
FLAT CEILINGS


CURVED CEILINGS


QUIKSTIX BULKHEADS


SHORTSPAN


WALL SYSTEMS

DRYWALL GRID SYSTEM – TECHNICAL GUIDE

Inspiring Great Spaces™

Armstrong®
CEILING SYSTEMS

Contents

Contents

For Seismic Design support please contact your local Armstrong office.

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:

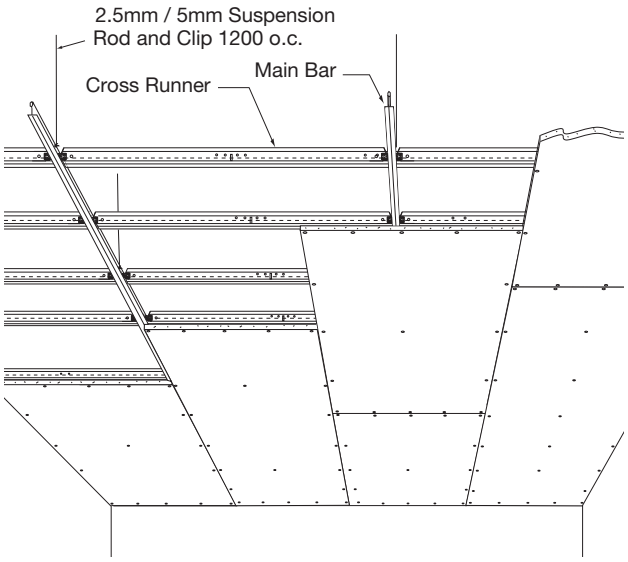
AS/NZ 2785-2000: Suspended Ceilings – Design and Installation
AS/NZ 2589-2007: Gypsum linings – Application and finishing
AS/NZ 1397-2002: Steel sheet and strip – Hot-dipped zinc-coated or aluminium/zinc-coated
AS/NZ 4600-2005: Cold-formed steel structures
AS/NZ 1170-2002: Structural Design Actions

The Drywall Grid System is made up of Main Bars and Cross Runners that are suspended from the structural deck. Sections of Main Bars lock together end-to-end with Cross Runners spanning between the Main Bars.

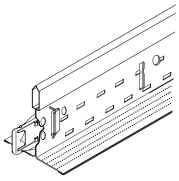
The ends of the Main Bars and Cross Runners either lock into the wall Channel or are fixed to Angle Trims that run around the perimeter of the space.

Features

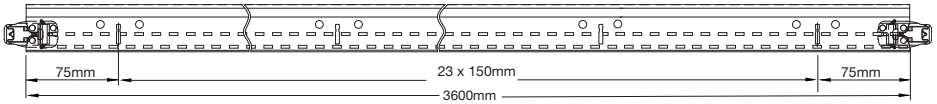
- Simple “two way” grid system for interior screw up ceilings
- Solutions for Bulkheads/special transitions
- Integration between plasterboard and acoustical panel ceilings
- Complete range of perimeter solutions including Pelmets



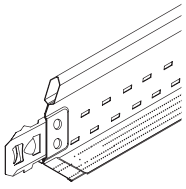
Main Bar: PeakForm 38 with Knurled Face and SuperLock Clip (bulb-to-bulb connection)



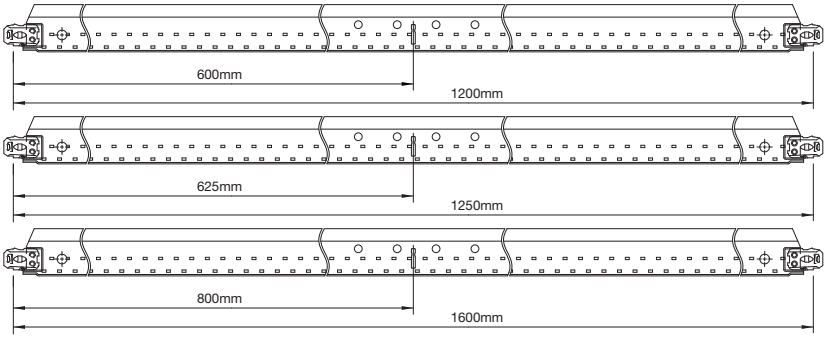
Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Carton / Weight pcs	lm	kg
BP 794033	3600	38	38	150cc	12	43.2	24



Cross Runners: PeakForm 38 XL² with Knurled Face (stab connection, override)

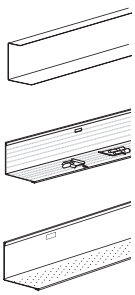


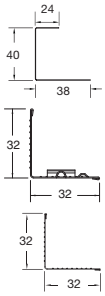
Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Carton / Weight pcs	lm	kg
BP 793033	1200	38	38	Centre	36	43.20	21
BP 793133	1250	38	38	Centre	36	45.0	22
BP 796133	1600	38	38	Centre	36	57.6	24



Perimeter Trims

A variety of drywall grid perimeter trims and accessories are available to provide problem-solving solutions that save time, labor and money.

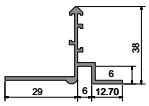




Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Carton / Weight pcs	lm	kg
Knurled Channel Moulding (hemmed with Knurled lower leg) BP KCM 36	3600	40	38	–	12	43.2	15.6
Locking Angle Trim (hemmed with Knurled faces) BP LAT36	3600	32	32	75 in / 150 o.c.	20	72	26
Angle Trim (hemmed with Knurled faces) BP KAM36	3600	32	32	–	20	72	26

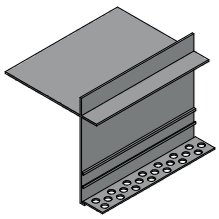
Transition Trims

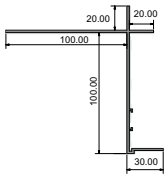
An innovative transition solution from flush plasterboard to acoustical ceiling systems.



Plasterboard Transition Set Bead With 6mm Revel – Satin White

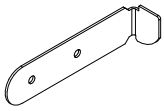
Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Carton / Weight pcs	lm	kg
ALPTPERFTH3600	3600	38	45.5	–	20	72	24





2 sided Pelmet with Set Edge – Satin White

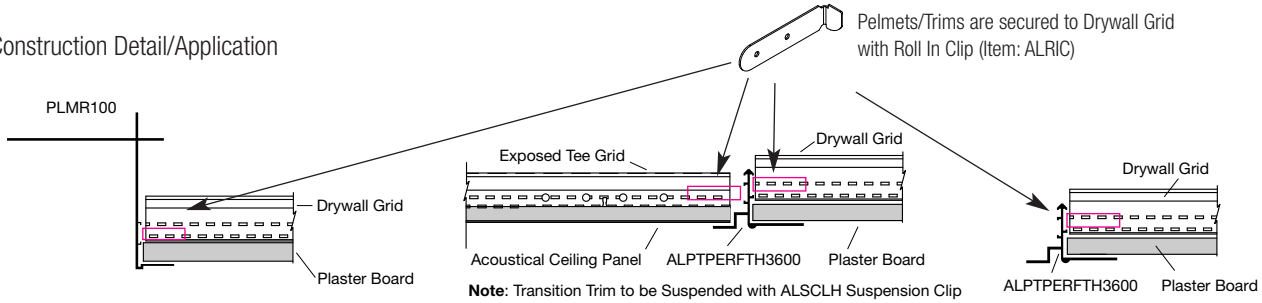
Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Carton / Weight pcs	lm	kg
PLMR100	3600	100	100	–	4	14.4	28



Pelmets/Trims are secured to Drywall Grid with Roll In Clip (Item: ALRIC)

Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Carton / Weight pcs	lm	kg
ALRIC	65	16	–	–	100	–	5

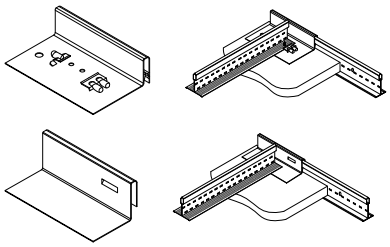
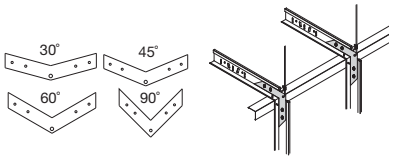
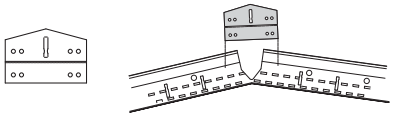
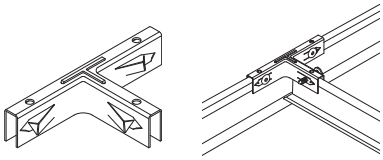
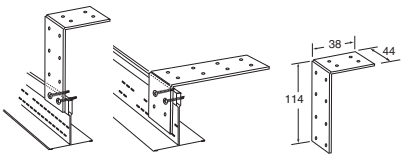
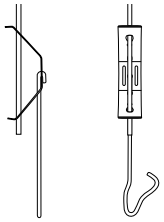
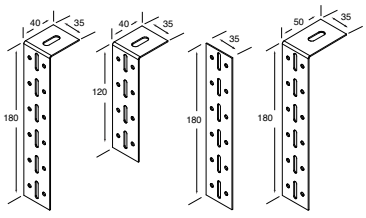
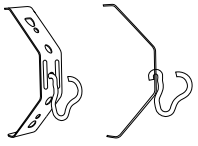
Construction Detail/Application



Note: Transition Trim to be Suspended with ALSCLH Suspension Clip

GRID ACCESSORIES

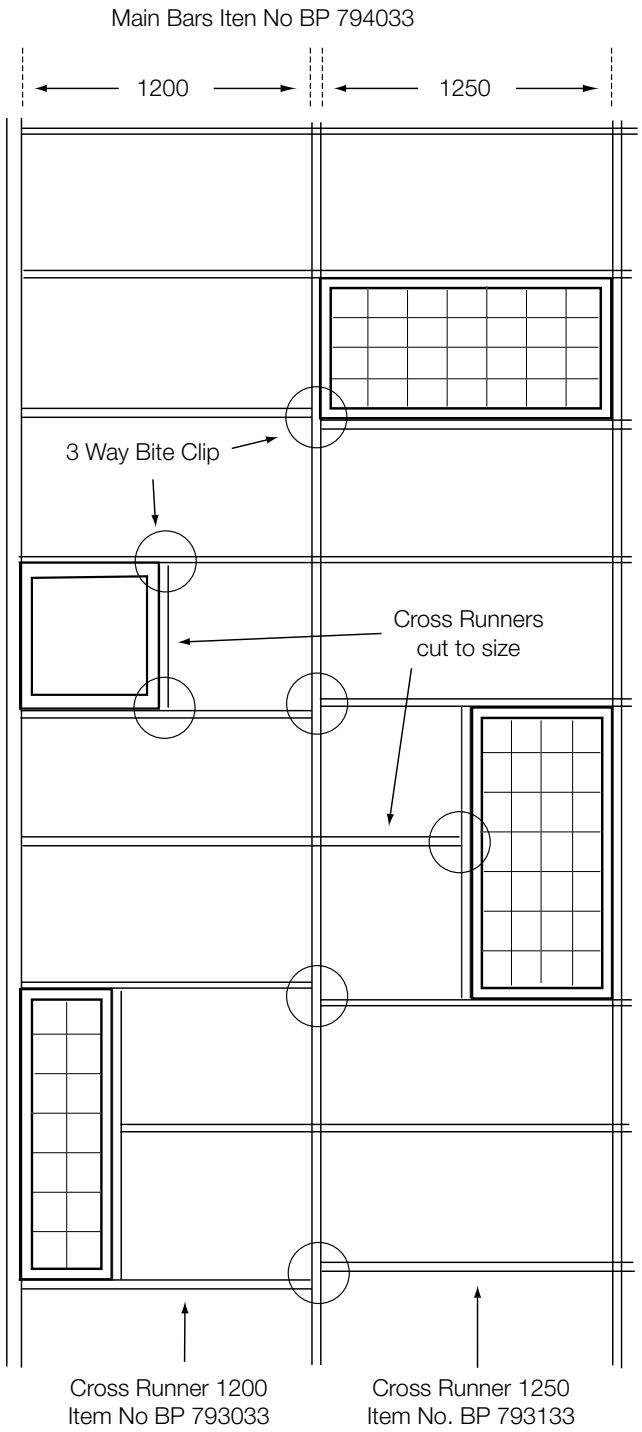
LEGEND: ● Flat Ceilings, ● Wall systems, ● Curved Ceilings, ● Quikstix Bulkheads, ● ShortSpan

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	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	●
	BPDW45C		250	●
	BPDW60C		250	●
	BPDW90C		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 2.5 or 5mm rod to the DGS Main Bar	100	● ● ●
	DWDFC	**Direct Fix Clip** – 180mm L Shape	100	● ● ● ●
	DWDFC120	**Direct Fix Clip** – 120mm L Shape	100	● ● ● ●
	DWDFFC180	**Direct Fix Clip** – 180mm Flat Extension	100	● ● ●
	DWDFC18050	**Direct Fix Clip** – 180mm L Shape with 50mm Head	100	● ● ● ●
	DGSSCS	**DGS Suspension Clip Small** is the standard height adjustable suspension clip connecting from 2.5 or 5mm rod to the DGS Main Bar	100	● ● ●
	DGSSCTR	**DGS Threaded Rod Clip** is a suspension clip for 6mm Threaded Rod	100	● ● ●

Integrating Services

The Armstrong Drywall Grid System is designed to accommodate installation of mechanical services such as light fixtures and air registers. Fixtures can be simply framed regardless of orientation (parallel or perpendicular to Main Bars), as per the illustrations below.

