

The Push-fit Solution for Underfloor Heating



THE UNDERFLOOR H E A T I N G MANUFACTURERS' ASSOCIATION

Single Room Underfloor Heating Pack Installation and User Guide

Ideal for Conservatories and Extensions

JGUFHPACK20 For up to 20SQM JGUFHPACK30 For up to 30SQM JGUFHWPACK For up to 30SQM

JULY 2012



REQUIREMENTS

Boiler heat output requirement: It is likely that the existing domestic heating boiler will have sufficient capacity to cover the extra load the floor heating zone requires. As a general rule-of-thumb, the maximum heat input equates to 100watts per m² of floor area. Typically a 20m² room would require 2000 watts (2kW) of heat from the boiler. If in doubt, contact a qualified heating engineer.

JG One Room Pack Unit Overview

Speedfit Underfloor Heating Packs consist of:

A Control Unit which is pre assembled and pre wired, has integral ballvalves to allow for isolation from the primary system, an adjustable blending valve to control the temperature of the water and a high quality 6 metre head circulating pump. An antivibration mounting bracket ensures silent operation.

Programmable Room Thermostat to give individual time and temperature, with a simple menu for easy adjustment. Control can be either 5 day/2 day or 7 day with up to 4 different time and temperature settings per day.

Speedfit Barrier Pipe that is lightweight and flexible with an inner barrier to prevent the ingress of Oxygen molecules. Manufactured and Kitemarked to BS7291 Class S.



- Pre assembled and pre wired
 - Suitable for tiled, timber or carpeted floor coverings

Part No.

JGUFHPACK20

Control Unit

Pipe Clips

Pipe Inserts

Programmable Room Thermostat

15mm x 150m Coils of Barrier Pipe

THE 20SQM PACK CONTAINS :-

200

JG Speedfit®

Floor Constructions - Solid Floor

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HEAT OUTPUT TABLES (w/m²)

Screeded Floor					
Floor Finish + Resistance (m ² K/W)		Flow and Return Temperature °C			
	Tog Value	40/30	45/35	50/40	55/45
Tiles	0.1	60	80	95	120
Thin Timber Finish	0.5	48	66	83	95
Carpet Tiles/Laminate	1	40	53	69	83
Carpet and Underlay	1.5	34	47	58	70

Figures based on 15mm PB tube using 200mm pipe centres and a 65mm traditional screed. Heat outputs are for guidance only and can vary with water temperature, floor finish and construction.

Further information and advice is available on 01895 425333 or www.speedfitUFH.co.uk

TROUBLESHOOTING

PUMP NOT RUNNING

Check thermostat is set and calling for heat Check for heat to flow pipework is above 42°C Check power to pump

Check pump spindle is free to turn

NOT ENOUGH HEAT

Check flow temperature setting (Typically 50°C for screeded floors)

Check amount of time the floor is on allowing for heat loss and outside conditions

Conservatory floors where the UFH is connected to the radiator system and not having an independent circuit may not be on long enough to bring the floor up to operating

Temperature due to the heat loss of this type of room



EXAMPLES OF SERPENTINE AND SPIRAL PIPE LAYOUTS

Preparing the Floor

The insulation should be fitted to a level and clean floor and over a DPM. Insulation thickness should be to the designed specification or building regulation whichever is greater (consult Architect/Building Control Officer).

An expansion strip is required around the perimeter of the room to accommodate the expansion from the screed being heated up.

Some buildings, especially older types may have a higher heat loss than the UFH can provide. In this case there may be a need to increase the insulation and reduce heat loss of the building or consider supplementary heating.

Pipe Laying

When uncoiling the pipe unroll it from the outside and not the centre of the roll. Start from the outside of the room when using the counterflow. Keeping the pipe centeres consistent may be made easier by the use of a spacer EG 200mm centres will require a 185mm long spacer.

Testing

The underfloor heating pipework should be pressure tested before the system is connected to the primary circuit and before screeding. Using the pressure tester, pressurise the system to 2 Bar for 10 minutes and then 10 bar for 10 minutes. After testing, the system should remain pressurised at 6 Bar throughout the screeding and curing process. This is in accordance with BS EN1264 Part 4.

Screeding

The screed should be laid as soon as possible after the pressure test. The system should be left pressurised during the screeding process. The screed must be laid so that it is in good contact with the pipes with no air pockets. Traditional sand and cement screed is normally 65-75mm thick. It should be allowed to dry naturally in line with the requirements of the screed manufacturer's instructions and British Standards BS8204-1 Special low thickness screeds are available and screed manufacturers will be able to advise on their use with underfloor heating. Manufacturers' screed drying times will vary but under no circumstances should the underfloor heating system be used to speed up the drying process as it may damage the screed.

Setting up and Pairing the Thermostat (Wireless Pack Only)

USING A STANDALONE RECEIVER (RCI)

With the termostat turned off • Press and hold the Clock button until the LCD comes on.

• You will now see 2 sets of numbers. The small number 01 in the top right corner is the feature number. This is feature 01

• Press Clock repeatedly until you see feature 06

00= UHI-W 0I= Standalone receiver •Use the Up/Down keys to set feature 06 large nubmers to 01⁰⁶

• Press Clock again until you see feature 07

01-32 Receiver Address (RF is disabled if receiver Address is set to 00) •Use Up/Downkeys to set feature 07 to 01 (You should set a unique receiver address for each receiver installed)

Press Clock again until you see feature 07 01-32 Receiver Address (RF is disabled if receiver Address is set to 00) •Use Up/Downkeys to set feature 07 to 01 (You should set a unique receiver address for each receiver installed)

Press Clock again until you see feature 08 01-02 Zone Number

You are able to connect two DT-W / PRT-W to one receiver. You should select which zone this thermostat controls.

• Press A to accept, the display will now go blank

Pairing the thermostat

- On the receiver, press and hold the pairing button until the Comms LED comes on
- Turn off the thermostat by holding down the power button
- On the thermostat, press the A key for 5 seconds. The thermostat will send a signal for 1 minute, and will flash the RF signal icon
- If successful, the receiver will flash the Comms LED
- Press the Pairing Button on the receiver to store
- If the pairing is unsuccessful, reposition the thermostat and try again.

WIRING TO MOTORISED VALVE USING WIRELESS RECEIVER



All new electrical works must be installed tested by a competent person and comply with IEE Regulations and before connection to mains voltage. Power off Clock H Button



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Installing & Wiring a JG One Room Pack

USING A MOTORISED VALVE



WIRING JGPRTE TO MOTORISED VALVE



All new electrical works must be installed tested by a competent person and comply with IEE Regulations and before connection to mains voltage

CONNECTING TO THE EXISTING HEATING CIRCUIT (JG STAT NOT USED)



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