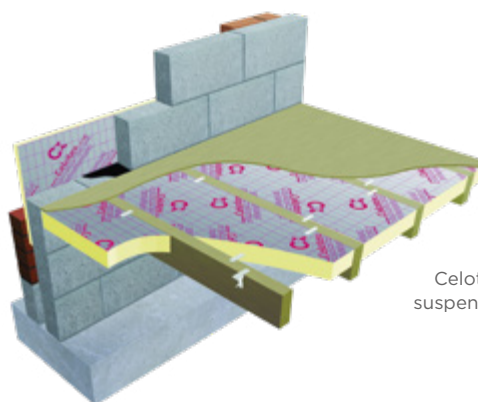


Use [Celotex GA4000](#) or [Celotex XR4000](#) high performance thermal insulation in [suspended timber floor applications](#) to minimise insulation thickness and give the following benefits:

- Quick and easy to install insulation between joists in one layer
- Boards retained by Celotex Insulation Clip
- Minimise air leakage by friction fitting the insulation
- Provides reliable long term energy savings for buildings
- Low emissivity foil facers give improved thermal insulation performance within cavity air spaces
- Minimal load added to the structure due to light-weight boards



Celotex GA4000 in a suspended timber floor

Celotex GA4000 Technical Data

Thickness (mm)	R-value (m ² K/W)	Maximum Board Weight (kg/m ²)
GA4050	2.25	1.92
GA4060	2.70	2.26
GA4070	3.15	2.61
GA4075	3.40	2.78
GA4080	3.60	2.96
GA4090	4.05	3.31
GA4100	4.50	4.15

Celotex XR4000 Technical Data

Thickness (mm)	R-value (m ² K/W)	Maximum Board Weight (kg/m ²)
XR4110	5.00	4.54
XR4120	5.45	4.93
XR4130	5.90	5.32
XR4140	6.35	5.71
XR4150	6.80	6.10
XR4165	7.50	6.69
XR4200	9.05	8.06

For product information for your project, please contact either our [technical team](#) or our [specification team](#).



We have an experienced team of energy assessors who can carry out SAP calculations, water calculations, airtightness testing and much more. [Contact us](#).



Celotex presents a comprehensive range of thermal bridging models featuring our PIR insulation products. This tool helps you identify the build-up required to reduce heat loss through a typical junction of elements or at openings. [Sign up now](#).

Example U-value calculation: Ground Floor - Suspended Timber

Celotex Product	Thickness (mm)	Perimeter / Area Ratio										
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	
Celotex GA4000	50	0.17	0.24	-	-	-	-	-	-	-	-	-
Celotex GA4000	60	0.17	0.22	-	-	-	-	-	-	-	-	-
Celotex GA4000	70	0.16	0.21	0.24	-	-	-	-	-	-	-	-
Celotex GA4000	75	0.15	0.20	0.23	0.25	-	-	-	-	-	-	-
Celotex GA4000	80	0.15	0.20	0.22	0.24	0.25	-	-	-	-	-	-
Celotex GA4000	90	0.14	0.19	0.21	0.22	0.23	0.24	0.25	0.25	-	-	-
Celotex GA4000	100	0.14	0.18	0.20	0.21	0.22	0.23	0.23	0.23	0.24	0.24	-
Celotex XR4000	110	0.13	0.17	0.19	0.20	0.21	0.21	0.22	0.22	0.22	0.22	0.22
Celotex XR4000	120	0.13	0.16	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.21	0.21
Celotex XR4000	130	0.12	0.15	0.17	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.20
Celotex XR4000	140	0.12	0.15	0.16	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.19
Celotex XR4000	150	0.12	0.14	0.15	0.16	0.17	0.17	0.17	0.17	0.18	0.18	0.18
Celotex XR4000	165	0.11	0.13	0.14	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.17
Celotex XR4000	200	0.10	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.14

U-value

Based on timber joists @ 400 ctrs

For more options, refer to our online U-value calculator at celotex.co.uk

Installation Guidelines

Celotex insulation boards should not be installed when the temperature is at or below 4°C and falling.

- Install joists in the conventional manner, with solid or diagonal strut bracing as necessary. (N.B. diagonal bracing may lead to thermal bridging).
- The Celotex Insulation Clip is designed to allow insulation boards to be installed between timber joists quickly and without nails or screws.
- Either fit the clips at one metre maximum centres along the edge of the insulation (as described in the Celotex Insulation Clip datasheet) or fix battens to the sides of the joists to support the insulation.
- Use the Celotex Insulation Saw to cut the boards to achieve a tight fit, then push the boards firmly down between the joists. The insulation clip will ensure a friction fit.
- Insulate gaps between the joists and walls to prevent thermal bridging.
- Install either chipboard or softwood floor boarding directly onto the joists.
- Ensure that the void below the insulation is ventilated.

Use scaffold boards or other protection to prevent wheelbarrows and other traffic damaging the insulation.

These recommendations are suitable for normal domestic floor loadings. If higher loadings are required, it may be necessary to increase the screed thickness and provide reinforcement within the screed. Consult a structural engineer or a specialist flooring contractor.

Where building regulation approval is required, you should take advice from your local building control authority and the building designer.

Certifications and accreditations

Celotex products GA4000 and XR4000 are covered by BBA Agrément Certificate No 17/5405. To download a copy of this certificate, visit the 'literature' pages on our website.

Further information

If you wish to contact Celotex, please do so through the 'contact us' page on our website. For information regarding storage, installation and handling of Celotex products, or for health & safety information, please refer to our online 'literature' pages.

Celotex has a policy of continuous product development and reserves the right to alter product designs or specifications without prior notice.

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