JG LowFit™
Castellated Panel 16mm (for 12mm Pipe)
Installation manual
Description

The JG LowFit Castellated Panel is a 16mm deep castellated panel (0.6m² effective area per panel). It is designed to be used with 12mm JG polybutylene barrier pipe and self-levelling screed (typical overall system depth 18-20mm) to provide a high output, low profile UFH solution. Each panel has a 50mm overlap to give additional strength and support. In addition, the panel has a self-adhesive backing to make installation easier and has been made with additional holes to enable the screed to adhere to the substrate below giving a solid, stable structure.

Please Note – These instructions are provided to give guidance on the correct installation of the JG 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, ensure that the floor is level and without undulations or high/low spots. 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 and 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 range 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 www.jgunderfloor.com)
3. Perimeter Strip
Install a 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. Ensure any gaps in walls / floors are filled and sealed.

4. Fitting the Panels
Check the UFH design to establish the areas to be covered by 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.

5. Installing Pipe Loops
Once the panels cover the complete 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 16mm is designed to be used with 12mm 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 pouring the screed. 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.

6. Additional Considerations
All pipes passing through doorway thresholds should be sleeved. Most floor coverings are suitable for use with underfloor heating. However, JG Underfloor recommends that 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.

7. 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.