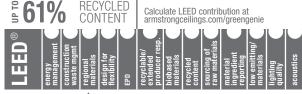
# DRYWALL Grid Systems – Curved Ceilings

Declare SH High Living Building Challenge Compliant Cell

SUSTAIN\*
High Performance
Sustainable
Ceiling Systems



LOCATION DEPENDENT



#### **KEY SELECTION ATTRIBUTES**

- Select items available in High Recycled Content (HRC) (XL8965, XL8945): Total Recycled Content 61%, Post-consumer 53%, Pre-consumer 8%
- Non-HRC items have 30% recycled content
- PeakForm® profile increases strength and stability for improved performance during installation
- SuperLock™ main beam clip is engineered for a strong, secure connection and fast, accurate alignment confirmed with an audible click; easy to remove/relocate
- ScrewStop<sup>™</sup> reverse hem prevents screw spin-off on 1-1/2" wide faces

- Pre-notched at either 8" or 16" on center to simplify fabrication of faceted main beam
- RC2 clip is used on main beam at every knockout location to reinforce the desired radius; route hole on clip allows for cross tee placement as required
- Rotary-stitched during manufacture by a patented method
- Minimum G40 hot dipped galvanized coating, per ASTM C645; provides superior corrosion resistance
- XL® staked-on end detail cross tees for secure locked connection; easy to install
- 10-Year Limited System Warranty
- · 30-Year Limited Ceiling Systems Warranty

#### TYPICAL APPLICATIONS

- · Indoor applications
- · Barrel vaults and domes
- Groin vaults
- · 3-D curves of all types

Meets a broad range of UL® design assemblies: D501, D502, G523, G524, G526, G527, G528, G529, J502, L502, L508, L513, L515, L525, L526, L529, L564, P501, P506, P507, P508, P509, P510, P513, P514, P516 (XL7936G90 and SP135 are not fire rated).

NOTE: See UL Directory for details on specific designs.

#### **MATERIALS**

ASTM C635 Intermediate-duty main beam classification, ASTM A653 zinc-coated hot dipped galvanized steel. Exposed surfaces chemically cleansed, zinc-coated, and prefinished. Materials conform to the performance standard ASTM C645 (Standard Specification for Rigid Furring Channels for Screw Applications of Gypsum Board).

