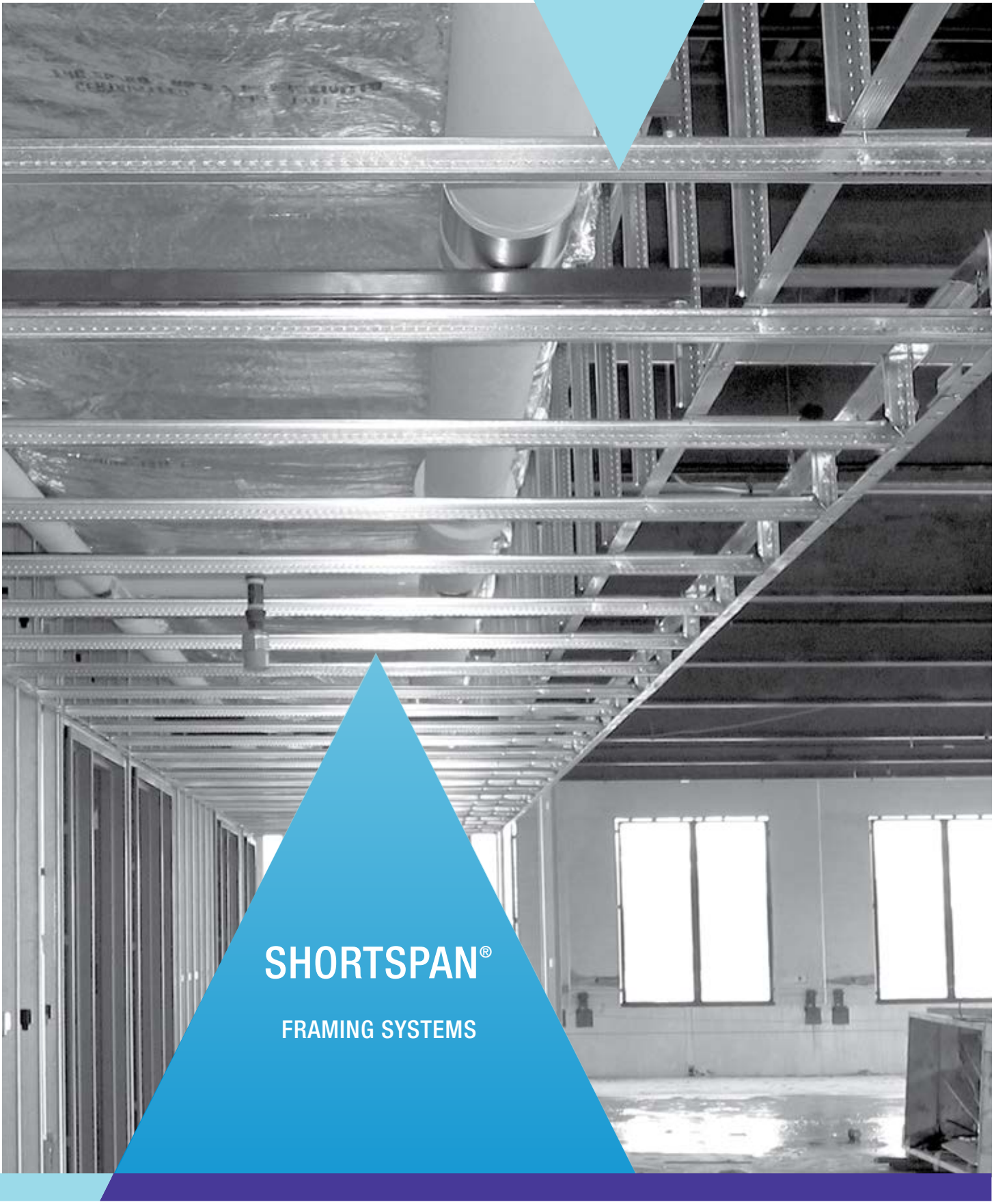


SHORTSPAN®

FRAMING SYSTEMS

Inspiring Great Spaces®

Armstrong®
CEILING SOLUTIONS

FASTER. EASIER. BETTER.

Armstrong® Drywall Framing Systems install faster than traditional methods, which helps you complete jobs under cost and ahead of schedule.

Our Drywall Systems are manufactured to meet or exceed ASTM standards and code requirements and are engineered to provide economical alternatives to stud and track construction.

We provide pre-engineered solutions for direct-to-deck installations, vertical drops, and short spans. This makes Armstrong ShortSpan® Drywall Framing perfect for use in corridors, small room configurations, restrooms, and storage closets.

DRYWALL Grid Systems

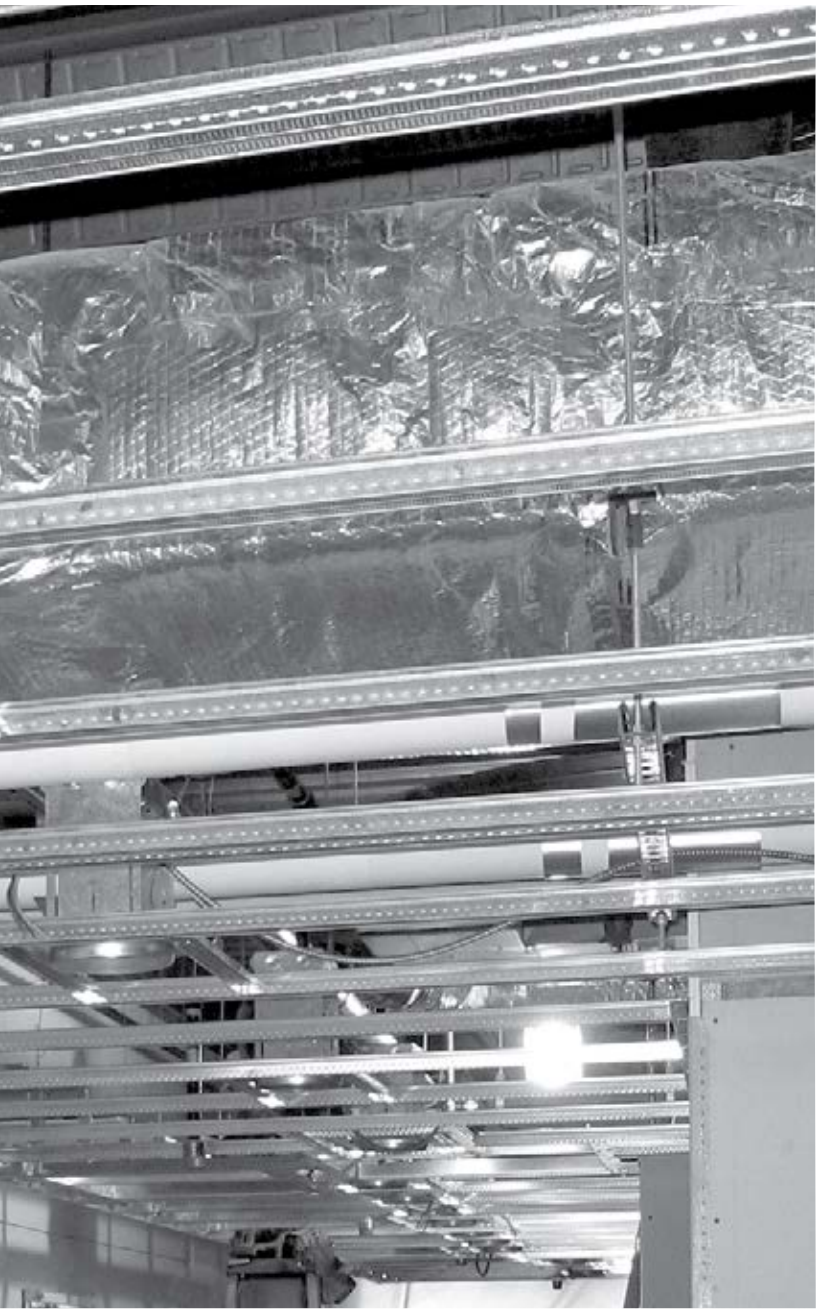
Code Compliance You Can Trust

Armstrong systems provide superior performance when compared to traditional methods. Our pre-engineered systems are tested for fit and finish and are engineered to be code compliant. When you specify Armstrong, you're assured a top quality product that reduces risk.

- ICC-ES: ESR-2311 Evaluation of Code Compliance
- ICC-ES: ESR-1289 Evaluation of Code Compliance
- IAPMO: ER-163: Evaluation of Code Compliance
- Department of State Architect – DSA PA105
- City of LA – RR 5348
- 26 UL Fire Resistant Designs
- Meets ASTM C635, C841, C926, C636, C754, C840,and C842
- Meets ASTM C645 requirement for minimum metal thickness to .0179" for screw pullout

Performance

- **PeakForm**® Eliminate hanger wires for spans up to 8' – 6"
- Select items available in High Recycled Content (HRC): 61% Total Recycled Content, 53% Post Consumer Content, 8% Pre-Consumer Content
- Non-HRC items have 30% recycled content
- Components meet broad range of UL design assemblies (ShortSpan® Tee, LAM, SB12)



SHORTSPAN® FRAMING SYSTEMS

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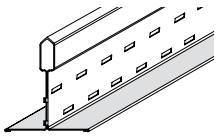
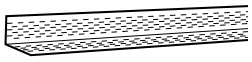
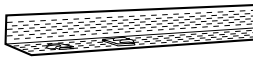
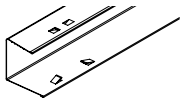
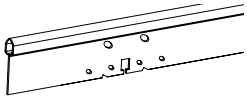
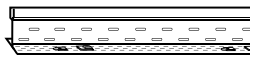
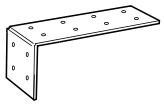
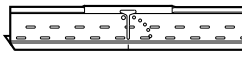
12 QuikStix™ Drywall Ceilings
13-16 QuikStix Soffits DGS
17 Maximum Load and Vertical Support
18-24 Integrated Solutions

- G40, 0.018" metal thickness meets ASTM C645
- G90 hot dipped galvanized coating available for interior high moisture areas.
- ScrewStop™ reverse hem prevents screw spin off
- Rotary stitching on double web adds strength and stability
- Deep knurled surface for easy screw insertion

SHORTSPAN ITEM DETAILS

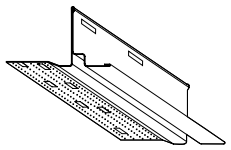
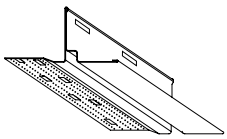
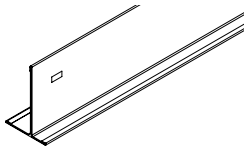
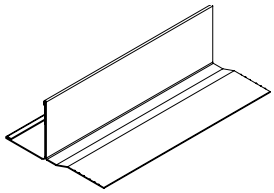
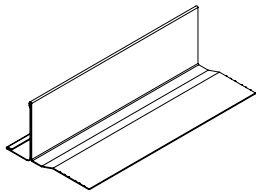
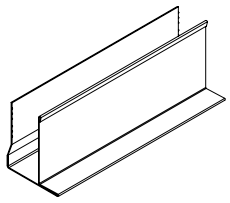
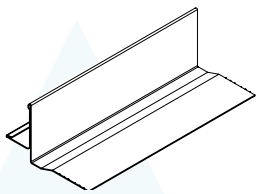
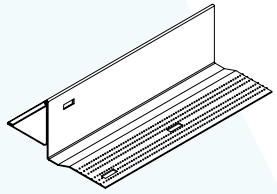
ShortSpan Item Details

