

ALTIS FLOW

V1.4 – October 2026

Altis Flow is a new way to lay UFH that delivers fantastic results, is one of the thinnest systems on the market, and pairs perfectly with heat pumps. Whether you have existing concrete, screed, timber or even tiles, as long as the floor is level and structurally sound, Altis Flow should work for your project.

Use this document only as a guide for installing the Altis Flow system. We recommend reading separate manufacturer guidelines regarding using the levelling compound and subsequent preparation of the floors to receive finished floor coverings.

KEY PARTS OF ASSEMBLY

- Board size 1050x650mm
- For use with 12mm pipework
- Castellations for 50mm spacings.
- Made from high impact recycled polystyrene
- High bond self-adhesive backing

Flooring without insulation: for system efficiency, we recommend laying the system on an insulated floor. Due to how this system works, the insulation should not be above the subfloor (under the Altis Flow panel) for the Altis Flow system to work, and it needs to be directly bonded to the subfloor.

The Altis system will perform with uninsulated slabs, but will have a reduced efficiency.

Please note: if on an un-insulated suspended floor, you cannot lay this system on a vented floor as this will provide excessive cooling.

BENEFITS

- Perfect for ASHP installs
- Closer pipe centres can be used
- Compatible with most existing floors
- High thermal mass so great output at low temperatures
- Direct tiling on cured system
- Fast heat-up times

FEATURES

- High density recycled polystyrene sheets
- Castellations for 50mm spacings
- 1050 x 650mm sheet size
- All-in-one panel design (no feed and return panels)
- Lightweight, easy to lay

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A NOTE ON SUB FLOORS

When installing this system, the existing subfloor must be level, stable, and free of debris. If the system panels do not sit flat, this can cause issues when applying the levelling compound, as the panels may not bond fully, or you may experience uneven heating. We recommend only using this list below of suitable subfloors. If your construction is not listed, contact us on **01245 227630** to check suitability before laying.

- A solid concrete floor which is cured for a minimum of 6 weeks and is fully dry.
- Screed floors where the manufacturer's full curing time has elapsed.
- Existing screed, tile floor or concrete floors that are level (if not level, a suitable levelling compound can be used but must be cured first).
- Timber flooring where the floorboards are level and well secured down to the joists with no movement when walked on, any movement will cause cracking of the Altis Flow system and your finished floor. This system is not recommended for vented floors.

SYSTEM WEIGHT

Thanks to Altis Flow's design, it opens up possibilities for installation on suspended floors, providing fantastic output and an alternative to radiators. However, please account for the additional load on joisted floors. The Altis Flow system is heavy. Check with the structural engineer before installation; please use the table below for system weights.

Dried System Weight to 20mm coverage using Mapei Ultraplan Renovation Screed 3240: 45.4kg/m². For every further mm, add 2.05kg.

Dried System Weight to 25mm coverage using Gyvlon low profile screed: 50.51kg/m². For every further mm, add 2.5kg.

All product advice in this guide is given using approved Mapei products. Other products are available to be used on this system. But first, check the manufacturer of adhesives and compounds for correct application as described in this guide. Multipipe will not accept liability for damaged floor surfaces occurring from the use of incorrect products.

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INSTALLATION STEPS

1



Ensure the subfloor is dry, clean and free from debris. Level any holes/ uneven areas using Mapei Ultraplan Renovation Screed 3240.

2



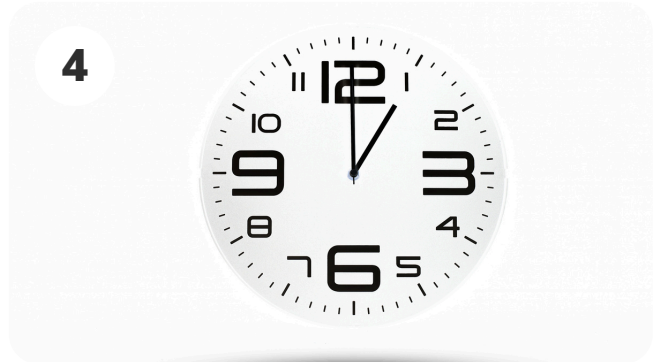
If fixing to timber floor, ensure the floor panels are screwed down and have no movement, any holes in the floor will need to be plugged using a waterproof mastic. There should be no flexing in the boards as you walk over them. Lastly, make sure the system's weight (see above) does not cause any structural issues.

