British Gypsum has published a new handy pocket guide to make understanding and complying with the national Building Regulations Part E easy. It is specially written for those working on housing refurbishment and conversion work, or new-build contracts.

The Guide provides advice, and details everything the small builder or contractor needs to know about meeting the Part E standards. It includes a comprehensive listing of all current Robust Details, guidance constructions, and British Gypsum approved systems to meet the Pre-Completion Testing option, plus all the flanking details.

*British Gypsum - sound solutions.*
Welcome to the Residential ceilings guide

This new ARTECO Residential ceilings guide, part of the HomeSpec sector guide series, details a portfolio of ceiling systems developed by British Gypsum to provide architects, specifiers and housebuilders with leading edge residential ceiling solutions.

The Residential ceilings guide considers the legislative and key design requirements that need to be taken into account in order to specify and install the appropriate ceiling element in residential developments.

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Legislative requirements

The problem of reverberation
In increasing numbers, people living in apartments are complaining about the noise generated within their apartment blocks. The use of hard floor surfaces and high ceilings are a major contribution to this phenomenon. Sounds generated in common spaces, that are allowed to go unabated, will tend to build up in intensity and cause noise nuisance and disturbance within adjacent living areas.

Controlling reverberation
Building on best practice, the national Building Regulations Part E was updated on 1st July 2003. The document provides guidance on how to provide reasonable standards of sound insulation in dwellings and other residential buildings, for both new-build and refurbishment/conversions.

Section E3 of the new regulations covers reverberation noise in the common internal parts of buildings containing flats or rooms for residential purposes.

The regulations state that ‘The common internal parts of buildings which contain flats or rooms for residential purposes shall be designed and constructed in such a way as to prevent more reverberation around the common parts than is reasonable.’

Requirement E3 applies to all corridors, stairwells, hallways and entrance halls that give access to, or are adjacent to, the flat or rooms being used for residential purposes.

Lining ceilings and walls with sound absorbing materials can effectively control reverberation.

What is reverberation?
In acoustics, reverberation refers to the multiple reflections, or echoes, of sounds inside a building that merge and persist a short time (up to a few seconds) before fading away. At each reflection, some of the sound energy is absorbed, causing the amplitude of the sound wave and the intensity of the sound to reduce a little.

Part E separating floor requirements
Part E has increased the acoustic standard for separating floors in both new-build and refurbishment/conversions. These levels of sound insulation must be achieved, even where sound absorbing linings are being used as part of the floor construction.

Performance criteria
New-build separating floors between dwellings and rooms used for residential purposes

\[ = 45 \text{dB } D_{NTW} + \text{ Ctr. (Min. airborne sound transmission – site test result)} \]
\[ = 62 \text{dB } L_{NTW} (\text{Max. impact sound transmission – site test result)} \]

Separating floors between rooms created by a material change in use

\[ = 43 \text{dB } D_{NTW} + \text{ Ctr. (Min. airborne sound transmission – site test result)} \]
\[ = 64 \text{dB } L_{NTW} (\text{Max. impact sound transmission – site test result)} \]

The requirement of Part E is that 10% of all dwellings should undergo Pre-Completion Testing (PCT) on site. Testing needs to be carried out by a test body with appropriate accreditation.

As an alternative to PCT the use of Robust Detail (RD) separating floor constructions is permitted in new houses and flats to demonstrate compliance with the Part E regulations.

For full details please refer to the British Gypsum HomeSpec publication.

Compliance method
For new-build houses or flats, either RD or PCT is available. For new-build rooms for residential purposes (e.g. hotels, hostels, student accommodation, etc) and for conversions only the PCT route is allowed as a means of compliance.

Construction choice
The guide will present options for installing sound absorption treatment to both sound-insulating and non sound-insulating floors. In the case of sound-insulating floors, both Robust Detail (RD) and Pre-Completion Testing (PCT) floor constructions are shown with various Arteco ceiling solutions to control reverberation.

Left Gyptone QUATTRO 41
**Arteco residential ceilings specifications**

The introduction of sound absorbing materials into communal areas can create real design issues. Using carpets that are capable of giving the high levels of sound absorption required, for instance, can lead to problems with ongoing maintenance and long term durability. Equally, installing common mineral fibre tiles on exposed metal grids can give areas an institutional feel and detract from the overall building design.

With a track record of use in some of the most prestigious buildings in the UK and throughout Europe, Arteco ceiling products create flexibility in design and construction. The range of ceiling tiles, planks and boards have all of gypsum’s own unique strength and fire safety qualities as well as a natural mineral feel.

