

DuraLine and DuraLine SEVERE

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DESCRIPTION

Gyproc DuraLine is a high impact resistant gypsum board for internal dry lining of buildings where a more durable surface is required. It can be used in applications such as schools and recreational buildings, hospitals and other institutional buildings, public circulation areas of commercial buildings, hotels and industrial premises.

Gyproc DuraLine's gypsum core, incorporating glass fibre and other fire protective additives, is encased in, and firmly bonded to, strong ivory coloured paper liners.

Gyproc DuraLine SEVERE has a special polyester film bonded to the back face to resist hard body impact penetration and achieve a severe duty rating in a single boarded partition system.

Standards

Gyproc DuraLine SEVERE further conforms to:
BS 5234: Parts 1 & 2: 1992 with regard to heavy / severe duty rating of partitions.

All British Gypsum boards and plasters are manufactured under *BS EN ISO 9002*, a quality assurance system approved by the BSI.

Safety Data Sheets are available for all British Gypsum products. Please contact the British Gypsum Drywall Academy Advice Centre for guidance.

PERFORMANCE

Fire protection

Plasterboard linings provide good fire protection owing to the unique behaviour of the non-combustible gypsum core when subjected to high temperatures. Please refer to **White Book Section x10 - Fire protection measures** for further guidance.

For the purposes of the national Building Regulations, plasterboard is designated a 'material of limited combustibility' (Approved Document B).

Gyproc DuraLine and DuraLine SEVERE satisfy the Class 0 surface requirements for the purposes of national Building Regulations. Please refer to **Table 1**.

Table 1 - Reaction to fire test performance

Test	Performance
<i>BS 476: Part 6: 1989</i> <i>Method of test for fire propagation for products.</i>	Index of performance (I) not exceeding 12 and a sub-index (i ₁) not exceeding 6.
<i>BS 476: Part 7: 1997</i> <i>Surface spread of flame tests for materials.</i>	Class 1.

EFFECT OF TEMPERATURE, THERMAL PROPERTIES AND SOUND INSULATION

Effect of temperature

Gyproc DuraLine and DuraLine SEVERE are unsuitable for use in areas subject to continuously damp or humid conditions and must not be used to isolate dampness. Plasterboards are not suitable for use in temperatures above 49°C, but can be subjected to freezing conditions without risk of damage.

Thermal Conductivity / Resistance

Conductivity (λ) = 0.24 W/mK.

Resistance (R) = 0.05m²K/W.

Sound insulation

For laboratory sound insulation testing, please refer to **Table 2**.

HEALTH AND SAFETY

Please refer to **White Book Section 14 - Health and Safety** before specifying, handling or installing any British Gypsum products and systems covered in this publication.

British Gypsum fully accepts its responsibilities as a supplier of building materials and systems as required by Section 6 of the Health and Safety Work Act: 1974. The designer should take full account of relevant regulations and guidance. Please refer to **Section 14 - Health and Safety**, for further details.

Safety Data Sheets for all British Gypsum products, and additional copies of **Section 14 - Health and Safety** are available to download from our website: www.british-gypsum.bpb.com, or via the British Gypsum Drywall Academy Advice Centre.

When cutting boards, power and hand tools should be used with care and in accordance with manufacturers' recommendations. Appropriate personal protective equipment should be used.

Table 2 - Performance of GypWall^{ROBUST} (metal stud partition) incorporating Gyproc DuraLine

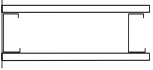
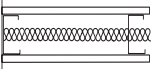
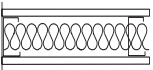
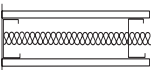
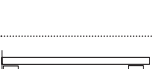
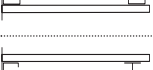

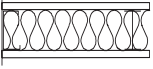
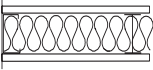
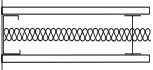

Detail	Construction	Nominal overall thickness mm	Maximum recommended height mm	Duty Grade ¹ at max. recommended height	Fire resistance minutes	Laboratory sound insulation 100-3150 Hz R _w dB (R _w + Ctr)	Performance substantiation report
	13mm Gyproc DuraLine each side of 70 S 60 studs at 600mm centres.	98	3800	Heavy	30	41 (32)	Q606025
	As above with 25mm Isowool Acoustic Partition Roll (1200) in the cavity.	98	3800	Heavy	60	47 (38)	Q606026
	As above with 50mm Isowool Acoustic Partition Roll (1200) in the cavity.	98	3800	Heavy	60	48 (39)	Q606027
	13mm Gyproc DuraLine SEVERE each side of 70 S 60 studs with 25mm Isowool Acoustic Partition Roll (1200) in the cavity.	98	3800	Severe	60	47 (38)	Q606028
	As above with 50mm Isowool Acoustic Partition Roll (1200) in the cavity.	98	3800	Severe	60	48 (39)	Q606029
	13mm Gyproc DuraLine each side of 70 I 50 studs at 600mm centres with 25mm Isowool Acoustic Partition Roll (1200) in the cavity.	98	4000	Heavy	60	47 (38)	Q606030
	As above with 80mm Isowool General Purpose Roll in the cavity.	98	4000	Heavy	60	50 (39)	Q606031
	As above with 75mm Isowool High Performance Slabs in the cavity.	98	4000	Heavy	60	51 (41)	Q606032
	13mm Gyproc DuraLine SEVERE each side of 70 I 50 studs at 600mm centres with 25mm Isowool Acoustic Partition Roll (1200) in the cavity.	98	4000	Severe	60	47 (38)	Q606033
	As above with 80mm Isowool General Purpose Roll in the cavity.	98	4000	Severe	60	50 (39)	Q606034
	As above with 75mm Isowool High Performance Slabs in the cavity.	98	4000	Severe	60	51 (41)	Q606035

TABLE INFORMATION

For performance data where Gyproc DuraLine or Gyproc DuraLine SEVERE are used as the durable outer layer in conjunction with base layers of other Gyproc plasterboards, please contact the British Gypsum Drywall Academy Advice Centre.

