Introduction

The CSR Gyprock Party Wall System is designed to provide a separating wall between dwellings that are side-by-side such as town houses.

CSR Gyprock Party Wall comprises a double frame wall with a fire barrier between the frames.

The basis of the fire performance is a central 25mm fire barrier which provides the primary fire resistance. This allows the wall linings to be installed as per normal decorative linings and to incorporate penetrations.

The basis of the acoustic performance is the double wall framing. This provides impact isolation, and cavity insulation on both sides compensates for any penetrations and services that may occur.

Applications

CSR Gyprock Party Wall intertenancy systems are designed as separating walls for Class 1 buildings. Systems are available for steel and timber framed buildings with FRL 60/60/60 and sound ratings to meet BCA requirements.

Systems with FRL 90/90/90 are also available for other classes of buildings. Contact CSR Gyprock for further information on construction for these applications.

Components

Linnings

- 25mm Gyprock® Shaft Liner Panel.
  Gyprock® Shaft Liner Panel is a 25mm thick machine made sheet composed of a specially processed glass fibre reinforced gypsum core encased in a heavy duty liner board. Gyprock® Shaft Liner Panel is primarily used to enclose lift shafts, stairwells and service shafts in multistorey construction, and within intertenancy wall systems. Mass is approximately 19.8kg/m².

- 16mm Gyprock Fyrchek™ plasterboard.
  Gyprock Fyrchek™ is machine made sheet composed of a specially processed glass-fibre reinforced gypsum core encased in a heavy duty liner board. Gyprock Fyrchek™ is used in these systems to increase the fire resistance in ceiling areas, at wall floor junctions, and in FRL 90/90/90 systems.

- Gyprock Flamechek MR™ plasterboard.
  Gyprock Flamechek MR™ is a fire and moisture resistant high performance 10mm thick plasterboard. It is designed for use in the lining of walls and ceilings in residential buildings. Gyprock Flamechek MR™ is designed to reduce damage to walls and ceilings in the event of fire or leaking water pipes around dishwashers, taps, sinks and other water sources and can be used in wet areas in place of Gyprock Aquachek™. Gyprock Flamechek MR™ is a machine made gypsum plasterboard with core, face and back linerboards treated to make it resistant to moisture, humidity and fire. It is manufactured to satisfy the requirements of AS2588 –‘Gypsum Plasterboard’, and the water resistant requirements of ASTM C630. It is encased with blue linerboard and the long edges are recessed.

- Gyprock Soundchek™ plasterboard (10mm and 13mm).
  Gyprock Soundchek™ has been designed to provide increased acoustic resistance in wall and ceiling systems. Gyprock Soundchek™ is machine made sheet composed of a high density gypsum core encased in a heavy duty linerboard. Long edges are recessed to assist in producing a smooth, even and continuous surface once jointed. Gyprock Soundchek™ is manufactured to AS2588 –‘Gypsum Plasterboard’, and is suitable for internal walls and ceilings.

- Cemintel™ Wallboard (6mm and 9mm).
  Cemintel™ Wallboard is an autoclaved, cellulose fibre reinforced cement sheet which is immune to permanent water damage and will not rot. It is specifically designed for use in the lining of walls in kitchens, bathrooms, laundries, toilets and other areas commonly known as ‘wet areas’ in domestic buildings. Cemintel™ Wallboard has a recess on both long edges so that sheets may be taped and set with CSR Gyprock/Cemintel™ jointing materials. Once jointed, it may be tiled, painted or wallpapered as desired.
Fasteners

- Gyprock® Plasterboard Laminating Screw - 40mm x Nº10. for fixing 16mm Gyprock FYRCHEK plasterboard to Shaft Liner Panels.
  Order Nº: 12215 Pack Qty: 1000

- Drill-point wafer-head screw - 10g x 16mm, for joining steel track back-to-back, for fixing Wall Clip to H-Stud, and for fixing wall clip to steel frame.
  Order Nº: 39367 Pack Qty: 1000
  Order Nº: 40914 Pack Qty: 100

- Drill-point wafer-head screw - 10g x 30mm for fixing Wall Clip to H-Stud through FYRCHEK plasterboard.
  Order Nº: 39368 Pack Qty: 1000
  Order Nº: 40915 Pack Qty: 100

- Needle-point screw - 6g x 25mm for fixing Wall Clip to timber plate.
  Order Nº: 12234 Pack Qty: 1000

- Nails – 2mm x 25mm hot-dip galvanised for fixing Wall Clip to timber plate.
  Order Nº: 11332 Pack Qty: 2.5kg
  Order Nº: 12786 Pack Qty: 0.5kg

- Track fasteners - must be steel e.g. Power actuated concrete nails, flat or round head expansion anchors.

