JG LowFit™
Castellated Panel 20mm (for 15mm Pipe)
Installation manual
Description

The JG LowFit Castellated panel is 20mm deep (0.72m² effective area per panel). It is designed to be used with 15mm JG Layflat polybutylene barrier pipe and self-levelling screed (typical overall system depth 20-25mm) to provide a high output, low profile UFH solution. The JG LowFit Castellated Panel system is designed so that the panels butt up against each other when clipped together and is made with an open grid so that the screed can adhere to the substrate below.

Please Note – These instructions are provided to give guidance on the correct installation of the JG LowFit Castellated Panel system. They are not intended to be, or provided as, comprehensive system design guides or complete UFH installation instructions. In all cases, installers are reminded that UFH installations need to comply with relevant Building Regulations, British Standards and manufacturer’s instructions.

Installation

1. Check Floor Levels
   Before laying the JG LowFit Castellated Panel, check that the sub floor is flat & level to meet SR2 flatness requirement, which is 5mm over a 2m distance. It may be necessary to pour a self-levelling floor mixture before installation to ensure a suitable surface.

   ![Check Floor Levels](image)

When installing over Suspended Timber Floors, ensure the structure is secure, fixing any loose or damaged timber & check with a suitably qualified person the floor is capable of withstanding the additional weight & take any necessary measures to strengthen the structure. Fill any gaps to prevent self-levelling compound from leaking through.

2. Clean & Prime
   The JG LowFit Castellated Panel can be laid on a concrete, plywood or chipboard floor but in all cases the floor should be swept free of debris and then primed using a suitable floor primer – available from a wide number of suppliers. Once the primer has cured, (follow the manufacturer’s instructions) you can begin to lay the plastic panels.
   (For details of suitable primers please refer to our website jgunderfloor.com)

   ![Clean & Prime](image)
Installation (cont)

3. Perimeter Strip
   Ensure any gaps in walls are filled and sealed. Install perimeter strip around the edge of the space. This prevents seepage of the self-levelling screed, provides some expansion & creates a thermal break to the adjacent structure.

4. Fitting the Panels
   Remove the plastic backing on the panel so the pre-applied adhesive is exposed place the panels in the area to be heated

   a) There are male studs along one side and one end of each board.
   b) There are mating holes in the castellations along one side and one end of each board
   c) When laying the first row of panels ensure that the edge of the panels with the mating holes in the castellations is against the wall and that the male studs are facing into the room.
   d) Clip the panels together taking care that each edge is butted up and the matting is flat on the floor.

   Quick Tip
   It is advisable to draw a straight line on the floor for the first row to make sure it will fit along the entire length.

   Starting in a corner lay the first sheet, ensuring it overlaps the perimeter strip, making a good seal. It is important to take note of the orientation at this stage.

   5. Once the panels cover the complete heating area, the UFH manifold & pipe loops can be installed in accordance with the pipe layout drawing. Installation of the pipe can begin in the orientation best suited to the design. The JG Lowfit Castellated Panel 20mm is designed to be used with 15mm Layflat polybutylene pipe. The panels can be walked on immediately after installation and the adhesive on the panels will help will provide a strong firm base while the pipe is being laid and the screed is being poured. Install each loop starting from the manifold, following the pipe layout plan. When complete, the systems should be filled & pressure tested before installing the screed.

   6. With the pipes under pressure, install the screed as per manufacturer’s recommendations & take note of drying/curing times. UFH should not be used to accelerate drying/curing times as this could damage the screed.

   7. Additional Considerations
   All F&R Pipes passing through doorway thresholds should be sleeved. Most floor coverings are suitable for use with Underfloor Heating. However, JG Underfloor recommend guidance is sought from the floor covering supplier to check the suitability & installation requirements for use with UFH. JG underfloor recommend the use of floor probes in all zones to prevent overheating of floors & potential damage to certain floor coverings. When using floor tiles or similar, check manufacturers requirements for decoupling membrane & expansion joints. There are many self levelling / screed products available, please check with manufacturers/suppliers your chosen product is suitable for UFH.

   8. Got a question or need more information?
   We have a wide range of information, support & installation videos on all our UFH products. For more detailed information, guidance & advice please refer to jgunderfloor.com. To speak to one of our technical advisors via our web chat service, please visit johnguest.com/speedfit/technical-support/ then click the blue “Chat with an Expert” link & we will be happy to help.