

# Cavity Wall Specification Guide



# Contents

Introduction	3
Product Properties	4
Certification	6
Sustainability	7
Specification Support	8
Building Regulations	9
U-value Tables	10
Design Considerations and Installation Guidelines	11
General Information	15

Freshwater Holiday Park,  
Dorset



## Introduction

Cavity wall construction still remains the predominant build method within the UK. Consisting typically of a masonry inner and outer skin, separated by a residual cavity, today's challenge for building professionals centres around retaining traditional sized cavities in design whilst complying with the latest thermal regulations.

Celotex CG5000 is a partial fill PIR insulation solution featuring a super low lambda value of 0.021 W/mK designed to achieve better U-values and thinner solutions. CG5000 comprises a rigid polyisocyanurate foam core with super low emissivity foil facings on both sides and is designed in 1200mm x 450mm dimensions to fit with standard cavity wall tie spacing. Using CG5000 in a partial fill cavity wall ensures maximum thermal performance and compliance to regulations can be achieved without having to widen the footprint of the external wall construction.

---

**Cavity wall construction still remains the predominant build method within the UK**

---

# Product Properties

## Celotex CG5000

Celotex CG5000 is a partial fill cavity wall board with a rigid polyisocyanurate foam core adhesively bonded in the manufacturing process to super low emissivity aluminium foil facings on both sides.

**Dimensions:** 1200mm x 450mm

**Thickness Range:** 41mm – 100mm

**Compressive Strength:**  $\geq 120$  kPa  
BS EN 826:1996 (Thermal insulating products for building applications – determination of compressive behaviour)

**Dimensional Stability:** DS (TH) 8  
BS EN 1604:2013 (Thermal insulating products for building applications – determination of dimensional stability under specified temperature and humidity conditions)

**Thermal Performance:** Celotex CG5000 has a declared thermal conductivity ( $\lambda$ -value) of 0.021 W/mK in accordance with BS EN 13165:2008 (Thermal insulation for products – factory made rigid polyurethane foam (PUR) products).

## Celotex GD5000

Celotex GD5000 is a thermal plasterboard laminate comprising a rigid polyisocyanurate foam core bonded to 9.5mm tapered edge gypsum plasterboard. The insulation component of GD5000 has bilaminate (kraft paper/foil) facings on both sides benefiting from a built-in vapour control layer.

**Dimensions:** 1200mm x 2400mm

**Thickness Range:** 25mm – 60mm

**Compressive Strength:**  $\geq 120$  kPa  
BS EN 826:1996 (Thermal insulating products for building applications – determination of compressive behaviour)\*

**Dimensional Stability:** DS (TH) 8  
BS EN 1604:2013 (Thermal insulating products for building applications – determination of dimensional stability under specified temperature and humidity conditions)\*

**Thermal Performance:** Celotex GD5000 has a declared thermal conductivity ( $\lambda$ -value) of 0.021 W/mK in accordance with BS EN 13950:2005 (Gypsum plasterboard thermal/acoustic insulation composite panels – definitions, requirements and test methods).

The thermal conductivity ( $\lambda$ -value) of the plasterboard component of Celotex GD5000 is 0.19 W/mK.

*\*Insulation only*

## Cavity Wall Insulation

Celotex CG5000 Technical Data

Product Code	Thickness (mm)	R-value (m <sup>2</sup> K/W)	Weight (kg/m <sup>2</sup> )
CG5041	41	1.95	1.52
CG5047	47	2.20	1.71
CG5050	50	2.35	1.81
CG5060	60	2.85	2.16
CG5070	70	3.30	2.48
CG5075	75	3.55	2.64
CG5085	85	4.00	2.96
CG5100	100	4.75	3.38

## Internal Wall Insulation

Celotex GD5000 Technical Data

Product Code	Thickness (mm)	R-value (m <sup>2</sup> K/W)	Weight (kg/m <sup>2</sup> )
GD5025	25 + 9.5	1.20	7.02
GD5040	40 + 9.5	1.95	7.50
GD5050	50 + 9.5	2.40	7.82
GD5060	60 + 9.5	2.90	8.17

**Celotex CG5000 is faced with super low emissivity foil facings on both sides.**

## Fire Performance

### Cavity Wall Insulation

Celotex CG5000 is Class O fire rated as described by the national Building Regulations having achieved:

A pass to BS 476 Part 6:1989 (Fire tests on building materials and structures – method of test for fire propagation for products).  
Classification as Class 1 in accordance BS 476 Part 7:1997 (Fire tests on building materials and structures – method of test to determine the classification of the surface spread of flame of products).

