

Val-U-Therm® Floors



Val-U-Therm®
Future Proof Solutions

Val-U-Therm® offers a smart integrated building envelope providing relatively thin external walls, floors & roofs with excellent insulation performance. The panels use insulation derived from recycled vegetable oil and are injected using the latest HP technology in a factory quality controlled environment that minimises waste.

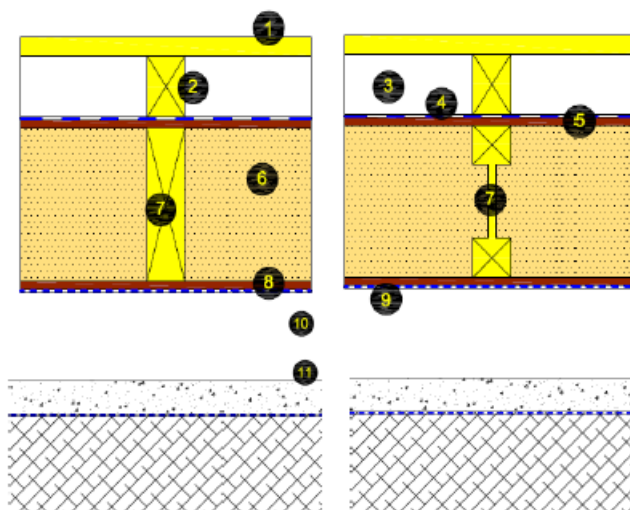
The Val-U-Therm® ground floor solution offers:

- ✔ A robust, cassette-based timber structure
- ✔ Uses solid timber joists or integrated I-joists for longer spans
- ✔ Available with level access and other typical design requirements
- ✔ BBA accredited building system (walls, floors & roofs)
- ✔ Factory injected environmentally friendly insulation
- ✔ Thinner ground floors with excellent thermal performance*
- ✔ A 21st century version of the traditional proven suspended timber ground floor



Typical Configurations:

- 1 Chipboard flooring
- 2 Service battens
- 3 Service void
- 4 Reflective vcl
- 5 OSB
- 6 Injected insulation
- 7 Joist
- 8 OSB
- 9 Standard breather membrane
- 10 Minimum 150mm cross-ventilated void
- 11 Suitable solum to detail by others



Joists supported on load bearing walls and honeycomb sleeper walls as required

Thermal Performance:



	Joist (J)			I-Joist (IJ)		
	V145J	V195J	V220J	V145IJ	V195IJ	V220IJ
Joist Depth (mm)	145	195	220	145	195	220
U-Value (W/m ² K)	0.13	0.11	0.10	0.13	0.10	0.09

*With Thinner Ground Floors:

Floor Type	Typical Make Up	U-Value (W/m ² K)* (Varies with perimeter to area ratio)	Depth of Floor System (mm)
Val-U-Therm®	195mm I-Joist with 200mm cross-ventilated void as detail overleaf	0.10	523
Masonry	150mm well compacted hardcore; 50mm sand blinding; 100mm concrete slab; 180mm insulation & 75mm structural concrete screed	0.11	555

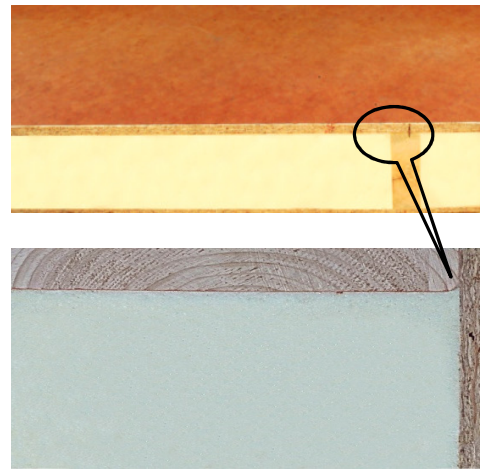
Typical Availability:

Joist depth selection depends on achieving a cost-effective balance between clear span and thermal performance requirements. A wide range of options are available:

