

Insumate is an innovative, development driven company, leading the way in insulation installation technologies. Central to our philosophy is the belief that products should be client driven. We understand building processes and the needs of the industry. Therefore, we strive to develop products which simplify and improve construction practices, along with reducing the energy usage of buildings.

Invented and patented by Penrith resident Raymond Robinson. The Insumate system provides a unique way of streamlining the insulation installation process within properties, along with offering increased installation efficiency for first fix activities.

The Insumate tray system is a 100% recycled polypropylene tray which is simply stapled into place between suspended floor joists. This offers a simple and effective way of installing underfloor insulation.

Covering 70% of the underside of the insulation material, the Insumate system increases the performance of an insulation material by regulating the airflow and combating condensation build-up.

### **Insumate cost savings**

Using Insumate enables savings in multiple places:

- ❖ Accelerated insulation installation times, reducing labour costs.
- ❖ Quicker installation of first fix cabling and wiring reducing labour costs.
- ❖ Heating costs reduced as insulation coverage guaranteed.

### **Commercial viability**

The commercial viability of Insumate covers all timber based construction, new builds and also retrofits and refurbishments.

The fast installation is also suited to modular offsite construction and time critical builds.

Insumate works alongside traditional floor or ceiling materials to increase the acoustic value of any floor construction.

### **Benefits**

The Insumate insulation support system is a method of holding all makes of insulation between all kinds of joists.

- ❖ Manufactured from recycled polypropylene, the double skin construction allows for dampened acoustic travel and increased thermal insulation performance.
- ❖ Insumate enables a quick method of achieving consistent coverage of insulation without the risk of insulation compaction or sagging.
- ❖ Insumate leaves a gap for down lighters to operate without risk of overheating.
- ❖ Insumate alleviates the risk of wiring touching the insulation material and therefore electrical fire risk.
- ❖ Trays are installed using a standard staple gun, from above or below.
- ❖ Insumate is covered by fire standard: LPS1207.
- ❖ One person can install 50sq/m in 60 minutes.
- ❖ UK Manufactured
- ❖ Robust Details accepted: E-FT-1, E-FT-2, E-FT-3

### Insumate vs. traditional insulation support methods

Insumate	Nets, Bats, Laths
Fast insulation installation, 50sq/m within 30 minutes.	Lengthy installation process.
Low labour costs.	High labour costs, with trades working around each other.
Fast first fix installation.	Slower first fix installation process and therefore higher costs.
Consistent insulation coverage, which can be easily inspected.	Insulation becomes compacted and sags over time.
Lengthens the performance life of the insulation by ensuring against compaction and sagging.	Laths, bats and nets subject to sagging.
Enables fire risk free usage of down-lighters.	Risk of insulation coming into contact with down-lighters.

### Sizes

Insumate trays are available to fit all joist gap widths up to 650mm centres. Our standard sizes however, fit all joists with centres 400 or 600mm.

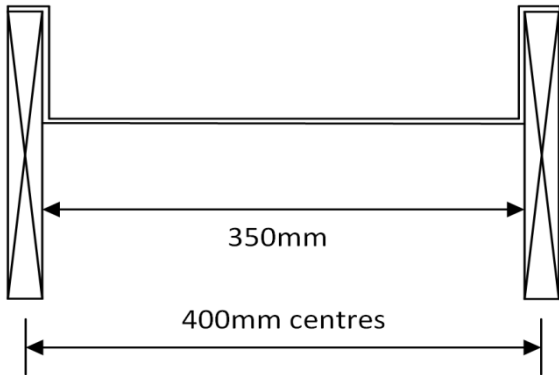
Varying insulation depths can be achieved by simply mounting the Insumate trays further down the side of the joist.

Bespoke widths also available (minimum orders apply).

