Drywall Grid System Technical Guide QuikStix Bulkheads

Armstrong CEILING SOLUTIONS

DRYWALL GRID SYSTEM

Drywall Grid Systems

Features and Benefits

Armstrong Drywall Grid is fast and easy to install and an economical alternative to TCR and Furring Channel construction.

Applications

Armstrong Drywall Grid Systems offer flexible design solutions for:

- Flat and Curved Ceilings
- Bulkheads (Multiple Step and Curved)
- Transitions to Acoustical Ceilings
- Margins
- Perimeters
- Walls

Features

- **PeakForm**
  Patented profile increases strength and stability for improved performance during installation
- **Knurled Face**
  Positive screw penetration into tees
- **SuperLock / XL²**
  Main Bar and Cross Runner clips are engineered for a strong secure connection and fast accurate alignment confirmed with an audible click; easy to remove and relocate
- **ScrewStop**
  Reverse hem prevents screw spin off on Tee face
- **38mm Wide Face**
  Main Bars and Cross Runners – easy installation of screw fixed plasterboard sheets
- **Rotary stitched Double Thickness Web**
  For additional torsional strength and stability
- **Simple Integration of Mechanical Services**

Benefits

- Reduced installation time
- Reduced labour costs
- Reduced material costs and wastage
- Low 38mm profile across one plane
- Material off cuts can be used for bracing and as an alternative suspension method

Physical Data

- Material: Hot dipped galvanised steel
- Recycled Content: 25%
- Surface Finish: Z275 galvanised
- Main Bar / Cross Runner Interface: Joggled ends
- End Detail:
  - Main Bar: staked-on SuperLock clip
  - Cross Runner: staked-on XL² clip

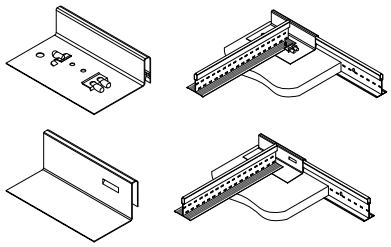
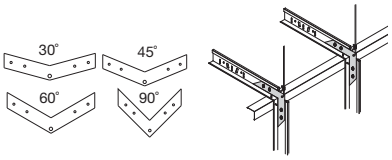
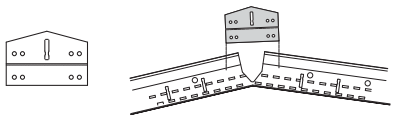
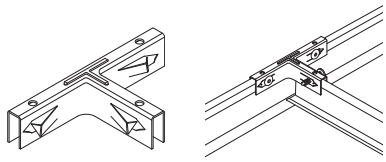
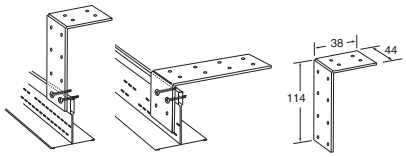
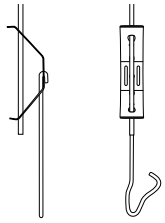
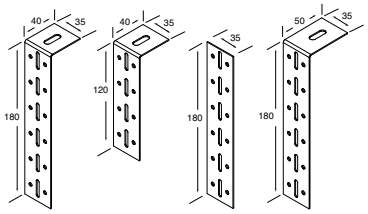
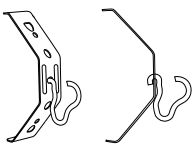
Code Compliance

Armstrong DGS is designed and manufactured to comply with the following standards:

AS/NZS 2785-2020: Suspended Ceilings – Design and Installation
AS/NZ 2589-2007: Gypsum linings – Application and finishing
AS/NZ 1397-2002: Steel sheet and strip – Hot-dipped zinc-coated or aluminium/zinc-coated
AS/NZ 4600-2005: Cold-formed steel structures
AS/NZ 1170-2002: Structural Design Actions

Grid Accessories

LEGEND: • Flat Ceilings, • Wall systems, • Curved Ceilings, • Quikstix Bulkheads, • ShortSpan

