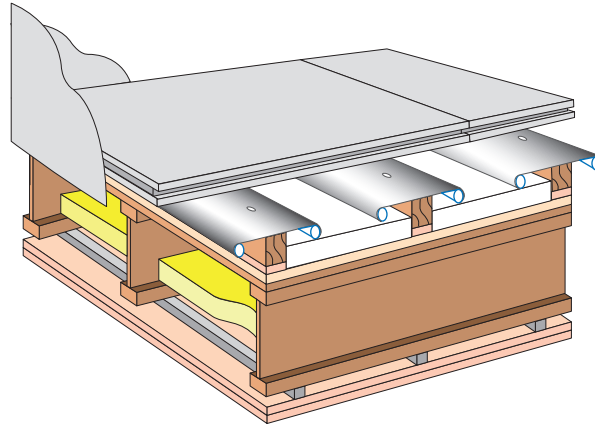


## AKA14 – 14mm Fastflo™ with ClippaPlate™ in a resilient batten floor with Knauf board\*



\* Can be purchased from Nu-Heat

### AKA14

- Acoustic floor cassette to exceed Part E requirements
- Sustainable – reduced use of concrete + recycled content of Knauf board
- High thermal conductivity
- Unique, high output underfloor heating clipping system
- Ideally complements the reduced temperatures associated with heat pumps – enhancing efficiency
- Compositional mass of floor produces high quality floor finish
- Dry application allowing application of floor finish within hours, simplifying and speeding installation
- Ideal substrate for tile and stone floor finishes
- Enhanced site continuity – no drying time

Knauf board installed as shown can gain additional credits towards achieving BREEAM 'outstanding' – please contact Nu-Heat for advice.

For site-specific floor cassette detail please contact Nu-Heat.

### Knauf Gifa Floor FHB 25

#### System acoustic data

Airborne	62dB $R_w$
Impact	56dB $L_n, w$

#### Fire performance

From above	60mins
From below	60mins

#### Thermal performance

Thermal conductivity	$D_R = 0.44 \text{ W/mK}$
Thermal resistance	$0.06 \text{ m}^2 \text{ K/W}$

#### Loading

Point loading	3kN*
Area loading	$3 \text{ kN/m}^2$ *
Load class	2

\* Safety factor of x2

#### Product density

Density FHB 25	$\geq 37.5 \text{ kg/m}^2$
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### Heat output

( $\text{m}^2$  K/W)

Water temp	R = 0.05 (tile)	R = 0.1 (timber)	R = 0.2 (carpet)
45 °C flow (35 ° average)	51 W/m <sup>2</sup>	48 W/m <sup>2</sup>	42 W/m <sup>2</sup>
55 °C flow (45 ° average)	77 W/m <sup>2</sup>	72 W/m <sup>2</sup>	63 W/m <sup>2</sup>

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



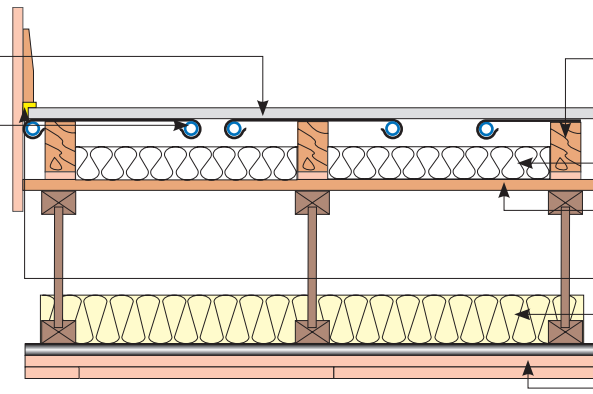
[www.nu-heat.co.uk/floorspecs](http://www.nu-heat.co.uk/floorspecs)

Acoustic performance data is taken from tests carried out at the Sound Research Laboratories, Sudbury in accordance with the appropriate 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. All loading data is tested in accordance with DIN 1055-3. All fire performance data and building material classes are to EN 13501-1.

The information contained in this publication is believed to be current and accurate as at the date of publication but no warranty, express or implied is given. Updates will not be issued automatically.

**Supplied by Nu-Heat**

Nu-Heat ClippaPlate™  
14mm Fastflo™ tubing

**Supplied by others**

Resilient batten/saddle system  
25mm Knauf board\*  
Mineral wool insulation  
Structural deck  
Knauf perimeter insulation strip  
100mm insulation  
Resilient bar  
2 layers plasterboard

If for any reason you choose not to use Knauf board please inform Nu-Heat, as it will affect the underfloor heating design.

\* Can be purchased from Nu-Heat

**FLOOR HEATING TUBE**

Nu-Heat's 14mm Fastflo™ tubing is extremely flexible which means that it can easily be installed around the numerous turns typical to any design. The use of multiple, shorter Fastflo® coils within each temperature control zone means the tubing is installed at closer centres, suitable even for low temperature heat sources (e.g. heat pumps).

**ACOUSTIC BRIDGING**

It is important that there is no contact between any elements of the underfloor heating or deck and the structural floor. Ensure that all loose Fastflo™ pipework is either fixed to the battens using the nail clips provided, or it is seated on mineral wool.

**RESILIENT BATTENS / SADDLE SYSTEM**

The system must be installed according to the manufacturer's instructions. Use their proprietary resilient acoustic flanking strip around the perimeter of the room.

**INSULATION**

25mm mineral wool quilt should be placed between the battens to offset downward heat transmission complying to the requirements of Part L of Building Regulation. Alternatively, if mineral wool is installed between the joists for acoustic reasons, the uppermost mineral wool layer is not required.

**KNAUF BOARD**

Knauf board is a gypsum-based composite that is capable of withstanding the temperatures involved in underfloor heating. It offers significant benefit over chipboard both acoustically (because of its greater density) and in terms of thermal output due to its better conductivity.

**FLOOR COVERINGS**

Tiles, stone and thin laminates offer benefits such as improved response time and higher heat output. Carpets can be used but the Tog value, when combined with performance underlay should be no greater than 2.5. If the system is powered by a heat pump greater restrictions apply.

Natural timber with a low moisture content can be used when care is taken to properly acclimatise the wood by following manufacturers' instructions.

Natural stone finishes may require thicker board; please contact Nu-Heat for advice.

**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.