Main Bars feature connection routs at 150mm centres for installation of additional Cross Runners so that fixtures can be framed and supported. The "3 Way Bite Clip" is applied where connections are required where no rout exists, such as connecting between Cross Runners.

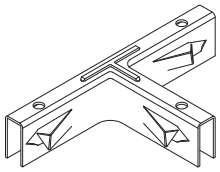


Note: Light Fixtures Installed Perpendicular to Main Bars

1. Main Bars should be installed at 1250mm OC to accommodate Light Fixtures, providing a clear opening of 1212mm for easy installation. Standard 1250mm long Cross Runners are installed between Main Bars at 600mm OC, with additional Cross Runners to support and frame out the fixtures.
2. For shorter rectangular fixtures, (with length less than 1162mm) install Main Bars at 1200mm OC and apply typical 1200mm Cross Runners.

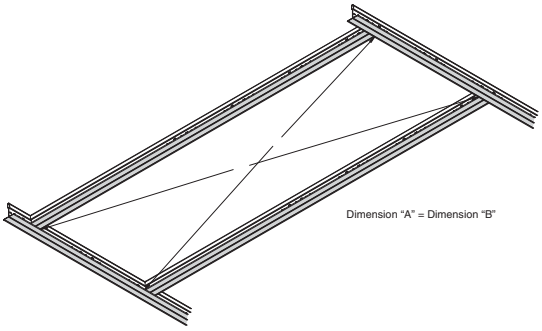
Legend

3 Way Bite Clip to be installed at Cross Runner connection where no rout is available

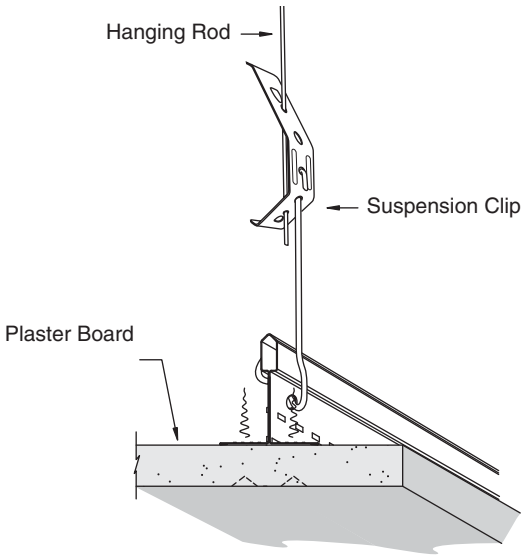


Squaring up the system

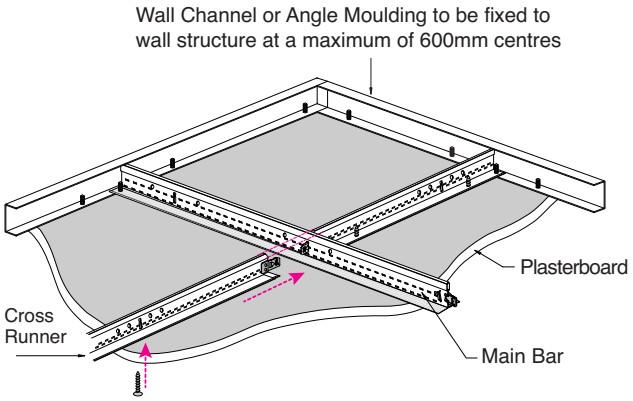
Ensure grid is square following installation of first two Main Runners



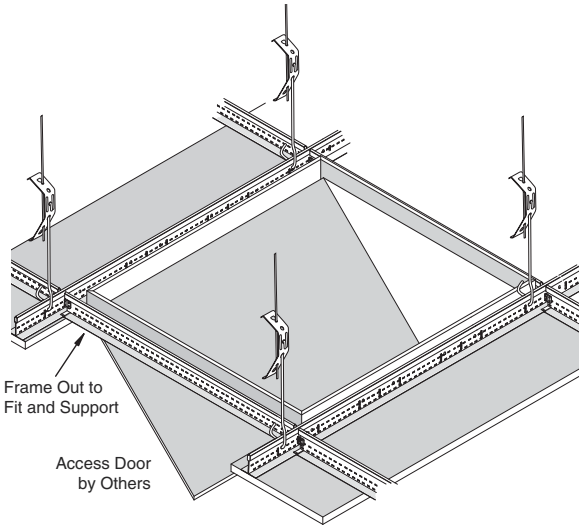
System Details



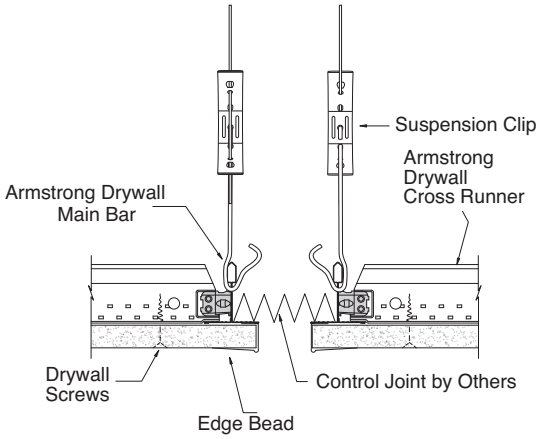
1 Suspension



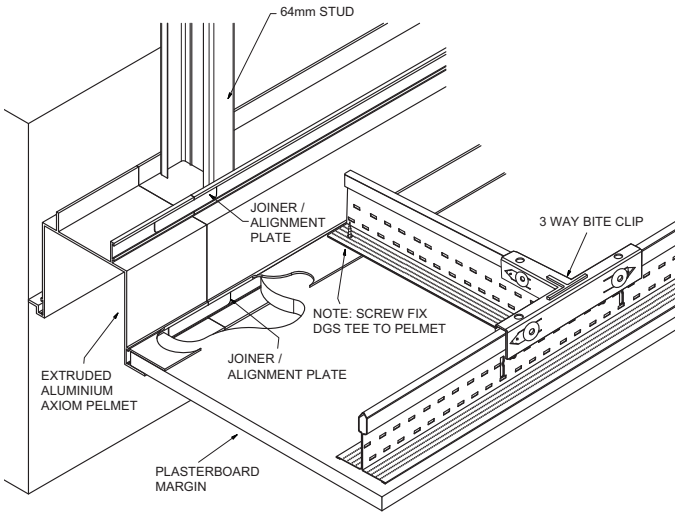
2 Perimeter Detail



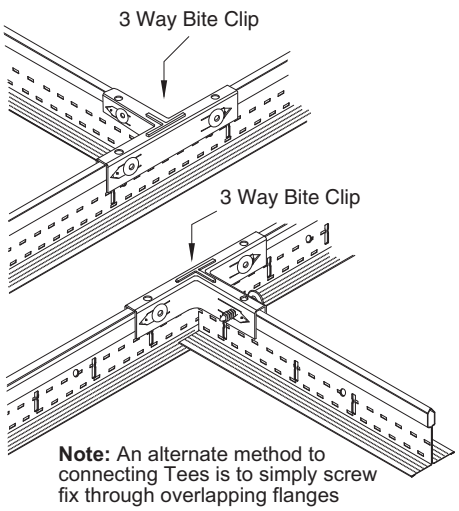
3 Access Door



4 Control Joint



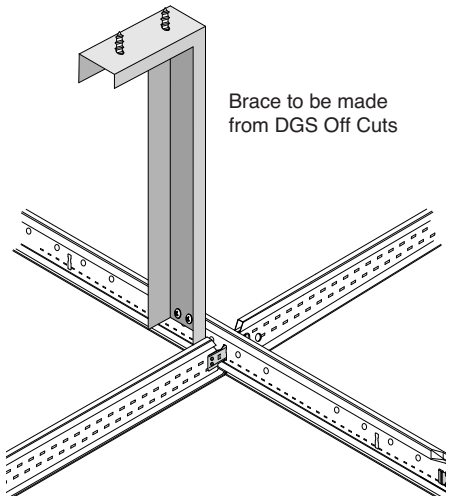
5 Pelmet



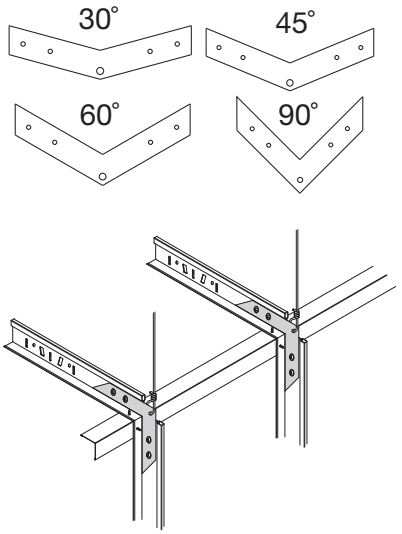
Note: An alternate method to connecting Tees is to simply screw fix through overlapping flanges

6 Securing a Single Cross Runner

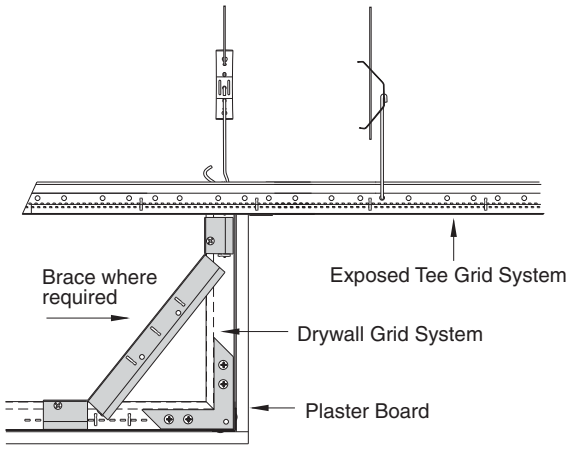
System Details



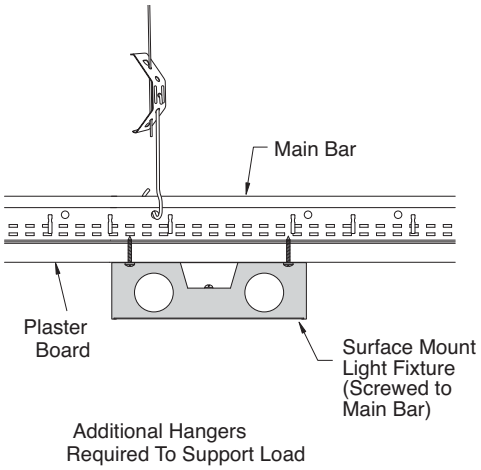
7 Alternative Suspension Method



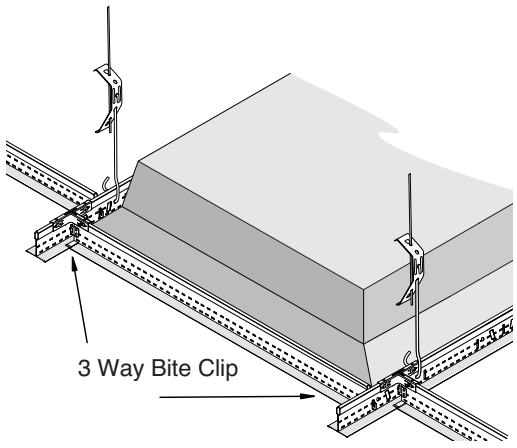
8 Angle Clip



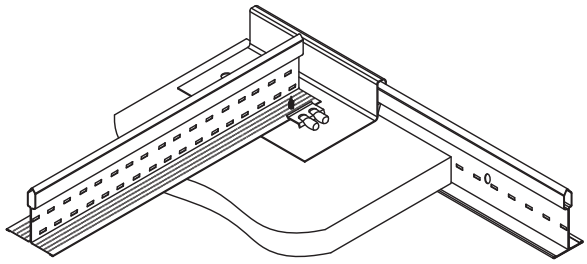
9 Bulkhead



10 Surface Mount Fixture



11 Light Fixture



12 Transition with DW10/13/16 Clip

Suspension System – Grid Estimator Per 100m^2

Reference 1

Module 1200x600	**Main Bars @ 1200mm Centres / Suspension points @ 1200mm 1200mm Cross Runners @ 600mm Centres**			
CODE	**Item**	**L/m**	**PCS**	**QTY**
BP794033	DGS Main Bar 3600mm	83	23	2 Boxes
BP793033	DGS Cross Runner 1200mm	166	139	4 Boxes
SCDGS	Rod Hanging Clip		69	100 Pcs pack
BPKCM36	Knurled Channel Moulding	20	6	1 Box

