu-Heat



Supplied by others

TECHNICAL INFORMATION

Substrate

It is important that the underlying substrate is flat and level to at least SR2 standard (5mm deviation over 2 metres) so that deflection is minimised.

Insulation

Mineral wool or rigid insulation can be installed between joists if required. The thickness required to comply with Building Regulations can vary. Insulation below the underfloor heating layer will improve performance.

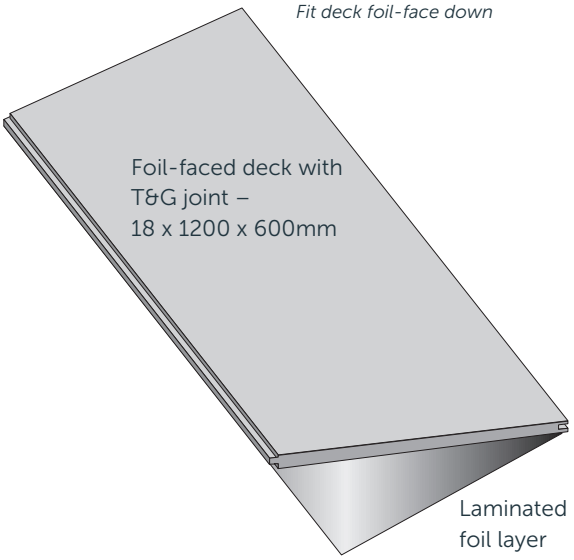
FastDeck® components

FastDeck® consists of two main components:

Individual 500mm x 500mm moulded panels are clipped together on top of a structural deck

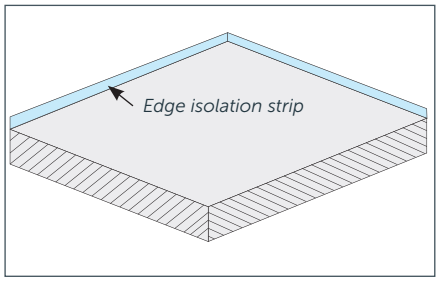
A A low-profile moulded polypropylene panel that can be clipped together across the existing structural deck; used to carry the 14mm Fastflo® underfloor heating pipe.

Fit deck foil-face down



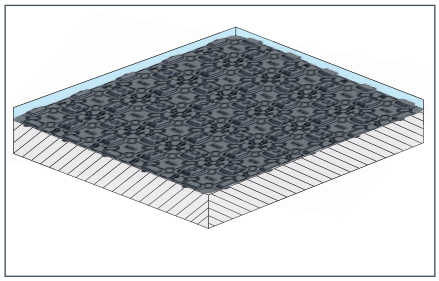
B A structural 18mm foil-faced cover deck, which is placed on top of the FastDeck® panel to form the final surface on which floor coverings will be fitted. T&G joints are glued.

INSTALLATION SEQUENCE

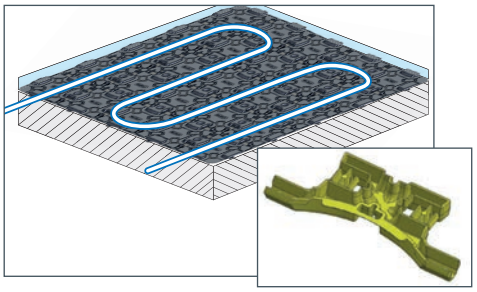


1 Fit insulation between joists (if required).

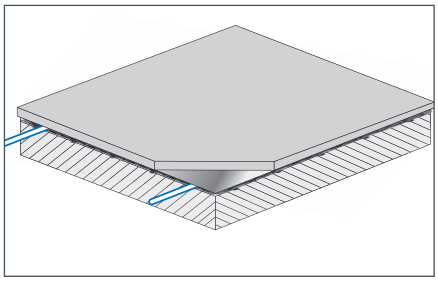
2 Fit an edge isolation strip around all walls in the room (if required).



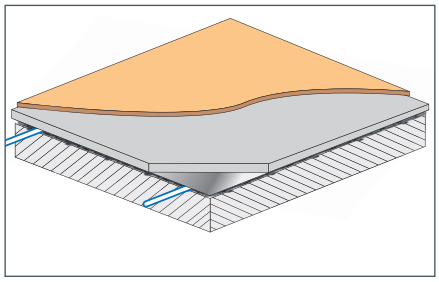
3 Lay the moulded FastDeck® over the insulation layer. Use the staples supplied to secure it into the insulation around the edges of the room.