Sealants

- Gyprock® Wet Area Acrylic Sealant.

Insulation

- Bradford Comfortseal™ R1.5 batts (75mm).
- Bradford Comfortseal™ R2.0 batts (95mm).
- Bradford Fibertex 350 Rockwool. (60kg/m³) 50mm thickness.
- Tontine TSB3 (65mm) or Autex ASB3 (60mm) Polyester Insulation.
- Tontine TSB5 (85mm) or Autex ASB5 (80mm) Polyester Insulation.
- Bradford Glasswool Partition batts 50mm & 75mm.
- Cavity Seal. Bradford rockwool batts with width to match the cavity being sealed.

Steel H-Stud

The Gyprock Party Wall System incorporates 25mm H-Studs to support the SHAFT LINER PANELS at all vertical joints. It is made from 0.55mm BMT G275 galvanised steel.

Order Nº: 39156 Length: 3000mm

Steel Track

Steel track (Rondo NºP140) is used in the following applications:

- Support of SHAFT LINER PANELS at the top and the bottom of the wall.
- Support of SHAFT LINER PANELS at the ends of the wall.
- Used back to back at all horizontal joints in SHAFT LINER PANELS.

Order Nº: 10465 Length: 3000mm
Wall Clip

Wall clips are used to support the 25mm H-Stud, and are critical in the fire performance of this system. They are manufactured from 1.6mm aluminium.

Order Nº: 30447  Pack Qty: 1

Design Considerations

Structural Design

All walls must be designed for the applied loads. Timber framing shall be in accordance with AS1684 or AS1720.1 and steel framing shall be designed to AS4600 or AS3740.

The maximum height for the Shaft Liner Panel fire barrier is 12m. H-Studs must be restrained to frames on each side of the barrier with wall clips spaced at 3m maximum centres. Wall clips must be placed a maximum 600mm below the top of a H-Stud.

The building designer must ensure load-bearing walls have been designed assuming no contribution to axial strength from the wall linings. For bracing capacities of timber framed walls, refer to brochure NºGYP545.

Gyprock® Party Wall Systems may be exposed to wind during construction for up to three months during construction, for wind zones N1 and N2. For higher wind loads or longer exposure, the H-Studs must be adequately propped until the building is enclosed.

Fire Resistance

The Gyprock® Party Wall systems in this manual have been assessed by Warrington Fire Research in accordance with the general principles of AS1530.4. They are suitable for the stated FRL when designed in accordance with the structural considerations above.

For all systems, penetrations may be made in Shaft Liner Panels in the roof space only, and must be fire sealed to suit the system fire rating.

Systems lined with Cemintel™ Wallboard must include Bradford Comfortseal insulation to each frame to achieve the stated fire resistance.

Acoustic Performance

The acoustic performance of wall systems is expressed in terms of $R_W$ and $R_{W+C_{tr}}$. They have been assessed by PKA Acoustic Consulting, and the ratings refer to expected laboratory performance. The site performance of the systems may be affected by sound flanking, the effectiveness of workmanship, and the inclusion of structural elements and bridging items. The building designer must pay special attention to airborne and structural flanking paths to minimise the difference between laboratory and field performance.

Wall clips are only to be installed at floor and ceiling zones as shown in the details. Using additional clips within the storey height will reduce the acoustic performance of the wall.

Substitution

Plasterboard linings and barriers, and fibre cement linings, must be as specified in the system and be supplied by CSR Gyprock and Fibre Cement. No statement of performance will be provided by CSR when other product brands are used.

Stud linings on one side of a system may be substituted with the lining from another system to create an asymmetric system. This might occur, for example, where a wet area in one unit is adjacent to a habitable area of an adjoining unit. The fire and acoustic performance of the asymmetric system shall be taken as the lower of the values of the two systems that were combined.

Wallboard & Plasterboard Fixing

Once erected, Gyprock® Shaft Liner Panels may be left exposed to weather for up to one month. Protect the panels with suitable sheeting if building enclosure is not provided within this period.
Walls may be built to achieve a particular ‘Level of Finish’ as defined in AS/NZS2589.1. The Level of Finish specified can have requirements for frame alignment, jointing and back blocking methods, and sheet orientation.

Cemintel™ Wallboard and Gyprock® plasterboard may be installed vertically or horizontally, although for some Levels of Finish horizontal sheeting must be used.