Reference 2

Module 1250x600	**Main Bars @ 1250mm Centres / Suspension points @ 1200mm 1250mm Cross Runners @ 600mm Centres**			
CODE	**Item**	**L/m**	**PCS**	**QTY**
BP794033	DGS Main Bar 3600mm	80	22	2 Boxes
BP793133	DGS Cross Runner 1250mm	166	133	4 Boxes
SCDGS	Rod Hanging Clip		66	100 Pcs pack
BPKCM36	Knurled Channel Moulding	20	6	1 Box

Reference 3

Module 1600x600	**Main Bars @ 1600mm Centres / Suspension points @ 900mm 1600mm Cross Runners @ 600mm Centres**			
CODE	**Item**	**L/m**	**PCS**	**QTY**
BP794033	DGS Main Bar 3600mm	63	18	2 Boxes
BP796133	DGS Cross Runner 1600mm	169	106	3 Boxes
SCDGS	Rod Hanging Clip		72	100 Pcs pack
BPKCM36	Knurled Channel Moulding	20	6	1 Box

Reference 4

Module 1200x450	**Main Bars @ 1200mm Centres / Suspension points @ 1200mm 1200mm Cross Runners @ 450mm Centres**			
CODE	**Item**	**L/m**	**PCS**	**QTY**
BP794033	DGS Main Bar 3600mm	83	23	2 Boxes
BP793033	DGS Cross Runner 1200mm	228	190	6 Boxes
SCDGS	Rod Hanging Clip		69	100 Pcs pack
BPKCM36	Knurled Channel Moulding	20	6	1 Box

Reference 5

Module 1250x450	**Main Bars @ 1250mm Centres / Suspension points @ 1200mm 1250mm Cross Runners @ 450mm Centres**			
CODE	**Item**	**L/m**	**PCS**	**QTY**
BP794033	DGS Main Bar 3600mm	80	22	2 Boxes
BP793133	DGS Cross Runner 1250mm	225	180	4 Boxes
SCDGS	Rod Hanging Clip		66	100 Pcs pack
BPKCM36	Knurled Channel Moulding	20	6	1 Box

Reference 6

Module 1600x450	**Main Bars @ 1600mm Centres / Suspension points @ 900mm 1600mm Cross Runners @ 450mm Centres**			
CODE	**Item**	**L/m**	**PCS**	**QTY**
BP794033	DGS Main Bar 3600mm	63	18	2 Boxes
BP796133	DGS Cross Runner 1600mm	222	139	4 Boxes
SCDGS	Rod Hanging Clip		72	100 Pcs pack
BPKCM36	Knurled Channel Moulding	20	6	1 Box

Drywall Grid Board Loadings – Maxium Weight m²

Main Bar Centres mm	Cross Runner	Cross Runners Centres mm	Suspension Points 900mm	1200mm
1200mm	1200mm	450mm	2 x 16mm Plasterboard	1 x 13mm Plasterboard
	1200mm	600mm	2 x 16mm Plasterboard	1 x 13mm Plasterboard
1250mm	1250mm	450mm	2 x 16mm Plasterboard	1 x 13mm Plasterboard
	1250mm	600mm	2 x 13mm Plasterboard	1 x 13mm Plasterboard
1600mm	1600mm	450mm	1 x 16mm Plasterboard	Not Allowed
	1600mm	600mm	1 x 13mm plasterboard	Not Allowed

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

BP794033	3600mm Main Bar
BP796133	1600mm Cross Runner
BP793133	1250mm Cross Runner
BP793033	1200mm Cross Runner

Load Data

Module Size	Grid System Weight (kg/m²)
1200 x 450	1.43
1200 x 600	1.17
1250 x 450	1.42
1250 x 600	1.16
1600 x 450	1.33
1600 x 600	1.08

Ceiling Load Calculator

To determine compliance of system (In accordance with AS2785:2000), based on project requirements, apply the following calculator:

1. Determine Dead Load (G) = Sum of following:
   a. Plasterboard weight in kg/m2 = A
   b. Grid weight based on module (Fig 2) = B
   c. Fixtures Load (Includes lights etc) = C
   Dead Load (G) = Sum (A+B+C) x 1.4 = _ kg/m²
2. Add Service Load (U) = 3kg/m2 x 1.7 = 5.1kg/m²
3. Actual Ceiling Load = G + U = _kg/m²
4. For compliance to AS2785:2000, the Calculated Ceiling Load (G+U) must be less than the System Capacity.

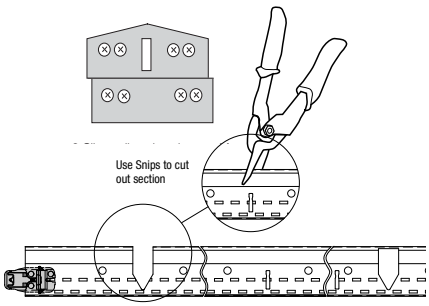
Note: Light fixtures and other mechanical services may require additional suspension points or be independently suspended.

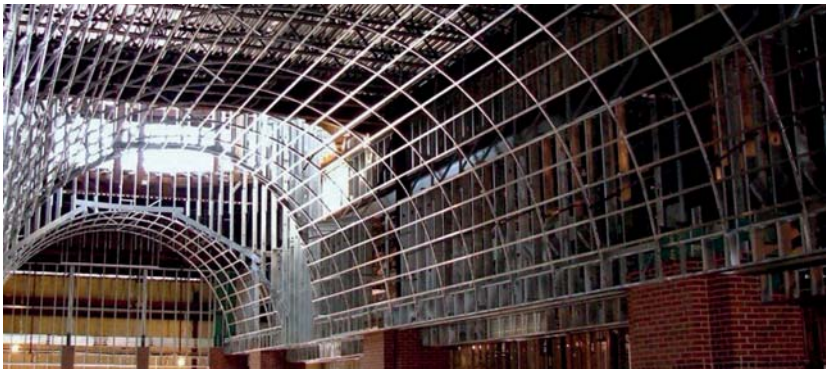
Worked Example of Actual Project Ceiling Load: Using 13mm plasterboard and Grid Module: 1200x600mm

1. Determine Dead Load (G) = Sum of following:
   a. Plasterboard weight in 8.2kg/m² = A
   b. Grid weight based on module (Fig 2) = 1.17kg/sm² = B
   c. Fixtures Load (Includes lights etc) = Assume Nil based on light fixture = weight of plasterboard
   Dead Load (G) = Sum (A+B+C) x 1.4 = 13.12 kg/m²
2. Add Service Load (U) = 3kg/m² x 1.7 = 5.1kg/m²
3. Actual Ceiling Load = G + U = 18.21kg/m²
4. System complies to AS2785:2000, as the Calculated Ceiling Load (G+U) < 18.79kg/sm (being the System Capacity.

CURVED CEILINGS

An unlimited range of curved ceilings can simply be constructed using standard Armstrong Drywall Grid components.
Single and multiple curved ceilings can be framed quickly and easily, without the requirement to order pre-rolled components.





Features

- Standard Main Bars are simply Faceted on site
- Limitless Concave or Convex designs
- Pre-engineered accessories
- Off site curving can be made to order

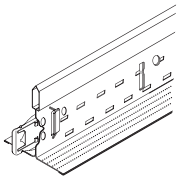
Creating Curved Framing Ceilings

Faceting the Main Bar

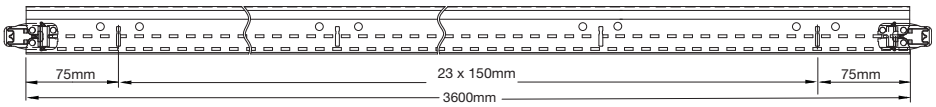
Three simple steps:

i. Cut Main Bar as required
ii. Bend the face of the Main Bar to match the desired radius
iii. Screw fix Radius Clip to reinforce Main Bar at each "cutout" location (use four #6 x12mm button head screws).

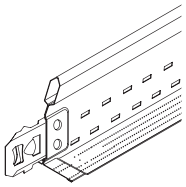
Main Bar: PeakForm 38 with Knurled Face and SuperLock Clip (bulb-to-bulb connection)



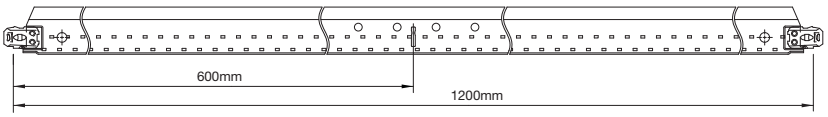
Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Carton / Weight pcs	lm	kg
BP 794033	3600	38	38	150cc	12	43.2	24



Cross Runner: PeakForm 38 XL² with Knurled Face (stab connection, override)

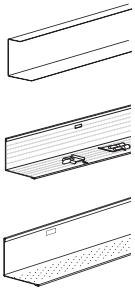


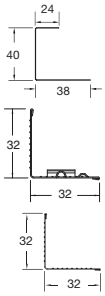
Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Carton / Weight pcs	lm	kg
BP 793033	1200	38	38	Centre	36	43.20	21



Perimeter Trims

A variety of drywall grid perimeter trims and accessories are available to provide problem-solving solutions that save time, labor and money.



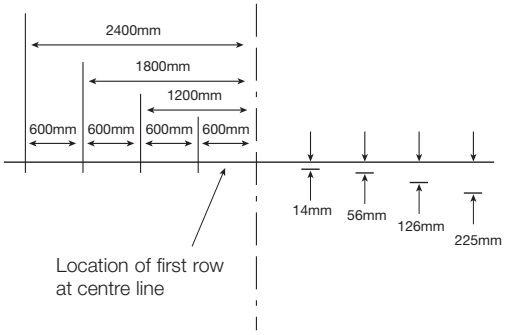


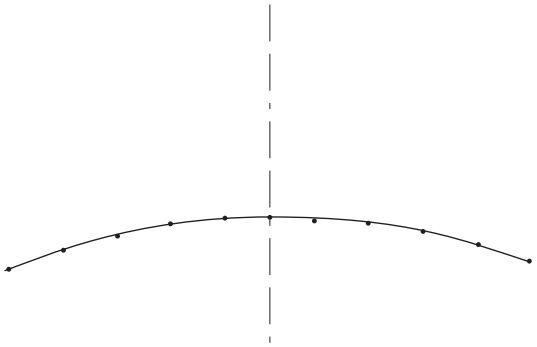
Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Carton / Weight pcs	lm	kg
Knurled Channel Moulding (hemmed with Knurled lower leg)							
BP KCM 36	3600	40	38	–	12	43.2	15.6
Locking Angle Trim (hemmed with Knurled faces)							
BP LAT36	3600	32	32	75 in / 150 o.c.	20	72	26
Angle Trim (hemmed with Knurled faces)							
BP KAM36	3600	32	32	–	20	72	26

Establishing an arc

1. Establish a centre line
2. Mark 600mm increments on line perpendicular to centre line
3. At 600mm marks, identify points of arc below perpendicular line (maintain consistent spacing of point). See radius charts on page 14.
4. Connect points to form a smooth arc

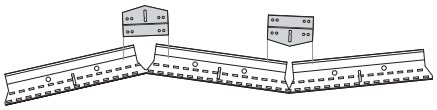
Example: 12.9 m using chart on page 17.