Item Number	Length/Item Description	Face Dimension	Profile Height	Simple Span Uniform Load at L/240 (lbs./LF)	Fire Resistive	
S7708P S7710P S7712P S7714P	8' ShortSpan Tee 10' ShortSpan Tee 12' ShortSpan Tee 14' ShortSpan Tee	1-1/2" 1-1/2" 1-1/2" 1-1/2"	1-13/16" 1-13/16" 1-13/16" 1-13/16"	All items: 5ft. Span – 14.18 6ft. Span – 10.49 8ft. Span – 4.43		
KAM10	10' Knurled Angle Mold 0.018" Metal Thickness	1-1/4" x 1-1/4"	–	–	–	
KAM12	12' Knurled Angle Mold 0.018" Metal Thickness	1-1/4" x 1-1/4"	–	–	–	
KAM12G90	12' Knurled Angle Mold 0.018" Metal Thickness	1-1/4" x 1-1/4"	–	–	–	
KAM12HRC	12' Knurled Angle Mold 0.018" Metal Thickness	1-1/4" x 1-1/4"	–	–	–	
KAM1510	10' Knurled Angle Mold 0.018" Metal Thickness	1-1/2" x 1-1/2"	–	–	–	
KAM1512	12' Knurled Angle Mold 0.018" Metal Thickness	1-1/2" x 1-1/2"	–	–	–	
KAM151020E	10' Knurled Angle Mold 0.018" Metal Thickness	1-1/2" x 1-1/2"	–	–	–	
KAM151220E	12' Knurled Angle Mold 0.018" Metal Thickness	1-1/2" x 1-1/2"	–	–	–	
KAM151020	10' Knurled Angle Mold 0.018" Metal Thickness	1-1/2" x 1-1/2"	–	–	–	
KAM21025	10' Knurled Angle Mold 0.018" Metal Thickness	2" x 2"	–	–	–	
KAM21020EQ	10' Knurled Angle Mold 0.018" Metal Thickness	2" x 2"	–	–	–	
LAM12	12' Knurled Angle Mold (Locking tabs 8" o.c.) 0.018" Metal Thickness	1-1/4" x 1-1/4"	–	–		
LCM12	12' Locking Channel Molding 0.018" Metal Thickness	1-3/4" Face 1-1/4" Top Flange	1-3/4"	–	–	
SB12P	12' StrongBack Support (knockouts 8" o.c.) 0.018" Metal Thickness	–	2"	–		
QSLPM12	12' QuikStix Locking Pocket Main (Locking tabs 8" o.c.) 0.018" Metal Thickness	1-1/2"	1-1/2"	Vertical Supports @ 4' o.c. - 21.64 Vertical Supports @ 3' o.c. - 40.60	–	
QSUTC	QuikStix Uptight Clip (Pre-drilled screw holes)	1-3/4" wide	1-1/2" x 4-1/2"	–	–	
QS612 QS812	12' QuikStix Soffits Tee (Knockouts 6" o.c.) 12' QuikStix Soffits Tee (Knockouts 8" o.c.)	1-1/2" 1-1/2"	1-1/2" 1-1/2"	4' Span - 3.79 4' Span - 4.41	– –	

Note: All components are available with G90 hot dipped galvanized coating. Just add G90 suffix to end of Item #, Ex: LAM12G90.
"P" at the end of Item numbers means PeakForm bulb

Drywall Transitions Molding

Material: Commercial-quality, cold rolled, hot dipped galvanized steel

Item Number	Length/Item Description	Face Dimension	Flange	Profile Height	
7901	120" Shadow Reveal Molding	3/8" shadow reveal	9/16"	1-1/4"	
7902	120" Shadow Reveal Molding	3/8" shadow reveal	15/16"	1-1/4"	
7903	120" Inverted T Molding	1" Inverted T	–	1-1/2"	
7904 7904PF*	120", 15/16" Flush Transition Molding		15/16"	1-1/4"	
7905 7905PF*	120", 9/16" Flush Transition Molding		9/16"	1-1/4"	
7906	120", “F” Vertical Transition Molding		5/8"	1-7/16"	
7907	120", 9/16" Tegular Transition Molding		9/16"		
7908	120", 15/16" Tegular Transition Molding	1" Inverted T	15/16"		

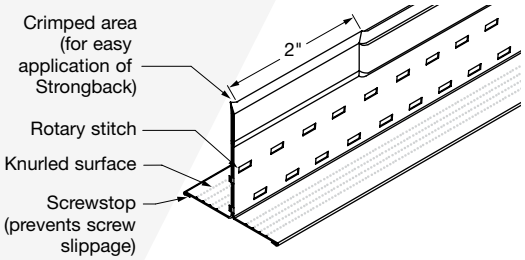
SHORTSPAN® FRAMING SYSTEM – INTERIOR DRYWALL CEILINGS

THE BEST CHOICE FOR FRAMING SHORT SPANS

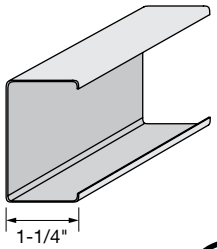
Reduce Labor Cost:	Eliminates screws, cross tees and hanger wire (in most applications)
Reduce Material Cost:	Economical price point on components
Reduce Waste:	Standard and custom lengths – and there are no cartons to throw away
Reduce Risk:	System was evaluated using full scale seismic testing and may be an acceptable solution on your next project. Check with your local code official for approval prior to installations. For official test reports, please contact TechLine at 877-ARMSTRONG.
Fire Rated:	Up to 2-hour rating with one (1) layer of fire-rated gypsum board. (See pages 8 and 9 for drawing detail.) Resistive when used in applicable UL fire resistive designs. Fire Guard components meet UL Design Listings D501, D502, G523, G524, G526, G527, G528, G529, G531, G553, J502, L502, L508, L513, L515, L525, L526, L529, L564, P501, P506, P507, P508, P509, P510, P513, P514.

SHORTSPAN FRAMING TEES ARE ENGINEERED FOR FASTER, EASIER INSTALLATION

- 1-1/2" wide face exceeds the minimum industry standard
- ScrewStop™ reverse hem prevents screw spin-off
- Balanced profile stays flat during installation
- Rotary stitching on double web adds strength and stability
- Deep knurled surface for easy screw insertion
- G40, .018" metal thickness meets ASTM C645



Traditional Method to Frame Short Spans



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

Corridor framing using traditional steel studs

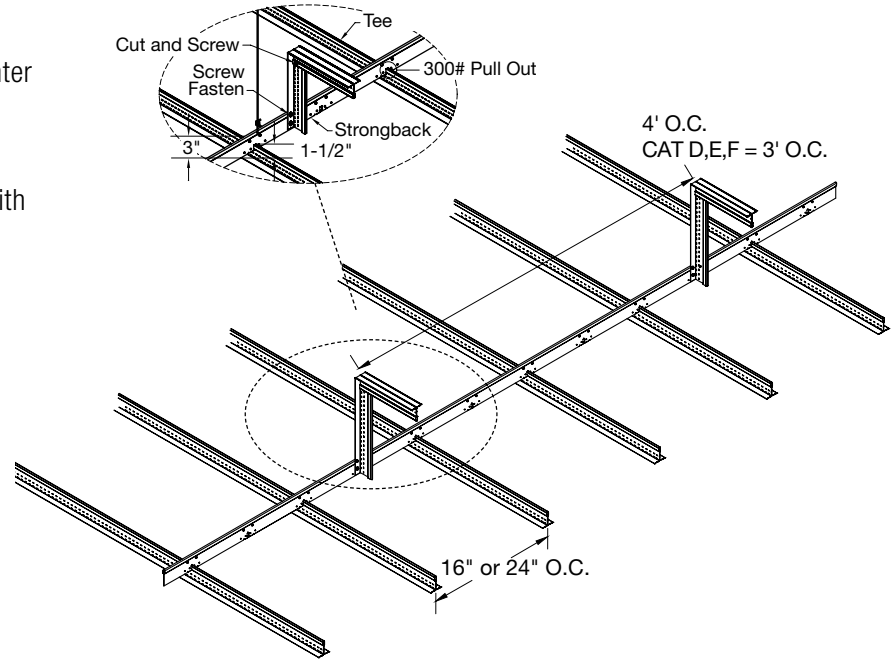
NO CARDBOARD CARTONS

- Reduced clean-up and waste at jobsite
- Quick to open
- Chop saw to length

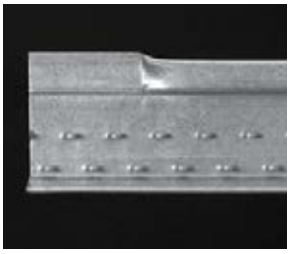
EASIER, PRE-ENGINEERED SOLUTION TO SUPPORT SPANS UP TO 8' – 6"

- Knockouts 8" on center eliminates measuring, screwing, and splicing
- Allows vertical supports at 4' on center instead of 24" or 16"
- Reduces lateral movement
- Resists upward movement if used with vertical tee post or stud
- Easier to level system compared to traditional framing

StrongBack support installed mid-span with vertical post at 4' on center.



INSTALLATION RECOMMENDATIONS*

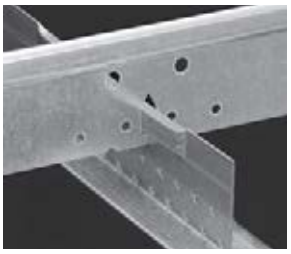


1 Install Locking Angle Molding (LAM12) on walls

2 Lock in ShortSpan tees (577XXP) into LAM12

3 Flattened bulb allows StrongBack to slide over bulb

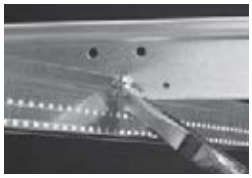
4 Slide StrongBack into place – no bending of tab required



*ALTERNATIVE METHOD TO INSTALL STRONGBACK

1 Open StrongBack (SB12P) lock tabs with pliers (easier if performed on floor)

2 Slide StrongBack over bulb of ShortSpan tee and engage by bending lock tabs back to original position

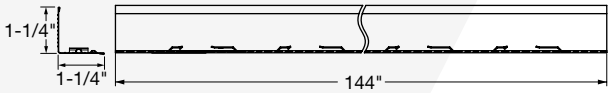


3 Support and level system to structure; attach vertical supports to StrongBack as required

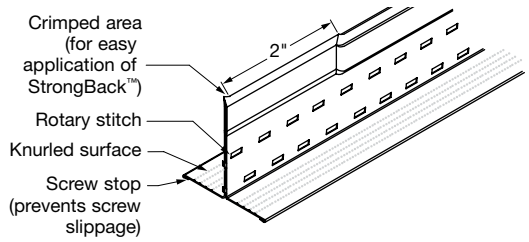
4 To provide stability to StrongBack, it is recommended to bend first 4" to 90° and pin to wall

TIME SAVING SOLUTION FOR CONGESTED PLENUM INSTALLATIONS

- Eliminates the need for hanger wire
- Gussets and mounting rail provide alternative method of grid attachment when straight drops for hanger wire are not possible
- Reduced labor costs over conventional installation methods in congested plenum
- Alignment crimps at locking tabs for fast, easy alignment



12' Locking Angle Molding (LAM12) – Wall angle molding fabricated from hot dipped galvanized steel. The molding features patented locking details at 8" centers that lock and hold the ShortSpan framing tees.



ShortSpan Tee (S7708P, S7710P, S7712P, S7714P) – ShortSpan eliminates cross tees, screws, and hanger wire. Rotary stitching on double web adds strength and stability. G40, .018"metal thickness meets ASTM C645.

