

Floor constructions

LoPro®10 – 10mm Fastflo™ in pre-routed LoPro®10 panel

Supplied by Nu-Heat

Castellated panel/LoPro®QuickSet self-levelling compound

15mm pre-routed LoPro®10

10mm Fastflo® tubing

Supplied by others

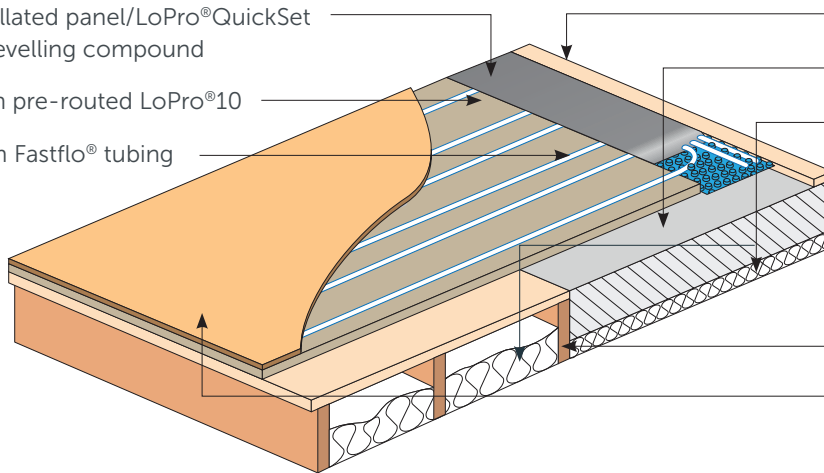
Edge batten

Existing concrete slab

Existing/optional insulation

Existing joists

Final floor finish: tiles, stone, carpet, or engineered timber



DESCRIPTION

LoPro®10 is a pre-routed 15mm gypsum panel that can be laid over new and existing floors. A castellated tray is fitted around the edge of the room to enable Fastflo pipe to be conveniently fed into the panel and back to the manifold or zone distributor. The castellated tray is designed to guide the pipe through 180° bends and to enable multiple runs to be neatly and securely fixed.

FLOOR HEATING TUBE

Typically, a room or heating zone will use several coils of 10mm Fastflo® pipe, each of shorter length than a single coil of larger diameter, providing a more even spread of warmth across the floor. Fastflo's flexibility aids installation.

INSULATION

In order to limit downward heat transmission, insulation should be installed where practicable; it is often possible to retrofit insulation such as space blanket between joists. Inclusion of insulation within the floor increases overall system efficiency, especially on suspended timber ground floors.

Suspended timber ground floors: In order to limit downward heat transmission, insulation should be installed where practicable; it is often possible to retrofit insulation such as 'space blanket' between joists.

Concrete ground floors: Concrete sub-floors provide a much better thermal barrier to downward heat loss than suspended timber. Therefore, in a retrofit project, there is no economic justification to remove and replace the existing floor unless damp or structural failure are present.

Beam & block ground floors: In order to limit downward heat transmission, insulation should be installed where access to the void is practicable. If access is not available, there is insufficient economic benefit to warrant taking them up to fit insulation unless remedial work is being carried out to the floor structure.

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. LoPro®10 is a perfect partner for modern gas, oil and LPG condensing boilers.

FLOOR STRUCTURE

LoPro®10 can be installed over concrete and timber floors with ease. Individual panels are laid in brick-bond format, with glued butt joints. LoPro®10 can either be floated (unfixed) or screwed to the existing floor layer, depending on the nature of the final floor finish. A castellated tray is used to carry pipe to the manifolds. Once all floor heating pipe is installed the castellated tray is filled with the self-levelling compound supplied.

Virtually any covering can be applied over LoPro®10, but using less thermally resistive coverings ensures greater heat output and faster warm up times. See the LoPro®10 Specification Guide for more details.

Note: Avoid applying LoPro®10 in direct contact with a bitumen or asphalt floor as the temperature of the system can affect the structural properties of the bitumen/asphalt, consult our team if you need any 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.

LoPro®10