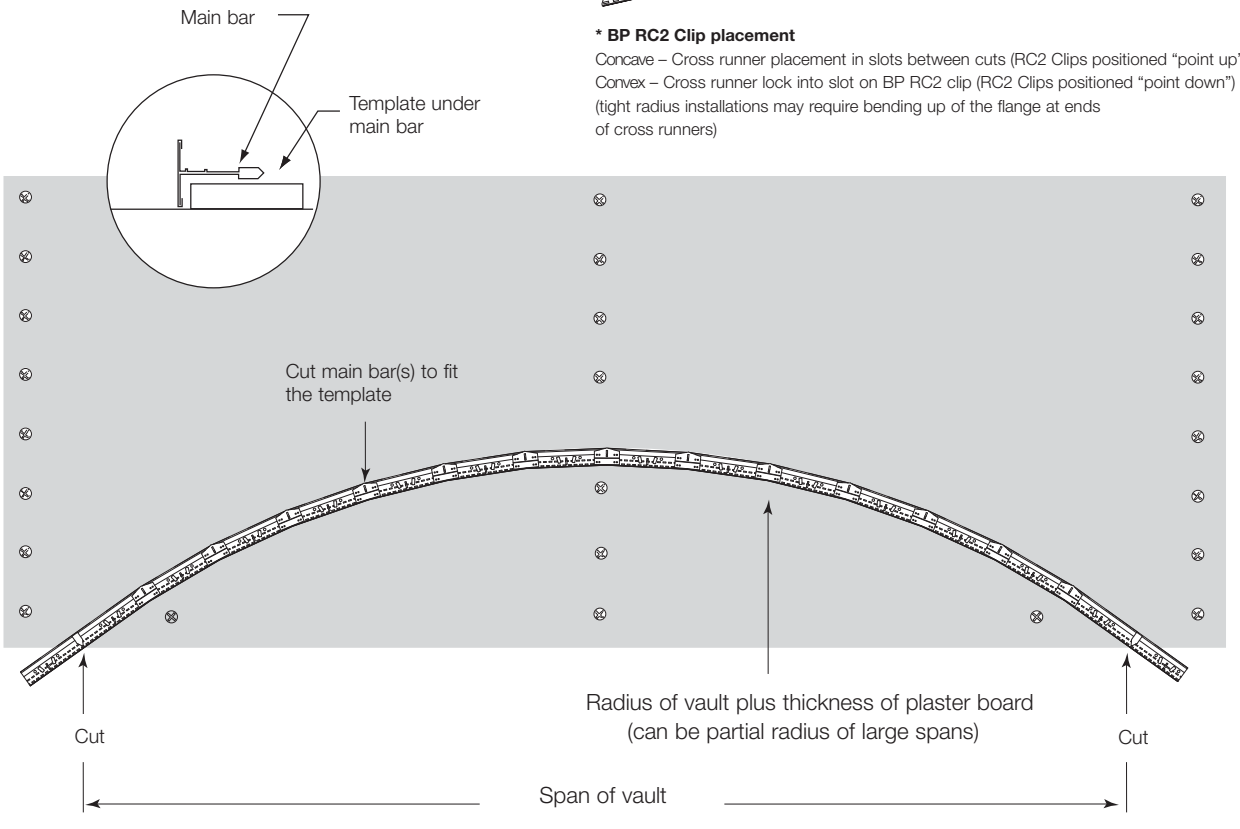
Completing the template

1. Draw radius on template
2. Cut along the radius and remove section of template
3. Cut main bar as required and position along the cut radius on the template (use the chart below)
4. Screw BP RC2 clips to faceted main bar at all cutout locations *
5. On the template, mark a slot location reference point to maintain consistent slot location



*** BP RC2 Clip placement**

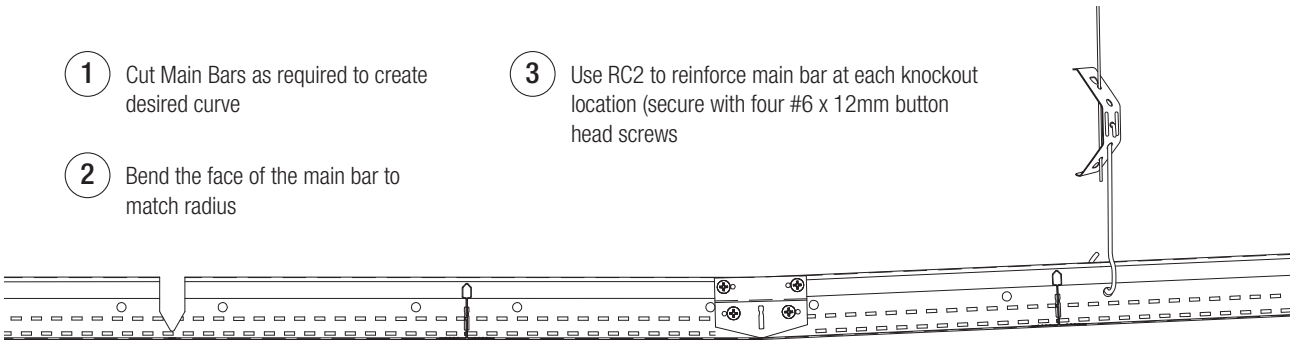
Concave – Cross runner placement in slots between cuts (RC2 Clips positioned "point up")
Convex – Cross runner lock into slot on BP RC2 clip (RC2 Clips positioned "point down")
(tight radius installations may require bending up of the flange at ends of cross runners)

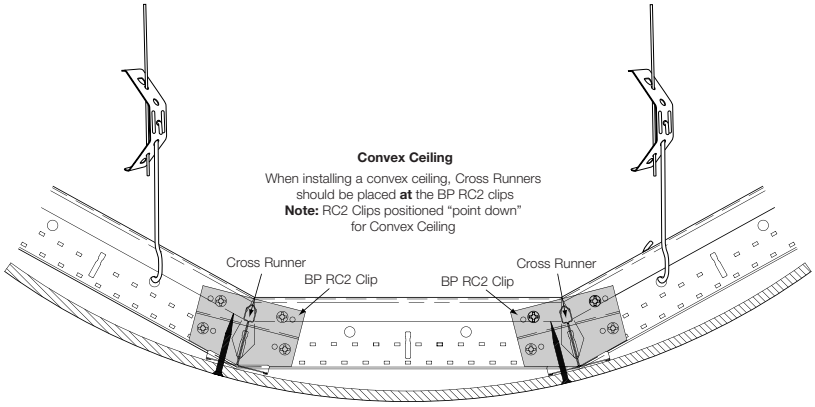


Creating Convex Ceilings

An unlimited range of convex ceilings can be constructed by faceting the Main Bars on the job site to meet design needs.

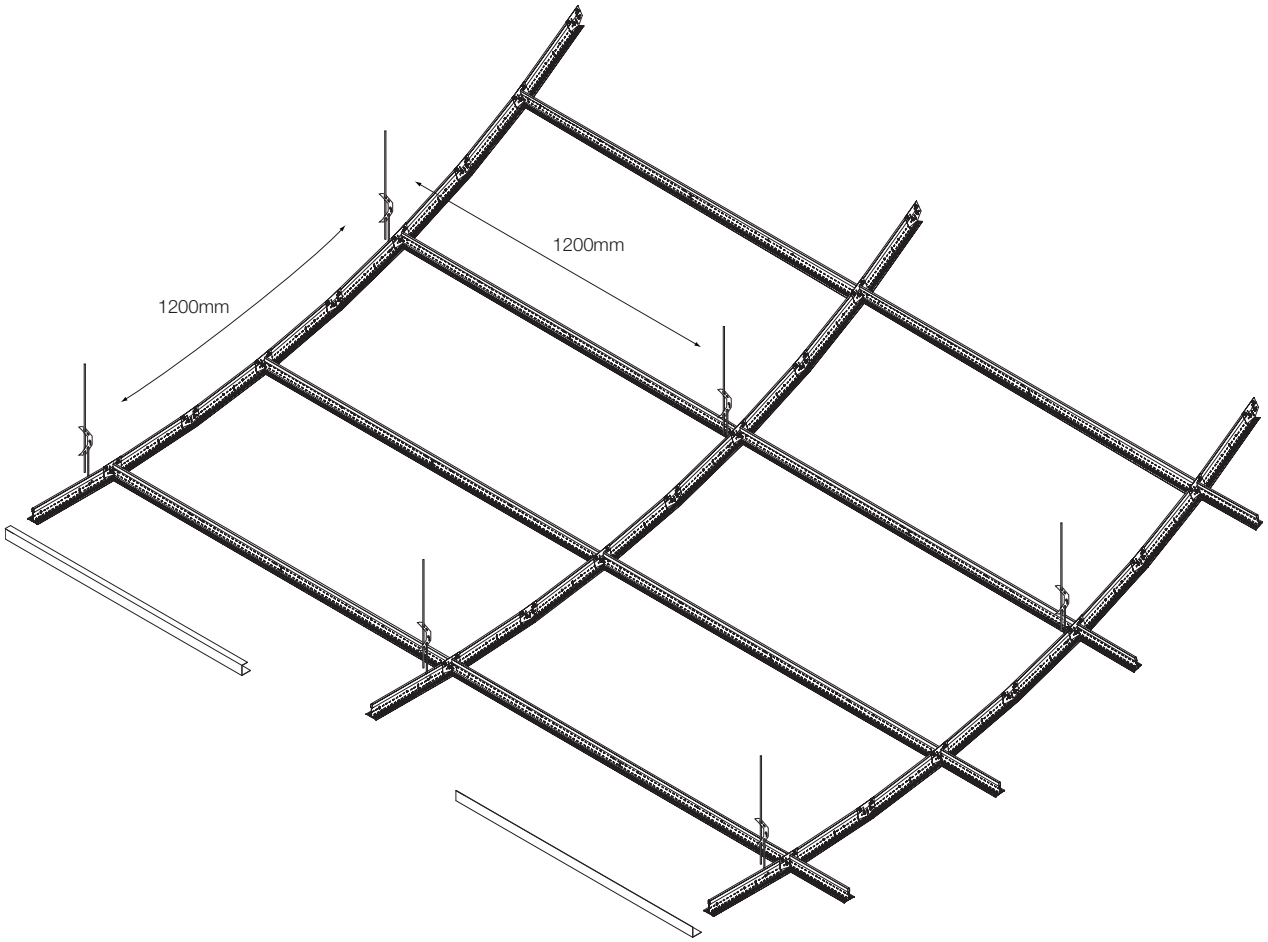
1. Cut Main Bars as required to create desired curve
2. Bend the face of the main bar to match radius
3. Use RC2 to reinforce main bar at each knockout location (secure with four #6 x 12mm button head screws





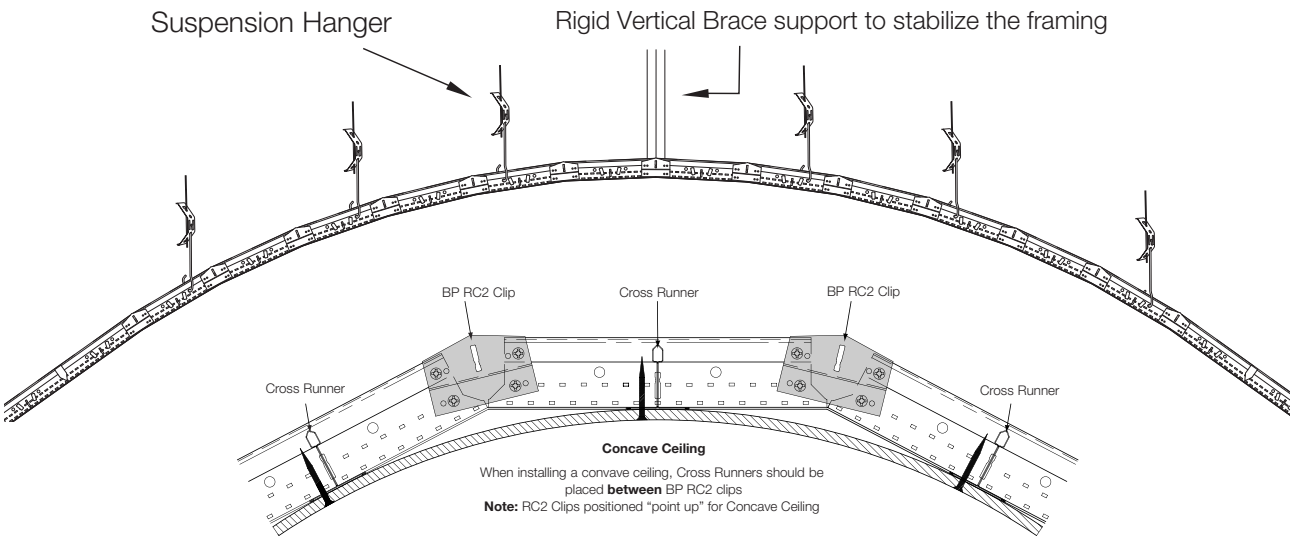
- Suspension hangers spaced along the Main Bars not more than 1200mm on centre (dependent upon plaster board construction).
- Add vertical braces as required to stabilize the frame.
- Thickness of the sheeting material is determined by its plasticity. (Refer to supplying manufacturer's recommendation).