#### VISUAL SELECTION

Face Profile				Load Test D	ata*		
Profile	Description	Dimensions (Inches)	Route Spacing	Load Test Data* (Lbs./Lin. Ft.)		Packaging Pcs./ Lin. Ft	
Number Profile				L/240	L/360	Ctn.	Ctn.
Grid Mai	n Beams						
1-1/2"	12' Faceted Drywall Main Beam: for creating curved installations	144 x 1-1/2 x 1-11/16"	51 routes – 8" O.C.	18.4 @ 4'	12.3 @ 4'	12	144
1-1/2"	12' Faceted Drywall Main Beam: for creating curved installations	144 x 1-1/2 x 1-11/16"	51 routes – 16" O.C.	18.4 @ 4'	12.3 @ 4'	12	144
oss Tees							
1-1/2"	6' Drywall Cross Tee	72 x 1-1/2 x 1-1/2"	6 routes – starting 24" from each end	6.87 @ 72"	4.58 @ 72"	36	216
1-1/2"	50" Drywall Cross Tee	50 x 1-1/2 x 1-1/2"	8 routes – starting 10" from each end – for Type F light fixtures	19.5 @ 50"	12.79 @ 50"	36	150
1-1/2"	4' Drywall Cross Tee	48 x 1-1/2 x 1-1/2"	9 routes – center route and starting 10" from each end – for Type F light fixtures	22.5	14.27	36	144
1-1/2"	3' Drywall Cross Tee	36 x 1-1/2 x 1-1/2"	None	49.96 @ 3'	31.33 @ 3'	38	108
1-1/2"	2' Cross Tee	24 x 1-1/2 x 1-1/2"	3 routes – center route and 10" from each end	158 @ 2'	90.25 @ 2'	36	78
	1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"	for creating curved installations  1-1/2" 12' Faceted Drywall Main Beam: for creating curved installations  DSS Tees  1-1/2" 6' Drywall Cross Tee  1-1/2" 4' Drywall Cross Tee  1-1/2" 3' Drywall Cross Tee	1-1/2" 12' Faceted Drywall Main Beam: for creating curved installations 144 x 1-1/2 x 1-11/16"  1-1/2" 12' Faceted Drywall Main Beam: for creating curved installations 144 x 1-1/2 x 1-11/16"  DSS TECS  1-1/2" 6' Drywall Cross TeC 72 x 1-1/2 x 1-1/2"  1-1/2" 50" Drywall Cross TeC 50 x 1-1/2 x 1-1/2"  1-1/2" 4' Drywall Cross TeC 48 x 1-1/2 x 1-1/2"  1-1/2" 3' Drywall Cross TeC 36 x 1-1/2 x 1-1/2"  1-1/2" 2' Cross TeC 24 x 1-1/2 x 1-1/2"	1-1/2"       12' Faceted Drywall Main Beam: for creating curved installations       144 x 1-1/2 x 1-11/16"       51 routes – 8" 0.C.         1-1/2"       12' Faceted Drywall Main Beam: for creating curved installations       144 x 1-1/2 x 1-11/16"       51 routes – 16" 0.C.         DSS Tees         1-1/2"       6' Drywall Cross Tee       72 x 1-1/2 x 1-1/2"       6 routes – starting 24" from each end         1-1/2"       50" Drywall Cross Tee       50 x 1-1/2 x 1-1/2"       8 routes – starting 10" from each end – for Type F light fixtures         1-1/2"       4' Drywall Cross Tee       48 x 1-1/2 x 1-1/2"       9 routes – center route and starting 10" from each end – for Type F light fixtures         1-1/2"       3' Drywall Cross Tee       36 x 1-1/2 x 1-1/2"       None         1-1/2"       2' Cross Tee       24 x 1-1/2 x 1-1/2"       3 routes – center route and 10" from each end	1-1/2" 12' Faceted Drywall Main Beam: for creating curved installations 144 x 1-1/2 x 1-11/16" 51 routes − 8" 0.C. 18.4 @ 4'  1-1/2" 12' Faceted Drywall Main Beam: for creating curved installations 144 x 1-1/2 x 1-11/16" 51 routes − 16" 0.C. 18.4 @ 4'  DSS TECS  1-1/2" 6' Drywall Cross Tee 72 x 1-1/2 x 1-1/2" 6 routes − starting 24" from each end 1-1/2" 50" Drywall Cross Tee 50 x 1-1/2 x 1-1/2" 8 routes − starting 10" from each end − for Type F light fixtures 1-1/2" 4' Drywall Cross Tee 48 x 1-1/2 x 1-1/2" 9 routes − center route and starting 10" from each end − for Type F light fixtures 1-1/2" 3' Drywall Cross Tee 36 x 1-1/2 x 1-1/2" None 49.96 @ 3'  1-1/2" 2' Cross Tee 24 x 1-1/2 x 1-1/2" 3 routes − center route and 10" from each end 10"	1-1/2" 12' Faceted Drywall Main Beam: for creating curved installations 144 x 1-1/2 x 1-11/16" 51 routes – 8" 0.C. 18.4 @ 4' 12.3 @ 4' 1-1/2" 12' Faceted Drywall Main Beam: for creating curved installations 144 x 1-1/2 x 1-11/16" 51 routes – 16" 0.C. 18.4 @ 4' 12.3	1-1/2" 12' Faceted Drywall Main Beam: for creating curved installations 144 x 1-1/2 x 1-11/16" 51 routes – 8" 0.C. 18.4 @ 4' 12.3 @ 4' 12

<sup>\*</sup> NOTE: All load test data based on flat installation per ASTM C635.

ASTM Class HD - Heavy-duty ID - Intermediate-duty LD - Light-duty



### DRYWALL Grid Systems - Curved Ceilings

#### **VISUAL SELECTION**

Item No.	Description	Dimensions (Inches)	Packaging Pcs./Lin. Ft.	
Moldings				
□ 7858	Reverse Angle Molding	144 x 1-9/16 x 15/16"	20	240
□ LAM12	25 gauge nominal locking angle molding, locking tabs 8" on center, starting 4" from each end	144 x 1-1/4 x 1-1/4"	10	240
☐ LAM12HRC	25 gauge nominal locking angle molding, locking tabs 8" on center, starting 4" from each end	144 x 1-1/4 x 1-1/4"	10	240
☐ KAM10	25 gauge knurled angle molding (.018" Metal Thickness)	120 x 1-1/4 x 1-1/4"	10	100
☐ KAM12	25 gauge knurled angle molding (.018" Metal Thickness)	144 x 1-1/4 x 1-1/4"	10	120
☐ KAM12G90	25 gauge knurled angle molding (.018" Metal Thickness)	144 x 1-1/4 x 1-1/4"	10	120
☐ KAM12HRC	25 gauge knurled angle molding (.018" Metal Thickness)	144 x 1-1/4 x 1-1/4"	10	120
☐ KAM1510	25 gauge knurled angle molding (.018" Metal Thickness)	120 x 1-1/2 x 1-1/2"	10	100
☐ KAM1512	25 gauge knurled angle molding (.018" Metal Thickness)	144 x 1-1/2 x 1-1/2"	10	120
☐ KAM151020E	22 gauge knurled angle molding (.028" Metal Thickness)	120 x 1-1/2 x 1-1/2"	10	100
☐ KAM151020	20 gauge knurled angle molding (.033" Metal Thickness)	120 x 1-1/2 x 1-1/2"	10	100
☐ KAM151020G90	10 gauge knurled angle molding – G90 galvanized steel coating (.033" Metal Thickness)	120 x 1-1/2 x 1-1/2"	10	100
☐ KAM21025	25 gauge knurled angle molding (.018" Metal Thickness)	120 x 2 x 2"	10	100
☐ KAM21020EQ	22 gauge knurled angle molding (.028" Metal Thickness)	120 x 2 x 2"	10	100
☐ KAM20020	20 gauge knurled angle molding (.033" Metal Thickness)	120 x 2 x 2"	10	XX