Walls lined with Gyprock® plasterboard or Cemintel™ Wallboard may be finished with tiles. For tiles greater than 32kg/m² or over 6.5mm thickness, specific installation details apply. Refer to the appropriate installation manual.

## Regulatory Issues

### Dwellings Constructed Side-By-Side on a Single Allotment

Where it is proposed to construct single dwellings side-by-side on a single allotment the internal wall between dwellings is a fire separating wall as defined in the BCA. The fire separating wall must start from the ground level (top of concrete footings or top of floor slab) and achieve a 60/60/60 FRL if load bearing, or ~60/60 FRL if non-load bearing. The wall must go to the underside of a non-combustible roof covering and any gaps be filled with fire-resisting material as described in Figure 3.7.1.11 of Volume Two of the BCA.

### Dwellings Constructed Side-By-Side on Separate Allotments

Where it is proposed to construct single dwellings side-by-side on separate allotments, or if subsequent subdivision is proposed, the wall might also be considered an external wall and each dwelling may be required to have its own wall starting from the ground level (top of concrete footings or top of floor slab) and each achieving a 60/60/60 FRL if load bearing, or ~60/60 FRL if non-load bearing. Contact your local authorities, as there may also be applicable legislation or discretionary powers available to vary these provisions.

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**FIG 1. TYPICAL APPLICATIONS**

[Diagram showing typical applications of wall systems]
System Features

For systems with FRL 60/60/60, penetrations such as plumbing and electrical services can be installed without the need for acoustic caulking, baffles or complex details. The penetrations may be made in the stud wall linings and back-to-back services are permitted. No penetrations are permitted through the central fire barrier outside the roof space.

Systems have been fire tested with services including PVC (65mm max. diameter), copper plumbing, and electrical services installed in both wall leaves with acceptable performance. No fire caulking is required in the outer linings. Simply prepare neat cut holes with a 6mm clearance.

No fire or acoustic sealant is required at junction of shaft liner panel with H-Studs or between the track and an even floor slab.

For all systems, penetrations may be made in Shaft Liner Panels in the roof space, and must be fire sealed to suit the system fire rating.

FIG 2. TYPICAL PENETRATION FEATURES FOR FRL 60/60/60

- GYPROCK SHAFT LINER PANEL (no penetration permitted through this lining except in roof space)
- Cemintel™ Wallboard or GYPROCK FLAMECHEK MR to wet areas
- Services must run through wall framing and must not be fixed to shaft liner fire barrier
- Services may penetrate stud wall lining without fire caulking. Use flexible sealant to suit waterproofing requirements
Typical Installation Sequence

**FIG 3. GROUND FLOOR FIRE BARRIER INSTALLED**

Steel track fastened back-to-back to support shaft liner panel at all horizontal joints.

- GYPROC FYRCHECK at floor level fixed with laminating screws at 400mm max. centres.
- H-studs
- Timber or steel party wall frame
- Steel track at base and ends of wall

**FIG 4. UNIT 2 FRAME AND FLOOR INSTALLED**

- GYPROC SHAFT LINER PANEL
- H-studs

**FIG 5. FIRST FLOOR FIRE BARRIER INSTALLED**

Optional steel track at top of wall.

- GYPROC FYRCHECK in roof space fixed with laminating screws at 400mm max. centres.
- GYPROC SHAFT LINER PANEL
- H-studs

**FIG 6. UNIT 2 FIRST FLOOR FRAMING INSTALLED**

- Timber or steel party wall frame
# Timber Stud Systems

## System Specification

- Lining material as per system table.
- Timber Framing in accordance with AS1684 or AS1720.1.
- Cavity insulation as per system table.
- 20-40mm separation between frame and GYPROCK SHAFT LINER PANEL.
- 25mm GYPROCK SHAFT LINER PANEL between steel H-Studs at 600mm maximum centres.
- 20-40mm separation between frame and GYPROCK SHAFT LINER PANEL.
- Cavity insulation as per system table.
- Timber Framing in accordance with AS1684 or AS1720.1.
- Lining material as per system table.

