Product Manual

Floor Supports and Ceiling Hangers

Application Guidelines, Specifications, Installation Procedures, Maintenance, Spare Parts, and Product Index

Intelligrated®

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Read these documents thoroughly before attempting to perform maintenance or repairs to the applicable Intelligrated conveyor system components or devices. Exercise extreme caution when working around moving and rotating conveyor equipment. Wear the proper clothing and safety equipment. DO NOT attempt to perform any maintenance until the equipment is de-energized, locked out and tagged out in accordance with established company procedures.

The information presented in these documents are correct at the time of publication. Intelligrated has made every effort to ensure that the information presented is correct and free from error. However, some errors or misprints may occur. Please contact Intelligrated with any corrections.

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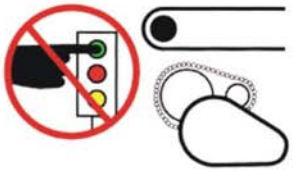
Package Conveyors Safety Notices

Do Not Climb, Sit, Stand, Walk, Ride, or Touch the Conveyor at Any Time

Do Not Perform Maintenance on Conveyor Until Electrical, Air, Hydraulic and Gravity Energy Sources Have Been Locked Out or Blocked



Operate Equipment Only With All Approved Covers and Guards in Place

Do Not Load a Stopped Conveyor or Overload a Running Conveyor

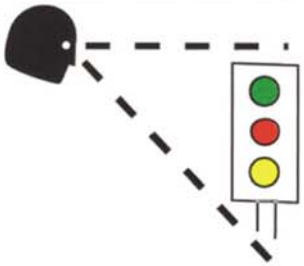
Ensure That All Personnel Are Clear of Equipment Before Starting

Allow Only Authorized Personnel To Operate or Maintain Material Handling Equipment

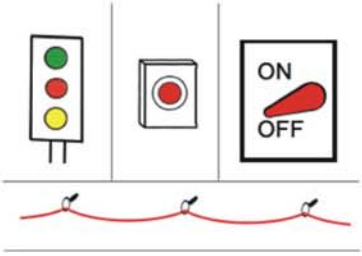
Do Not Modify or Misuse Conveyor Controls

Keep Clothing, BodyParts, and Hair Away from Conveyors

Remove Trash, Paperwork, and Other Debris Only When Power is Locked Out and Tagged Out



Ensure That ALL Controls and Pull Cords are Visible and Accessible



Know the Location and Function of All Stop and Start Controls

Report All Unsafe Conditions Jams should be cleared ONLY BY Authorized, Trained, Personnel

SECTION A:PRODUCT SUMMARY

Floor Supports and Ceiling Hangers - Product Summary

Floor Supports					
	General Applications	Single Level	1500 Lb.	SLE Series	1/2" – 6 $^{11}/_{16}$" height range
				FSL Series	6" – 108" height range
			2500 Lb.	FSM Series	6" – 108" height range
		Double Deck	2500 Lb.	SDA Series	Legs set flush
				SDA HDD Series	Legs set out
		Up to 4 Levels	2500 Lb.	SDB Series	Legs set flush
				SDB HDD Series	Legs set out
	Unisort IV & Unisort VI Applications		2500 Lb.	FSMU4 Series	Leg flanges oriented out
	Unisort VII, XV & Unisort LBS Applications		2500 Lb.	FSU15 Series	Furnished with compression pads
	Portable Conveyor Applications		2500 Lb.	MSS Series	Dual-leg with caster
				MSC Series	Single-leg with caster
Ceiling Hangers					
	General Applications	Centered on section joint (splice flat)	1500 Lb.	Model CH1-A	12-foot threaded rod
				Model CH2-A	18-inch threaded rod
				Model CH3-A	No threaded rod
		Offset from section joint (splice channel)	1500 Lb.	Model CH1-B	12-foot threaded rod
				Model CH2-B	18-inch threaded rod
				Model CH3-B	No threaded rod

	Trash Belt Applications	Centered on intermediate section joint	1500 Lb.	Model CH1-T	12-foot threaded rod
				Model CH2-T	18-inch threaded rod
				Model CH3-T	No threaded rod
	Merge, Diverge & Crossover Applications	Cross channel included	1500 Lb.	Model CM1-A	12-foot threaded rod
				Model CM2-A	18-inch threaded rod
				Model CM3-A	No threaded rod
		Cross channel not included	1500 Lb.	Model CM1-B	12-foot threaded rod
				Model CM2-B	18-inch threaded rod
				Model CM3-B	No threaded rod
Accessories					
	General:	Fill flat, fill channel, splice angle, Unisorb pad.			
	Floor Supports:	Knee brace			
	Ceiling Hang-ers:	Protective pad, splice flat, splice channel			

SECTION B:APPLICATION GUIDELINES

General

Conveyor systems may be supported using either floor supports or ceiling hangers (see Figure B - 1).

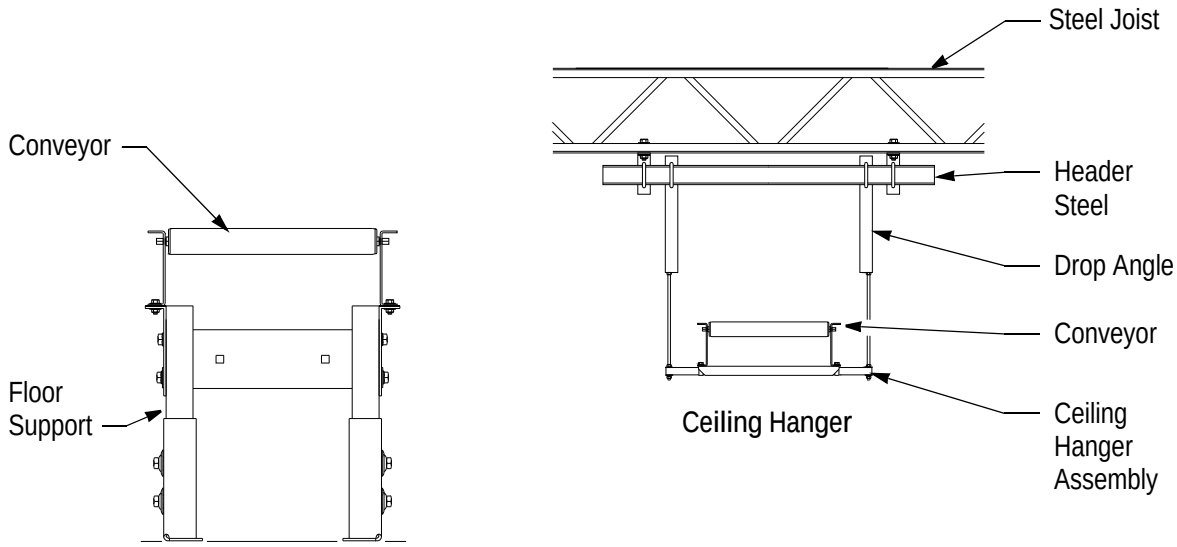


Figure B - 1 Floor Support and Ceiling Hanger

Floor Supports

Series and Models

Each series of floor support is available in multiple models. The series designation indicates a weight-capacity class and a configuration. Within each series, individual models of floor supports are assembled from among the following interchangeable components, which are bolted togethe (see Figure B - 2):

- Feet;
- Legs;
- Support tops;
- Cross ties; and
- X-braces.

An individual model designation indicates a specific combination of components. Each model is designed to support a specific width of conveyor. The height of each model of floor support is adjustable, and the height-adjustment range of each model overlaps the height-adjustment range of the adjacent models. Floor supports can be selected to support a conveyor at any height that may be required.

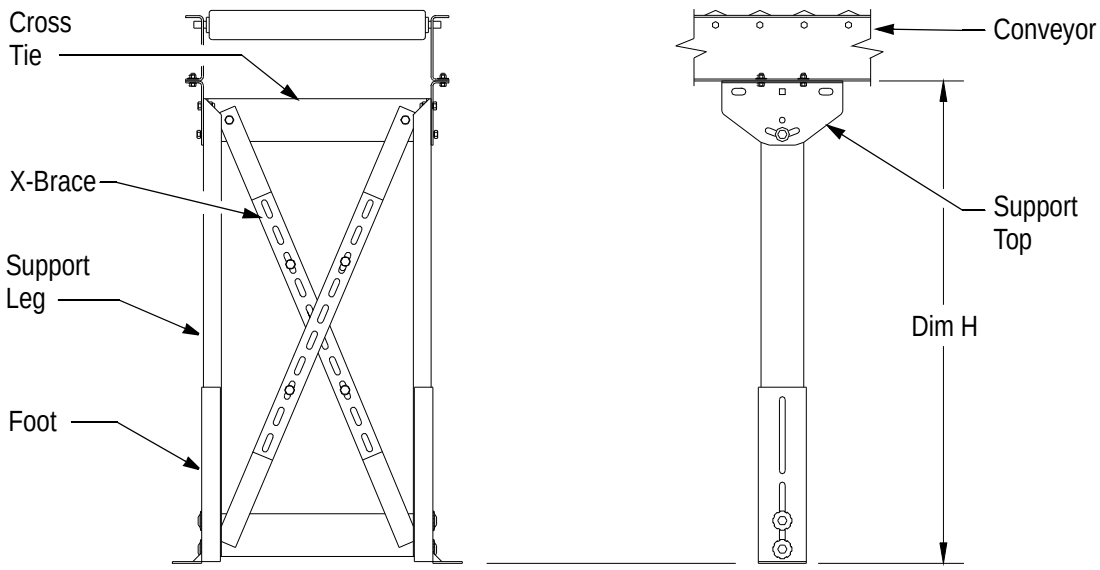


Figure B - 2 Floor Support Assembly (FSM Series Shown)

Weight-Capacity Classes

Weight capacity applies to a single, complete floor-support assembly. To determine the distribution of load, consideration should include the weight of the conveyor itself, drive components, accessories, and the product to be conveyed.

Available weight-capacity classes include:

- Light-duty – up to 1500 lbs; and
- Medium-duty – up to 2500 lbs.

Configurations

Floor supports are available in the following configurations:

- Single-level;
- Multiple-level; and
- Mobile.

Single-Level Floor Supports

Single-level floor supports are available in the following model series (see Figure B - 3 and Figure B - 4):

- SLE Series – low-elevation supports, 1500-pound capacity.
- FSL Series – light-duty floor supports, 1500-pound capacity.
- FSM Series – medium-duty floor supports, 2500-pound capacity.
- FSMU4 Series – medium-duty floor supports for Unisort IV and Unisort VI applications; 2500-pound capacity.
- FSU15 Series – medium-duty floor supports for Unisort VII, Unisort XV and LBSapplications; 2500-pound capacity; furnished with compression pads to dampen noise and vibration.

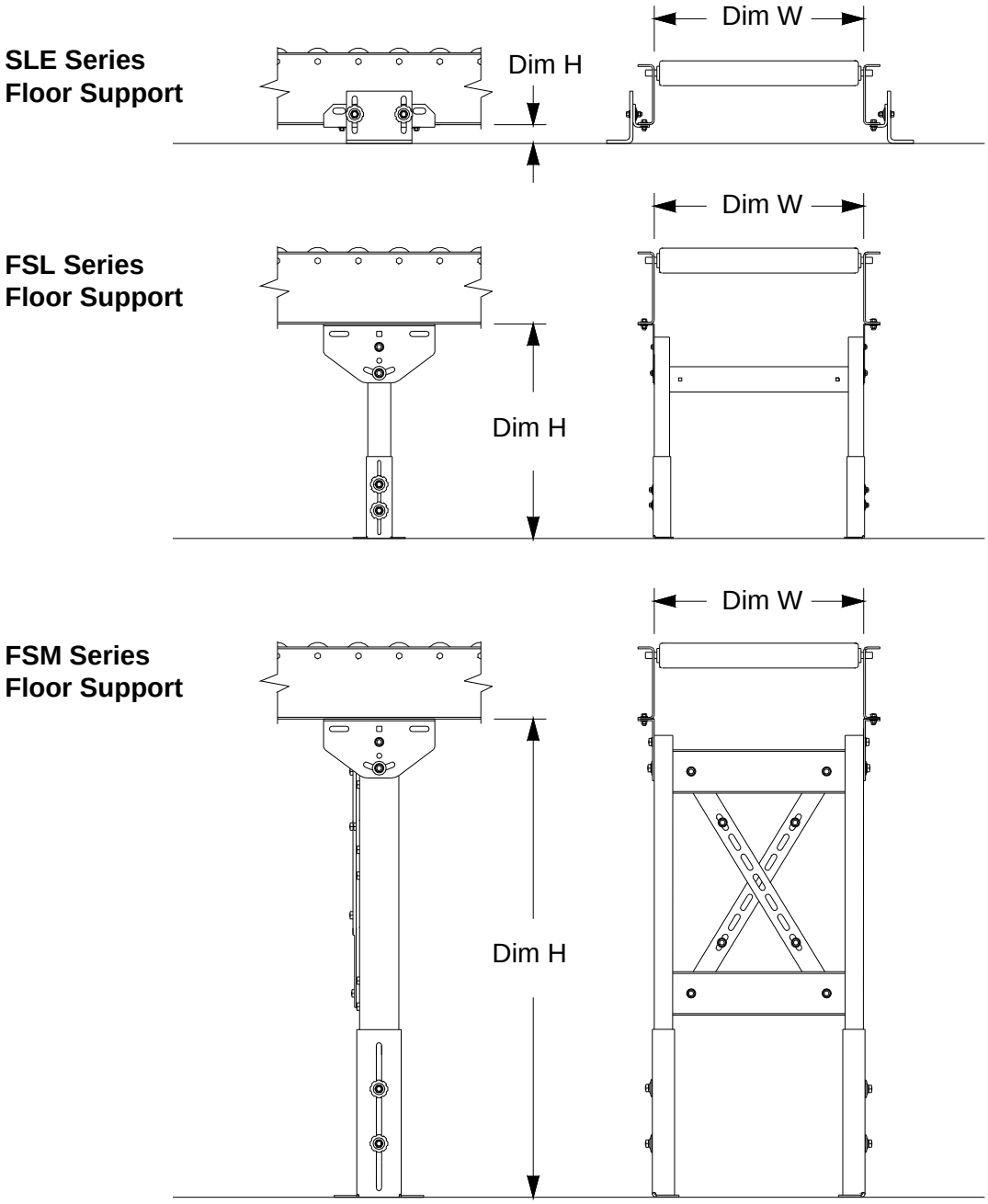
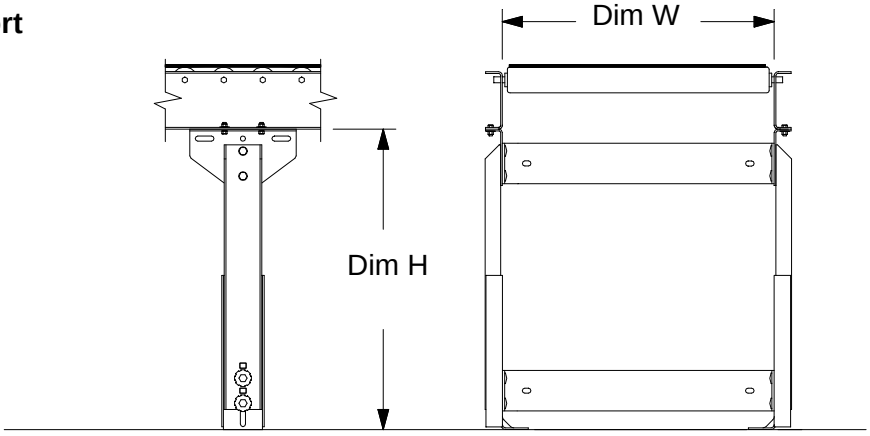


Figure B - 3 SLE, FSL & FSM Series Single-Level Floor Supports

FSMU4 Series
Floor Support



FSMU15 Series
Floor Support

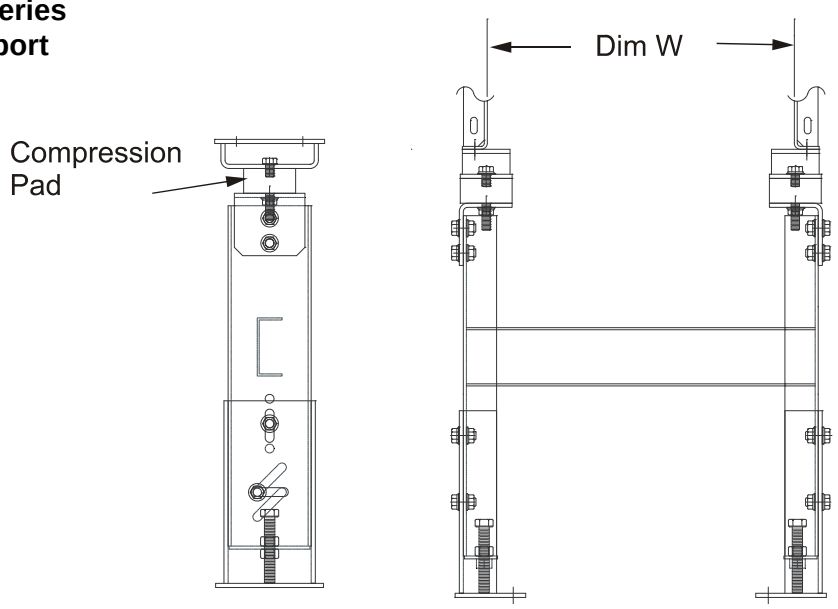


Figure B - 4 FSMU4 and FSMU15 Series Single-Level Floor Supports

Multiple-Level Conveyor Floor Supports

Multiple-level floor supports are available in the following four model series (see Figure B - 5 and Figure B - 6):

- SDA Series – 1500-pound capacity, double-deck. Legs are set flush (located immediately adjacent) to the conveyor frames.
- SDB Series – 1500-pound capacity, double-deck. Legs are set out from the conveyor frames to provide clearance for open flaps or for wide products.
- SDA HDD Series – 1500-pound capacity, supports up to four levels of conveyor. Legs are set flush (located immediately adjacent) to the conveyor frames.
- SDB HDD Series – 1500-pound capacity, supports up to four levels of conveyor. Legs are set out from the conveyor frames to provide clearance for open flaps or for wide products.