Application	Item Number	Product Description	Pcs / Bucket	Legend
		**Transition Clips with Locking Tabs** facilitate transition from drywall to acoustical ceiling; one-sided hold-down clip; eliminates need for drywall bead. Locking tabs provide secure location for DGS tees		
	BPDW10LT	**For 10mm Plasterboard**	125	•
	BPDW13LT	**For 13mm Plasterboard**	125	•
	BPDW16LT	**For 16mm Plasterboard**	125	•
	ALDW13	**Suits 45/50 Top Hat for 13mm Plasterboard**	100	•
	BPDW30C BPDW45C BPDW60C BPDW90C	30, 45, 60 and 90 degree **Drywall Angle Clips** are used to create positive and secure angles for drywall and ceiling installations on either Main Bars or Cross Runners	250 250 250 250	• • • •
	BPRC2	**Radius Clip** is used to secure the Main Bar at the desired angle in curved ceiling applications. Includes a rout for Cross Runners installation	205	•
	BPGC3W	**3 Way Bite Clip** connects Intersecting Cross Runners at any point along a Main Bar or other Cross Runners	250	• • •
	BPQSUTC*	**Up Tight Clip** is used for Direct fix applications *Non stock item – lead time required	150	• • • •
	SCDGS	**Rod Hanging Clip** is the standard height adjustable suspension clip connecting from 2.5mm or 5mm rod to the DGS Main Bar	100	• • •
	DWDFC DWDFC120 DWDFFC180 DWDFC18050	**Direct Fix Clip** – 180mm L Shape **Direct Fix Clip** – 120mm L Shape **Direct Fix Clip** – 180mm Flat Extension **Direct Fix Clip** – 180mm L Shape with 50mm Head	100 100 100 100	• • • • • • • • • • • • • • •
	DGSSCS	**DGS Suspension Clip Small** is the standard height adjustable suspension clip connecting from 2.5mm or 5mm rod to the DGS Main Bar	100	• • •
	DGSSCTR	**DGS Threaded Rod Clip** is a suspension clip for 6mm Threaded Rod	100	• • •

QuikStix Bulkheads

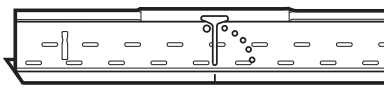
Armstrong DGS QuikStix is a fast and easy solution for framing “Bulkhead” Ceilings and an economical alternative to Stud and Track construction.

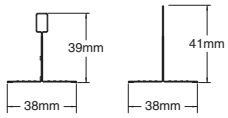
Features

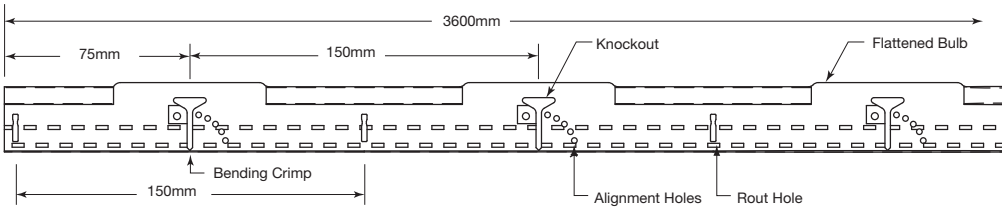
- Knockouts at 150mm centers reduces cutting time.
- Alignment holes make screw installation simple and forms perfect 30, 45, 60, 75 and 90 degree angles.
- Flattened bulb is offset to allow true angles without interference.
- Bending crimp prevents misalignment.
- 90 degree angle fits locking angle mold (LAT-36).

Components

QuikStix Tee with Knurled Face

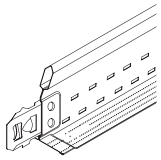




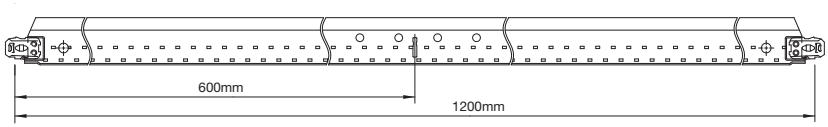


Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Carton / Weight pcs	lm	kg
BP 79QS36	3600	39/41	38	75 in / 150 o.c.	12	43.2	21

