Fit from below Spreader Plate System

Ø 0800 5420 816
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OMEGA profile

Omega profile channels allow the pipe

to be held securely in place and provide

maximum contact with the floorheating pipe

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Three flexible options

Wunda's fit from below Aluminium spreader plates are designed to be fitted between the joists to the underside of the floor deck of the room above which often makes life a lot easier on both new builds and renovations.

They can be used individually or in certain combinations to suit a variety of joist centres and to provide variable performance options.

- A) 150mm x 1000mm spreader plates come with 2 Omega pipe channels giving 150mm pipe spacing
- **B) 250mm x 1000mm** spreader plates come with **2 Omega channels** giving 250mm pipe spacing.
- **C) 180mm x 1000mm** 'J' profile spreader plates come with **1 Omega channel** allowing flexible pipe spacing when used with our 250mm spreader plate



В

150mm x 1000mm double Omega channels



250mm x 1000mm double Omega channels



180mm x 1000mm 'J' profile Single Omega channel

You will need:

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- Hammer
- Saw/hacksaw
- Suitable screws
- Cordless screwdriver
- Staple Gun
- Scissors
- Stanley knife
- Safety Glasses/Gloves
- Wire Cutters
- Tape Measure

Please Note:

The edges and corners of aluminium spreader plates can be very sharp, take care and wear appropriate clothing/gloves when handling.



A single run of 250mm spreaders accommodate **2 channels** of pipe within each 400mm joist space providing standard performance heat output. See **Option 1** on **pg 3** for installation details.

Recommended Layout Combinations



A mixed run of 150mm & 180mm spreaders accommodate **3 channels** of pipe within each 400mm joist space providing high performance heat output. See **Option 2** on **pg 4** for installation details.



Two runs of 150mm spreaders accommodate **4 channels** of pipe within each 600mm joist space providing very high performance heat output. See **Option 3** on **pg 5** for installation details.

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Before fitting the spreader plates study the pipe layout if supplied and familiarise yourself with the design and layout.

Options for notching joists:

In most cases you will need to notch the joists to allow the floor heating pipe to pass unrestricted across joist spans. Depending on which joists you have, notching will have to be acheived according to building regulations. The following illustrations are a only a guide.

Standard Joists

Standard Joists must be drilled/notched in accordance with building regulations.



Standard Joists with battens Battens attached to the bottom the joist does not affect the integity of the joist.



'l' Joists I beam joists can't be notched, but can have holes drilled at convenient points to allow pipe access.



Steel web Joists Steel web joists allow easier installation of the pipe than the other joist types.







Insulation

Fit at least 100mm of insulation (mineral wool) for best performance, increase to 200mm over unheated areas. A 20-50mm air gap is recommended between the insulation and the pipes.

Nail Pipe Clips If required, pipe sections not supported within

the spreader plate can be secured to the floor deck above with 15mm nail pipe clips

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Floor probes

Floor probes can be fitted if required to measure the temperature of the floor. Limiting floor surface temp to a maximum of 27°C by using floor probes is advisable when using wooden floor finishes.

Specialist timber suppliers should be contacted to obtain expert advice on your chosen floor finish. The addition of carpet or rugs on wooden floors can increase the temperature between the floor and carpet, check suitability with specialist suppliers.



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OPTION 1: Fitting the plates

Single runs of 250mm spreaders on 400mm centred joists

This method assumes you have notched standard wooden joists as per building regs and the upper floor deck has been fixed accross the joists ready to accept the under deck spreader plates.



3



Place a spreader plate centred between the josts and note the measurement from the edge of the plate to the joist (A). Use this measurement to cut a piece of card or wood that will act as a spacing guide when fixing the spreader plates to the floor deck

Wood or card spacer template



Start fixing the spreader plates to the floor deck using pan head chipboard screws and cordless screwdriver. Make sure the length of screw doesn't exceed the thickness of the floor deck. Use the spacer template to

We recommend each spreader to be fixed at six points evenly spread across the surface of the spreader plate (see left) making sure the screws are no nearer than 40mm to any edge.

Spreader plates should start and end no nearer that 250 - 300mm from the wall at the end of each joist span, this is to allow pipe to turn and return back into the opposite channel of the plate.

Make sure the spreader plates are 15mm apart to allow room for expansion.

> Pan head screws - no longer than the thickness of the floor deck

NOTE: Plates can be cut to length as required

Fitting the floor heating pipe

All pipe runs start and finish at the manifold. We recommend fitting the manifold before laying the floor heating pipe, as this will give a reference point for the start and end points. Allow sufficient pipe for cutting and fitting to the manifold at a later stage and clearly label each flow, return and zone on each pipe with a permanent marker.



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The pipe is best laid by two people, one to roll out the pipe while the other presses the pipe into the Omega shaped channels in the spreader plate following the route illustrated in the pipe layout drawing.





At one end of the first joist void, the pipe will have to pass through the notch in the joist and feed into the channels of the adjacent spreader plate, this is repeated for each joist void.



You will note that the pipe centres are closer together at the ends where the pipe passes through the notched joist. To avoid kinking the pipe, form the pipe into a 'Light Bulb End' as shown above.

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OPTION 2: Fitting the plates

mixed runs of 150mm & 180mm 'J' spreaders on 400mm centred joists

This method assumes you have notched standard wooden joists as per building regs and the upper floor deck has been fixed accross the joists ready to accept the under deck spreader plates.



