

5174B BPB PLASTERBOARD IMPACT RESISTANT LININGS

1. GENERAL

This section relates to the supply, fixing and jointing of BPB Plasterboard sheets and accessories to timber and steel framed walls and ceilings to form:

- impact resistant systems
- related fire and sound rating

1.1 RELATED SECTIONS

Refer to 5113B BPB PLASTERBOARD LININGS for standard plasterboard systems.

1.2 ABBREVIATIONS

The following abbreviations are used throughout this part of the specification:

FRR	Fire resistance rating
STC	Sound transmission class

Documents

1.3 DOCUMENTS REFERRED TO

Documents referred to in this section are:

AS 1397	Steel sheet and strip - hot-dip, zinc-coated, or aluminium/zinc-coated
AS/NZS 2589	Gypsum linings - Application and finishing
NZS 3602	Timber and wood-based products for use in building
NZS 3631	New Zealand timber grading rules
AS 4600	Cold-formed steel structures
BS 5234.2	Partitions (including match linings). Specification for performance requirements for strength and robustness including methods of testing

Documents listed above and cited in the clauses that follow are part of this specification. However, this specification takes precedence in the event of it being at variance with the cited document.

1.4 MANUFACTURER'S DOCUMENTS

Manufacturer's and supplier's documents relating to work in this section are:

BPB Plasterboard - Installation manual
BPB Plasterboard - Fire and Acoustic Systems manual
BPB Plasterboard - GypWall™ ROBUST brochure
Environmental Choice NZ, license No 1909052

Copies of the above literature are available at

Web: www.bpb.co.nz
Telephone: 09-353 2080 or 0800-272 262

Requirements

1.5 NO SUBSTITUTIONS

Substitutions are not permitted to any specified **BPB Plasterboard** systems, sheets or associated products, components or accessories.

1.6 QUALIFICATIONS

Plasterboard fixers and stoppers to be experienced competent workers, familiar with materials and techniques specified. Submit evidence of experience on request.

Performance

1.7 INSPECTIONS AND ACCEPTANCE

Inspect the finished surface of the installed plasterboard:

- before applying sealer and
- before applying finish coatings or decorative papers,

so that after assessment of the type and/or angle of illumination and its effect on the completed decorative treatment, group approval and acceptance of the surface can be given.

- 1.8 **IMPACT RESISTING REQUIREMENTS**
Provide impact damage resisting wall and floor or ceiling systems. Refer to SELECTIONS for type. Form and treat perimeters of the elements to ensure the specified performance.
- 1.9 **FIRE AND SOUND RATING REQUIREMENTS**
Provide BPB fire and sound rated systems as scheduled in SELECTIONS.
- 1.10 **ENVIRONMENTAL REQUIREMENTS**
All plasterboard sheets to comply with the requirements of Environmental Choice NZ, license No 1909052.

2. **PRODUCTS**

Materials

- 2.1 **BPB PLASTERBOARD, IMPACT RESISTANCE SYSTEMS**
BPB Duraline high density gypsum plaster core incorporating glass fibre and fire resistant additives, encased in a durable face and backing paper formed for impact resistance. To BS 5234.2, **Severe duty**.
- 2.2 **CORNICE**
Plasterboard, scotia pattern.

Components

- 2.3 **CEILING BATTENS, METAL**
0.55mm galvanized steel (275 g/m² zinc coating) battens and matching perimeter channels.
- 2.4 **CEILING BATTENS, TIMBER**
Species, in service moisture content and treatment as set out in [NZS 3602](#) and grading to [NZS 3631](#).
- 2.5 **NAILS, TIMBER FRAME**
13mm BPB Duraline: 40mm x 2.5mm galvanized drywall clouts

Nails for fire rated systems as required by **BPB Plasterboard** specifications.
- 2.6 **SCREWS, TIMBER FRAME**
13mm BPB Duraline: Type S gypsum screws 40mm x 6 gauge

Screws for fire rated systems as required by **BPB Plasterboard** specifications.
- 2.7 **SCREWS, STEEL FRAME / BATTENS**
13mm BPB Duraline: Type S gypsum screws 25mm x 6 gauge

Screws for fire rated systems as required by **BPB Plasterboard** specifications.
- 2.8 **SECTIONS AND TRIM MATERIAL**
Form from galvanized steel of a coating class not less than ZM275 to AS 1397 and fix with 30mm x 2.5mm galvanized clouts.
- 2.9 **EXTERNAL ANGLE**
Perforated.
- 2.10 **INTERNAL REINFORCING ANGLE**
Perforated.