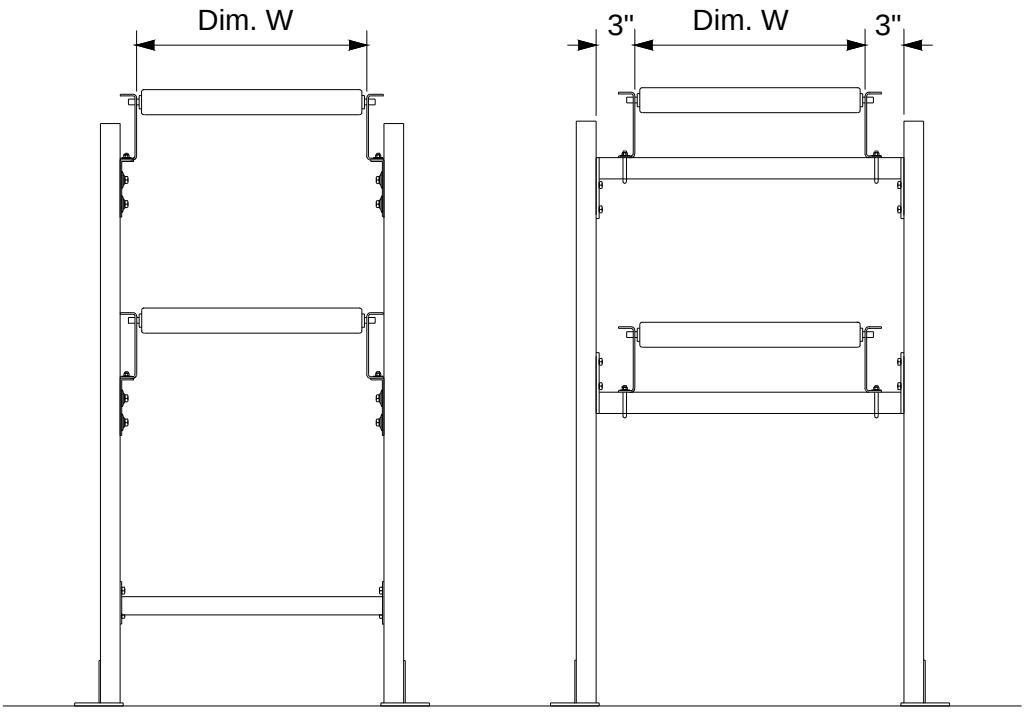


Figure B - 5 SDA & SDB Series Double-Deck Floor Supports

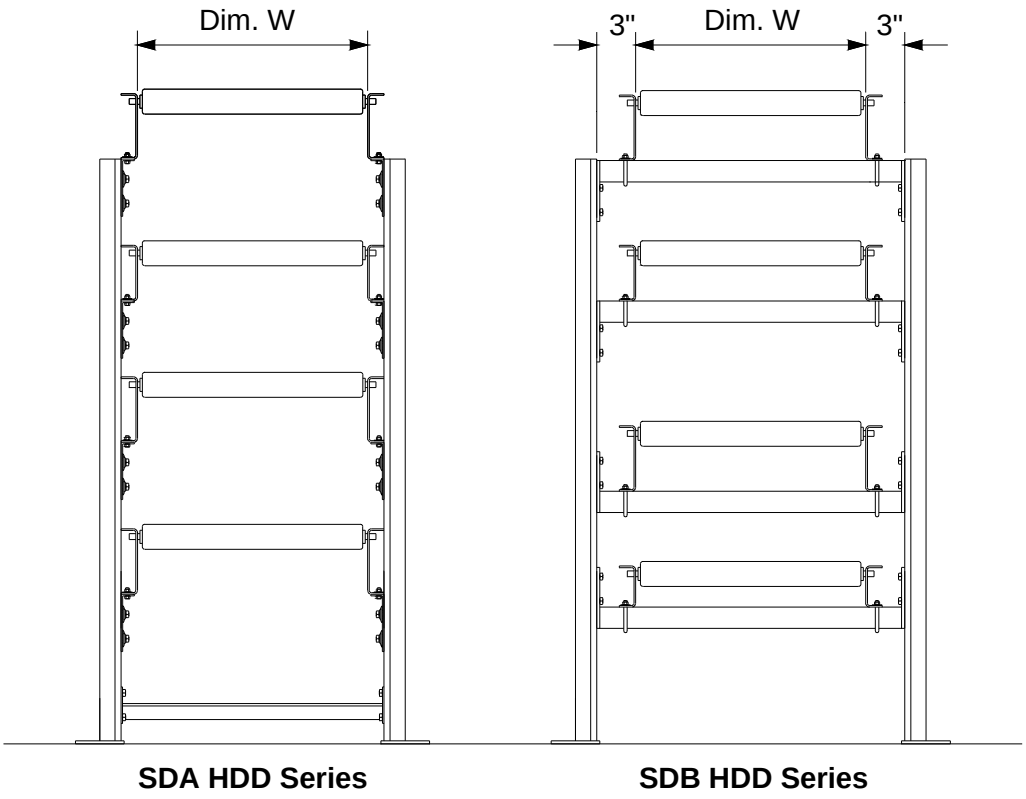


Figure B - 6 SDA HDD & SDB HDD Series Multiple-Level Floor Supports

Mobile Floor Supports

Mobile floor supports are used to support portable sections of Gravity Wheel and Gravity Roller conveyors (see Figure B - 7). The following models of mobile floor supports are available:

- Model MSS – Used to support straight sections as needed and to support terminal ends of curved sections. Model MSS consists of an FSM series floor support furnished with a caster mounted to each foot.
- Model MSC – Used to support curved sections at the center of the curve. Model MSC consists of one leg of an FSM series floor support furnished with a caster mounted to the foot, which are to be attached to the outside side rail, and a knee brace to be attached to the inside side rail.

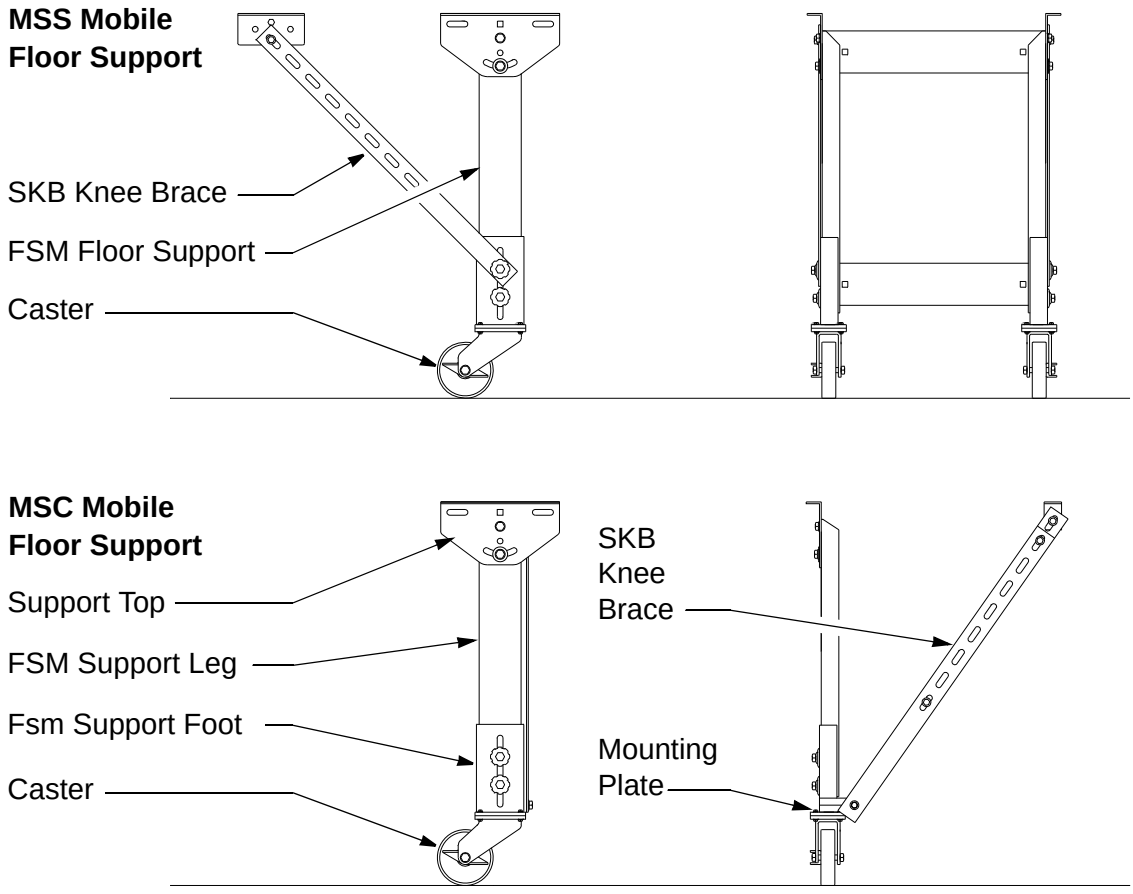


Figure B - 7 MSS & MSC Mobile Floor Supports

Model SKB Knee Brace

Knee braces provide additional strength and rigidity to floor supports (see Figure B - 8). The bottom flanges of the side rails of all gravity and power conveyors are furnished with mounting holes for installing knee braces.

Use knee braces about every 50 feet on a long, straight run, at the ends of straight runs, before case stops, or near drive units. Knee braces must be located on the downstream side

of the supports, in order to put them in tension. However, when the conveyor starts, it puts stress on the legs in a direction opposite to when it stops. On conveyors with drive units installed toward the infeed end, stress on the legs can be reduced by installing braces near the drive.

For the best results, the strap-to-frame angle should not exceed 45 degrees or be less than 30 degrees. On short supports requiring an angle less than 30 degrees, the brace strap may be shortened.

Knee braces are required on all horizontal gravity and power conveyors where support height is greater than 30 inches. Conveyors over 10 feet long require a minimum of two sets of knee braces (one set mounted at each end of the conveyor).

On conveyors with a support height (dimension H) greater than 45 inches, the maximum unbraced length is 40 feet. At or near each case stop, one set of knee braces should be installed so that the braces are in tension. One set of knee braces should be used at each end of a gate section or at any other inserted accessory where the sections are not rigidly connected.

On conveyors with end drive units, install one set of braces at the take-up idler end, and one set at the support nearest to the drive. On conveyors with center drive units, install one set of braces at each end of the conveyor.

On inclined power conveyors, install knee braces on all floor supports wherever possible. In the case of a conveyor with an end drive unit, it is not possible to install a set of braces on the support under the drive unit.

If the conveyor connected to an end drive unit is properly supported, it is not necessary to install knee braces under the end drive.

Conveyors connected perpendicular to each other or tied together by curve sections, spur junctions, etc., do not require knee braces.

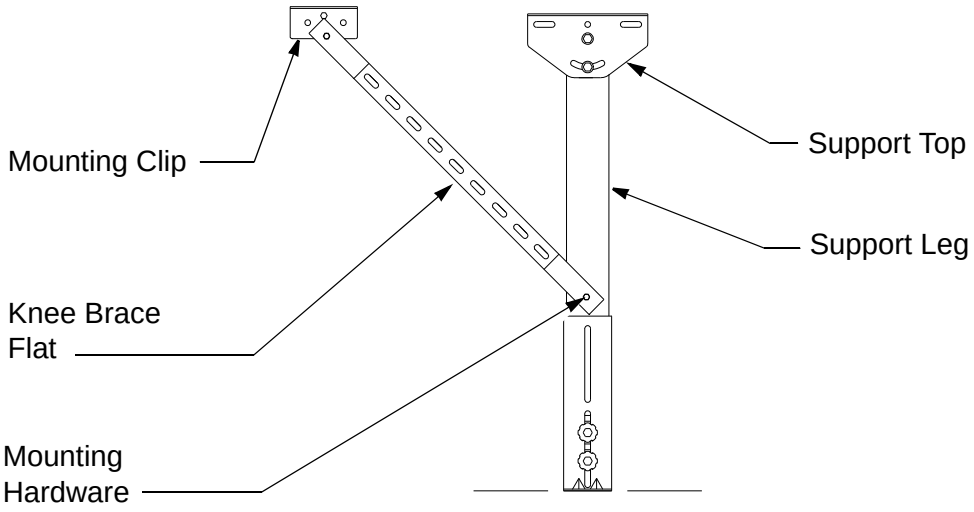


Figure B - 8 Model SKB Knee Brace

Ceiling Hangers

CH1-A and CH1-B

CH1-A and CH1-B ceiling hangers are suitable for installing most models of conveyors (see Figure B - 9). The weight capacity for a CH1-A or CH1-B ceiling-hanger assembly is 1500 pounds. CH1-A is used for most support locations. CH1-B is used at underhung drive units to locate the ceiling hanger offset from a section joint.

CH1-A and CH1-B ceiling hangers include the following components:

- One cross pipe;
- Two pipe straps, with 3/8-16 x 1" hex-head bolts, flat washers and flanged hex nuts, for mounting the conveyor to the cross pipe;
- CH1-A includes two splice flats; CH1-B includes two splice channels; and
- Two 12-foot-long 5/8-11 threaded rods, each fitted with a hanger clip, a 5/8-11 hex coupler nut welded to the hanger clip, a 5/8-11 lock nut, and 5/8" flat washers and 5/8-11 hex nuts for attaching the cross pipe to the threaded rod.

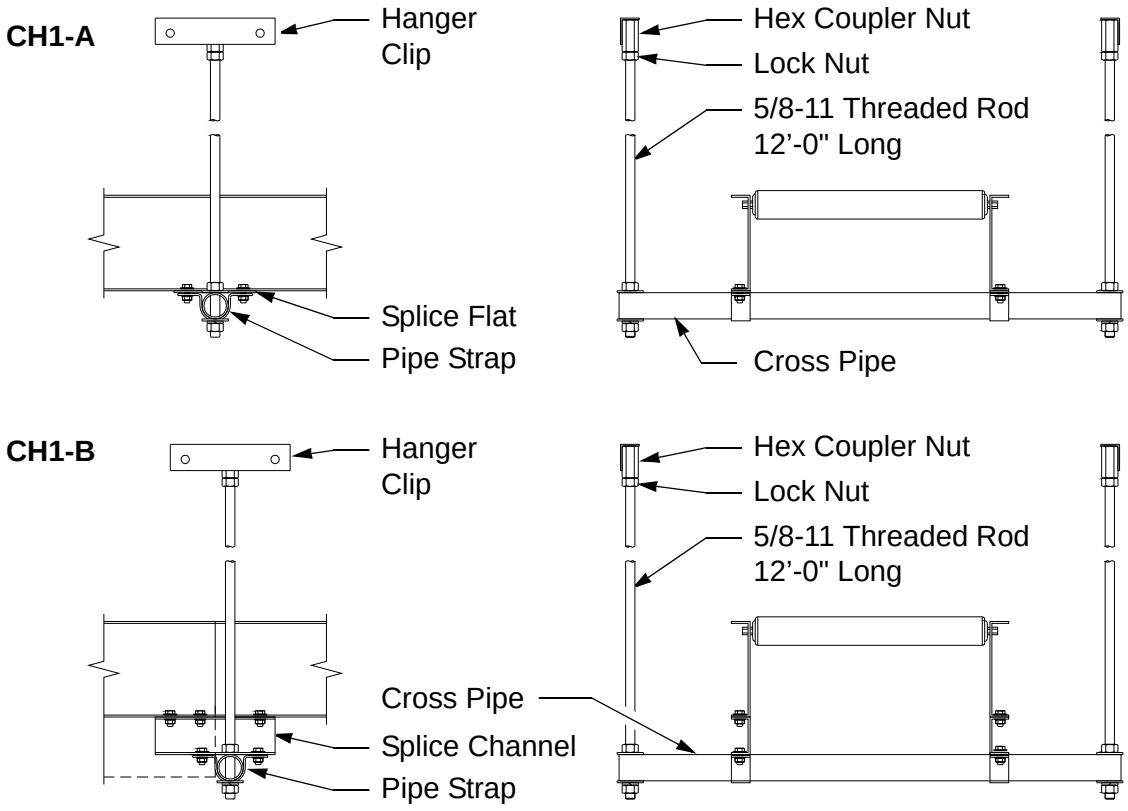


Figure B - 9 CH1-A & CH1-B Ceiling Hangers

CH2-A & CH2-B

CH2-A and CH2-B ceiling hangers are suitable for installing most models of conveyors (see Figure B - 10). The weight capacity for a CH2-A or CH2-B ceiling-hanger assembly is 1500 pounds. CH2-A is used for most support locations. CH2-B is used at underhung drive units to locate the ceiling hanger offset from a section joint.:

- One cross pipe;
- Two pipe straps, with 3/8-16 x 1" hex-head bolts, flat washers and flanged hex nuts, for mounting the conveyor to the cross pipe;
- CH2-A includes two splice flats; CH2-B includes two splice channels; and
- Two 18-inch-long 5/8-11 threaded rods, each fitted with a 5/8-11 hex coupler nut , a 5/8-11 lock nut, and 5/8" flat washers and 5/8-11 hex nuts for attaching the cross pipe to the threaded rod.