Load Test Data

		Hanger Spacing Uniform Load at L/240 (Lbs/LF)							
ShortSpan Cross Tees	**Web Height**	**3'**	**4'**	**5'**	**6'**	**7'**	**7'-6"**	**8'**	**8'-6"**
S77**P	1-13/16"	–	31.76	14.18	10.49	5.84	5.54	4.43	3.37
QuikStix Locking Pocket Main									
QSLPM12	1-1/2"	40.60	20.87	–	–	–		–	
StrongBack Support Hanger		Hanger Spacing Uniform Load at L/360 (Lbs/LF)							
SB12P	2"	27.53	17.76	–	–	–		–	

Maximum Load Test Data in Lbs./SF - L/240

									(10'-14' spans require a mid-span support)		
Item Number	**OC Spacing**	**4' Span Lbs./SF**	**5' Span Lbs./SF**	**6' Span Lbs./SF**	**7' Span Lbs./SF**	**7'-6" Span Lbs./SF**	**8' Span Lbs./SF**	**8'-6" Span Lbs./SF**	**10' Span Lbs./SF**	**12' Span Lbs./SF**	**14' Span Lbs./SF**
S77**P	16"	23.82	10.64	7.87	4.38	4.16	3.32	2.53	10.64	7.76	4.38
S77**P	24"	15.88	7.09	5.25	2.92	2.77	2.22	1.69	7.09	5.17	2.92

Note: 5/8" drywall weighs 2.4 lbs./SF (tees installed 16" or 24" on center)
1/2" drywall weighs 2.0 lbs/SF (tees installed 16" on center only)

INSTALLATION NOTES

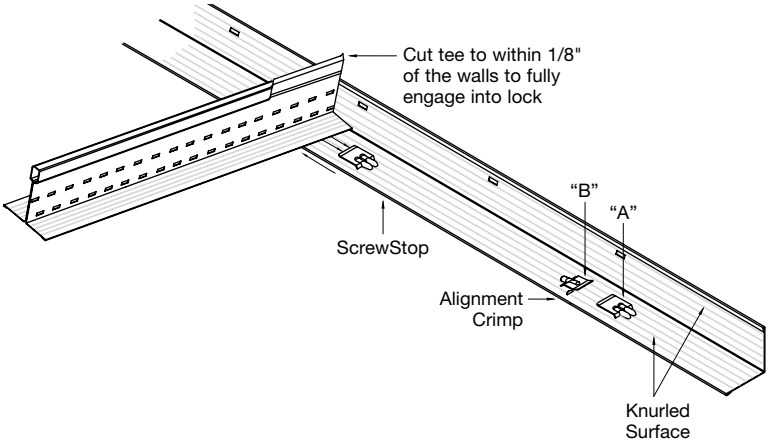
ShortSpan:

1 ShortSpan tees **must** be cut within 1/8" of the vertical leg of the Locking Angle Moldings (for non-rated installations only).

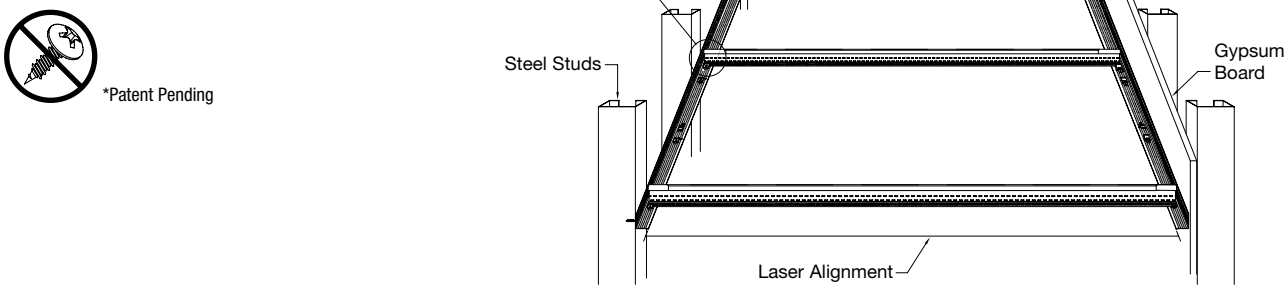
2 **Must** screw LAM to wall structure (#8 x 1-1/4" wafer head self drill sheet metal screws tested in 25- and 20- gauge steel studs).

– Assembly tested to 200 lbs. for shear and screw pullout without failure (refer to Maximum Load chart on page 11

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

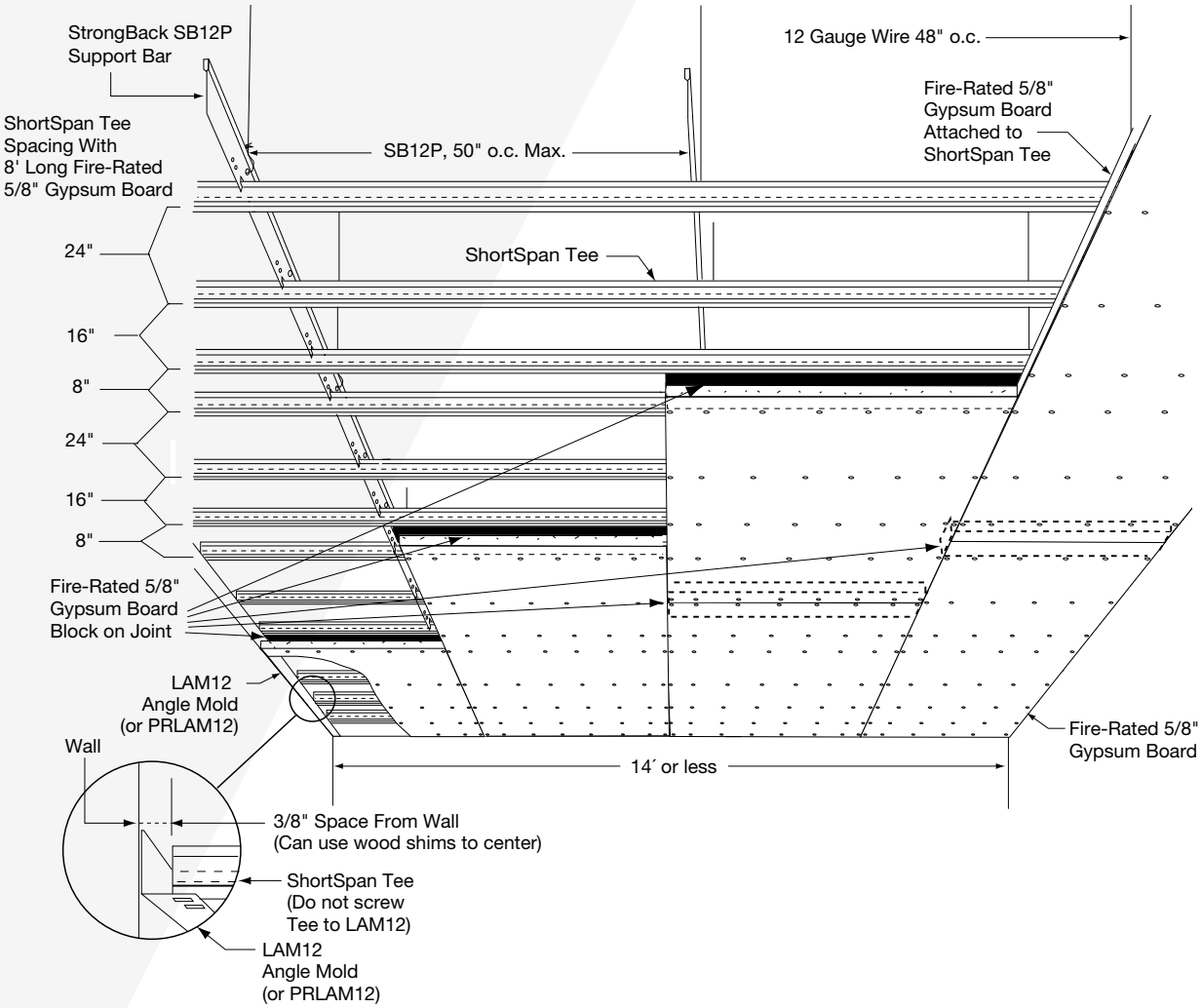


No Additional Requirements For Seismic Areas
There's no need to screw ShortSpan Tees to Locking Angle Molding in Seismic Design Categories A-F (unless required by local code).



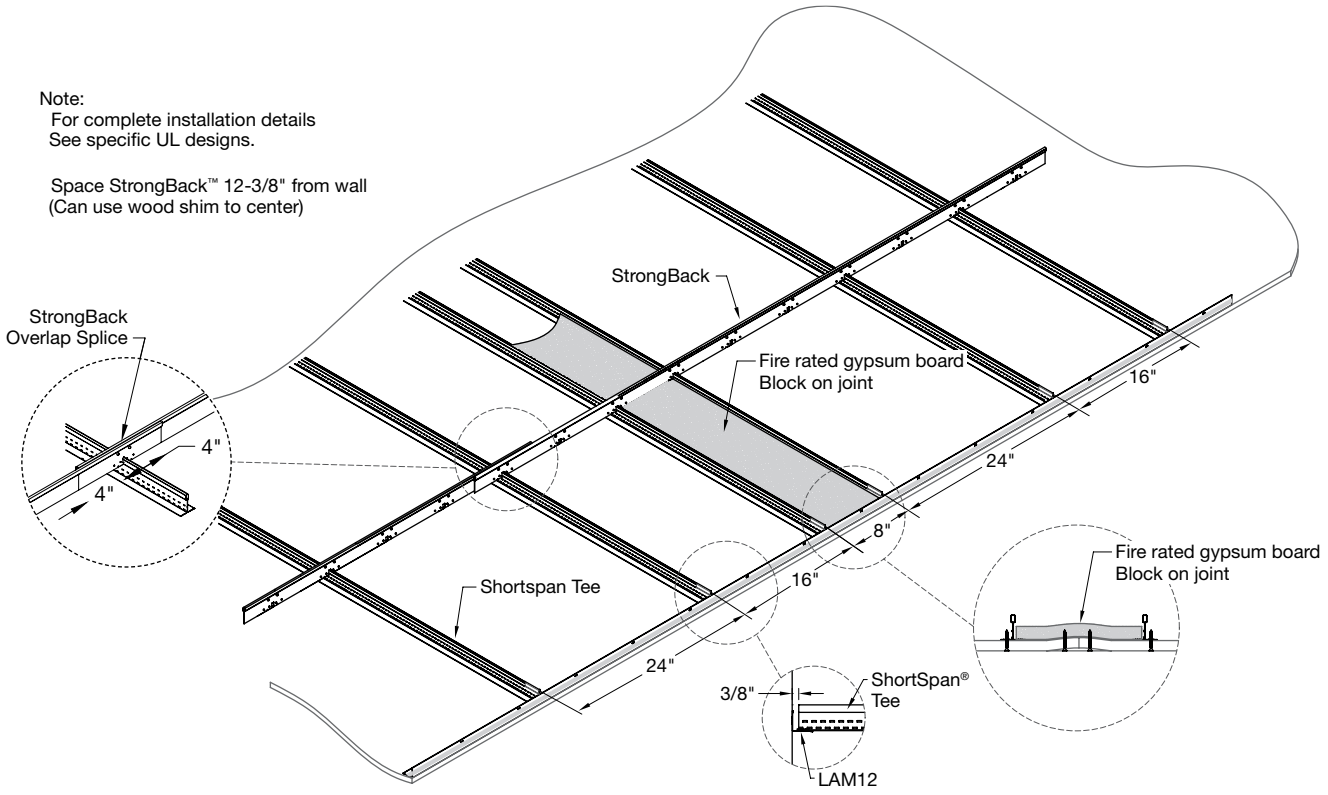
*Patent Pending

FIRE RATED



Fire Rated: up to 2-hour rating with one (1) layer of fire-rated gypsum board. Resistive when used in applicable UL fire resistive designs. Fire Guard components meet UL Design Listings D501, D502, G523, G524, G526, G527, G528, G529, G531, G553, J502, L502, L508, L513, L515, L525, L526, L529, L564, P501, P506, P507, P508, P509, P510, P513, P514.