### Internal Wall Insulation

Celotex GD5000 is classified as Euroclass B in accordance with:

BS EN 13501-1:2007 (fire classification of construction products and building elements – classification using test data from reaction to fire tests).

## Celotex IQ Emissivity

Celotex CG5000 is faced with super low emissivity aluminium foil facings on both sides. The highly reflective foil facings deliver better U-values in cavity wall constructions by enhancing the thermal resistance of the unventilated cavity air space adjacent to the board.

*The Shires, Yeovil*



# Certification

Third party approvals play a key role in distinguishing product performance between different manufacturers. To eradicate the perception that all PIR is the same, we recognise the importance of approvals and certifications from a number of leading organisations, including BBA, BRE and ISO. These approvals include independent validation of thermal, fire and other product standards.

Product Code	Application	BBA No.	ISO 9001	ISO 14001
CG5000	Cavity Wall	94/3080	✓	✓
GD5000	Internal Wall	-	✓	✓



*Poundbury, Dorchester*



# Sustainability

Suitable for use within a number of applications within the building fabric, the specification of Celotex products will significantly contribute to improving the energy efficiency of the UK's building stock.

Celotex is also able to independently certify the environmental impact for a selection of its product ranges. This includes Celotex CG5000.

Measured by its BRE Ecopoint score, Celotex achieve the lowest environmental impact of any PIR manufacturer and from its most recent recertification, has improved this score by over 5% since 2010. Moreover, when compared to the generic PIR Ecopoint value, Celotex' impact

is over 20% better than that of non-certified PIR manufacturers.

Through its BRE Approved Environmental Profile, Celotex was the first PIR manufacturer to achieve an A+ Green Guide rating. This rating has been maintained through ongoing recertification and now includes even more Celotex products as part of the profile. Celotex products are all manufactured in accordance with environmental management system ISO 14001. As well as this, the suppliers of the principal raw materials used in the manufacture of Celotex products also possess this standard allowing a credit to be achieved within the Materials category of BREEAM assessments.

Celotex manufacture solutions that start saving energy as soon as they are installed. Over its useful life, PIR insulation saves over 100 times more energy than was used in its manufacture.

For further information please see Celotex' Sustainability Guide available at [celotex.co.uk](http://celotex.co.uk)



Cavity Wall Insulation		
Name of Insulation Material	CG5000	✓
Manufacturer	Celotex	✓
Unfoamed, Foamed or Installed using Propellants	Foamed	✓
Global Warming Potential (GWP)	Less than 5	✓
Blowing Agent	Pentane	✓
Green Guide Rating	A+	✓
Element Number	1315320025	✓
Environmental Management System (EMS) - Key Process	ISO 14001	✓
Environmental Management System (EMS) - Supply Chain Process	ISO 14001	✓

Internal Wall Insulation		
Name of Insulation Material	GD5000	✓
Manufacturer	Celotex	✓
Unfoamed, Foamed or Installed using Propellants	Foamed	✓
Global Warming Potential (GWP)	Less than 5	✓
Blowing Agent	Pentane	✓
Green Guide Rating	A	✓
Element Number	815320017	✓
Environmental Management System (EMS) - Key Process	ISO 14001	✓
Environmental Management System (EMS) - Supply Chain Process	ISO 14001	✓

# Specification Support



**Celotex**  
Energy Assessments

For more information on how to download Celotex CG5000 and GD5000 for BIM, visit [celotex.co.uk/bim](http://celotex.co.uk/bim)

## Specification Clause

### Celotex CG5000

The cavity wall insulation shall be Celotex CG5000 \_\_\_\_\_mm thick, comprising a polyisocyanurate (PIR) rigid foam insulation core featuring Celotex IQ providing super low emissivity textured aluminium foil facings on both sides and Class O fire performance throughout the product in accordance with BS 476. CG5000 is A+ rated when compared to the BRE Green Guide 2008 and is CFC/HCFC free with low GWP and zero ODP and CE marking compliance to BSEN13165. CG5000 is manufactured in accordance with quality management systems ISO 9001 and environmental management system ISO 14001. All products must be installed in accordance with instructions issued by Celotex.

