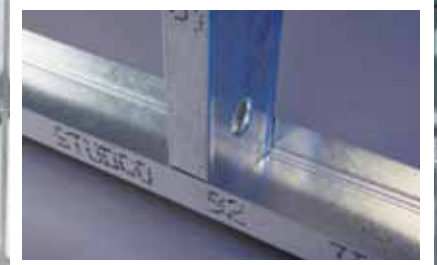


Steel Stud Systems



Studco Stud
Fits positively into track



External Infill Framing
Between concrete and steel structures



Service Holes

Bell-mouthed service holes at 500mm centres – do not require grommets for cabling. Knurled face for screw point location.



Boxed Studs

Studco .50, .55 and .75BMT steel studs can be easily boxed together providing extra strength at door openings or where greater loads are required.

Steel Stud Systems

The Studco steel stud framing system is engineered to provide designers and installers the solution to create framing systems that are not only durable and versatile but can also achieve the needs and design criteria in accordance with the BCA and appropriate Australian standards. The Studco steel stud framing system is manufactured in a range of various widths, lengths and material gauges from 0.50mmBMT to 1.5mm BMT. This range of stud and track profiles not only offer greater span and performance, but also are accompanied by a range of accessories including noggings, nogging track and bracket joining systems. The design tables in this section have been formulated to comply with the relevant Australian standards, accompanied by substantial laboratory and field testing. Construction of fire-rated or sound rated wall systems can be achieved by using the Studco steel framing system and accessories. Refer to the building board manufacturers for more detailed information.

Components

Stud and Track Sections

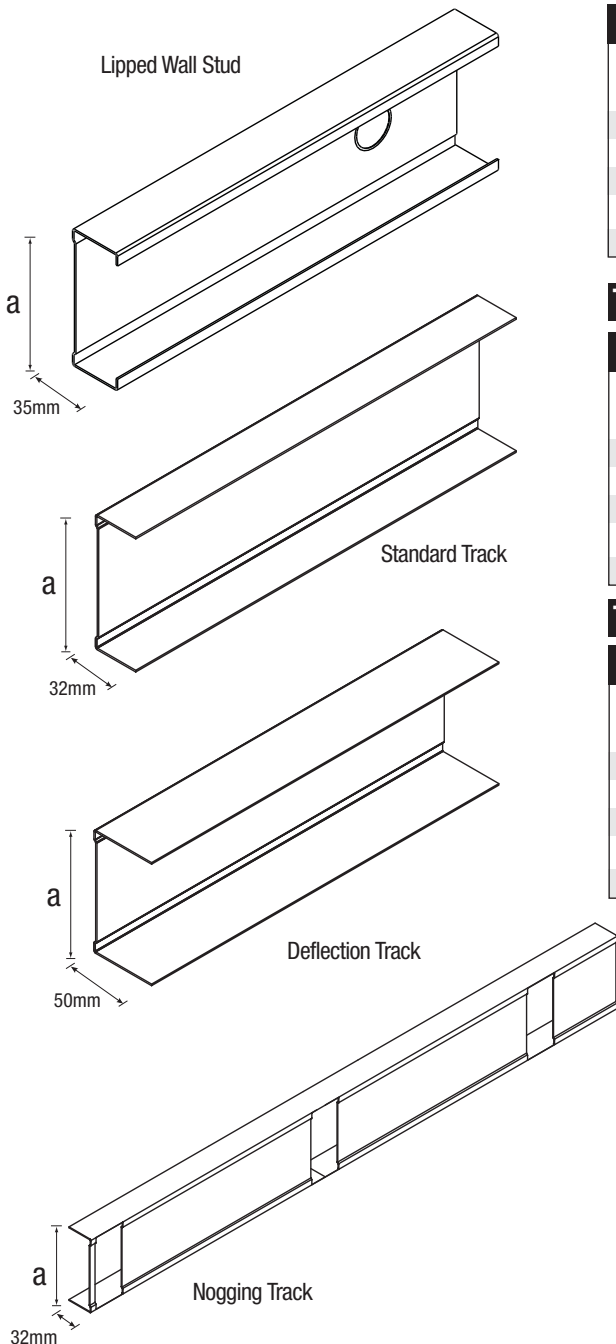


Table 44

| LIPPED WALL STUDS - PART NUMBERS | | | | |
|---|----------------------------|--------|--------|--------|
| Section Width "a" | Base Metal Thickness - BMT | | | |
| | 0.5mm | 0.55mm | 0.75mm | 1.15mm |
| 51mm | S5150 | N/A | S5175 | N/A |
| 64mm | S6450 | N/A | S6475 | S64115 |
| 76mm | N/A | S7655 | S7675 | S76115 |
| 92mm | N/A | S9255 | S9275 | S92115 |
| 150mm | N/A | N/A | S1507 | S15012 |

Table 45

| STANDARD TRACK - PART NUMBERS | | | | | | |
|--------------------------------------|----------------------------|--------------|--------|------------|--------|--------|
| Section Width "a" | Base Metal Thickness - BMT | | | | | |
| | 0.5mm | 0.5mm Hemmed | 0.55mm | 0.7 Hemmed | 0.75mm | 1.15mm |
| 51mm | T5155 | N/A | N/A | N/A | T5175 | N/A |
| 64mm | T6455 | T6455H | N/A | T6475H | T6475 | T64115 |
| 76mm | T7655 | T7655H | N/A | T7675H | T7675 | T76115 |
| 92mm | T9255 | T9255H | N/A | T9275H | T9275 | T92115 |
| 150mm | N/A | N/A | N/A | N/A | T1507 | T15012 |

Table 46

| DEFLECTION HEAD TRACK - PART NUMBERS | | | | | |
|---|----------------------------|--------|--------------|--------|---------|
| Section Width "a" | Base Metal Thickness - BMT | | | | |
| | 0.5mm | 0.55mm | 0.7mm hemmed | 0.75mm | 1.15mm |
| 51mm | N/A | N/A | N/A | DT5175 | N/A |
| 64mm | N/A | DT645 | DT6475H | DT6475 | DT64115 |
| 76mm | N/A | DT765 | DT7675H | DT7675 | DT76115 |
| 92mm | N/A | DT925 | DT9275H | DT9275 | DT92115 |
| 150mm | N/A | N/A | N/A | DT1507 | DT15012 |

Table 47

| NOGGING TRACK - PART NUMBERS | | | | | |
|-------------------------------------|--------------------------|----------------------------|--------|-----------|--------|
| Section Width "a" | Nogging Track Centres | Base Metal Thickness - BMT | | | |
| | | 0.5mm | 0.55mm | 0.75mm | 1.15mm |
| 64mm | 300mm | N/A | N/A | NT6475-30 | N/A |
| 64mm | 450mm | N/A | N/A | NT6475-45 | N/A |
| 64mm | 600mm | N/A | N/A | NT6475-60 | N/A |
| 76mm | 300mm | N/A | N/A | NT7675-30 | N/A |
| 76mm | 450mm | N/A | N/A | NT7675-45 | N/A |
| 76mm | 600mm | N/A | N/A | NT7675-60 | N/A |
| 92mm | 300mm | N/A | N/A | NT9275-30 | N/A |
| 92mm | 450mm | N/A | N/A | NT9275-45 | N/A |
| 92mm | 600mm | N/A | N/A | NT9275-60 | N/A |
| 150mm | 300mm | N/A | N/A | NT1507-30 | N/A |
| 150mm | 450mm | N/A | N/A | NT1507-45 | N/A |
| 150mm | 600mm | N/A | N/A | NT1507-60 | N/A |

Steel Stud Systems – Components

Noggings

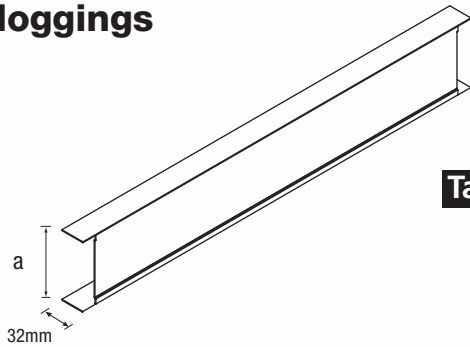


Table 48

| NOGGINGS - PART NUMBERS | | | | | |
|--------------------------------|--------------------------|----------------------------|--------|----------|--------|
| Section Width "a" | Nogging Track Centres | Base Metal Thickness - BMT | | | |
| | | 0.5mm | 0.55mm | 0.75mm | 1.15mm |
| 64mm | 450mm | N/A | N/A | N6475-45 | N/A |
| 64mm | 600mm | N/A | N/A | N6475-60 | N/A |
| 76mm | 450mm | N/A | N/A | N7675-45 | N/A |
| 76mm | 600mm | N/A | N/A | N7675-60 | N/A |
| 92mm | 450mm | N/A | N/A | N9275-45 | N/A |
| 92mm | 600mm | N/A | N/A | N9275-60 | N/A |
| 150mm | 450mm | N/A | N/A | N1507-45 | N/A |
| 150mm | 600mm | N/A | N/A | N1507-60 | N/A |

Nogging Brackets

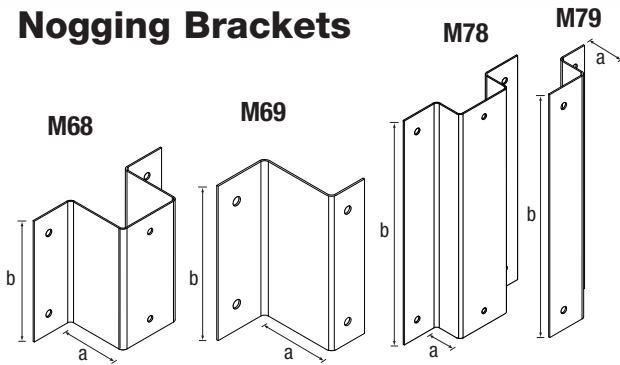


Table 49

| NOGGING BRACKETS - PART NUMBERS | | | | |
|--|-----------------------|-----------------------|------|--------------------------|
| Part No | Section Height "a" | Section length "b" | BMT | Timber Nogging Thickness |
| M68 | 36mm | 72mm | 0.75 | 35mm |
| M69 | 36mm | 72mm | 0.75 | 35mm |
| M78 | 18mm | 150mm | 0.75 | 18mm |
| M79 | 18mm | 150mm | 0.75 | 18mm |

Studco Ezy-Track

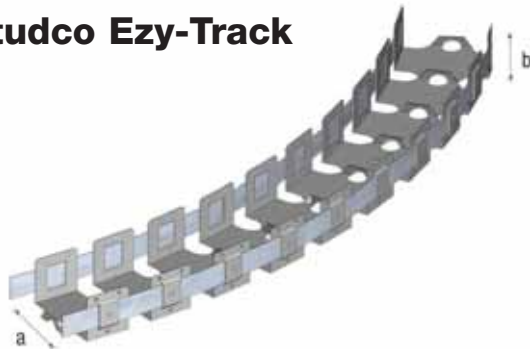
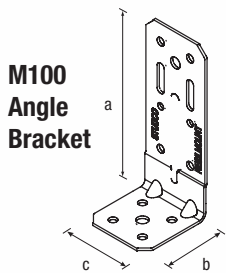


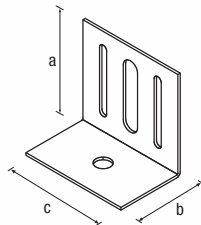
Table 50

| EZY TRACK - PART NUMBERS | | | | | |
|---------------------------------|-------------------------|----------------------------|--------|--------|--------|
| Section Width "a" | Track leg height "b" | Base Metal Thickness - BMT | | | |
| | | 0.5mm | 0.55mm | 0.75mm | 1.15mm |
| 51mm | 42mm | N/A | N/A | FX51 | N/A |
| 64mm | 45mm | N/A | N/A | FX64 | N/A |
| 76mm | 39mm | N/A | N/A | FX76 | N/A |
| 92mm | 41mm | N/A | N/A | FX92 | N/A |
| 150mm | 42mm | N/A | N/A | FX150 | N/A |

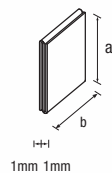
Brackets



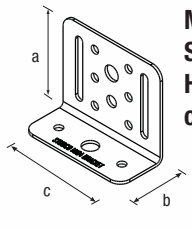
**M100
Angle
Bracket**



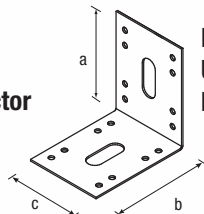
**M103
Slotted
Deflection
Cleat**



**M126
Staggered
Stud Wall
ClipTrack**



**M104
Slotted
HEDA
connector**



**M545
Universal
L Bracket**

Table 51

| BRACKETS - PART NUMBERS | | | | |
|--------------------------------|----------------------|----------------------|----------------------|-------|
| Part No. | Section Width "a" | Section Width "b" | Section Width "c" | BMT |
| M100 | 100mm | 45mm | 40mm | 1.5mm |
| M103* | 75mm | 50mm | 80mm | 3.0mm |
| M104 | 65mm | 35mm | 80mm | 2.0mm |
| M545 | 75mm | 75mm | 55mm | 1.5mm |

* To be superseded by M104

Steel Stud Systems - Wall Studs

HEDAjamb

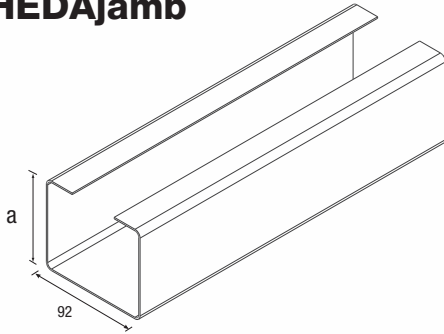


Table 52

| STUDCO HEDA JAMB - PART NUMBERS | | |
|--|----------------------------|-----------|
| Section Width "a" | Base Metal Thickness - BMT | |
| | 1.15mm | 1.55mm |
| 76mm | HJ9276115 | N/A |
| 89mm | N/A | HJ9289155 |

Rapidtrack Slotted Deflection Track

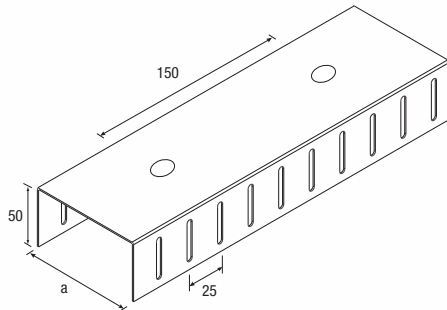


Table 53

| RAPIDTRACK | | | | |
|----------------------|----------------------------|--------|--------|----------|
| SECTION WIDTH "a" | Base Metal Thickness - BMT | | | |
| | 0.5mm | 0.55mm | 0.75mm | 1.15mm |
| 51mm | N/A | N/A | N/A | N/A |
| 64mm | N/A | N/A | N/A | N/A |
| 76mm | N/A | N/A | N/A | N/A |
| 92mm | N/A | N/A | N/A | DS92115 |
| 150mm | N/A | N/A | N/A | DS150115 |

Hole size is $\phi 14$ mm, suitable for M12 bolts or M10 masonry sleeve anchors.

Strongarm Wall Brace

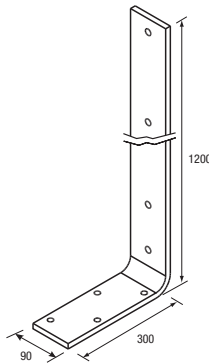


Table 54

| PART No | STRONGARM | Section A Height | Section B Length | BMT |
|----------------|-----------------------------|-------------------------|-------------------------|------------|
| M110 | StrongArm Wall Brace 1200mm | 1200 | 300 | 12.0 |

Slimwall Brackets & Channel

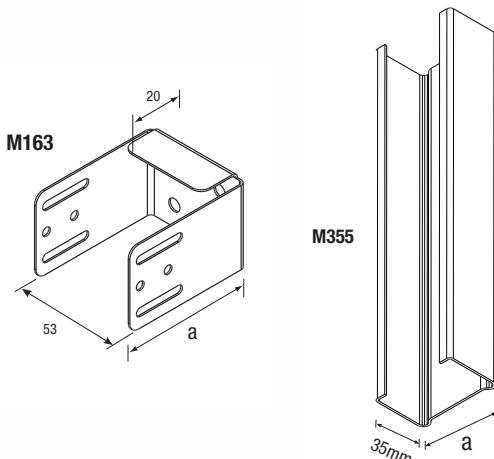


Table 55

| PART No | SLIMWALL | Section A Height |
|----------------|----------------------------------|-------------------------|
| M163-6 | Slimwall Bracket 69-92mm Cavity | 68mm |
| M163-8 | Slimwall Bracket 85-108mm Cavity | 84mm |
| M355 | M355 Ceiling Channel | 51mm |

Steel Stud Systems - Studs

Steel Stud Systems

The Studco lipped wall studs are manufactured in various widths and gauges from 0.50BMT to 1.15BMT. Bell mouth service holes are punched at 500mm centres eliminating the need for cabling grommets. The knurled face along the stud flange provides a positive screw point location. Studs can be boxed or spliced to extend the overall length or to provide strengthening if required. Refer to *Table 47* for splice fixing details.

Table 56

| SPLICE STUD FIXING DETAIL | | | |
|----------------------------------|-------------------------|--|---------|
| Wall Height | Splice Position In Wall | No. of Fasteners for both sides of studs at splice joint | |
| | | 0.50 / 0.55 / 0.75BMT | 1.15BMT |
| 0-6000mm | 0 -10% | 2 | 3 |
| | 10% - 25% | 3 | 5 |

Spliced Studs

0.75 BMT - 150mm studs
1.15 BMT - 64, 76, 92, 150mm studs

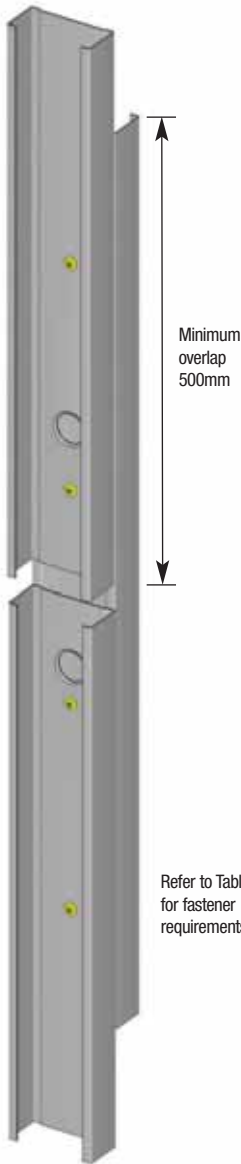


Fig. 1

Spliced Studs – Back to Back
Screw through at maximum 500mm centres.

Spliced Studs

0.50 BMT - 51, 64mm studs
0.55 BMT - 76, 92mm studs
0.75 BMT - 51, 64, 76, 92mm studs

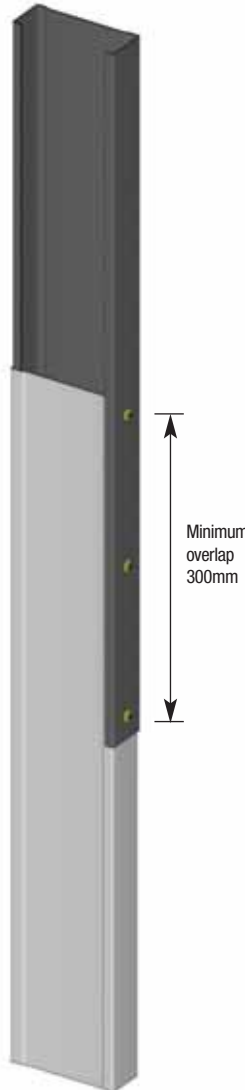


Fig. 2

Spliced Studs - Boxed
Refer to Table 47 for fixing requirements

Boxed Studs

0.50 & 0.55 BMT - all stud sizes



Fig. 3

Boxed Studs - Screw Fixing
only required if studs are unlined.