CH2-A and CH2-B ceiling hangers are typically installed by welding the coupler nuts to drop angles, which are mounted to structural members overhead.

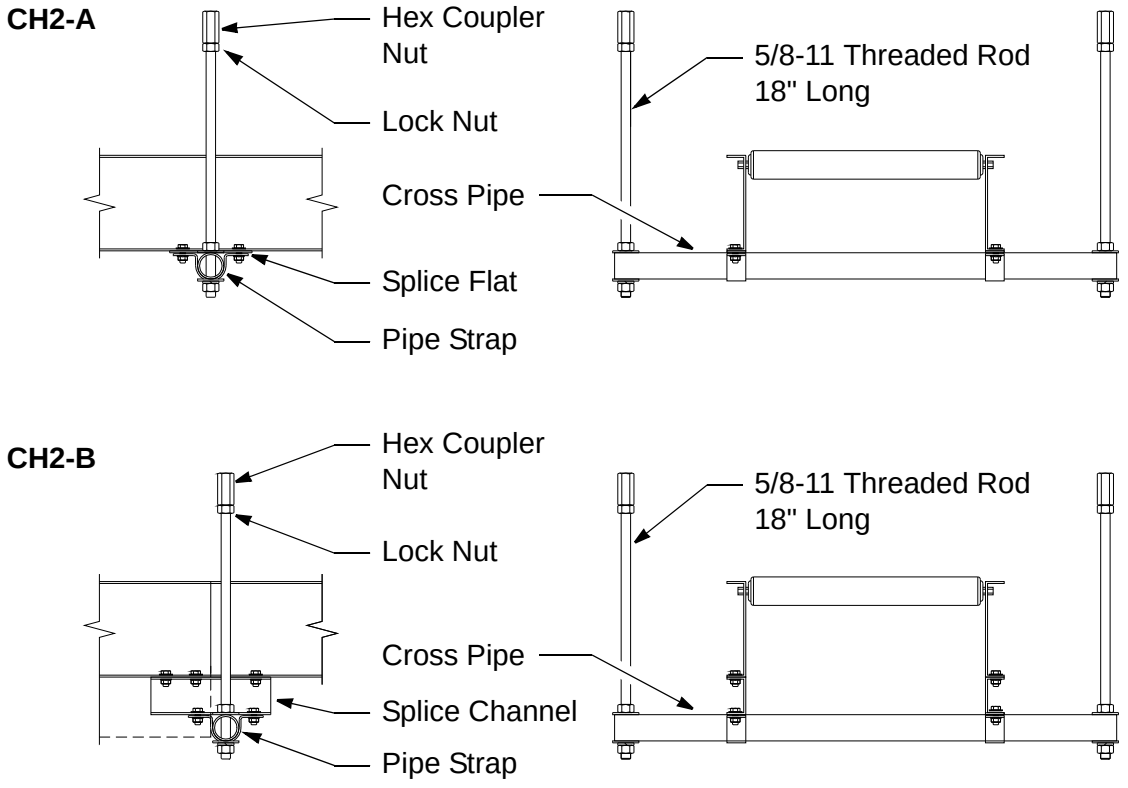


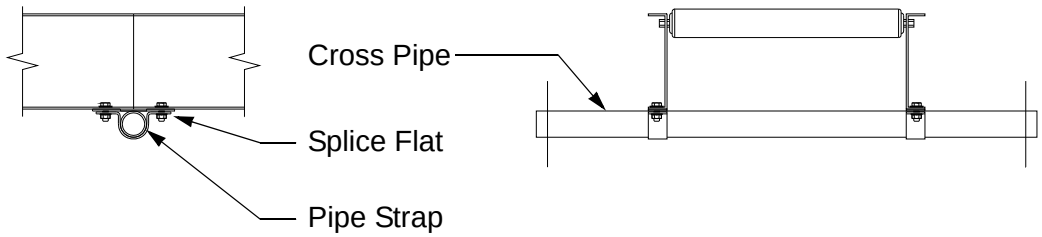
Figure B - 10 CH2-A & CH2-B Ceiling Hangers

CH3-A & CH3-B

CH3-A and CH3-B ceiling hangers are suitable for installing most models of conveyors (see Figure B - 11). The weight capacity for a CH3-A or CH3-B ceiling-hanger assembly is 1500 pounds. CH3-A is used for locating the ceiling hanger in line with a section joint. CH3-B is used for locating the ceiling hanger offset from a section joint. CH3-A and CH3-B ceiling hangers include the following components:

- One cross pipe;
- Two pipe straps, with 3/8-16 x 1" hex-head bolts, flat washers and flanged hex nuts, for mounting the conveyor to the cross pipe; and
- CH3-A includes two splice flats; CH3-B includes two splice channels.
- CH3-A and CH3-B ceiling hangers are typically installed by mounting them to threaded rods furnished by others.

CH3-A



CH3-B

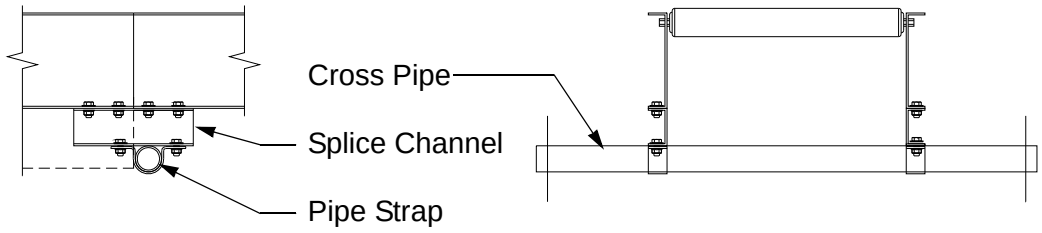


Figure B - 11 CH3-A & CH3-B Ceiling Hangers

CH1-T, CH2-T & CH3-T

CH1-T, CH2-T and CH3-T ceiling hangers are used for installing Trash Belt conveyors at intermediate section joints. (see Figure B - 12). To provide head room for personnel working alongside the conveyor, the hanger assembly has a narrow profile.

CH1-T

A CH1-T assembly includes the following components:

- Two hanger brackets, to be mounted to the sides of the Trash Belt conveyor boxbed frame;
- Four spreader pipes, with mounting hardware, to be installed inside the Trash Belt conveyor boxbed frame; and
- Two 10-foot-long 5/8-11 threaded rods, each fitted with a hanger clip for mounting the ceiling hanger to the structural members, a 5/8-11 hex coupler nut welded to the hanger clip, a 5/8-11 lock nut, and 5/8" flat washers and 5/8-11 hex nuts for attaching the cross pipe to the threaded rod.

CH1-T ceiling hangers are typically installed by mounting the hanger clips to a header steel channel, which is attached to structural members overhead.

CH2-T

A CH2-T assembly includes the following components:

- Two hanger brackets, to be mounted to the sides of the Trash Belt conveyor boxbed frame;
- Four spreader pipes, with mounting hardware, to be installed inside the Trash Belt conveyor boxbed frame; and
- Two 18-inch-long 5/8-11 threaded rods, each fitted with a 5/8-11 hex coupler nut , a 5/8-11 lock nut, and 5/8" flat washers and 5/8-11 hex nuts for attaching the cross pipe to the threaded rod.

CH2-T ceiling hangers are typically installed by welding the coupler nuts to drop angles, which are mounted to structural members overhead.

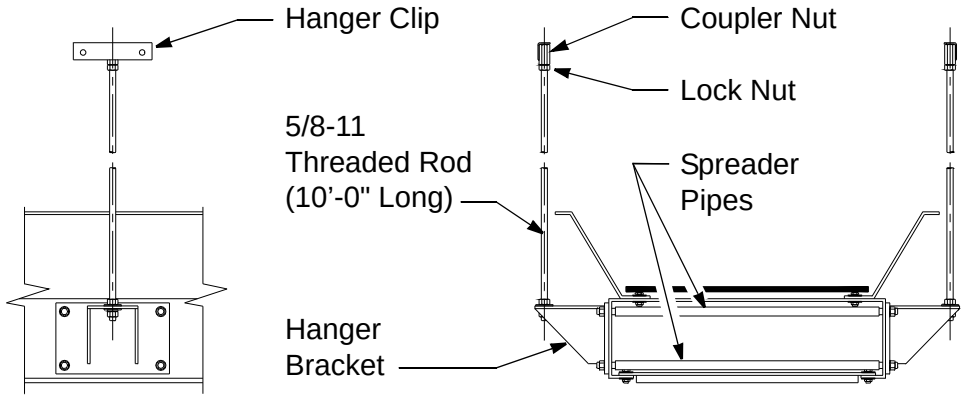
CH3-T

A CH3-T assembly includes the following components:

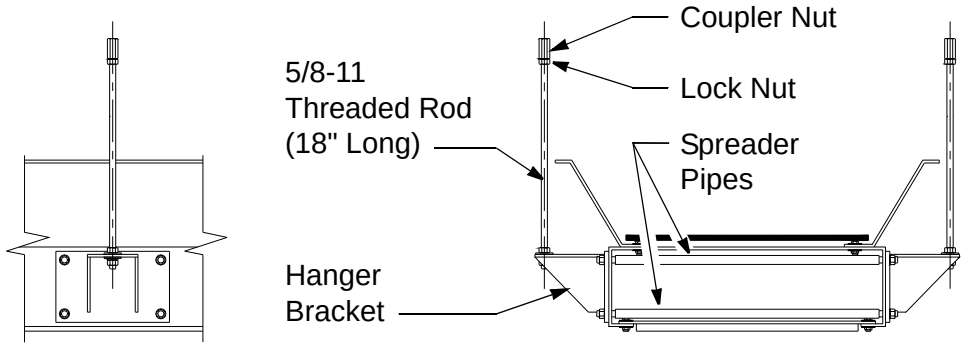
- Two hanger brackets, to be mounted to the sides of the Trash Belt conveyor boxbed frame; and
- Four spreader pipes, with mounting hardware, to be installed inside the Trash Belt conveyor boxbed frame.

CH3-T ceiling hangers are typically installed by mounting the hanger brackets to 5/8-11 threaded rods furnished by others.

CH1-T Ceiling Hanger



CH2-T Ceiling Hanger



CH3-T Ceiling Hanger

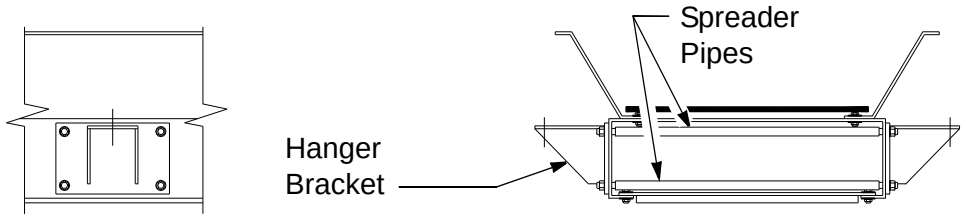


Figure B - 12 CH1-T, CH2-T & CH3-T Ceiling Hangers

CM1-A & CM1-B

CM1-A and CM1-B ceiling hangers are suitable for installing merge, diverge and crossover conveyors (see Figure B - 13). The weight capacity for a CM1-A or CM1-B ceiling-hanger assembly is 1500 pounds. CM1-A is used to support section joints of the double-wide conveyor. CM1-B is used to support the infeed and discharge ends of the double-wide conveyor. CM1-A and CM1-B ceiling hangers include the following components:

- Two partial cross-pipes;
- Four pipe straps for mounting the conveyor to the partial cross pipes;
- Two 10-foot-long 5/8-11 threaded rods, each fitted with a hanger clip, a 5/8-11 hex coupler nut welded to the hanger clip, a 5/8-11 lock nut, and 5/8" flat washers and 5/8-11 hex nuts for attaching the cross pipe to the threaded rod; and
- One cross channel (CM1-A only).

CM1-A and CM1-B ceiling hangers are typically installed by mounting the hanger clips to a header steel channel, which is attached to structural members overhead.

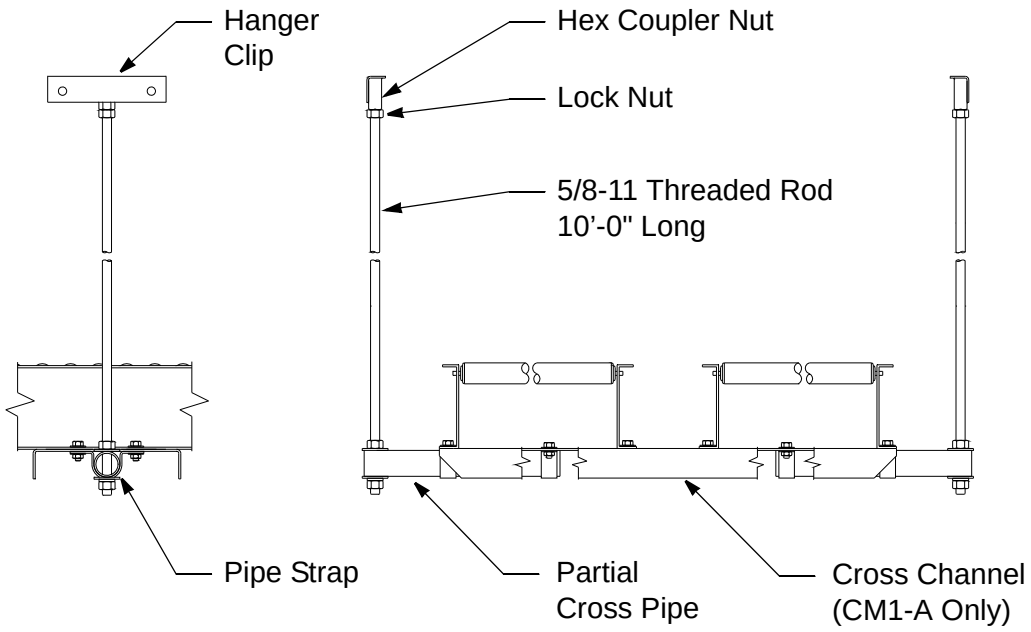


Figure B - 13 CM1-A & CM1-B Ceiling Hangers

CM2-A & CM2-B

CM2-A and CM2-B ceiling hangers are suitable for installing merge, diverge and crossover conveyors (see Figure B - 14). The weight capacity for a CM2-A or CM2-B ceiling-hanger assembly is 1500 pounds. CM2-A is used to support section joints of the double-wide conveyor. CM2-B is used to support the infeed and discharge ends of the double-wide conveyor. CM2-A and CM2-B ceiling hangers include the following components:

- Two partial cross pipes;
- Four pipe straps for mounting the conveyors to the cross pipe;
- Two 18-inch-long 5/8-11 threaded rods, each fitted with a 5/8-11 hex coupler nut , a 5/8-11 lock nut, and 5/8" flat washers and 5/8-11 hex nuts for attaching the cross pipe to the threaded rod; and
- One cross channel (CM2-A only).

CM2-A and CM2-B ceiling hangers are typically installed by welding the coupler nuts to drop angles, which are mounted to structural members overhead.