The wide range of innovative and contemporary designs provides interior designers with inspiration and flexibility, enabling them to realise fully the visual and acoustic ambience of their designs. Installers and users benefit as well. Installation is rapid and simple, and enables easy access for the maintenance of services. Designed for low maintenance and high durability, an Arteco ceiling is an investment that keeps performing year after year, plus it can be redecorated without affecting performance.

**Performance warranty**

All British Gypsum proprietary systems now benefit from SpecSure®, a lifetime system warranty that supports and protects the integrity of our market leading drywall systems from specification to installation.

Arteco ceilings are no exception. It is this guaranteed performance that continues to convince professional specifiers to choose our products and systems, above all others, for their entire internal lining solutions.

**Technical support**

From specification to installation, Arteco ceiling products are supported by the most comprehensive technical support resource in the industry, the British Gypsum Drywall Academy.

Through the Drywall Academy, we can offer advice and assistance with product selection, design and detailing, health and safety, statutory requirements and any other installation issues.

We also offer a full range of training courses at our purpose built Drywall Academy training centres at Erith, in South East London, East Leake, near Nottingham and Kirkby Thorne, in Cumbria, alongside regional satellite training centres throughout the UK.
The national Building Regulations require that sound absorptive treatments be applied within corridors, hallways, stairwells and entrance halls that give access to, or are adjacent to, flats or rooms for residential purposes.

The reason for this treatment is to reduce the reverberant noise created in these areas, so as to avoid a possible nuisance being created. The easiest way of providing absorption is to install an acoustic tile or board ceiling.

The regulations give two methods of calculating the amount of absorption required in any communal areas. The two methods are referred to as ‘Method A’ and ‘Method B’.

### Method A

**Entrance halls, corridors or hallways**

Cover an area at least equal to, or greater than, the floor area, with a Class C absorber or better. In most situations it will normally be convenient to cover the ceiling area with the additional absorption.

See page 17 for Arteco ceiling tiles, planks and boards that have a Class C rating.

**Stairwells or stair enclosures**

Calculate the combined area of the stair treads, the upper surface of the intermediate landings, the upper surface of the landings (excluding ground floor) and the ceiling area of the top floor. Either cover at least an area equal to this calculated area with a Class D absorber, or cover an area equal to at least 50% of this calculated area with a Class C absorber or better.

The absorption material should be equally distributed between floor levels. It will normally be convenient to cover the underside of intermediate landings, the underside of the other landings, and the ceiling on the top floor. However, where there is insufficient ceiling area available, the absorptive materials can be applied to any surface. In this case, the use of Gyptone boards as wall linings would be a suitable solution.

Contact the British Gypsum Drywall Academy Advice Centre for further details.

### Note

To simplify the specification of materials, the sound absorption performance can be quoted as a Class.

There are 5 classes (A through to E) with Class A signifying the products with the highest level of sound absorption.
Method A - worked examples

Stairwells or stair enclosures

Example
Area of stair treads = 20 stairs x 1.2m wide x 0.25m deep = 6m²
Area of intermediate landings = 1.6m x 1.6m = 2.56m²
Top floor ceiling area = 3.8m x 4.3m = 16.34m²
Total area = 24.9m²

Option 1
Install 12.5m² of Class C absorber, e.g. Gyptone QUATTRO 41 on Casoline MF

Option 2
Install 24.9m² of Class D absorber, e.g. Gyptone LINE 6 on Casoline MF

Corridor or hallway

Example
Total corridor area = (1.4m x 14.4m) + (1 x 3.8m) + (1 x 2.8m)
= 26.8m²

Option 1
Install 26.8m² of Class C absorber, e.g. Gyptone QUATTRO 41 on Casoline MF

Option 2
Install 26.8m² of Class C absorber, e.g. Casoprano NOVA with 100mm Isowool General Purpose Roll on suspended grid.

The examples above utilise ‘Method A’ as defined in Building Regulations Part E
Ceilings in communal areas

Method B

This method is intended for use in entrance halls, corridors and hallways only, as it is not suited to stairwells or stair enclosures. In comparison to Method A, Method B takes into account existing absorption provided by all surfaces and should allow greater flexibility in meeting the requirements.

However, the method is more complex and requires knowledge of all the materials to be used for lining the area and their sound absorption coefficients. Performance data for generic materials is available within Part E, alternatively manufacturers’ data can be used where available.