Back to Back Studs

0.75 & 1.15BMT - all stud sizes

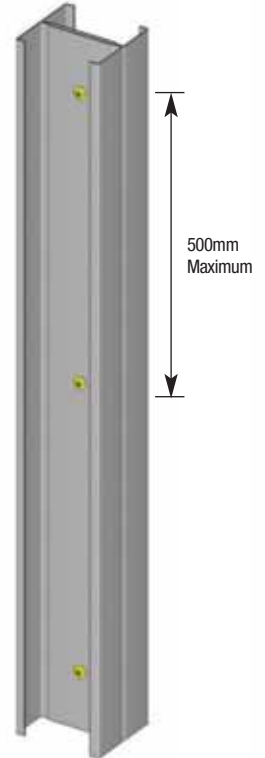


Fig. 4

Back to Back – Fixing for 1.15 stud range in lieu of Boxing stud.
Refer to Table 56 for fixing requirements

Steel Stud Systems - Tracks

The Studco Track sections provide a friction fit for the lipped wall studs. The friction fit holds the studs in position until the lining boards are fixed; this friction fit also accommodates a slip joint to allow for any movement in the primary structure. To allow for this movement to occur it is not recommended that the lining board is fixed to the track sections unless specifically stated. Studco Track Sections are manufactured in two different profiles: a standard track with a nominal leg height of 32mm and the deflection head track with a nominal leg height of 50mm. The standard track is also available with a rolled hemmed edge. This safety hem along the entire length of the track section reduces the exposure to sharp edges whilst also enhancing the rigidity of the profile.

DEFLECTION HEAD TRACK NOTES

- 1) 0.55 D/Track For use in walls using 0.50 - 0.55 Stud up to 2.7m high, with a maximum internal pressure of 0.25kPa.
- 2) 0.75 D/Track To be used in walls over 2.7m high or if the wall calls for 0.75 stud and/or the internal pressure is greater than 0.25 kPa.
- 3) 1.15 D/Track Use 1.15 D/Track for top & bottom tracks when a 1.15 stud wall exceeds 3.0m high and where the wall design calls for 1.15 stud system.
- 4) Deflection Head Tracks should be used for top & bottom tracks when wall heights exceeds 4.8m.

Fig. 1 Bottom Track Fixing

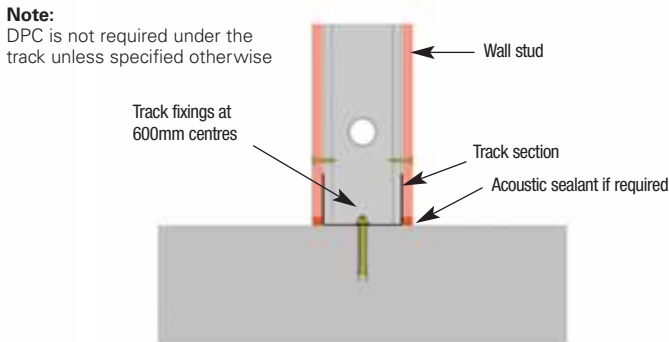
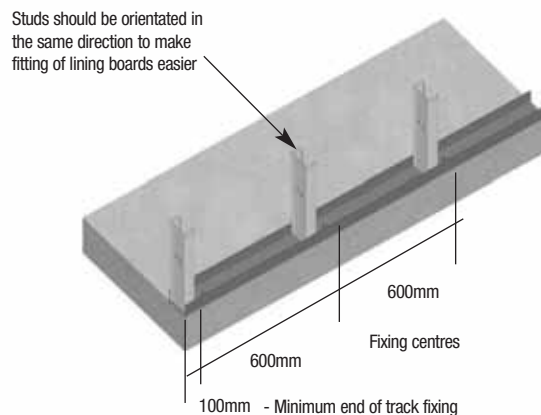


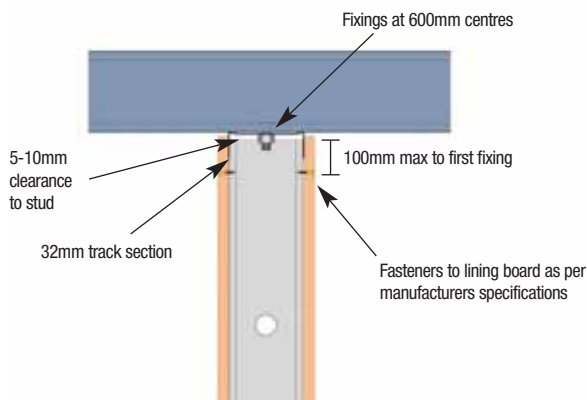
Fig. 2 Fixing Centres



Note:
Use 2 fixings at 600mm centres for the 150mm track section, approximately 20mm in from either side of the track.

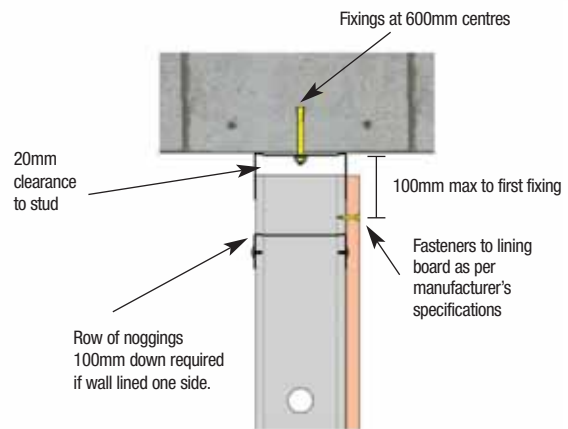
Note:
Where tracks are fastened to concrete minimum edge distances for all fixings must be maintained.

Fig. 3 Friction Fit



Note:
Do not fix cornice to walls rigidly where friction joints are installed.

Fig. 4 Deflection Head



Note:
Do not rigidly fix cornice to walls where deflection head is used.

Steel Stud Systems - Noggings

Studco noggings and nogging tracks are manufactured in a range of sizes to suit standard wall stud centres. Nogging track to suit custom centres and back to back studs is available. The use of noggings is to provide support and also to prevent twisting of the studs during the installation of the lining boards. Noggings also provide extra support to the wall construction, and in some instances a more cost effective design can be achieved by using noggings. Studco manufactures two types of noggings, individual noggings or nogging track. Noggings are supplied as pre-cut individual nogging pieces to save cutting on site and can also be installed after the studs and tracks have been fitted. Nogging track is a continuous track that can be installed in stud framing in one length and requires only two screw fixings per stud connection. Timber noggings may be used, providing they are fixed as per diagram Fig. 3. Treated timber must not be used. The minimum number of noggings for different wall configurations can be established from Table 49. This is applicable for internal walls subjected to 0.25kPa. Walls connected to the underside of a concrete slab must be installed with deflection head track and an additional row of noggings 100mm down, if lined one side only.

Fig. 1 Nogging

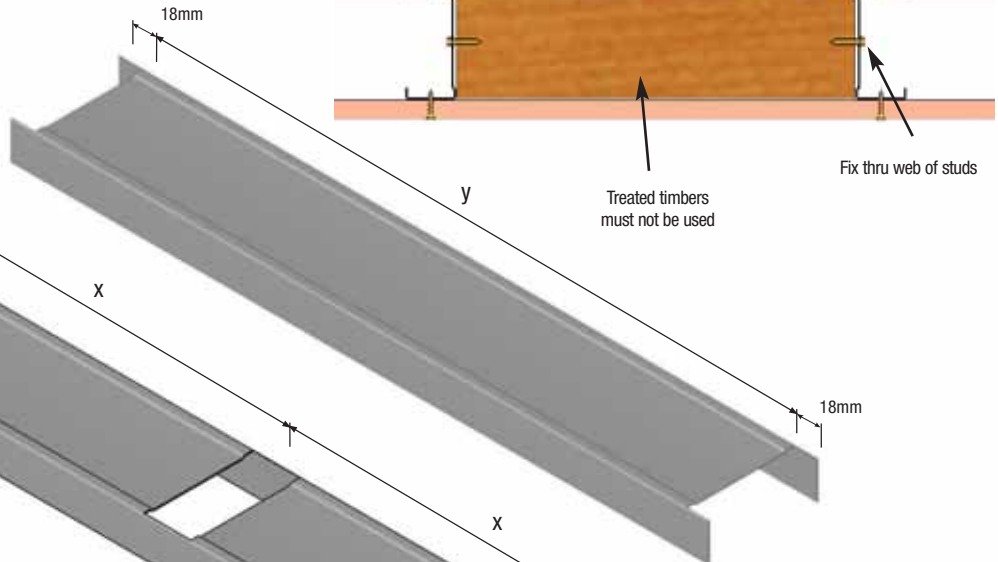


Fig. 3 Timber Nogging

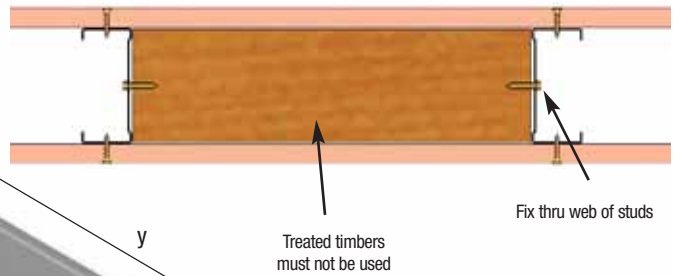


Fig. 2 Nogging Track

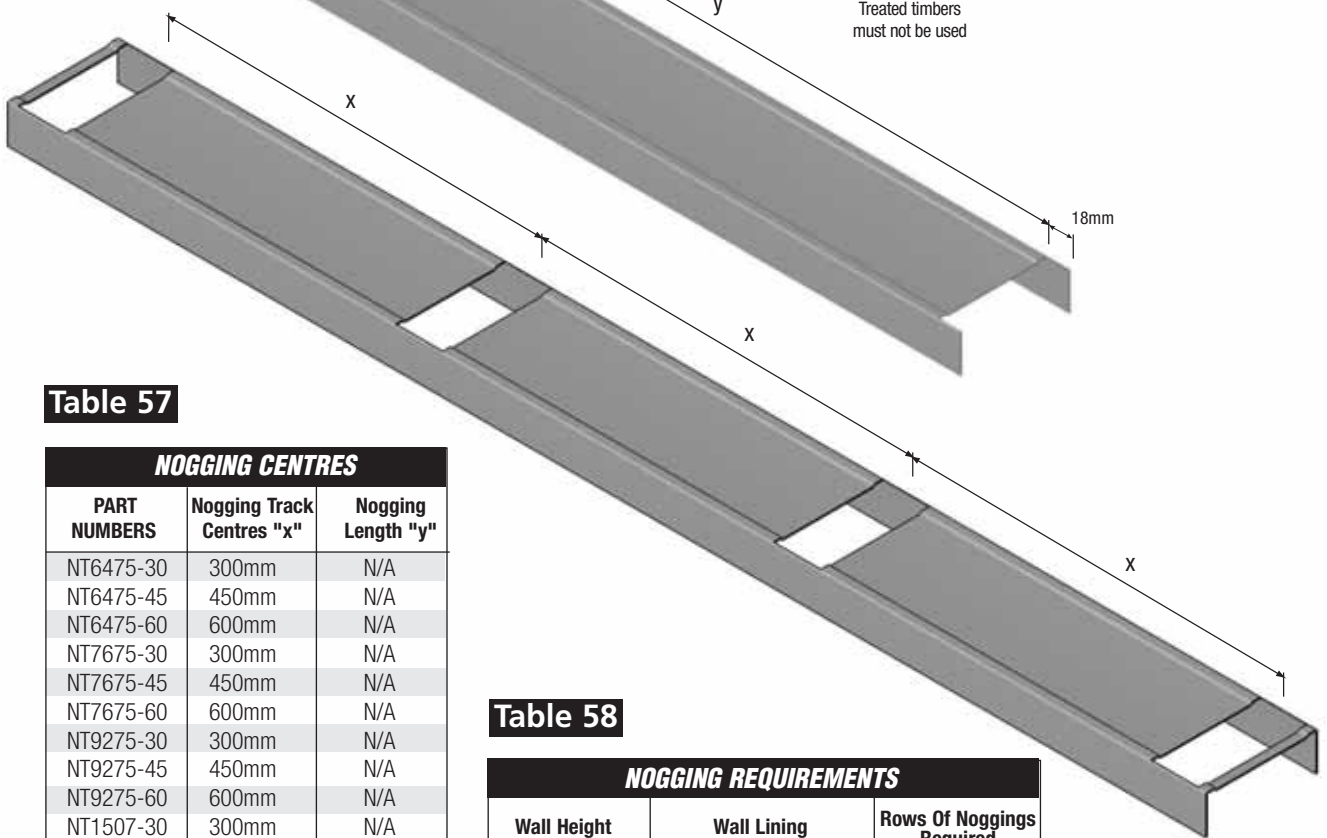


Table 57

| NOGGING CENTRES | | |
|-----------------|---------------------------|--------------------|
| PART NUMBERS | Nogging Track Centres "x" | Nogging Length "y" |
| NT6475-30 | 300mm | N/A |
| NT6475-45 | 450mm | N/A |
| NT6475-60 | 600mm | N/A |
| NT7675-30 | 300mm | N/A |
| NT7675-45 | 450mm | N/A |
| NT7675-60 | 600mm | N/A |
| NT9275-30 | 300mm | N/A |
| NT9275-45 | 450mm | N/A |
| NT9275-60 | 600mm | N/A |
| NT1507-30 | 300mm | N/A |
| NT1507-45 | 450mm | N/A |
| NT1507-60 | 600mm | N/A |
| N6475-45 | N/A | 412mm |
| N6475-60 | N/A | 562mm |
| N7675-45 | N/A | 412mm |
| N7675-60 | N/A | 562mm |
| N9275-45 | N/A | 412mm |
| N9275-60 | N/A | 562mm |
| N1507-45 | N/A | 412mm |
| N1507-60 | N/A | 562mm |

Table 58

| NOGGING REQUIREMENTS | | |
|----------------------|-----------------------|---------------------------|
| Wall Height | Wall Lining | Rows Of Noggings Required |
| 0 - 4.2m | Wall Lined Both Sides | 0 |
| 4.2m - 8.4m | | 1 |
| 0 - 3.0m | Wall Lined One Side | 1 |
| 3.0m - 6.0m | | 2 |
| 6.0m - 8.0m | | 3 |

Note: Walls connected to the underside of a concrete slab must be installed with deflection head track and additional row of noggings 100mm down if unlined or lined one side only. If slotted deflection head track is used, additional row of noggings 100mm down not required.

Installation Guide - Wall to Ceiling Intersections

Fig. 1 Top Track to Bridging Support Detail

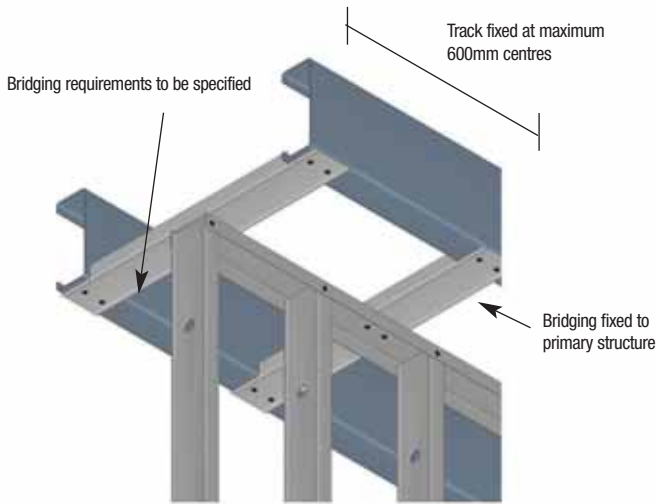


Fig. 2 Concealed Ceiling with Wall Parallel to Furring Channel Detail

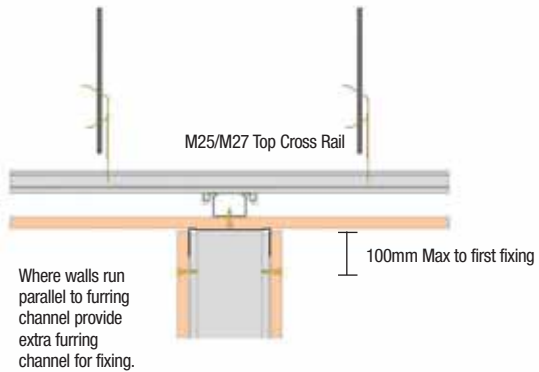


Fig. 3 Concealed Ceiling with Wall Right Angles Connection Detail

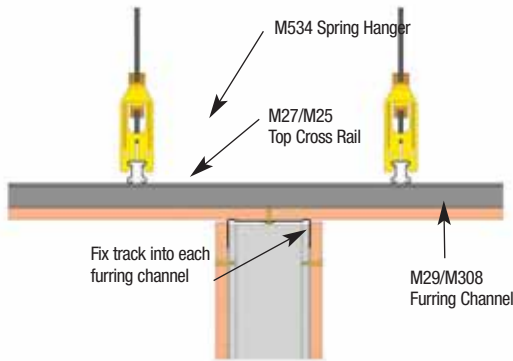


Fig. 4 Exposed T-Bar Ceiling Connection Detail

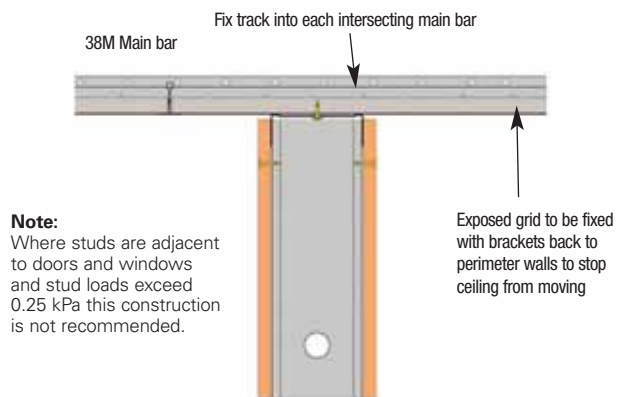


Fig. 5 Decorative Stopping Section with Wall Track Detail

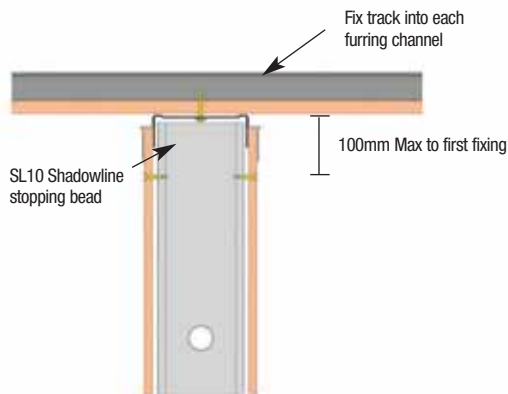
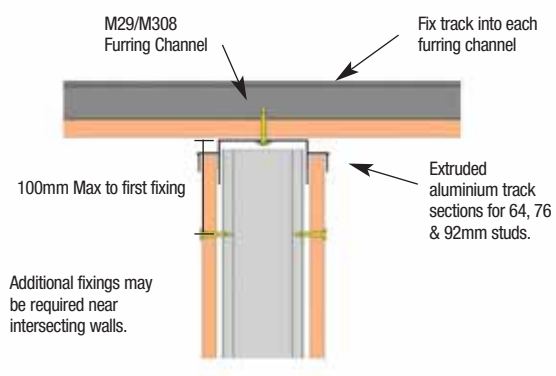


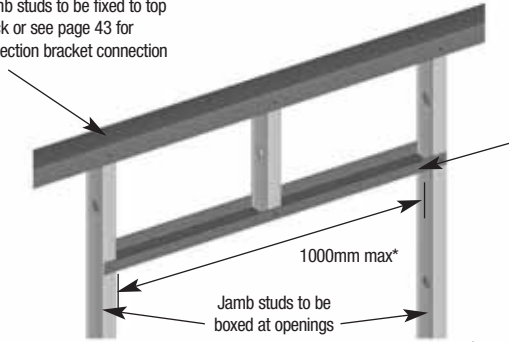
Fig. 6 Decorative Stopping Header Track Detail



Installation Guide - Internal Stud Walls

Fig. 1 Door Opening

Jamb studs to be fixed to top track or see page 43 for deflection bracket connection

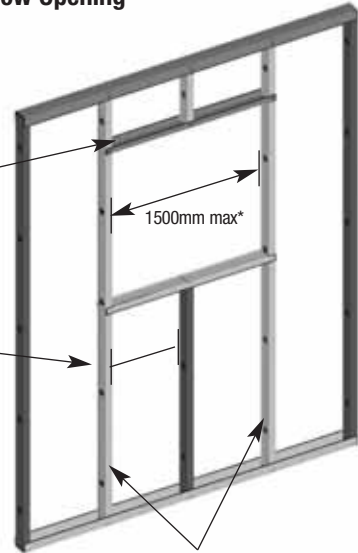


* Door openings over 1000mm and external openings must be checked prior to commencement of work.