## Typical Layout

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<tr>
<th>FRL Report/Oppinion</th>
<th>System No.</th>
<th>Wall Linings</th>
<th>Cavity Infill</th>
<th>Rw / R_{w+CTR}</th>
<th>Stud Depth</th>
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**ACOUSTIC OPINION**

PKA 018
Deemed Discontinuous Construction by BCA Vol 2 Clause 3.8.6.2.
### Timber Stud Systems

#### System Specification

- Lining material as per system table.
- Timber Framing in accordance with AS1684 or AS1720.1.
- Cavity insulation as per system table.
- 20-40mm separation between frame and GYPROCK SHAFT LINER PANEL.
- 25mm GYPROCK SHAFT LINER PANEL between steel H-studs at 600mm maximum centres.
- 16mm GYPROCK FYRCHEN screw laminated to SHAFT LINER.
- Cavity insulation as per system table.
- Timber Framing in accordance with AS1684 or AS1720.1.
- Lining material as per system table.

#### Typical Layout

![Diagram of a typical layout](image)

#### Acoustic Opinion

PKA 018
Deemed Discontinuous Construction by BCA Vol 2 Clause 3.8.6.2.

### FRL Report/Opinion

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### Steel Stud Systems

#### SYSTEM SPECIFICATION

- Lining material as per system table.
- Steel Framing in accordance with AS4600 or AS3740.
- Cavity insulation as per system table.
- 20-40mm separation between frame and GYPROC SH AFT LINER PANEL.
- 25mm GYPROC SHAFT LINER PANEL between steel H-Studs at 600mm maximum centres.
- 20-40mm separation between frame and GYPROC SHAFT LINER PANEL.
- Cavity insulation as per system table.
- Steel Framing in accordance with AS4600 or AS3740.
- Lining material as per system table.

#### TYPICAL LAYOUT

**ACOUSTIC OPINION**

PKA 018

Deemed Discontinuous Construction by BCA Vol 2 Clause 3.8.6.2.

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<td></td>
<td></td>
<td>(c) ASB3 Autex or TSB3 Tontine Polyester - both sides</td>
<td>58/46</td>
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<td></td>
<td></td>
<td></td>
<td>(d) ASB5 Autex or TSB5 Tontine Polyester - both sides</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>MINIMUM WALL THICKNESS mm</td>
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</tr>
<tr>
<td>60/60/60</td>
<td>CSR 513</td>
<td>BOTH SIDES</td>
<td>(a) 50mm Bradford Partition Batts - both sides</td>
<td>61/49</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(b) 75mm Bradford Partition Batts - both sides</td>
<td>63/51</td>
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<tr>
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<td></td>
<td></td>
<td>MINIMUM WALL THICKNESS mm</td>
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<tr>
<td>60/60/60</td>
<td>CSR 515</td>
<td>BOTH SIDES</td>
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<td>61/49</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(b) 75mm Bradford Partition Batts - both sides</td>
<td>63/53</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(c) ASB3 Autex or TSB3 Tontine Polyester - both sides</td>
<td>61/49</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(d) ASB5 Autex or TSB5 Tontine Polyester - both sides</td>
<td>65/56</td>
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<td></td>
<td></td>
<td></td>
<td>MINIMUM WALL THICKNESS mm</td>
<td>223</td>
</tr>
<tr>
<td>60/60/60</td>
<td>CSR 516</td>
<td>BOTH SIDES</td>
<td>(a) 50mm Bradford Partition Batts - both sides</td>
<td>61/49</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(b) 75mm Bradford Partition Batts - both sides</td>
<td>63/55</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MINIMUM WALL THICKNESS mm</td>
<td>223</td>
</tr>
</tbody>
</table>
# Steel Stud Systems

## System Specification

- Lining material as per system table.
- Steel Framing in accordance with AS4600 or AS3740.
- Cavity insulation as per system table.
- 20-40mm separation between frame and GYPROCK SHAFT LINER PANEL.
- 25mm GYPROCK SHAFT LINER PANEL between steel H-studs at 600mm maximum centres.
- 16mm GYPROCK FYRCHÉK screw laminated to SHAFT LINER.
- Cavity insulation as per system table.
- Steel Framing in accordance with AS4600 or AS3740.
- Lining material as per system table.

## Typical Layout

### ACOUSTIC OPINION

PKA 018
Deemed Discontinuous Construction by BCA Vol 2 Clause 3.8.6.2.