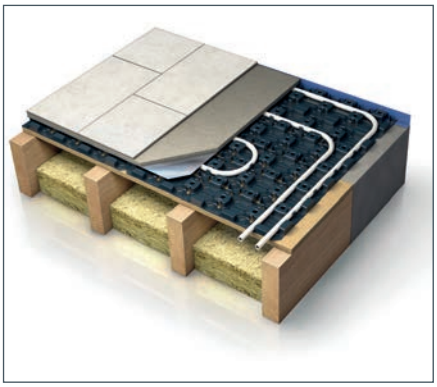
4 Lay the Fastflo® UFH pipe pushing it firmly into the FastDeck® panel. Use the green anchor clips if necessary to hold pipe in place on turns.



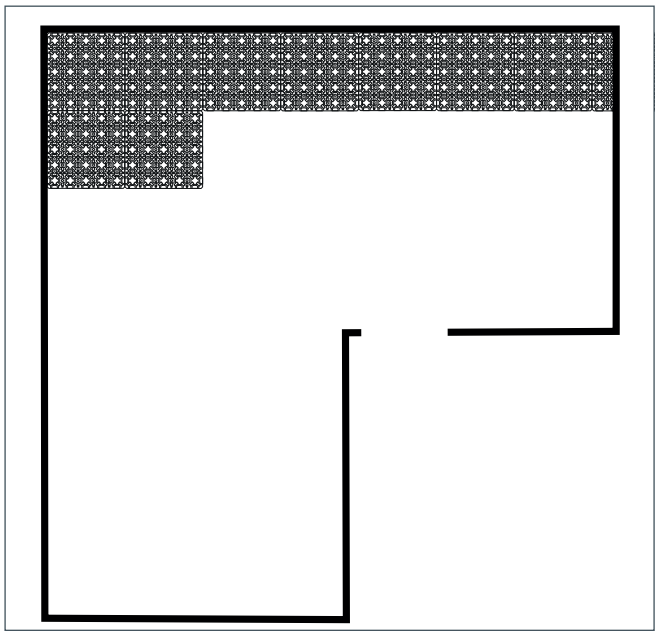
5 Lay the deck supplied with the foil facing down. Glue the T&G joint with the PU adhesive supplied.



6 Fit the floor finish. Carpet, vinyl, tiles and engineered timber are all suitable for use over FastDeck®.

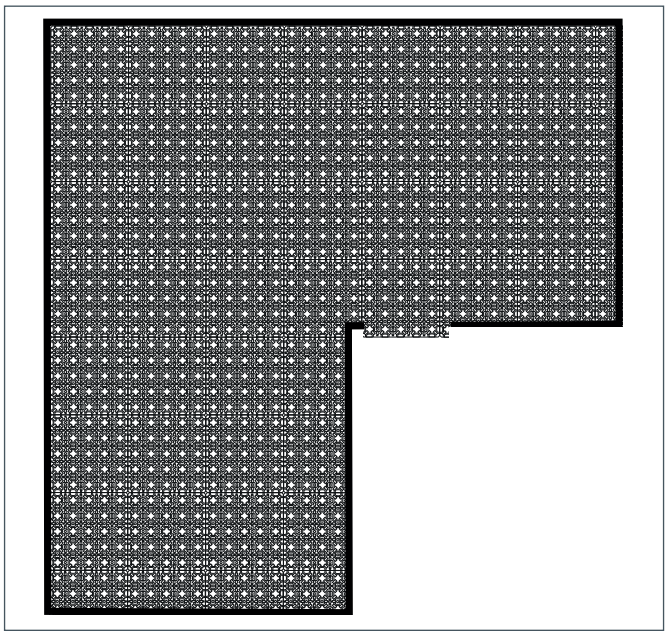


INSTALLING THE MOULDED FASTDECK® PANEL



1 Starting against a straight wall, lay the first row with the male edges facing into the centre of the room – this will allow the next panel to drop on top of the clip. The panels lock together.

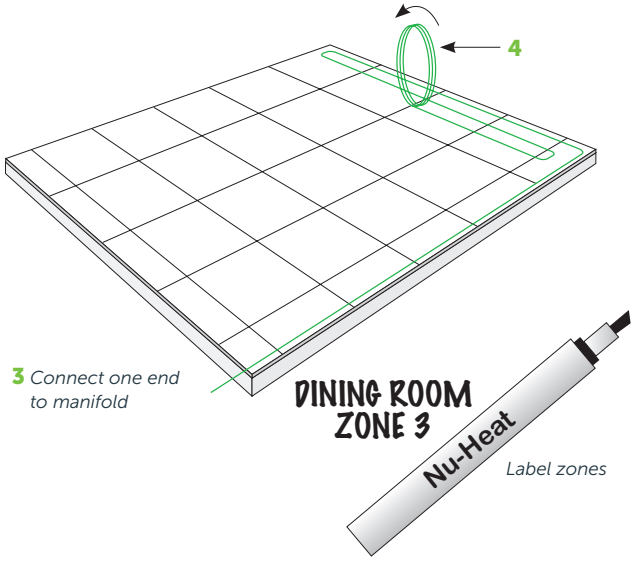
2 Cut off any excess panel at the end of the run – offcuts can be used to fill in at the edges of the room as needed.