Fig. 2 Window Opening

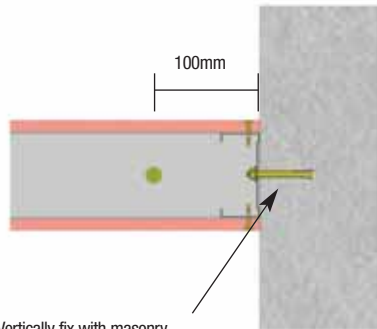
Door/Window header from track section fixed to jamb studs

Stud centres should match the standard wall stud spacing



* Jamb studs to be boxed at openings, window openings over 1500mm and external openings must be checked prior to commencement of work.

Fig. 3 Wall End Intersection to Concrete

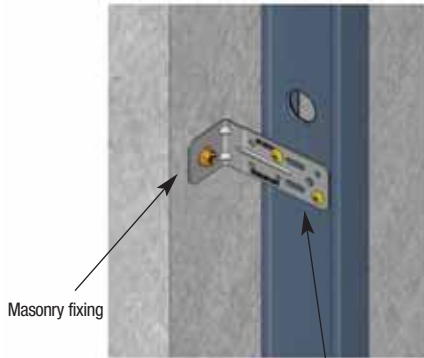


Vertically fix with masonry fixings max 500mm centres

**INTERNAL WALLS ONLY
DESIGN NOT SUITABLE
FOR EXTERIOR WALLS**

Fig. 4 Angle Bracket Connection

* Resilient mount can also be used - see page 30.



Minimum 2 tek screws per connection

* Bracket locations should be checked prior to commencement of work

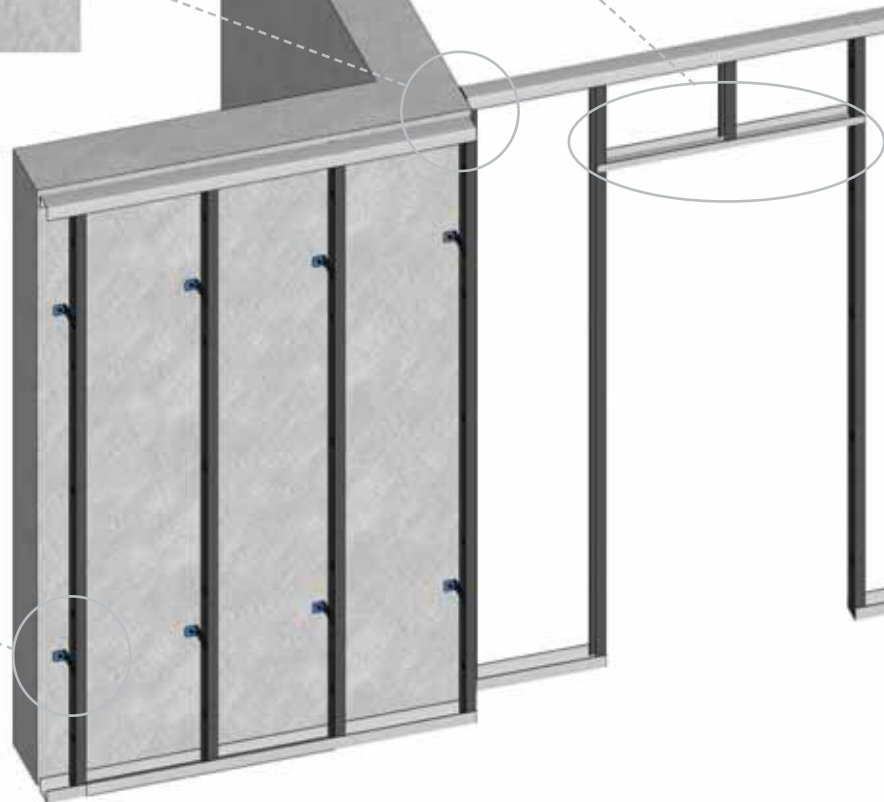


Fig. 5 Wall End

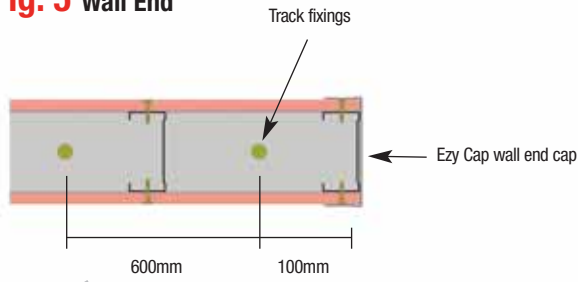


Fig. 6 Corner

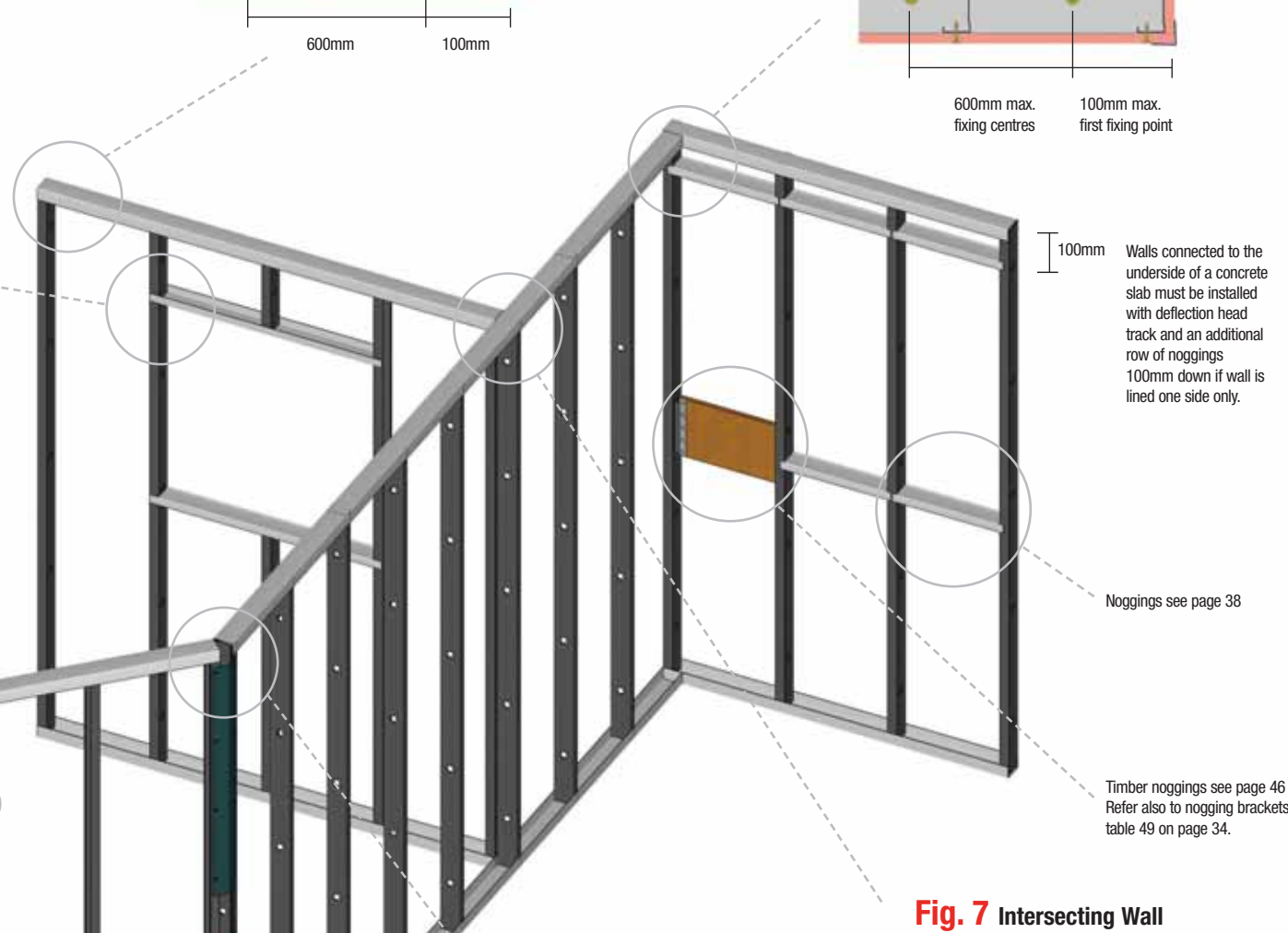
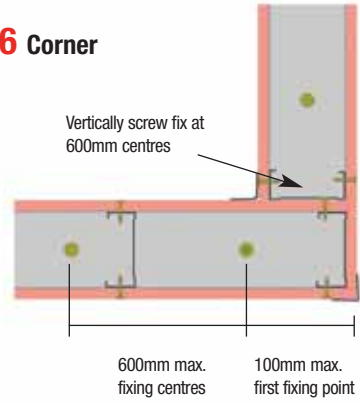


Fig. 8 Angled Wall

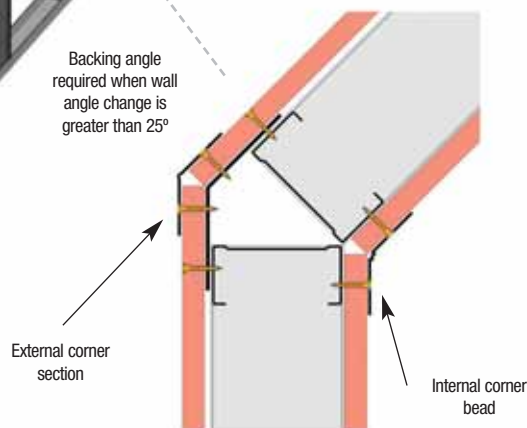
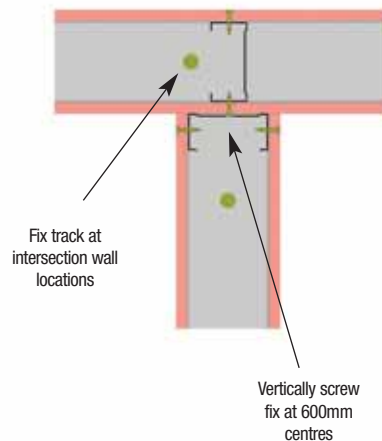


Fig. 7 Intersecting Wall



Installation Guide - Staggered Stud Walls

Staggered Stud Systems provide resistance to sound transmission and acoustic impact. Studs are held in place by using the M126 Staggered Stud Clip or M40 Wall Track as shown in Fig. 1. Refer to Table 59 for maximum wall heights.

Fig. 1 Typical Staggered Stud Wall Application

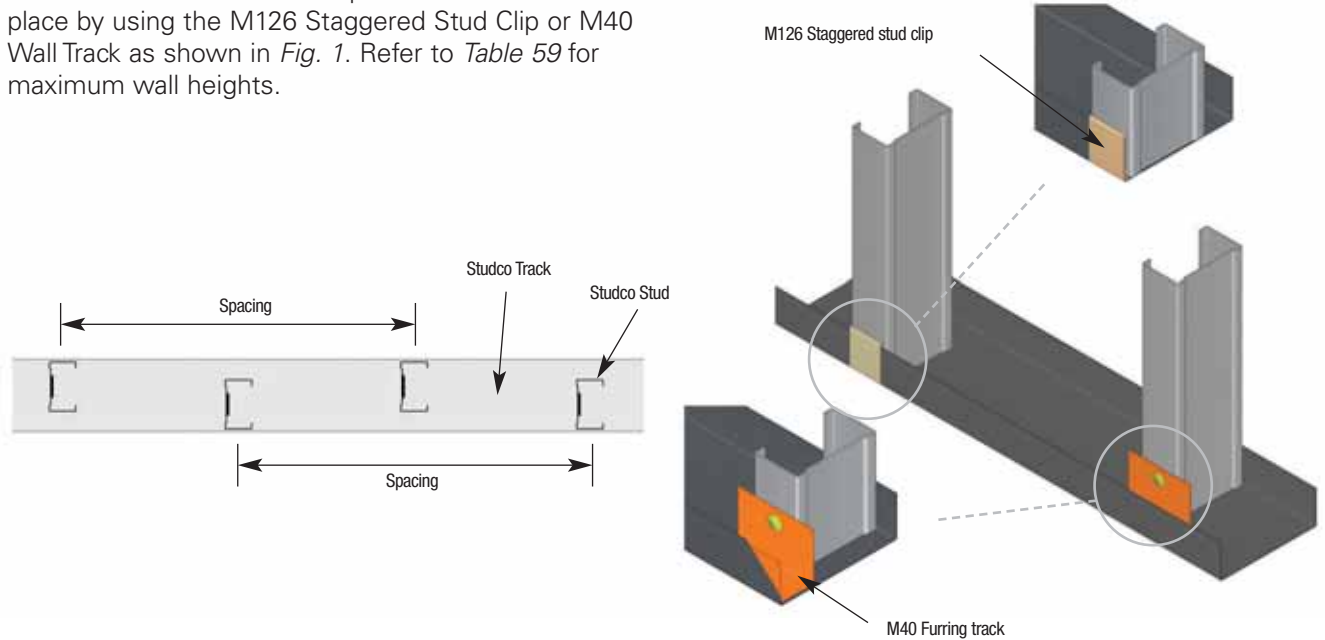


Table 59

| MAXIMUM STAGGERED STUD WALL HEIGHTS - SPAN/240 | | | | | | | | | | |
|--|-----------------|----------------------|-------|-------|-------------------|-------|-------|-------------------|-------|-------|
| PLASTER THICKNESS (mm) | | 10mm PLASTERBOARD | | | 13mm PLASTERBOARD | | | 16mm PLASTERBOARD | | |
| STUD SPACING (MM) | | 300mm | 450mm | 600mm | 300mm | 450mm | 600mm | 300mm | 450mm | 600mm |
| PART NO. | STUD SIZE | MAX WALL HEIGHT (mm) | | | | | | | | |
| S51050 | 51mm x 0.50BMT | 2880 | 2510 | 2350 | 2910 | 2540 | 2340 | 2900 | 2540 | 2340 |
| S64050 | 64mm x 0.50BMT | 2930 | 2600 | 2390 | 3000 | 2660 | 2380 | 3080 | 2710 | 2380 |
| S64075 | 64mm x 0.75BMT | 3620 | 3190 | 2850 | 3720 | 3290 | 2850 | 3800 | 3370 | 2850 |
| S64115 | 64mm x 1.15BMT | 4440 | 3880 | 3530 | 4490 | 3950 | 3520 | 4520 | 3980 | 3520 |
| S76055 | 76mm x 0.55BMT | 3170 | 2810 | 2610 | 3240 | 2850 | 2620 | 3290 | 2930 | 2610 |
| S76075 | 76mm x 0.75BMT | 3750 | 3330 | 3020 | 3830 | 3390 | 3020 | 3910 | 3470 | 3020 |
| S76115 | 76mm x 1.15BMT | 4550 | 4020 | 3620 | 4670 | 4080 | 3610 | 4770 | 4180 | 3620 |
| S92055 | 92mm x 0.55BMT | 3380 | 2980 | 2750 | 3440 | 3030 | 2740 | 3500 | 3050 | 2730 |
| S92075 | 92mm x 0.75BMT | 3920 | 3490 | 3180 | 3990 | 3540 | 3210 | 4050 | 3590 | 3200 |
| S92115 | 92mm x 1.15BMT | 4660 | 4110 | 3760 | 4780 | 4180 | 3760 | 4860 | 4250 | 3760 |
| S15007 | 150mm x 0.75BMT | 4440 | 3990 | 3690 | 4480 | 4010 | 3670 | 4520 | 4050 | 3670 |
| S15012 | 150mm x 1.15BMT | 5140 | 4560 | 4160 | 5180 | 4620 | 4160 | 5230 | 4650 | 4150 |

Notes:

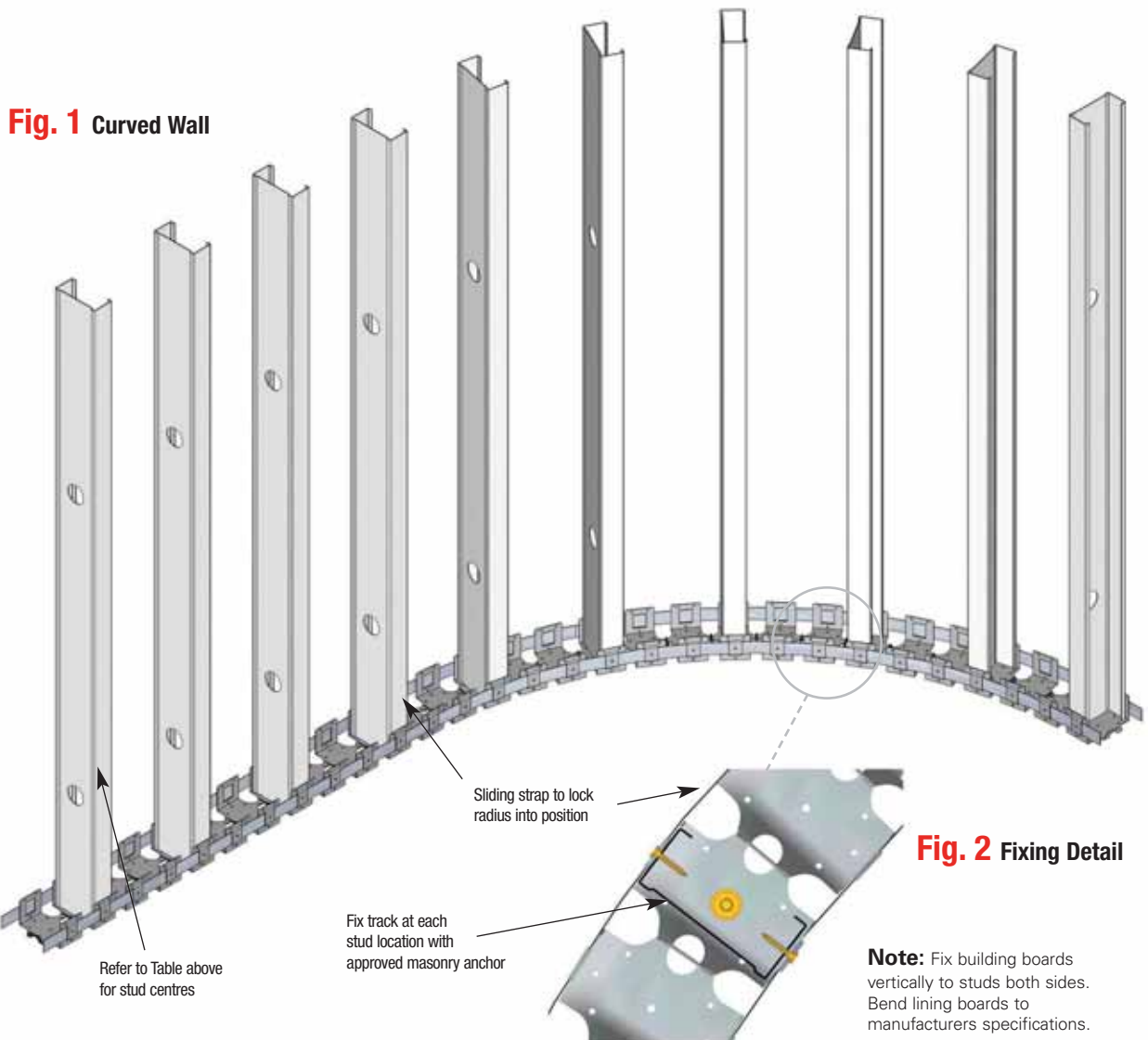
1. Tabulated heights can not be used for axial loads but include self weight and lateral pressures.
2. Shelf loadings are not included in the tabulated heights.
3. This table is for internal applications only.

