

Floor installation instructions

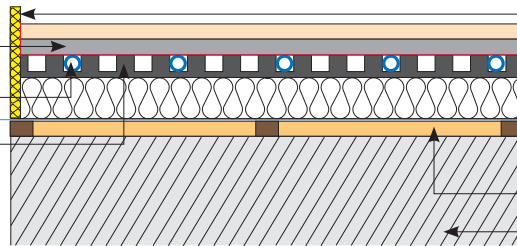
FDC14 – 14mm Fastflo® in low-profile FastDeck® panels with foil-faced deck on a concrete or beam & block slab

Supplied by Nu-Heat

Foil-faced deck
14mm UFH tube
FastDeck® moulded panel

Supplied by others

Edge isolation strip (optional)
Floor covering
Rigid insulation to meet Building Regulations
DPM
Sand blinding layer/battens (optional)
Concrete or beam & block slab



TECHNICAL INFORMATION

Substrate

To minimise deflection it is important that the underlying substrate (concrete or beam & block slab) is flat. An optional sand blinding layer can be used to help achieve a flat surface; battens used to assist in levelling can be removed if necessary. The sand should be compacted before laying a DPM on top. Insulation can then be fitted.

Insulation

In all cases, insulation installed below the FastDeck® panel must have a compressive strength higher than 140kPa. XPS (extruded polystyrene) boards including Celotex, Polyfoam, Styrofoam and Yelofoam are suitable. Expanded polystyrene is not suitable. The thickness of the insulation is dependent on Part L of Building regulations, which can vary.

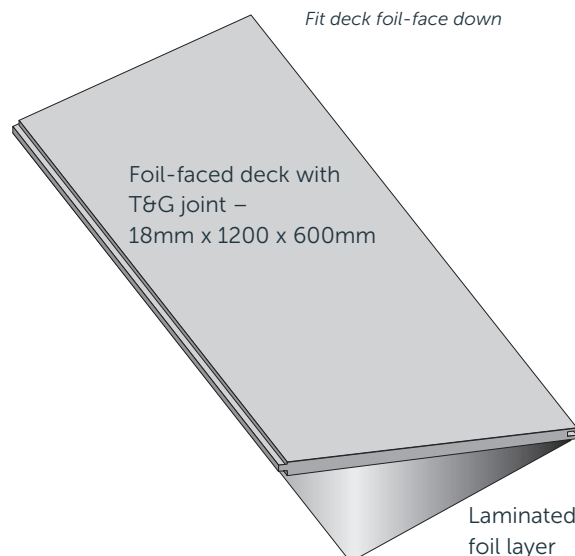
FastDeck™ components

FastDeck® consists of two main components:

Individual 500mm x 500mm moulded panels are clipped together on top of the insulation layer.



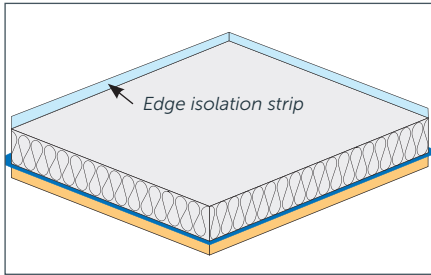
Fit deck foil-face down



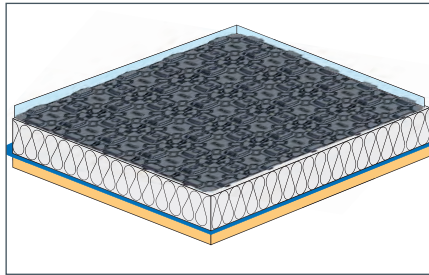
A A low-profile moulded polypropylene panel that can be clipped together on top of the insulation layer, which is used to carry the 14mm Fastflo® underfloor heating pipe.

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.

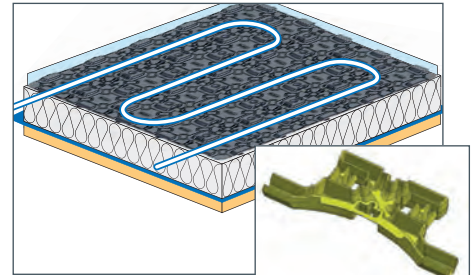
INSTALLATION SEQUENCE



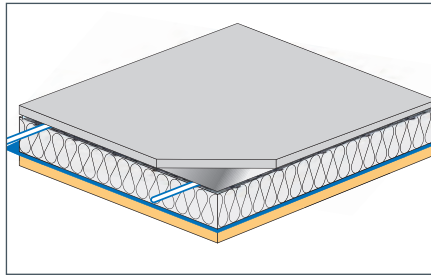
- 1 Fit insulation on top of the DPM/ optional sand blinding layer.
- 2 Fit an edge isolation strip around all walls in the room (if required).