Note: Place RC2 clip on the side of the web where the rotary stitching forms a cavit. This allows the clip to be flush with the web.



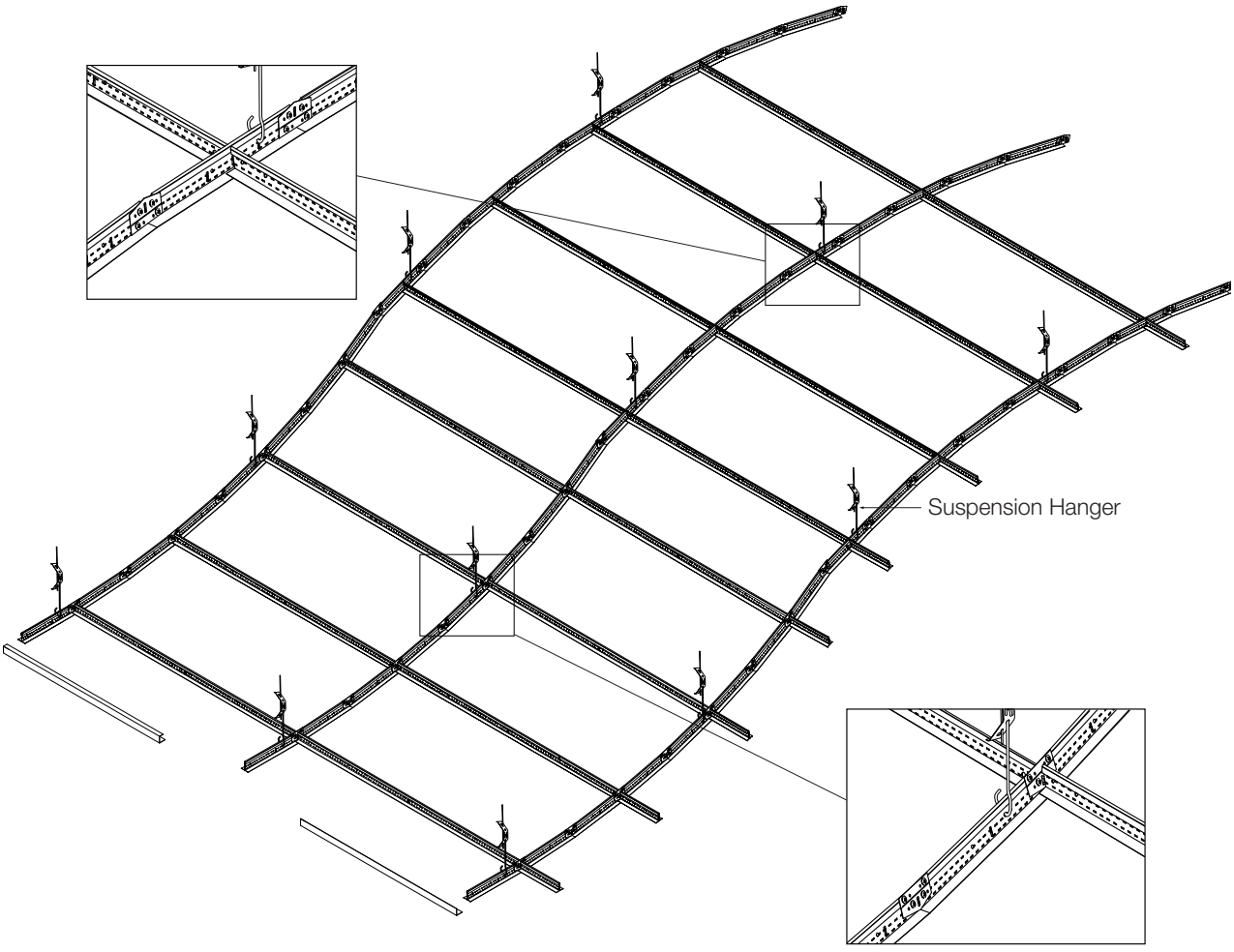
Creating Concave Ceilings and Undulating Ceilings (Waves)

An unlimited range of concave ceilings can be constructed by faceting the Main Bars on the job site to meet design needs Single and multiple curved ceilings can be framed quickly and easily.



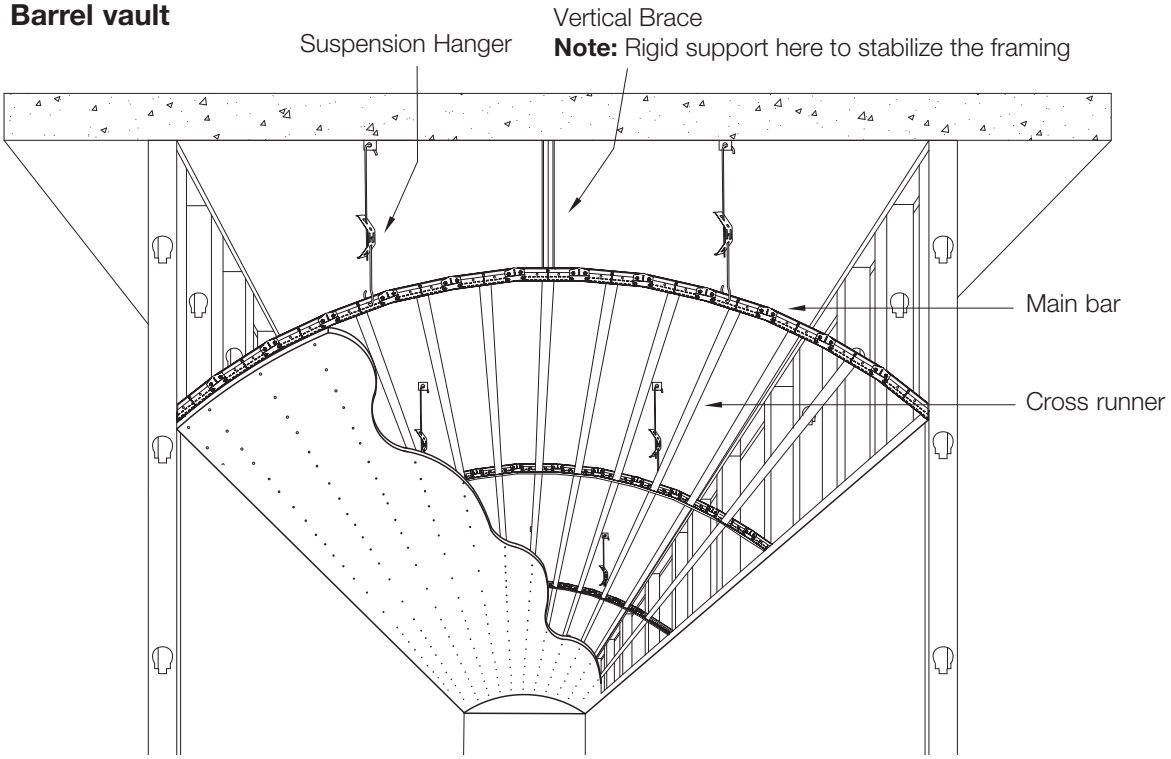
- Suspension hangers spaced along the Main Bars not more than 1200mm on centre (dependent upon plaster board construction).
- Add vertical braces as required to stabilize the frame.
- Thickness of the sheeting material is determined by its plasticity. (Refer to supplying manufacturer's recommendation).

Note: Place RC2 clip on the side of the web where the rotary stitching forms a cavit. This allows the clip to be flush with the web.

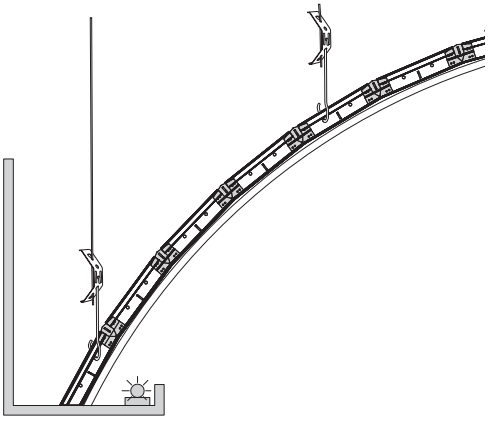


Special Curved Solutions

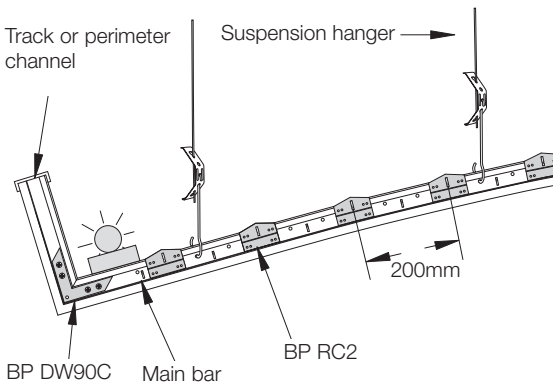
Barrel vault



Vault perimeter light cove



Floating vault



Cantilever Ceilings

A maximum cantilever dimension of 450 mm is allowed on the following basis:

1. Being the sum of both the horizontal and vertical elements.
2. Is measured as the distance from a hanger to the terminal end of the cantilever.

Note: Regardless of the horizontal dimension, a diagonal brace must be installed if the vertical dimension exceeds 300mm. (applies to flat or curved installation – as shown).

CURVED CEILINGS

Radius dimension in mm

600mm increments from centre line

	3000	3300	3600	3900	4200	4500	4800	5100	5400	5700	6000	6300	6600	6900	7200
600	60	55	50	46	43	40	38	35	33	32	30	29	27	26	25
1200	250	226	206	189	175	163	152	143	135	128	121	115	110	105	101
1800	600	534	482	440	405	376	350	328	309	292	276	263	250	239	229
2400	1200	1035	917	826	753	693	643	600	563	530	501	475	452	431	412

	7500	7800	8100	8400	8700	9000	9300	9600	9900	10200	10500	10800	11100	11400	11700
600	24	23	22	21	21	20	19	19	18	18	17	17	16	16	15
1200	97	93	89	86	83	80	78	75	73	71	69	67	65	63	6.2
1800	219	211	203	195	188	182	176	170	165	160	155	151	147	143	139
2400	394	378	364	350	338	326	315	305	295	286	278	270	263	255	249

	12000	12300	12600	12900	13200	13500	13800	14100	14400	14700	15000	15300	15600	15900	16200
600	15	15	14	14	14	13	13	13	13	12	12	12	12	11	11
1200	60	59	57	56	55	53	52	51	50	49	48	47	46	45	45
1800	136	132	129	126	123	121	118	115	113	111	108	106	10.4	102	100
2400	242	236	231	225	220	215	210	206	201	197	193	189	186	182	179

	16500	16800	17100	17400	17700	18000	18300	18600	18900	19200	19500	19800	20100	20400	20700
600	11	11	11	10	10	10	10	10	10	9	9	9	9	9	9
1200	44	43	42	41	41	40	39	39	38	38	37	36	36	35	35
1800	98	97	95	93	92	90	89	87	86	8.5	83	82	81	80	78
2400	175	172	169	166	163	161	158	155	153	151	148	146	144	142	140

	21000	21300	21600	21900	22200	22500	22800	23100	23400	23700	24000	24300	24600	24900	25200
600	9	8	8	8	8	8	8	8	8	8	8	7	7	7	7
1200	34	34	33	33	32	32	32	31	31	30	30	30	29	29	29
1800	77	76	75	74	73	72	71	70	69	68	68	67	66	65	64
2400	138	136	134	132	130	128	127	125	123	122	120	119	117	116	115

	25500	25800	26100	26400	26700	27000	27300	27600	27900	28200	28500	28800	29100	29400	29700
600	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6
1200	28	28	28	27	27	27	26	26	26	26	25	25	25	25	24
1800	64	63	62	61	61	60	59	59	58	58	57	56	56	55	55
2400	113	112	111	109	108	107	106	105	103	102	101	100	99	98	97

	30000	30300	30600	30900	31200	31500	31800	32100	32400	32700	33000	33300	33600	33900	34200
600	6	6	6	6	6	6	6	6	6	6	5	5	5	5	5
1200	24	24	24	23	23	23	23	22	22	22	22	22	21	21	21
1800	54	54	53	52	52	51	51	51	50	50	49	49	48	48	47
2400	96	95	94	93	92	92	91	90	89	88	87	87	86	85	84

	34500	34800	35100	35400	35700
600	5	5	5	5	5
1200	21	21	21	20	20
1800	47	47	46	46	45
2400	84	83	82	81	81

QUIKSTIX BULKHEADS

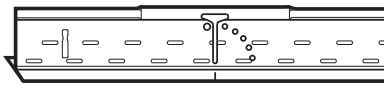
Armstrong DGS QuikStix is a fast and easy solution for framing “Bulkhead” Ceilings and an economical alternative to Stud and Track construction.