Installation Guide - Curved Walls

Curved Walls can be easily constructed by using Studco Ezytrack. Ezytrack can be curved to suit the desired radius and screwed through the side strap to lock the radius into position. Studs are then placed into the Ezytrack and screwed both sides. The Ezytrack is fixed to the primary structure at each Stud location, top and bottom. The use of Ezytrack in bulkhead construction is a cost effective alternative as the Ezytrack can be preformed to your radius then screw locked and installed. For a guide on Stud centres for curved walls, refer to *Table 60* below.

Table 60

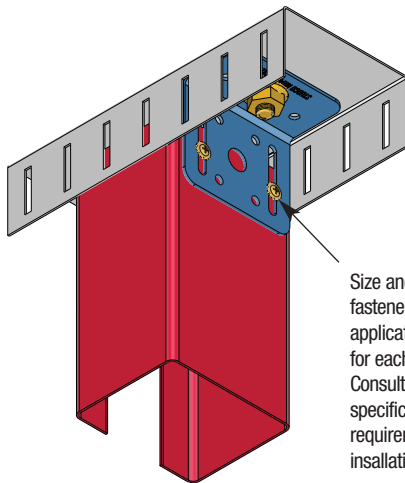
| STUDS CENTRES - CURVED WALLS | | | | | | | |
|------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|-------------|
| PLASTERBOARD THICKNESS | WALL RADIUS | | | | | | |
| | 800mm-1000mm | 1000mm-1500mm | 1500mm-2000mm | 2000mm-2500mm | 2500mm-3000mm | 3000mm-4000mm | over 4000mm |
| MAXIMUM WALL STUD CENTRES | | | | | | | |
| 6.5mm | 150mm | 200mm | 250mm | 300mm | 350mm | 450mm | 550mm |
| 10mm | 150mm | 200mm | 250mm | 300mm | 350mm | 450mm | 550mm |
| 13mm | -- | 150mm | 200mm | 250mm | 300mm | 400mm | 500mm |
| 16mm | -- | -- | -- | 150mm | 200mm | 250mm | 350mm |



Installation Guide - HEDA Tough Wall System

The HEDA System from Studco offers an fast and easy way of creating openings in walls in both internal and external applications. Traditionally, wall openings have required two or three studs at each side of the jamb and a series of studs and track to act as a lintel. Whilst this method remains highly popular, the new HEDA System from Studco uses fewer sections and fewer connections, thereby greatly decreasing construction time and simplifying the construction process. The HEDA System consists of only two items. Firstly, there is one new profile, known as the HEDAJamb, which is 92mm wide and 75mm deep, and suits the standard 92mm steel stud system from Studco. Made from galvanised steel, the HEDAJamb is available in 1.2mm and 1.6mm thicknesses, making this section extremely versatile over a vast range of opening sizes. The HEDAJamb section can be used for both the opening jambs (vertical members) and the lintels and sills (horizontal members) and it eliminates the need for using multiple studs and stud/track combinations. Secondly, to connect the HEDAJamb to adjoining members, a new bracket is used, known as the HEDAConnector. This versatile bracket is suitable for all connections required around the openings, eliminating the need for ordering different brackets for different connections.

The HEDA System has been fully engineered to meet BCA requirements and Australian Standards, ensuring you of code compliance whenever you use Studco's new HEDA System. The HEDA System is suitable for most opening applications and by discussing your needs with a Studco representative, you can be sure that even your most demanding opening specifications can be accommodated.



Size and type of fasteners may vary from application to application for each connection. Consult engineer for specific fastener requirements prior to installation.

Fig. 1 Jamb Stud To Slotted Deflection Track Connection

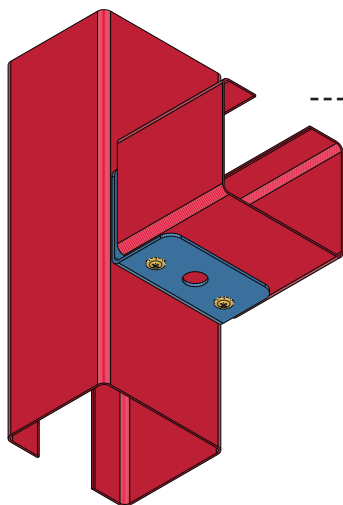
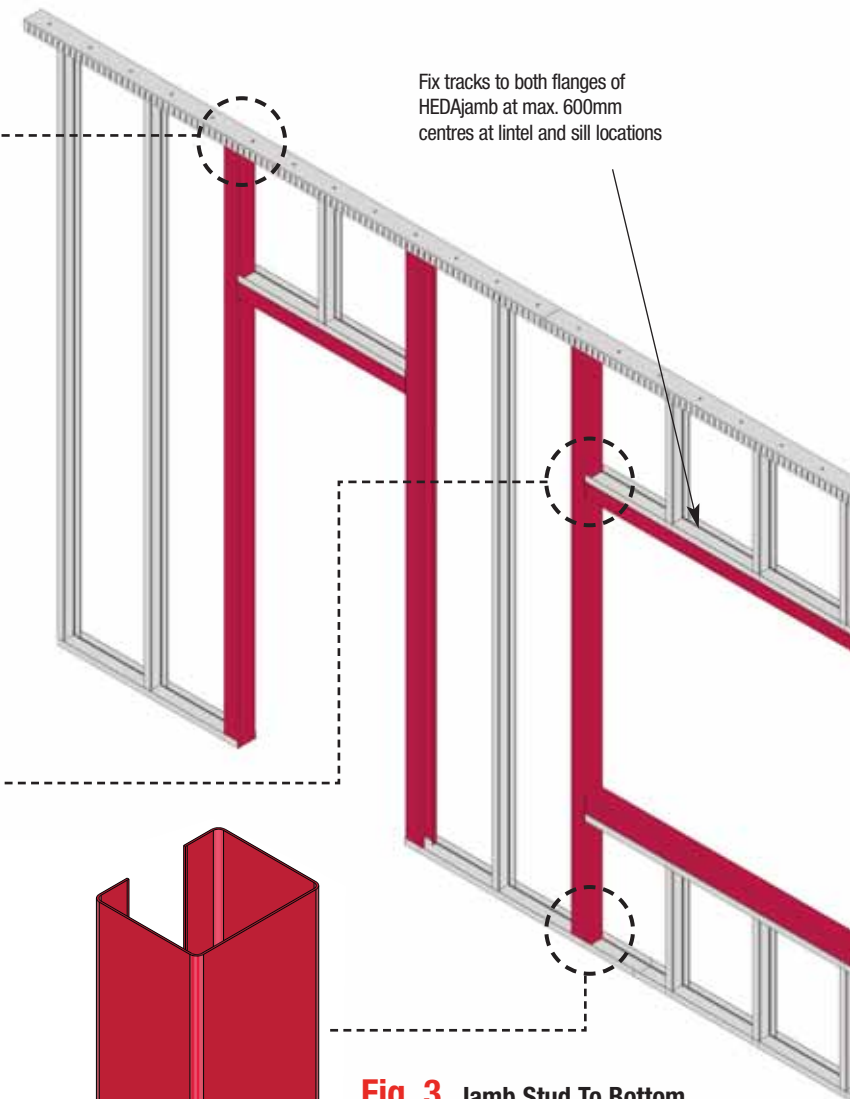
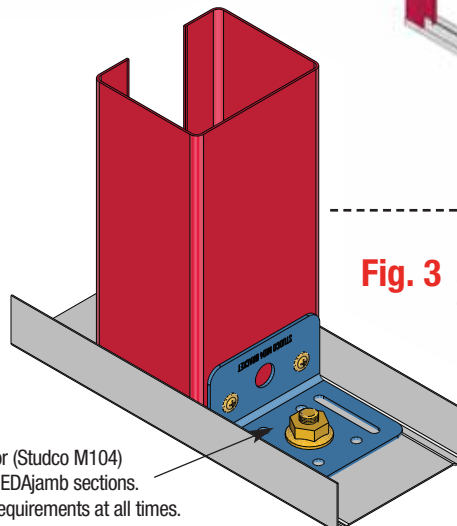


Fig. 2 Jamb Stud To Lintel/Sill Connection



Fix tracks to both flanges of HEDAJamb at max. 600mm centres at lintel and sill locations

Fig. 3 Jamb Stud To Bottom Track Connection

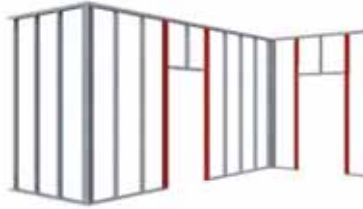


Use HEDAConnector (Studco M104) for connection of HEDAJamb sections. Observe fastener requirements at all times.

Studco HEDAjamb is suitable for use in...



Openings in external walls



Openings in internal walls



Construction of extreme walls

Fix studs through slots to allow for building movement (deflection).

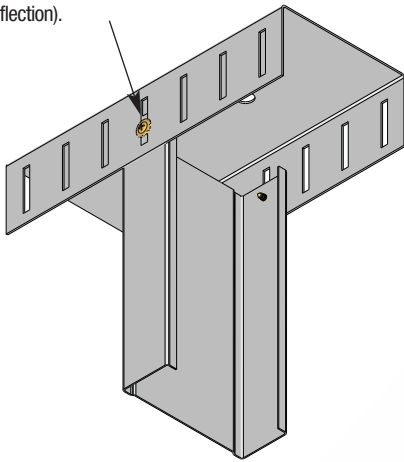
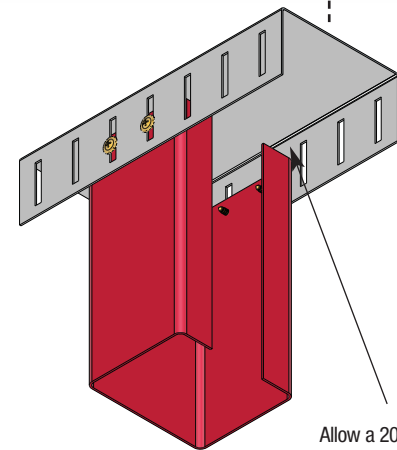
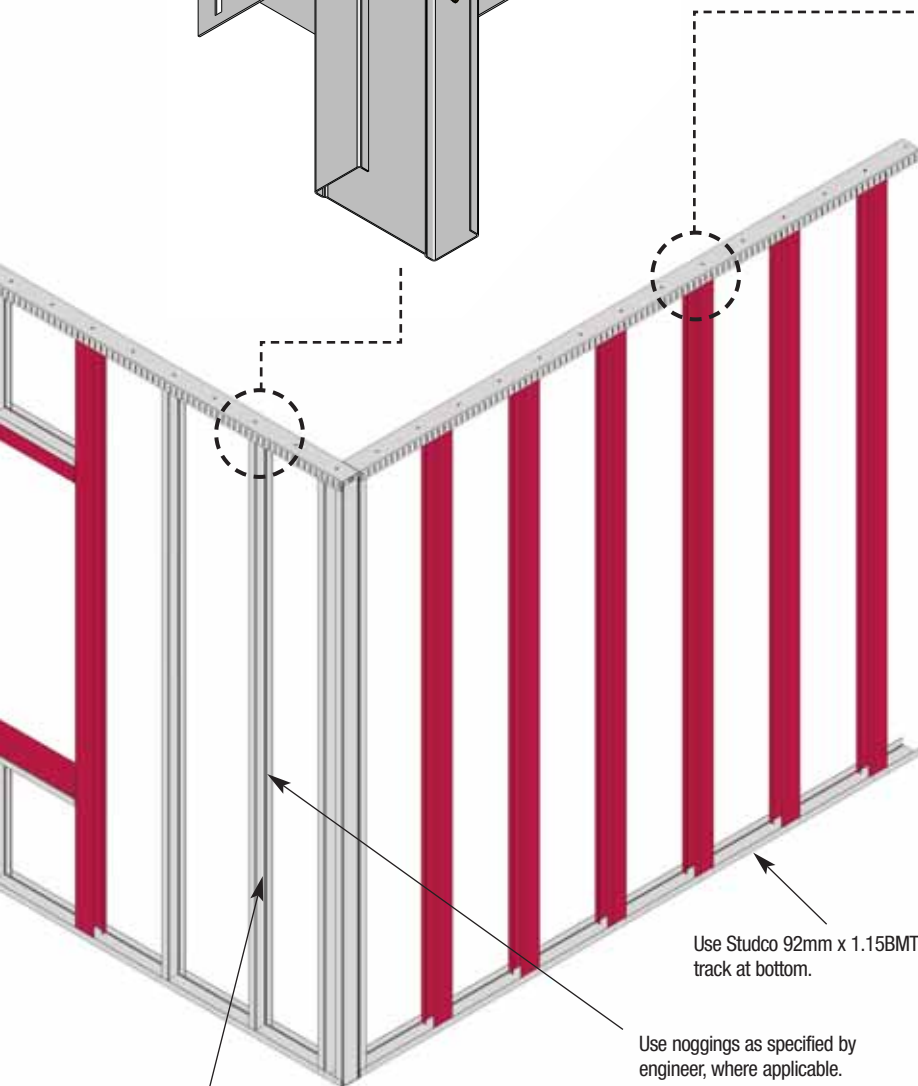


Fig. 4 Wall Stud To Slotted Deflection Track Connection
(Using std stud as wall stud)

** HEDAjamb sections shown in red for illustrative purposes only.*

Always ensure tightness of screw is sufficient to allow for deflection if needed.



Allow a 20mm minimum gap between wall studs or jamb studs on top track.

Fig. 5 Wall Stud To Slotted Deflection Track Connection
(Using HEDAjamb as wall stud)

Use Studco 92mm x 1.15BMT steel studs for intermediate wall studs. Consult engineer for spans and spacing.

Use Studco 92mm x 1.15BMT track at bottom.

Use noggings as specified by engineer, where applicable.

CONSULT STUDCO FOR WALL DESIGNS & SPECIFICATIONS

Installation Guide - Electrical & Plumbing Services

Steel Stud Systems

Plumbing pipes such as copper or brass must be isolated from direct contact with steel stud framing. Plastic grommets or lagging should be used to stop water hammer of pipework. Alternatively plumbing pipes can be fixed to flanges of studs where you have a suitable cavity with appropriate saddle clamps.

Electrical wires simply run through pre-punched service holes. Wires must be isolated safely from the steel structure. When drilling extra holes, refer to *Fig. 3* for cutout guidelines. Drilled holes should not exceed 50mm diameter.