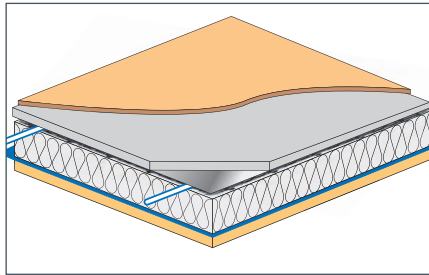
- 3 Lay the moulded FastDeck® over the insulation layer. Use the staples supplied to secure it into the insulation around the edges of the room.



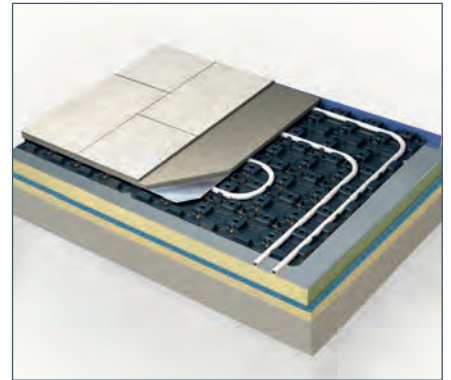
- 4 Lay the Fastflo® UFH pipe pushing it firmly into the FastDeck™ panel. Use the green anchor clips if necessary to hold pipe in place on turns.



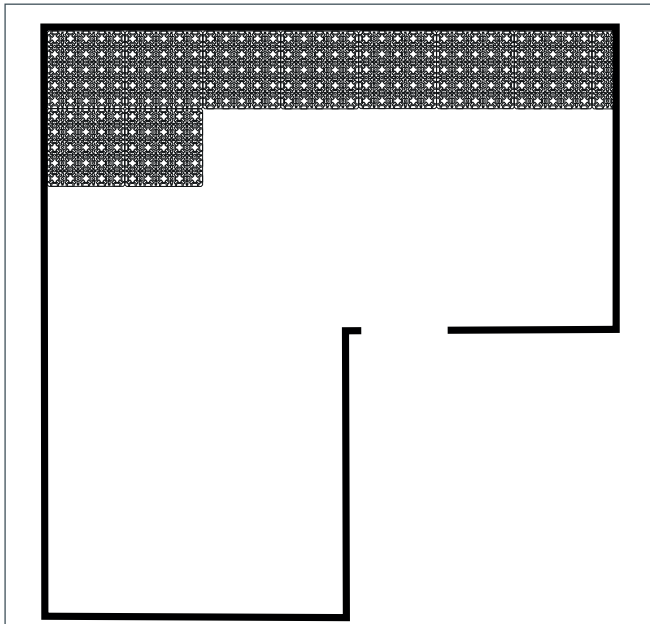
- 5 Lay the deck supplied with the foil facing down. Glue the T&G joint with the adhesive supplied.



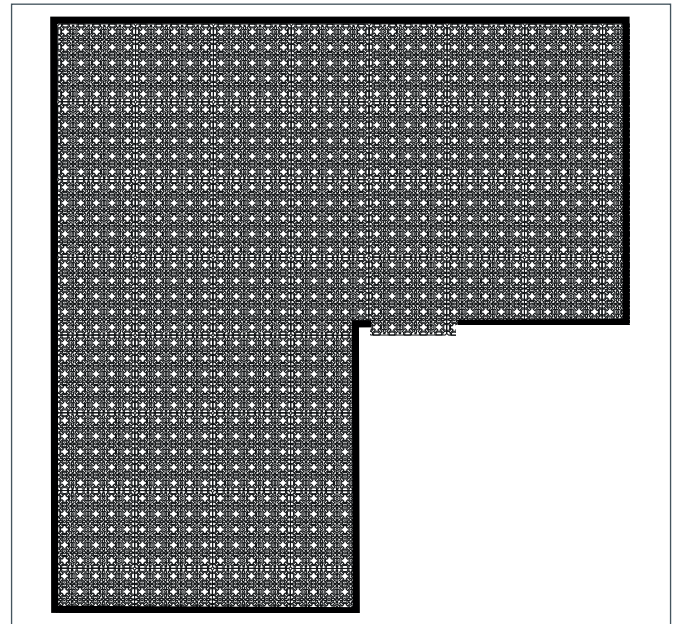
- 6 Fit the floor finish. Carpet, vinyl, tiles and engineered timber are all suitable for use over FastDeck®.



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 FastDeck® panel. Using staples supplied, fix FastDeck® panel to insulation around the edges of the room.

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



3 Connect one end to manifold

DINING ROOM ZONE 3

Nu-Heat

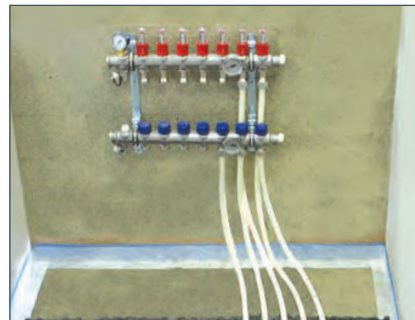
Label zones

The diagram illustrates two types of floor heating systems. The top system, labeled '5', is a single-circuit system where a single loop of green lines represents the heating circuit. The bottom system, labeled '7', is a two-circuit system where multiple loops of blue lines represent separate heating circuits for different zones. Both systems are shown installed within a grid representing the floor structure.