#### **ACCESSORIES**

RC2 – Radius Clip – Radius Clip is used for drywall applications which form curved installations; attaches to the cavity side of web of the main beam with four 7/16" pan head screws. Install at all knockout locations.





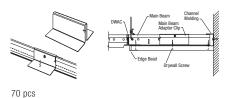
205 pcs FastShip 50 pcs IIC – Impact Isolation Clip – Impact Isolation Clip for use with HD8906IIC drywall grid main beam. Provides up to 8 points of IIC improvement to ensure your project meets IBC requirements. IIC Clip must be used with HD8906IIC Drywall Grid Main Beam.





36 pcs

MBAC – Main Beam Adapter Clip – Attaches to web of suspension system section; provides larger surface for screw attachments; used as a hold down clip for thin material (metal or plastic lay-in panels); fastens drywall track to underside of exposed suspension system with lay-in panels, leaving the suspension system face free of screw holes.



#### **INSTALLATION NOTES**

#### **Curving Main Beams**

Creating curved framing for drywall is easy and offers unlimited possibilities.

- · Custom radii to suit any design installation
- You control the curve
- · Not limited to a preselected or predetermined curved radius
- Full range of clips and accessories make installation easier than bending stud and track



RC2 clip must be installed on faceted main beams when used to frame a flat ceiling.

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

NOTE: RC2 clip must be installed at every knockout location on main beam.

Contractors' efficiency and understanding of the suspended grid system construction provides performance benefits and cost savings.

- An unlimited range of vaults and valleys can be constructed using faceted main beams
- Single and multiple curved ceilings can be framed quickly and easily

#### Working with Vaults

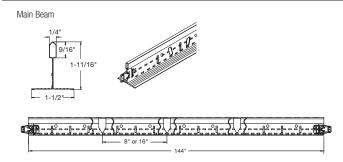
 Hanger wires must be minimum 12 gauge and spaced along the main beams not more than four feet on center for gypsum board construction and not more than three feet on center for plaster work (spaced as required to support load).

FastShip 50 pcs

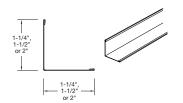
- 2. For vaults, space the main beams four feet on center for gypsum board construction and three feet on center for plaster. Angle or channel molding is used to frame the ends of the structure. Mains 6' on center is possible, but must consult ISS rep first.
- 3. Thickness of the sheeting material is determined by its plasticity.
- 4. Add vertical braces as required to stabilize the frame.
- $\textbf{5.} \ \ \textbf{See Commercial Ceilings Solutions Guide (BPCS-3479)} \ \ \textbf{for additional information}.$

## DRYWALL Grid Systems - Curved Ceilings

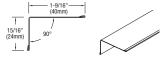
#### **DETAILS**







Reverse Molding



Cross Tees





#### SEISMIC PERFORMANCE

Main Beams	Minimum Lbs. To Pull Out Compression/Tension		
HD8901	348.0		
HD8906	374.0		
Cross Tees			
XL7918, XL8926, XL8925, XL7936G90, XL7341, XL8341, XL8945PHRC, XL8947P, XL8965HRC	377.0		

#### **ICC Reports**

For areas under ICC jurisdiction, see ICC evaluation report number 1289 for allowable values and/or conditions of use concerning the suspension system components listed on this page. The report is subject to reexamination, revisions, and possible cancellation.

#### PHYSICAL DATA

Material

Hot dipped galvanized steel

Surface Finish Unpainted steel

Cross Tee/Main Beam Interface

**End Detail** 

Main Beam: Staked-on clip Cross Tee: Staked-on clip

**Duty Classification** Heavy-duty

