1. GENERAL

This section relates to the supply, fixing and jointing of GIB® plasterboard linings and accessories to timber and steel framed walls and ceilings to form X-Ray shielding systems.

1.1 RELATED WORK

Refer to 5113G GIB® PLASTERBOARD LININGS for standard wall linings
Refer to 5171G GIB® PLASTERBOARD FIRE & SOUND LININGS for performance wall linings
Refer to 5311G GIB® PLASTERBOARD TILE SUSPENDED CEILINGS for suspended ceilings
Refer to 5174G GIB® PLASTERBOARD IMPACT RESISTING LININGS for impact performance systems

1.2 ABBREVIATIONS AND DEFINITIONS

Refer to the general section 1232 INTERPRETATION & DEFINITIONS for abbreviations and definitions used throughout the specification.

The following abbreviations apply specifically to this section:

AWCINZ  Association of Wall and Ceiling Industries New Zealand
QHP  Qualified Health Physicist
NRL  National Radiation Laboratory

1.3 DOCUMENTS

Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

NZBC C/AS2-AS6 Protection from fire
NZBC E2/AS1 External moisture
AS 1397 Continuous hot-dip metallic coated steel sheet and strip - Coatings of zinc and zinc alloyed with aluminium and magnesium
AS/NZS 2588 Gypsum plasterboard
AS/NZS 2589 Gypsum linings - Application and finishing
AS 4600 Cold-formed steel structures
ISO 5660.1 Reaction-to-fire tests - Heat release, smoke production and mass loss rate - Part 1: Heat release rate (cone calorimeter method)
ISO 5660.2 Reaction-to-fire tests - Heat release, smoke production and mass loss rate - Part 2: Smoke production rate (dynamic measurement)
NRL C5 Code of safe practice for the use of X-rays in medical diagnosis
NRL IS25 General guidance on shielding requirements for medical X-ray diagnostic rooms

1.4 MANUFACTURER/SUPPLIER DOCUMENTS

Manufacturer’s and supplier’s documents relating to this part of the work:
- GIB® Site Guide (Dec 2014)
- GIB X-Block® Radiation Shielding Systems (April 2009)
- GIB® Rondo® Metal Ceiling Batten Systems
- GIB-Cove™
- GIB® Goldline® Platinum Tape-on Trims
- GIB® UltraFlex® high impact corner mould

GreenTag Certification WWLCG001-001-A-2015 - GreenTag™ GreenRate/Level B for GIB® Standard Plasterboard
GreenTag Certification WWLCG001-002-A-2015 - GreenTag™ GreenRate/Level C for GIB X-Block® Plasterboard

Copies of the above literature are available at
Company: Winstone Wallboards
Requirements

1.5 NO SUBSTITUTIONS
Substitutions are not permitted to any specified GIB® systems, GIB® system components, GIB® plasterboard, associated GIB® products or GIB® accessories.

1.6 INSTALLER WORK SKILLS AND QUALIFICATIONS
GIB® plasterboard fixers and plasterers to be experienced competent workers, familiar with GIB® plasterboard lining systems installation and finishing techniques. Submit evidence of experience on request. For example:
- National Certificate of Interior Systems; or
- Certified Business members of AWCINZ.

Performance

1.7 INSPECTIONS AND ACCEPTANCE
Allow for inspection of the finished plasterboard surface:
- before applying sealer and
- before applying finish coatings or decorative papers,
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 TESTING AND ACCEPTANCE
Allow for testing of the finished installation by the QHP to NRL C5.

1.9 X-RAY RADIATION PROTECTION REQUIREMENTS
Provide X-Ray radiation protection rated wall and floor or ceiling systems. Refer to SELECTIONS for type. Form and treat perimeters of openings and penetrations in the elements to ensure the specified performance. Refer to: GIB X-Block® Radiation Shielding Systems and NRL IS25.

1.10 SURFACE FIRE PROPERTIES - UNFINISHED BOARD
All GIB® unfinished plasterboard sheet materials achieve a Group Classification of, Group 1-S to NZBC C/AS2-AS6, Table 4.1, following testing in accordance with ISO 5660.1 and ISO 5660.2.

2. PRODUCTS

Materials

2.1 GIB® PLASTERBOARD
Gypsum plaster core encased in a face and backing paper formed for standard and water resistance use to AS/NZS 2588. Refer to SELECTIONS for location, type, thickness and finish.
GIB® Standard plasterboard
GIB X-Block® X-Ray radiation protective plasterboard

2.2 CORNICE
GIB-Cove® plasterboard cornice. Refer to SELECTIONS for profile and size.

Components

2.3 CEILING BATTENS
GIB® Rondo® metal ceiling battens, batten joiners and perimeter channel.

2.4 SCREWS
GIB® Grabber® drywall screws.

2.5 NAILS
GIB® Nails (gold passivated).
2.6 METAL ANGLE TRIMS
GIB® galvanized steel slim angle trims.

2.7 CONTROL JOINTS
GIB® Rondo® P35 control joints.
GIB® Goldline® tape-on trims
GIB® Levelline® Tape on Trim

2.8 TAPE ON TRIMS AND EDGES
GIB® Goldline® tape-on paper trims
GIB® UltraFlex high impact corner mould.

**Accessories**

2.9 ADHESIVE
Timber frame and/or steel frame:
GIBFix® One ultra low VOC water based wallboard adhesive.
GIBFix® All-Bond solvent wallboard adhesive.