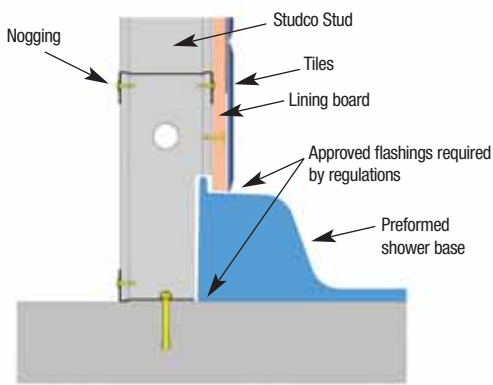


Fig. 1 Showerbase Installation Detail

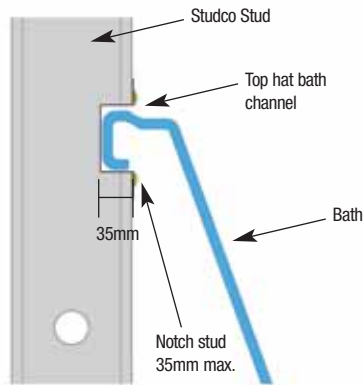


Fig. 2 Bath Notching Detail

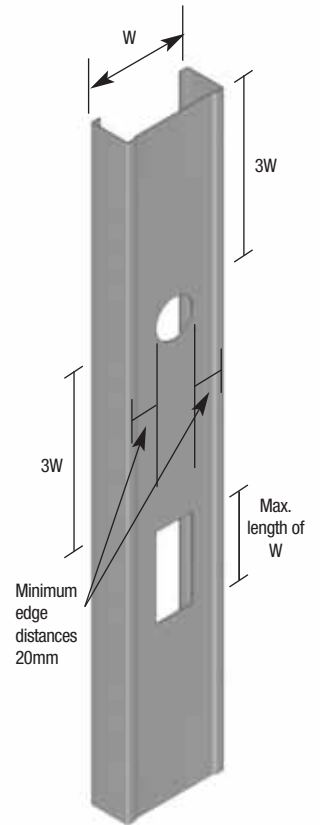


Fig. 3 Stud Cut-Out Guidelines

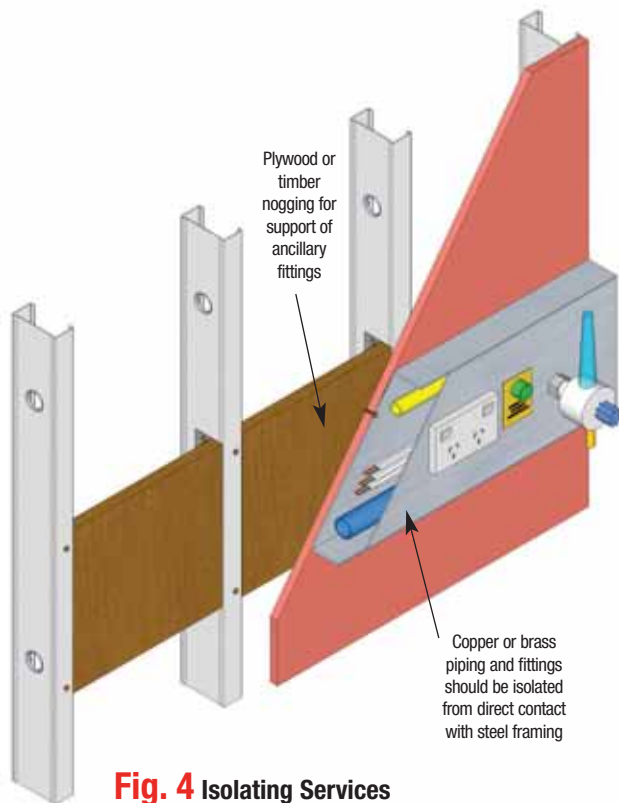


Fig. 4 Isolating Services

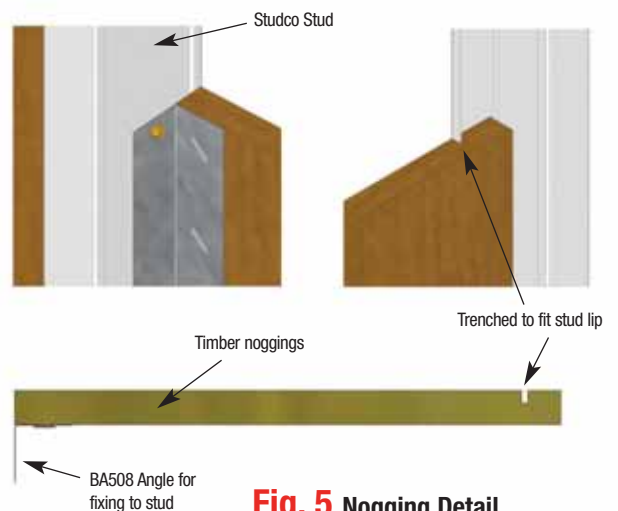


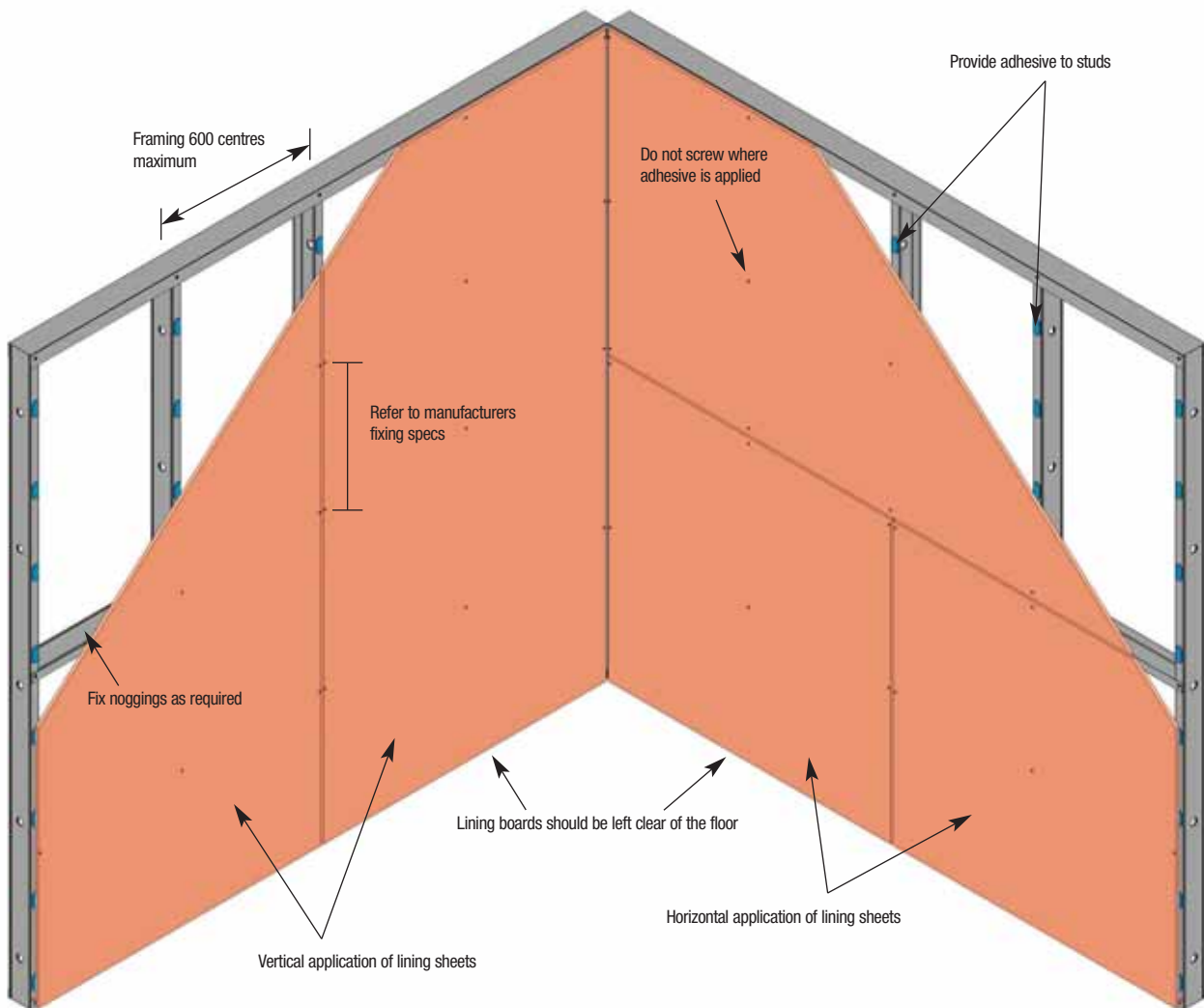
Fig. 5 Nogging Detail

Nogging brackets can also be used for this application - refer to table 49 on page 34

Installation Guide - Lining Boards

Plasterboard linings can be fixed vertically or horizontally with joints staggered alternately either side of the wall. Stud centres should not exceed 600mm centres. Refer to building board and fastener manufacturers specifications for fixing details.

Fig. 1 Lining Boards



Note:

For expansion joints, refer to building board manufacturers recommendations. Also see page 16.

Installation Guide - Chase Walls

Chase walls are required where services have to be accommodated or a discontinuous structure is needed for acoustic purposes. Chase walls are constructed as two separate walls using steel stud and track sections and cross braced at regular intervals with steel stud or track section (see Fig. 1). Where a chase wall is required for acoustic purposes the M24R resilient joiner bracket may be used as bracing. Consult Studco Technical Services for project requirements. Noggings are required based on a chase wall being classed as a wall lined one side. The maximum wall heights can be determined from Table 61.

Fig. 1 Typical Chase Wall Application

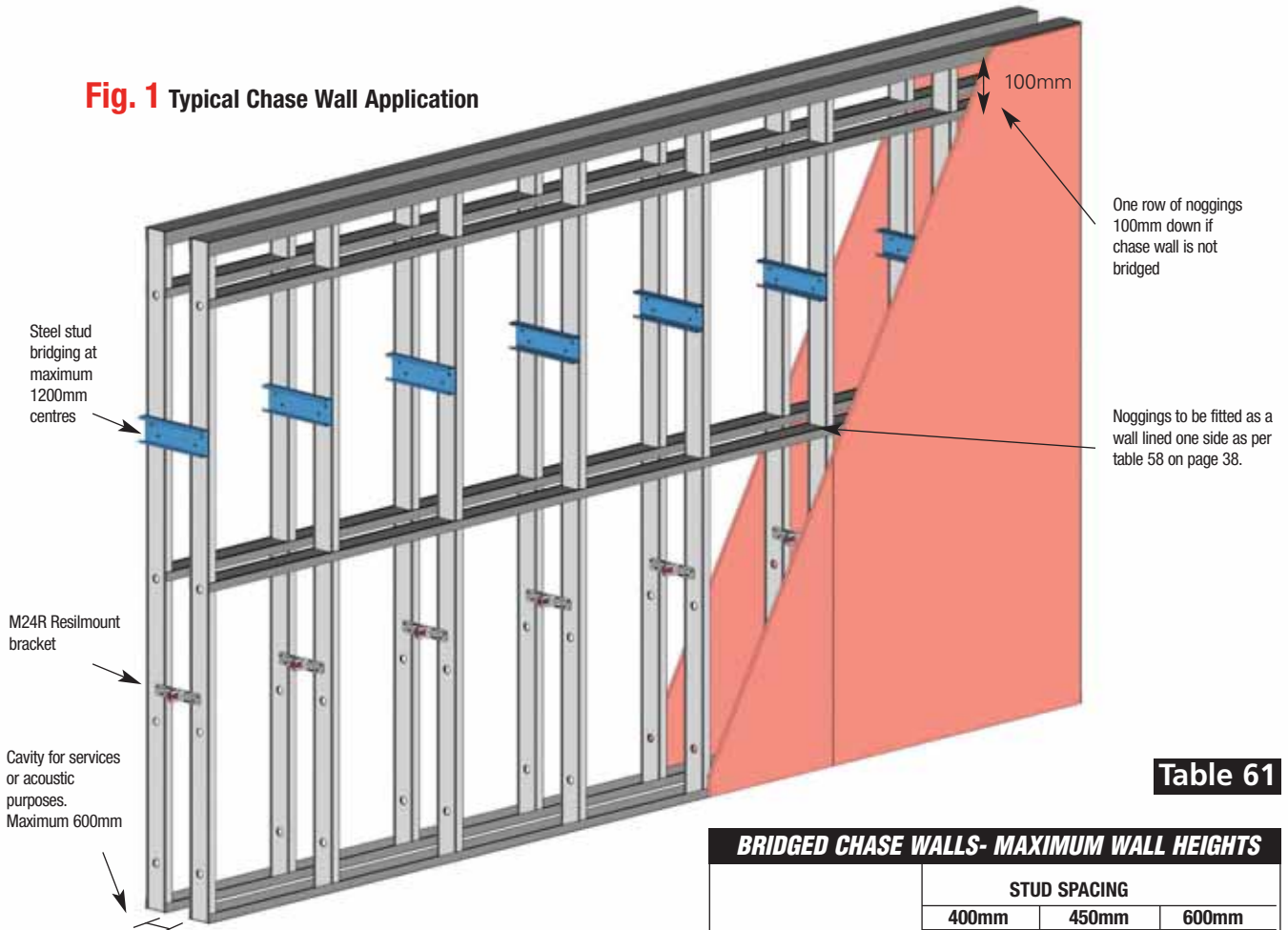


Table 61

| BRIDGED CHASE WALLS- MAXIMUM WALL HEIGHTS | | | |
|---|--------------|--------|--------|
| STUD SIZE | STUD SPACING | | |
| | 400mm | 450mm | 600mm |
| MAXIMUM WALL HEIGHTS - L/360 | | | |
| 64mm x 0.55BMT | 3715mm | 3503mm | 3033mm |
| 64mm x 0.75BMT | 5077mm | 4787mm | 4145mm |
| 76mm x 0.55BMT | 4460mm | 4205mm | 3642mm |
| 76mm x 0.75BMT | 5659mm | 5336mm | 4621mm |
| 92mm x 0.55BMT | 4987mm | 4702mm | 4072mm |
| 92mm x 0.75BMT | 6324mm | 5962mm | 5163mm |

- Notes:**
1. Noggings to be equally spaced over wall height
 2. Deflection limit limited to L/360 or L/240 at 0.25kPa in accordance with the BCA spec C1.8
 3. Unbridged walls must be installed with deflection track and an additional row of noggings 100mm down from top of wall.

Fig. 2 Max distance between walls with Resilmount brace

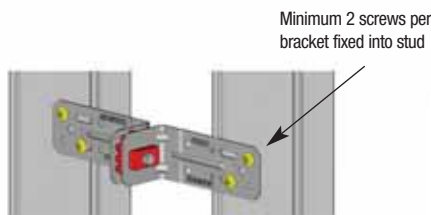
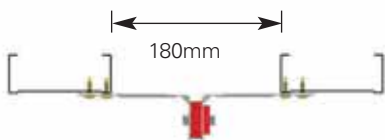


Fig. 3 Max distance between walls with Resilmount brace

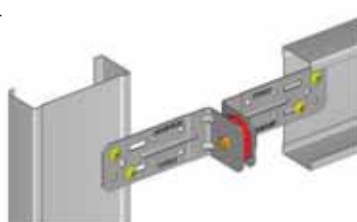


Fig. 4 Larger chase wall cavities use bridging extension.

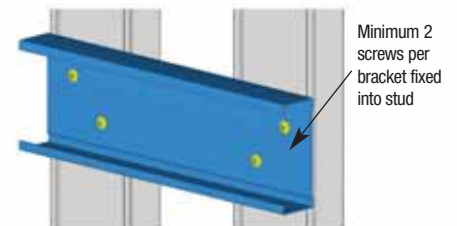


Fig. 5 Steel stud bridging

Consult Studco Engineer for project specifications.

Installation Guide - Stud Ceilings

When constructing ceilings, steel studs acting as joists can be used where it is impractical to use a concealed suspended ceiling. Applications include many areas, such as apartments, corridors and bathrooms etc. Where service hatches or access locations are within ceilings this area must be strengthened for service trades.

Refer to pages 58/59 for steel stud spans and bridging. Installation and fixing procedures refer to diagrams below.

Fig. 1 Typical Stud Ceiling Application

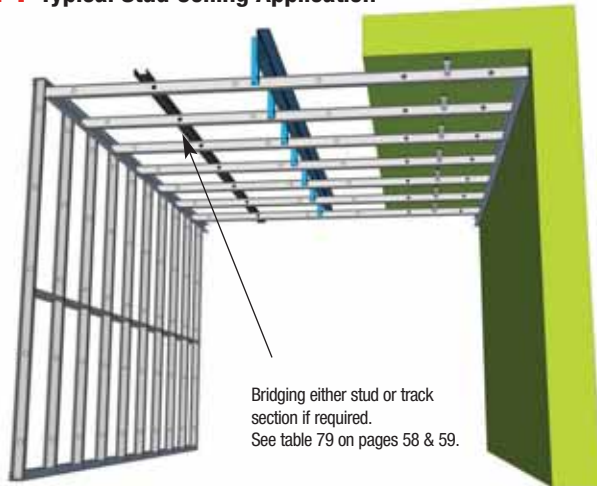


Fig. 2 Stud Joist to Wall Track Fixing Masonry

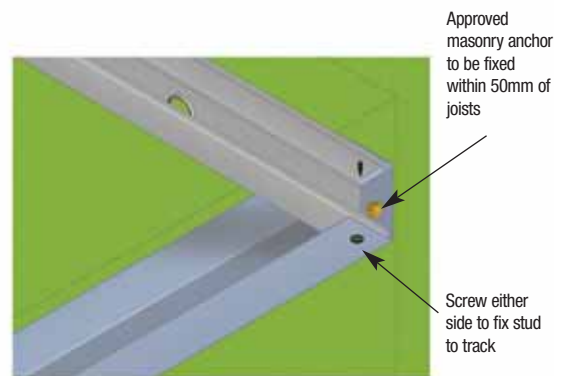


Fig. 3 Stud Joist to Wall Track Fixing

Note:
Where ceiling intersects a stud wall, the wall must be checked for the ceiling load

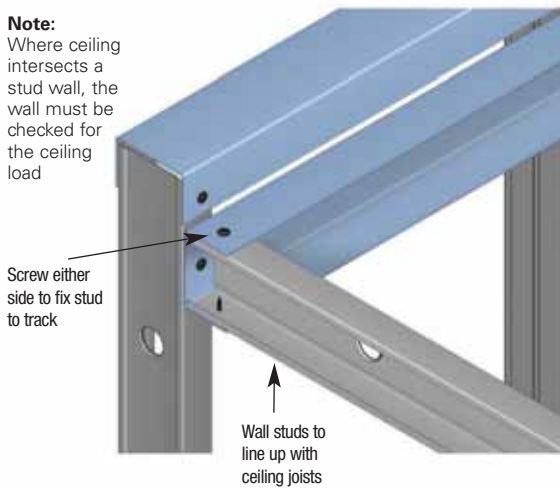


Fig. 4 Stud Joist Suspension Fixing 1

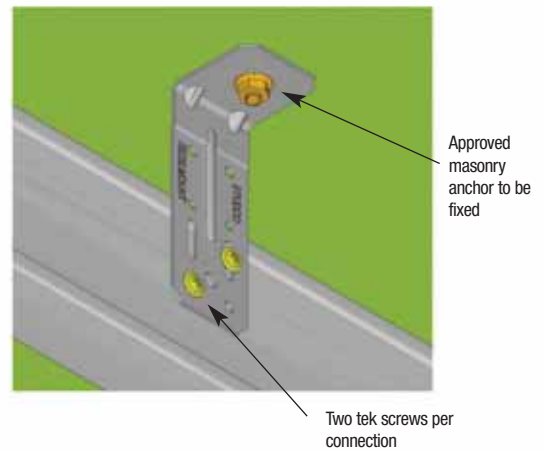
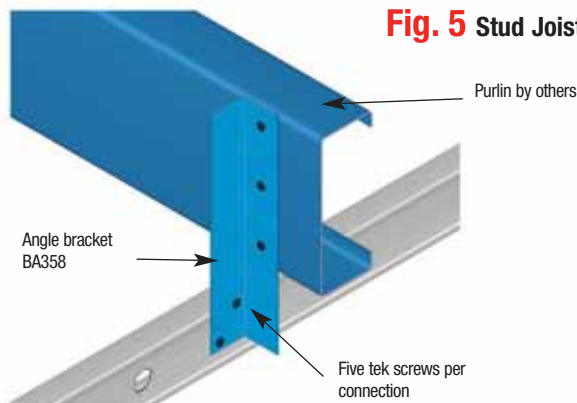


Fig. 5 Stud Joist Suspension Fixing 2



Note:
Refer to fastener manufacturers for fixings.

Note:
Fixings should be made to the web of the purlin unless otherwise approved by an engineer.

Installation Guide - Bulkheads

Bulkheads can be constructed using steel stud and track where furring channels become impractical. Bulkhead stud members will need to be fixed and braced to suitable structural supports, and ensure that the bulkheads meet required design loadings. Design loadings and specifications should be referred by a structural engineer or Studco Technical Services. An economical alternative to constructing bulkheads on-site is to use pre-fabricated modules. Studco can analyse comprehensive plans and reach innovative solutions for framing requirements with any architectural style. The possibilities include circular, curved, stepped or cantilevered framing which is easily suspended from slab or structure by using springhanger Part No. M534 subject to engineers approval. (See Fig 4). Spring hangers to be used only for preliminary suspension before bracing back to structure.