### Celotex GD5000

The internal wall insulation shall be Celotex GD5000 \_\_\_\_\_mm thick comprising a polyisocyanurate (PIR) rigid foam insulation core with a thermal conductivity of 0.021 W/mk with aluminium foil/kraft paper facings on both sides bonded to a layer of 9.5mm tapered edge plasterboard. Celotex GD5000 is CFC/HCFC free with zero ODP and low GWP and CE marking compliance to BS EN 13950. Celotex GD5000 is manufactured in accordance with quality management system ISO 9001 and environmental management system ISO 14001. All products must be installed in accordance with instructions issued by Celotex.

## Building Information Modelling (BIM)

Celotex CG5000 and GD5000 are available for BIM in the following software formats:

- Autodesk Revit
- ArchiCAD
- Vectorworks
- Bentley
- Industry Foundation Classes (IFC)

Celotex products are available for BIM through both [celotex.co.uk/bim](http://celotex.co.uk/bim) and the NBS National BIM Library.

## NBS Specifications

Celotex CG5000 is referenced in the following NBS clauses:

- F30 155
- F30 12

Celotex GD5000 is referenced in the following NBS clauses:

- K10 45
- K10 185

## Technical Services

Celotex provide outstanding levels of technical expertise and personal assistance through two industry leading services:

### Celotex Technical Centre

When it comes to finding easy-to-understand, quick and helpful advice regarding PIR insulation, the Celotex Technical Centre (CTC) is where you will discover high levels of support and guidance on finding the most appropriate solutions to meet your requirements.

This includes provision of:

- U-value calculations
- Condensation risk analysis
- Application and installation advice
- Guidance on compliance to Building Regulations
- Information on our product and environmental credentials

Call the Celotex Technical Centre on **01473 820850** to speak to one of our advisors, or alternatively email [technical@celotex.co.uk](mailto:technical@celotex.co.uk)

### Celotex Energy Assessments

Offering energy calculations including SAP, SBEM and bespoke thermal modelling as well as additional services for pre-tender planning and sustainability assessments for the Code for Sustainable Homes and BREEAM.

For more information on Celotex Energy Assessments (CEA) please take a look at the CEA brochure on [celotex.co.uk](http://celotex.co.uk) with a full breakdown of the services we can provide for your project requirements. For more information please phone **0333 733 0850** or email [info@celotexea.co.uk](mailto:info@celotexea.co.uk)

Customers should be aware that Celotex and Darren Evans Assessments are separate legal entities and Celotex makes no warranty as to the quality of the services that DEA provides and assumes no responsibility in connection with those services. Customers should also be aware that, as an Assured Partner of Celotex, Darren Evans Assessments operate under a commercial agreement with Celotex for services provided by Darren Evans Assessments under the Celotex Energy Assessment Service.

# Building Regulations

## England Part L 2013

Part L is an Approved Document within the Building Regulations for England dealing with the Conservation of Fuel and Power. It ensures that the design and construction of new buildings, as well as work done on existing buildings, meets targets designed to limit the associated CO<sub>2</sub> emissions from the building following its construction or modification. Below is a guidance table of U-values to help comply with Part L 2013 Building Regulations.

	New Build		Existing Buildings	
	Domestic Notional Value/Backstop	Non-Domestic Notional value/ Backstop	New Thermal Element e.g. Extensions	Existing Thermal Element e.g. Garage Conversions
<b>Walls</b>	0.18 / 0.30	0.26 / 0.35	0.28	0.30
<b>Floors</b>	0.13 / 0.25	0.22 / 0.25	0.22	0.25
<b>Pitched Roofs</b>	0.13 / 0.20	0.18 / 0.25	0.18	0.18
<b>Flat Roofs</b>	0.13 / 0.20	0.18 / 0.25	0.18	0.18

## Scotland Section 6 2010

Section 6 of the Scottish Building Regulations is the Technical Handbook that deals with Energy within the built environment. Section 6 supports the Climate Change (Scotland) Act 2009 as it seeks to meet the target of an 80% reduction in carbon emissions by 2050 by ensuring that effective measures for the conservation of fuel and power are taken with constructing new or modifying existing buildings. Below is a guidance table of U-values to help comply with Section 6 2010 Building Regulations.