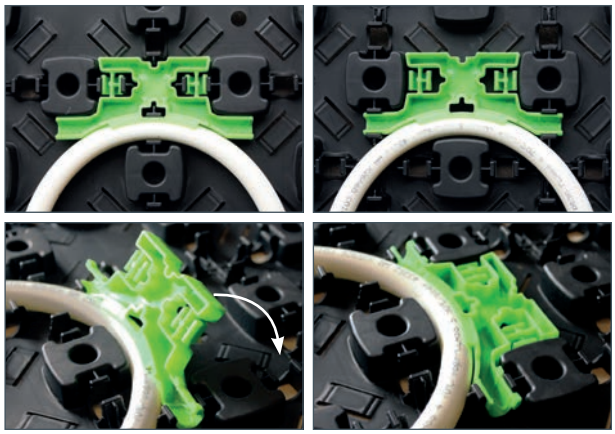
3 Fill the entire room with moulded panel. On timber sub-floors, the panel can be screwed down if required but this is not essential.

Panel is easy to cut with a handsaw or circular saw.

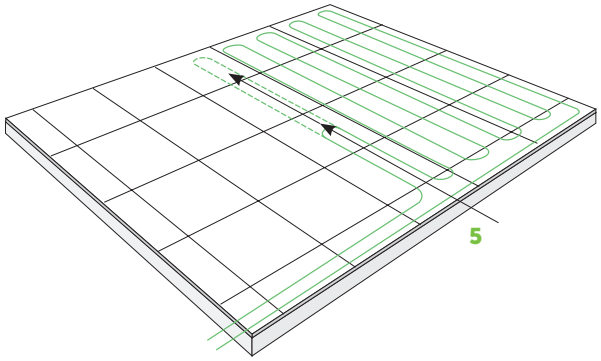
SEQUENCE OF LAYING THE HEATING TUBE IN THE FLOOR

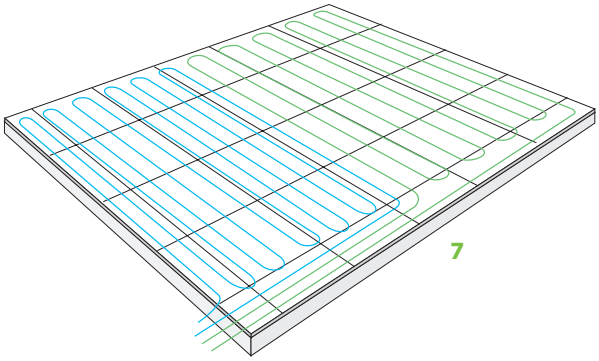


4 *Small clips can be used on turns if required. They can be orientated in either direction, smooth side down.*



Insert the clip at an angle and then rotate into the panel.





1 Install the Fastflo® UFH pipe following the layout on the CAD drawings and these instructions.

2 Firstly install the furthest room from the manifold. Ensure that the correct coil is selected for the room to be installed. The coil is marked every metre with its overall length and remaining coil length. The coil lengths for each room will be shown on the system drawings.

3 Connect one end of the coil into the correct port of the manifold as described in the *Installation Manual*. **The tube should be clearly labelled with the room name.**

4 Lay the tube from the manifold to the zone following the CAD plan provided. Green anchor clips are provided to secure pipe into the panel on turns if required – make turns in the pipework at least one channel away from the wall to allow space for this.

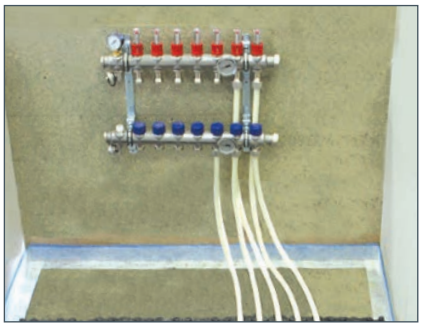
Note: **Do not kink the tube.**

5 Continue installing the tube until there is just enough tube remaining to return to the manifold **plus any difference in supplied length and cut-length** as stated on the system drawings. The metre markings on the coil can be used to help judge the amount of pipe remaining.

Note: **All tube coils within a single zone must be no more than 10% different in length.**

6 Once back at the manifold do not cut the tube to length or connect it to the manifold unless the zone has only one coil. Label the return pipe to ensure the pipes do not get crossed when connected at a later stage.

7 All remaining coils for the zone can now be installed in exactly the same way until the room is fully covered with tube.