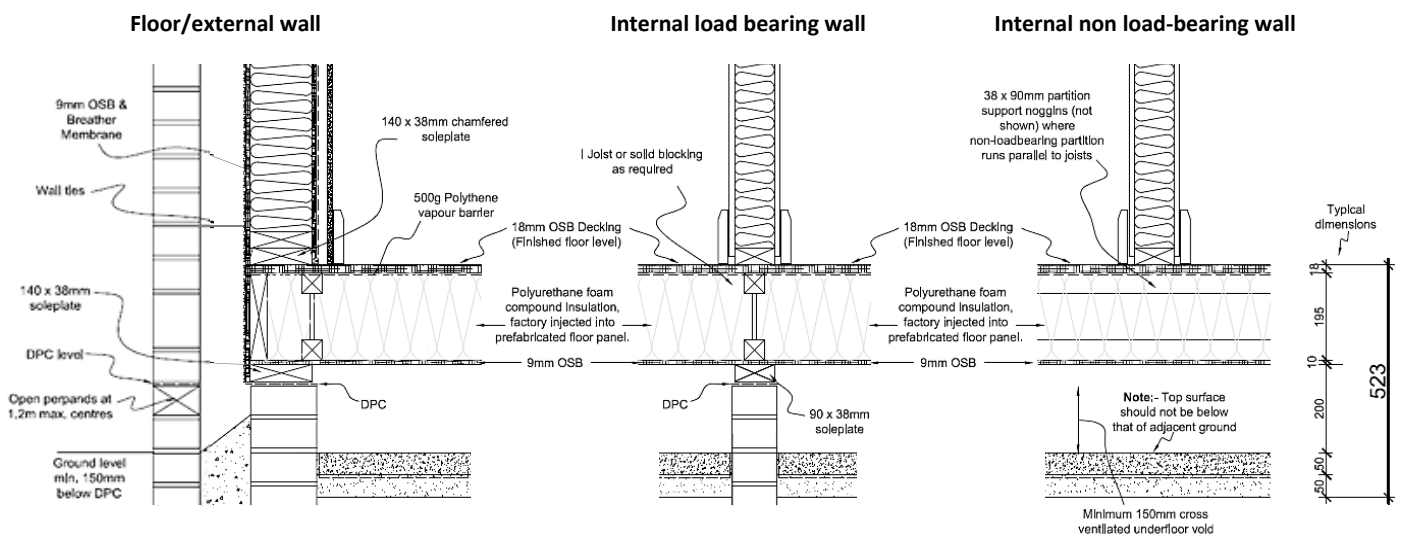
- ✔ Panel lengths up to 10m long & 3.2m wide
- ✔ Solid timber joists @ 145mm, 195mm & 220mm
- ✔ I-joists @ 145mm, 195mm, 220mm, 245mm, 300mm up to 450mm

Technical Credentials:

- ✔ From 3m to 12m clear spans
- ✔ Excellent U-values (0.10 W/m²K) economically achieved
- ✔ Factory controlled injected insulation that fills into every corner
- ✔ Layouts available to minimise thermal bridging - third party accredited
- ✔ Air tightness to < 1 m³/m²h@50pa - integrated with Val-U-Therm® System
- ✔ Meets existing and forthcoming Regulations, Codes and Standards
- ✔ Simplified assembly reduces reliance on construction skills
- ✔ Green Guide A/A+ sustainability and environmental credentials
- ✔ Sustainably sourced FSC/PEFC chain of custody timber

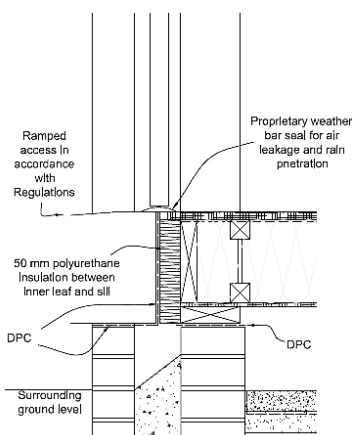


Typical Detailing:

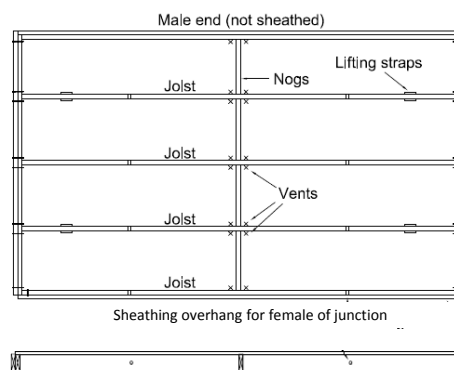


Solum detail by others - a typical specification is 50mm fine aggregate; 1200g polythene (with sealed joints) & 50mm sand blinding

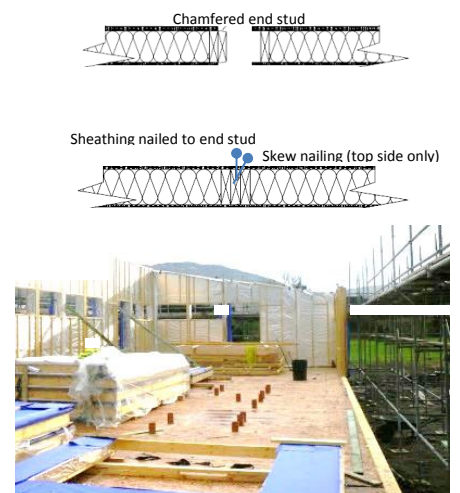
Level threshold detail



Section through finished panel



Typical panel junction



For further details, please contact:

Val-U-Therm Limited Tel: +44 (0) 7572 860014
 Inverurie Business Park
 Souterford Avenue
 Inverurie
 Aberdeenshire AB51 0ZJ Email: info@valutherm.co.uk

or visit valutherm.co.uk