	New Build		Existing Buildings	
	Domestic Notional Value/Backstop	Non-Domestic Notional Value/ Backstop	New Thermal Element e.g. Extensions	Existing Thermal Element e.g. Garage Conversions
<b>Walls</b>	0.19 / 0.25	0.26 / 0.27	0.19* / 0.22*	0.30
<b>Floors</b>	0.15 / 0.20	0.22 / 0.22	0.18* / 0.18*	0.25
<b>Pitched Roofs</b>	0.13 / 0.18	0.18 / 0.20	0.18* / 0.18*	0.25
<b>Flat Roofs</b>	0.13 / 0.18	0.18 / 0.20	0.18* / 0.18*	0.25

\*Value required when extensions for houses have a reasonable standard of insulation

# U-value Tables

## U-value calculations: partial fill cavity wall with Celotex CG5000

Buildup: Blockwork outerleaf / Celotex CG5000 / Blockwork inner leaf / Plasterboard on dabs

Product Code	Blocktype (Lambda)			
	Dense (1.13)	Medium Dense (0.59)	Lightweight Concrete (0.25)	Aircrete (0.15)
CG5041	0.31	0.31	0.29	0.27
CG5047	0.29	0.28	0.27	0.25
CG5050	0.28	0.27	0.26	0.24
CG5060	0.24	0.24	0.23	0.22
CG5070	0.22	0.21	0.21	0.2
CG5075	0.21	0.20	0.20	0.19
CG5085	0.19	0.19	0.18	0.17
CG5100	0.17	0.16	0.16	0.15

Buildup: Brickwork outerleaf / Celotex CG5000/ Blockwork inner leaf /Plasterboard on dabs

Product Code	Blocktype (Lambda)			
	Dense (1.13)	Medium Dense (0.59)	Lightweight Concrete (0.25)	Aircrete (0.15)
CG5041	0.31	0.3	0.29	0.27
CG5047	0.28	0.28	0.26	0.25
CG5050	0.27	0.27	0.25	0.24
CG5060	0.24	0.24	0.23	0.22
CG5070	0.22	0.21	0.20	0.2
CG5075	0.21	0.2	0.20	0.19
CG5085	0.19	0.18	0.18	0.17
CG5100	0.17	0.16	0.16	0.15

## U-value calculations: partial fill cavity walls with internal layer Celotex GD5000

Buildup: Blockwork outerleaf / 50mm CG5000 / Blockwork inner leaf / Celotex GD5000 on plasterboard dabs

Product Code	Blocktype (Lambda)			
	Dense (1.13)	Medium Dense (0.59)	Lightweight Concrete (0.25)	Aircrete (0.15)
GD5025	0.21	0.21	0.20	0.19
GD5040	0.18	0.18	0.17	0.17
GD5050	0.17	0.16	0.16	0.15
GD5060	0.15	0.15	0.15	0.14

Buildup: Brickwork outerleaf / 50mm CG5000 / Blockwork inner leaf / Celotex GD5000 on plasterboard dabs

Product Code	Blocktype (Lambda)			
	Dense (1.13)	Medium Dense (0.59)	Lightweight Concrete (0.25)	Aircrete (0.15)
GD5025	0.21	0.20	0.20	0.19
GD5040	0.18	0.18	0.17	0.17
GD5050	0.17	0.16	0.16	0.15
GD5060	0.15	0.15	0.15	0.14

# Design Considerations and Installation Guidelines

## Design Considerations for Celotex CG5000

### Thermal Performance

#### U-values

The tables on page 10 demonstrate how Celotex CG5000 used on its own or in conjunction with GD5000 can contribute to meeting the energy conservation requirements outlined in the Building Regulations. (See page 9)

#### Linear Thermal Bridging

Building Regulations require building designers to consider heat loss through junctions within the construction. Approved Document L clarifies the requirement:

*“The building fabric should be constructed so that there are no reasonably avoidable thermal bridges in the insulation layers caused by gaps within the various elements, at the joints between elements, and at the edges of elements such as those around window and door openings”*

Similar performance standards are required in Scotland and Northern Ireland.