Features

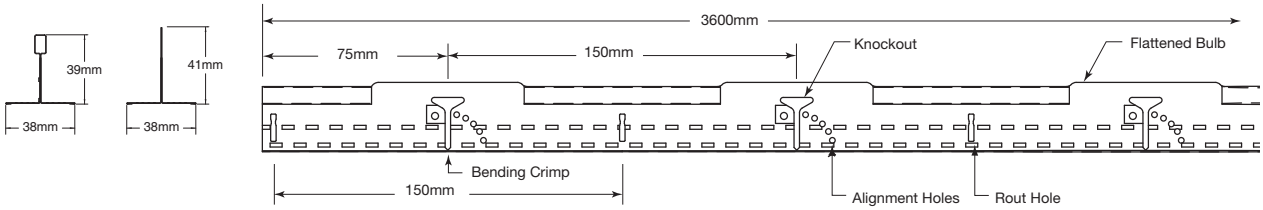
- Knockouts at 150mm centers reduces cutting time.
- Alignment holes make screw installation simple and forms perfect 30, 45, 60, 75 and 90 degree angles.
- Flattened bulb is offset to allow true angles without interference.
- Bending crimp prevents misalignment.
- 90 degree angle fits locking angle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

Components

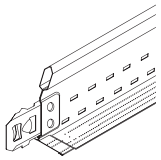
QuikStix Tee with Knurled Face



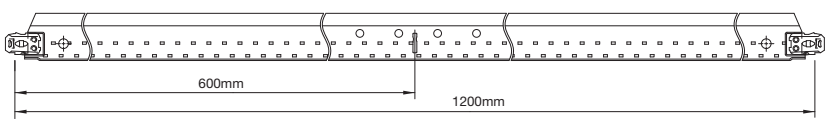
Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Bundle / Weight pcs	lm	kg
BP 79QS36	3600	39/41	38	75 in / 150 o.c.	12	43.2	21



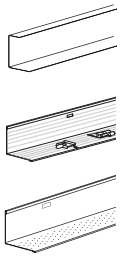
Cross Runner: PeakForm 38 XL² with Knurled Face (stab connection, override)

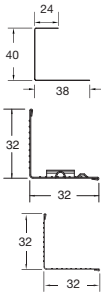


BP 793033	1200	38	38	Centre	36	43.2	21



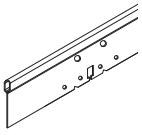
Perimeter Trims

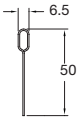




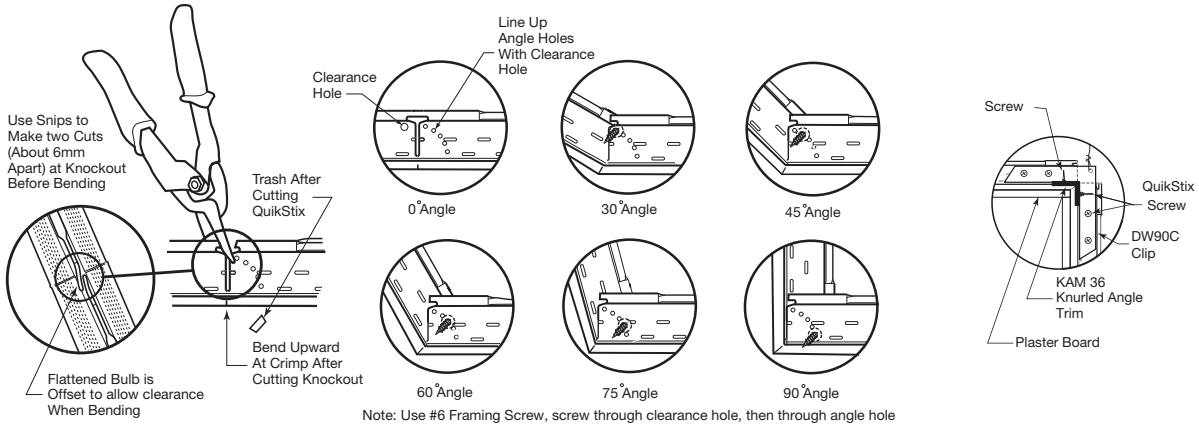
Knurled Channel Moulding (hemmed with Knurled lower leg) BP KCM 36	3600	40	38	–	12	43.2	15.6
Locking Angle Trim (hemmed with Knurled faces) BP LAT36	3600	32	32	75 in / 150 o.c.	20	72	26
Angle Trim (hemmed with Knurled faces) BP KAM36	3600	32	32	–	20	72	26

StrongBack Support



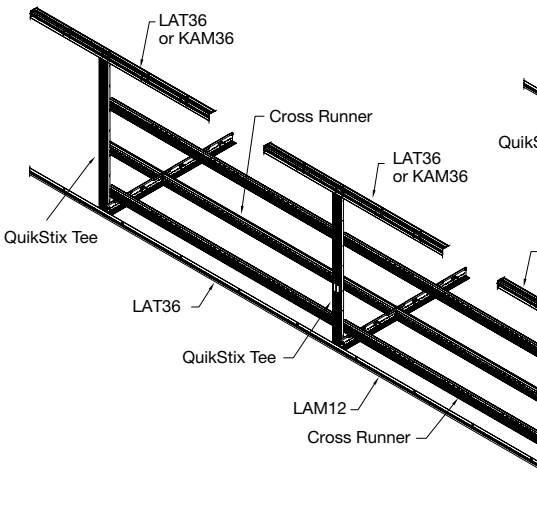


BP 79SB36	3600	50	–	150	12	43.20	21

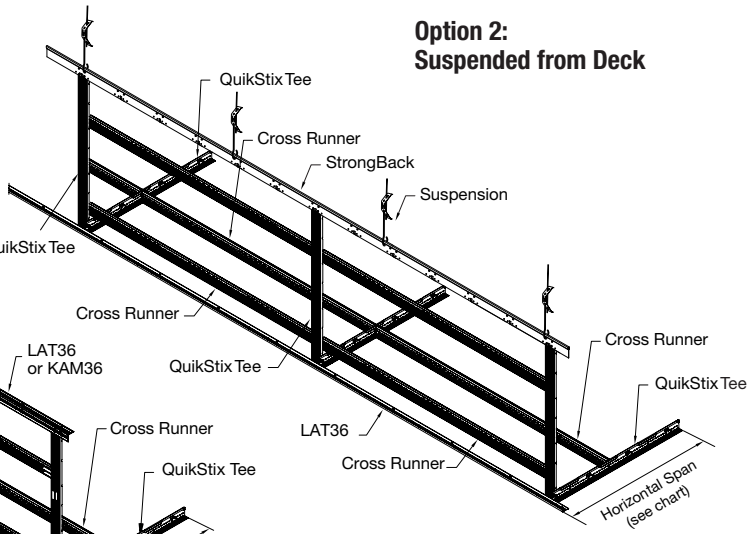


Note: Use #6 Framing Screw, screw through clearance hole, then through angle hole

