



Floors.

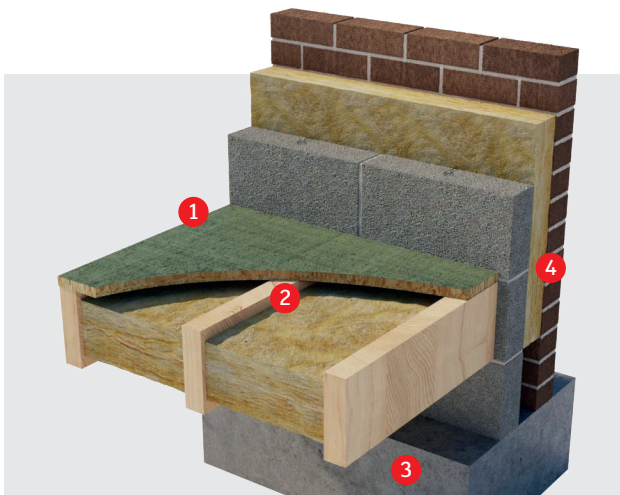
Superglass Insulation for suspended timber ground floors.

Typically a suspended timber floor consists of timber flooring attached to timber joists which are then suspended above the building's foundations.

Superglass insulation is ideal for easy installation and minimising heat loss. This is achieved by friction fitting the insulation between the timber joists.

Typical Application

- 1 Chipboard flooring
- 2 Timber joists (400mm centres) with Superglass insulation
- 3 Foundations
- 4 External masonry wall



Typical U-Values achieved (W/m²K)

Insulation and joist depth (mm)	P/A Ratio (exposed internal perimeter divided by floor area)							
	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80
100mm Multi-Roll 44	0.17	0.23	0.26	0.28	0.30	0.31	0.32	0.33
100mm Multi-Roll 40	0.17	0.22	0.25	0.27	0.29	0.3	0.3	0.31
150mm Multi-Roll 44	0.15	0.19	0.21	0.22	0.23	0.24	0.25	0.25
150mm Multi-Roll 40	0.14	0.18	0.2	0.21	0.22	0.23	0.23	0.24
200mm Multi-Roll 44	0.13	0.16	0.18	0.18	0.19	0.20	0.20	0.20
200mm Multi-Roll 40	0.12	0.15	0.17	0.18	0.18	0.19	0.19	0.19
250mm (100+150) Multi-Roll 44	0.11	0.14	0.15	0.16	0.16	0.17	0.17	0.17
250mm (100+150) Multi-Roll 40	0.11	0.13	0.14	0.15	0.15	0.16	0.16	0.16

Calculated using 11% bridging for timber joists.

Thermal Insulation

Superglass Insulation for suspended timber ground floors

Superglass Products	Thermal conductivity
Multi-Roll 40	0.040 W/mK
Multi-Roll 44	0.044 W/mK

Superglass Insulation for internal floors.

Aside from internal floors being able to support the different loads of a building, there are also regulations defining their performance in terms of fire resistance and, in England and Wales, requirements in terms of sound insulation too. Even where formal regulations do not exist, it would be reasonable to expect that an internal floor should provide good acoustic separation between storeys.

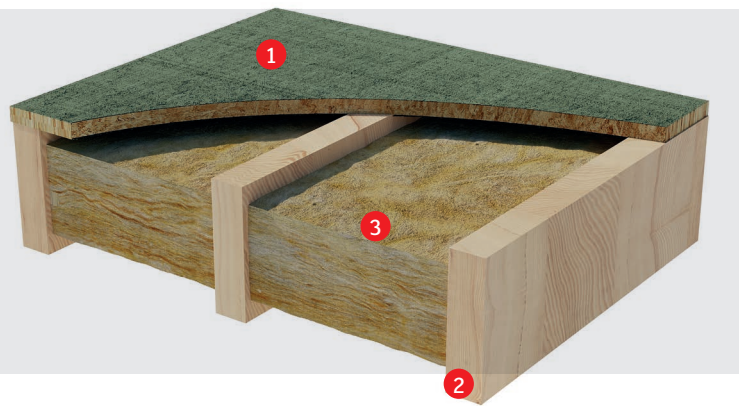
While thermal performance is not specifically regulated, the increasing focus being placed on the energy efficiency of an

entire building means that it makes good sense to maintain optimum temperatures in different rooms.

Internal floors are generally either timber or metal construction, and there are effective Superglass products for both applications.

Timber floors are typically constructed using either timber or metal joists. In each case, the installation of Superglass insulation in the void between the beams will provide improved acoustic performance, while also delivering significant benefits in terms of thermal performance without increasing floor depth.

- 1 T & G Flooring
- 2 Plasterboard below timber joists
- 3 Timber joists with Superglass insulation





Superglass acoustic insulation for Internal floors

Multi Purpose Acoustic Slab is a lightweight, non-combustible glass mineral wool insulation slab. The slab is manufactured to allow easy installation between common stud spacings, and minimum on-site cutting and waste.

Superglass Products	Nominal density
Multi Purpose Acoustic Slab	22kg/m ³



Multi Acoustic Roll is a lightweight, non-combustible glass mineral wool insulation roll. The flexible roll is perforated at 2x600mm and 3x400mm widths to allow easy installation.

Superglass Products	Minimum density
Multi Acoustic Roll	10kg/m ³



Acoustic Partition Roll (APR) is a lightweight, non-combustible glass mineral wool insulation roll. The flexible roll is manufactured to allow easy installation between common stud spacings, and minimum on-site cutting and waste.

Superglass Products	Nominal density
25mm APR	18kg/m ³
50mm APR	16kg/m ³