As insulation standards continue to evolve, it has become increasingly critical to consider heat loss in these areas. Accredited Construction Details (ACDs) for England and Wales, Scotland and Northern Ireland provide practical guidance on meeting this requirement. The documents provide approved design details for junctions within many common constructions, including masonry cavity walls.

Where work is being undertaken in an existing building – for example an extension, the requirement can be met by adopting the designs given in Accredited Construction Details. Where a new building

is being constructed, heat loss through each junction is considered as part of the whole building carbon dioxide emissions calculation.

Using improved junction detailing will allow buildings to more easily meet the requirements of the Building Regulations. Heat loss through each junction is represented by the psi ( $\lambda$ ) value. Where ACDs have been adopted then a default  $\lambda$  value may be used for each junction. Junctions can also be individually modelled by a competent person and the  $\lambda$  value calculated. This value can be used directly in the whole building calculation. This approach will allow easier compliance and promotes strong fabric performance of the building. Celotex Energy Assessments are able to provide bespoke junction calculations.

#### Wall to Floor Junctions

Where insulation is installed under a screed or concrete slab, perimeter upstand insulation should be provided at all exposed edges as shown in Figure 1.

The distance maintained between the top of the perimeter upstand insulation and the bottom of the cavity wall insulation should be a minimum of 150mm.

#### Openings

An insulated cavity closer should be used around openings into the cavity wall. For more information please contact the

Celotex Technical Centre on 01473 820850 or email [technical@celotex.co.uk](mailto:technical@celotex.co.uk)

#### Gable Walls

At gable walls it is recommended that Celotex CG5000 is taken up to the underside of the roof verges. In cold roof constructions, the product should extend at least 250mm above the ceiling insulation. The top edge of the insulation should be protected with a cavity tray.

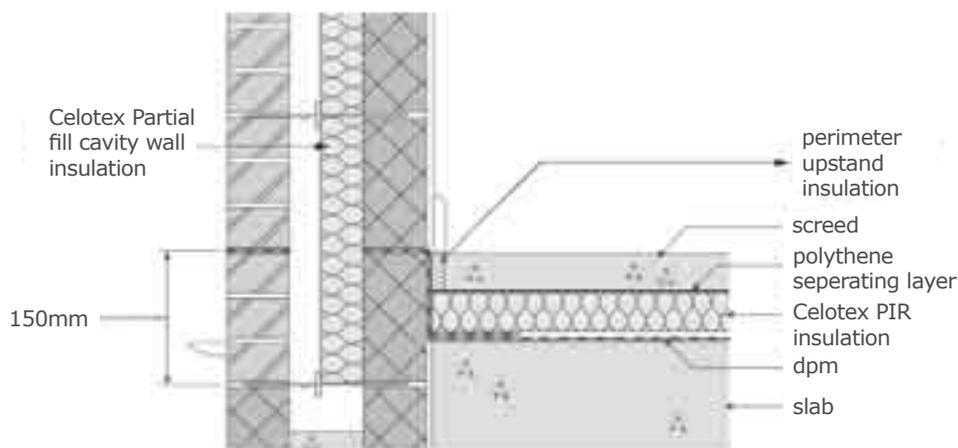
#### Resistance to Moisture

##### Residual Clear Cavity

Building Regulations for England, Wales and Scotland determine the residual clear cavity required to resist the passage of moisture ingress by the location on a national exposure zone map. The location is given an index number which is then applied to a table detailing the maximum recommended residual cavity for insulated masonry cavity walls.

In areas of severe and very severe exposure a minimum 50mm residual clear cavity is required. In less exposed zones a minimum 25mm residual cavity width may be acceptable in buildings up to 12m high subject to third party certification. Celotex CG5000 can be installed in accordance with BBA Certificate 94/3080.

NHBC Insurance and buildings over 12m require a minimum 50mm residual clear cavity.



Source: Celotex Cavity Wall BBA Certificate

Figure 1.

## Wall Ties

BBA approved wall ties and clips should be used. The advice of the wall tie manufacturer should be followed, but Celotex does not consider butterfly ties to be suitable for use with partial fill cavity insulation. Only wall ties in accordance with BS DD 140-2:1987 or BS EN 845-1:2003 and BS EN 1996-2:2006 approved by the BBA are suitable.