## System Table

<table>
<thead>
<tr>
<th>FRL Report/Opinion</th>
<th>SYSTEM Nº</th>
<th>WALL LININGS</th>
<th>CAVITY INFILL</th>
<th>Rw / Rw+Ctr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>90/90/90</strong></td>
<td><strong>CSR 520</strong></td>
<td><strong>Both Sides</strong></td>
<td>1 x 10mm GYPROCK SOUNDCHEK.</td>
<td>(a) 50mm Bradford Partition Batts - both sides</td>
</tr>
<tr>
<td>WFRA SF45743.3</td>
<td></td>
<td></td>
<td></td>
<td>(b) 75mm Bradford Partition Batts - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(c) ASB3 Autex or TSB3 Tontine Polyester - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(d) ASB5 Autex or TSB5 Tontine Polyester - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>MINIMUM WALL THICKNESS mm</strong></td>
</tr>
<tr>
<td><strong>90/90/90</strong></td>
<td><strong>CSR 521</strong></td>
<td><strong>Both Sides</strong></td>
<td>1 x 9mm Cemintell™ Wallboard.</td>
<td>(a) 50mm Bradford Partition Batts - both sides</td>
</tr>
<tr>
<td>WFRA SF45743.3</td>
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<td></td>
<td></td>
<td>(b) 75mm Bradford Partition Batts - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(c) ASB3 Autex or TSB3 Tontine Polyester - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(d) ASB5 Autex or TSB5 Tontine Polyester - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>MINIMUM WALL THICKNESS mm</strong></td>
</tr>
<tr>
<td><strong>90/90/90</strong></td>
<td><strong>CSR 522</strong></td>
<td><strong>Both Sides</strong></td>
<td>1 x 13mm GYPROCK SOUNDCHEK.</td>
<td>(a) 50mm Bradford Partition Batts - both sides</td>
</tr>
<tr>
<td>WFRA SF45743.3</td>
<td></td>
<td></td>
<td></td>
<td>(b) 75mm Bradford Partition Batts - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(c) ASB3 Autex or TSB3 Tontine Polyester - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(d) ASB5 Autex or TSB5 Tontine Polyester - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>MINIMUM WALL THICKNESS mm</strong></td>
</tr>
<tr>
<td><strong>90/90/90</strong></td>
<td><strong>CSR 523</strong></td>
<td><strong>Both Sides</strong></td>
<td>2 x 10mm GYPROCK SOUNDCHEK.</td>
<td>(a) 50mm Bradford Partition Batts - both sides</td>
</tr>
<tr>
<td>WFRA SF45743.3</td>
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<td></td>
<td></td>
<td>(b) 75mm Bradford Partition Batts - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(c) ASB3 Autex or TSB3 Tontine Polyester - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(d) ASB5 Autex or TSB5 Tontine Polyester - both sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>MINIMUM WALL THICKNESS mm</strong></td>
</tr>
</tbody>
</table>
# Installation of Linings

Internal lining systems must be installed in accordance with the following installation manuals:

## TABLE 1. DECORATIVE LINING FIXING METHODS

<table>
<thead>
<tr>
<th>Lining</th>
<th>Application</th>
<th>Fixing Manual</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10mm SOUNDCHEK</td>
<td>General areas</td>
<td>GYP547 (timber studs)</td>
<td>Adhesive/Fastener fixing.</td>
</tr>
<tr>
<td>13mm SOUNDCHEK</td>
<td></td>
<td>GYP544 (steel studs)</td>
<td>or Full fastener fixing (screws or nails).</td>
</tr>
<tr>
<td>6mm or 9mm</td>
<td>Wet areas</td>
<td>FC101</td>
<td>All fastener fixing (screws or 30mm nails).</td>
</tr>
<tr>
<td>Cemintel™ Wallboard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10mm FLAMECHEK MR</td>
<td>Wet areas</td>
<td>GYP547 (timber studs)</td>
<td>Fix as per AQUACHEK.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GYP544 (steel studs)</td>
<td>Tiled areas: All fastener fixing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-tiled areas: Adhesive/Fastener or all</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>fastener fixing.</td>
</tr>
</tbody>
</table>
Typical Construction Details

FIG 7. BASE DETAIL AT SLAB – FRL 60/60/60

- Steel or Timber studs
- 25mm GYPROC SHAFT LINER PANEL with steel H-studs at vertical panel joints
- Steel track fixed to concrete slab at 150mm max. from ends and 600mm max. centres between
- 20-40mm gap on each side
- Fire Mastic only required at gaps

FIG 8. BASE DETAIL AT SLAB – FRL 90/90/90

- Steel or Timber studs
- 25mm GYPROC SHAFT LINER PANEL with steel H-studs at vertical panel joints
- Steel track fixed to concrete slab at 150mm max. from ends and 600mm max. centres between
- 20-40mm gap on each side
- 16mm GYPROC FYRCHECK laminated to SHAFT LINER PANEL at 400 x 400mm centres