LOCKING ANGLE MOLDING:* A FASTER, MORE ACCURATE SOLUTION

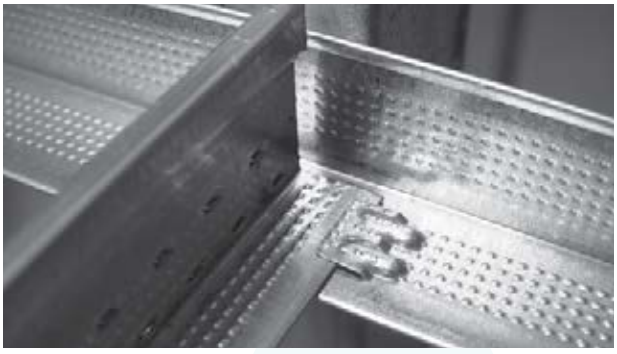


FIRE RATED

Fire Rated: up to 2-hour rating with one (1) layer of fire-rated gypsum board.
Resistive when used in applicable UL fire resistive designs. Fire Guard components meet UL Design Listings D501, D502, G523, G524, G526, G527, G528, G529, G531, G553, J502, L502, L508, L513, L515, L525, L526, L529, L564, P501, P506, P507, P508, P509, P510, P513, P514.

MOLDINGS

- Pre-engineered locking tabs punched 8" on center:
  - – Eliminates measuring 16" or 24"
  - – Locking tabs prevent lateral and upward movement
  - – Eliminates screws, pop rivets, or crimpers needed to attach tees to molding
- Knurled surface on both flanges
- ScrewStop™ reverse hem prevents screw spin-off and provides safer handling
- Alignment crimp at locking tabs for fast, easy alignment
- Locking Angle Molding is designed to only work with Armstrong ShortSpan products



ShortSpan tee engaged in Locking Angle Molding

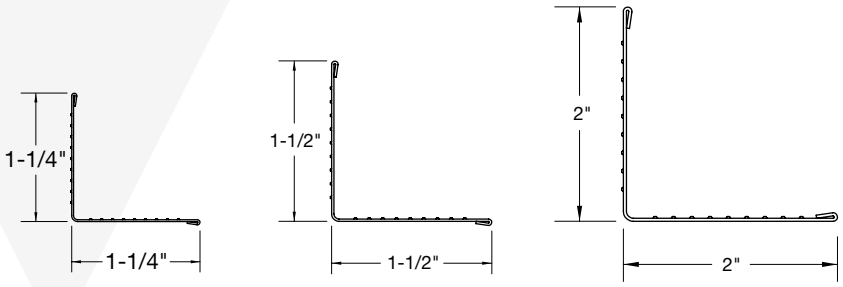
KNURLED
ANGLE MOLDING

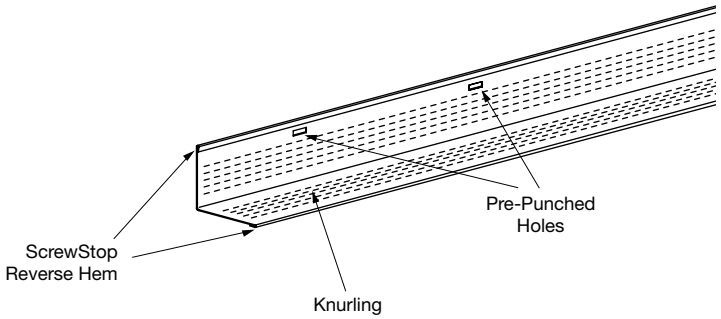
MORE INSTALLATION BENEFITS IN ENHANCED DRYWALL FRAMING SYSTEM WALL ANGLE

Knurled Angle Molding (KAM) for Drywall Framing has the time saving advantages of knurling, ScrewStop™, pre-punched holes, and no cartons to throw away.

Knurling:	Helps the screws to grab quickly
ScrewStop:	A reverse hem on the top and bottom flanges will catch the screw and prevent it from slipping off the wall angle. No sharp edges on the top or bottom of the angle.
Pre-punched Holes:	Located on the top edge to allow for faster insertion of the screws.
No Carton Packaging:	Eliminate time needed to open and throw away cartons. Just cut the plastic strap and go.

- Available with a 1-1/4", 1-1/2" or 2" face to meet your specific need
- 2" KAM is available in 0.030", 0.027", and 0.018" metal thickness
- 1-1/2" KAM is available in 0.030", 0.027", and 0.018" metal thickness
- 1-1/2" KAM is available in 10' or 12' lengths
- 1-1/4" KAM is available in 10' or 12' lengths
- Top and bottom flanges are hemmed for easy handling, unlike the sharp flanges on competitor moldings
- ScrewStop reverse hem catches screws, preventing them from slipping off the wall angle
- Pre-punched holes on the top edge (4" o.c.) allow for faster screw insertion

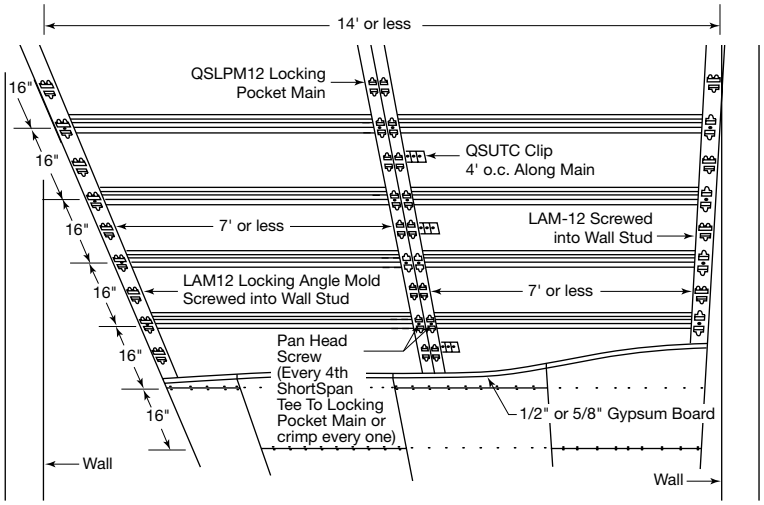




LOCKING POCKET MAINS*

- Reduces time and labor installing drywall ceilings in tight plenum conditions
- Uptight clip allows installation in 1-1/2" to 5-1/2" plenums
- Locking Pocket Main has the same characteristics as StrongBack™
- Locking Pocket Main allows uptight installation since it is installed at the same level as the ShortSpan tees
- ShortSpan Tees can span up to 8'-6" without vertical support (16" o.c.)
- Locking Angle Mold eliminates measuring, marking and screwing at perimeters

*Patent Pending



Maximum Load in Lbs/SF (L/240 per ASTM C645)

Main Beam o.c. Spacing	Vertical Support (Tee Post, Hanger Wire, or QSUTC) Spacing Along Main Beam	Max Load in Lbs/SF
QSLPM12 – 4' o.c.	4'	5.22
QSLPM12 – 5' o.c.	4'	4.17
QSLPM12 – 6' o.c.	4'	3.48
QSLPM12 – 7' o.c.	4'	2.98
QSLPM12 – 7'6" o.c.	4'	2.78
QSLPM12 – 8' o.c.	4'	2.61
QSLPM12 – 8'6" o.c.	4'	2.46

Main Beam o.c. Spacing	Vertical Support (Tee Post, Hanger Wire, or QSUTC) Spacing Along Main Beam	Max Load in Lbs/SF
QSLPM12 – 7' o.c.	3'	6.60
QSLPM12 – 7'6" o.c.	3'	6.16
QSLPM12 – 8' o.c.	3'	5.77
QSLPM12 – 8'6" o.c.	3'	5.43
QSLPM12 – 8'6" o.c.	3'	–

Note: 5/8" drywall weighs 2.4 lbs/SF or less
1/2" drywall weighs 2.0 lbs/SF or less
Fixtures should be independently supported
* For other combinations; consult TechLine at 1-877-Armstrong

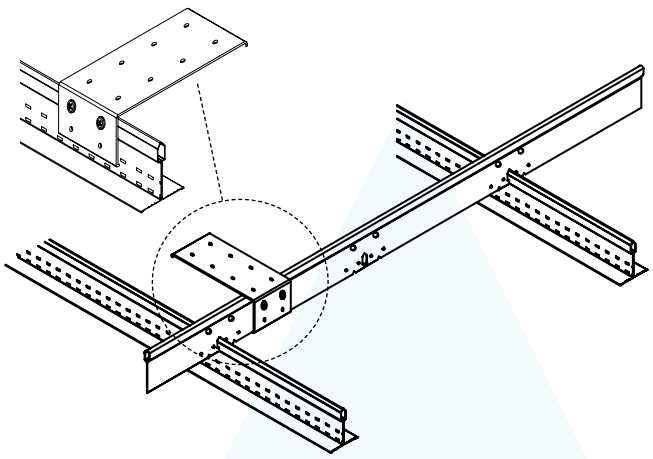
INSTALLATION RECOMMENDATIONS

1 Vertical supports to structure should be either QuikStix Uptight Clips or stiff legs using scrap metal. Wire is NOT recommended for hanging this system.

2 ShortSpan tees must be cut within 1/8" of vertical leg of the Locking Angle Moldings and Locking Pocket Mains.

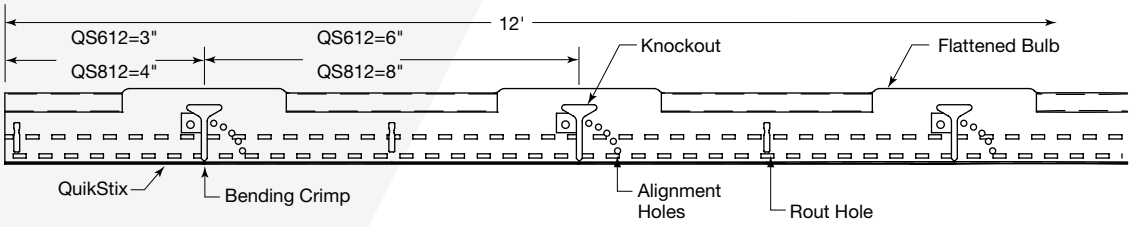
3 To engage ShortSpan tees into Locking Pockets: insert right hand flange of tee into long pocket first and allow left flange to clear short pocket; rest flat. Slide tee to the left to engage in short pocket (audible click).