The wall ties used must be suitable for the structural requirements and incorporate a retaining clip to ensure the insulation is held permanently in place. For more information please contact the Celotex Technical Centre on **01473 820850** or email **technical@celotex.co.uk**

## Cavity Obstructions

Unavoidable projections into the cavity, such as floor edge beams and steel columns, need careful detailing. Where the residual clear cavity is reduced by the obstruction, a minimum 25mm residual clear cavity must be maintained and extra care must be taken with fixings and weatherproofing for example the inclusion of cavity trays with weep holes. Where buildings are subject to a building warranty such as NHBC Standards, the requirements of the warranty provider must be met.

## Installing Below DPC

When the products bridge the dpc in walls, dampness from the ground will not pass through to the inner leaf provided the wall is detailed in accordance with the requirements and provisions of the National Building Regulations.

See Figure 1 (page 11).

## Fire

### Cavity Fire Barriers

The requirement of the Building Regulations relating to the fire spread in cavity walls can be met in buildings of all purpose groups without the need for cavity fire barriers provided the construction complies with the provisions detailed in England and Wales, Approved Doc B, volume 1, Diagram 13 and volume 2,

Diagram 34. Northern Ireland, Technical Booklet E Diagram 3.5.

For further information please refer to BBA Certificate 94/3080.

Scotland: Technical handbook 2 (Domestic and Non Domestic) - Mandatory standard 2.4, clause 2.4.1, 2.4.2, 2.4.7 and 2.4.9.

## Installation Guidelines Celotex CG5000

The wall ties used must be suitable for the structural requirements and incorporate a retaining clip to ensure that the insulation is held permanently in place.

The insulation is installed between wall ties and against the inner leaf of the wall. The retaining disc on each wall tie holds the insulation against the inner leaf of the wall.

When installing Celotex CG5000 ensure that horizontal and vertical joints are tightly butted to minimise heat loss as well as surrounding cavity closers. The boards are cut to size with a fine tooth saw and a straight edge.

The first row of board retaining wall ties should be installed at least one course below the damp proof course (DPC) and positioned at maximum of 600 centres horizontally, to provide a minimum support of two ties per 1200mm board.

The second and subsequent rows of ties should be installed at 450mm centres vertically and maximum 900mm centres horizontally.

All wall ties are to slope downwards towards the outer leaf and at centres not exceeding 900mm to ensure that each board is secured at a minimum of three points.

Additional ties may on occasion be required to satisfy the structural requirements of BS EN 1996-2 : 2006 and/or to ensure adequate retention of boards or cut pieces.

The following leaf is built up to level of the top of the boards.

After each section of the leading leaf is

built, excess mortar should be removed from the cavity face and mortar droppings cleaned from the exposed edges of the installed board.

Use of a cavity board or a cavity batten will protect the installed board edges and help to keep the cavity clean as the following leaf is built.

---

For more information  
please contact the Celotex  
Technical Centre on  
**01473 820850** or email  
**technical@celotex.co.uk**

---

The correct installation of Celotex CG5000 within the masonry cavity wall will ensure a continuity of insulation around junctions.

## Design Considerations Celotex GD5000

### Thermal Performance

#### Thermal Bridging

The correct installation of Celotex CG5000 within the masonry cavity wall will ensure a continuity of insulation around junctions with other elements and limit the impact of thermal bridging.

The correct use and installation of cavity closers will limit thermal bridging around openings for windows and doors. Each design should be assessed individually. In some cases it may be necessary to further insulate the opening at the window reveals.

Celotex PL4015 can be dot and dabbed to the window reveals. It has an R-value of  $0.7\text{m}^2\text{K}/\text{W}$  and complies with Accredited Construction Details for England, Wales and Scotland. This will effectively insulate the thermal bridge and so limit heat loss through the window reveal.

Accredited Construction Details for England and Wales, Scotland and Northern Ireland provide guidance on limiting thermal bridging.

#### Air Tightness

Uncontrolled air leakage where Celotex GD5000 board edges contact floor and ceiling surfaces as well as edges around window and door openings will result in increased heat loss.