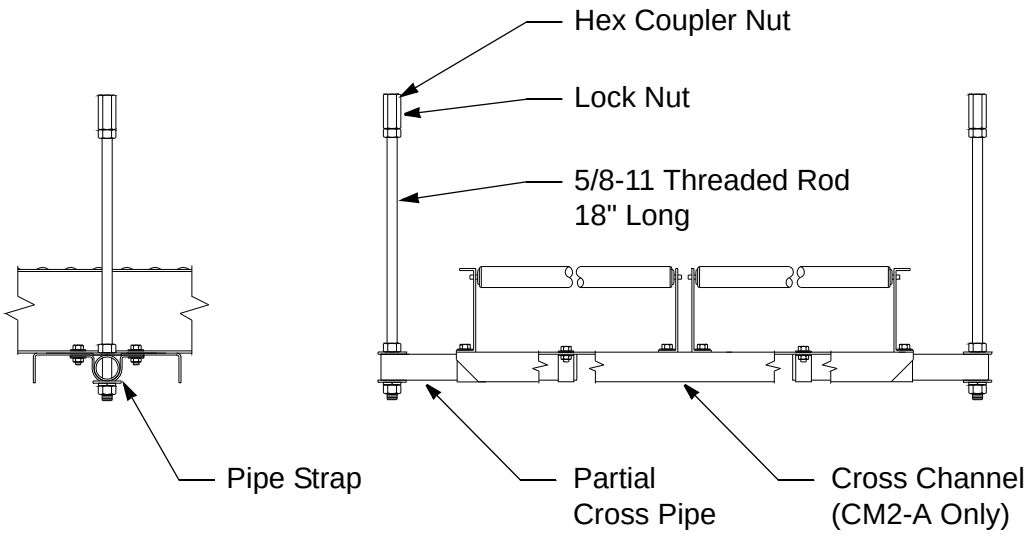


Figure B - 14 CM2-A & CM2-B Ceiling Hangers

CM3-A & CM3-B

CM3-A and CM3-B ceiling hangers are suitable for installing merge, diverge and crossover conveyors (see Figure B - 15). The weight capacity for a CM3-A or CM3-B ceiling-hanger assembly is 1500 pounds. CM3-A is used to support section joints of the double-wide conveyor. CM3-B is used to support the infeed and discharge ends of the double-wide conveyor. CM3-A and CM3-B ceiling hangers include the following components:

- Two partial cross pipes; and
- Four pipe straps for mounting the conveyor to the cross pipe; and
- One cross channel (CM3-A only).

CM3-A and CM3-B ceiling hangers are typically installed by mounting them to threaded rods furnished by others.

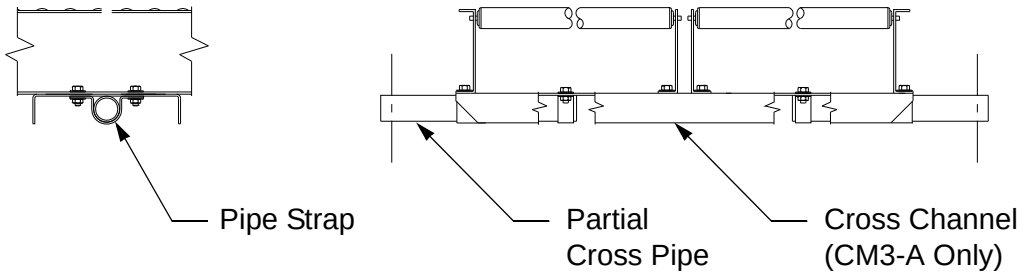


Figure B - 15 CM3-A & CM3-B Ceiling Hangers

Miscellaneous Components

In addition to floor-support and ceiling-hanger assemblies, the following components are also available:

- Fill flats – required to raise the conveying surface of a roller conveyor to be flush with the conveying surface of an adjoining belt conveyor.
- Fill channels – required where two adjoining conveyors have different side-rail heights.
- Splice plates (trapezoidal and intermediate) – used for connecting adjoining sections where section joints are not located at a support.
- Boxbed-to-boxbed splice plates – used for connecting adjoining sections of boxbed belt conveyor where section joints are not located at a support.
- Splice flats – required with ceiling hangers between the bottom flange of the side rail and the pipe strap where the ceiling hanger is centered on a section joint.
- Splice channels – required with ceiling hangers between the bottom flange of the side rail and the pipe strap where the ceiling hanger is offset from a section joint.
- Ceiling hanger protective pads – installed on the exposed ends of ceiling hanger cross pipes where ceiling-hung conveyors are located low enough to endanger to personnel.

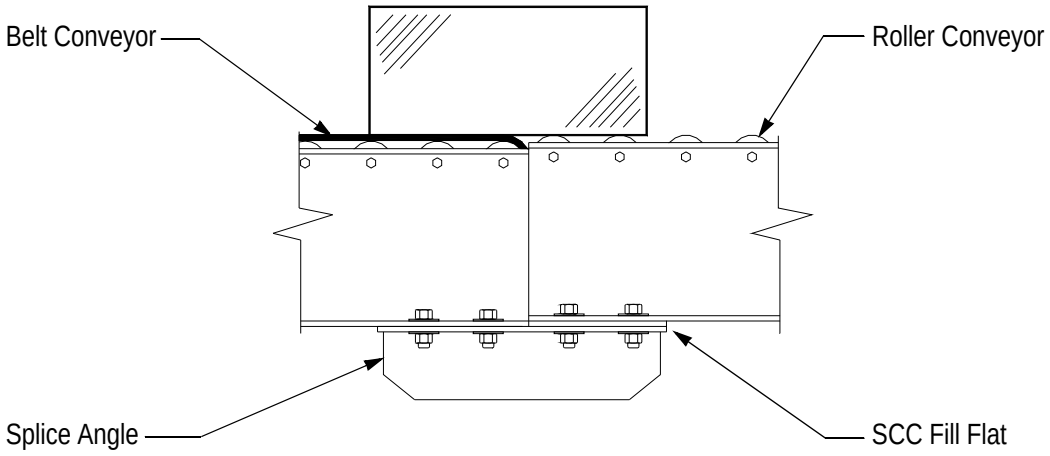


Figure B - 16 Model SCC Fill Flat & Splice Angle

Applications

Application Summary

Table B 1: Floor Support Applications

Conveyor Model	Floor Support								
	SLE	FSL	FSM	SDA	SDB	MSS	MSC	FSMU4	FSU15
Gravity Wheel	X	X	X	X	X	X	X		
Gravity Roller	X	X	X	X	X	X	X		
Powered Belt	X	X	X	X	X				
Brake/Meter Belt	X	X	X	X	X				
Trash Belt	X	X	X						
E-Z Set Live Roller	X	X	X	X	X				
A/CQ Chain-Powered Roller	X	X	X	X	X				
Accuglide Plus Live Roller	X	X	X	X	X				
T/C Chain-Powered Roller	X	X	X	X	X				
V-Belt Live Roller	X	X	X	X	X				
High Speed Skew	X	X	X	X	X				
Line Shaft Live Roller	X	X	X	X	X				
TBC-24	X	X	X	X	X				
Infeed Belt, Knife-Edge	X	X	X	X	X				
Merge, Diverge & Crossover (V-Belt & Chain-Powered)	X	X	X						
UniSort IV								X	
UniSort VI								X	
UniSort VII									X
UniSort XV									X
UniSort LBS									X

Table B 2: – Ceiling Hanger Applications

Conveyor Model	Ceiling Hanger				
	CH1-A CH2-A CH3-A	CH1-B CH2-B CH3-B	CH1-T CH2-T CH3-T	CM1-A CM2-A CM3-A	CM1-B CM2-B CM3-B
Gravity Wheel	X	X			
Gravity Roller	X	X			
Powered Belt	X	X			
Brake/Meter Belt	X	X			
Trash Belt (Except Intermediate Section Joints)	X	X			
Trash Belt (Intermediate Section Joints)			X		
E-Z Set Live Roller	X	X			
A/CQ Chain Powered Roller	X	X			
Accuglide Plus Live Roller	X	X			
High Speed Skew	X	X			
Line Shaft Live Roller	X	X			
TBC-24	X	X			
Infeed Belt, Knife Edge	X	X			
T/C Chain Powered Roller	X	X			
V-Belt Live Roller	X	X			
Merge, Diverge, & Crossover (V-Belt & Chain-Powered)				X	X

Notes:

1. Wherever appropriate, recommended locations for floor supports and ceiling hangers are identified in the product manual for each model of conveyor.
2. For the VHS Combiner, floor supports and ceiling hangers are not shown herein, since the VHS Combiner assembly includes its own dedicated supports.

Merge, Diverge & Crossover Conveyors

Double-wide merge, diverge and crossover conveyors may be supported either by floor supports or by ceiling hangers (see Figure B - 17). Note that an end cross channel is part of the infeed and discharge sections of the double-wide conveyor.

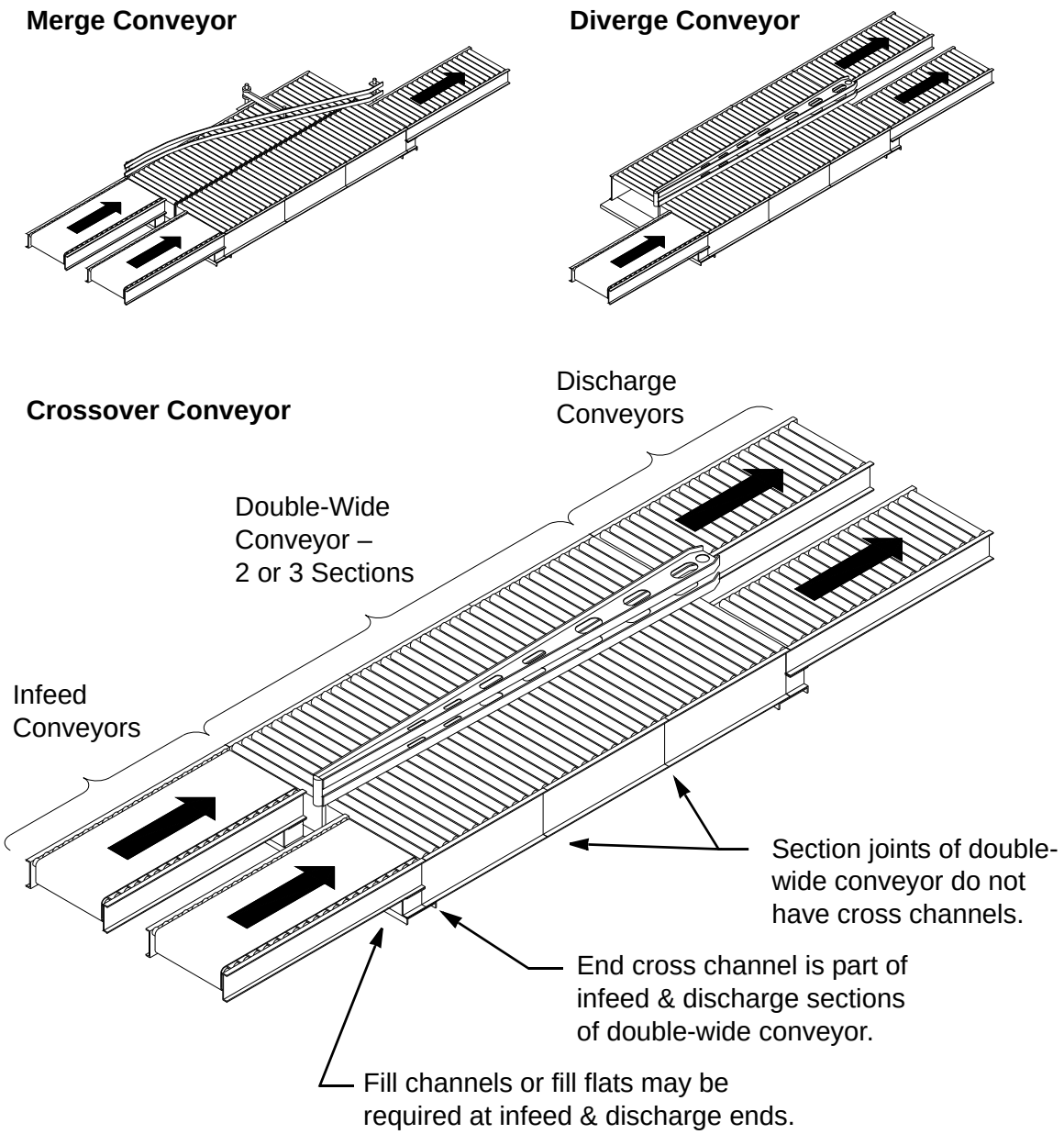


Figure B - 17 Merge, Diverge & Crossover Conveyors

Floor Supports

SLE, FSL and FSM series floor supports may be used to support merge, diverge, and crossover conveyors.

At the infeed and discharge ends, floor supports should be specified as necessary to support the infeed and discharge conveyor. If the infeed or discharge conveyors have shallower side rails than the double-wide conveyor, then fill channels are required between the side rails of the infeed or discharge conveyors and the floor supports.

At section joints of the double-wide conveyor, an assembly consisting of a support top, a support leg, and a foot should be installed to the bottom flange of each of the outside side rails.

Ceiling Hangers

For section joints of the double-wide conveyor, specify a CM1-A, CM2A or CM3A ceiling hanger, since a cross channel is furnished with these ceiling hangers. If the infeed or discharge conveyors have shallower side rails than the double-wide conveyor, then fill channels are required between the side rails of the infeed or discharge conveyors and the cross channel.

On diverge and crossover conveyors, the deflector-arm drive unit extends below the side rails at a section joint. As a result, the ceiling hanger location must be offset from the section joint as necessary to clear the drive unit.

For the infeed and discharge ends of the double-wide conveyor, specify a CM1-B, CM2-B, or CM3 ceiling hanger, since a cross channel is not furnished with these hangers. For a double-wide conveyor with an underhung end drive (infeed end or discharge end), the ceiling-hanger position at the drive location must be offset as necessary to clear the power-unit guards.

Support Locations – V-Belt & T/C Curves

The following information shows the proper support locations for both V-Belt and T/C curved sections (see Figure B - 18 through Figure B - 34).

Key to Figures

- n Support always required.
- s Support required only if straight extensions are 36” long or greater.
- l Support required only if both straight extensions INF and CTR are greater than 19” long and less than 36” long.