Fig. 1 Ceiling Bulkhead

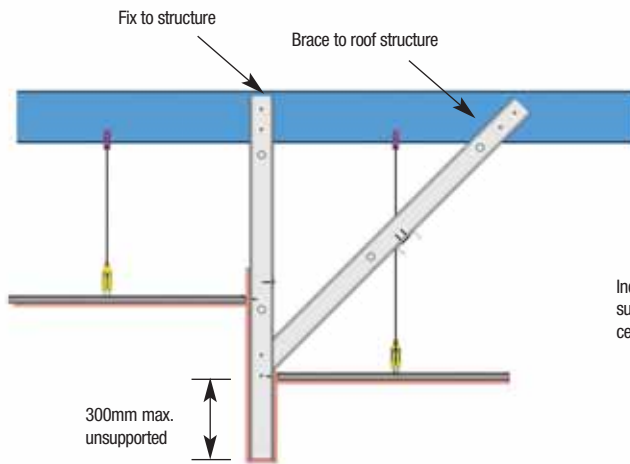


Fig. 2 Ceiling Bulkhead Bracing Detail

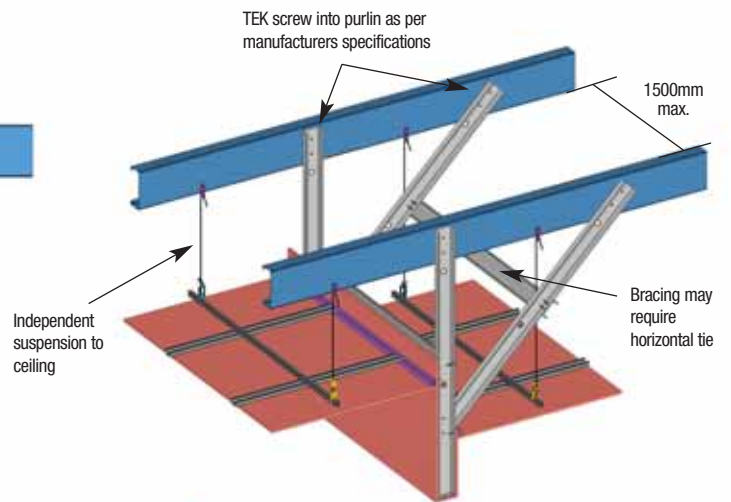


Fig. 4 M534 Spring Hanger Suspension

M534 Spring hanger can be used for preliminary bulkhead suspension for initial installation, then support with bracing back to structure

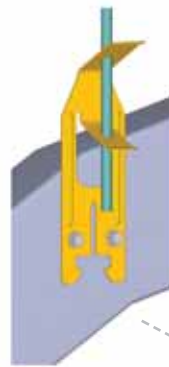


Fig. 5 Suspension of Prefabricated Bulkheads

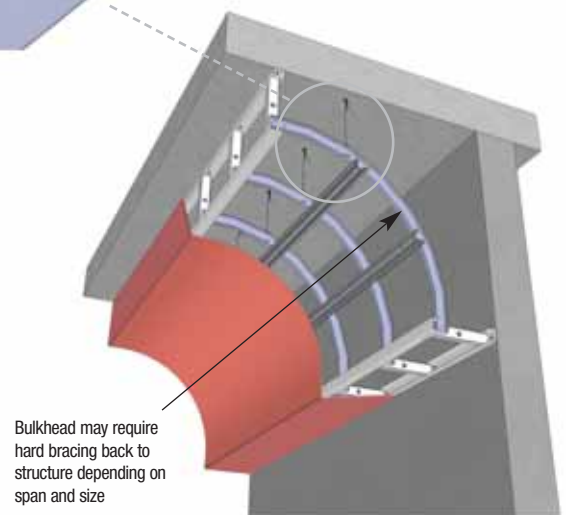
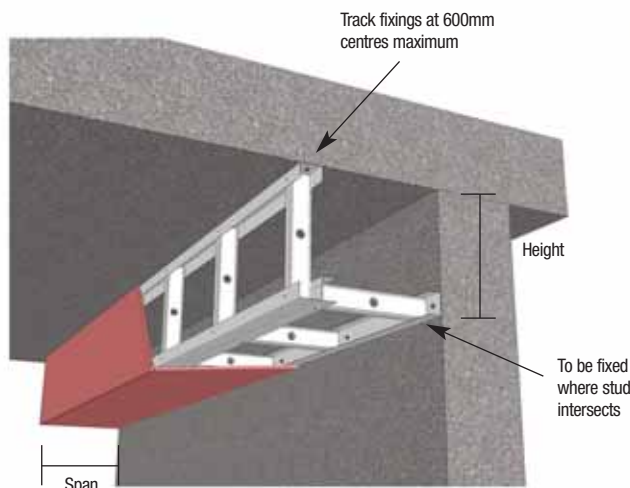


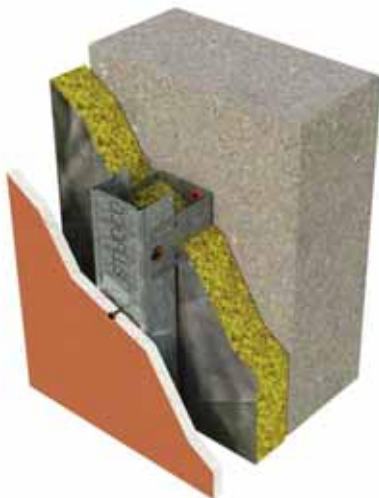
Fig. 3 Box Bulkhead



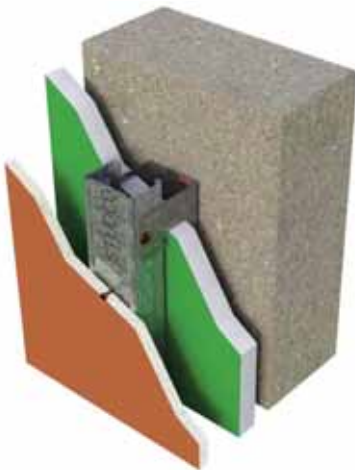
Installation Guide - Slimwall



The Studco SLIMWALL system is a energy efficient wall system that is code compliant to NCC 2011 Section J (BCA 2011) Energy Efficiency criteria. The Studco SLIMWALL System consists of a C-channel section and a series of two brackets, designed to provide adjustable stand-off points for fixing the channel. The M163-6 SLIMWALL bracket is suitable for wall cavities 69-92mm and the M163-8 SLIMWALL bracket is suitable for wall cavities 85-108mm. Once the M163 brackets are fixed to external wall using shot pins or masonry anchors, the Studco Slimceil M355 channel are inserted into the brackets and screwed to the brackets, achieving a secure and permanent fixing which can support a wide variety of lining board types and weights. So whether you're chasing 6 Star Green Star on your next project or you just need a fast, flexible and fully code compliant wall system, choose the unique, new Studco SLIMWALL.



Studco Slimwall system used with CSR Bradford foil-faced builders blankets to achieve R2.8 rating.



Studco Slimwall system used with foilboard insulation to achieve R1.8 rating.

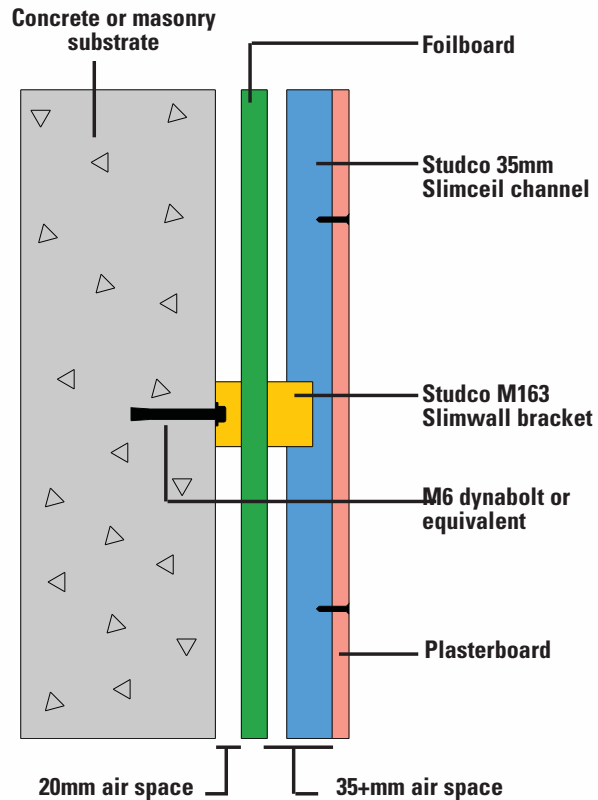


Table 62

| SLIMWALL - MIN & MAX MEASUREMENTS | | | |
|--|---------------------|------------------------|------------------------|
| PART No | BRACKET SIZE | Min measurement | Max measurement |
| Distance from substrate to back of plasterboard. | | | |
| M163-6 | 68mm | 70mm | 90mm |
| M163-8 | 84mm | 86mm | 106mm |

* This is the distance from the concrete substance and to the back face of the plasterboard lining.

Installation Guide - Strongarm



Steel Stud Systems

The Studco StrongArm™ structural wall brace is designed for rapid in-wall strengthening of free-standing steel stud walls commercial applications, where a structural member is required to limit deflection and improve rigidity. Made from 12mm thick steel and protected by a hot-dip galvanised coating, this super bracket can withstand extreme loads, is suitable for internal and external applications and is sure to save you time and money on your next project. Typical applications include; Free-standing walls, Balustrades, Nib walls, Bulkheads and Smoke baffles.

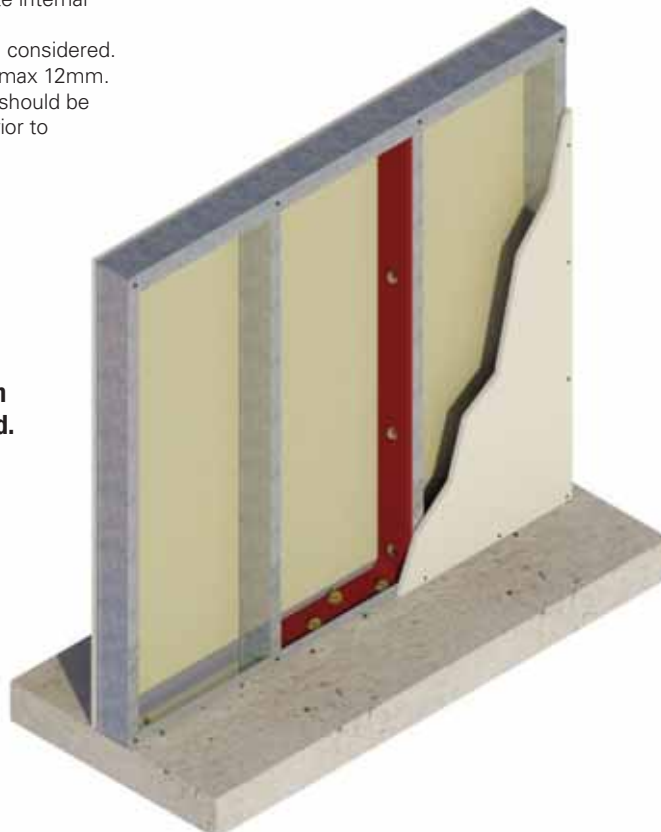
Table 63

| Wall Height | STRONGARM - BRACKET/STUD SPACING | |
|---------------|---|--|
| 600mm | Wall Stud type and Stud centres | Studco S92075 92mm x 0.75BMT lipped wall stud at 600mm centres |
| | M110 Bracket Spacing | Maximum 2400mm centers |
| 900mm | Wall Stud type and Stud centres | Studco S92075 92mm x 0.75BMT lipped wall stud at 600mm centres |
| | M110 Bracket Spacing | Maximum 1800mm centers |
| 1200mm | Wall Stud type and Stud centres | Studco S92075 92mm x 0.75BMT lipped wall stud at 600mm centres |
| | M110 Bracket Spacing | Maximum 1800mm centers |
| 1500mm | Wall Stud type and Stud centres | Studco S92115 92mm x 1.15BMT lipped wall stud at 600mm centres |
| | M110 Bracket Spacing | Maximum 1800mm centers |
| 1800mm | Wall Stud type and Stud centres | Studco S92115 92mm x 1.15BMT lipped wall stud at 450mm centres |
| | M110 Bracket Spacing | Maximum 1800mm centers |
| 2100mm | Wall Stud type and Stud centres | Studco S92115 92mm x 1.15BMT lipped wall stud at 450mm centres |
| | M110 Bracket Spacing | Maximum 1350mm centers |
| 2400mm | Wall Stud type and Stud centres | Studco S92115 92mm x 1.15BMT lipped wall stud at 450mm centres |
| | M110 Bracket Spacing | Maximum 900mm centers |

Notes:

1. Use Minimum 4No x 12mm masonry anchors with minimum 60mm embedment into concrete is required to fix the bracket to the substrate.
2. The design is for max 0.4kpa Ultimate internal pressure.
3. The Live impact load of 0.75kN been considered.
4. The absolute deflection is limited to max 12mm.
5. All specifications and design criteria should be confirmed by the project engineer prior to installation.

M110 Strongarm bracket installed.



Section Properties & Dimensions - Wall Studs

Table 64

| SECTION PROPERTIES - STUDS | | | | | | | | | | |
|----------------------------|--------|----------------------|--------------------------|--------------------------|---------------------|---------------------|-------|-------|-------------------------|-------------------|
| Section | BMT mm | Area mm ² | Ixx mm ⁴ x1E3 | Iyy mm ⁴ X1E3 | Zxx mm ³ | Zyy mm ³ | rx mm | ry mm | Iw mm ⁶ x1E6 | J mm ³ |
| S51050 | 0.50 | 63.50 | 30.618 | 11.280 | 1213 | 528 | 21.96 | 13.33 | 6.360 | 5.29 |
| S64050 | 0.50 | 70.00 | 50.016 | 12.135 | 1588 | 538 | 26.73 | 13.17 | 10.004 | 5.83 |
| S64075 | 0.75 | 105.00 | 75.024 | 18.070 | 2382 | 803 | 26.73 | 13.12 | 15.007 | 19.69 |
| S64115 | 1.15 | 161.00 | 115.037 | 27.386 | 3652 | 1222 | 26.73 | 13.04 | 23.010 | 70.97 |
| S76055 | 0.55 | 84.15 | 83.103 | 14.133 | 2196 | 600 | 31.43 | 12.96 | 16.258 | 8.49 |
| S76075 | 0.75 | 114.75 | 113.323 | 19.156 | 2994 | 815 | 31.43 | 12.92 | 22.170 | 21.52 |
| S76115 | 1.15 | 175.95 | 173.762 | 29.017 | 4591 | 1240 | 31.43 | 12.84 | 33.994 | 77.56 |
| S92055 | 0.55 | 92.95 | 127.904 | 14.972 | 2796 | 610 | 37.10 | 12.69 | 24.578 | 9.37 |
| S92075 | 0.75 | 126.75 | 174.414 | 20.288 | 3812 | 828 | 37.10 | 12.65 | 33.515 | 23.77 |
| S92115 | 1.15 | 194.35 | 267.435 | 30.718 | 5846 | 1259 | 37.10 | 12.57 | 51.390 | 85.68 |
| S15007 | 0.75 | 171.00 | 549.611 | 23.126 | 7353 | 857 | 56.69 | 11.63 | 100.832 | 32.06 |
| S15012 | 1.15 | 262.20 | 842.736 | 34.981 | 11274 | 1302 | 56.69 | 11.55 | 154.609 | 115.59 |

Material Specifications The sections are cold formed from zinc coated steel strip manufactured to AS 1397. Each component having the following properties: Steel Grade G2 Yield strength 300 MPa

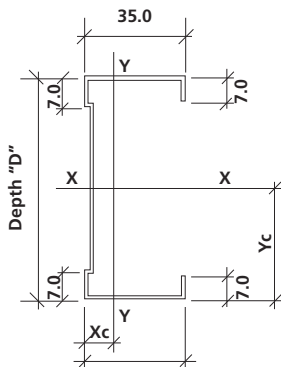


Table 65

| SECTION DIMENSIONS - STUDS | | | | | | |
|----------------------------|------|--------|------|------|-------|-------|
| Part No. | D | Flange | Lips | BMT | Xc | Yc |
| S51050 | 50.8 | 35.0 | 7.0 | 0.50 | 12.84 | 25.40 |
| S64050 | 63.5 | 35.0 | 7.0 | 0.50 | 11.75 | 31.75 |
| S64075 | 63.5 | 35.0 | 7.0 | 0.75 | 11.81 | 31.75 |
| S64115 | 63.5 | 35.0 | 7.0 | 1.15 | 11.92 | 31.75 |
| S76055 | 76.2 | 35.0 | 7.0 | 0.55 | 10.89 | 38.10 |
| S76075 | 76.2 | 35.0 | 7.0 | 0.75 | 10.95 | 38.10 |
| S76115 | 76.2 | 35.0 | 7.0 | 1.15 | 11.07 | 38.10 |
| S92055 | 92 | 35.0 | 7.0 | 0.55 | 9.92 | 46.00 |
| S92075 | 92 | 35.0 | 7.0 | 0.75 | 9.98 | 46.00 |
| S92115 | 92 | 35.0 | 7.0 | 1.15 | 10.11 | 46.00 |
| S15007 | 150 | 35.0 | 7.0 | 0.75 | 7.59 | 75.00 |
| S15012 | 150 | 35.0 | 7.0 | 1.15 | 7.73 | 75.00 |

Table 66

| SECTION PROPERTIES - HEDA | | | | | | | | | | |
|---------------------------|--------|----------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------|-------------------------|-------------------|
| Part No. | BMT mm | Area mm ² | Ixx mm ⁴ | Iyy mm ⁴ | Zxx mm ³ | Zyy mm ³ | rx mm ² | ry mm | Iw mm ⁶ x1E6 | J mm ³ |
| HJ9275115 | 1.15 | 329.78 | 484661.1 | 292585.53 | 10528.1 | 6360.0 | 38.336 | 29.786 | 660 | 145.38 |
| HJ9289155 | 1.55 | 479.69 | 730116.8 | 553486.85 | 15752.25 | 12032.0 | 39.014 | 33.968 | 1280 | 384.15 |

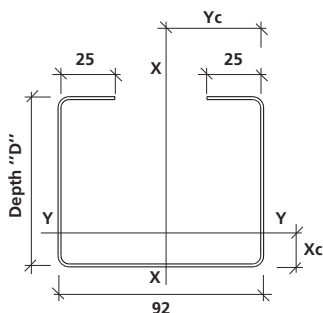


Table 67

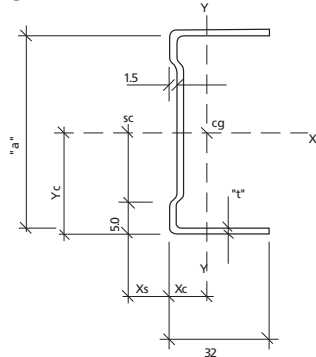
| SECTION DIMENSIONS - HEDA | | | | | | |
|---------------------------|------|--------|------|------|-------|------|
| Part No. | D | Flange | Lips | BMT | Xc | Yc |
| HJ9275115 | 76.2 | 92 | 25.4 | 1.15 | 40.45 | 46.0 |
| HJ9289155 | 89.9 | 92 | 25.4 | 1.55 | 41.33 | 46.0 |

Notes:

1. Section properties are approximate only and may be subject to revision.
2. Section properties tabulated are gross section properties.
3. The strength and serviceability section capacities are based on effective section properties calculated in accordance with AS 4600 "Cold Formed Steel Structures Code"

Section Properties & Dimensions - Track

C Channel Track



Material Specifications

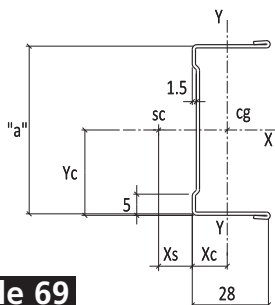
The sections are cold formed from zinc coated steel strip manufactured to AS 1397. Each component having the following properties

Steel Grade G2
Yield strength 300 MPa
Coating class Z275

Table 68

| C CHANNEL TRACK | | | | | | | | | | | | | | | | |
|------------------------|------|------|-------|-------|------------|--------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|-------|-------------|------|------------------|------------------|---------------------------------|
| Dimensions | | | | | Gross Area | 2nd Moment of Area | | Section Modulus | | Radius of Gyration | | Form Factor | B | Torsion Constant | Warping Constant | |
| a | BMT | t | Xc | Xs | Xo | | Ixx | Iyy | Zxx | Zyy | rxx | ryy | Q | | J | Iw |
| mm | mm | mm | mm | mm | mm | mm ² | 10 ³ mm ⁴ | 10 ³ mm ⁴ | 10 ³ mm ³ | 10 ³ mm ³ | mm | mm | | mm | mm ⁴ | 10 ⁶ mm ⁶ |
| 51 | 0.55 | 8.53 | 11.53 | 20.06 | 61.05 | 61.05 | 27.880 | 5.323 | 1.072 | 0.244 | 21.37 | 9.34 | 0.47 | 62.73 | 6.16 | 2.66 |
| 64 | 0.55 | 7.92 | 10.92 | 18.84 | 67.10 | 67.10 | 46.22 | 5.644 | 1.422 | 0.252 | 26.25 | 9.17 | 0.44 | 69.94 | 6.77 | 4.49 |
| 76 | 0.55 | 7.25 | 10.36 | 17.61 | 74.8 | 74.8 | 70.325 | 5.903 | 1.803 | 0.256 | 30.66 | 8.88 | 0.40 | 81.35 | 7.54 | 6.89 |
| 92 | 0.55 | 6.64 | 9.75 | 16.39 | 83.60 | 83.60 | 108.79 | 6.129 | 2.314 | 0.260 | 36.07 | 8.59 | 0.36 | 97.83 | 8.43 | 10.67 |
| 51 | 0.75 | 8.48 | 11.50 | 19.98 | 83.25 | 83.25 | 37.59 | 7.216 | 1.445 | 0.329 | 21.25 | 9.31 | 0.58 | 62.55 | 15.61 | 3.56 |
| 64 | 0.75 | 7.88 | 10.88 | 18.76 | 91.50 | 91.50 | 62.43 | 7.652 | 1.921 | 0.340 | 26.12 | 9.15 | 0.55 | 69.72 | 17.16 | 6.02 |
| 76 | 0.75 | 7.21 | 10.33 | 17.53 | 102.0 | 102.0 | 95.108 | 8.006 | 2.438 | 0.345 | 30.54 | 8.86 | 0.50 | 81.09 | 19.13 | 9.25 |
| 92 | 0.75 | 6.61 | 9.72 | 16.32 | 114.0 | 114.0 | 147.28 | 8.359 | 3.133 | 0.351 | 35.94 | 8.56 | 0.45 | 97.51 | 21.38 | 14.35 |
| 150 | 0.75 | 5.16 | 7.95 | 13.12 | 159.0 | 159.0 | 485.87 | 9.208 | 6.309 | 0.365 | 55.28 | 7.61 | 0.33 | 186.41 | 29.81 | 45.58 |
| 51 | 1.0 | 8.42 | 11.45 | 19.87 | 111.0 | 111.0 | 49.419 | 9.551 | 1.900 | 0.432 | 21.1 | 9.28 | 0.70 | 62.30 | 37.00 | 4.65 |
| 64 | 1.0 | 7.82 | 10.83 | 18.65 | 122.0 | 122.0 | 82.261 | 10.131 | 2.531 | 0.446 | 25.97 | 9.11 | 0.67 | 69.45 | 40.67 | 7.87 |
| 76 | 1.0 | 7.16 | 10.28 | 17.44 | 136.0 | 136.0 | 125.497 | 10.602 | 3.217 | 0.454 | 30.38 | 8.83 | 0.61 | 80.75 | 45.33 | 12.11 |
| 92 | 1.0 | 6.56 | 9.61 | 16.23 | 152.0 | 152.0 | 194.602 | 11.071 | 4.140 | 0.462 | 35.78 | 8.53 | 0.56 | 97.09 | 50.67 | 18.81 |
| 150 | 1.0 | 5.13 | 7.91 | 13.04 | 212.0 | 212.0 | 643.75 | 12.200 | 8.360 | 0.480 | 55.10 | 7.59 | 0.42 | 185.53 | 70.67 | 59.86 |
| 76 | 1.15 | 7.13 | 10.25 | 17.38 | 156.4 | 156.4 | 143.42 | 12.143 | 3.677 | 0.577 | 30.28 | 8.81 | 0.68 | 80.54 | 68.95 | 13.76 |
| 92 | 1.15 | 6.54 | 9.64 | 16.18 | 174.8 | 174.8 | 222.57 | 12.681 | 4.735 | 0.527 | 35.68 | 8.52 | 0.62 | 96.83 | 77.06 | 21.40 |
| 150 | 1.15 | 5.11 | 7.89 | 13.00 | 243.8 | 243.8 | 737.52 | 13.97 | 9.578 | 0.548 | 55.00 | 7.57 | 0.46 | 184.99 | 107.48 | 68.22 |