For entrance halls, Method B requires a minimum of 0.20m² of total absorption area (AT) per cubic metre of volume. The additional absorptive material should be distributed over the available surfaces. Sound absorption data for Arteco ceiling tiles, planks and boards for use in Method B calculations is available by contacting the Drywall Academy Advice Centre.

For corridors and hallways, Method B requires a minimum of 0.25m² of total absorption area (AT) per cubic metre of volume. The additional absorptive material should be distributed over one or more of the surfaces.

Calculating the absorption class and the area of material required using Method B is an 8 step process:

⇒ Step 1
● Calculate the surface area related to each absorptive material (i.e. for the floor, walls, doors and ceiling).

⇒ Step 2
● Obtain values of absorption coefficients for the wall, floor and ceiling linings, including door sets and glazed areas.

⇒ Step 3
● Calculate the absorption area (m²) related to each absorptive surface (i.e. for the floor, walls and doors) in octave frequency bands (absorption area = surface area x absorption coefficient).

⇒ Step 4
● Calculate the sum of the absorption areas (m²) obtained in step 3.

⇒ Step 5
● Calculate the total absorption area (AT) required.

⇒ Step 6
● Calculate additional absorption area (A) to be provided by ceiling. If any values of minimum absorption area are negative, then there is sufficient absorption from the other surfaces to meet the requirement without any additional absorption in this octave band.
Step 7

- Calculate required absorption coefficient $\alpha$ to be provided by ceiling (required absorption coefficient $\alpha = \frac{\text{additional absorption area}}{\text{area of ceiling}}$).

Step 8

- Identify a ceiling product, from the Arteco product range, that provides absorption coefficients that exceed the values calculated in step 7. Full performance data for Arteco ceiling products is available in the Arteco ceiling products – Acoustic performance data publication.

Part E contains generic absorption data alongside a full worked example of the use of Method B to provide a ceiling finish within a corridor area.
System choice

The choice of system used will be dependant on a number of factors

The finished appearance of the ceiling
Using Gyptone or Rigitone boards fixed to either GypLynner or CasoLine MF grids produces a monolithic ceiling with no exposed metal.

The requirement to provide on-going access to services within the ceiling void
On-going access to services can be provided using a lay-in grid ceiling. Gyptone Plank and D1 concealed grid are alternatives to the traditional 600mm x 600mm tiles but offer more design flexibility, whilst still offering full access to the ceiling void.

Where Gyptone boards are used, access to services can be maintained using Gyptone Access Panels, these are designed to fully integrate into the ceiling appearance. See page 16 for details.

Floor to ceiling height and the space available for installation
Where floor to ceiling height is limited, Gyptone or Rigitone boards can be installed on a GypLynner ceiling system with a minimum plenum depth of just 45mm.

If the ceiling height needs to be reduced or where a deeper plenum is required behind the ceiling to carry services, Gyptone and Rigitone boards are installed on a CasoLine MF system.

For lay-in grid, Gyptone Plank and Gyptone D1 systems, a minimum plenum depth of 100mm is required to allow for the installation and removal of the tiles.

Installation options

1 CasoLine MF

A highly flexible, concealed grid system that can be used to create design features such as curved ceilings. For use with plenum depths from 120mm.

For full design and installation details refer to the British Gypsum White Book and SiteBook, or visit www.british-gypsum.com
A concealed grid system suited to areas where floor to ceiling height is restricted, as it can be installed with a minimum 45mm plenum depth.

For full design and installation details refer to the British Gypsum White Book and SiteBook, or visit www.british-gypsum.com

Specifically designed for corridor installations, the exposed grid system does not generally require suspension from the structure, reducing installation time and cost, and leaving the entire plenum unrestricted for service installation. A minimum plenum depth of 100mm should be allowed for installation.

For full design and installation details refer to the British Gypsum White Book and SiteBook, or visit www.british-gypsum.com
4 Gyptone D1 system

Based on the CasoLine T24D1 concealed grid system, the D1 tiles are fitted to the front of the grid, concealing the metal section whilst allowing full access to the ceiling void. A minimum plenum depth of 100mm should be allowed for installation.

For full design and installation details refer to the British Gypsum White Book and SiteBook, or visit www.british-gypsum.com

5 Standard 24mm and 15mm exposed grid systems

All Arteco A and E edge tiles are suitable for installation on proprietary 15mm and 24mm exposed grid systems. Whilst giving on-going access to the ceiling plenum, the supporting grid remains exposed. A minimum plenum depth of 100mm should be allowed for installation.