V-Belt & T/C Styles 05 & 05P

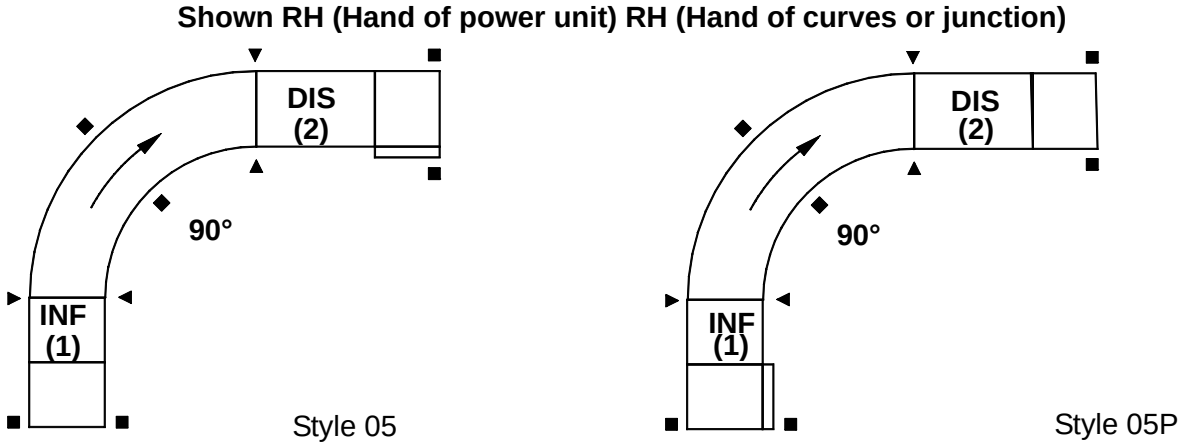


Figure B - 18 V-Belt & T/C Styles 05 & 05P

V-Belt & T/C Styles 06 & 06P

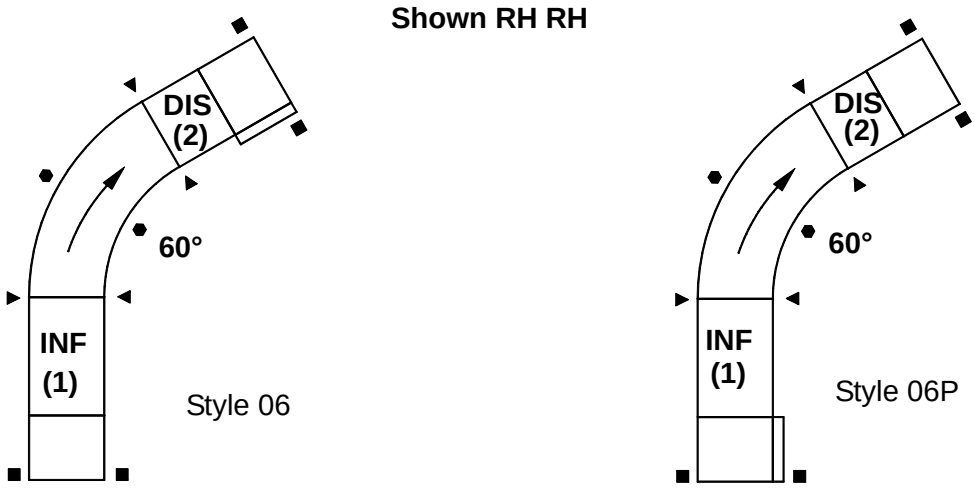


Figure B - 19 V-Belt and T/C Style 06 and 06P

V-Belt & T/C Styles 07 & 07P

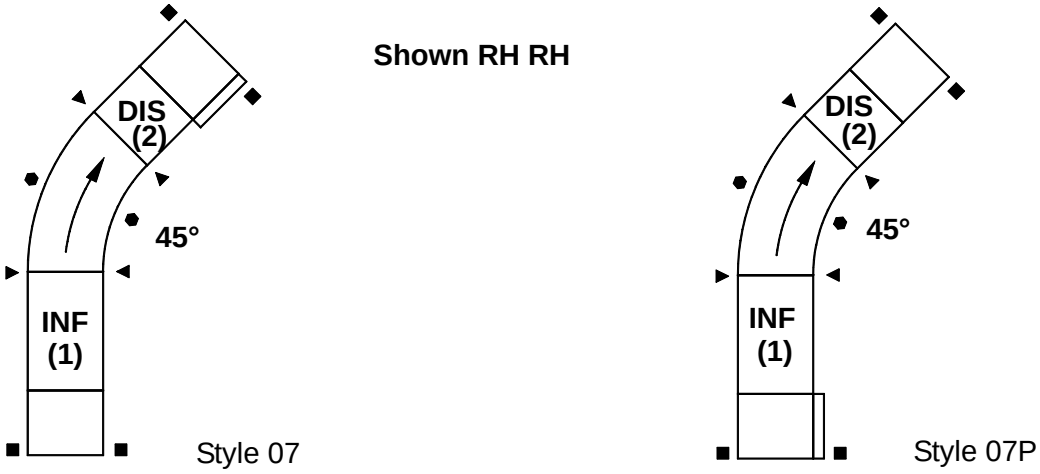


Figure B - 20 V-Belt & T/C Styles 07 & 07P

V-Belt & T/C Styles 08 & 08P

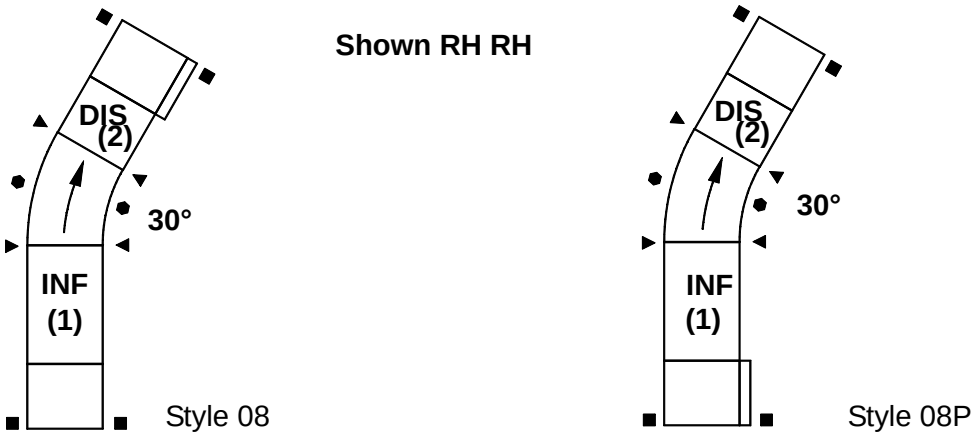


Figure B - 21 V-Belt & T/C Styles 08 & 08P

V-Belt & T/C Styles 09 & 09P

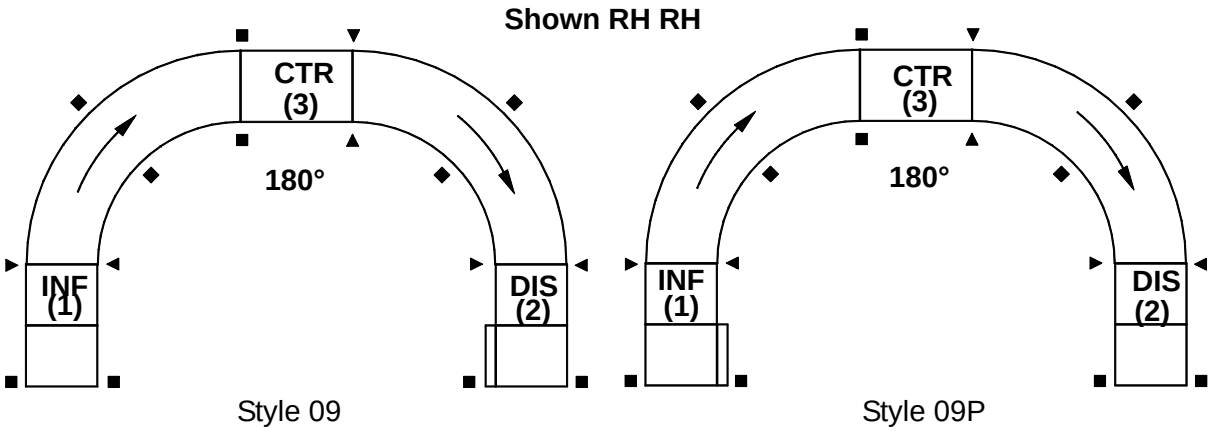


Figure B - 22 V-Belt & T/C Styles 09 & 09P

V-Belt & T/C Styles 10 & 10P

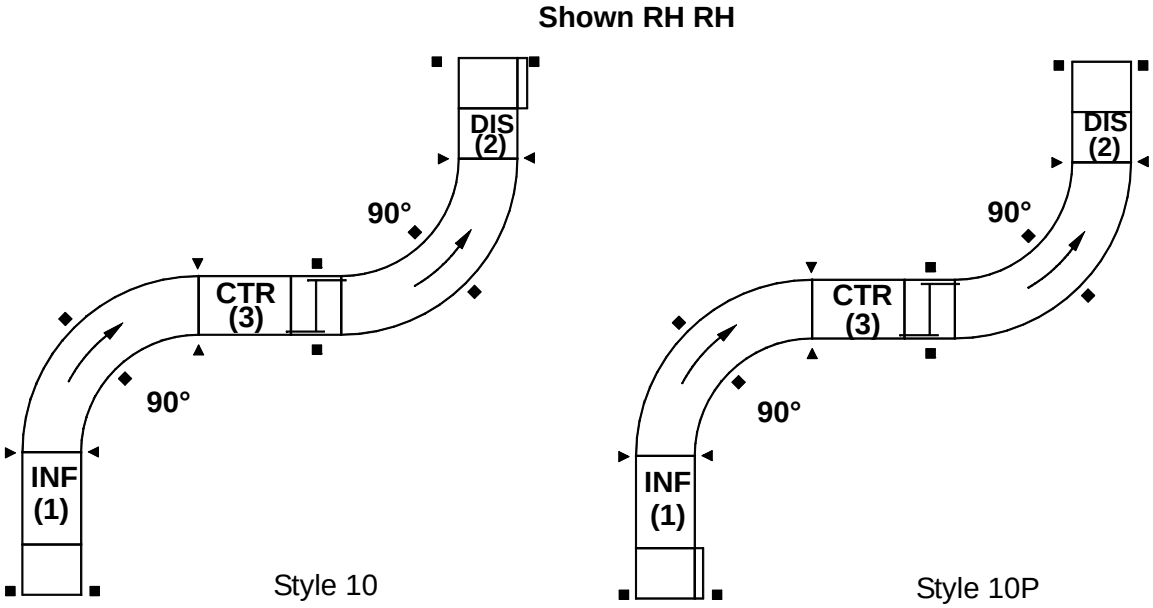


Figure B - 23 V-Belt & T/C Styles 10 & 10P

V-Belt & T/C Styles 11 & 11P

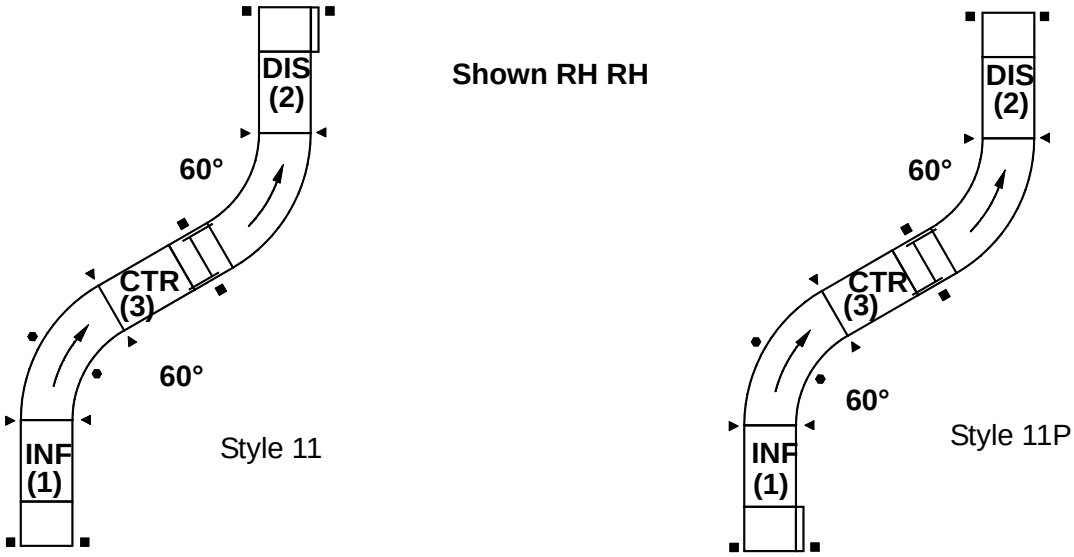


Figure B - 24 V-Belt & T/C Styles 11 & 11P

V-Belt & T/C Styles 12 & 12P

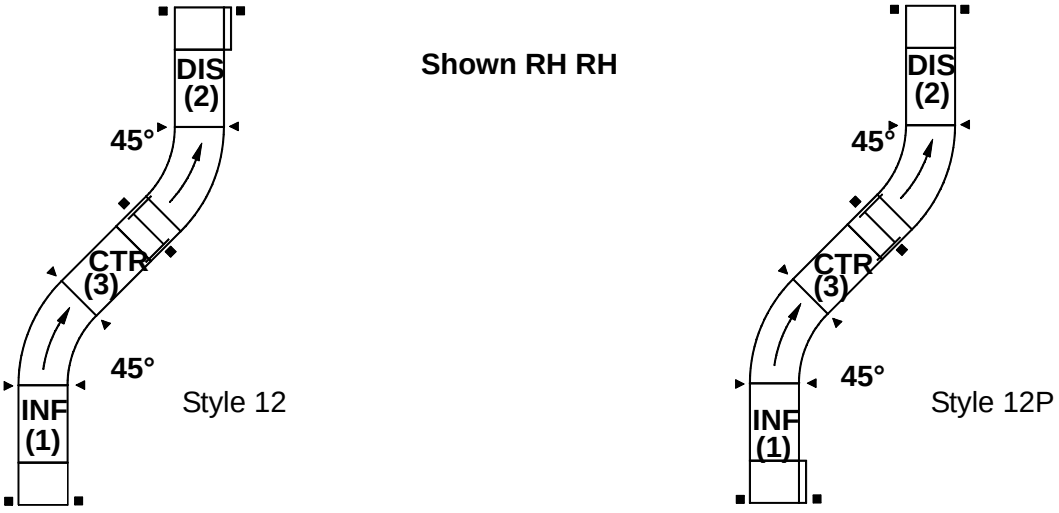


Figure B - 25 V-Belt & T/C Styles 12 & 12P

V-Belt & T/C Styles 13 & 13P

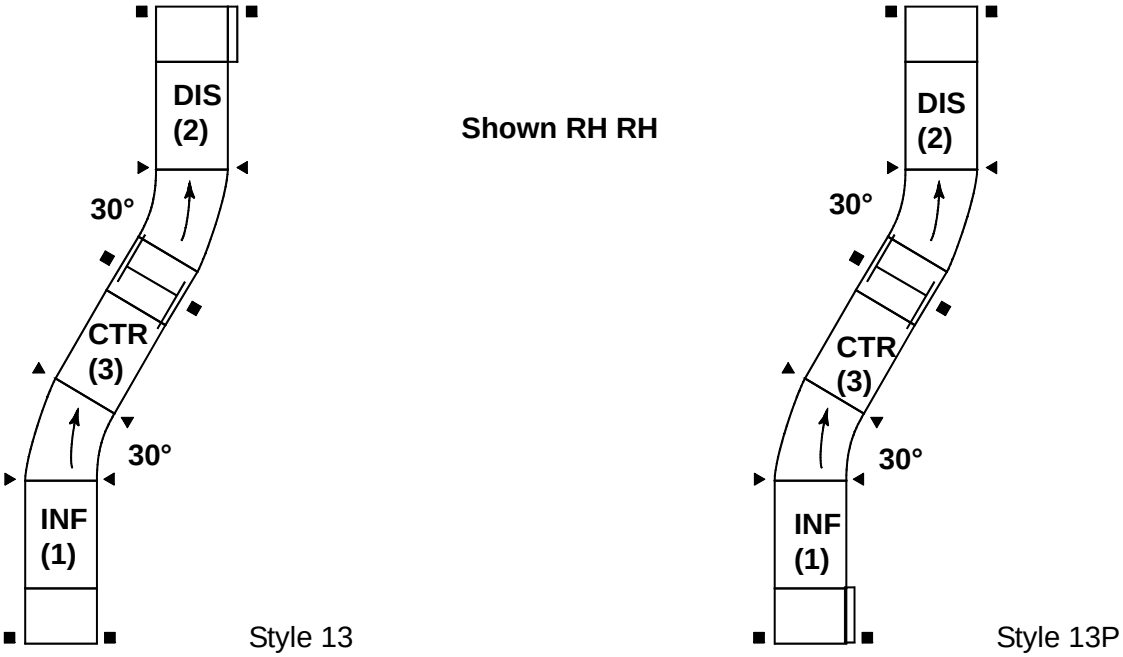


Figure B - 26 V-Belt & T/C Styles 13 & 13P

V-Belt & T/C Styles 14 & 14P

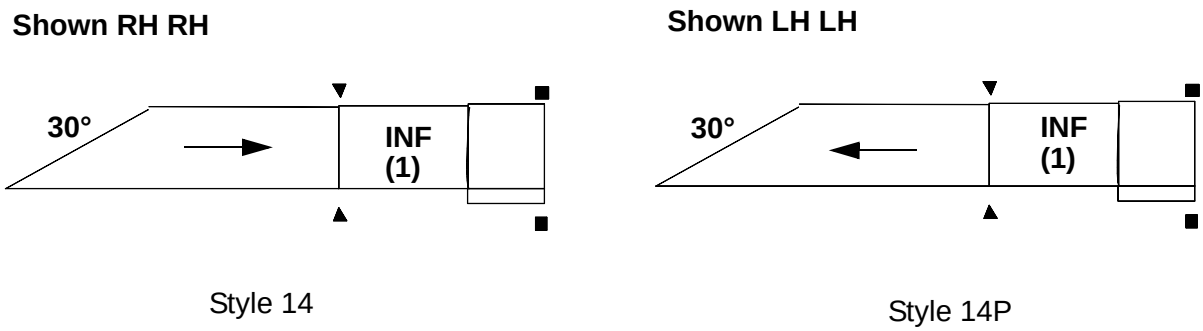


Figure B - 27 V-Belt & T/C Styles 14 & 14P

V-Belt & T/C Styles 15 & 15P

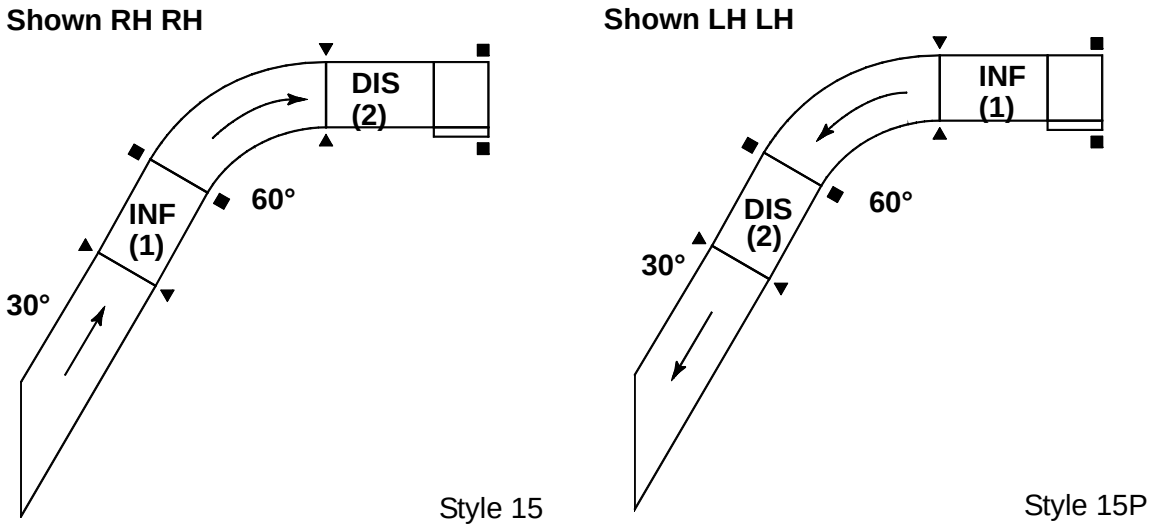


Figure B - 28 V-Belt & T/C Styles 15 & 15P

V-Belt & T/C Styles 16 & 16P

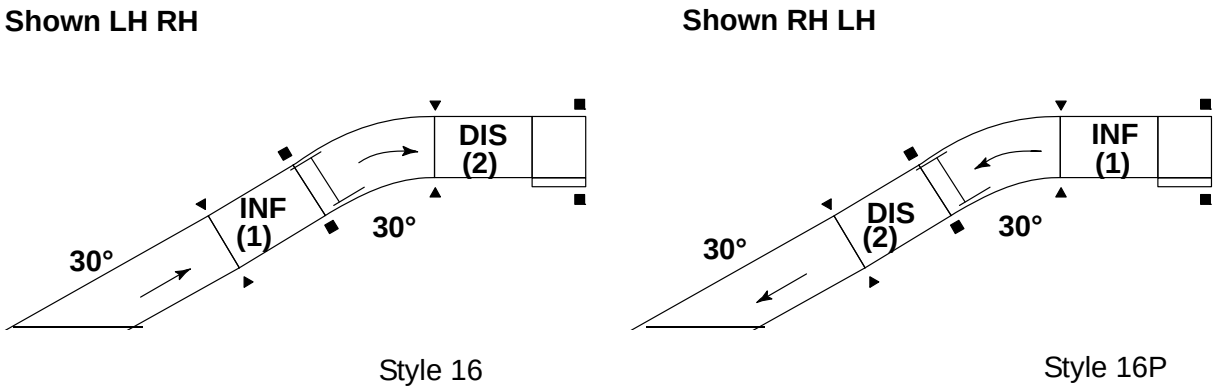


Figure B - 29 V-Belt & T/C Styles 16 & 16P

V-Belt Styles 17 & 17P; T/C Styles 17 & 21

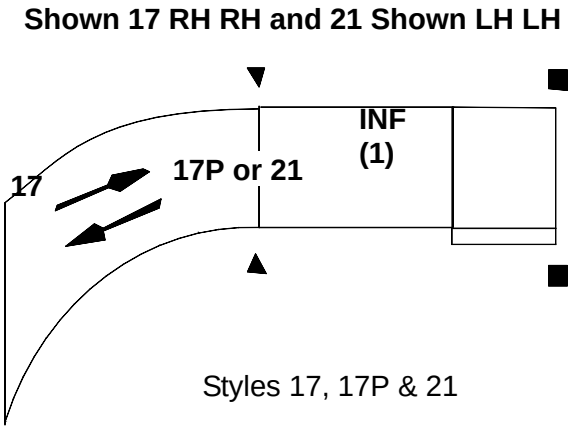


Figure B - 30 V-Belt Styles 17 & 17P; T/C Styles 17 & 21

V-Belt & T/C Styles 18 & 18P

