



External timber frame walls.

Superglass Timber & Rafter Insulation.

Superior thermal performance in timber frame walls.

Today's modern timber frame structures are precision-engineered, strong and durable, comprising of a build method which relies on timber frame as a basic means of structural support; carrying the loads imposed by the floors and roofs, before transmitting them to the foundations.

Timber frame currently accounts for around 25% of new homes in the UK and over 80% of all new homes built in Scotland use this method. Around 75% of self-builders use timber frame construction as their primary build method. This build type is utilised by every sector of the construction industry and is very popular for hotels and student accommodation. As with all forms of structural timber, timber frame has superb environmental credentials, as well as being quick and easy to construct.

In addition to providing installers with a flexible, time efficient insulation solution, Superglass timber frame products deliver superior levels of thermal and acoustic performance time after time. This makes Superglass insulation the natural partner for this growing method of construction.

Our technical team will help you find **the best solution** for your application, call **0808 1645 134**.


Thermal Insulation

Superglass Timber & Rafter Rolls/Batts for timber frame walls

Superglass Timber & Rafter Roll/Batts are lightweight, non-combustible glass mineral wool insulation products. The flexible rolls and batts are manufactured to allow easy installation between common stud spacings and minimum on-site cutting and waste. The products are self-supporting by friction fitting between timber studs, which helps to eliminate air gaps.



Superglass Products	Thermal conductivity
Timber & Rafter Roll or Batt 32	0.032 W/mK
Timber & Rafter Roll or Batt 35	0.035 W/mK
Timber & Rafter Roll or Batt 40	0.040 W/mK



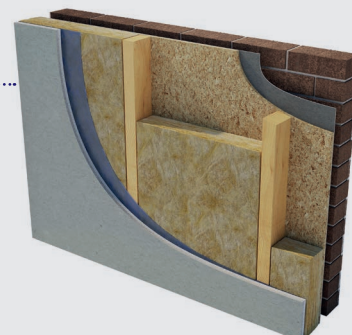
**STRUCTURAL
TIMBER ASSOCIATION**
Building solutions in timber

Superglass are members of the Structural Timber Association, the UK's foremost timber organisation, leading the industry on quality, health & safety, education and technical knowledge.

Typical U-Values for timber frame wall applications.

Standard Breather Membrane

- 102.5mm brick
- 50mm unvented cavity (0.18m²K/W)
- Standard breather membrane
- 9mm OSB
- **Timber studs (600mm centres) with Superglass Timber & Rafter Roll or Batt**
- Standard vapour control layer (VCL)
- 12.5mm standard plasterboard (0.19W/mK)

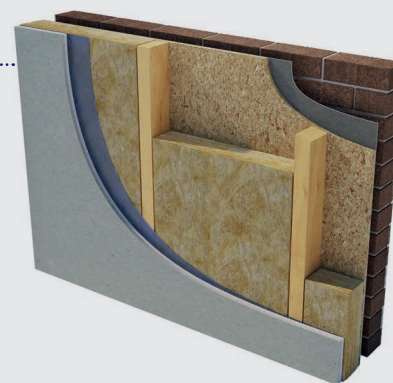


Insulation and stud thickness (mm)	Superglass insulation	U-Value Achieved (W/m ² K)
140	Timber & Rafter Roll or Batt 32	0.27
140	Timber & Rafter Roll or Batt 35	0.28
140	Timber & Rafter Roll or Batt 40	0.30

Bridging Factor for timber studs 15%.

Reflective Breather Membrane and Reflective Vapour Control Layer (VCL)

- 102.5mm Brick
- 50mm Unvented low-e cavity (0.77m²K/W)
- Reflective Breather Membrane
- 9mm OSB
- Superglass Insulation between timber studs
- Reflective Vapour Control Layer (VCL)
- 25mm Unvented low-e cavity between timber battens (0.78m²K/W)
- 12.5mm Standard Plasterboard (0.19W/mK)



Insulation and stud thickness (mm)	Superglass insulation	U-Value Achieved (W/m ² K)
140	Superglass Timber & Rafter Roll or Batt 32	0.19
140	Superglass Timber & Rafter Roll or Batt 35	0.20
140	Superglass Timber & Rafter Roll or Batt 40	0.21
90	Superglass Timber & Rafter Roll or Batt 32	0.25
90	Superglass Timber & Rafter Roll or Batt 35	0.26
90	Superglass Timber & Rafter Roll or Batt 40	0.27

Bridging Factor for timber studs 15%.

For any U-value calculations for alternative construction build-ups and written calculations, please email Technical-uk@tn-i.com

Superglass Timber and Rafter insulation is well suited for use in timber frame buildings with its quick and easy fitting, dimensional stability and its ability to adjust to small movements of the construction during the lifetime of the building.