FIG 9. ALTERNATE BASE DETAIL – FRL 60/60/60

- Steel or Timber studs
- 25mm GYPROC SHAFT LINER PANEL with steel H-studs at vertical panel joints
- Wall Clips fixed at each H-Stud
- 20-40mm gap on each side
- Fire Mastic only required at gaps

FIG 10. BASE DETAIL AT FRAMED FLOOR – FRL 60/60/60 (FRL 90/90/90 SIMILAR)

- Timber or steel stud wall framing
- 25mm GYPROC SHAFT LINER PANEL between steel H-studs at 600mm centres
- Refer to System Table for wall lining and insulation
- 20-40mm gap on each side
- Timber or steel stud subfloor members
- Continuous strip of 16mm GYPROC FYRCHECK laminated to GYPROC SHAFT LINER PANEL
- Concrete or masonry wall with FRL equal to Gyprock Party Wall above. Dampcourse and termite barrier as required
16mm GYPROCK FYRCHECK screw laminated to one side (can be on either side of shaft liner panel). Butt together neatly at sheet joins.

Continuous steel track fixed back to back at 600mm max. centres

Floor joists may be perpendicular or parallel to wall

600mm max. from clip to joint in shaft liner panel

Optional insulation

Additional nogging at each clip

Refer to Party Wall System Table for insulation and wall linings

Timber or steel studs

GYPROCK SHAFT LINER PANEL with H-Studs at panel joints

Wall Clips at each H-Stud on both sides of wall

NOTE: No additional clips to be placed within storey height

Tip: For steel wall framing, clips may be fixed to a short section of inverted track.
FIG 12. TYPICAL DETAIL AT EXTERNAL TIMBER FRAME WALL – FRL 60/60/60
(FRL 90/90/90 SIMILAR)

- Insulation
- External cladding system
- Required acoustic insulation, minimum R1.5 Bradford Comfortseal batts
- Wall Clips at each H-Stud, both sides
- Rondo P140 track vertically at outer ends of wall (allow 25mm gap to cladding). Fill gap with Bradford Rockwool Cavity Seal
- Required acoustic insulation, minimum R1.5 Bradford Comfortseal batts
- Sarking as required
- Timber or steel stud wall framing
- 10mm GYPROCX Plasterboard CD
- Control joint opposite GYPROCX SHAFT LINER PANEL
- Insulation

FIG 13. TYPICAL DETAIL AT EXTERNAL STEEL FRAME WALL – FRL 60/60/60
(FRL 90/90/90 SIMILAR)

- Insulation
- External cladding system
- Required acoustic insulation, minimum R1.5 Bradford Comfortseal batts
- Wall Clips at each H-Stud, both sides
- Rondo P140 track vertically at outer ends of wall (allow 25mm gap to cladding). Fill gap with Bradford Rockwool Cavity Seal
- Required acoustic insulation, minimum R1.5 Bradford Comfortseal batts
- Sarking as required
- Steel stud wall framing
- Steel angle 35x35mm or additional stud for plasterboard fixing
- 10mm GYPROCX Plasterboard CD
- Insulation
- Refer to Party Wall System Table for wall linings and insulation
FIG 14. TYPICAL DETAIL AT EXTERNAL BRICK VENEER WALL – FRL 60/60/60
(FRL 90/90/90 SIMILAR)

- Required acoustic insulation, minimum R1.5 Bradford Comfortseal batts
- 10mm GYPROC Liner Panel
- Control joint opposite
- Wall Clips at each H-Stud, both sides
- Timber or steel stud wall framing
- Bradford Rockwool Cavity Seal
- Rondo P140 track vertically at outer ends of wall
- Sarking.
  1. For walls without sarking, protect the cavity seal with damp course against the brickwork
  2. Cavity Seal may be inside sarking

FIG 15. TYPICAL DETAIL AT RETURN IN BRICK VENEER WALL – FRL 60/60/60
(FRL 90/90/90 SIMILAR)

- Optional insulation
- 10mm GYPROC Plasterboard CD
- Wall Clips at each H-Stud, both sides
- Timber or steel stud wall framing
- Rondo P140 track vertically at outer ends of wall with wall clips both sides
- Bradford Rockwool Cavity Seal

Sarking.
1. For walls without sarking, protect the cavity seal with damp course against the brickwork
2. Cavity Seal may be inside sarking
FIG 16. TYPICAL DETAIL AT CEILING AND ROOF – FRL 90/90/90
(FRL 60/60/60 SIMILAR)

Nominal 10mm gap to top of GYPROCK SHAFT LINER PANEL (track optional)