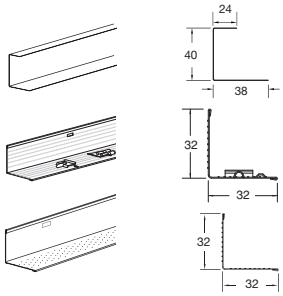
Cross Runner: PeakForm 38 XL2 with Knurled Face (bulb-to-bulb connection)



BP 793033	1200	38	38	Centre	36	43.20	21

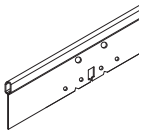


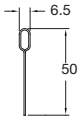
Perimeter Trims



Knurled Channel Moulding (hemmed with Knurled lower leg)							
BP KCM 36	3600	40	38	–	12	43.2	15.6
Locking Angle Trim (hemmed with Knurled faces)							
BP LAT36	3600	32	32	75 in / 150 o.c.	20	72	26
Angle Trim (hemmed with Knurled faces)							
BP KAM36	3600	32	32	–	20	72	26

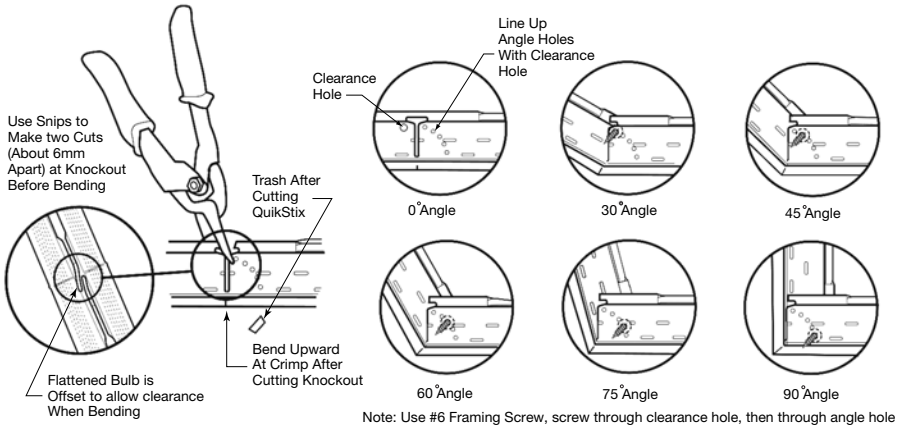
StrongBack Support

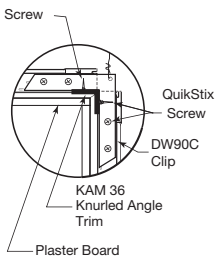




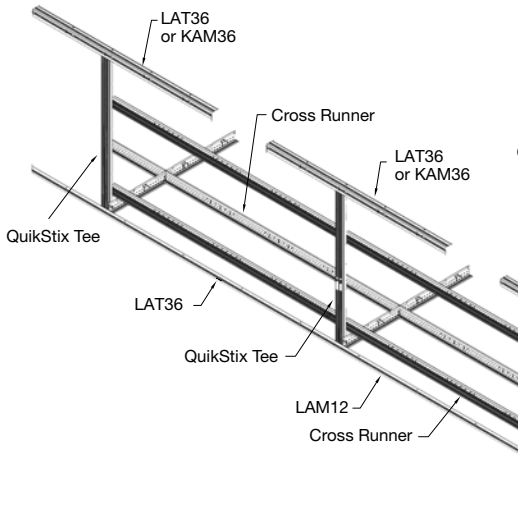
BP 79SB36	3600	50	–	150	12	43.20	21

QuikStix Bulkheads

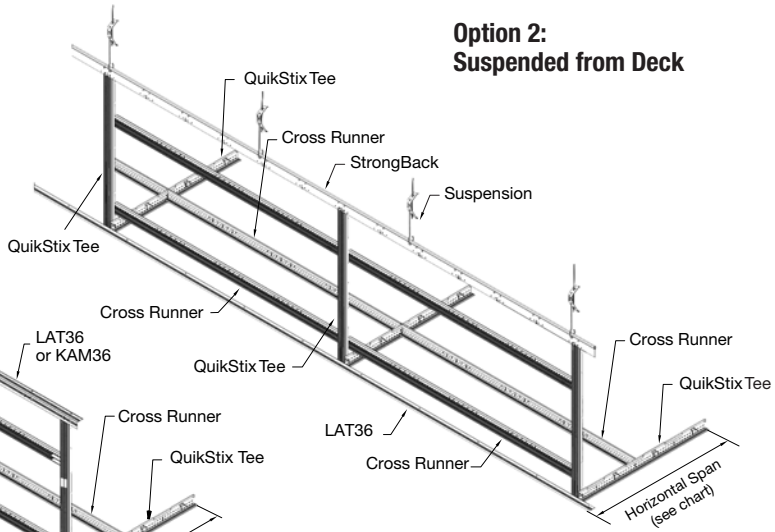




Option 1:
Direct Attach Method



Option 2:
Suspended from Deck



QuikStix Bulkhead Board Loadings/Design – Maxium Weight m²

NOTE – Horizontal Spans Greater Than 900mm Require Vertical Support
NOTE – For Stepped Bulkheads Please Consult The DGS Technical Guide

Frame Centres	Horizontal Span			
	400mm	600mm	800mm	900mm
600mm	1 x 16mm Plasterboard	1 X 16mm Plasterboard	1 x 13mm Plasterboard	1 x 13mm Plasterboard

NOTE – All Vertical Framing To Be Installed At A Maxium Of 600mm Centres

Suspended Bulkhead	
Suspension Points	Vertical Drop
600mm Centres	2775mm
1200mm Centres	1050mm

Direct Fixed Bulkhead	
Fixing Centres	Vertical Drop
600mm	2775mm

NOTE – Suspended Bulkheads to be screw fixed to strongback
Refer to above table for suspension Points

10mm Plasterboard	6.8kgs m²
13mm Plasterboard	8.6kgs m²
13mm Plasterboard	10.5kgs m²
16mm Plasterboard	13kgs m²
10mm Ceiling Board	7.2kgs m²