For full design and installation details refer to the British Gypsum White Book and SiteBook, or visit www.british-gypsum.com
**Wall linings**

Within entrance halls, corridors or hallways, Part E allows for the additional absorption to be distributed over one or more of the surfaces. In this case, the most efficient way of doing this is to install a sound absorbing ceiling.

In stairwells or stair enclosures, the absorption material should be equally distributed between floor levels. It would normally be convenient to cover the underside of intermediate landings, and the ceiling on the top floor.

However, these are only recommendations and, where needed for either design or installation reasons, or where there is insufficient ceiling area available, the absorptive materials can be applied to any surface.

In these cases, Gyptone boards used as a wall lining would be a suitable solution.

Please contact the British Gypsum Drywall Academy Advice Centre for further details.

**Training**

Training courses covering the installation of all British Gypsum ceiling products and systems are available. Contact the British Gypsum Drywall Academy for details – Tel: 08702 406040
Product choice

Arteco ceiling products provide the widest possible range of design solutions for meeting national Building Regulation requirements for provision of sound absorbing materials in communal areas.

Gyptone

A versatile range of perforated and pre-finished gypsum suspended ceiling tiles, planks and boards. Its three attractive geometric patterns can be used in conjunction with unperforated board to provide limitless design options for the interiors of a wide variety of buildings.

Edge detail

E15

D1

Board edge
Casoprano
A range of pre-finished white gypsum suspended ceiling tiles, available in a choice of Square (A) or Rebated (E15) edge options.

Edge detail
A

E15

Rigitone
A range of perforated gypsum boards with a dramatic and seamless appearance, that offer the potential to inspire architects and satisfy modern design solutions.

Edge detail
Boards edge

Left Gyptone line 6
Gyptone Access Panels

Gyptone’s comprehensive range of ceiling boards now encompass a range of specially developed access panels which allow easy access to the service area behind the suspended ceiling.

The Gyptone range of access panels are fully integrated into the ceiling design and can be installed without the need for screws or other mechanical fixing. The panels are small and unobtrusive and can be filled and painted to exactly match the desired ceiling appearance - never compromising the overall seamless look of the ceiling.

Product information

Gyptone Access Panels are delivered as an assembled kit, to match the board design being installed.

Dimensions

350mm x 350mm

Perforations

Gyptone Access Panels are supplied to match board designs:

- Arteco Gyptone LINE 6
- Arteco Gyptone QUATTRO 41
- Arteco Gyptone QUATTRO 46
- Arteco Gyptone QUATTRO 47
Arteco ceiling tiles, planks and boards with Class C and D ratings

The table to the right shows all Arteco products that achieve either a Class C or Class D absorber rating.

To give the designer greater flexibility when using Method A in entrance halls, corridors and hallways, a number of the Arteco ceiling products can be used in combination with plain plasterboard.

For example, Method A requires a Class C absorber with an area equivalent to the floor area, to be installed in the corridor. Where the corridor width exceeds 1200mm (i.e. one full board width), it may be desirable to install a plain board border. This is possible using all Class C absorbers listed.

Therefore, Gyptone QUATTRO 41 boards can be installed, with an area equivalent to 10% of the total ceiling area being plain board. This area can be increased to 24% of total ceiling area if 50mm Isowool APR 1200 quilt is included in the cavity. These plain board areas are in addition to the areas of unperforated board that form part of the Gyptone QUATTRO 41 board.

For example

A corridor 1.5m wide x 10m long, total area = 15m².

1.2m wide Gyptone QUATTRO 41 board is fixed down the centre of the corridor with a 150mm wide border of plain board.

Area of Gyptone board = 12m² = 80%
Area of plain board = 3m² = 20%

In this case it would be necessary to install 50mm Isowool APR 1200 within the cavity.

<table>
<thead>
<tr>
<th>Absorber Class</th>
<th>Product</th>
<th>Minimum plenum</th>
<th>Quilt</th>
<th>System reference</th>
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<tbody>
<tr>
<td>Class C</td>
<td>Gyptone LINE 4 tile</td>
<td>45mm*</td>
<td>50mm Isowool APR 1200</td>
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<tr>
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<td>C10A097</td>
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* Normal accepted minimum system cavity (plenum) for installation and demounting of tiles is 100mm.
Sound absorption treatments to sound insulating floors

Where a floor is separating a common area of the building below a room for residential purposes, the floor will have to provide airborne sound insulation performance.

Part E will also require sound absorption to be used within the common area to provide noise control.