A continuous fillet of adhesive plaster is applied around the perimeter of each wall and around any openings to limit heat loss by uncontrolled air movement.

The edges are sealed with a flexible sealant. Seal any holes made for services.

Accredited Construction Details (Scotland) recommend a continuous ribbon of adhesive is applied around socket outlets and switch plates prior to installing the plasterboard.



Richard Rose Academy, Cumbria



### Resistance to Moisture

Cavity walls by design resist the passage of moisture. Celotex GD5000 is not intended to offer resistance to the passage of moisture. Walls must show no sign of rain penetration or damp from ground moisture.

### Condensation

The inner leaf of the masonry cavity wall is isolated from the internal heat and presents a risk of interstitial condensation. Celotex GD5000 incorporates a built in vapour control layer which effectively minimise this risk. GD5000 plasterboard edges are taped and jointed to complete the vapour control layer.

### Fire

Celotex GD5000 has been classified as Euroclass B-s1, d0 to BS EN 13501-1 : 2007 and is unrestricted with respect to surface spread of flame under the Building Regulations.

Any cavities formed by the system (such as those formed between the thermal liner and the substrate wall) must have appropriate fire stopping in accordance with relevant national Building Regulations.

## Installation Guidelines Celotex GD5000

### Preparation

Ensure the condition of the wall prior to installation is sound, secure and free from contaminants and dry. Mark out finished board position on substrate.

### Process

Ensure a continuous seal at skirting, ceiling level and at openings by applying a continuous band of gypsum adhesive. This is especially important when considering the air tightness of the building.

Follow drywall adhesive manufacturer guidelines for number, size and layout of dabs but as a guide, apply dabs of gypsum adhesive in three rows with each dab approximately 75mm by 250mm in dimension. Intermediate dabs should be

applied at ceiling level but individual dabs should not bridge boards.

The bottom edge of the board should rest on packing strips to provide a level surface. The boards are tapped into place and aligned with predetermined markings. The boards are supported until the plaster adhesive has set.

The packing strip is removed and replaced with a PUR expandable foam or flexible sealant before skirting board fitted.

### Finishing and detailing

Once the dabs are set, it is a requirement that additional fixings be applied as a secondary fixing. Two nailable plugs are used per board. They can be positioned within the tapered edge, inset 50mm and half way down each board.

Joints between the boards must be tightly butted, taped and jointed using appropriate tape and jointing material to create the vapour control layer.

A finishing skim coat of 2mm of plaster should be applied to finish the installation.

### Corner and skirting

For internal and external corners, the plasterboard joints can be rebated or feathered to allow for the angle. Air gaps between joints are minimised to reduce the risk of heat loss.

### Heavy fixings

Heavy wall hangings for example shelving, radiators etc should be secured back to the masonry substrate with suitable fixings. Celotex GD5000 can support lightweight wall hangings only.

---

For more information  
please contact the Celotex  
Technical Centre on  
**01473 820850** or email  
**technical@celotex.co.uk**

---

## General Information

### Storage

Celotex insulation boards should be stored dry, flat and clear of the ground. Only as much material as can be installed during a single working period should be removed from storage at any one time. If boards are stored under tarpaulins, care should be taken to prevent rope damage to boards.

### Installation

Always install Celotex insulation boards in accordance with the instructions supplied by Celotex.

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

Where possible, cut the product using the Celotex Insulation Saw to minimise dust creation.

When cutting Celotex insulation, dust extraction equipment, eye protection and face masks should be provided. Dust or particles in the eyes should be washed out with liberal quantities of water. If skin is sensitive to fibre irritation, apply a barrier cream to exposed areas before handling.

### Handling

Care should also be taken to ensure that packs are not dropped on to corners or edges.

Aluminium foil edges may be sharp. Avoid sliding bare hands along board edges.



Find out more at [celotex.co.uk](http://celotex.co.uk)

Follow us on  @celotex

Team up with us on [LinkedIn](#) 

Like us on 

# Celotex

## Insulation Specialists

Celotex, Lady Lane Industrial Estate, Hadleigh, Ipswich, Suffolk, IP7 6BA

T: 01473 820850 E: [technical@celotex.co.uk](mailto:technical@celotex.co.uk)



Celotex is a Saint-Gobain brand