C Channel Hemmed Track



Material Specifications

The sections are cold formed from zinc coated steel strip manufactured to AS 1397. Each component having the following properties

Steel Grade G2
Yield strength 300 MPa
Coating class Z275

Table 69

| C CHANNEL HEMMED TRACK | | | | | | | | | | | | | | | |
|-------------------------------|-----|------|-------|--------|-----------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------|------|--------|------------------|---------------------------------|--|
| Dimensions | | | | | Gross Area | 2nd Moment of Area | | Section Modulus | | Radius of Gyration | | By | Torsion Constant | Wrapping Constant | |
| a | BMT | Xc | Xs | Xo | | Ixx | Iyy | Zxx | Zyy | rxx | ryy | | J | Iw | |
| mm | mm | mm | mm | mm | mm ² | 10 ³ mm ⁴ | 10 ³ mm ⁴ | 10 ³ mm ³ | 10 ³ mm ³ | mm | mm | mm | mm ⁴ | 10 ⁶ mm ⁶ | |
| 64 | 0.5 | 8.28 | 8.13 | 16.41 | 63.24 | 43.267 | 5.043 | 1.331 | 0.271 | 26.16 | 8.93 | 69.88 | 5.3 | 3.42 | |
| 76 | 0.5 | 7.74 | 7.6 | 15.34 | 69.24 | 63.818 | 5.255 | 1.658 | 0.275 | 30.36 | 8.71 | 81.58 | 5.79 | 5.07 | |
| 92 | 0.5 | 7.15 | 6.973 | 14.123 | 77.24 | 99.05 | 5.486 | 2.130 | 0.279 | 35.81 | 8.43 | 104.57 | 6.46 | 7.89 | |

Notes:

- Section properties are approximate only and may be subject to revision.
- Section properties tabulated are gross section properties.
- The strength and serviceability section capacities are based on effective section properties calculated in accordance with AS 4600 "Cold Formed Steel Structures Code".

Section Properties & Dimensions - Deflection Track

Deflection Head Track

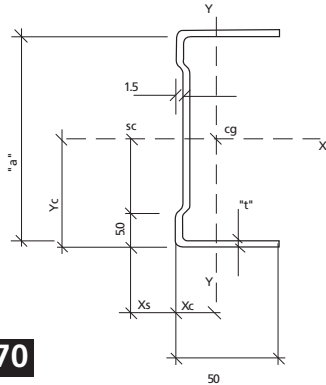


Table 70

Material Specifications

The sections are cold formed from zinc coated steel strip manufactured to AS 1397. Each component having the following properties

Steel Grade G2
 Yield strength 300 MPa
 Coating class Z275

| DEFLECTION HEAD TRACK | | | | | | | | | | | | | | | | |
|-----------------------|------|-------|-------|-------|------------|--------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|-------|-------------|--------|------------------|------------------|---------------------------------|
| Dimensions | | | | | Gross Area | 2nd Moment of Area | | Section Modulus | | Radius of Gyration | | Form Factor | By | Torsion Constant | Warping Constant | |
| a | BMT | t | Xc | Xs | Xo | mm ² | lxx | lyy | Zxx | Zyy | rxx | ryy | Q | mm | J | Iw |
| mm | mm | mm | mm | mm | mm | | 10 ³ mm ⁴ | 10 ³ mm ⁴ | 10 ³ mm ³ | 10 ³ mm ³ | mm | mm | mm | mm | mm ⁴ | 10 ⁶ mm ⁶ |
| 64 | 0.55 | 15.91 | 20.73 | 36.65 | 90.2 | 68.761 | 23.819 | 2.128 | 0.693 | 27.61 | 16.25 | 0.33 | 96.61 | 9.10 | 18.22 | |
| 76 | 0.55 | 14.94 | 20.04 | 34.97 | 96.8 | 102.200 | 25.138 | 2.640 | 0.711 | 32.49 | 16.11 | 0.31 | 101.6 | 9.76 | 27.59 | |
| 92 | 0.55 | 13.81 | 19.24 | 33.05 | 105.6 | 154.760 | 26.530 | 3.320 | 0.727 | 38.28 | 15.85 | 0.29 | 110.60 | 10.65 | 42.51 | |
| 150 | 0.55 | 11.05 | 16.77 | 27.81 | 136.4 | 469.750 | 30.150 | 6.215 | 0.768 | 58.69 | 14.87 | 0.23 | 162.53 | 13.75 | 132.0 | |
| 64 | 0.75 | 15.98 | 20.77 | 36.76 | 123.0 | 94.550 | 32.610 | 2.910 | 0.948 | 27.73 | 16.28 | 0.41 | 96.69 | 23.06 | 25.16 | |
| 76 | 0.75 | 15.00 | 20.08 | 35.08 | 132.0 | 140.33 | 34.414 | 3.615 | 0.972 | 32.61 | 16.15 | 0.39 | 101.69 | 24.75 | 38.05 | |
| 92 | 0.75 | 13.88 | 19.27 | 33.15 | 144.0 | 212.37 | 36.32 | 4.54 | 0.994 | 38.40 | 15.88 | 0.36 | 110.69 | 27.00 | 58.57 | |
| 150 | 0.75 | 11.09 | 16.81 | 27.90 | 186.0 | 643.42 | 41.59 | 8.493 | 1.050 | 58.82 | 14.89 | 0.29 | 162.64 | 34.88 | 181.00 | |
| 64 | 1.0 | 16.07 | 20.82 | 36.89 | 164.0 | 127.410 | 43.720 | 3.89 | 1.270 | 27.89 | 16.33 | 0.50 | 96.79 | 54.67 | 34.07 | |
| 76 | 1.0 | 15.09 | 20.12 | 35.21 | 176.0 | 188.830 | 46.110 | 4.830 | 1.302 | 32.75 | 16.19 | 0.48 | 101.79 | 58.67 | 51.46 | |
| 92 | 1.0 | 13.95 | 19.32 | 33.27 | 192.0 | 285.42 | 48.65 | 6.072 | 1.331 | 38.56 | 15.92 | 0.45 | 110.81 | 64.00 | 79.11 | |
| 150 | 1.0 | 11.15 | 16.85 | 28.00 | 248.0 | 862.638 | 55.243 | 11.35 | 1.403 | 58.98 | 14.93 | 0.36 | 162.77 | 82.67 | 244.0 | |
| 64 | 1.15 | 16.13 | 20.85 | 36.97 | 188.0 | 147.44 | 50.43 | 4.480 | 1.460 | 27.96 | 16.35 | 0.56 | 96.84 | 83.14 | 39.56 | |
| 76 | 1.15 | 15.14 | 20.15 | 35.29 | 202.4 | 218.34 | 53.19 | 5.562 | 1.500 | 32.84 | 16.21 | 0.53 | 101.85 | 89.22 | 59.68 | |
| 92 | 1.15 | 14.00 | 19.35 | 33.35 | 220.80 | 329.78 | 56.10 | 6.990 | 1.533 | 38.650 | 15.94 | 0.50 | 110.86 | 97.34 | 91.68 | |
| 150 | 1.15 | 11.19 | 16.88 | 28.07 | 285.20 | 995.319 | 63.69 | 13.070 | 1.617 | 59.08 | 14.94 | 0.40 | 162.85 | 125.73 | 283.0 | |

Deflection Head Hemmed Track

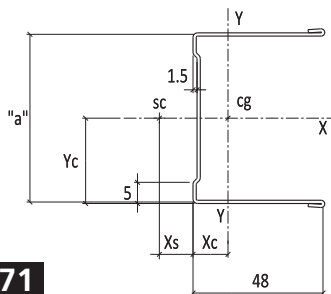


Table 71

Material Specifications

The sections are cold formed from zinc coated steel strip manufactured to AS 1397. Each component having the following properties

Steel Grade G2
 Yield strength 300 MPa
 Coating class Z275

| DEFLECTION HEAD HEMMED TRACK | | | | | | | | | | | | | | | |
|------------------------------|-----|-------|-------|-------|-----------------|--------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|-------|--------|------------------|------------------|---------------------------------|
| Dimensions | | | | | Gross Area | 2nd Moment of Area | | Section Modulus | | Radius of Gyration | | By | Torsion Constant | Warping Constant | |
| a | BMT | Xc | Xs | Xo | mm ² | lxx | lyy | Zxx | Zyy | rxx | ryy | mm | mm | J | Iw |
| mm | mm | mm | mm | mm | | mm ² | 10 ³ mm ⁴ | 10 ³ mm ⁴ | 10 ³ mm ³ | 10 ³ mm ³ | mm | mm | mm | mm ⁴ | 10 ⁶ mm ⁶ |
| 64 | 0.7 | 14.15 | 18.57 | 32.72 | 132.44 | 93.371 | 31.82 | 2.855 | 2.435 | 26.55 | 15.50 | 87.85 | 18.87 | 19.4 | |
| 76 | 0.7 | 13.12 | 17.99 | 31.11 | 144.63 | 137.059 | 33.465 | 3.542 | 2.384 | 30.78 | 15.21 | 92.44 | 20.24 | 28.7 | |
| 92 | 0.7 | 12 | 17.22 | 29.22 | 160.88 | 211.66 | 35.271 | 4.532 | 2.337 | 36.27 | 14.81 | 100.95 | 22.07 | 44.4 | |

Notes:

- Section properties are approximate only and may be subject to revision.
- Section properties tabulated are gross section properties.
- The strength and serviceability section capacities are based on effective section properties calculated in accordance with AS 4600 "Cold Formed Steel Structures Code".

Span Tables - Internal Stud Wall Heights

Plasterboard

Table 72

| MAXIMUM WALL HEIGHTS - LINING BOTH SIDES L/240 | | | | | | | | | | |
|---|-----------------|----------------------|-------|-------|-------------------|-------|-------|-------------------|-------|-------|
| PLASTER THICKNESS (mm) | | 10mm PLASTERBOARD | | | 13mm PLASTERBOARD | | | 16mm PLASTERBOARD | | |
| STUD SPACING (mm) | | 300mm | 450mm | 600mm | 300mm | 450mm | 600mm | 300mm | 450mm | 600mm |
| PART NO. | STUD SIZE | MAX WALL HEIGHT (mm) | | | | | | | | |
| S51050 | 51mm x 0.50BMT | 3400 | 3050 | 2790 | 3730 | 3450 | 3195 | 3830 | 3550 | 3350 |
| S64050 | 64mm x 0.50BMT | 3980 | 3630 | 3400 | 4270 | 3990 | 3700 | 4460 | 4130 | 3900 |
| S64075 | 64mm x 0.75BMT | 4550 | 4150 | 3900 | 4750 | 4400 | 4200 | 4930 | 4600 | 4350 |
| S64115 | 64mm x 1.15BMT | 4940 | 4460 | 4180 | 5100 | 4680 | 4400 | 5260 | 4820 | 4550 |
| S76055 | 76mm x 0.55BMT | 4530 | 4050 | 3730 | 4850 | 4450 | 4160 | 5060 | 4600 | 4300 |
| S76075 | 76mm x 0.75BMT | 5250 | 4750 | 4450 | 5650 | 5250 | 4920 | 5850 | 5460 | 5100 |
| S76115 | 76mm x 1.15BMT | 5690 | 5070 | 4670 | 6030 | 5530 | 5180 | 6220 | 5690 | 5400 |
| S92055 | 92mm x 0.55BMT | 5350 | 4870 | 4560 | 5640 | 5210 | 4850 | 5850 | 5460 | 5100 |
| S92075 | 92mm x 0.75BMT | 5920 | 5280 | 4850 | 6250 | 5750 | 5480 | 6490 | 6050 | 5650 |
| S92115 | 92mm x 1.15BMT | 6400 | 5650 | 5150 | 6720 | 6180 | 5770 | 6930 | 6380 | 5950 |
| S15007 | 150mm x 0.75BMT | 7850 | 7160 | 6590 | 8140 | 7560 | 6750 | 8250 | 7670 | 7290 |
| S15012 | 150mm x 1.15BMT | 8590 | 7760 | 7280 | 8760 | 8040 | 7590 | 8900 | 8180 | 7710 |

Table 73

| MAXIMUM WALL HEIGHTS - LINING ONE SIDE L/240 | | | | | | | | | | |
|---|-----------------|----------------------|-------|-------|-------------------|-------|-------|-------------------|-------|-------|
| PLASTER THICKNESS (mm) | | 10mm PLASTERBOARD | | | 13mm PLASTERBOARD | | | 16mm PLASTERBOARD | | |
| STUD SPACING (mm) | | 300mm | 450mm | 600mm | 300mm | 450mm | 600mm | 300mm | 450mm | 600mm |
| PART NO. | STUD SIZE | MAX WALL HEIGHT (mm) | | | | | | | | |
| S51050 | 51mm x 0.50BMT | 2900 | 2530 | 2350 | 2910 | 2540 | 2360 | 2920 | 2550 | 2370 |
| S64050 | 64mm x 0.50BMT | 3400 | 2980 | 2730 | 3410 | 2990 | 2750 | 3470 | 3060 | 2760 |
| S64075 | 64mm x 0.75BMT | 3950 | 3450 | 3180 | 4020 | 3540 | 3250 | 4060 | 3560 | 3280 |
| S64115 | 64mm x 1.15BMT | 4450 | 3880 | 3550 | 4500 | 3950 | 3600 | 4550 | 3980 | 3620 |
| S76055 | 76mm x 0.55BMT | 4050 | 3530 | 3220 | 4140 | 3600 | 3250 | 4160 | 3620 | 3280 |
| S76075 | 76mm x 0.75BMT | 4500 | 3950 | 3600 | 4700 | 4100 | 3750 | 4730 | 4180 | 3800 |
| S76115 | 76mm x 1.15BMT | 5130 | 4480 | 4070 | 5150 | 4490 | 4080 | 5170 | 4500 | 4090 |
| S92055 | 92mm x 0.55BMT | 4640 | 4080 | 3650 | 4660 | 4090 | 3670 | 4680 | 4100 | 3690 |
| S92075 | 92mm x 0.75BMT | 5200 | 4540 | 4150 | 5290 | 4610 | 4190 | 5320 | 4630 | 4220 |
| S92115 | 92mm x 1.15BMT | 5930 | 5180 | 4700 | 5950 | 5200 | 4720 | 5970 | 5220 | 4730 |
| S15007 | 150mm x 0.75BMT | 7370 | 6600 | 5350 | 7390 | 6650 | 5390 | 7400 | 6680 | 5430 |
| S15012 | 150mm x 1.15BMT | 8300 | 7450 | 6850 | 8320 | 7480 | 6880 | 8350 | 7500 | 6900 |

* See page 37 for nogging requirements.

Notes:

1. Serviceability limits are as stated on tables.
2. Tables 57-60 are for internal non-load bearing walls.
3. Internal design pressures = 0.25 kPa serviceability and 0.375 kPa strength as per BCA 2009.
4. It is assumed the top plate is restrained laterally.
5. Shelf loading has not been allowed for in tabulated wall heights.
6. Noggings to be used in accordance with *Table 58* on page 38.
7. The above wall heights are suitable for up to two layers of the nominated lining thickness.

Span Tables - Internal Stud Wall Heights

Brittle Substrates - (ie. tiles, glass etc.)