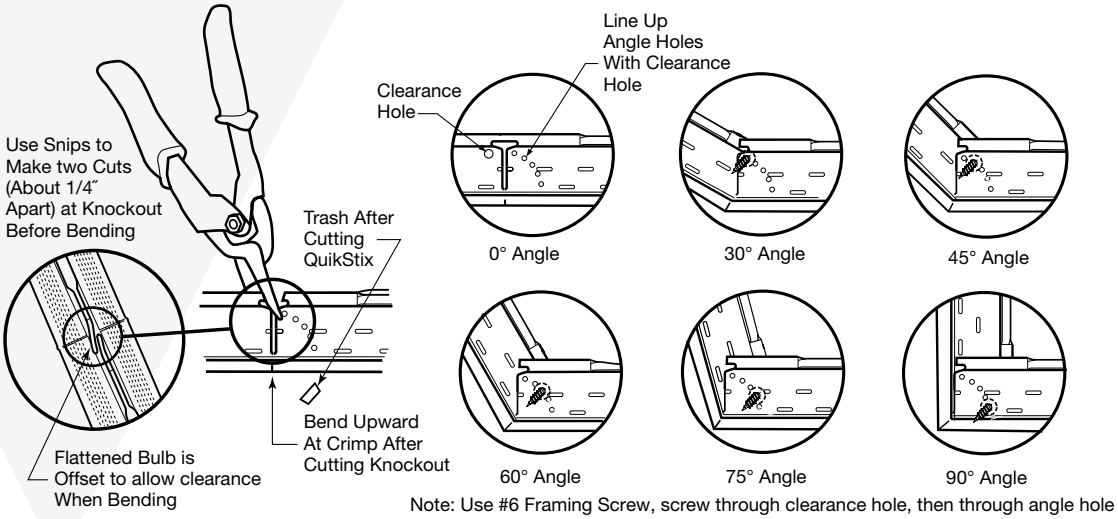
Uptight Clip (QSUTC): Saves Time in Tight Plenum Areas and is Adjustable to Uneven Surfaces



REDUCES TIME AND LABOR WHEN INSTALLING VERTICAL DROPS

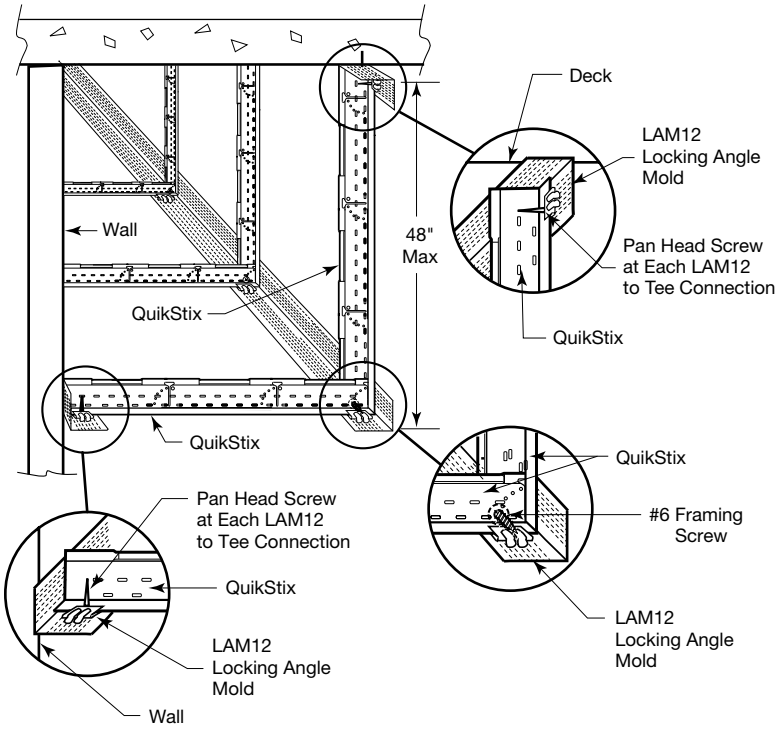
- Knockouts at 6" or 8" centers reduces cutting time
- Alignment holes make screw installation simple and forms perfect 30°, 45°, 60°, 75° and 90° angles
- Flattened bulb to allow true angles without interference; bending crimp prevents misalignment
- 90 degree angle fits Locking Angle Molding (LAM12)
- Rout holes 6" (QS612) and 8"(QS812) o.c. allows use of XL8926, XL7936, XL8945P or XL8965 cross tees for 2', 3', 4', or 6' section spans



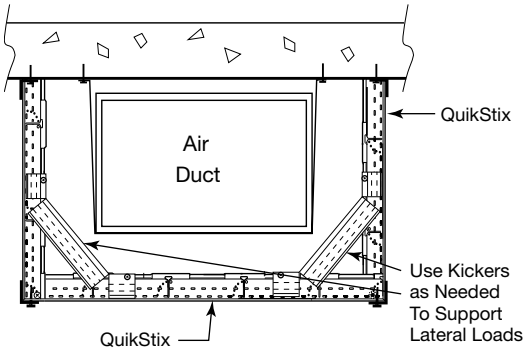


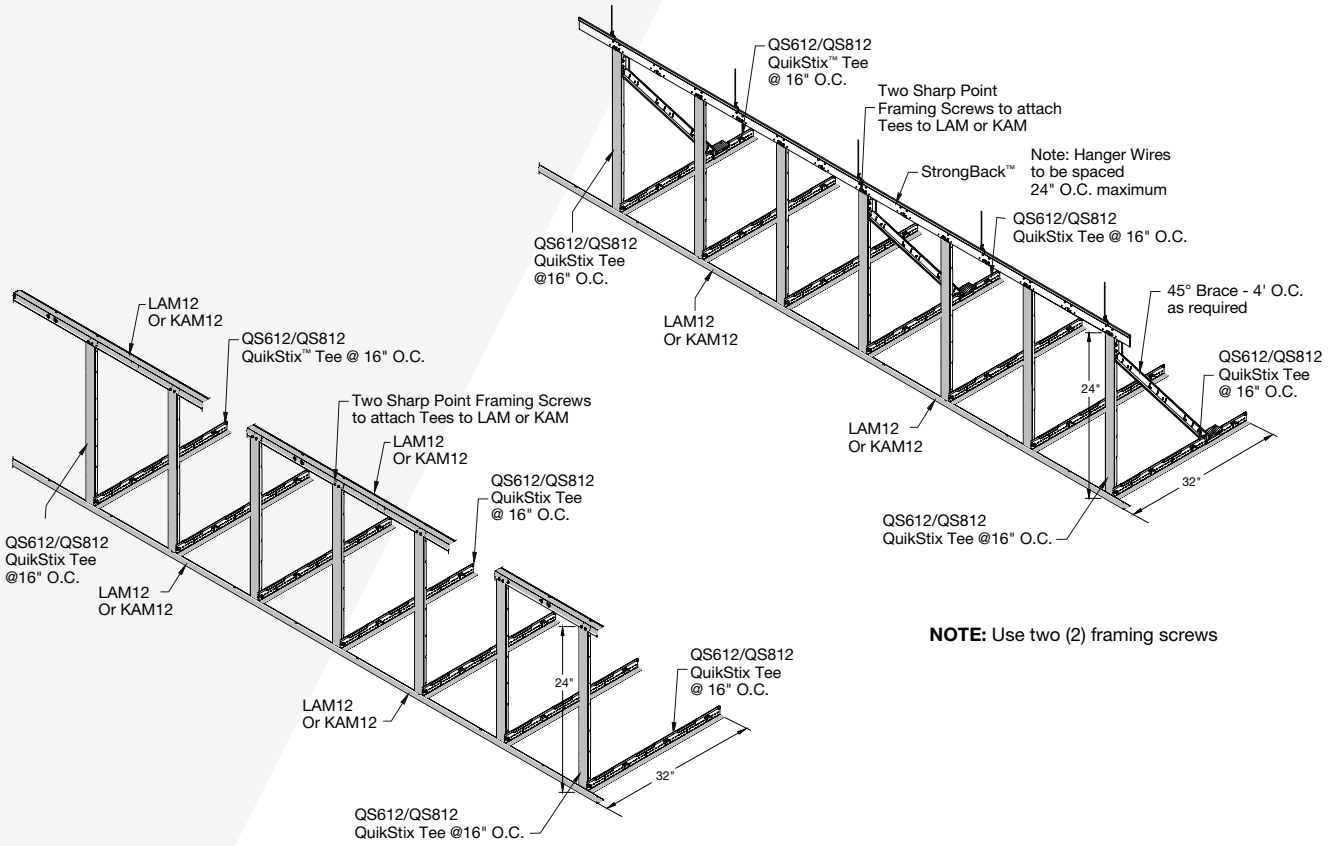
Note: Use #6 Framing Screw, screw through clearance hole, then through angle hole

90 DEGREE DROP SOFFIT



FRAMING AROUND DUCT WORK





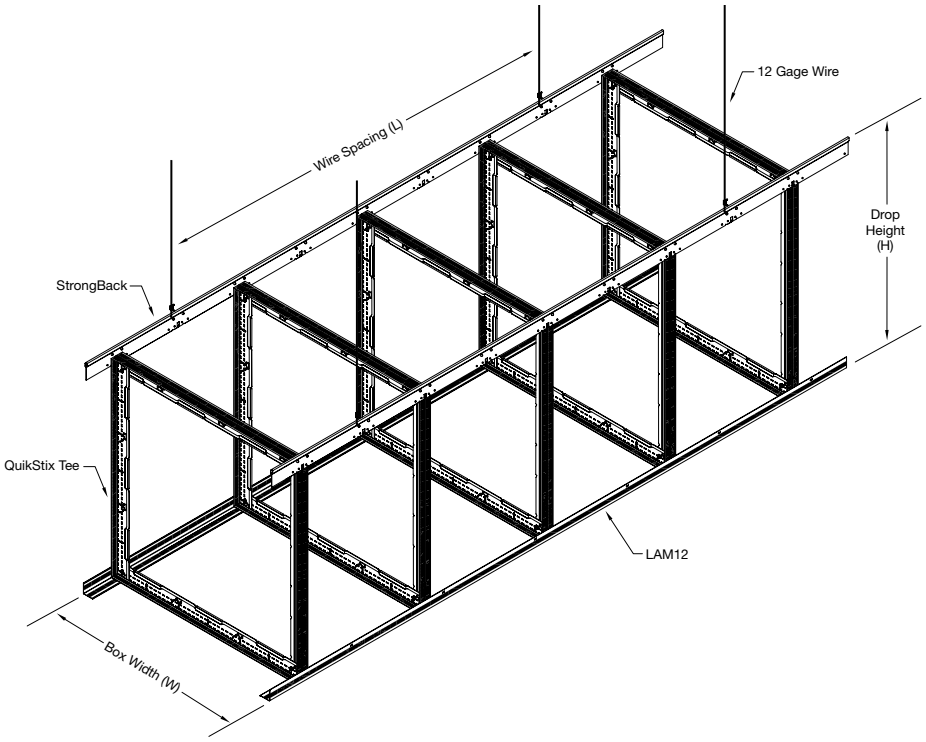
NOTE: Use two (2) framing screws

Maximum System Load for QuikStix Soffit (6" and 8" O.C) in Lbs./SF* (L/240 per ASTM C645)

	Horizontal QuikStix Soffit Span				
	16"	24"	32"	36"	48"
16" o.c.				5.30 (Lbs/SF)	2.84 (Lbs/SF)
24" o.c.	10.65 (Lbs/SF)	7.92 (Lbs/SF)	5.46 (Lbs/SF)	3.53 (Lbs/SF)	**
36" o.c.	7.10 (Lbs/SF)	5.28 (Lbs/SF)	3.64 (Lbs/SF)	**	**
48" o.c.	5.34 (Lbs/SF)	3.96 (Lbs/SF)	2.73 (Lbs/SF)	**	**
72" o.c.	3.55 (Lbs/SF)	2.64 (Lbs/SF)	**	**	**

Note: Cross Tees are installed 12" or 16" o.c.
* All data obtained from actual Load Testing except for 32" span column. This column has a 1.2 Safety Factor built into it.
** Additional support required