8 Leave a section approx. 400mm wide below the manifold clear to allow close spacing of pipes.

CONNECTING THE PIPE AND PRESSURE TESTING

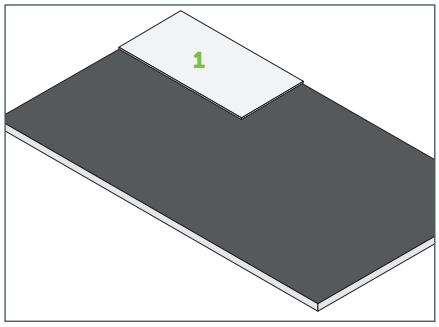
9 When the correct number and lengths of tube are laid in the floor, trim excess coil length and connect to the manifold as described in the *Installation Manual*. All ports on the manifold should now be connected.

Note: **Always mark the flow and return pipes with their correct zone names. Do not get pipes crossed.**

10 The manifold must now be filled and pressure tested as described in the *Installation Manual* before the cement board deck is fitted.

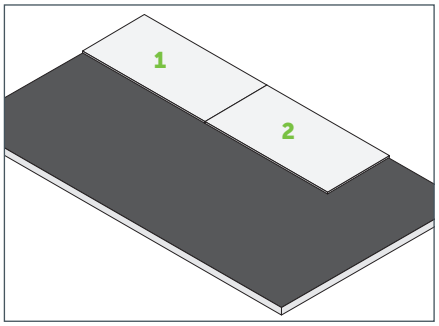
INSTALLING THE FOIL-FACED COVER DECK

The foil-faced deck should be laid in a brick-bond pattern on top of the FastDeck® moulded panel – this will give a stronger joint.

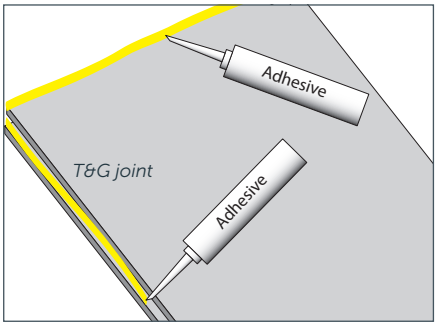


1 Starting against a straight wall, lay the first panel – **foil face down**.

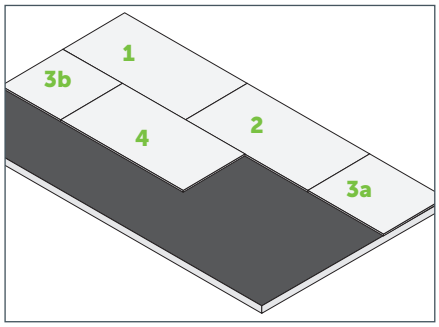
Remove the T&G joint next to the wall.



2 Lay the next panel, ensuring it is pushed firmly against its neighbour. Continue laying panel along the edge of the room.

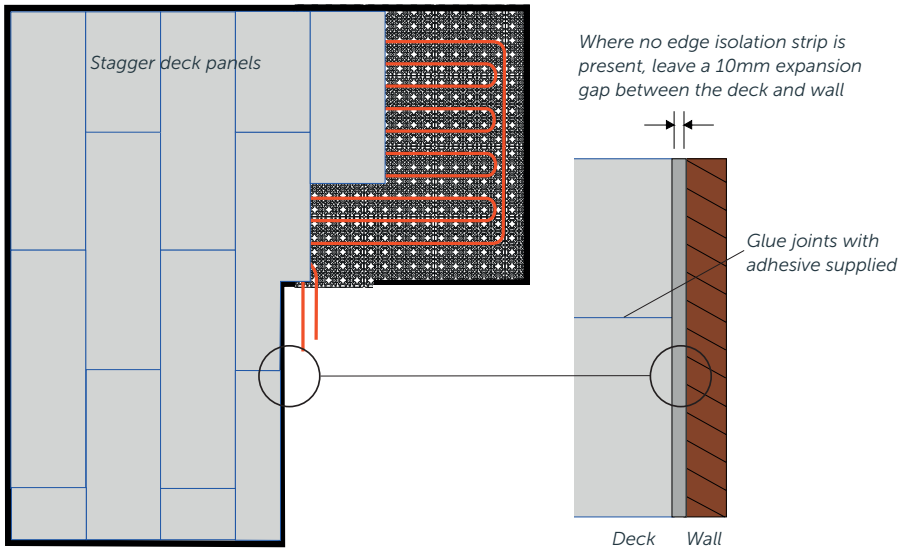


3 Run a bead of adhesive (supplied) along the tongue of each panel before it is installed into the groove.



4 Cut off any excess panel at the end of the run to use at the beginning of the next row. Lay in a brick-bond pattern with offset joints.

5 Fill the entire room with deck.



The deck should be installed with the joints staggered and glued.

Note: Wear PPE gloves and a mask when cutting laminated gypsum board, as the foil has sharp edges and generates dust when cut.