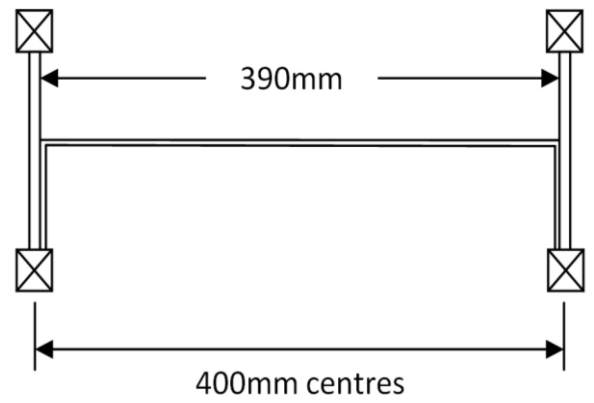
Sizes Available		
Joist	Sizes Available.	
Solid Wood	350mm for 400mm joist centres.	550mm for 600mm joist centres.
I Joist	390mm for 400mm joist centres.	590mm for 600mm joist centres.
Open Web Joist	328/303/278 for 400mm joists gaps (dependent on joists used).	528/503/478 for 600mm joists gaps (dependent on joists used).
Cellar Tray	1200mm x 475mm surface area.	
Adjustable Tray	Adjustable for 350- 450mm. Tray length 1050mm	Adjustable for 550- 650mm. Tray length 1050mm

Insumate insulation support tray size range.