- 2.11 CONTROL JOINT
With plastic protective tape.
- 2.12 CASING BEAD
To suit sheet thickness.
- 2.13 J MOULD
Extruded uPVC dimensioned to suit the sheet thickness and fixed with 25mm x 1.6mm nickel panel pins.
- 2.14 TAPE ON EDGE TRIMS
Tape-on paper tape and galvanized steel trims and edges.
- 2.15 EDGE PROFILES
Pre-formed aluminium profiles, with perforated edge trims.

Accessories

- 2.16 ADHESIVE
Multi-purpose water based wallboard adhesive.
- 2.17 JOINTING COMPOUNDS
System match bedding compound and finishing compound. Refer to **BPB Plasterboard** literature and follow the requirements on which compounds to use with which accessory and in which location, to achieve the required level of finish.
- 2.18 TAPE
System match reinforcing tape.

Finishes

- 2.19 SKIMCOAT PLASTER
Proprietary spray-on surface finish.

3. EXECUTION

Conditions

- 3.1 HANDLE AND STORE
Handle and store sheets and accessories in dry conditions stored indoors out of direct sunlight in neat flat stacks clear of the floor with no sagging and avoiding damage to ends, edges and surfaces. Reject damaged material.
- 3.2 SUBSTRATE
Do not commence work until the substrate is plumb, level and to the standard required by **BPB Plasterboard** requirements.
- 3.3 MOISTURE CONTENT
Maximum allowable moisture content in accordance with [NZS 3602](#) for:
Timber framing at lining: 16% for plasterboard linings
- 3.4 METAL FRAMING
Metal framing, to which gypsum lining is fixed, shall comply with AS 1397 or AS/NZS 4600, as applicable. Where adhesion of gypsum linings is required, surfaces shall be free of oil, grease, dust and other foreign materials. Refer to the metal framing manufacturers specifications where high density gypsum linings (>800 kg/m³) such as **BPB Duraline** are specified for fixing to light gauge steel framing.
- 3.5 PROTECT
Protect surfaces, cabinetwork, fittings, equipment and finishes already in place from the possibility of water staining and stopping damage.