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Place a 150mm & 180mm spreader plate alongside each other leaving a 5mm gap between the plates on the long side. Note the measurement from the edge of the plate to the joist and use this measurement to cut a piece of card or wood that will act as a spacing guide when fixing the spreader plates to the floor deck.

Start fixing the spreader plates to the floor deck using pan head chipboard screws and cordless screwdriver. Make sure the length of screw doesn't exceed the thickness of the floor deck. Use the spacer template to ensure a consistent line for the plates.

We recommend each spreader to be fixed at six points evenly spread across the surface of the spreader plate (see left) making sure the screws are no nearer than 40mm to any edge.

Spreader plates should start and end no nearer that 250 - 300mm from the wall at the end of each joist span, this is to allow pipe to turn and return back into the opposite channel of the plate.

Make sure the spreader plates are 15mm apart to allow room for expansion.

Pan head screws - no longer than the thickness of the floor deck

NOTE: Plates can be cut to length as required

Fitting the floor heating pipe

All pipe runs start and finish at the manifold. We recommend fitting the manifold before laying the floor heating pipe, as this will give a reference point for the start and end points. Allow sufficient pipe for cutting and fitting to the manifold at a later stage and clearly label each flow, return and zone on each pipe with a permanent marker.



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The pipe is best laid by two people, one to roll out the pipe while the other presses the pipe into the Omega shaped channels in the spreader plate following the route illustrated in the pipe layout drawing.

Pipe should be laid to outside walls first, working back towards the manifold.





At one end of the first joist void, the pipe will have to pass through the notch in the joist and feed into the channels of the adjacent spreader plate, this is repeated for each joist void.



You will note that the pipe centres are closer together at the ends where the pipe passes through the notched joist. To avoid kinking the pipe, form the pipe into a 'Light Bulb End' as shown above.

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OPTION 3: Fitting the plates

2 runs of 150mm spreaders on 600mm centred joists

This method assumes you have notched standard wooden joists as per building regs and the upper floor deck has been fixed accross the joists ready to accept the under deck spreader plates.



Place 2 spreader plates 155mm apart and centred between the josts and note the measurement from the edge of the plate to the joist **(A)**. Use this measurement to cut a piece of card or wood that will act as a spacing guide when fixing the spreader plates to the floor deck.

Wood or card spacer template

2 Spreader plates 150mm apart & centred between joists



Start fixing the spreader plates to the floor deck using pan head chipboard screws and cordless screwdriver. Make sure the length of screw doesn't exceed the thickness of the floor deck. Use the spacer template to ensure a consistent line for the plates.

We recommend each spreader to be fixed at six points evenly spread across the surface of the spreader plate (see left) making sure the screws are no nearer than 40mm to any edge.

Spreader plates should start and end no nearer that 250 - 300mm from the wall at the end of each joist span, this is to allow pipe to turn and return back into the opposite channel of the plate.

Make sure the spreader plates are 15mm apart to allow room for expansion.

NOTE: Plates can be cut to length as required

Fitting the floor heating pipe

All pipe runs start and finish at the manifold. We recommend fitting the manifold before laying the floor heating pipe, as this will give a reference point for the start and end points. Allow sufficient pipe for cutting and fitting to the manifold at a later stage and clearly label each flow, return and zone on each pipe with a permanent marker.



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The pipe is best laid by two people, one to roll out the pipe while the other presses the pipe into the Omega shaped channels in the spreader plate following the route illustrated in the pipe layout drawing.





At one end of the first joist void, the pipe will have to pass through the notch in the joist and feed into the channels of the adjacent spreader plate, this is repeated for each joist void.



At 150mm pipe centres you should be able to form the pipe into a smooth radius between channels without kinking the pipe, however if you are unsure, form the pipe into a 'Light Bulb End' as shown above.

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Technical Information		
Maximum heat output		Approx 80 W/m ² **
Recommended flow temperature		45 - 55°C*
Maximum loop length		100m (15/16mm MLC Pipe
Fire properties		Meets Class 1
Environmental		Recyclable
250mm Double Spreader	Thickness	0.5mm
Dimensions:	Width	250mm
	Length	1000mm
	Pipe Centres	230mm
180mm 'J' Spreader	Thickness	0.5mm
Dimensions:	Width	180mm
	Length	1000mm
	Pipe Centres	170mm
150mm Double Spreader	Thickness	0.5mm
Dimensions:	Width	150mm
	Length	1000mm
	Pipe Centres	135mm



*Limiting floor surface temperature to a maximum of 27°C. by using floor probes, is essential when using wooden floor finishes. Specialist timber floor suppliers should be contacted to obtain expert advice on your chosen floor finish. The addition of carpet and rugs on wooden floors can increase the temperature between floor and carpet. Make sure the combined tog value of carpet & underlay does not exceed 1.5 tog. Total thickness of floorboards and any wooden or laminate floor finish should not exceed 25mm.

"When mixed floor solutions are being served from the same manifold, a floor probe must be used in the floor solution with the lower maximum supply temperature. This is to limit the temperature in these floor areas and prevent damage to the floor solution and/or floor finish."

** Flow temp 55°c with tile finish, approx 66m² with 1.5 tog carpet.