The most effective area to apply the sound absorption is the ceiling.

The following details show the installation of sound absorbing ceilings for both Robust Detail (RD) and Pre Completion Testing (PCT) requirements.

Contact the British Gypsum Drywall Academy Advice Centre for details of installation of secondary ceilings.

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Timber joists

### ROBUST DETAIL

**E-FT-1 Engineered timber ‘I’ joist with floating floor**

Minimum 240mm depth engineered timber ‘I’ joist Gypframe RB1 Resilient Bar ceiling at 450mm centres.

Lined with an inner layer of 19mm Gyproc Plank and an outer layer of 12.5mm Gyproc WallBoard. 100mm Isowool APR 1200 in the joist cavity.

A sub-deck of 15mm OSB and an RD approved floating floor system (must achieve a minimum lab performance of 17dB) incorporating: 22mm chipboard, 19mm Gyproc Plank and 25mm Isowool APR 1200 in the batten cavity.

If additional service space is required beneath the joists then the CasoLine system may be used, instead of Gypframe Resilient Bar.

Secondary sound absorbing Arteco ceiling installed below primary ceiling lining.

### PRE-COMPLETION TESTING

**Timber frame base with independent ceiling and platform floor (floor type 3.1A)**

Independent joisted floor with a platform floor walking surface, comprising 25mm Isowool Sound Deadening Floor Slabs overlaid with 19mm Gyproc Plank and chipboard walking surface.

Ceiling consisting of 2 layers of 12.5mm Gyproc WallBoard TEN with 100mm Isowool APR 1200.

There should be at least 100mm clearance between the top of the ceiling joists and the underside of the sub-deck.

Further enhanced (90 min) fire resistance can be achieved as per the above specification, but replace Gyproc WallBoard TEN with 2 layers of 15mm Gyproc FireLine.

Secondary sound absorbing Arteco ceiling installed below primary ceiling lining.
Concrete with screed

**Cast in-situ concrete base with ceiling and floating floor (floor type 2.1C)**

Cast in-situ concrete slab, minimum surface mass 300kg/m² including any bonded screed. Floating floor treatment essential.

GypLynner ceiling lining set to a minimum 25mm cavity depth with 25mm Isowool APR 1200 in the cavity.

Lined with a single layer of 12.5mm Gyproc WallBoard TEN.

Secondary sound absorbing Arteco ceiling installed below primary ceiling lining.

**Concrete plank base with ceiling and soft covering (floor type 1.2B)**

Concrete planks, minimum surface mass 365kg/m² including any bonded screed. All floor joints fully grouted. Soft floor covering essential.

Ceiling battened out, Gypframe RB1 Resilient Bars fixed at 450mm centres. 25mm Isowool APR 1200 in the cavity.

Lined with a single layer of 12.5mm Gyproc WallBoard TEN.

Secondary sound absorbing Arteco ceiling installed below primary ceiling lining.

**Concrete plank base with ceiling and floating floor (floor type 2.2B)**

Concrete planks minimum surface mass 300kg/m² including any bonded screed.

All floor joints fully grouted. Floating floor treatment essential. Ceiling battened out, Gypframe RB1 Resilient Bars fixed at 450mm centres.

25mm Isowool APR 1200 in the cavity.

Lined with a single layer of 12.5mm Gyproc WallBoard TEN.

Secondary sound absorbing Arteco ceiling installed below primary ceiling lining.
In-situ concrete slab

**E-FC-2 Reinforced in-situ concrete with floating floor**

Minimum 250mm depth in-situ concrete floor slab with minimum density of 2400kg/m² without screed.

Or minimum 200mm depth in-situ concrete floor slab, minimum density 2400kg/m² with 40mm screed directly applied.

Gypsum ceiling lining set to a minimum of 75mm cavity depth, lined with single layer of 12.5mm Gyproc WallBoard. TEN.

Or, if a minimum cavity depth of 100mm, lined with 12.5mm Gyproc WallBoard.

An RD performing floating floor system (must achieve a minimum lab performance of 17dB).

Secondary sound absorbing Arteco ceiling installed below primary ceiling lining.

**Cast in-situ concrete base with ceiling and soft covering (floor type 1.1C)**

Cast in-situ concrete slab, minimum surface mass 365kg/m² including any bonded screed. Soft floor covering essential. Gypsum ceiling lining set to a minimum 25mm cavity depth with 25mm Isowool APR 1200 in the cavity.

Lined with a single layer of 12.5mm Gyproc WallBoard. TEN.