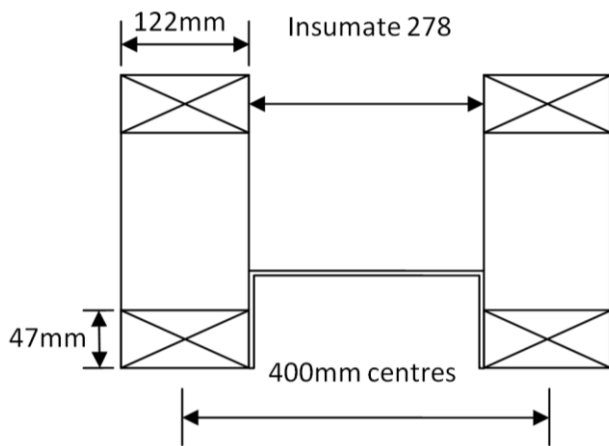
Insumate 9 x 2" floor joist



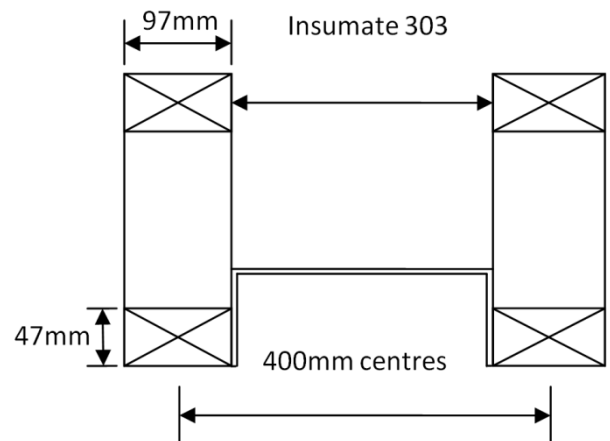
Insumate 390 or 590 for I joists



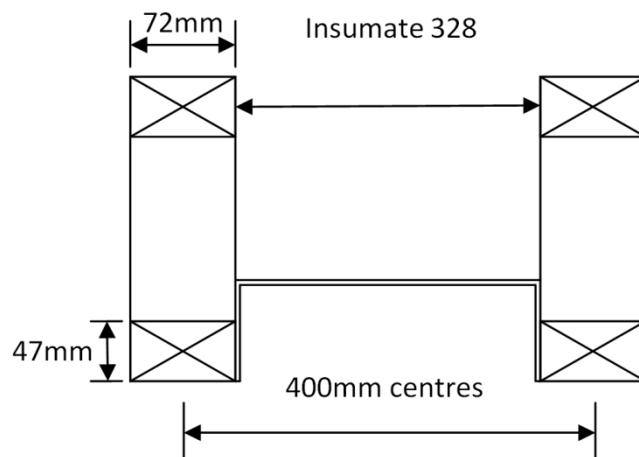
Insumate 278



Insumate 303



Insumate 328



## Material Properties

Property	Test Method	Mean Result
Resistance to water penetration	BS 4016	Pass
Water Vapour Permeability	BS 3177	<0.2MN s-g <sup>-1</sup>
Tensile Strength (N): Control Heat Aged (28 days at 70°C). Heat Aged (56 days at 70°C).	BS EN 12311-1:2000.	484 509 510
Trouser Tear (N-mm <sup>-1</sup> ) Max load/thickness.	BBA T1/23	18.5
Nail Tear (N)	BS EN 12310 – 1:2000	516

Insumate meets the requirements of Fire Standard LPS1207.

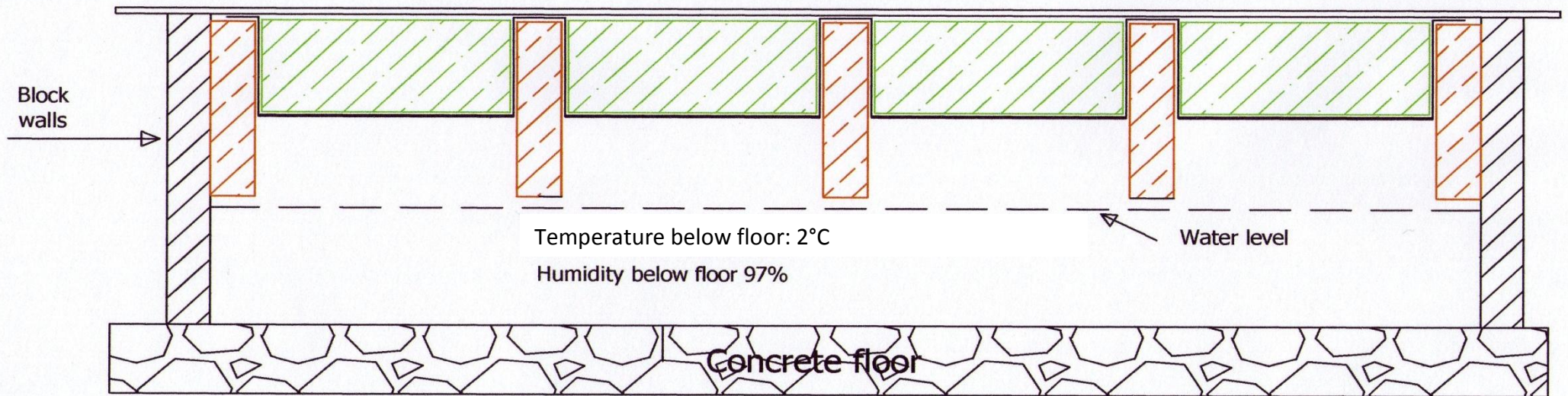
Recommended for use with joists E-FT-1, E-FT-2, E-FT-3.

## Regulations and Standards

Regulation	Code	Detail
The Building Regulations 2000	C2 (c) Regulation 7	Resistance to moisture Materials and workmanship
The Building (Scotland) Regulations 2004 (as amended)	8 (1) 9 3.15 12	Fitness and durability of materials and workmanship. Building Standards-Construction. Condensation. Building Standards-conversions.
The Building Regulations (NI) 2000 (as amended).	B2 C5	Fitness of materials and workmanship. Condensation.
NHBC Standards 2008	5.2	Suspended ground floors.
BRE report	BR 263:2002	Thermal insulation: avoiding the risks.

