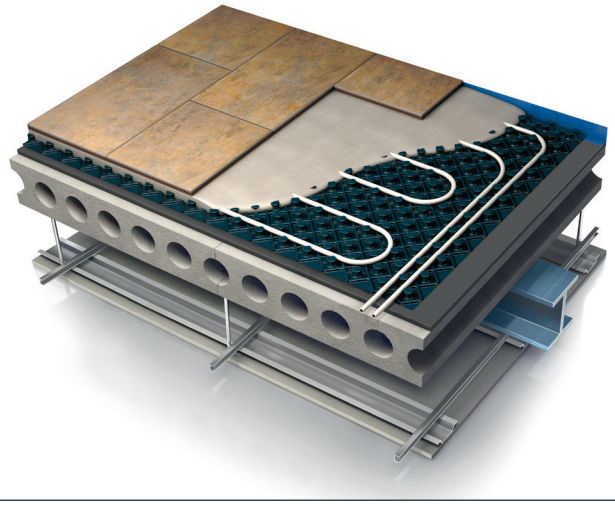
Nu-Heat
Feel the difference

Information sheet

AMC14 – 14mm Fastflo® pipe in castellated panel and self-levelling compound with an acoustic resilient layer over a concrete separating floor



AcoustiMax®14

This tailor-made acoustic underfloor heating system offers:

- Underfloor heating and acoustic performance in a single solution, which is fitted above the structural floor deck
- Fast heat transfer and high performance heat output of up to 120W/m²
- High acoustic performance that can assist in achieving Part E compliance standards
- Ultra-smooth, low deflection surface, ideal for high quality floor finishes including large format tiles
- Just 31mm height build up – less than typical acoustic batten solutions
- Independently tested acoustic performance
- Full design performance indemnity
- Can achieve up to 3 BREEAM credits when correctly installed as part of an acoustic floor cassette

A straightforward installation

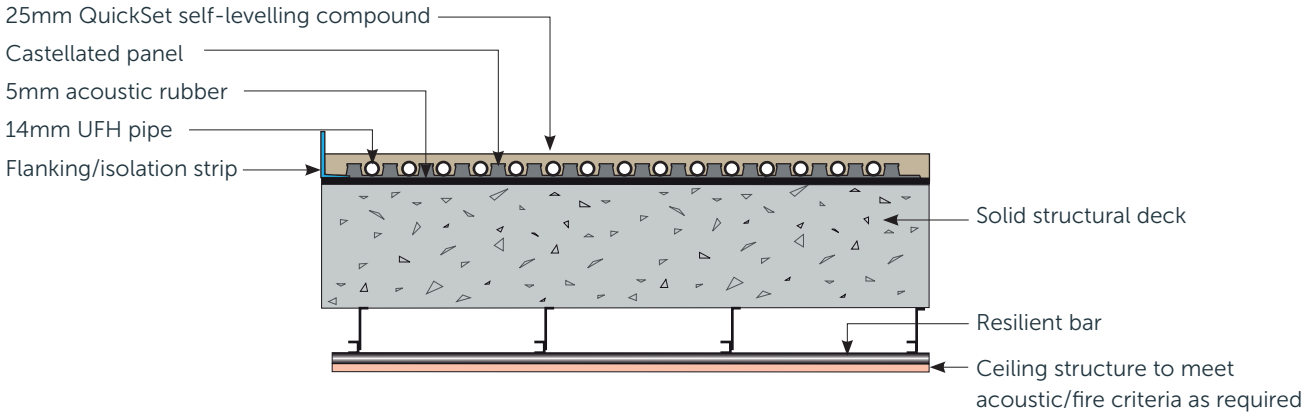
- Fully tailored design incorporating interlocking castellated panels for optimal heating and pipework layouts
- Installed directly over structural concrete separating floor
- Quick drying self-levelling skim reduces impact on project schedule – dries overnight, floor finishes can be fitted after just 72 hours
- A single manifold serves up to 100m², for a quick installation that uses less material
- Robust, step-by-step Nu-Heat installation manual, including complete mechanical, electrical and layout drawings

www.nu-heat.co.uk/floorspecs

ACOUSTIPANEL®14 WITH 5mm RUBBER RESILIENT LAYER ON A CONCRETE SUB-FLOOR

Supplied by Nu-Heat

Supplied by others



DESCRIPTION

AcoustiMax™14 from Nu-Heat is a unique single floor deck solution, which combines efficient underfloor heating with effective airborne and impact noise reduction.