Design Loads Based On Items Below

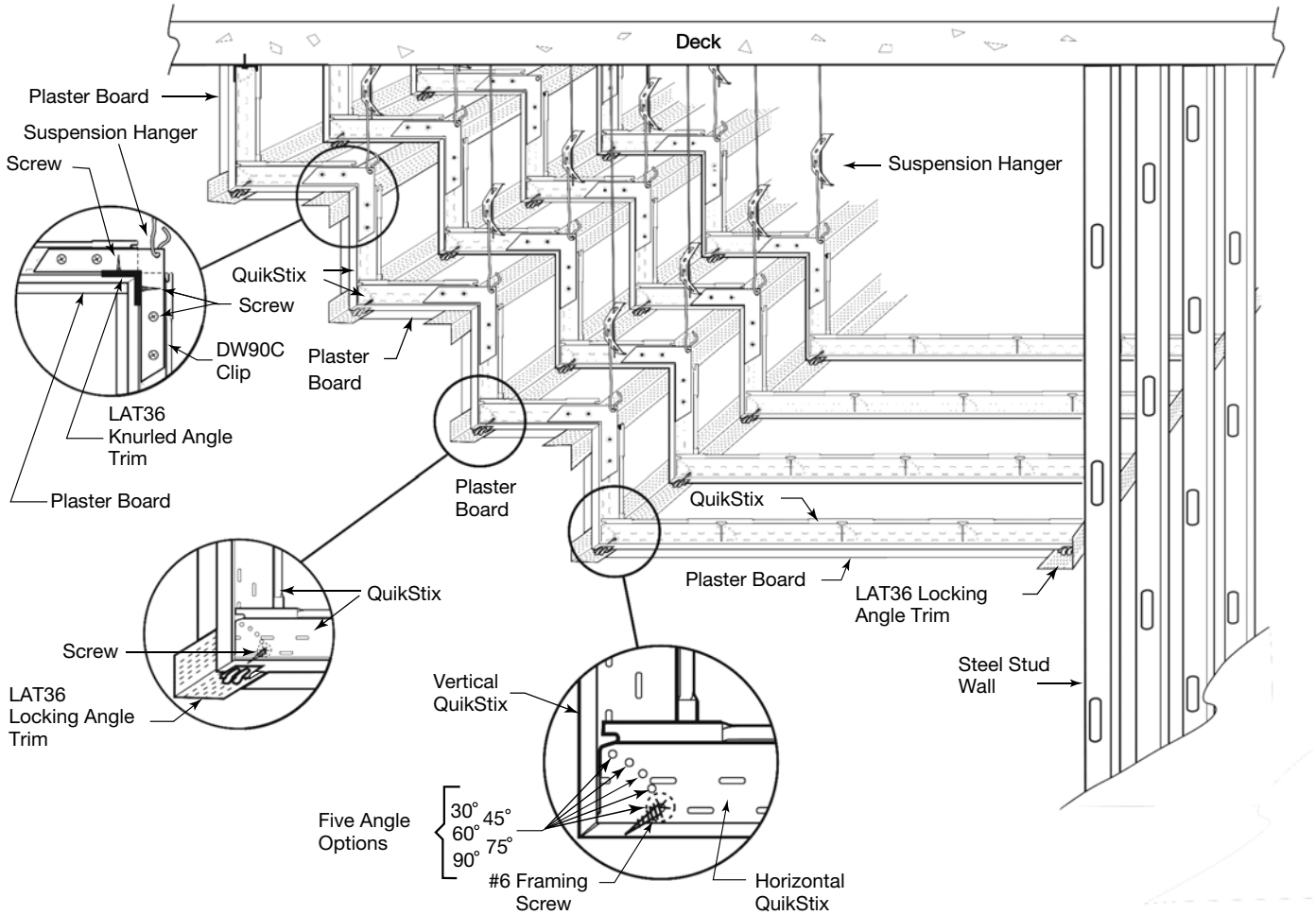
BP79QS36	QUIKSTIX
BP79SB36	STRONGBACK

QuikStix Bulkheads

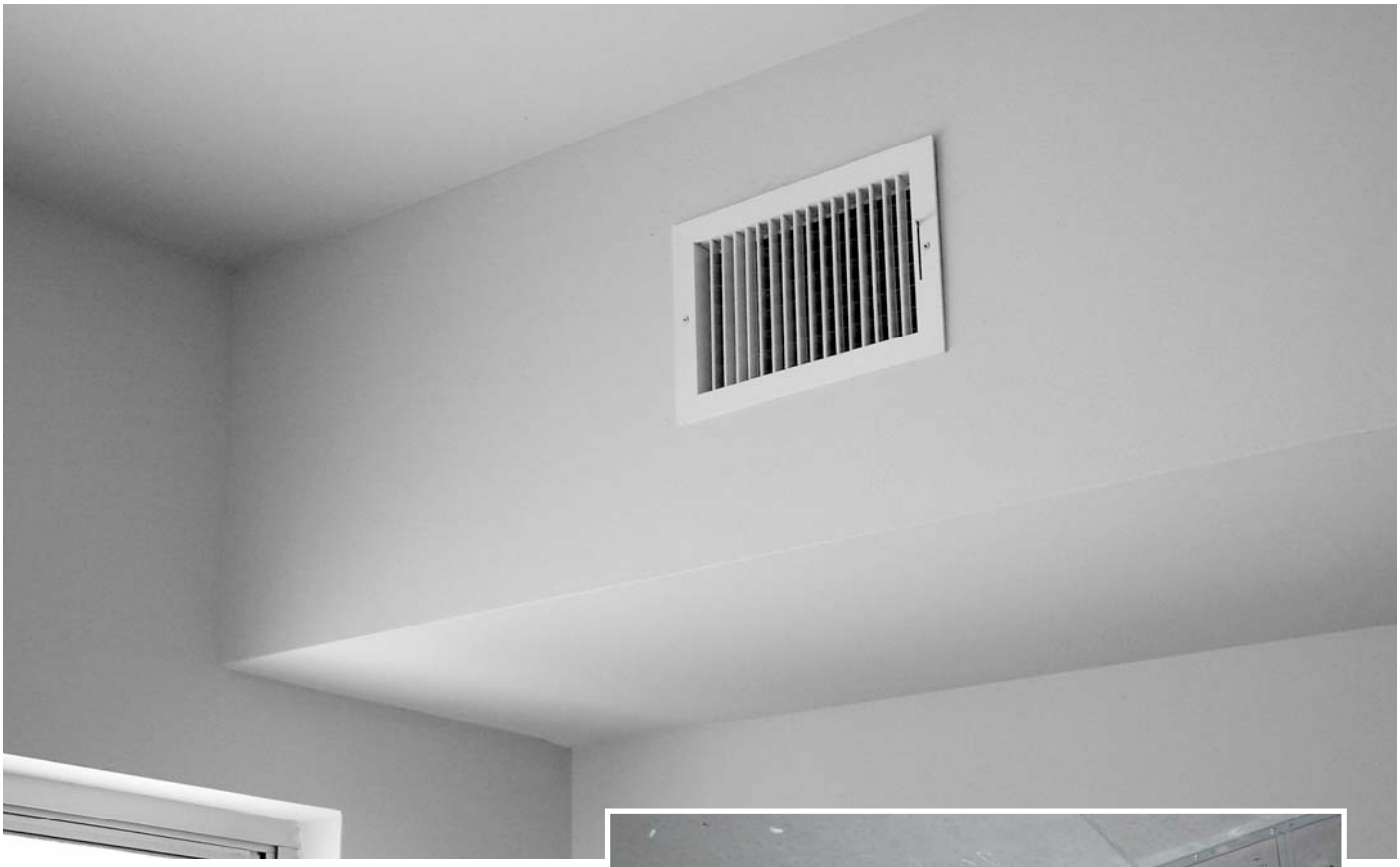
Loadings/Design Considerations

- If QS section is spaced at 600 on centre, with a horizontal span of 900, the system will carry 18.16 kg/m^2.
- Moving QS sections further apart, to 1200, with 1200 tees between, and a horizontal span of 800, the system will carry 10.22 kg/m^2.
- If tees are used to spread QS sections further apart, tees should be installed at 450 o/c.
- Horizontal spans greater than 900 require vertical support.
- Diagonal bracing as required inside the soffit.
- Vericat height of soffit can be taken from chart.
- Vertical Drops measured when BoxBeam is suspended by StrongBack.
- If BoxBeam is suspended from upper ceiling, it must be screwed directly to main beams, with a hanger to structure above the connection. Diagonal bracing inside the box as required.