Battens may be continuous over party wall. Refer to BCA requirements

Roof battens

Roof framing

50mm Bradford Fibertex 350 Rockwool min. 300mm wide

Wall Clips at each H-Stud both sides of wall

16mm GYPROCK FYRCHECK laminated to GYPROCK SHAFT LINER PANEL laminating screws at 400mm x 400mm max. centres

Roof sarking. For roofs without sarking, protect Rockwool with damp course under tiles

Wall Clips at each H-Stud both sides of wall

200mm min. extent of 16mm FYRCHECK FRL 60/60/60 systems

Required acoustic insulation minimum 75mm Bradford R1.5 Comfortseal batts

Refer to Party Wall System Table for wall lining and insulation

50mm Bradford Fibertex 350 Rockwool min. 300mm wide

FIG 17. INSTALLATION DETAIL FOR FYRCHECK LAMINATION – FRL 60/60/60 AND FRL 90/90/90

25mm GYPROCK SHAFT LINER PANEL

16mm GYPROCK FYRCHECK laminated to SHAFT LINER PANEL

200mm max.

400mm max.

100mm max.

20-40mm gap each side of wall

Required acoustic insulation minimum 75mm Bradford R1.5 Comfortseal batts

Wall Clips at each H-Stud both sides of wall

Gypsum Shastic LINER PANEL

200mm max.

400mm max.

100mm max.

20-40mm gap each side of wall

Non-combustible roofing

Roof battens

Roof framing

50mm Bradford Fibertex 350 Rockwool min. 300mm wide

Wall Clips at each H-Stud both sides of wall

16mm GYPROCK FYRCHECK laminated to GYPROCK SHAFT LINER PANEL laminating screws at 400mm x 400mm max. centres

Roof sarking. For roofs without sarking, protect Rockwool with damp course under tiles

Wall Clips at each H-Stud both sides of wall

200mm min. extent of 16mm FYRCHECK FRL 60/60/60 systems

Required acoustic insulation minimum 75mm Bradford R1.5 Comfortseal batts

Refer to Party Wall System Table for wall lining and insulation

50mm Bradford Fibertex 350 Rockwool min. 300mm wide

FIG 17. INSTALLATION DETAIL FOR FYRCHECK LAMINATION – FRL 60/60/60 AND FRL 90/90/90

25mm GYPROCK SHAFT LINER PANEL

16mm GYPROCK FYRCHECK laminated to SHAFT LINER PANEL

200mm max.

400mm max.

100mm max.

20-40mm gap each side of wall

Required acoustic insulation minimum 75mm Bradford R1.5 Comfortseal batts

Wall Clips at each H-Stud both sides of wall

Gypsum Shastic LINER PANEL

200mm max.

400mm max.

100mm max.

20-40mm gap each side of wall

Non-combustible roofing

Roof battens

Roof framing

50mm Bradford Fibertex 350 Rockwool min. 300mm wide

Wall Clips at each H-Stud both sides of wall

16mm GYPROCK FYRCHECK laminated to GYPROCK SHAFT LINER PANEL laminating screws at 400mm x 400mm max. centres

Roof sarking. For roofs without sarking, protect Rockwool with damp course under tiles

Wall Clips at each H-Stud both sides of wall

200mm min. extent of 16mm FYRCHECK FRL 60/60/60 systems

Required acoustic insulation minimum 75mm Bradford R1.5 Comfortseal batts

Refer to Party Wall System Table for wall lining and insulation

50mm Bradford Fibertex 350 Rockwool min. 300mm wide

FIG 16. TYPICAL DETAIL AT CEILING AND ROOF – FRL 90/90/90
(FRL 60/60/60 SIMILAR)
FIG 18. TYPICAL DETAIL AT ROOF/CEILING AND VALLEY GUTTER – FRL 60/60/60
(FRL 90/90/90 SIMILAR)

- Required acoustic insulation minimum 75mm Bradford R1.5 Comfortseal batts
- 25mm gap over GYPROC SHAFT LINER PANEL
- Optional track along top of GYPROC SHAFT LINER PANEL
- 50mm Bradford Fibertex 350 Rockwool
- Required acoustic insulation minimum 75mm Bradford R1.5 Comfortseal batts
- Timber packing to suit
- Extended bottom chord to trusses (refer to truss supplier)
- Wall Clips at each H-Stud, both sides of wall
- Refer to Party Wall System Table for wall lining and insulation