Table 74

| MAXIMUM WALL HEIGHTS - LINING BOTH SIDES L/360 | | | | | | | | | | |
|---|-----------------|----------------------|-------|-------|-------------------|-------|-------|-------------------|-------|-------|
| PLASTER THICKNESS (mm) | | 10mm PLASTERBOARD | | | 13mm PLASTERBOARD | | | 16mm PLASTERBOARD | | |
| STUD SPACING (mm) | | 300mm | 450mm | 600mm | 300mm | 450mm | 600mm | 300mm | 450mm | 600mm |
| PART NO. | STUD SIZE | MAX WALL HEIGHT (mm) | | | | | | | | |
| S51050 | 51mm x 0.50BMT | 3050 | 2750 | 2570 | 3340 | 3070 | 2910 | 3360 | 3150 | 3050 |
| S64050 | 64mm x 0.50BMT | 3520 | 3210 | 3110 | 3760 | 3520 | 3350 | 3950 | 3700 | 3600 |
| S64075 | 64mm x 0.75BMT | 4000 | 3660 | 3490 | 4200 | 3910 | 3730 | 4420 | 4100 | 3910 |
| S64115 | 64mm x 1.15BMT | 4330 | 3940 | 3680 | 4500 | 4150 | 3920 | 4680 | 4300 | 4060 |
| S76055 | 76mm x 0.55BMT | 4030 | 3680 | 3350 | 4280 | 3930 | 3750 | 4460 | 4150 | 3900 |
| S76075 | 76mm x 0.75BMT | 4620 | 4200 | 4000 | 4810 | 4540 | 4310 | 5160 | 4750 | 4550 |
| S76115 | 76mm x 1.15BMT | 5000 | 4520 | 4210 | 5260 | 4820 | 4580 | 5480 | 5040 | 4800 |
| S92055 | 92mm x 0.55BMT | 4710 | 4310 | 4050 | 4970 | 4600 | 4370 | 5190 | 4810 | 4610 |
| S92075 | 92mm x 0.75BMT | 5230 | 4750 | 4420 | 5530 | 5170 | 4870 | 5760 | 5350 | 5100 |
| S92115 | 92mm x 1.15BMT | 5700 | 5090 | 4670 | 6000 | 5440 | 5150 | 6190 | 5640 | 5350 |
| S15007 | 150mm x 0.75BMT | 7150 | 6370 | 5880 | 7350 | 6680 | 6270 | 7540 | 6850 | 6440 |
| S15012 | 150mm x 1.15BMT | 7950 | 7060 | 6480 | 8200 | 7320 | 6840 | 8310 | 7480 | 6970 |

Table 75

| MAXIMUM WALL HEIGHTS - LINING ONE SIDE L/360 | | | | | | | | | | |
|---|-----------------|----------------------|-------|-------|-------------------|-------|-------|-------------------|-------|-------|
| PLASTER THICKNESS (mm) | | 10mm PLASTERBOARD | | | 13mm PLASTERBOARD | | | 16mm PLASTERBOARD | | |
| STUD SPACING (mm) | | 300mm | 450mm | 600mm | 300mm | 450mm | 600mm | 300mm | 450mm | 600mm |
| PART NO. | STUD SIZE | MAX WALL HEIGHT (mm) | | | | | | | | |
| S51050 | 51mm x 0.50BMT | 2520 | 2240 | 2020 | 2540 | 2260 | 2040 | 2560 | 2280 | 2060 |
| S64050 | 64mm x 0.50BMT | 2960 | 2590 | 2360 | 2980 | 2600 | 2370 | 3100 | 2690 | 2450 |
| S64075 | 64mm x 0.75BMT | 3450 | 3000 | 2750 | 3560 | 3120 | 2850 | 3580 | 3150 | 2880 |
| S64115 | 64mm x 1.15BMT | 3880 | 3400 | 3100 | 3970 | 3490 | 3170 | 3990 | 3510 | 3190 |
| S76055 | 76mm x 0.55BMT | 3520 | 3080 | 2800 | 3670 | 3220 | 2950 | 3700 | 3260 | 2960 |
| S76075 | 76mm x 0.75BMT | 3940 | 3430 | 3120 | 4100 | 3700 | 3400 | 4140 | 3770 | 3460 |
| S76115 | 76mm x 1.15BMT | 4460 | 3890 | 3550 | 4470 | 3900 | 3570 | 4480 | 3910 | 3590 |
| S92055 | 92mm x 0.55BMT | 4070 | 3560 | 3230 | 4160 | 3630 | 3260 | 4200 | 3650 | 3280 |
| S92075 | 92mm x 0.75BMT | 4530 | 3960 | 3610 | 4690 | 4120 | 3750 | 4700 | 4130 | 3780 |
| S92115 | 92mm x 1.15BMT | 5160 | 4520 | 4100 | 5250 | 4580 | 4150 | 5300 | 4600 | 4160 |
| S15007 | 150mm x 0.75BMT | 6680 | 5810 | 5270 | 6700 | 5830 | 5290 | 6730 | 5850 | 5300 |
| S15012 | 150mm x 1.15BMT | 7620 | 6660 | 6060 | 7640 | 6690 | 6090 | 7660 | 6730 | 6110 |

* See page 37 for noggling requirements.

Notes:

1. Serviceability limits are as stated on tables.
2. Tables 57-60 are for internal non-load bearing walls.
3. Internal design pressures = 0.25 kPa serviceability and 0.375 kPa strength as per BCA 2009.
4. It is assumed the top plate is restrained laterally.
5. Shelf loading has not been allowed for in tabulated wall heights.
6. Noggings to be used in accordance with *Table 58* on page 38.
7. The above wall heights are suitable for up to two layers of the nominated lining thickness.

Shelf Loadings - Stud Walls

Steel Stud Systems

Table 84

| MAXIMUM ALLOWABLE SHELF LOADS- WALL HEIGHT 2400mm | | | | | | | |
|--|----------------|---|-----|-----|-----|-----|-----|
| WALL HEIGHT - 2400mm | | NUMBER OF SHELVES SPACED EQUALLY OVER FULL HEIGHT | | | | | |
| STUD SIZE | SHELF WIDTH mm | 1 | 2 | 3 | 4 | 5 | 6 |
| | | MAXIMUM ALLOWABLE SHELF LOAD IN kg PER METRE RUN OF SHELF | | | | | |
| 64mm x 0.55BMT | 200 | 122 | 67 | 55 | 51 | 49 | 47 |
| | 300 | 81 | 45 | 37 | 34 | 33 | 32 |
| | 400 | 61 | 33 | 27 | 26 | 25 | 24 |
| 64mm x 0.75BMT | 200 | 183 | 100 | 82 | 77 | 74 | 71 |
| | 300 | 122 | 67 | 55 | 51 | 49 | 47 |
| | 400 | 92 | 50 | 41 | 39 | 37 | 36 |
| 76mm x 0.55BMT | 200 | 203 | 111 | 91 | 85 | 82 | 79 |
| | 300 | 135 | 74 | 61 | 57 | 55 | 53 |
| | 400 | 101 | 55 | 46 | 43 | 41 | 39 |
| 76mm x 0.75BMT | 200 | 277 | 151 | 124 | 116 | 112 | 108 |
| | 300 | 184 | 101 | 83 | 78 | 75 | 72 |
| | 400 | 138 | 76 | 62 | 58 | 56 | 54 |
| 76mm x 1.15BMT | 200 | 424 | 232 | 190 | 179 | 172 | 165 |
| | 300 | 283 | 155 | 127 | 119 | 115 | 110 |
| | 400 | 212 | 116 | 95 | 89 | 86 | 83 |

Table 85

| MAXIMUM ALLOWABLE SHELF LOADS- WALL HEIGHT 2700mm | | | | | | | |
|--|----------------|---|-----|-----|-----|-----|-----|
| WALL HEIGHT - 2700mm | | NUMBER OF SHELVES SPACED EQUALLY OVER FULL HEIGHT | | | | | |
| STUD SIZE | SHELF WIDTH mm | 1 | 2 | 3 | 4 | 5 | 6 |
| | | MAXIMUM ALLOWABLE SHELF LOAD IN kg PER METRE RUN OF SHELF | | | | | |
| 64mm x 0.55BMT | 200 | 109 | 59 | 49 | 46 | 44 | 42 |
| | 300 | 72 | 40 | 32 | 30 | 29 | 28 |
| | 400 | 54 | 30 | 24 | 23 | 22 | 21 |
| 64mm x 0.75BMT | 200 | 163 | 89 | 73 | 69 | 66 | 63 |
| | 300 | 109 | 59 | 49 | 46 | 44 | 42 |
| | 400 | 81 | 45 | 37 | 34 | 33 | 32 |
| 64mm x 1.15BMT | 200 | 250 | 137 | 112 | 105 | 101 | 97 |
| | 300 | 166 | 91 | 75 | 70 | 67 | 65 |
| | 400 | 92 | 50 | 41 | 39 | 37 | 36 |
| 76mm x 0.55BMT | 200 | 180 | 99 | 81 | 76 | 73 | 70 |
| | 300 | 120 | 66 | 54 | 51 | 49 | 47 |
| | 400 | 90 | 49 | 40 | 38 | 37 | 35 |
| 76mm x 0.75BMT | 200 | 246 | 134 | 110 | 104 | 100 | 96 |
| | 300 | 164 | 90 | 74 | 69 | 66 | 64 |
| | 400 | 138 | 76 | 62 | 58 | 56 | 54 |
| 76mm x 1.15BMT | 200 | 377 | 206 | 169 | 159 | 153 | 147 |
| | 300 | 251 | 137 | 113 | 106 | 102 | 98 |
| | 400 | 212 | 116 | 95 | 89 | 86 | 83 |

Shelf Loadings - Stud Walls

Table 86

| MAXIMUM ALLOWABLE SHELF LOADS- WALL HEIGHT 3000mm | | | | | | | |
|--|-----------------------|--|----------|----------|----------|----------|----------|
| WALL HEIGHT - 3000mm | | NUMBER OF SHELVES SPACED EQUALLY OVER FULL HEIGHT | | | | | |
| STUD SIZE | SHELF WIDTH mm | 1 | 2 | 3 | 4 | 5 | 6 |
| | | MAXIMUM ALLOWABLE SHELF LOAD IN kg PER METRE RUN OF SHELF | | | | | |
| 64mm x 0.55BMT | 200 | 98 | 53 | 44 | 41 | 40 | 38 |
| | 300 | 65 | 36 | 29 | 27 | 26 | 25 |
| | 400 | 49 | 27 | 22 | 21 | 20 | 19 |
| 64mm x 0.75BMT | 200 | 147 | 80 | 66 | 62 | 59 | 57 |
| | 300 | 98 | 53 | 44 | 41 | 40 | 38 |
| | 400 | 73 | 40 | 33 | 31 | 30 | 28 |
| 64mm x 1.15BMT | 200 | 225 | 123 | 101 | 95 | 91 | 87 |
| | 300 | 150 | 82 | 67 | 63 | 61 | 58 |
| | 400 | 112 | 61 | 50 | 47 | 45 | 44 |
| 76mm x 0.55BMT | 200 | 162 | 89 | 73 | 68 | 66 | 63 |
| | 300 | 108 | 59 | 49 | 46 | 44 | 42 |
| | 400 | 81 | 44 | 36 | 34 | 33 | 32 |
| 76mm x 0.75BMT | 200 | 221 | 121 | 99 | 93 | 90 | 86 |
| | 300 | 148 | 81 | 66 | 62 | 60 | 57 |
| | 400 | 111 | 61 | 50 | 47 | 45 | 43 |
| 76mm x 1.15BMT | 200 | 339 | 186 | 152 | 143 | 137 | 132 |
| | 300 | 226 | 124 | 102 | 95 | 92 | 88 |
| | 400 | 170 | 93 | 76 | 71 | 69 | 66 |

Table 87

| MAXIMUM ALLOWABLE SHELF LOADS- WALL HEIGHT 3600mm | | | | | | | |
|--|-----------------------|--|----------|----------|----------|----------|----------|
| WALL HEIGHT - 3600mm | | NUMBER OF SHELVES SPACED EQUALLY OVER FULL HEIGHT | | | | | |
| STUD SIZE | SHELF WIDTH mm | 1 | 2 | 3 | 4 | 5 | 6 |
| | | MAXIMUM ALLOWABLE SHELF LOAD IN kg PER METRE RUN OF SHELF | | | | | |
| 76mm x 0.55BMT | 200 | 135 | 74 | 61 | 57 | 55 | 53 |
| | 300 | 90 | 49 | 40 | 38 | 37 | 35 |
| | 400 | 68 | 37 | 30 | 28 | 27 | 26 |
| 76mm x 0.75BMT | 200 | 184 | 101 | 83 | 78 | 75 | 72 |
| | 300 | 123 | 67 | 55 | 52 | 50 | 48 |
| | 400 | 92 | 50 | 41 | 39 | 37 | 36 |
| 76mm x 1.15BMT | 200 | 283 | 155 | 127 | 119 | 115 | 110 |
| | 300 | 189 | 103 | 85 | 79 | 76 | 73 |
| | 400 | 141 | 77 | 63 | 60 | 57 | 55 |
| 92mm x 0.55BMT | 200 | 208 | 114 | 93 | 88 | 84 | 80 |
| | 300 | 139 | 76 | 62 | 58 | 56 | 54 |
| | 400 | 104 | 57 | 47 | 44 | 42 | 40 |
| 92mm x 0.75BMT | 200 | 284 | 155 | 127 | 120 | 115 | 110 |
| | 300 | 189 | 104 | 85 | 80 | 77 | 74 |
| | 400 | 142 | 78 | 64 | 60 | 57 | 55 |
| 92mm x 1.15BMT | 200 | 435 | 238 | 195 | 183 | 176 | 169 |
| | 300 | 290 | 159 | 130 | 122 | 118 | 113 |
| | 400 | 218 | 119 | 98 | 92 | 88 | 85 |

Shelf Loadings - Stud Walls

Steel Stud Systems

Table 88

| MAXIMUM ALLOWABLE SHELF LOADS- WALL HEIGHT 4200mm | | | | | | | |
|--|----------------|---|-----|-----|-----|-----|-----|
| WALL HEIGHT - 4200mm | | NUMBER OF SHELVES SPACED EQUALLY OVER FULL HEIGHT | | | | | |
| STUD SIZE | SHELF WIDTH mm | 1 | 2 | 3 | 4 | 5 | 6 |
| | | MAXIMUM ALLOWABLE SHELF LOAD IN kg PER METRE RUN OF SHELF | | | | | |
| 76mm x 0.55BMT | 200 | 116 | 63 | 52 | 49 | 47 | 45 |
| | 300 | 77 | 42 | 35 | 33 | 31 | 30 |
| | 400 | 58 | 32 | 26 | 24 | 23 | 23 |
| 76mm x 0.75BMT | 200 | 158 | 86 | 71 | 67 | 64 | 61 |
| | 300 | 105 | 58 | 47 | 44 | 43 | 41 |
| | 400 | 79 | 43 | 35 | 33 | 32 | 31 |
| 76mm x 1.15BMT | 200 | 242 | 133 | 109 | 102 | 98 | 94 |
| | 300 | 162 | 88 | 73 | 68 | 65 | 63 |
| | 400 | 121 | 66 | 54 | 51 | 49 | 47 |
| 92mm x 0.55BMT | 200 | 178 | 98 | 80 | 75 | 72 | 69 |
| | 300 | 119 | 65 | 53 | 50 | 48 | 46 |
| | 400 | 89 | 49 | 40 | 38 | 36 | 35 |
| 92mm x 0.75BMT | 200 | 243 | 133 | 109 | 102 | 99 | 95 |
| | 300 | 162 | 89 | 73 | 68 | 66 | 63 |
| | 400 | 122 | 67 | 55 | 51 | 49 | 47 |
| 92mm x 1.15BMT | 200 | 373 | 204 | 168 | 157 | 151 | 145 |
| | 300 | 249 | 136 | 112 | 105 | 101 | 97 |
| | 400 | 187 | 102 | 84 | 79 | 76 | 73 |

Table 89

| MAXIMUM ALLOWABLE SHELF LOADS- WALL HEIGHT 4800mm | | | | | | | |
|--|----------------|---|-----|-----|-----|-----|-----|
| WALL HEIGHT - 4800mm | | NUMBER OF SHELVES SPACED EQUALLY OVER FULL HEIGHT | | | | | |
| STUD SIZE | SHELF WIDTH mm | 1 | 2 | 3 | 4 | 5 | 6 |
| | | MAXIMUM ALLOWABLE SHELF LOAD IN kg PER METRE RUN OF SHELF | | | | | |
| 76mm x 0.55BMT | 200 | 101 | 55 | 46 | 43 | 41 | 39 |
| | 300 | 68 | 37 | 30 | 28 | 27 | 26 |
| | 400 | 51 | 28 | 23 | 21 | 21 | 20 |
| 76mm x 0.75BMT | 200 | 138 | 76 | 62 | 58 | 56 | 54 |
| | 300 | 92 | 50 | 41 | 39 | 37 | 36 |
| | 400 | 69 | 38 | 31 | 29 | 28 | 27 |
| 76mm x 1.15BMT | 200 | 212 | 116 | 95 | 89 | 86 | 83 |
| | 300 | 141 | 77 | 63 | 60 | 57 | 55 |
| | 400 | 106 | 58 | 48 | 45 | 43 | 41 |
| 92mm x 0.55BMT | 200 | 156 | 85 | 70 | 66 | 63 | 61 |
| | 300 | 104 | 57 | 47 | 44 | 42 | 40 |
| | 400 | 78 | 43 | 35 | 33 | 32 | 30 |
| 92mm x 0.75BMT | 200 | 213 | 116 | 96 | 90 | 86 | 83 |
| | 300 | 142 | 78 | 64 | 60 | 57 | 55 |
| | 400 | 106 | 58 | 48 | 45 | 43 | 41 |
| 92mm x 1.15BMT | 200 | 326 | 179 | 147 | 137 | 132 | 127 |
| | 300 | 218 | 119 | 98 | 92 | 88 | 85 |
| | 400 | 163 | 89 | 73 | 69 | 66 | 63 |

Shelf Loadings - Stud Walls

Table 90

| MAXIMUM ALLOWABLE SHELF LOADS- WALL HEIGHT 6000mm | | | | | | | |
|---|----------------|---|-----|-----|-----|-----|-----|
| WALL HEIGHT - 6000mm | | NUMBER OF SHELVES SPACED EQUALLY OVER FULL HEIGHT | | | | | |
| STUD SIZE | SHELF WIDTH mm | 1 | 2 | 3 | 4 | 5 | 6 |
| | | MAXIMUM ALLOWABLE SHELF LOAD IN kg PER METRE RUN OF SHELF | | | | | |
| 92mm x 1.15BMT | 200 | 261 | 143 | 117 | 110 | 106 | 102 |
| | 300 | 174 | 95 | 78 | 73 | 71 | 68 |
| | 400 | 131 | 71 | 59 | 55 | 53 | 51 |
| 150mm x 0.75BMT | 200 | 450 | 250 | 167 | 125 | 100 | 83 |
| | 300 | 298 | 196 | 161 | 120 | 95 | 83 |
| | 400 | 232 | 147 | 121 | 113 | 90 | 80 |
| 150mm x 1.15BMT | 200 | 650 | 400 | 370 | 346 | 320 | 267 |
| | 300 | 475 | 300 | 246 | 231 | 222 | 213 |
| | 400 | 368 | 225 | 185 | 173 | 167 | 160 |

Design Parameters and Assumptions

Preparation of the Shelf load Tables have been based on the following assumptions.

1. Max Stud Spacing - 600mm.
2. Top and bottom wall tracks are mechanically fixed to floor and ceiling framing.
3. Studs are mechanically fixed to top and bottom wall tracks.
4. Studs and track sections are manufactured by Studco Building Systems.
5. Shelves are evenly distributed over 2/3 the wall height.
6. The tables are applicable to shelves on one side of the wall.
7. Studco takes no responsibility for the shelf design or the attachment methods unless specifically requested to carry out checks on particular systems.
8. The tables have been designed for a deflection limit of wall height/480.
9. Wall studs are clad both sides with 13mm plasterboard or thicker.
10. Noggings are provided in accordance with minimum requirements as specified for wall construction.
11. Studs are to be continuous, not spliced.

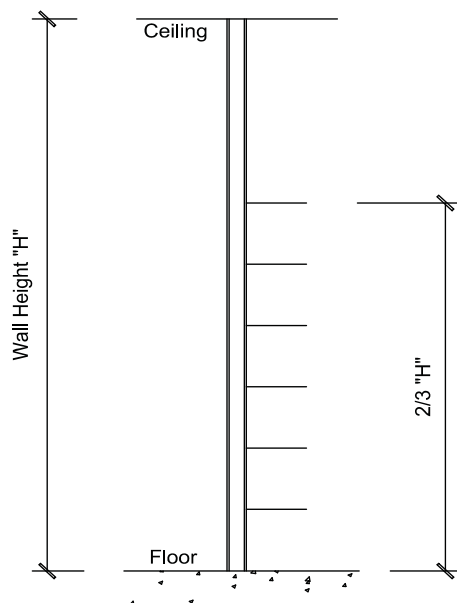


Fig. 1 Shelf Distribution Detail

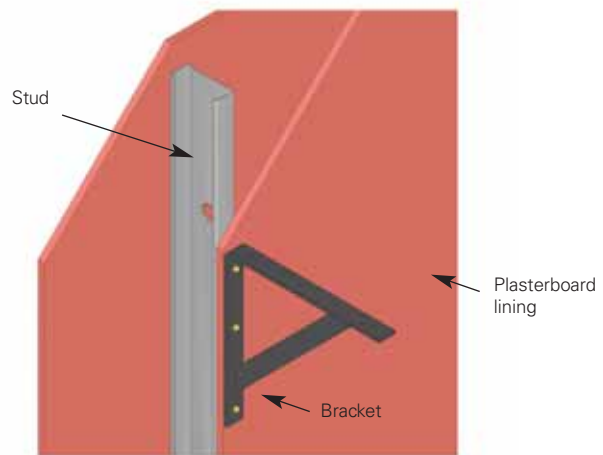


Fig. 2 Bracket Fixing to Stud Wall.

Consult Studco Engineer for project specifications.