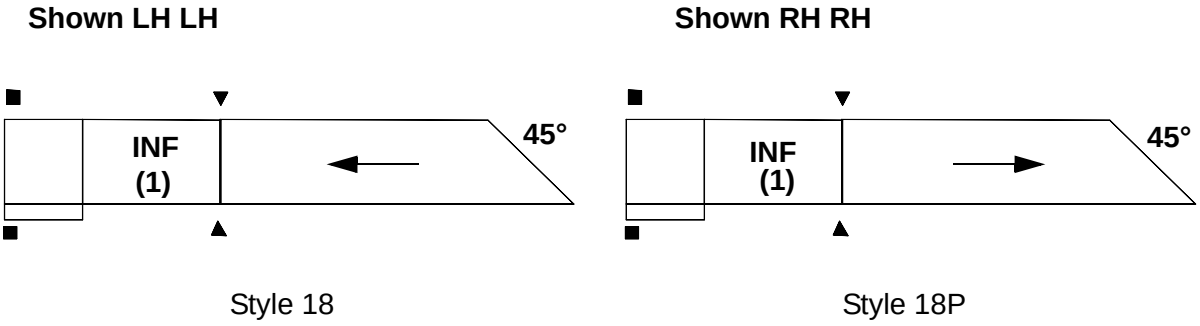


Figure B - 31 V-Belt & T/C Styles 18 & 18P

V-Belt & T/C Styles 19 & 19P

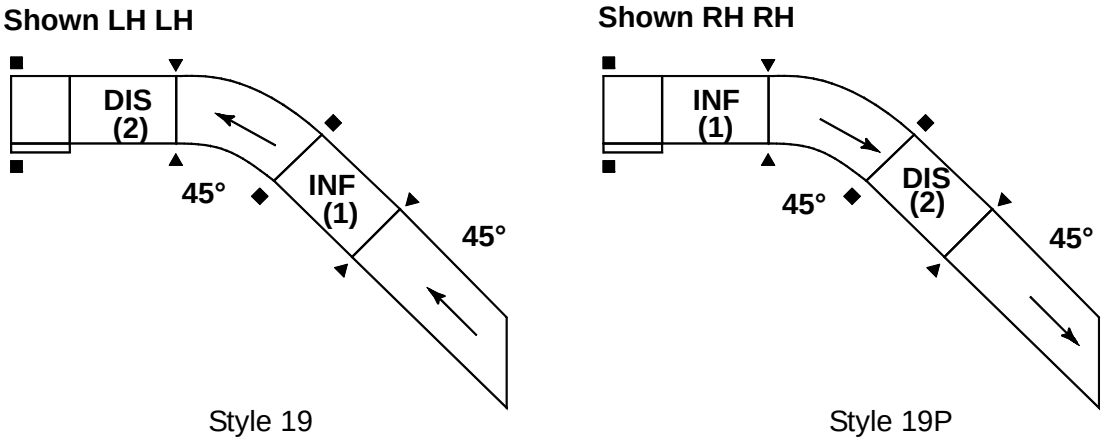


Figure B - 32 V-Belt & T/C Styles 19 & 19P

V-Belt & T/C Styles 20 & 20P

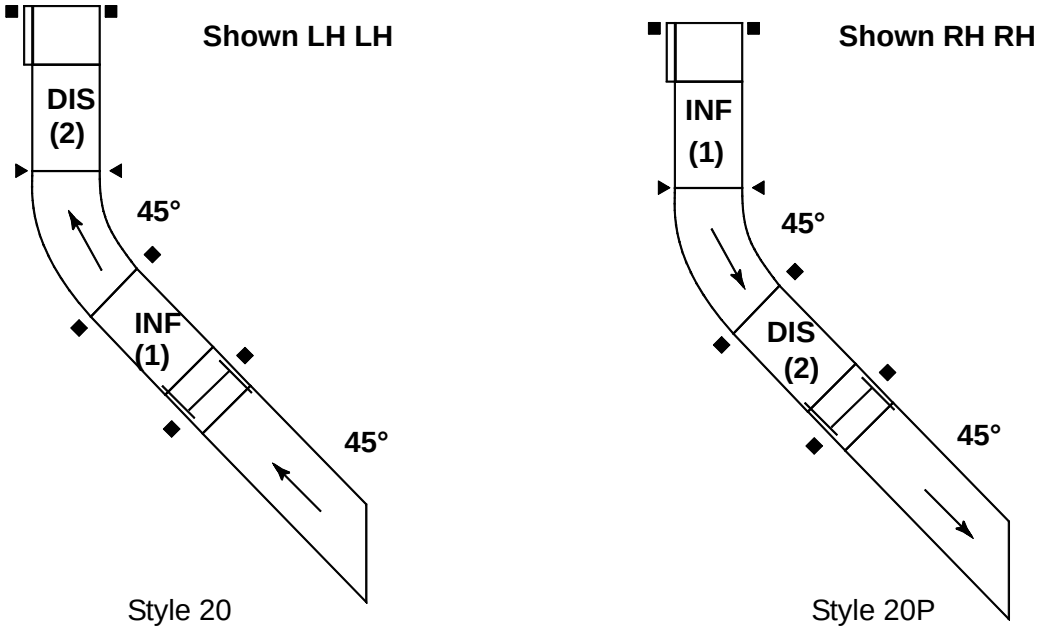


Figure B - 33 V-Belt and T/C Style 20 and 20P

V-Belt & T/C Style 22

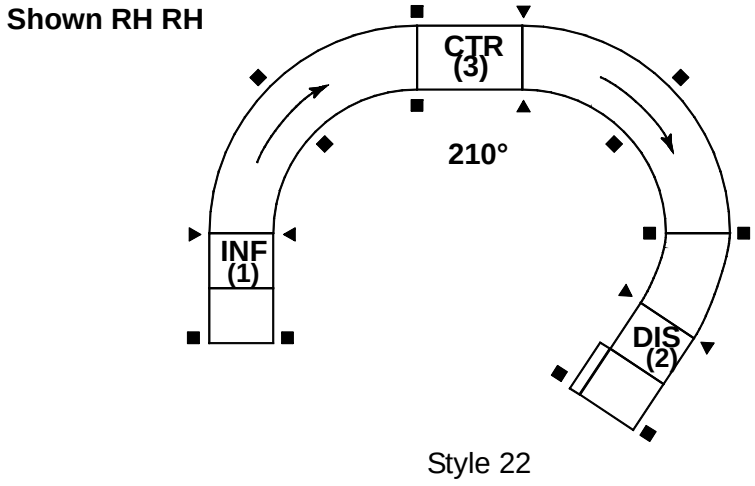


Figure B - 34 V-Belt & T/C Style 22

Incline Support Locations

On inclines, supports should be located as follows (see Figure B - 35):

- At the base of the incline;
- At the section joint between the power-feeder section and the inclined intermediate section;
- At the center of the upper-bend section;
- At the extreme end of the end drive or take-up section; and
- Between the upper-bend section and the end-drive or take-up section if the distance between the corresponding supports exceeds 10 feet.

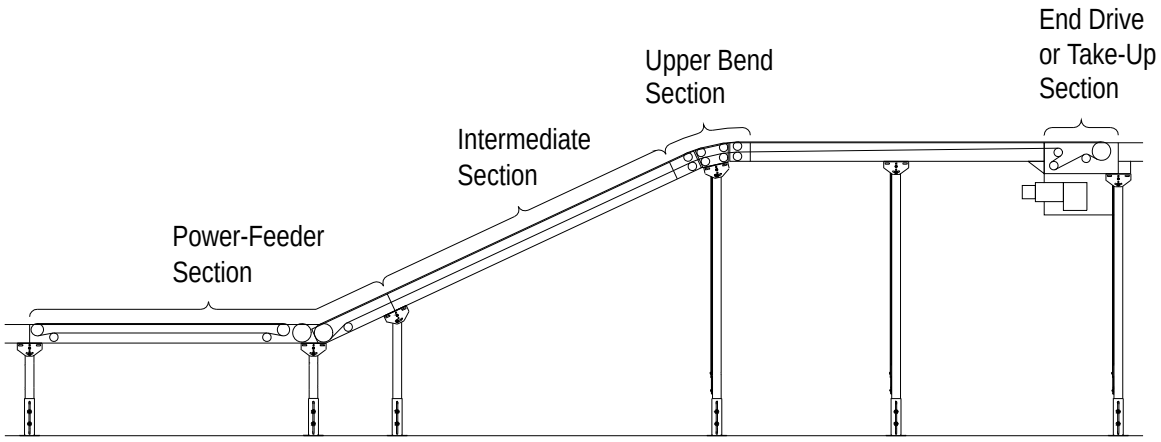


Figure B - 35 Incline Support Locations

SECTION C:STANDARD SPECIFICATIONS

Floor Support Components

Support Tops

Available Types

- A, B & C

Angular Adjustment Range

- Type A – 30°
- Type B – 30°
- Type C – None

Material

- Type A – 10 gauge stee
- Type B – 10 gauge
- Type C – 3/16” thick

Finish

- Powder-coated standard color

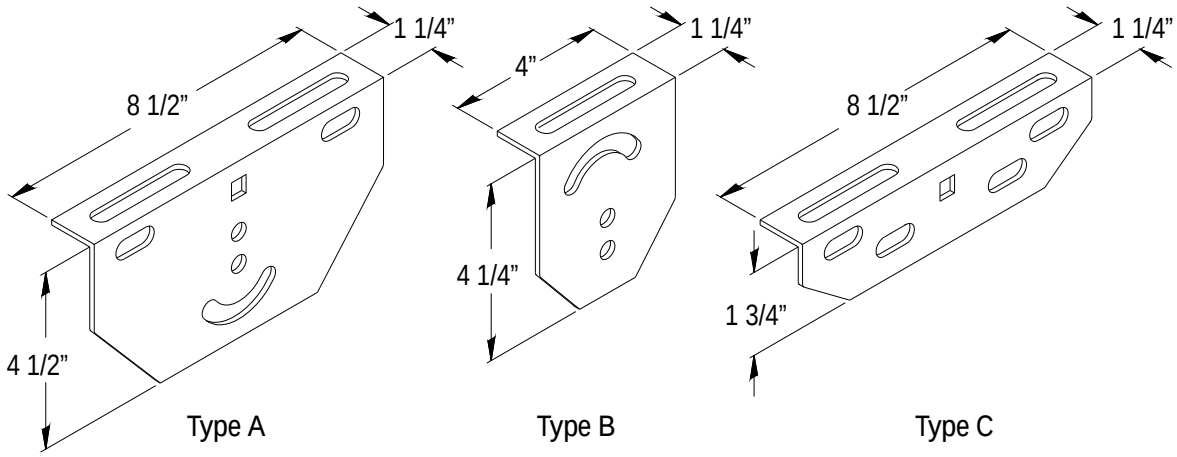


Figure C - 1 Types of Support Top

Support Feet

Material:

- SLE Series – 12 gauge steel
- FSL Series – 12 gauge steel
- FSM Series – 12 gauge steel

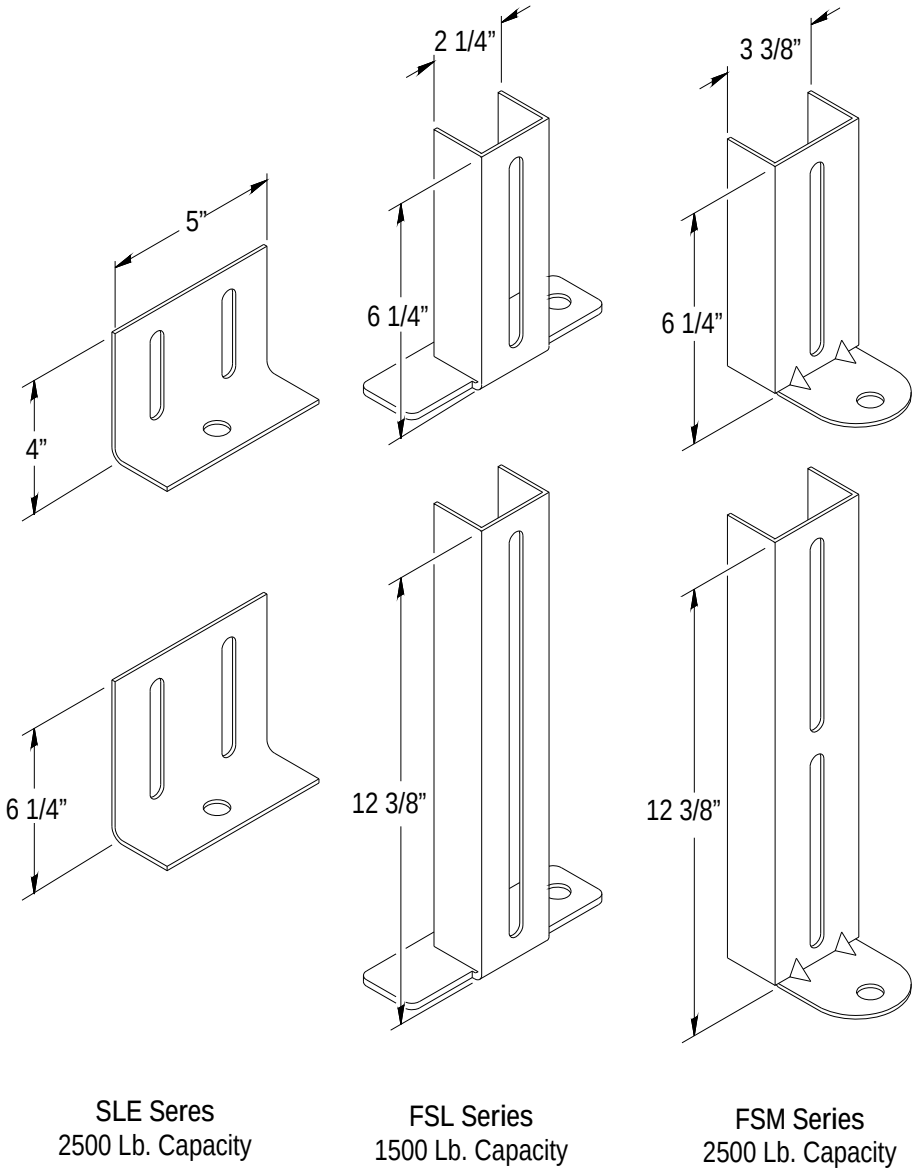


Figure C - 2 Floor-Support Feet

Support Legs

Material:

- 12 gauge steel

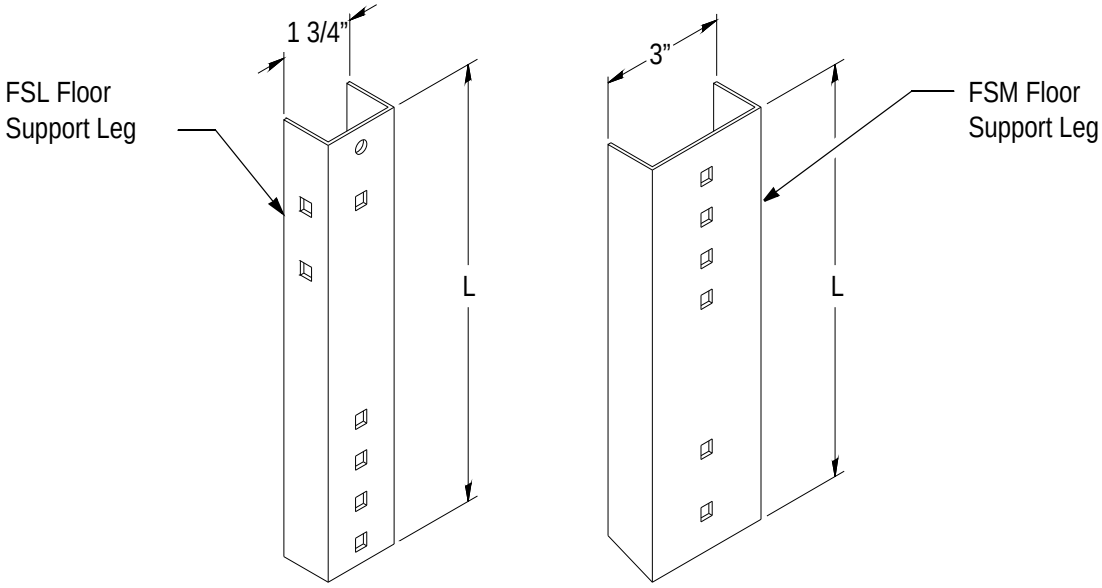


Figure C - 3 Floor-Support Legs

Cross Spreaders

Material:

- 12 gauge steel

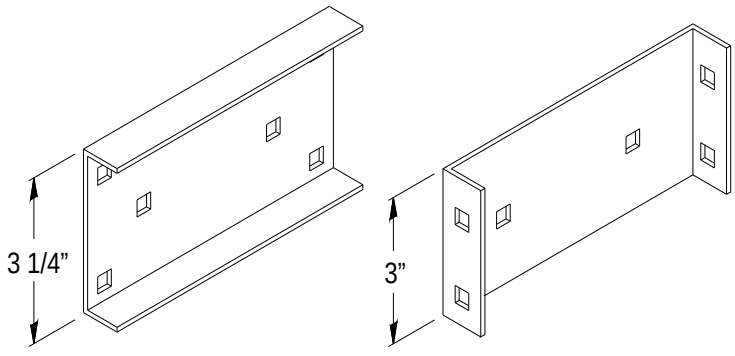


Figure C - 4 Cross Ties

Floor Support Assemblies

SLE Series Floor Supports

Material

- 12 gauge steel

Dimension W

- Conveyor width between side rails

Support Tops Available

- C

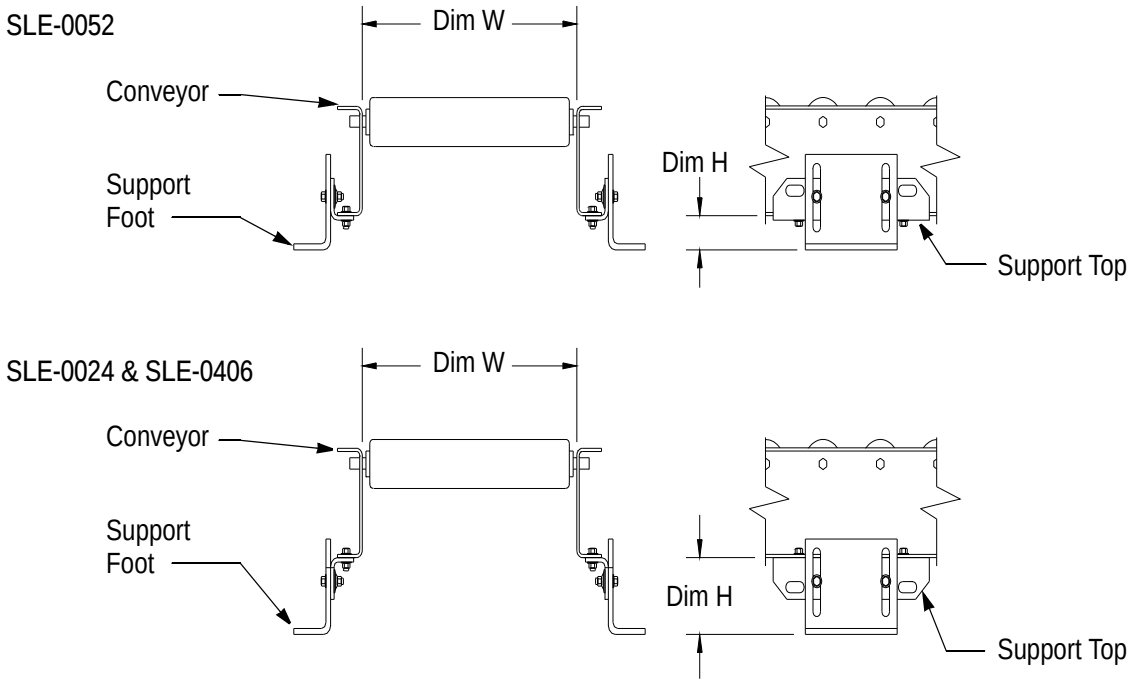


Figure C - 5 SLE Series Floor Support

Table C 1: – SLE Series Floor Support Dimensions

Model	Dimension H		Foot
	Minimum	Maximum	
SLE-0052	1/2”	2 3/8”	4” x 2” x 1/4”
SLE-0204	2 3/16”	4 11/16”	4” x 2” x 1/4”
SLE-0406	4 3/16”	6 11/16”	6” x 2” x 1/4”

FSL Series Floor Supports

Weight Capacity

- 1500 Lbs.

Material

- 12 gauge steel

Dimension W

- Conveyor width between side rails

Support Tops Available

- A, B & C

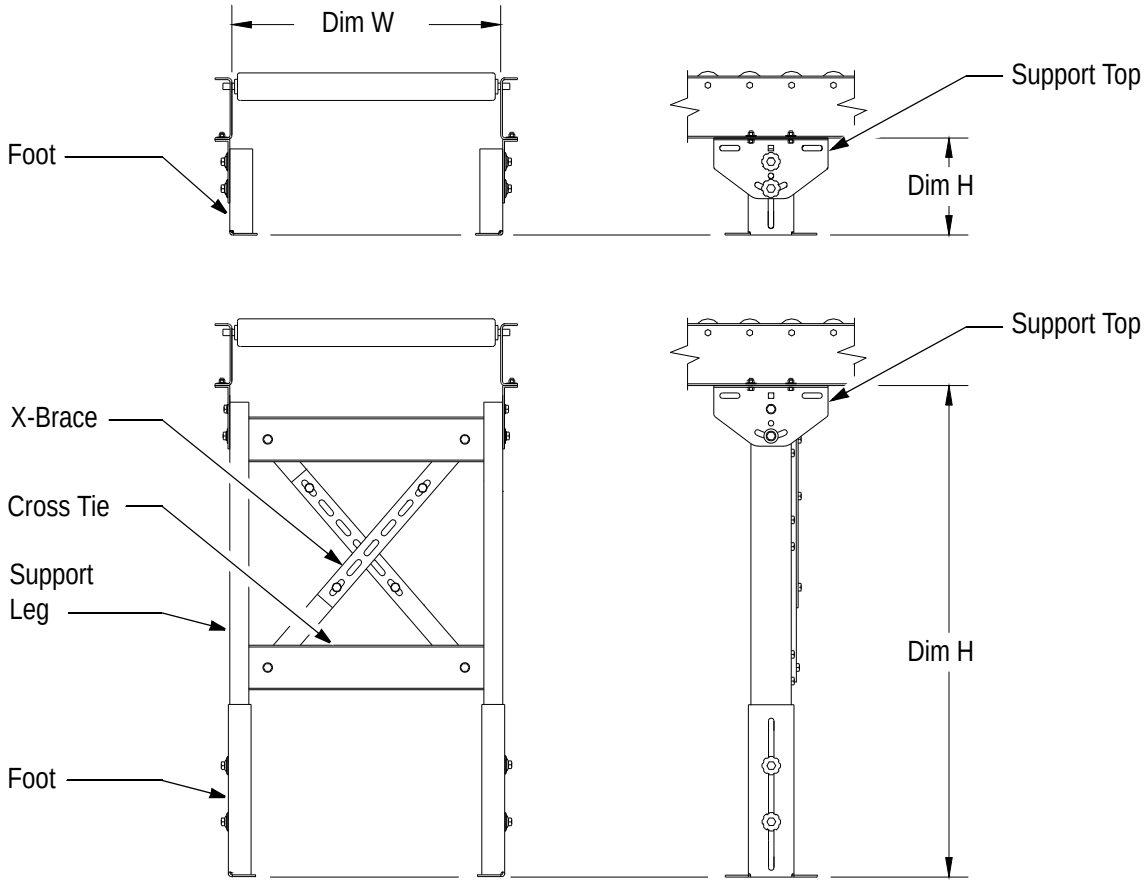


Figure C - 6 FSL Series Floor Support

Table C 2: FSL Series Floor Support Dimensions

Model	Dimension H		Foot	Leg Length	Cross Ties	X Braces
	Minimum	Maximum				
FSL-0608	6”	8”	6 1/4”		1	
FSL-0811	8”	11”	6 1/4”		1	
FSL-1013	10”	13”	6 1/4”		1	
FSL-1215	12 3/8”	15”	6 1/4”	10 3/4”	1	
FSL-1417	14 3/8”	17”	6 1/4”	12 3/4”	1	
FSL-1619	16 3/8”	19”	6 1/4”	14 3/4”	1	
FSL-1724	17 3/8”	24”	12 3/8”	15 3/4”	1	
FSL-2230	22 3/8”	30”	12 3/8”	20 3/4”	1	
FSL-2836	28 3/8”	36”	12 3/8”	26 3/4”	1	
FSL-3442	34 3/8”	42”	12 3/8”	32 3/4”	1	
FSL-4048	40 3/8”	48”	12 3/8”	38 3/4”	2	
FSL-4654	46 3/8”	54”	12 3/8”	44 3/4”	2	
FSL-5260	52 3/8”	60”	12 3/8”	50 3/4”	2	
FSL-5866	58 3/8”	66”	12 3/8”	56 3/4”	2	
FSL-6472	64 3/8”	72”	12 3/8”	62 3/4”	2	
FSL-7078	70 3/8”	78”	12 3/8”	68 3/4”	2	
FSL-7684	76 3/8”	84”	12 3/8”	74 3/4”	3	1
FSL-8290	82 3/8”	90”	12 3/8”	80 3/4”	3	1
FSL-8896	88 3/8”	96”	12 3/8”	86 3/4”	3	1
FSL-94102	94 3/8”	102”	12 3/8”	94 3/4”	3	1
FSL-100108	100 3/8”	108”	12 3/8”	100 3/4”	3	1

FSM Series Floor Supports

Weight Capacity

- 2500 Lbs.

Material

- 12 gauge steel

Dimension W

- Conveyor width between side rails

Support Tops Available

- A, B & C

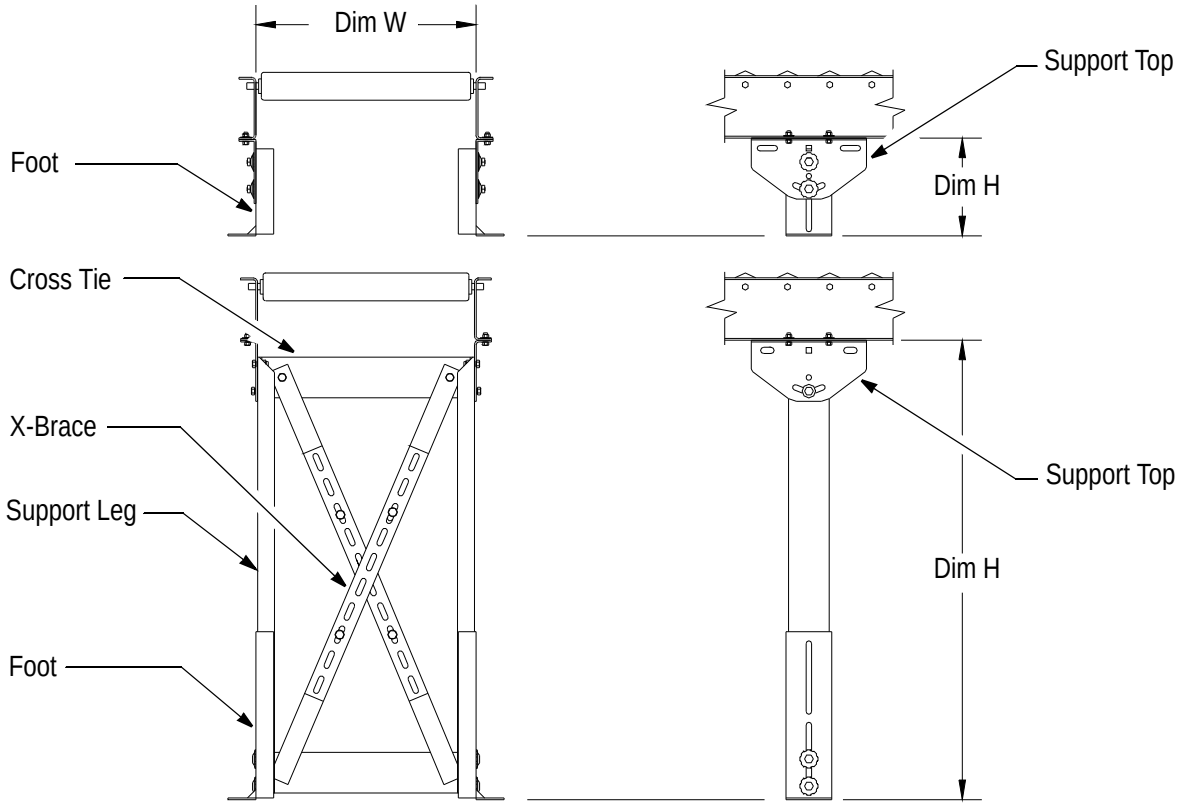


Figure C - 7 FSM Series Floor Support

Table C 3: – FSM Series Floor Support Dimensions

Model	Dimension H		Foot	Leg Length	Cross Ties	X Brace
	Minimum	Maximum				
FSM-0608	6”	8”	6 1/4”			
FSM-0811	8”	11”	6 1/4”	7”	1	
FSM-1013	10”	13”	6 1/4”	9”	1	
FSM-1215	12”	15”	6 1/4”	10 1/4”	1	
FSM-1417	14”	17”	12”	12 1/4”	1	
FSM-1619	16”	19”	12”	14 1/4”	1	
FSM-1724	17”	24”	12”	16”	2	
FSM-2230	22”	30”	12”	21”	2	
FSM-2836	28”	36”	12”	27”	2	
FSM-3442	34”	42”	12”	33”	2	
FSM-4048	40”	48”	12”	39”	2	
FSM-4654	46”	54”	12”	45”	2	
FSM-5260	52”	60”	12”	51”	3	
FSM-5866	58”	66”	12”	57”	3	
FSM-6472	64”	72”	12”	63”	3	
FSM-7078	70”	78”	12”	69”	3	
FSM-7684	76”	84”	12”	75”	3	2
FSM-8290	82”	90”	12”	81”	3	2
FSM-8896	88”	96”	12”	87”	3	2
FSM-94102	94”	102”	12”	93”	3	2
FSM-100108	100”	108”	12”	99”	3	2

FSMU4 Series Floor Supports

Weight Capacity

- 2500 Lbs.