3



Prime the entire area using a brush or roller, taking care not to miss any areas. Prime low porosity areas with Mapei Eco Prim Grip Primer. Prime porous areas with Mapei Eco Prim T Plus (diluted 1:2 with clean water).

4



Leave for a minimum of one hour for the primer to dry.

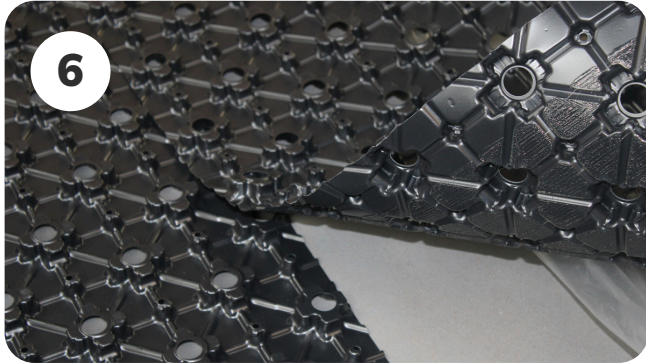
5



Roll out the edge insulation and ensure the apron faces into the room. The insulation must be stuck to the back wall, and the floor (this ensures there is no run out). If you must cross a door threshold (where pipes pass) cut a slot to allow the pipework in, then reseal using tape and mastic.

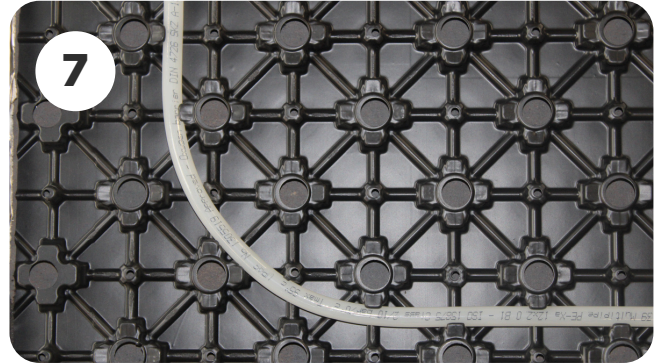
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INSTALLATION STEPS



Start by applying the self-adhesive sheets in the first row, and overlap the first nub. When laying the second row, overlap the panels by one nub.

Top Tip: make sure the smaller nub faces into the room as this is needed for the overlaps.



Once all panels are in place, and using your provided UFH diagram, lay the pipework into the boards. Where you have a tight turn, please do not force the pipe and bring it back one nub.



If any pipes are loose or for your feeds, use a 12mm plastic pipe clip nailed to the floor to secure the pipe.



After the system is laid and connected to the manifold, we recommend following our UFH system guide on filling and pressure testing.



Once the system is laid, we recommend limiting footfall on the system until the levelling compound is laid, to limit the risk of damage to the pipes (if you are not applying the screed straight away). Use clean crawl boards over the pipe.



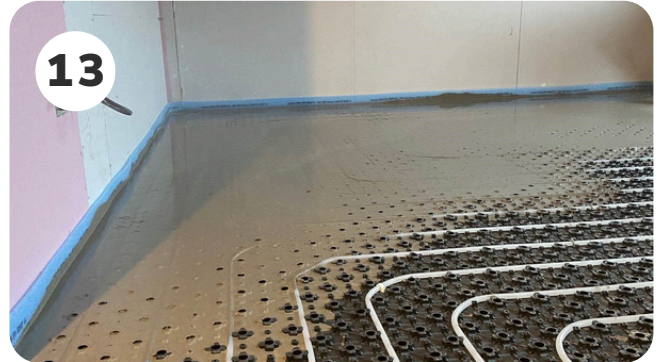
Before laying the Mapei Ultraplan Renovation Screed 3240 use the tables at the back of this guide to ensure you have enough bags to complete, as this product has a short working window.