FIG 19. TYPICAL DETAIL AT STEPPED ROOF – FRL 60/60/60

16mm GYPROC FYRCHEK MR
Refer to system CSR 900 for details

- Sarking
- Bradford Rockwool cavity seal
- Roofing
- Flashing and sarking to building designer’s details
- Wall Clips at each H-Stud, both sides of wall
- Refer to Party Wall System Table for wall lining and insulation

Note: FRL of external wall has load limitations. Refer to CSR 900 for details.
FIG 20. TYPICAL DETAIL AT ROOF/CEILING AND PARAPET – FRL 60/60/60
(FRL 90/90/90 SIMILAR)

Optional track along top of GYPROCodka SHAFT LINER PANEL

Bradford Rockwool Cavity Seal

Required acoustic insulation
minimum Bradford R1.5
Comfortseal batts

Parapet capping

Wall Clips at each H-Stud, both sides of wall.

Wall Clips at all H-Studs, both sides of wall.

Loadbearing timber wall frame both sides

200mm min.

45mm min. thick ledger with joist hanger

16mm GYPROCodka FYRCHECK laminated to GYPROCodka SHAFT LINER PANEL laminating screws at 400mm x 400mm max. centres

Required acoustic insulation
minimum Bradford R1.5
Comfortseal batts

Reference to Party Wall System Table for wall lining and insulation.
FIG 21. TYPICAL EAVES DETAIL – FRL 90/90/90 (SIDE ELEVATION)

- Leave 10mm gap between top of fire barrier and underside of battens and fill all gaps with Bradford Fibertex 350 Rockwool.
- 16mm GYPROCK FYRCEH plasterboard fixed to one side of SHAFT LINER PANEL with laminating screws at 400x400mm max. centres.
- GYPROCK SHAFT LINER PANEL within framing formed with P140 steel track.
- Wall clips each side of fire barrier fixed to P140 track and ends of rafters.
- Screw fix through fascia and track.
- P140 track continuous and fixed to next H-stud.
- Bradford Rockwool Cavity Seal, full height of cladding and fill gap above cladding.
- Sarking 1200mm max.
- Non-combustible roofing material.
- Complete fill all gaps between roofing and top of fire barrier with Bradford Fibertex 350 Rockwool to 150mm min. each side.

FIG 22. TYPICAL EAVES DETAIL – FRL 90/90/90 (OUTSIDE END ELEVATION)
FIG 23. TYPICAL DETAIL FOR JUNCTION OF GYPROCK PARTY WALL WITH FRL 60/60/60 AND NON FIRE-RATED WALL

Refer to Party Wall System Table for wall lining and insulation

Wall Clips at each H-Stud, both sides of wall

Timber stud wall framing

Non fire-rated wall

FIG 24. TYPICAL DETAIL FOR JUNCTION OF GYPROCK PARTY WALL WITH FRL 90/90/90 AND NON FIRE-RATED WALL

Refer to Party Wall System Table for wall lining and insulation

Wall Clips at each H-Stud, both sides of wall

Timber stud wall framing

Non fire-rated wall

GYPROCK FYRCHÉK plasterboard

FIG 25. TYPICAL DETAIL FOUR WAY JUNCTION – FRL 60/60/60

Refer to Party Wall System Table for wall lining and insulation

Wall Clips at each H-Stud, both sides of wall

Screw tracks together at 400mm centres

25mm GYPROCK SHAFTWALL LINER

FIG 26. TYPICAL DETAIL FOUR WAY JUNCTION – FRL 90/90/90

Refer to Party Wall System Table for wall lining and insulation

Screw tracks together at 400mm centres

16mm GYPROCK FYRCHÉK

Wall Clips at each H-Stud, both sides of wall

25mm GYPROCK SHAFTWALL LINER
FIG 27. TYPICAL DETAIL AT CORNER – FRL 60/60/60
(FRL 90/90/90 SIMILAR)
Health & Safety

Information on any known health risks of our products and how to handle them safely is on their package and/or the documentation accompanying them.

Additional information is listed in the Material Safety Data sheet.

To obtain a copy, telephone 1800 807 668.

 Guarantee

CSR Building Products guarantees its Gyprock® products to be free of defects in materials and manufacture.

If a CSR product does not meet our standard, we will, at our option, replace or repair it, supply an equivalent product, or pay for doing one of these.

CSR recommends that only products, components and systems recommended by it be used. If this is not done, CSR will need to be satisfied that any defect in its product is attributable to our failure to meet our standard (and not another cause) before this guarantee applies.

This guarantee excludes all other guarantees and liability for damage or loss in connection with defects in CSR’s product, other than those imposed by legislation.