SUSPENDED – QUIKSTIX BOX WITH STRONGBACK

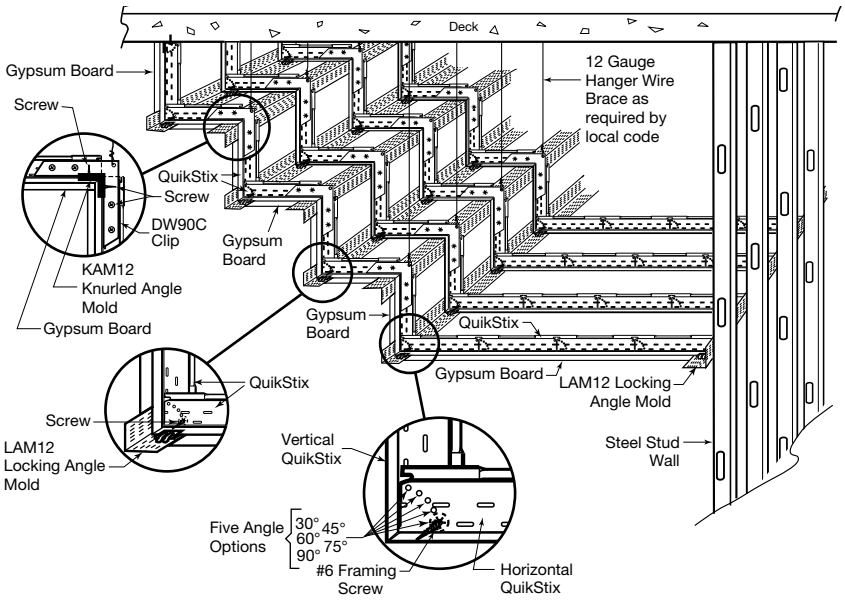


QuikStix Box Drop Height Limitation Table (H)

QuikStix Width (W)	StrongBack™ Wire Spacing (L)			
	32"	36"	40"	48"
1	9'-9"	8'-6"	7'	4'-6"
2	9'-3"	8'	6'-6"	4'
3	8'-9"	7'-6"	6'	3-6"
4	8'-3"	7'	5'-6"	3'

Note: Additional bracing may be required.

DRYWALL STEP VERTICAL



LOAD AND VERTICAL SUPPORTS

LOAD AND VERTICAL SUPPORTS

ShortSpan Vertical Support Requirements

Tees installed 16" on center with 5/8" or 1/2" drywall (Seismic Design Categories A, B, C, D, E,F)	
Up to 8'-6" span	No vertical support required
8'-6" to 14' 0" span	Mid-span vertical support required
Tees installed 24" on-center with 5/8" drywall (Seismic Design Categories A, B, C, D, E, F)	
Up to 7'-6 " span	No vertical support required
7'-6" to 14' 0" span	Mid-span vertical support required

Section Properties – ASTM C754 Table 3

Section	Min. Base Metal Thickness (in)	Design Thickness (in)	Gross Area (in2)	Effective Properties	
				Ixx2 (in4)	Ma (ft-lb)
ShortSpan®	0.0179	0.018	0.099	0.03633	52.33
StrongBack™	0.0335	0.034	0.092	0.033	45.6