- 3.6 LEVELS OF FINISH
Provide the scheduled plasterboard surfaces to the levels of finish specified in AS/NZS 2589.
- 3.7 LEVELS OF FINISH ACCEPTANCE
Before commencing work, agree in writing upon the surface finish assessment procedure necessary to ensure that the levels of finish specified, along with the effect of the type and/or angle of illumination on them, are obtained and are acceptable.
- 3.8 GENERAL REQUIREMENTS
Leave a 10mm gap at floor level. Do not break the face paper. Position sheets to a "touch fit" with no forcing or springing into place. Run sheets over doors and under and over window openings. Apply adhesive in daubs 25mm diameter and 10mm thick. Do not place daubs at sheet perimeters or under nail and screw fixings.
- Application - fixing**
- 3.9 INSTALL CEILING BATTENS
Install in accordance with the batten manufacturer's requirements.
- 3.10 LINE CEILINGS AND WALLS
Line ceilings and walls with the various sheets and fix to **BPB Plasterboard** details and requirements, using tapered edge joints as far as possible. Where specified line walls by the horizontal method using long sheets, 1350mm wide where applicable. Refer to SELECTIONS.
- 3.11 END BUTT JOINTS
When end butt joints are unavoidable, locate staggered off the framing, back block, fix and stop to **BPB Plasterboard** details and requirements.
- 3.12 IMPACT RESISTING SYSTEMS
Line walls strictly in accordance with the **BPB Plasterboard** requirements. Fixings at 300mm centres maximum.
- Application - finishing sections and trim**
- 3.13 FIX EXTERNAL ANGLE
Fix full length to external corners with clouts at 100mm centres each side staggered to **BPB Plasterboard** details and requirements.
- 3.14 FIX INTERNAL REINFORCING ANGLE
Fix full length to internal corners with clouts at 100mm centres each side staggered to **BPB Plasterboard** details and requirements.
- 3.15 FIX CASING BEAD
Fix between dissimilar materials and caulk with sound rated sealant to **BPB Plasterboard** details and requirements.
- 3.16 FIX J MOULD
Fix between dissimilar materials and caulk with sound rated sealant to the drawings supplied.
- 3.17 FORM CONTROL JOINTS
Provide at maximum 9 metre centres in long unbroken walls and 12 metre centres to ceilings to **BPB Plasterboard** details and requirements. Fix control joint section into joint by staples at 150mm both sides. Fill gap in voids with sound rated sealant. Remove plastic tape after stopping.
- 3.18 FIX COVER MOULDS
Fix to **BPB Plasterboard** details and requirements and to the drawings supplied.
- 3.19 FIX CORNICE
Fix with adhesive and mitre joints to **BPB Plasterboard** details and requirements.

3.20 FORM SQUARE STOPPED CORNERS
Form taped reinforced square stopped ceiling-to-wall angles to **BPB Plasterboard** requirements.

3.21 INSTALL TAPE-ON TRIMS
Install in accordance with the trim manufacturer's requirements.

3.22 INSTALL SPECIAL EDGES AND BANDS
Install in accordance with the edging manufacturer's requirements.

Finishing - stopping

3.23 FORM JOINTS
Fill recess with bedding compound, centre the reinforcing tape, apply a second coat of bedding compound followed by a coat of finishing compound. Allow to dry and lightly sand off, to **BPB Plasterboard** details and requirements.

3.24 STOPPING NAILS AND SCREWS
Apply two successive coats of bedding compound and a coat of finishing compound to **BPB Plasterboard** requirements.

3.25 SQUARE STOPPED CORNERS
Fill with bedding compound, centre reinforcing tape into internal angle and apply a coat of finishing compound and complete to **BPB Plasterboard** details and requirements.

3.26 EXTERNAL ANGLES
Apply two coats of bedding compound followed by a coat of finishing compound to **BPB Plasterboard** requirements.

3.27 END BUTT JOINTS
Fill, tape and coat as for tapered edge joints except that each stage is doubled in width.

3.28 APPLYING SKIMCOAT PLASTER
Apply spray-on or skim coat surface finish in accordance with **BPB Plasterboard** requirements.

Completion

3.29 REPLACE
Replace damaged sheets or elements.

3.30 CLEAN DOWN
Clean down completed surfaces to remove irregularities and finally sand down with fine paper to **BPB Plasterboard** requirements, to leave completely smooth and clean to the standard required for following trades.

3.31 REMOVE
Remove debris, unused materials and elements from the site.

4. SELECTIONS
Substitutions are not permitted to the following, unless stated otherwise.

Performance

4.1 FIXING
Horizontally fix and finish in the following locations:
Location: ~
Finish: Level 5

Plasterboard - performance systems

4.2 PLASTERBOARD IMPACT RESISTANCE SYSTEM
Location: ~
Brand: **BPB Plasterboard**
Type: **BPB Duraline**
Finish: Level 4

4.3 PLASTERBOARD FIRE AND SOUND RATINGS
Location: ~
Brand: **BPB Plasterboard**
Type: **BPB Duraline**
BPB system: single layer 13mm both sides
Cavity width: ~
System FRR: ~
System STC: ~
Insulation: ~mm thick
Finish: Level 4

Accessories

4.4 CEILING BATTENS
Brand/type: ~

4.5 CORNICE
Brand: **BGC**
Type/size: 55mm