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INSTALLATION STEPS



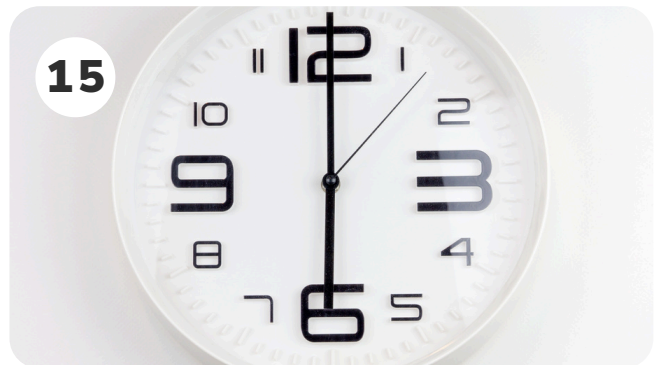
When mixing the levelling compound, mix off, m the floor to limit damage to the pipe. Mix Mapei Ultraplan Renovation Screed 3240 in line with the manufacturer's guidelines on the pack. For more information, see the separate datasheet for further detail.



Starting at the furthest point, we recommend marking the screed level to ensure it's correct. At the very least, ensure the pipe and nubs are fully buried and not showing. Any dips you see with the pipe indicate not enough coverage. Although this is a liquid-based product and there is an element of self-levelling, it might need working into corners of the room.



It is highly recommended to use a spiked plastic roller (no metal rollers) over the top of the panels, as this helps to distribute the levelling compound and ensure the nubs are filled.



Six hours after the screed has been laid (at average ambient temperatures), you can walk on the system. You must wait an additional three days before any floor coverings can be applied.



If any cracking occurs on the surface, this may be due to excessive water or the mix drying too quickly. Providing the cracks are only hairline in size this will not affect the performance of the UFH system.

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LAYING FLOATING FINISHED FLOORS

For any type of floating finished floor, e.g. laminate, we recommend installing approved floor insulation under the laminate to reduce step noise. A 10mm expansion gap should be laid around the entire room, including at door thresholds. When the floor covering manufacturer stipulates a maximum floor surface temperature, please ensure a floor sensor probe (22-23020) is fitted to the underside of the flooring.



We highly recommend that your flooring be left in the room that it is to be laid in overnight to acclimatise.

LAYING TILE FLOORING

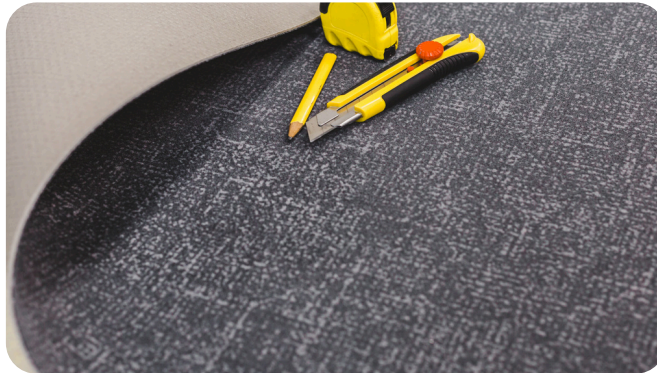
1. Ensure you allow enough time for all surfaces and levelling compounds to be fully cured.
2. If the surface of the levelling compound became contaminated during drying or laitance is present (milky or powdery surface), then grinding, t of the floor surface may be required. Please ensure when grinding, you do not remove too much of the surface as this could damage the pipework system.
3. If you plan to use a decoupling membrane, a notched trowel must be used to apply the tile adhesive, before sticking the membrane fabric side down. This should then be fully cured before laying tiles. The use of decoupling membranes is not mandatory but may be requested by some tilers.
4. Once the surface is cured, we recommend using Mapei Keraquick S1 tile adhesive applied using a notched trowel to the entire underside of each tile for full system adhesion.
5. For tiles above 600x600mm in size or non-moisture stable natural stone then please also add to the tile adhesive Mapei Latex Plus additive.
6. Once the tiles are laid, leave a minimum of 2-3 hours but ideally overnight before grouting.
7. For grouting, we recommend Mapei Ultracolor Plus grout.
8. All movement joints can be filled with either Mapei Mapesil AC (for ceramic and porcelain tiles) or Mapei Mapesil LM (for natural stone tiles).