- Note:** Do not kink the tube.

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

- 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

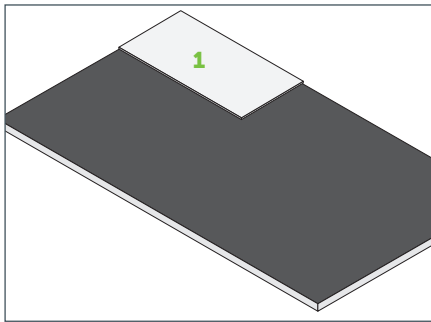
- 9** When the correct number and lengths of tube are laid in the floor, trim excess coil length and connect to the manifold as described in the *Installation Manual*. All ports on the manifold should now be connected.

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

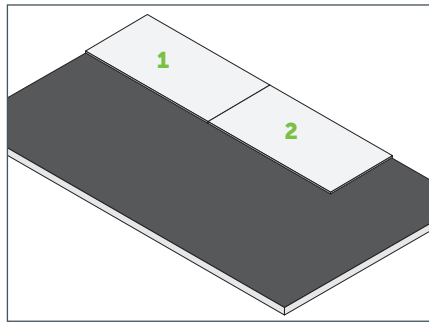
- 10** The manifold must now be filled and pressure tested as described in the *Installation Manual* before the cement board deck is fitted.

INSTALLING THE FOIL-FACED COVER DECK

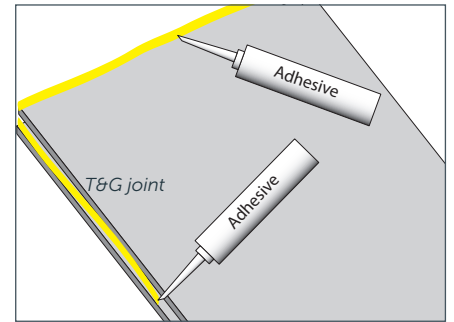
The foil-faced deck should be laid in a brick-bond pattern on top of the FastDeck® moulded panel – this will give a stronger joint.



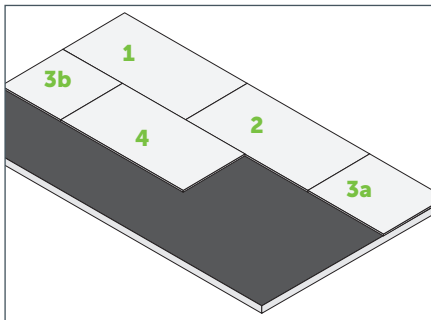
- 1** Starting against a straight wall, lay the first panel – **foil face down**.
Remove the T&G joint next to the wall.



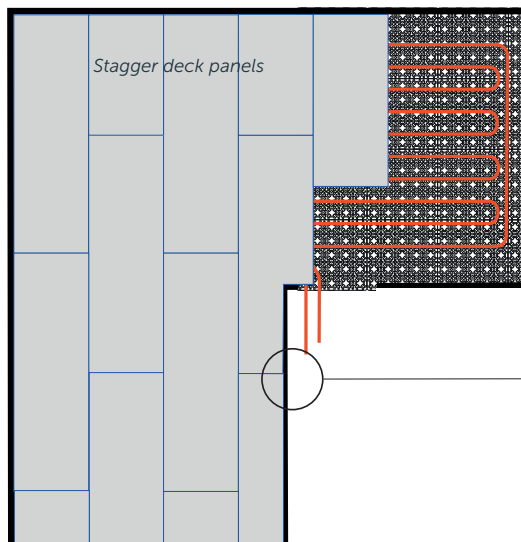
- 2** Lay the next panel, ensuring it is pushed firmly against its neighbour. Continue laying panel along the edge of the room.



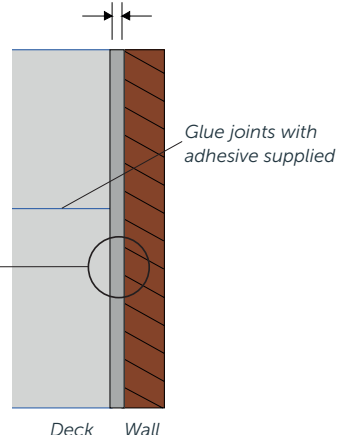
- 3** Run a bead of adhesive (supplied) along the tongue of each panel before it is installed into the groove.



- 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.



Where no edge isolation strip is present, leave a 10mm expansion gap between the deck and wall



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.