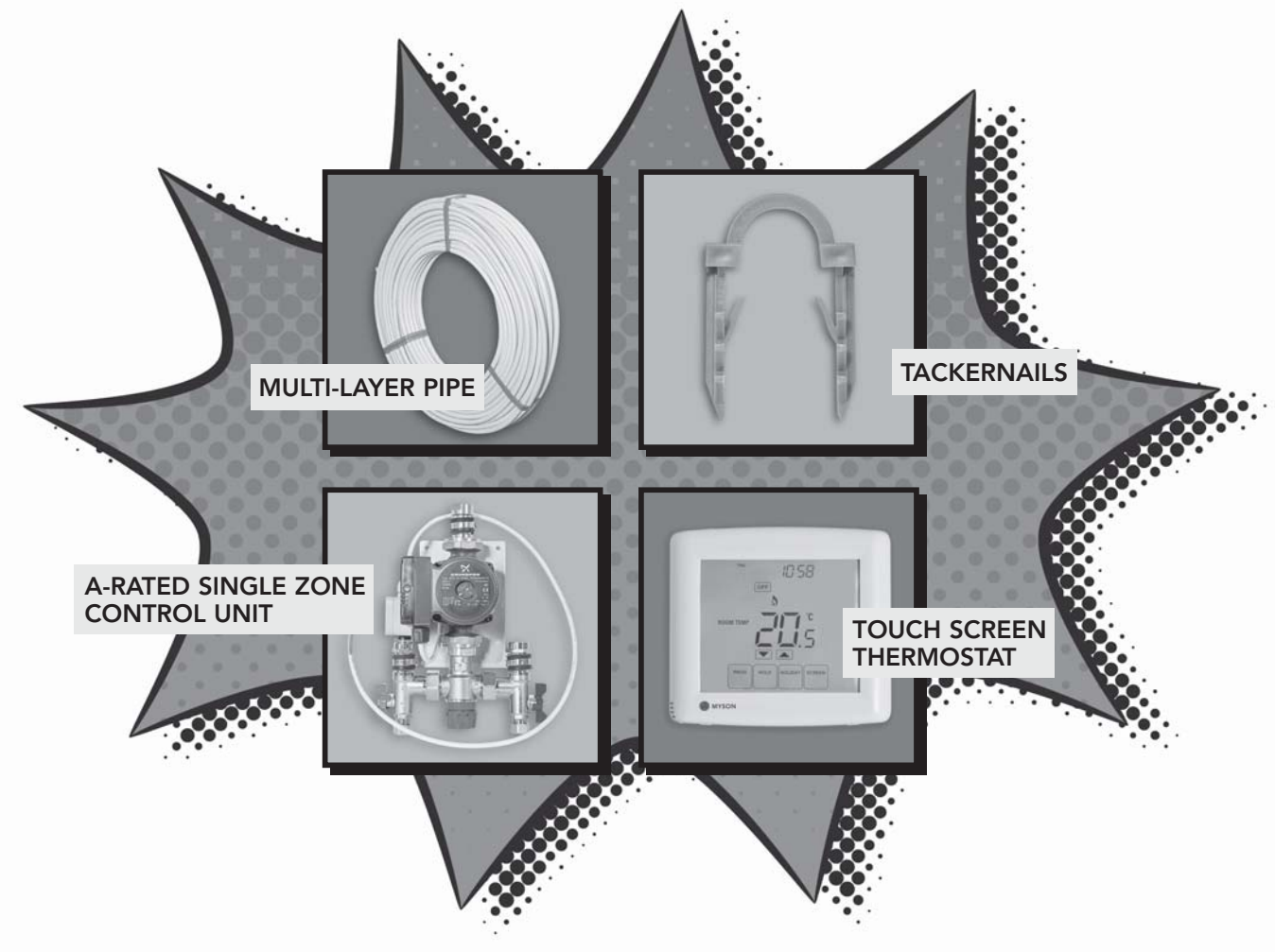


FLOORTEC UNDERFLOOR HEATING.

SINGLE ZONE PACK INSTALLATION GUIDE

**PLEASE READ
BEFORE INSTALLATION**



1.0 Before You Start

Please plan the installation carefully.

Consideration must be given to the system and additional equipment that may be required such as zone valves and additional timers.

We recommend the underfloor heating is installed and connected to a traditional two pipe heating system as a separate timed heating zone. Please contact FLOORTEC for further details.

2.0 What's in the box?



20m² Pack

- 1 x 100m 16mm MLCP Pipe
- 1 x FLOORTEC COMPACT control unit
- 2 x 16mm Compression Adapters
- 2 x ½" male iron adapters
- 1 x Edge Perimeter Insulation
- 1 x Box Long Tackernails
- 1 x 230v Touchscreen stat c/w floor sensor



40m² Pack

- 2 x 100m 16mm MLCP Pipe
- 1 x FLOORTEC COMPACT control unit
- 4 x 16mm Compression Adapters
- 2 x ½" male iron adapters
- 2 x Edge Perimeter Insulation
- 2 x Box Long Tackernails
- 1 x 230v Touchscreen stat c/w floor sensor
- 2 x Y Splitters