¹ Duty Grades

British Gypsum comprehensively tests partitions to the requirements of *BS 5234: Parts 1 and 2: 1992*. In accordance with the requirements, partitions are graded by duty. The grade of a partition is assessed by its ability to meet the requirements of four strength tests: Door slam, Soft body impact, Hard body impact and Stiffness. The grades, Light, Medium, Heavy and Severe Duty relate to the level of activity in adjacent areas and the degree of care likely to be exercised in them. The requirements are for partitions complete with their surface finishes, where these are part of the partition specification. Other optional tests may also apply. Using the duty of a particular partition and with due consideration for fire and sound requirements, the designer can select the most suitable partition for the area of use (please refer to **Table 3** and **Table 4**). A brief extract of *BS 5234* is given as a guide to partition duties.

DESIGN CONSIDERATIONS

Both Gyproc DuraLine and Gyproc DuraLine SEVERE have an ivory coloured liner on the decorative face and are available with a tapered edge profile for seamless jointing. Gyproc DuraLine and Gyproc DuraLine SEVERE are identified by printing of the brand down the centre of the board and by the ivory face.

Table 3 - Width, thickness, lengths available and approximate weight

Width mm	Thickness mm	Length mm	Weight kg/m ²
1200	13	2400 3000	11.5

Table 4 - A brief recommendation of category of duty required for example areas.

Grade	Category of Duty	Example areas
Heavy Duty	Adjacent space frequently used by the public and others with little incentive to exercise care. Chances of accidents occurring and of misuse.	Public circulation. Industrial areas.
Severe Duty	Adjacent space intensively used by the public and others with little incentive to exercise care. Prone to vandalism and abnormally rough use.	Major circulation areas. Heavy industrial areas.

INSTALLATION

General

It is important to observe appropriate Health and Safety legislation when working on site, i.e. protective clothing and equipment, etc. The following notes are intended as general guidance only, describing the basic sequence of installation. In practice, consideration must be given to design criteria requiring specific project solutions.

Please contact the British Gypsum Drywall Academy Advice Centre for guidance.

Health and Safety

For correct Health and Safety methods, please refer to **White Book Section 14 - Health and Safety**.

Cutting

Gyproc DuraLine and Gyproc DuraLine SEVERE may be cut using a wallboard saw or by scoring and snapping over a straight edge and cutting the paper on the other side. Holes for switch or socket boxes should be cut out before the boards are fixed using a saw or sharp knife.

Installation

Installation is similar to that for Gyproc WallBoard, either screw-fixed to timber framing or to Gypframe metal framing. Gyproc Drywall Screws should be used for 'C' Studs and channels up to 0.7mm and 'I' Studs up to 0.5mm. Gyproc Drywall Jack-Point Screws should be used for 'C' Studs and Channels greater than 0.7mm and 'I' Studs greater than 0.5mm.

Gyproc DuraLine can also be used for high impact resistant wall linings fixed to masonry backgrounds in a similar manner to Gyproc WallBoard using Gyproc Dri-Wall Adhesive. When using Gyproc Dri-Wall Adhesive it is important to ensure that a minimum of 20% of the area of the board is fixed by adhesive dabs. Please refer to **White Book Section 4 - Wall linings** for guidance.

Fixtures

Owing to the glass-fibre reinforced gypsum core, Gyproc DuraLine and Gyproc DuraLine SEVERE gives a secure base for fixtures. Providing suitable fixing provisions are made, British Gypsum wall lining or partition systems lined with Gyproc DuraLine or Gyproc DuraLine SEVERE are capable of withstanding loads such as cupboards or water heaters. All boards must be accurately and carefully drilled, and all fixings must be installed according to the manufacturer's instructions. Holes must not be punched. Please refer to **Table 5** for guidance.

In high usage areas where misuse may be a potential problem (please refer to **Table 4**), heavy fixtures such as wall-mounted sanitary ware should ideally be backed by framing members within the wall lining or partition systems. This could be achieved by either fixing into the metal studs, or to plywood fixed in Gypframe Service Support Plates or additional timber framing.

Picture 1 - General assembly of Gyproc DuraLine using British Gypsum GypWall ROBUSt framework



Fixture recommendations

In all instances, please contact the manufacturer for full details on the correct usage. Please refer to **White Book Section n25 - Fixtures** for guidance.

Table 5 - Fixture load recommendations

Fixture load	Examples	Fixing provisions
Light	Small pictures	Picture hooks. Wood screws.
Medium	Mirrors Floor cupboards Light fittings Coat hooks	Rawlplug PolyToggle
Heavy	Radiators Wall cupboards Water heaters Sanitary ware	Rawlplug Interset Cavity Fixing M4 x 40. Through single layer of Gyproc DuraLine or DuraLine SEVERE into Gypframe Fixing Channel ¹ .

¹ Pre-drill with an 8mm hole when using this type of fixing.

Surface treatment

For jointing methods (as for Gyproc WallBoard), please refer to **White Book Section n15 - Jointing**.

Decoration

After joint treatment has dried, decoration, including any decorator's preparatory work, should follow with the minimum of delay.

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 users 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 please 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

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