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LAYING CARPETS

1. When installing Carpet on the Altis Flow system, you first need to check the overall system TOG rating or R-Value. It is recommended that the Tog rating does not exceed 2.5 Tog, including the underlay. Anything thicker than this, please call our technical helpline on **01245 227630** to check system performance against your heat loss.
2. If you are stretching the carpet and using gripper rods, these should only ever be stuck down and not nailed as this could damage both the levelling compound and pipework system.



LAYING STICK VINYL OR WOOD SYSTEMS

1. We recommend checking the maximum floor surface temperature with the manufacturer before laying the Altis Flow as the fitting of a floor probe may be required.
2. Once the system is laid, and fully cured, a stick vinyl system can be directly applied to the floor surface. To ensure good adhesion, Mapei would not recommend that the smoothing compound is primed prior to bonding the resilient floor coverings with Mapei adhesives. **Note:** do not use the UFH system to accelerate drying times for any part of the system as this can cause cracking.



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BAGGED PRODUCT QUANTITIES

All quantities below are given using Mapei Ultraplan Renovation Screed 3240. For any other products call our technical line on **01245 227630** for advice on the suitability. All bagged amounts are provided as estimates due to the nature of deviations on the floor. However, a +/- 2.5mm in the floor height is allowed for in the first table.

Note: The maximum depth for each pour of Mapei Ultraplan Renovation Screed 3240 is 30mm. If a second layer is required, we recommend applying it approximately 3 hours after the first pour at +23°C and up to 8 hours in cooler conditions. If the first layer is completely dry, prime with Mapei Eco Prim T Plus diluted 1:2 with clean water.

BAGS REQUIRED OVER THE ALTIS FLOW SYSTEM

The table below shows how many bags of Mapei Ultraplan Renovation Screed 3240 you will need allowing for a 2.5mm deviation on the floor surface in the bag amount. Any more than this, then please use table 2.

Ensure the floors are reprimed with Mapei Eco Prim Grip Primer for low porosity areas or with Mapei Eco Prim T Plus (diluted 1:2 with clean water) for porous areas.

Altis Flow Build-up (mm)	Floor Area (m ²)									
	5	10	15	20	25	30	35	40	45	50
18	6	11	16	21	26	31	36	41	46	51
20	6	12	17	23	28	34	40	45	51	56
22	7	13	19	25	31	37	43	49	55	62
24	7	14	20	27	34	40	47	54	60	67
26	8	15	22	29	36	43	51	58	65	72

For systems out of level by more than +/- 2.5mm over the whole floor area use the table below in addition to the bags in the table above for your total system coverage.

Floor Depth Variation	Floor Area (m ²)									
	5	10	15	20	25	30	35	40	45	50
+/- 2.5mm	0	0	0	0	0	0	0	0	0	0
+/- 5mm	1	2	3	3	4	5	5	6	7	7
+/- 7.5mm	2	3	5	6	7	9	10	11	13	14
+/- 10mm	3	5	7	9	11	13	15	17	19	21
+/- 12.5mm	3	6	9	11	14	17	20	22	25	28
+/- 15mm	4	7	11	14	18	21	24	28	31	35
+/- 17.5mm	5	9	13	17	21	25	29	33	37	41
+/- 20mm	5	10	15	20	24	29	34	39	43	48

After the system is fully laid and cured, we recommend following our UFH system guide on starting up the system for the first time. This is very important to ensure you do not damage the floor surface.