VERTICAL SUPPORT OPTIONS

Hanger Wire

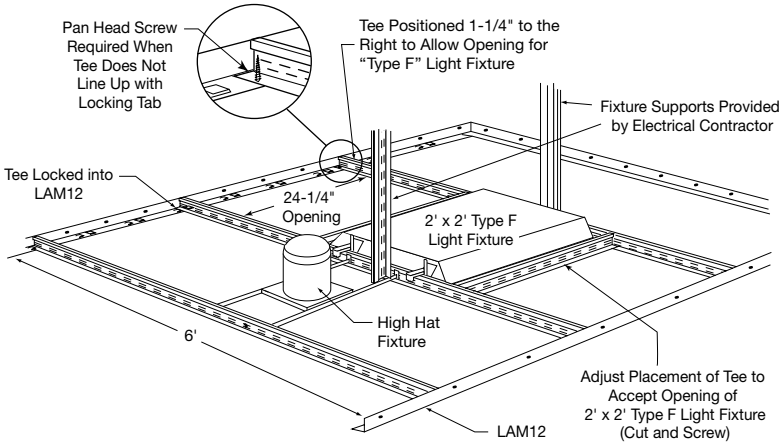
Scrap Tee Post

Manufactured StrongBack

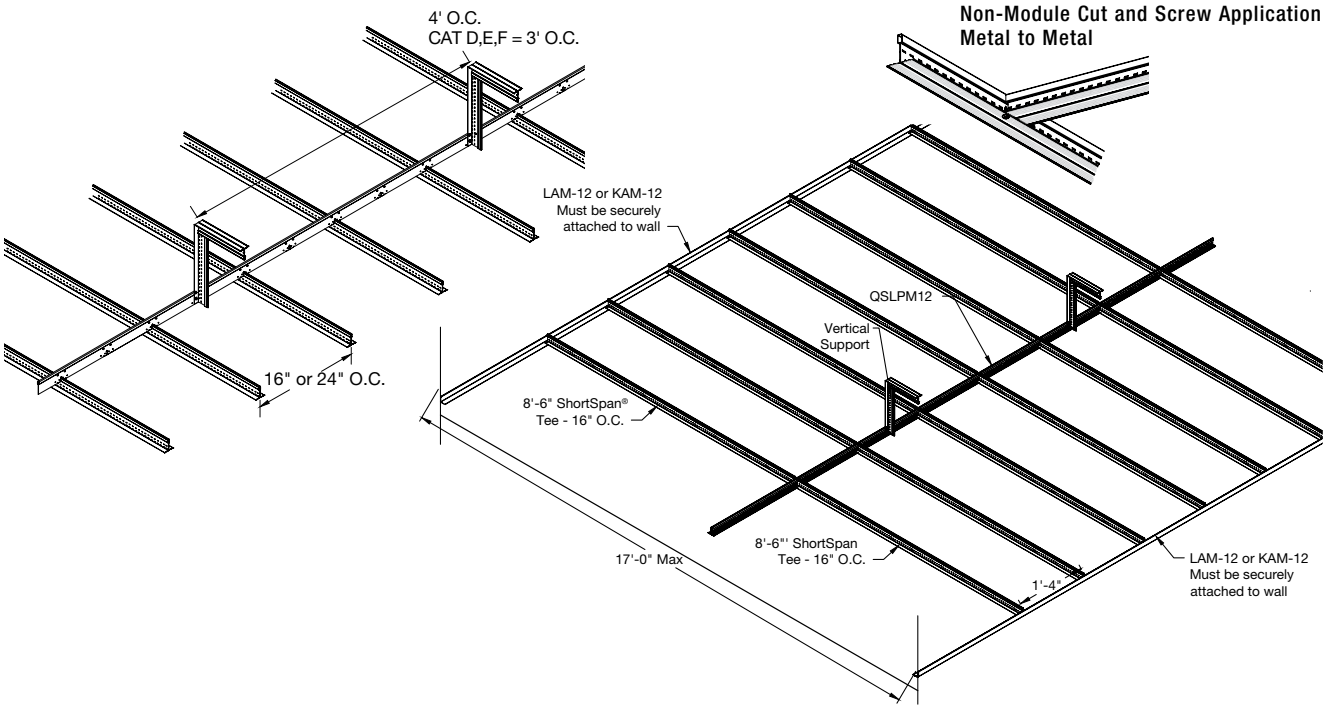
Field Assembled Support

QuikStix Uptight Clip

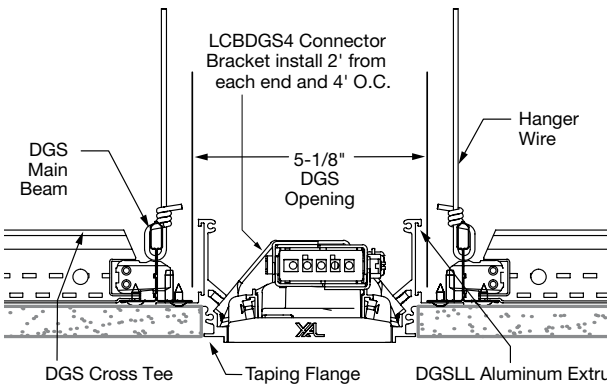
FIXTURE INSTALLATION

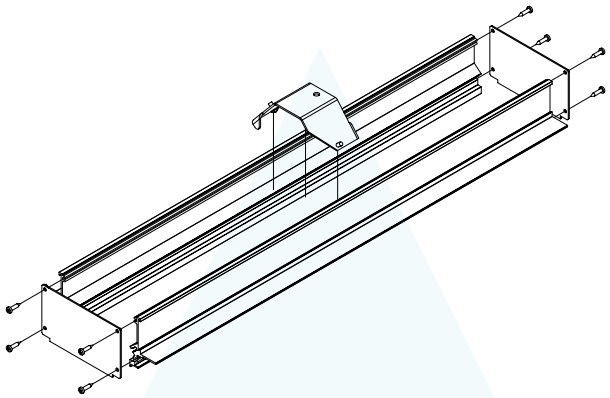


FIELD ASSEMBLED STIFF BACK



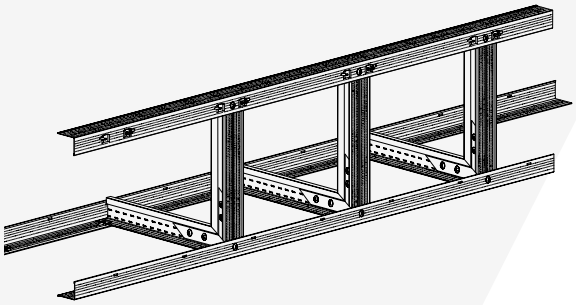
DRYWALL LINEAR LIGHTING

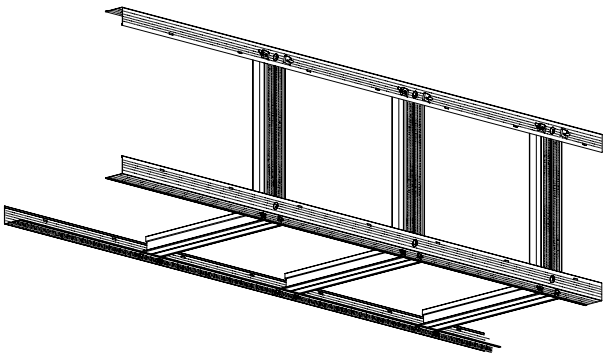


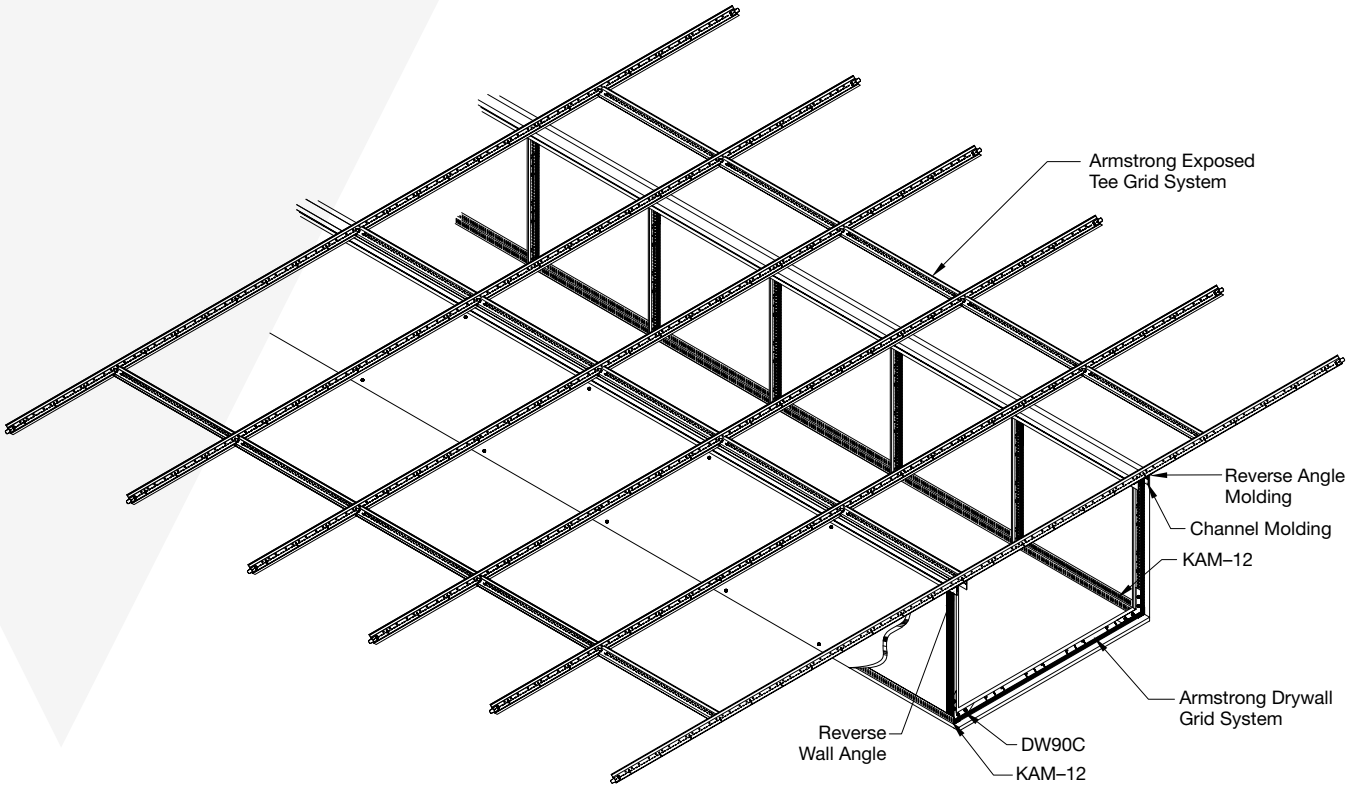


NOTE: Refer to the Drywall Linear Lighting Data Page (BPCS-5367) to view full details

SOFFITS AND BULKHEADS

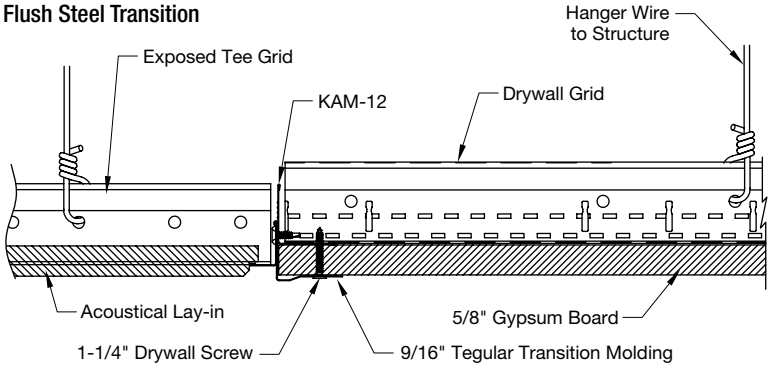




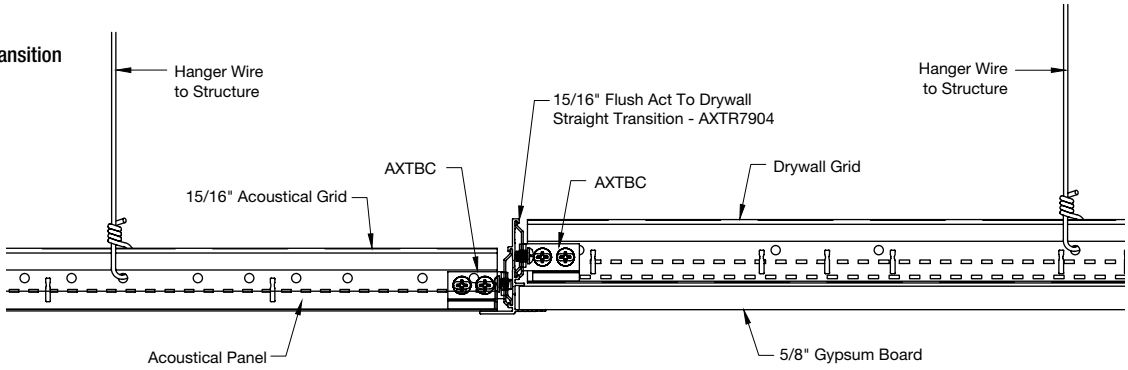


NOTE: Refer to the QuikStix Soffits Data Page (BPCS-3818) or Drywall Grid System – Flat Ceilings Data Page (BPCS-3081) to view full details.

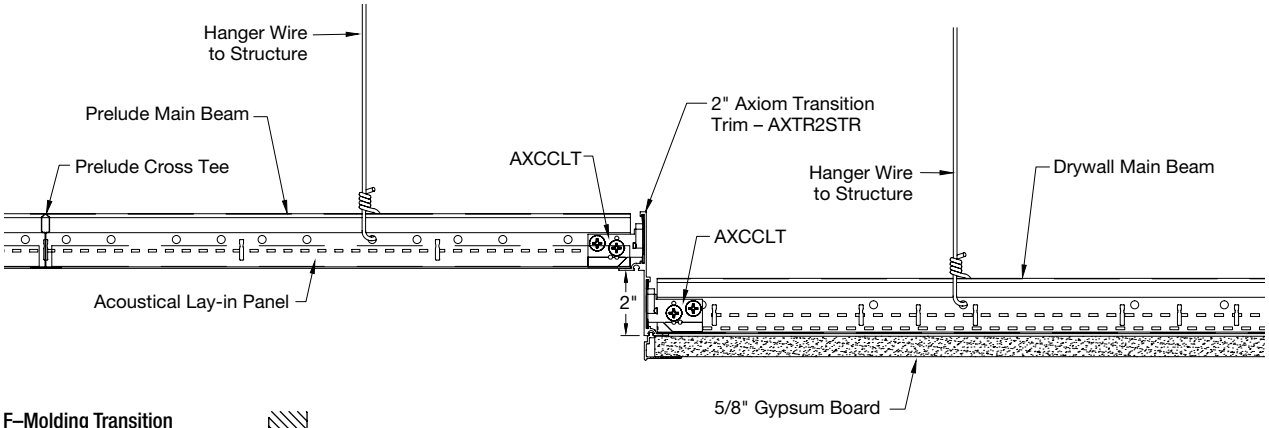
Flush Steel Transition



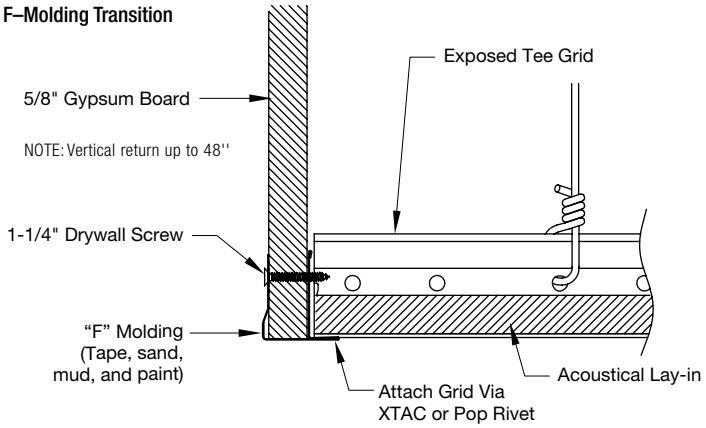
Axiom® Flush Transition



2" Axiom® Transition – Elevation Change (Available 1" – 10")



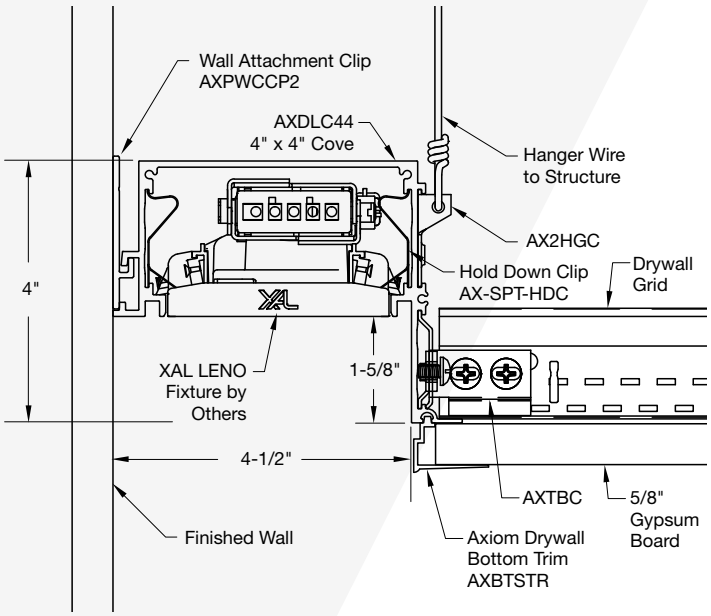
F–Molding Transition



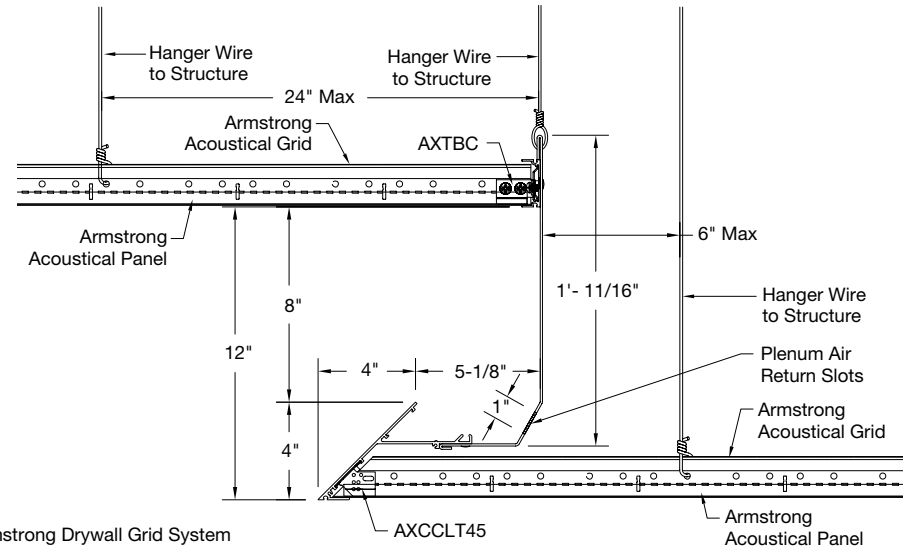
NOTE: Refer to the Transition Moldings Data Page (BPCS-4307) and Axiom Transitions Data Page (BPCS-3530) to view full details.