3.0 Installation

20m² pack / 1 circuit

1. Install COMPACT control unit and fittings.

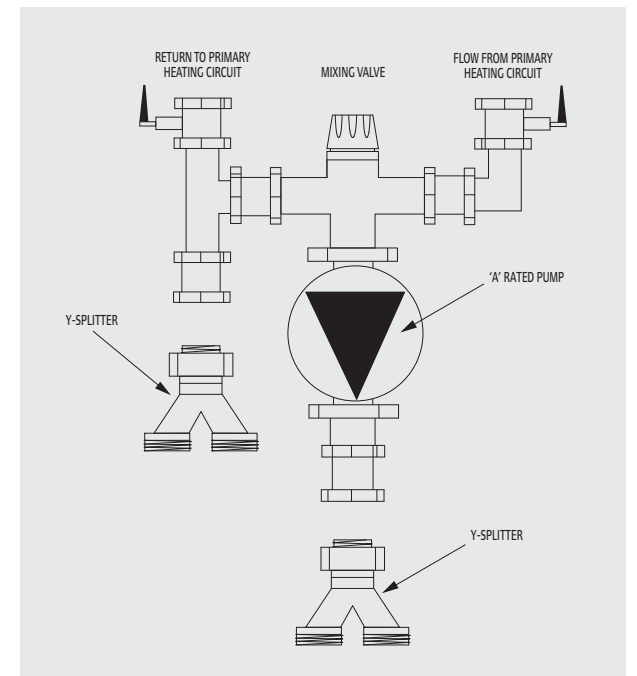
Install the ½" male adapters as shown pictured right on flow and return for UFH pipework.

If using the 40m pack then Y-splitters must be fitted to give 2 circuits after ½" adapters have been fitted (as pictured below).



40m² pack / 2 circuits

Install control unit in a convenient location in or near the area to be heated.



3.0 Installation (continued...)

2. Attach edging insulation to all perimeter walls (before base insulation if possible) and as/if required. Attach using tacks or tape to keep edging insulation in situ during remaining works.

It is recommended to fit a water migration barrier (500 gauge polythene sheet on top of insulation with 200mm taped overlaps). Please check with insulation manufacturer.

Ensure polythene flap from edging insulation lies on top of barrier and is secured in place using tape .



3. Lay pipe and fix to FLOORTEC compact control unit using 16mm compression fittings supplied.

Packs are sized to suit 200mm pipe spacings which will suit most new build extensions. Should the area to be heated have a high heat loss (ie conservatory, orangery etc) then smaller centres maybe required and a larger pack sourced. If unsure please contact FLOORTEC.

**3.0 Installation (continued...)****Single 20m² pack install example (1 loop)****40m² pack install example (2 loops)**

Note when installing 40m² pack please ensure each bay size is similar.

4.0 Filling and Pressure Testing

Attach a temporary mains water connection to the flow (red) connection of the UFH Compact Control Unit and connect a temporary drain to the return. Open isolating valves and allow mains water to enter system.

Run water through system until mains water contains no air. Close return isolating valve and allow pressure to increase to

3 bar. If mains water pressure is insufficient a separate hydraulic pump may be used.

Close both valves leave under 3 bar pressure for 30 minutes. Check for any leaks/pressure loss and rectify. Once system integrity has been proven reduce pressure to 1 bar and prepare for screeding.

5.0 Post Screeding

The slab must be allowed to cure for a minimum of 21 days before the heating system can be turned on. Following this period the heating system should be allowed to reach operating temperature by increasing the temperature 3°C per day from a commencing temperature of 30°C until the final operating temperature is reached. Failure to observe these instructions could result in damage to the screed.

Floor Coverings

Underfloor heating doesn't dictate to you in any way. It can be used with almost any kind of flooring or floor covering.

There are four basic floor finish types which should be considered: ceramic tiles, vinyl, timber and carpets. Ceramic

finishes have the least thermal resistance with carpets having the greatest.

Ceramic & Vinyl: Ceramic, plastic or vinyl flooring, have a low thermal resistance, and will function very well with FLOORTEC underfloor heating systems.

Timber: Timber flooring is compatible with FLOORTEC underfloor heating systems however you must ensure that it is stored in the room in which it is to be laid 2 weeks prior to installation.

Carpets: Carpets are generally compatible with FLOORTEC underfloor heating systems however heavy carpets with felt underlay should be avoided as this may reduce the heat output in the floor.

6.0 Wiring - with Zone Valve

All wiring should be undertaken by qualified installer and conform to current IEE regulations.

To comply with IEE regulations the pump on the unit is provided with an earth connection via the connection box. A fused spur should be provided adjacent the unit. The mains cable should be connected to the spur and fused at 3 amp.

Note: Certain flooring applications may require the use of a floor sensor which is supplied.

When fitting and locating the thermostat fix in a position on the wall as recommended in the manufacturers' instructions. When a room thermostat is fitted combined with the use of a zone valve please ensure the link is NOT removed as shown in the diagram above.

7.0 General

Flow Temperature °C	Floor Covering	Outputs Watts/sq.m
40	ceramic	71
	carpet / wood	46
	thick carpet	39
45	ceramic	94
	carpet / wood	61
	thick carpet	52
50	ceramic	117
	carpet / wood	76
	thick carpet	65
55	ceramic	140
	carpet / wood	91
	thick carpet	78

Important Notes

These figures assume 200mm pipe spacings, a 75mm deep screed, 8°C difference between the underfloor heating flow and return, and an air temperature of 20°C. Calculated in accordance with BSEN 1254-:1997.

Care must be taken when using underfloor heating with floor coverings, which may be affected by heat, such as wood or vinyl products. Consult the flooring manufacturer for guidance.

The underfloor heating installer must ensure the heat requirement of the area to be heated is within the potential outputs detailed above. Supplementary heating may be required if the heat requirement is in excess of the above outputs, if the system is to be operated intermittently, or a swift response time is required. FLOORTEC is not responsible for providing any form of temperature guarantee.

