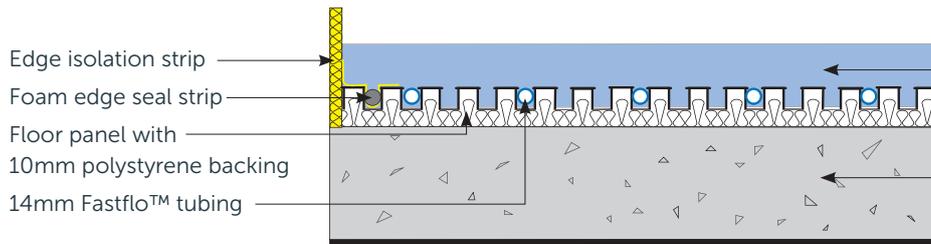


SPI14 – 14mm Fastflo™ in fixing panel with 10mm polystyrene backing, in screed

Supplied by Nu-Heat



Edge isolation strip
Foam edge seal strip
Floor panel with
10mm polystyrene backing
14mm Fastflo™ tubing

Supplied by others

50mm liquid screed OR
65mm sand & cement screed

Concrete slab

Note: Insulation levels must meet current Building Regulations standards

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 such as heat pumps.

INSULATION

In ground floors the insulation beneath the screed should be 70mm 'Celotex' or equivalent, or conform to Part L of the Building Regulations; whichever is greater.

In upper floors insulation should be to a minimum of 30mm 'Celotex' or equivalent to prevent downward heat transmission. Apart from the edge isolation strip for the perimeter, which is supplied by Nu-Heat, these materials and the polythene protection layer are standard and are most economically sourced from local builders' merchants.

Note: The edge isolation strip supplied by Nu-Heat should be fitted around all walls as an expansion medium. This should be the full depth of the floor insulation and screed. On external walls additional insulation material will be required to comply with Building Regulations.

FLOOR STRUCTURE

A liquid screed of 50mm depth or 65mm of sand and cement screed (for domestic applications) should be poured over the floor heating tube. It is important that the screed is as dense and consistent as possible to aid heat transfer.

Care must be taken to seal the screed floor panel and edge insulation layers to prevent the screed from seeping through and floating the insulation. The polythene apron on the edge isolation strip with the foam edge seal strip will aid this.

EXPANSION JOINTS

Expansion joints must be incorporated in areas over 40m², or with length greater than 8m and across doorways and other changes of section. Where tube passes across expansion joints it must be covered with sleeving for at least 200mm either side.

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, but care must be taken to properly acclimatise the wood by following manufacturers' instructions.

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.