LIGHT COVES

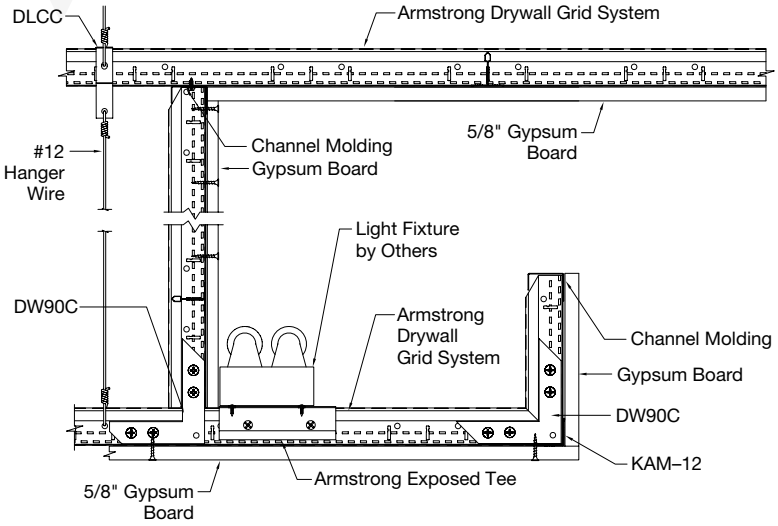
Axiom® Direct Light Cove



Axiom® Indirect Light Cove – Ceiling-to-Ceiling Knife Edge

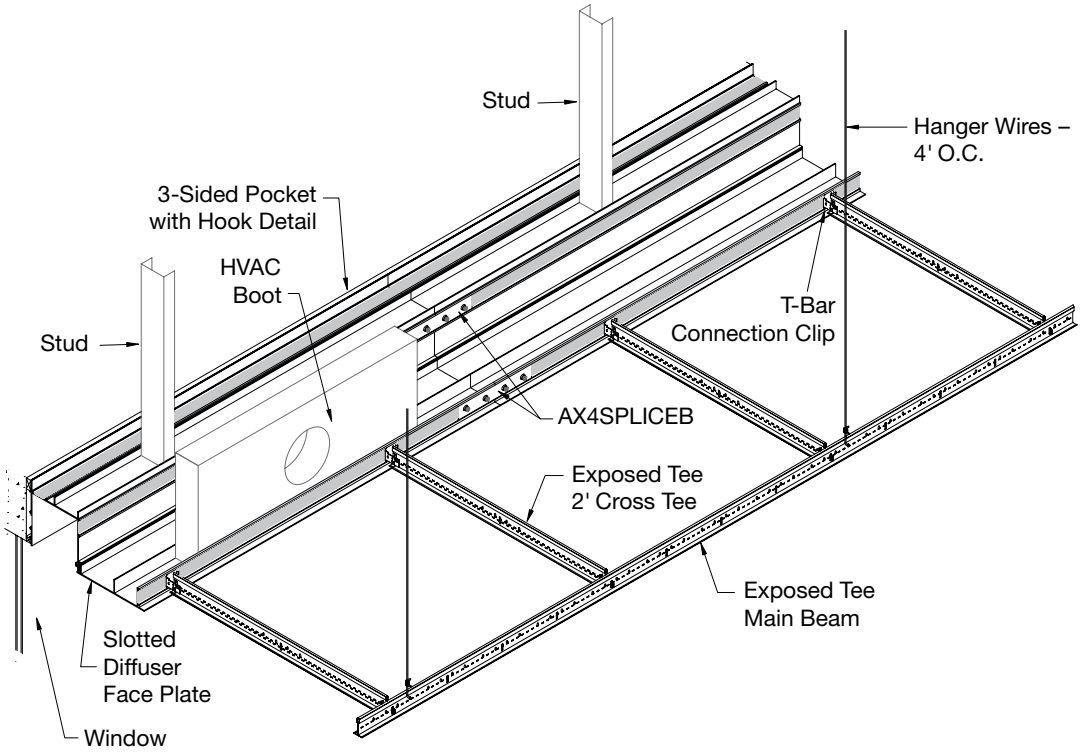


Drywall Light Cove

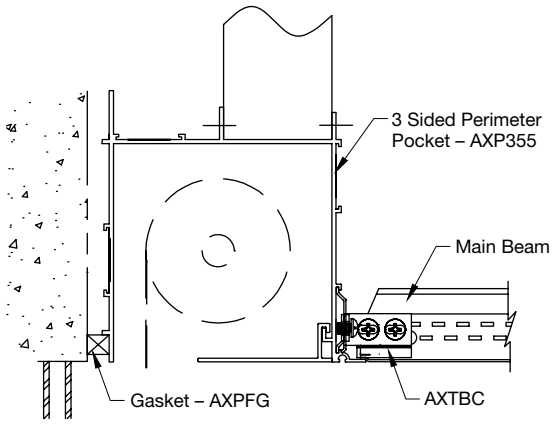


NOTE: Refer to the Axiom Direct Light Coves Data Page (BPCS-5065) and Drywall Grid System – Light Coves Data Page (BPCS-3081) to view full details.

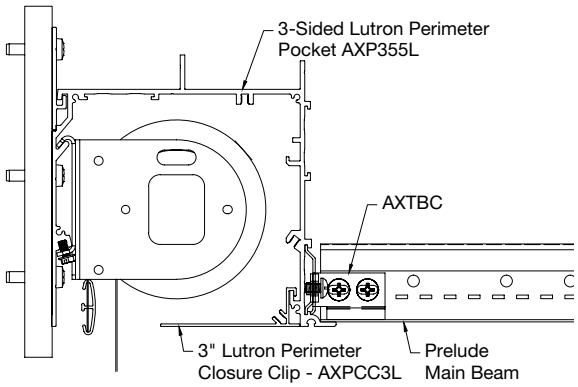
AXIOM® BUILDING PERIMETER SHADE POCKETS



Axiom® Building Perimeter Shade Pocket

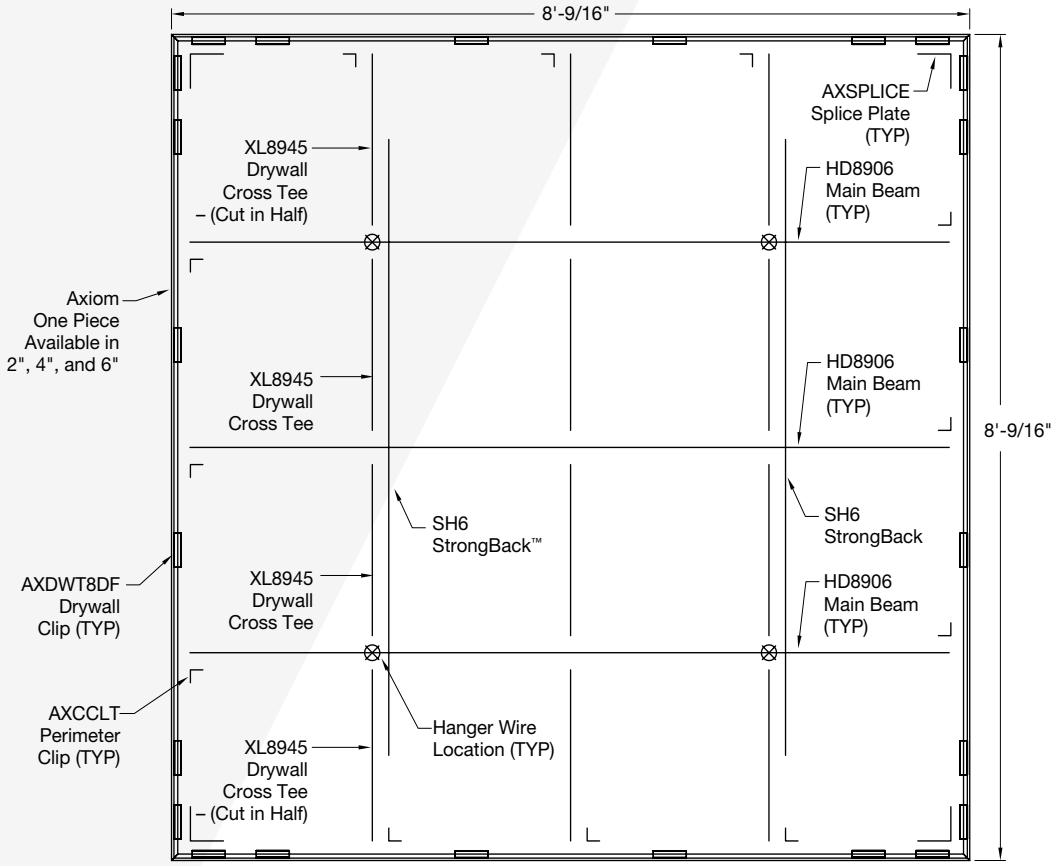


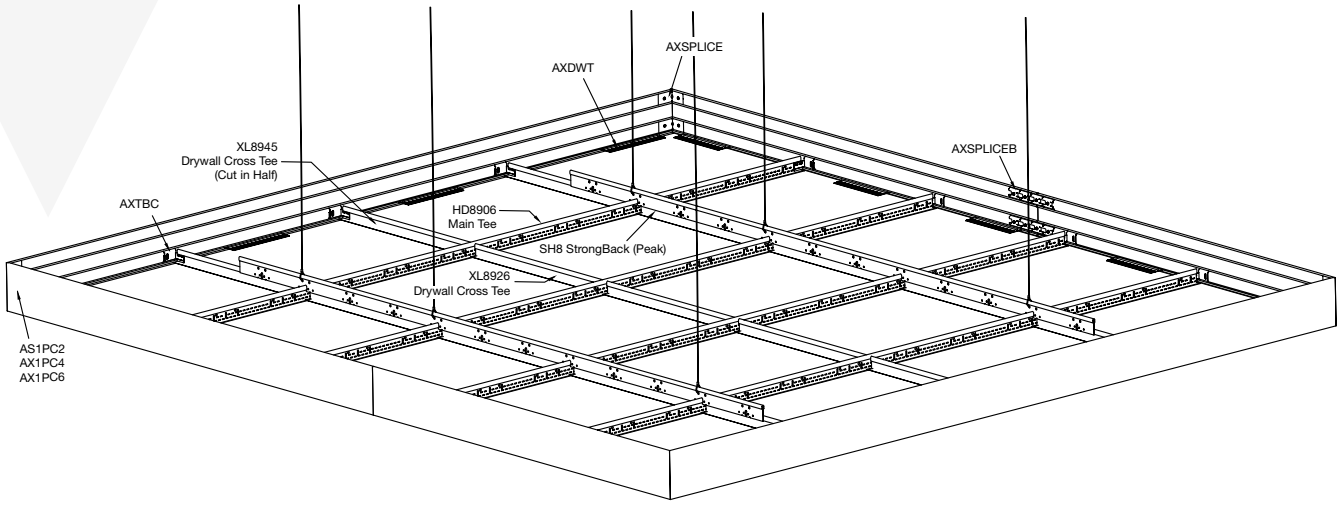
Axiom® Building Perimeter Shade Pocket – Lutron® compatible



NOTE: Refer to the Axiom Building Perimeter Shade Pockets Data Page (BPCS-3923) and Axiom Building Perimeter Shade Pockets – Lutron Compatible Data Page (BPCS-5159) to view full details.

FORMATIONS® DRYWALL CLOUD KITS





NOTE: Refer to the Formations Acoustical, Accent, Integrated Lighting, Drywall, & DC FlexZone™ Cloud Kits Brochure (BPCS-3708) to view full details.

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For additional information regarding Armstrong® Drywall Systems visit armstrong.com/drywall or reference:
BPCS-4037
Drywall Accessories

BPCS-3539
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BPCS-3540
Drywall Grid Systems for Curved Applications

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BPCS-3542
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BPCS-3950
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