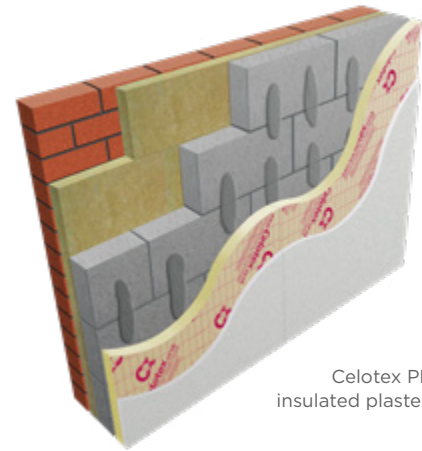


Use [Celotex PL4000](#) thermal laminate as a [top up to existing cavity walls](#) to deliver the following benefits:

- Suitable for multiple installation techniques
- Provides a vapour control layer when board joints are taped and jointed
- Can be used to provide reliable long term energy savings for buildings
- Tapered edge plasterboard offers the installer maximum installation flexibility and speed



Celotex PL4000 insulated plasterboard

Celotex PL4000 Technical Data

Thickness (mm)	R-value (m ² K/W)	Maximum Board Weight (kg/m ²)
PL4015 + 12.5 [†]	0.70 [‡]	9.69 [‡]
PL4025 + 12.5 [†]	1.20 [‡]	9.99 [‡]
PL4040 + 12.5 [†]	1.85 [‡]	10.46 [‡]
PL4050 + 12.5 [†]	2.30 [‡]	10.96 [‡]
PL4060 + 12.5 [†]	2.75 [‡]	11.31 [‡]
PL4065 + 12.5 [†]	3.00 [‡]	11.48 [‡]

[†] 12.5mm tapered edge plasterboard is laminated to the insulation thickness
[‡] insulation component only



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: top up cavity wall

Construction		50mm clear cavity	50mm cavity filled with mineral wool
Outside surface resistance		-	-
Brickwork		-	-
Cavity		-	-
Blockwork dense		100	100
Plaster dabs cavity		15	15
Variable layer		See below	See below
Board joints sealed to form VCL		-	-
Plaster skim		-	-
Variable Layer	Thickness (mm)	U-value (W/m ² K)	U-value (W/m ² K)
Celotex PL4000	15 + 12.5 [†]	-	-
Celotex PL4000	25 + 12.5 [†]	-	0.34
Celotex PL4000	40 + 12.5 [†]	-	0.27
Celotex PL4000	50 + 12.5 [†]	0.33	0.24
Celotex PL4000	60 + 12.5 [†]	0.29	0.22
Celotex PL4000	65 + 12.5 [†]	0.27	0.21

[†] 12.5mm tapered edge plasterboard is laminated to the insulation thickness

U-value

For U-values see variable layer list, or for more options, refer to our online U-value calculator at [celotex.co.uk](#)

Installation Guidelines for Celotex PL4000

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

Installation guidelines for internal lining systems using dot and dab

- Ensure that existing walls are permeable. Strip any gloss paint or vinyl wallpaper.
- Use the Celotex Insulation Saw to cut the 1200mm x 2400mm Celotex PL4000 boards to fit the floor-to-ceiling height of the room.
- Ensure a continuous seal at skirting, ceiling level and at openings by applying a continuous band of gypsum adhesive. Gypsum adhesive at perimeter edges can be replaced with thin timber battens.
- Apply further dabs of gypsum adhesive. This should be in accordance with the adhesive manufacturer's instructions.
- Align sheets against the dabs and secure into correct position.
- Once the dabs are set, apply additional secondary fixings to the Celotex PL4000. Exact fixing details should be in accordance with the recommendations of the fixing manufacturer.
- Joints between the boards must be tightly butted, taped and jointed using appropriate tape and jointing material to create the vapour control layer (VCL).
- Line window and door reveals with thinner Celotex PL4000 boards to reduce the risk of thermal bridging. Fix a batten around the edge of the opening and scribe the board to fit the reveal. Cut the dry lining to suit and mechanically fix into the masonry reveal using proprietary fixings. Finish using an angle fillet at the frame and an angle bead or scrim tape at external corners.
- Please note that to avoid the load being directly applied to the Celotex PL4000, suitable mechanical fixings should be used for other internal fittings. Advice on suitable fixings should be sought directly from the fixing manufacturer.

Installation guidelines for internal lining systems using mechanical fixings to timber battens

- Ensure that existing walls are permeable. Strip any gloss paint or vinyl wallpaper.
- Fix treated softwood timber battens to the masonry. They should be set out a maximum of 600mm vertical centres to coincide with the edges of the boards. As a minimum requirement, horizontal battens should be used to support the top and bottom of the board edges.
- Secure Celotex PL4000 with suitable mechanical fixings. Fixing details should be in accordance with the fixing manufacturer's instructions.
- Joints between the boards should be tightly butted and finished by taping and jointing using appropriate tape and jointing material to create the VCL.

Installation guidelines for internal lining systems using mechanical fixings

- Ensure that existing walls are permeable. Strip any gloss paint or vinyl wallpaper.
- Use the [Celotex Insulation Saw](#) to cut the 1200mm x 2400mm Celotex PL4000 boards to fit the floor-to-ceiling height of the room.
- Secure Celotex PL4000 with suitable mechanical fixings. Fixing details should be in accordance with the fixing manufacturer's instructions.
- Joints between the boards must be tightly butted, taped and jointed using appropriate tape and jointing material to create the vapour control layer (VCL).
- Line window and door reveals with thinner Celotex PL4000 boards to reduce the risk of thermal bridging. Fix a batten around the edge of the opening and scribe the board to fit the reveal. Cut the dry lining to suit and mechanically fix into the masonry reveal using proprietary fixings. Finish using an angle fillet at the frame and an angle bead or scrim tape at external corners.

Installation guidelines for internal lining systems using mechanical fixings to metal lining systems:

- Celotex PL4000 boards can be fixed to a number of proprietary metal frame lining systems. The system should be fixed in accordance with the manufacturer's instructions.

Following the Independent Review of Building Regulations and Fire Safety (the Hackitt review), the UK government is considering changes to the Building Regulations. You should consult your building designer and Building Control Officer before specifying any particular product.

Certifications and accreditations

Celotex products GA4000 and XR4000 are covered by BBA Agrément Certificate No [16/5357](#). 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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