The product comprises a castellated panel, over a high performance IsoRubber-UFH-NH base, into which Nu-Heat's 14mm pipe is neatly installed. A 25mm layer of specialist QuickSet self-levelling compound is poured over the castellated panel and pipe.

High thermal conductivity and a stable, ultra-smooth floor finish are achieved, making the floor finish perfect for large format tiles and other high quality floor coverings.

AcoustiMax®14 can contribute towards exceeding Part E compliance standards, when installed as part of an acoustic floor cassette. This makes the solution suitable for new-build and renovation apartment projects where a simple, efficient and discreet underfloor heating is required as part of an acoustically robust system.

FLOOR HEATING TUBE

A room or heating zone will use one or more coils of 14mm pipe, providing an even spread of warmth across the floor.

INSULATION

Sufficient insulation should be present to meet the requirements of Part L of the Building Regulations.

UNDERFLOOR HEATING EFFICIENCY

Setting the room thermostat 1–2˚C lower achieves the same comfort levels as with an equivalent radiator system because the heat is mostly radiant, meaning air convection currents are minimised and heat loss by natural ventilation reduced. AcoustiMax®14 is a perfect partner for modern gas, oil and LPG condensing boilers, it can also be used with a heat pump in new-build projects.

FLOOR STRUCTURE

A specially designed castellated panel is laid over a 5mm IsoRubber-UFH-NH resilient layer and structural floor deck. Once all floor heating pipe is installed, this is covered with 25mm Nu-Heat's QuickSet self-levelling compound. The floor can be walked on after 4 hours/overnight and floor coverings can be fitted after just 72 hours. The total height build-up is 31mm.

Virtually any covering can be applied over AcoustiMax®14, but using less thermally resistive coverings ensures greater heat output and faster warm up times.

WARRANTIES/INSURANCE

Manufacturer's warranty: all UFH tube supplied by Nu-Heat is covered by a 50-year warranty, the first 10 years of which are insurance-backed.

Product liability: Nu-Heat maintains product liability insurance to £5 million.

Professional indemnity: As Nu-Heat's design service is integral to the operational effectiveness of the UFH system, the company holds professional indemnity insurance of £5 million to cover all aspects of our consultation and design services.

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When correctly installed as part of an acoustic floor cassette AcoustiMax®14 can provide up to 3 BREEAM credits.

TECHNICAL SPECIFICATION

Panel dimensions:	1400 x 800mm
Area:	1.12m² per panel
Resilient layer:	5mm IsoRubber-UFH-NH
Self-levelling compound:	25mm LoPro®QuickSet
Mass (rubber/panel/pipe/QuickSet):	44.7 kg/m²
Overall height build-up:	31mm

Acoustic data for AcoustiMax® on a suspended timber floor

The combination of Nu-Heat's AcoustiMax® and 5mm Isorubber-UFH-NH has been shown through UKAS accredited laboratory testing to be effective in reducing Airborne and Impact Sound Transmission through suspended timber floors and can assist in achieving Part E compliance.

If you require the full test report, please contact your Nu-Heat Account Manager.

AcoustiMax®14 laboratory test results	Airborne R_w (C,C_{tr})	Base floor improvement	Impact $L_{n,w}$	Base floor improvement
Base floor	55dB (-3;-7)		65dB	
Castellated panel	62dB (-1;-6)	+8dB	59dB	+6dB

Heat output*	**AVAILABLE HEAT FLOW W/m², 150mm PIPE SPACING**			
FLOW WATER TEMPERATURE	**40˚C**	**45˚C**	**50˚C**	**55˚C**
Vinyl	71	95 (limit 75)	119 (limit 75)	142 (limit 75)
Natural stone/tiles	77	102 (limit 100)	128 (limit 100)	154 (limit 100)
14mm engineered board	51	68	85 (limit 75)	102 (limit 75)
2 tog carpet/underlay	40	53	66	79

*Nominal value; output values vary depending on specific floor finish.

Note: Bathrooms and en-suites are permitted a maximum heat output of 150 W/m².

Acoustic performance data is taken from tests carried out at the UKAS accredited Sound Research Laboratories, Sudbury, in accordance with the relevant BS EN ISO standards. Laboratory performances stated are specific to the above system only, inclusive of all elements shown and correct installation and should be used for guidance only.