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

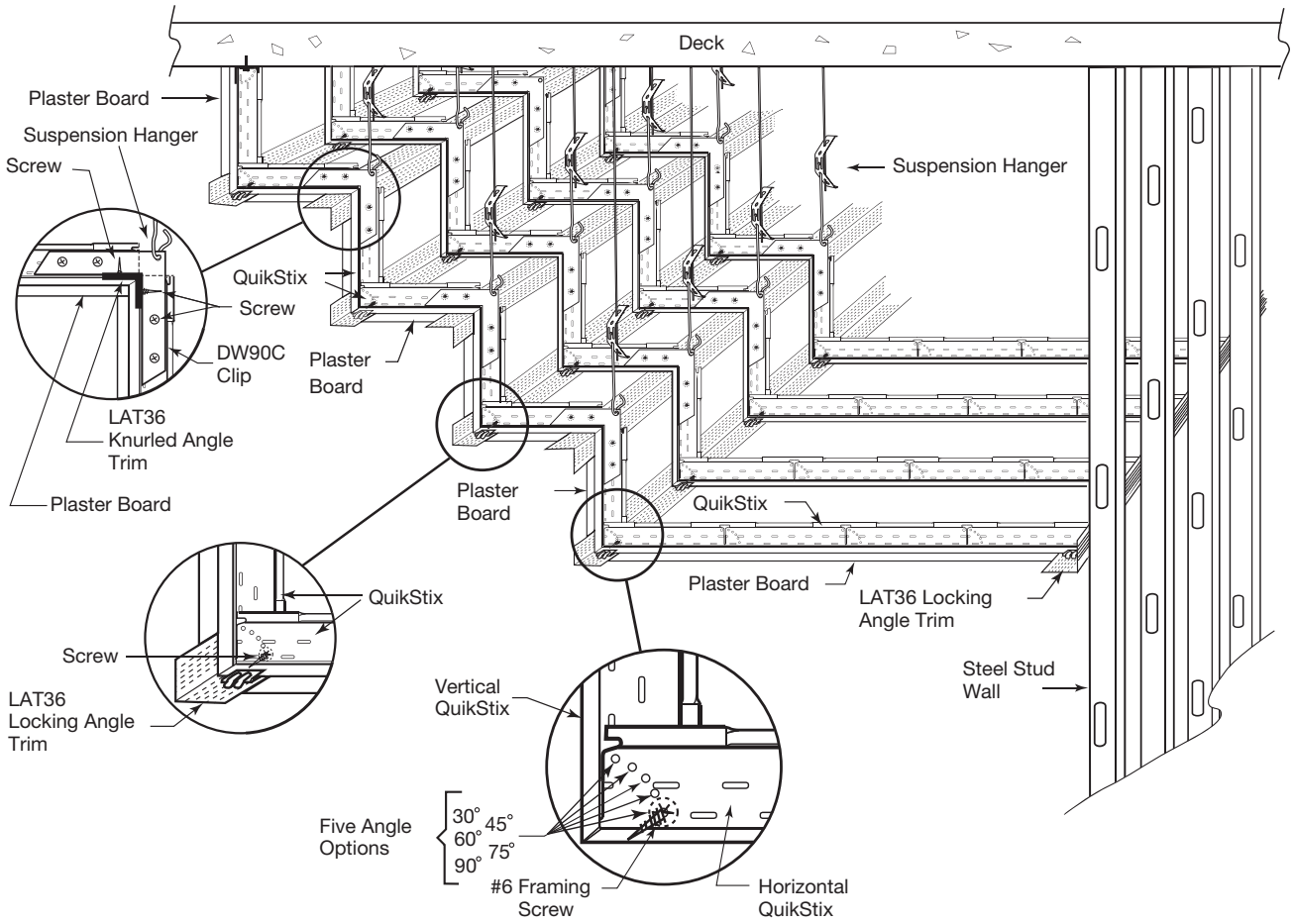
Design Loads Based On Items Below

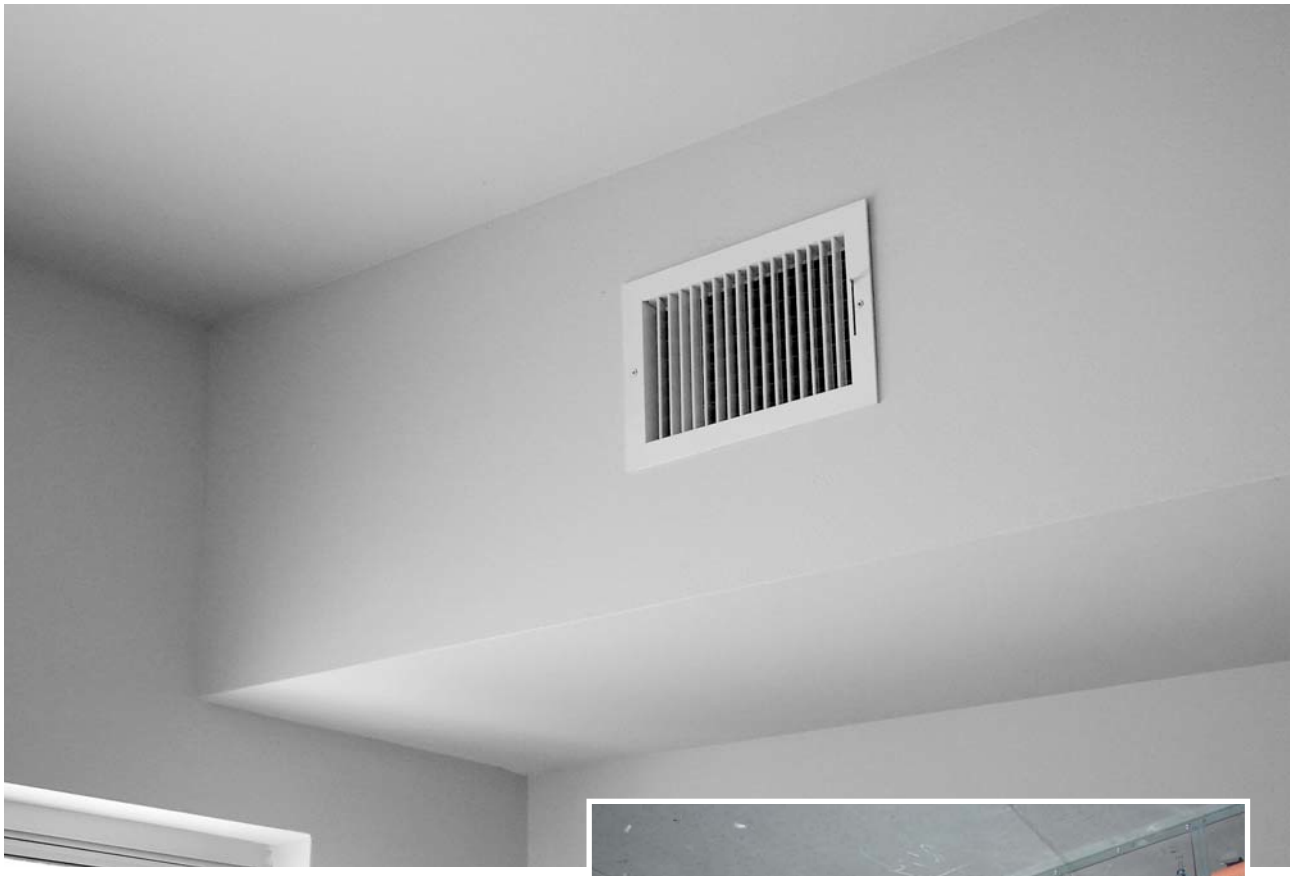
BP79QS36	QUIKSTIX
BP79SB36	STRONGBACK

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





Above: A completed QuikStix Bulkhead Installation

Right: QuikStix Bulkhead Installation in progress

QuikStix Knockout Close-up

QuikStix Large Bulkhead

QuikStix Stepped Bulkhead

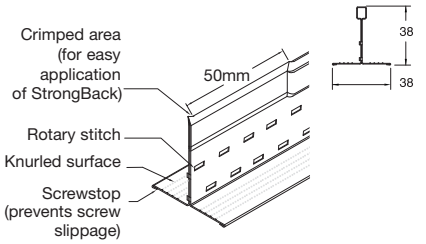
Armstrong DGS – ShortSpan is a fast and easy solution for framing short spans and an economical alternative to TCR and Furring Channel constructions.

Features

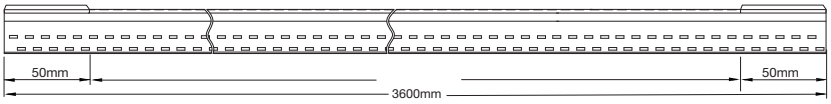
- ShortSpan enables framing without suspension hangers to a maximum span of 1600mm, saving material and time
- ShortSpan Tees engage to the Armstrong Locking Angles Trims at the perimeter without the need to screw fix.
- Longer spans can be simply achieved using the StrongBack Support at 1600mm centres.

Components

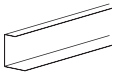
ShortSpan Tee with Knurled Face

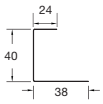


Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Bundle / Weight pcs	lm	kg
BP 79S36	3600	38	38	–	12	43.2	20



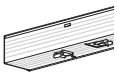
Perimeter Trims / Transition Trim

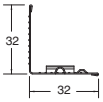




Perimeter Trim: Knurled Channel Moulding (hemmed with Knurled lower leg)

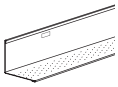
BP KCM 36	3600	40	38	–	12	43.2	15.6





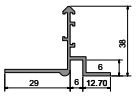
Perimeter Trim: Locking Angle Trim (hemmed with Knurled faces)

BP LAT36	3600	32	32	75 in / 150 o.c.	20	72	26



Perimeter Trim: Angle Trim (hemmed with Knurled faces)

BP KAM36	3600	32	32	–	20	72	26

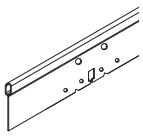


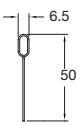
Shadowline reveal with Knurled Face for PB fixing and Pre-painted Global White finish

ALPTPERFTH3600	3600	38	45.5	–	20	72	24

Plasterboard Transition Set Bead With 6mm Revel – Satin White

StrongBack Support

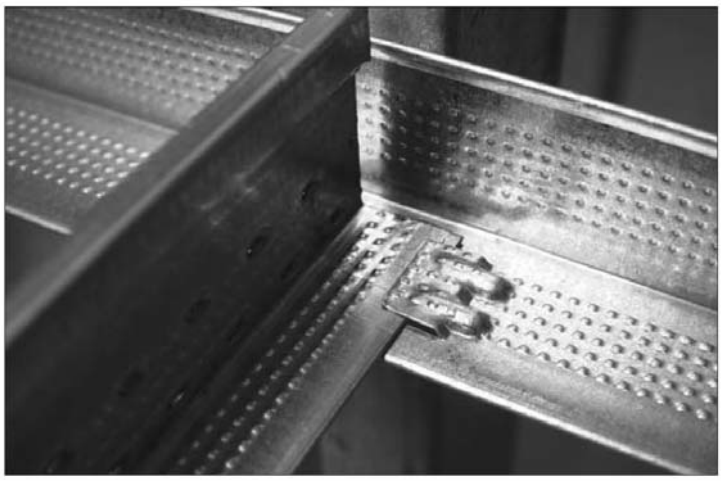




BP 79SB36	3600	50	–	75 in / 150 o.c.	12	43.20	20

Locking Angle Trim

- A faster and more accurate solution for securing grid to wall angle
- Pre-engineered locking tabs punched 150mm on center:
  - Locking tabs prevent lateral and upward movement
  - Eliminate screws, pop rivets, or crimpers needed to attach tees to moulding
- Knurled surface on both flanges
- **ScrewStop** – Reverse hem prevents screw spinoff and provides safer handling
- Alignment crimp at locking tabs for fast, easy alignment



ShortSpan tee engaged in Locking Angle Trim

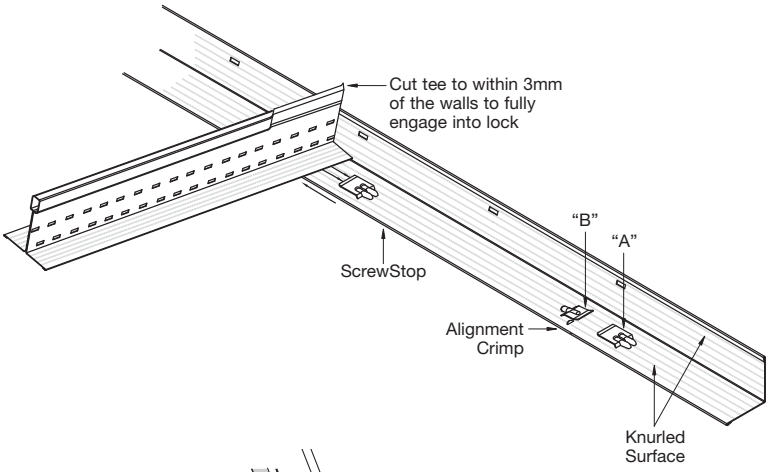
Installation Notes

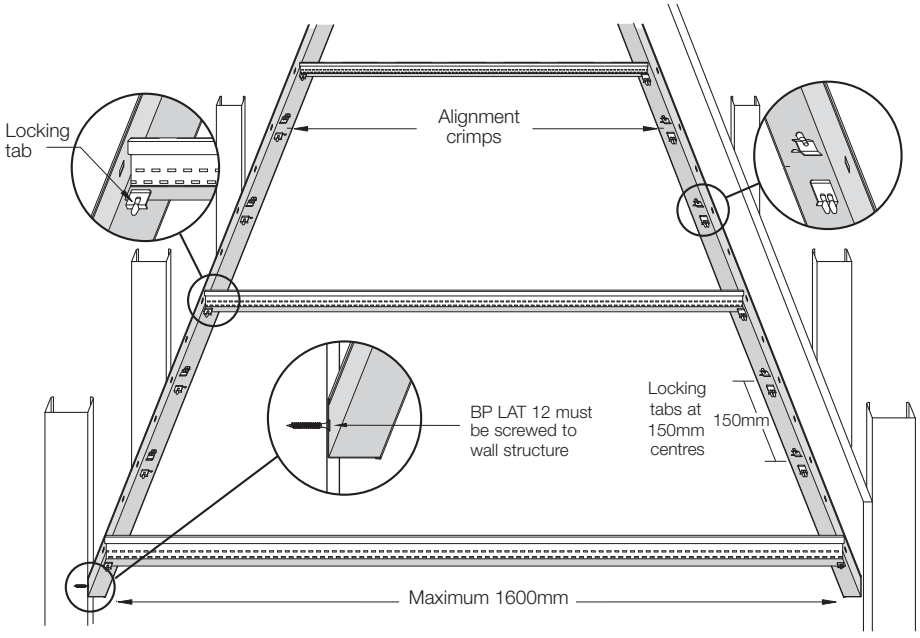
Installation Notes

1 ShortSpan tees must be cut within 3mm of the vertical leg of the Locking Angle Trim

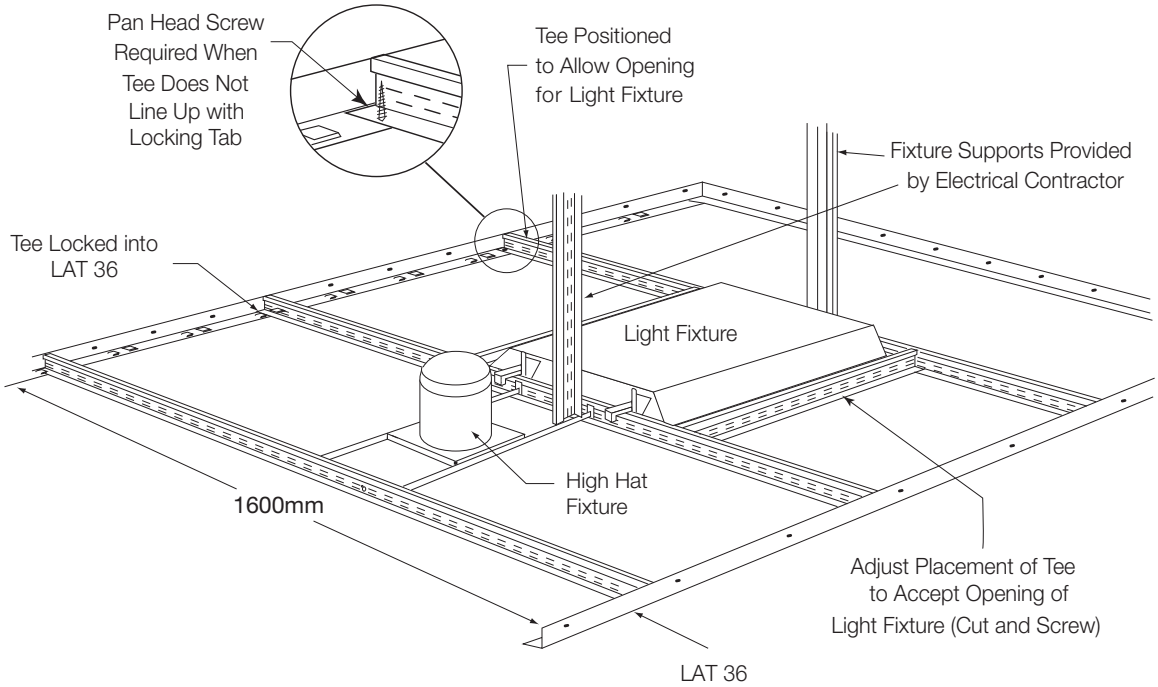
2 **Must** screw LAT 36 and KAM 36 to wall structure at module spacing of 450 or 600mm centres

3 Insert right hand flange of tee into pocket "A" first and allow left flange to clear pocket "B" and rest on angle moulding. Slide tee to the left to engage in pocket "B" (audible click)





Fixture Installation



ShortSpan Framing and Locking Angle Moulding make drywall framing faster and easier