## Test conditions

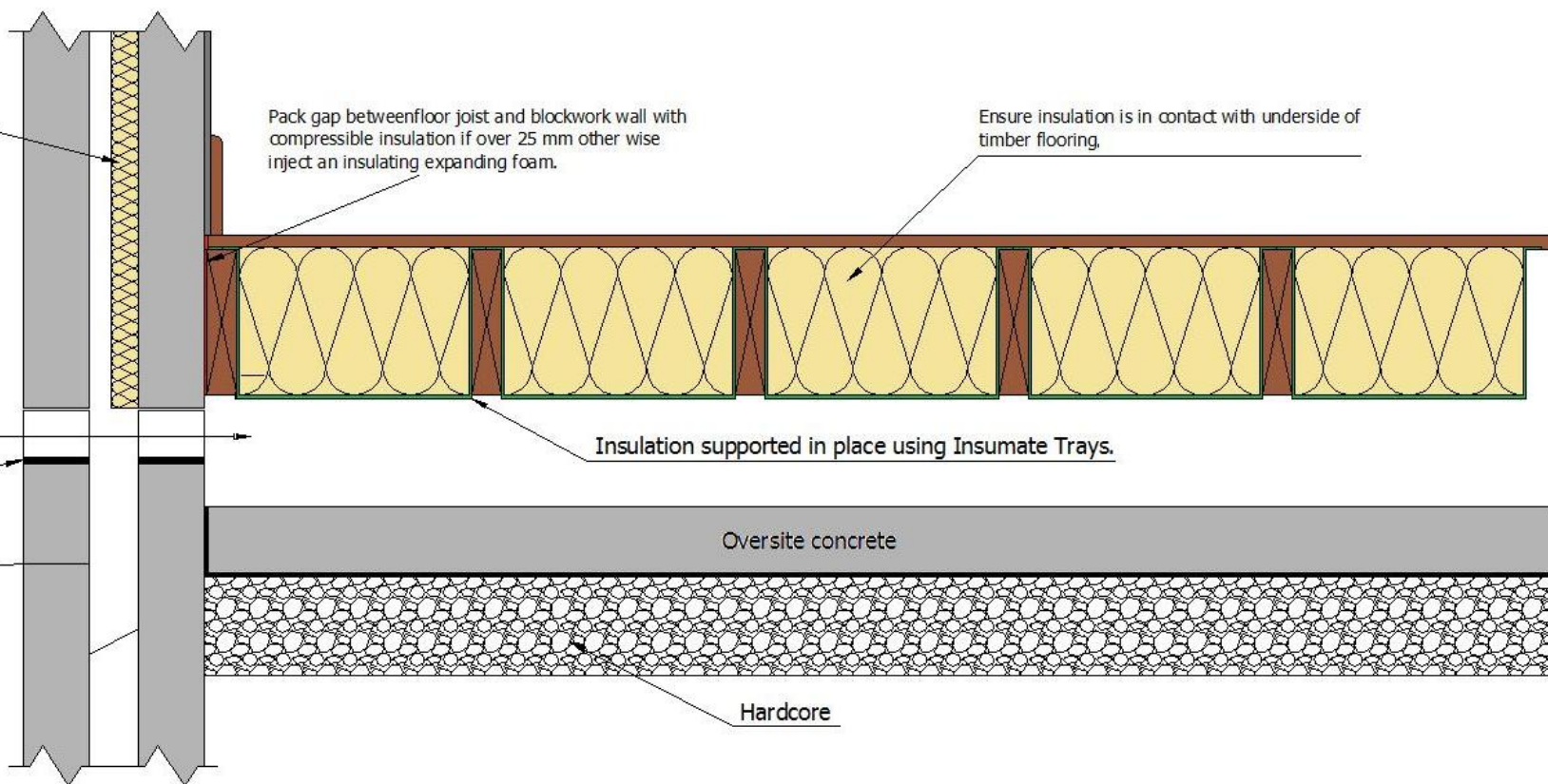
Temperature above floor: 19°C



Wall insulation must be installed at least 200 mm below top of floor insulation.

Air bricks must be below floor joists for unrestricted air flow

Damp-proof course



Pack gap between floor joist and blockwork wall with compressible insulation if over 25 mm otherwise inject an insulating expanding foam.

Ensure insulation is in contact with underside of timber flooring.

Insulation supported in place using Insumate Trays.

Oversite concrete

Hardcore

Insumate suspended timber ground floor insulation detail