2.10 JOINTING COMPOUND

<table>
<thead>
<tr>
<th>Bedding compound:</th>
<th>GIB X-Block® jointing compound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finishing compound:</td>
<td>GIB ProMix® All Purpose, GIB ProMix® Lite, GIB Trade Finish®, GIB Trade Finish® Lite, GIB® U-Mix and GIB Plus 4®</td>
</tr>
<tr>
<td>Cove:</td>
<td>GIB-Cove® Bond</td>
</tr>
</tbody>
</table>

2.11 JOINTING TAPE
GIB® paper jointing tape.

3. EXECUTION

**Conditions**

3.1 STORAGE
Store GIB® plasterboard sheets and accessories in dry conditions stored indoors out of direct sunlight in neat flat stacks on either an impervious plastic sheet or clear of the floor with no sagging and avoiding damage to ends, edges and surfaces. Reject damaged material. Refer to GIB® Site Guide.

3.2 LEVELS OF PLASTERBOARD FINISH
Provide the selected plasterboard surfaces to the pre decorative Levels of Finish specified in AS/NZS 2589.

3.3 CONFIRM LEVELS OF PLASTERBOARD FINISH ACCEPTANCE
Before commencing work, agree in writing upon the surface finish assessment procedure towards ensuring that the quality of finish expectations are reasonable and are subsequently obtained and acceptable.

*Do not apply decorative treatment until it is agreed in writing by the contractor, subcontractors and decorator that the specified plasterboard Level of Finish has been achieved.*

“Levels of plasterboard finish” is a tool for specifying the required quality of finish when installing and flush stopping GIB® plasterboard prior to the application of a range of decorative finishes under various lighting conditions. Refer to GIB® Site Guide and AS/NZS 2589.

3.4 SUBSTRATE
Do not commence work until the substrate is plumb, level and to the standard required by the sheet manufacturer's requirements. Refer to GIB® Site Guide (Dec 2014).
3.5 TIMBER FRAME MOISTURE CONTENT
Maximum allowable moisture content to AS/NZS 2589 for timber framing at lining is 18% or less for plasterboard linings. Refer to NZBC E2/AS1 and GIB® Site Guide (Dec 2014).

3.6 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.

3.7 PROTECTION
Protect surfaces; cabinetwork, fittings, equipment and finishes already in place from the possibility of water staining and stopping damage. Refer to GIB® Site Guide (Dec 2014).

Application

3.8 INSTALL CEILING BATTENS
Install to GIB® Rondo® Ceiling Batten Systems.

3.9 LINING WALLS AND CEILINGS GENERALLY
Form to GIB® Site Guide. Ensure bulk insulation thickness shall not exceed that of the wall framing.

3.10 FORM RADIATION PROTECTION SYSTEMS
Form to GIB X-Block® Lead-free lining solution for X-Ray radiation protection in medical facilities.

3.11 INSTALL COVES
Install to GIB-Cove® literature using GIB-Cove® Bond.

3.12 INSTALL TAPE-ON TRIMS
Install to GIB® Goldline® Tape-on trims literature and/or GIB® Ultraflex high impact corner mould literature.

Finishing

3.13 FINISHING GENERALLY
To GIB® Site Guide (Dec 2014) and AS/NZS 2589.

Completion

3.14 REPLACE
Replace damaged sheets or elements.

3.15 CLEAN DOWN
Clean down completed surfaces to remove irregularities and finally sand down with fine paper to the sheet manufacturer’s requirements, to leave completely smooth and clean.

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

3.17 LEAVE
Leave work to the standard required by following procedures.

4. SELECTIONS
For further details on selections go to www.gib.co.nz. Substitutions are not permitted to the following, unless stated otherwise.

Plasterboard

4.1 GIB® X-RAY RESISTANCE
Refer to GIB X-Block® Radiation shielding systems

<table>
<thead>
<tr>
<th>Location / Type</th>
<th>Plasterboard type / Lining requirements</th>
<th>Radiation protection / System specification</th>
<th>Finish Level</th>
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</thead>
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<tbody>
<tr>
<td></td>
<td><strong>GIB® X-Block® 13mm</strong></td>
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</table>

**Accessories**

4.2 **GIB® CORNICE**  
Size/brand/type: ~mm

4.3 **GIB® RONDO® CEILING BATTENS**  
Brand/type: GIB® Rondo® Ceiling battens

4.4 **GIB® TAPE ON EDGE OR CORNER TRIMS**  
Brand/type: ~

4.5 **GIB® EDGE PROFILES**  
Brand/type: ~