- Box ribs spaced at 600 o/c.
- Loads applied based on 15mm board, with board on two sides and bottom.
- Dimensions are for each side of box or drop – 2925 maximum drop for soffit/box.

Drywall Step Vertical

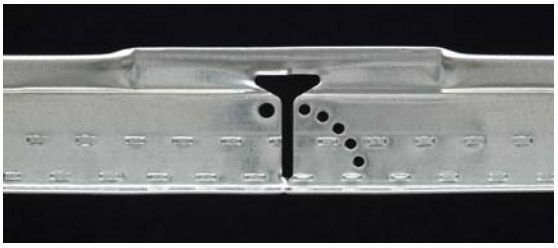


QuikStix Bulkheads



Above: A completed QuikStix Bulkhead Installation

Right: QuikStix Bulkhead Installation in progress



QuikStix Knockout Close-up

QuikStix Large Bulkhead

QuikStix Stepped Bulkhead

Archtectural Specifications

Flat Plasterboard Ceilings: Suspended Grid shall be Armstrong Drywall Grid System, comprising of Main Bars and Cross Runners, including Wall Mouldings and Transition Trims, as per manufacturer's instructions.

Curved Plasterboard Ceilings: Suspended Grid shall be Armstrong Drywall Grid System, comprising of Main Bars (facetted) and Cross Runners, including Wall Mouldings and Transition Trims, as per manufacturer's instructions.

Corridors or Plasterboard Margins: Suspended Grid shall be Armstrong DGS ShortSpan, comprising of ShortSpan Tees and StrongBack Support sections (where required), including Wall Mouldings and Transition Trims as per manufacturer's instructions.

Bulkhead / Soffit: Suspended Grid structure shall be Armstrong DGS QuickStix, comprising of QuickStix Tees and Cross Runners, including Wall Mouldings and Transition Trims, as per manufacturer's instructions.

Wall Battening: Wall framing shall be Armstrong Drywall Grid System, comprising of ShortSpan, or Main Bar, including Knurled Channel mouldings, as per manufacturer's instructions.

Contact your Armstrong Office for additional project specification details.

For Seismic Design support please contact your local Armstrong Ceilings office.

Contact us

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