Secondary sound absorbing Arteco ceiling installed below primary ceiling lining.

**E-FC-1 Pre-cast concrete slab with floating floor**

Minimum 150mm depth pre-cast units with minimum surface mass of 300kg/m².

Directly applied minimum 40mm sand/cement screed.

Gypsum ceiling lining set to a minimum of 75mm cavity depth, lined with single layer of 12.5mm Gyproc WallBoard. TEN.

Or, if a minimum cavity depth of 100mm, lined with 12.5mm Gyproc WallBoard.

An RD performing floating floor system (must achieve a minimum lab performance of 17dB).

Secondary sound absorbing Arteco ceiling installed below primary ceiling lining.
Where possible, downlighters or recessed lighting should not be built into the separating floor. If they must be built in, they should be kept to a minimum and the following guidance should be followed.

For concrete, concrete/steel and timber separating floors, downlighters or recessed lighting may be included in the ceiling provided they are installed:

- in accordance with the manufacturers instructions
- at no more than one light per 2m² of ceiling area in each room
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100 x 100mm

For Robust Detail timber separating floors, only downlighters which have been satisfactorily assessed in accordance with the procedure in Appendix F of the Robust Details handbook may be used.

The procedure requires airborne and impact sound tests to be conducted on a standard floor construction, with and without downlighters installed. To qualify for inclusion in a Robust Detail floor, the difference in performance should be no greater than 1dB for both airborne and impact sound insulation performance.

The procedure requires the downlighters to be installed at no more than one per 2m² and at centres not less than 0.75m. However the test procedure can be used to demonstrate compliance at reduced spacing or increased lighting density, providing the 1dB maximum difference is not exceeded.

In all cases where downlighters or recessed lighting are being installed attention should be paid to meeting the requirements of Building Regulation Part B - Fire Safety.

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**Services in Robust Detail separating floors**

*Steel & concrete composite floors*

**E-FS-1 In-situ concrete on metal decking with floating floor**

In-situ concrete slab, minimum density of 2200kg/m³, supported on a profiled metal deck. Minimum 80mm concrete cover at shallowest point, minimum 130mm at deepest point of metal deck. GypLynor ceiling lining set so the floor depth from the concrete floor surface to the underside of the ceiling is at least 300mm. Lined with a single layer of 12.5mm Gyproc WallBoard TEN.

An RD performing floating floor system (must achieve a minimum lab performance of 17dB). Secondary sound absorbing Arteco ceiling installed below primary ceiling lining.
British Gypsum
UK market leader in gypsum plaster and plasterboard systems, British Gypsum markets its products under the Gyproc, Thistle, Gypframe, Glasroc, Arteco, Rawl and Isowool* brand names.

All British Gypsum management systems have been independently audited and certified as conforming with ISO 9001:2000. The company maintains the quality and leading edge performance of its products and systems through an extensive and on-going programme of research, development and testing, supported by in-house fire, acoustic and system test facilities which are unique amongst building product manufacturers and match the best available anywhere in the UK.

British Gypsum quality does not stop at the products themselves – CAD and technical support for specifiers; comprehensive on-site support and off-site training through three dedicated product training centres at East Leake, near Nottingham, Kirkby Thore, in Cumbria, and Erith, in Kent, and ex-stock or next day availability through around 4000 stockists nationwide are just a part of a customer support package that has, for many years, set British Gypsum apart in the marketplace.

British Gypsum further benefits from being a member of the world’s leading gypsum company, BPB plc, which has interests in a wide range of associated building products and provides an extensive pool of knowledge and experience to the benefit of all its member companies.

* Gyproc, Thistle, Gypframe, Glasroc, Arteco and Rawl are all registered trade names of BPB United Kingdom Limited. Isowool is a registered trade name of British Gypsum-Isover Ltd, a joint venture between the insulation division of British Gypsum and Isover Saint-Gobain.

British Gypsum reserves the right to revise product specification without notice. The information given is correct to the best of our knowledge at the time of publication, but it is the user’s responsibility to ensure it remains current prior to use. The enclosed information should not be read in isolation as it is meant only as guidance for the customer, who should always ensure that they are fully conversant with the products and systems being used and their subsequent installation prior to the commencement of a job. We advise that you read and familiarise yourself with all the information contained in this literature prior to the commencement of the work or specification. For further details refer to our Health and Safety Guidance Sheet which is available on request.

For a comprehensive and up-to-date library of information visit our website at: www.british-gypsum.com