Corridor framing using traditional steel studs

ShortSpan Board Loadings – Maxium Weight m²

Span (mm)	Spacing	Load kgs/m²
1200mm	450mm	2 x 16mm Plasterboard
	600mm	2 x 13mm Plasterboard
1500mm	450mm	2 x 13mm Plasterboard
	600mm	1 x 13mm Plasterboard
1600mm	450mm	2 x 10mm Plasterboard
	600mm	1 x 13mm Plasterboard
*Spans Greater Than 1600mm Strong Back To Be Installed Mid Span		
*1800mm	450mm	3 x 16mm Plasterboard
	600mm	2 x 13mm Plasterboard
*2100mm	450mm	2 x 16mm Plasterboard
	600mm	2 x 13mm Plasterboard

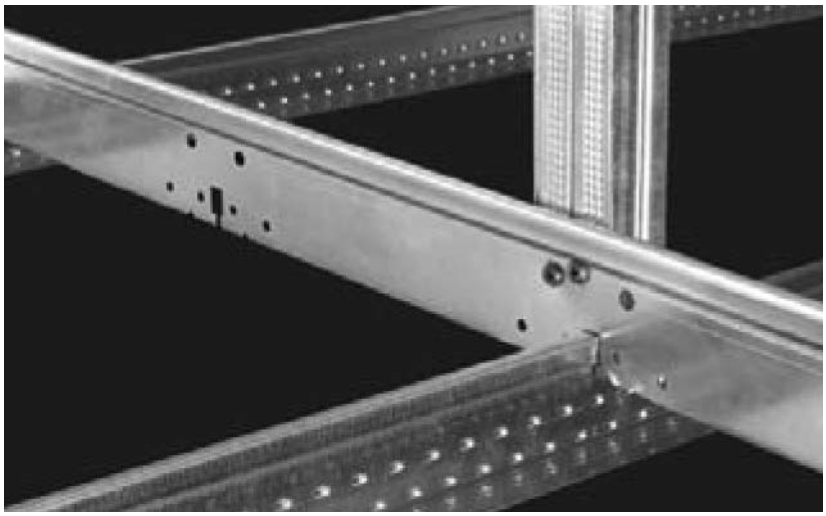
10mm Plasterboard	6.8kgs m²
13mm Plasterboard	8.6kgs m²
13mm Plasterboard	10.5kgs m²
16mm Plasterboard	13kgs m²
10mm Ceiling Board	7.2kgs m²

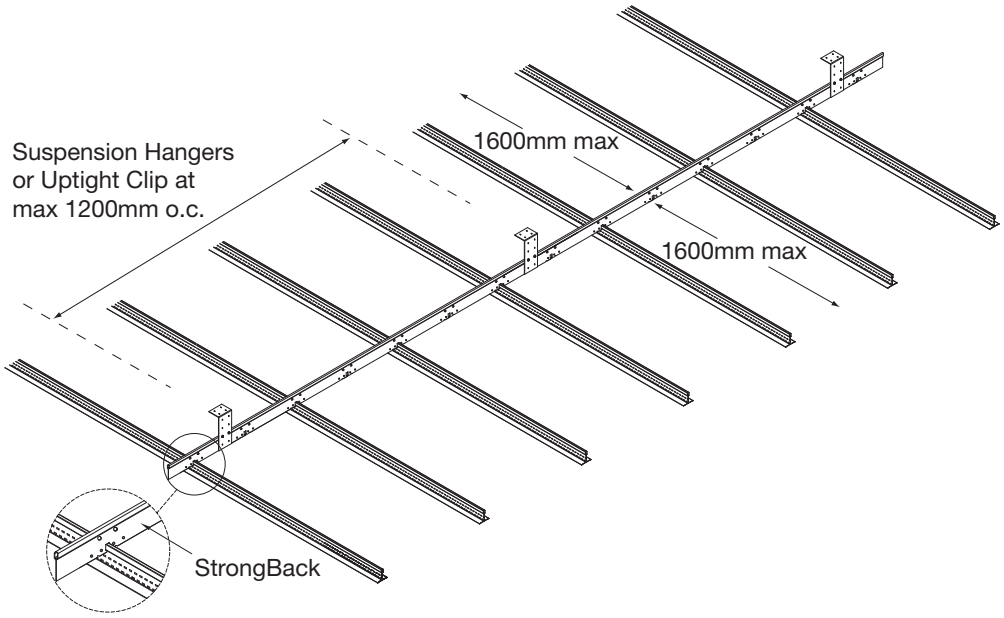
Design Loads Based On Items Below

BP79S36	SHORTSPAN
BP79SB36	STRONGBACK

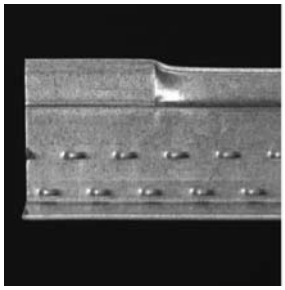
StrongBack

- Easier, pre-engineered solution to support spans over 1600mm
- Knockouts 150mm on center eliminates measuring, screwing, and splicing
- Allows vertical supports at 1200mm on centre
- Reduces lateral movement
- Resists upward movement if used with vertical tee post or stud
- Easier to level system compared to traditional framing

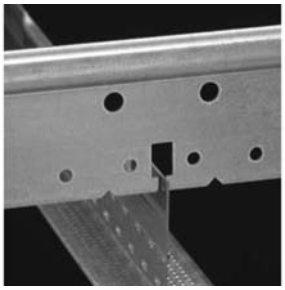




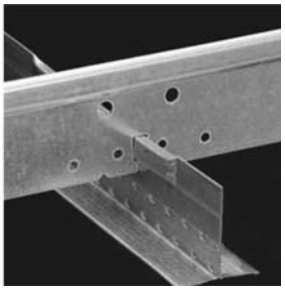
Method to Install StrongBack



1 Flattened bulb allows StrongBack to slide over bulb



2 Slide StrongBack into place – no bending of tab required



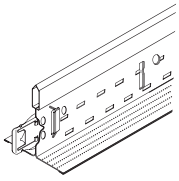
Armstrong DGS Wall Systems is a fast and easy solution for framing slim wall profiles and an economical alternative to Furring Channel battening.

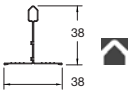
Features

- Enables simple framing with fixing points at a maximum span of 1200mm centres.
- Easily self levels saving material and time.
- Enhances quality of finish and speed of construction by virtue of Wall Mouldings at the perimeter.

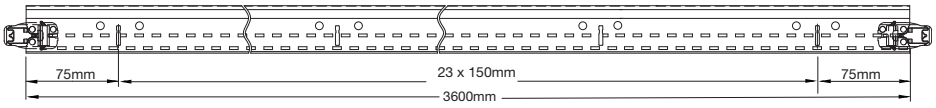
Components

Main Bar: PeakForm 38 with Knurled Face and SuperLock Clip (bulb-to-bulb connection)

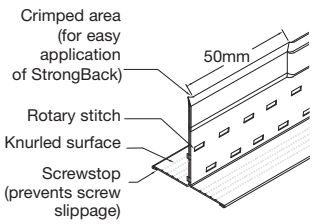




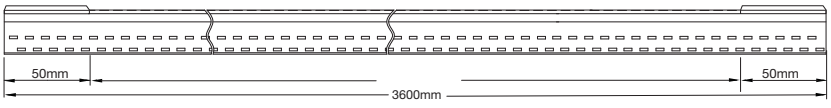
Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Carton / Weight pcs	lm	kg
BP 794033	3600	38	38	150cc	12	43.2	24



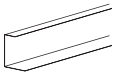
ShortSpan Tee with Knurled Face

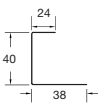


Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Bundle / Weight pcs	lm	kg
BP 79S36	3600	38	38	–	12	43.2	20

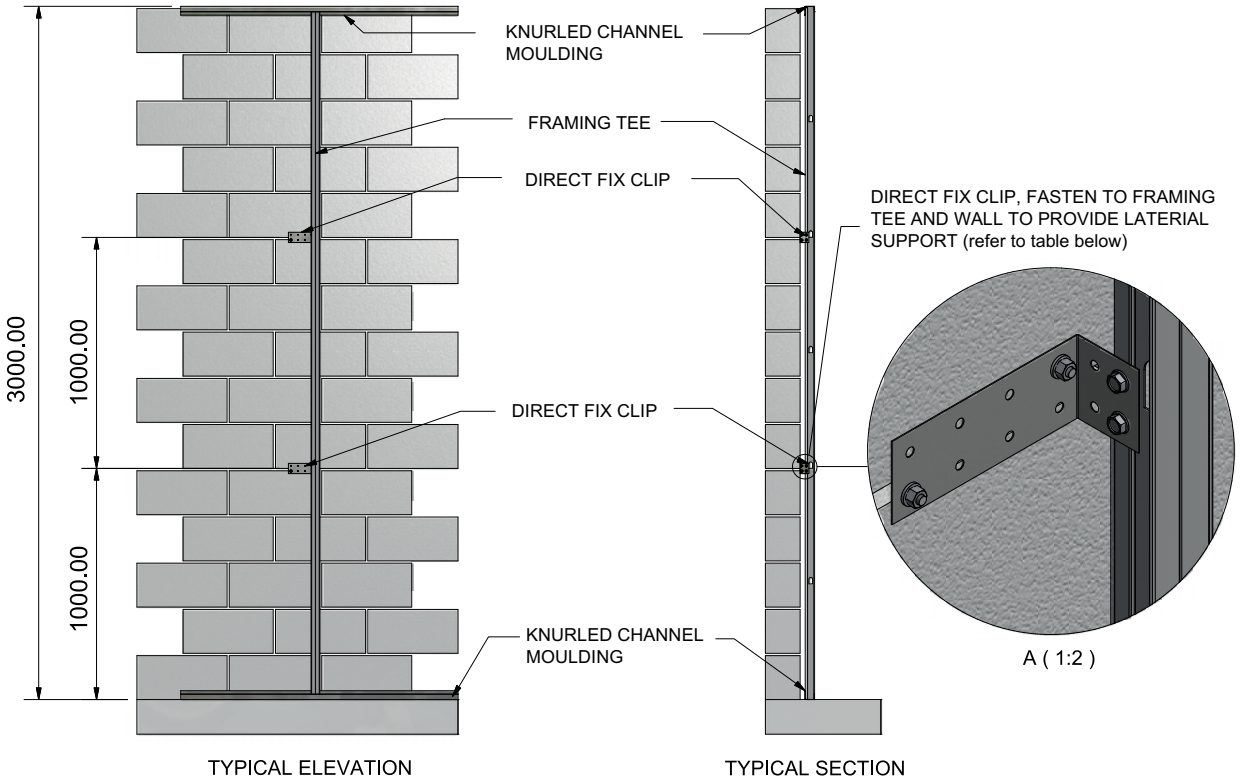


Perimeter Trim





Item Number	Dimensions length (mm)	height (mm)	face (mm)	Rout Spacing mm	Content / Bundle / Weight pcs	lm	kg
Knurled Channel Moulding (hemmed with Knurled lower leg)							
BP KCM 36	3600	40	38	–	12	43.2	15.6



Wall System Clip Spacings

Main Bar Length	Maximum Anchor Spacing
2400mm	1200mm centres
2700mm	900mm centres
3000mm	1000mm centres
3600mm	1200mm centres

Design based on items below

BP794033	3600mm Main Bar
BP79S36	3600mm Shortspan

Installation Guide

The Armstrong Wall System is unique as the primary component is a 38mm Flat Face Tee which can be installed very quickly without requiring any adjustable clips to level your wall.

Step 1. Locate and fix the Channel Moulding top and bottom.

Step 2. Cut the Short Span 38mm Flat Face Main Bars to length and install at required centres (to suit your building board); screw fixing to Chanel Mouldings. This method will aid the wall system leveling.

Step 3. Screw brackets to both the structure (as per Design table), and to the ShortSpan Main Bars.

Locating Insulation

The DGS Wall System allows insulation to be installed easily, and the “Tee Bar” profile holds the insulation in place.

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 office.

Armstrong, the Global Leader in Acoustic Ceilings

NSW
Armstrong World Industries Pty. Ltd.
99 Derby Street,
Silverwater NSW 2128
Telephone (02) 9748 1588
Facsimile (02) 9748 8449

VIC/TAS
Armstrong World Industries Pty. Ltd.
29-39 Mills Road,
Braeside VIC 3195
Telephone (03) 9580 9633
Facsimile (03) 9587 5139

QLD/NT
Armstrong World Industries Pty. Ltd.
6 Barrinia Street,
Slacks Creek QLD 4127
Telephone (07) 3809 5565
Facsimile (07) 3809 5507

www.armstrongceilings.com.au

Printed on Zanders Mega Recycled paper

AWP1015

Inspiring Great Spaces™

Armstrong®
CEILING SYSTEMS