Material

- 12 gauge steel formed channel

Dimension W

- Conveyor width between side channels

Support Top Used

- A, B & C

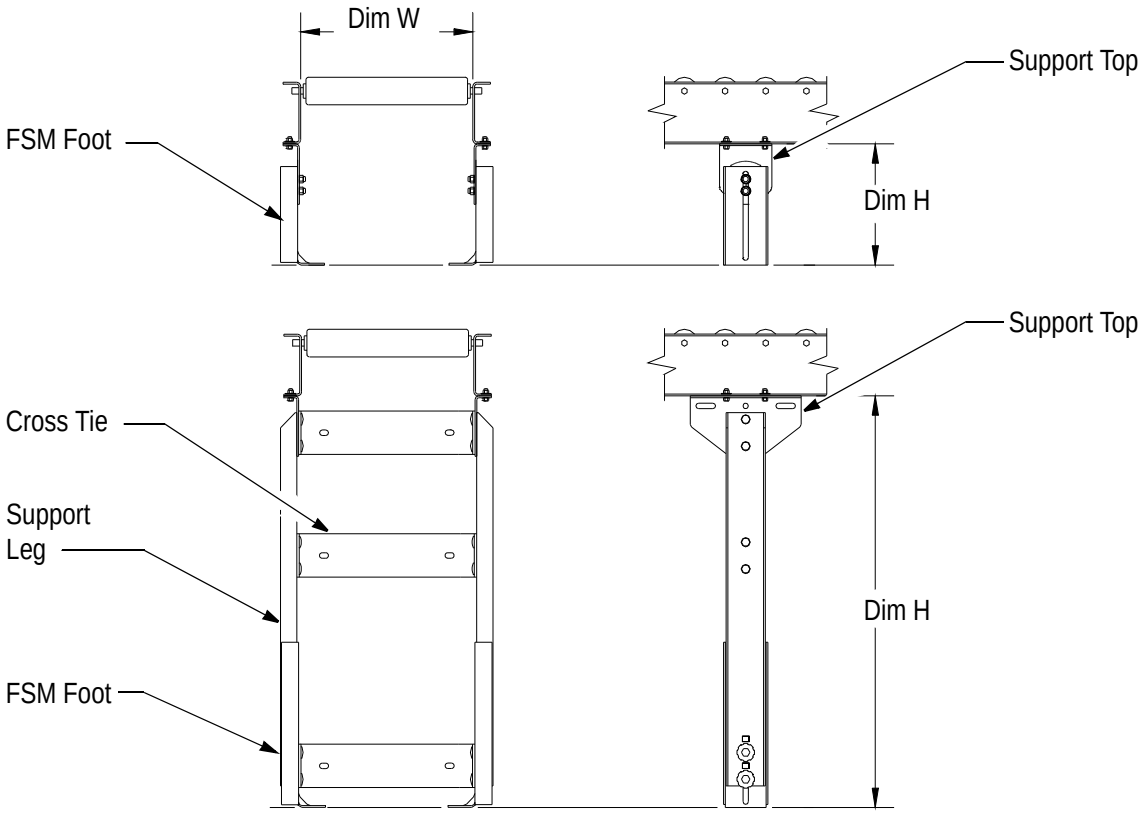


Figure C - 8 FSMU4 Series Floor Supports

Table C 4: FSMU4 Series Floor Support Dimensions

Model	Dimension H		Foot	Leg Length	Cross Ties
	Minimum	Maximum			
FSMU4-0608	8”	78”	6 1/4”		
FSMU4-0811	8”	11”	6 1/4”	7”	1
FSMU4-1013	10”	13”	6 1/4”	9”	1
FSMU4-1215	12”	15”	6 1/4”	10 1/4”	1
FSMU4-1417	14”	17”	12”	12 1/4”	1
FSMU4-1619	16”	19”	12”	14 1/4”	1
FSMU4-1724	17”	24”	12”	16”	2
FSMU4-2230	22”	30”	12”	21”	2
FSMU4-2836	28”	36”	12”	27”	2
FSMU4-3442	34”	42”	12”	33”	2
FSMU4-4048	40”	48”	12”	39”	2
FSMU4-4654	46”	54”	12”	45”	2, 2
FSMU4-5260	52”	60”	12”	51”	2, 2
FSMU4-5866	58”	66”	12”	57”	2, 2
FSMU4-6472	64”	72”	12”	63”	2, 2
FSMU4-7078	70”	78”	12”	69”	2, 2

FSU15 Series Floor Supports

Weight Capacity

- 2500 Lbs.

Components:

(A) Support Top: 3-3/4” x 3-3/16” x 4-1/4” x 1/4” Formed Angle (Types II, III, IV, and V)

(B) Support Frame: 5” x 2” x 7 ga. channel with 3-1/2” x 1-1/2” x 11 ga. channel crossmember and 5/8”-11 x 4” Jackbolt; welded diagonal brace (Type V)

(C) Support Foot: 5-5/16” x 2-1/4” x 1/4” channel with 1/4” tk. bottom plate

(D) Compression Pad, Stud/Plate Mount 51551-5:

Max. Shear - 285 lbs.; Max. Compression -1815 lbs.

(E) Vibration Mounting Bracket: 1/4” Steel Weldment

Dimension “W”:

- (Infeed/Discharge) Conveyor width (between side channels)

Types:

- Type I, II, III, IV, and V (see Table C-5)

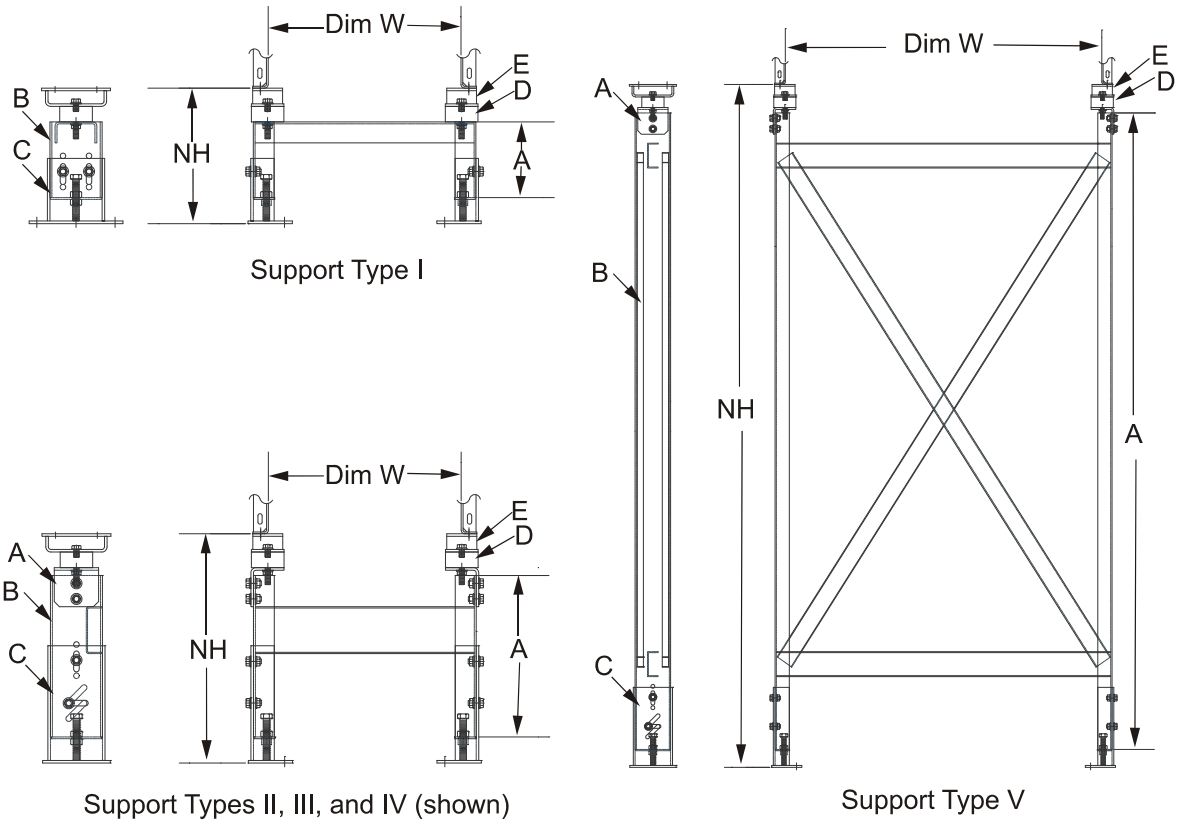


Figure C - 9 FSU15 Series Floor Supports

Table C 5: – FSU15 Series Floor Support Dimensions

Model	Nominal Height (NH)	Height Adjustment	Foot Height	Leg Length	Cross Members	Diagonal X-Brace
Type I	11”, 12”, 13”, 14”, 15”	± 1.5”	6.25”	NH - 5.75”	1	No
Type II	16”, 17”, 18”, 19”	± 1.5”	6.25”	NH - 5.75”	1	No
Type III	10”, 21”, 22”, 23”	± 1.5”	6.25	NH - 5.75	1	No
Type IV	24” thru 28”	± 1.5”	11.25	NH - 5.75”	1	No
	29” thru 41”				2	
Type V	97” thru 174”	± 1.5”	11.25”	NH - 5.75	3	Yes
	175” thru 246”				4	

Model SKB Knee Brace

Material

- 1 1/2” x 10 gauge steel flat with slots punched at 2” centers

Mounting Clip

- Type C support top

Mounting Hardware

- Four 3/8” x 3/4” hex head bolts, nuts, and lock washers

Finish

- Powder-coated standard color

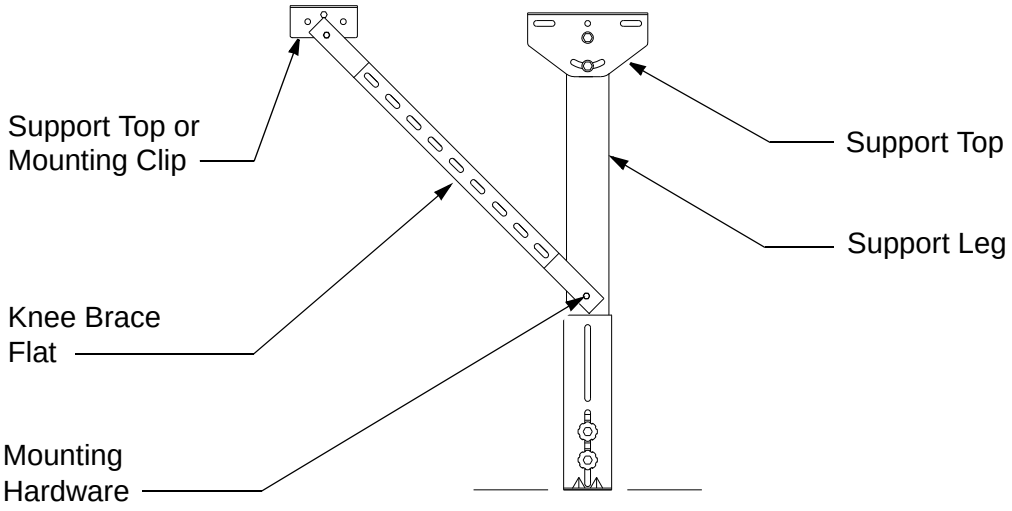


Figure C - 10 Model SKB Knee Brace

SDA Series Double-Deck Floor Supports

Dimension H

- Leg height = maximum support height.
  - 4 feet
  - 6 feet

Dimensions B and C

- Variables based on customer needs and engineering.

Dimension D

- Variable based on height from floor to top of cross brace.

Support Top Available

- Type A.

Support Leg

- 1 5/8" x 1 5/8" x 12 gauge steel strut with welded 12 gauge steel support foot.

Cross Brace

- 1 1/2" x 1 1/2" x 3/16" steel angle with welded 12 gauge steel end plates.

Finish

- Powder-coated standard color.

Dimension W (Conveyor Width)	15”	16”	21”	22”	27”	28”	33”	34”	39”	40”
Dimension W + 2 $^{7}/_{8}$”	17 $^{7}/_{8}$”	18 $^{7}/_{8}$”	23 $^{7}/_{8}$”	24 $^{7}/_{8}$”	29 $^{7}/_{8}$”	30 $^{7}/_{8}$”	35 $^{7}/_{8}$”	36 $^{7}/_{8}$”	41 $^{7}/_{8}$”	42 $^{7}/_{8}$”

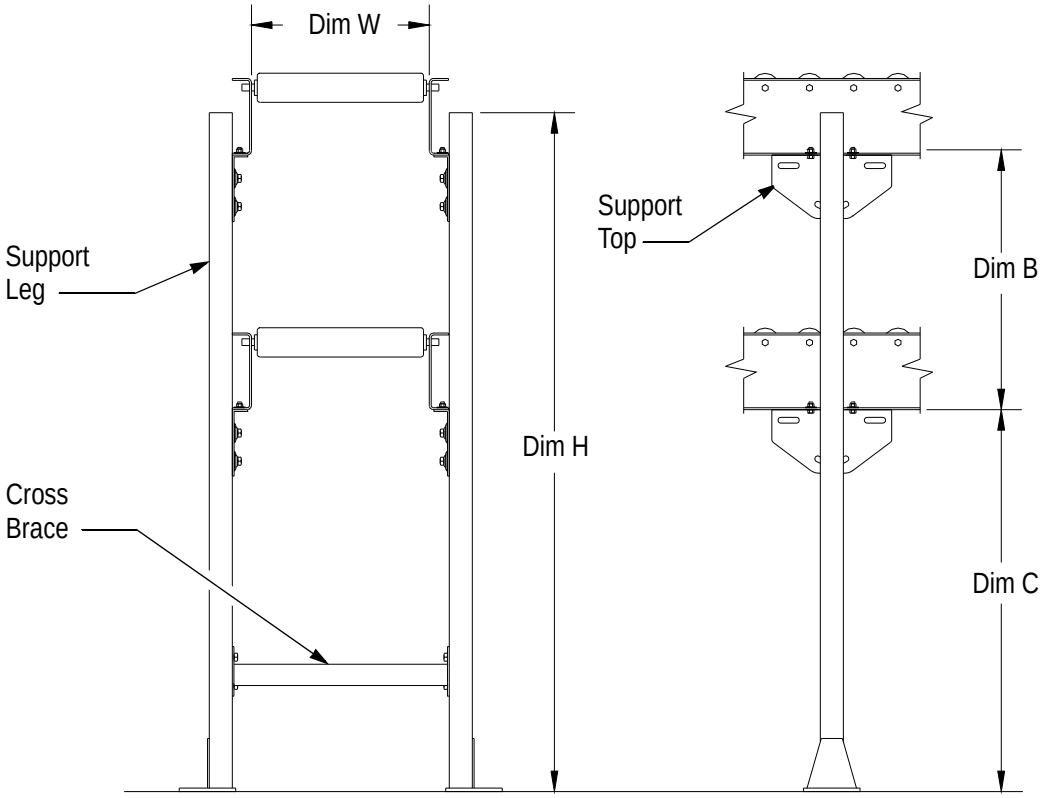


Figure C - 11 SDA Series Double-Deck Floor Supports

SDB Series Double Deck Floor Supports

Weight Capacity

- 1500 lbs.

Dimension H

- Leg height = maximum support height.
  - 4 feet
  - 6 feet

Dimensions B and C

- Variables based on customer needs and engineering.

Support Leg

- 1 5/8" x 1 5/8" x 12 gauge steel strut and welded 12 gauge steel support feet.

Cross Pipe

- 1 3/4" O. D. x 11 gauge steel pipe with 1/4" thick steel end plates.

Mounting Hardware

- 5/16-18 x 1 3/4" x 2 11/16" U-bolts with flanged hex nuts.

Finish

- Powder-coated standard color.

Dimension W (Conveyor Width)	15”	16”	21”	22”	27”	28”	33”	34”	39”	40”
Dimension W + 6”	21”	22”	27”	28”	33”	34”	37”	40”	45”	46”

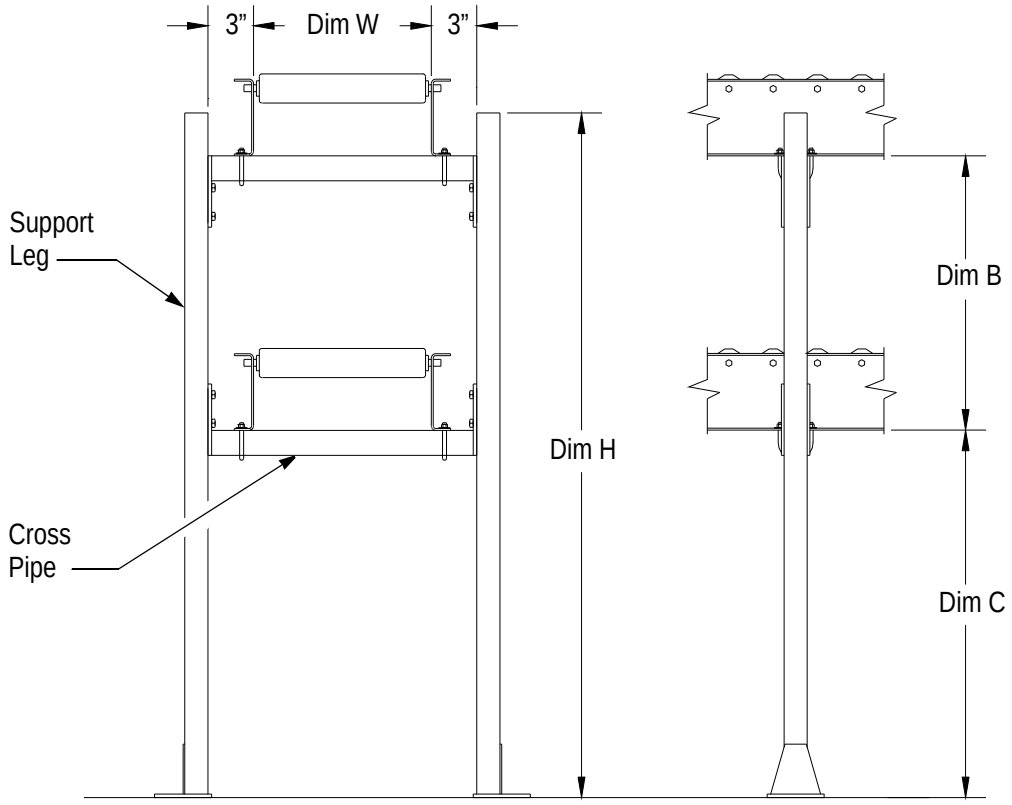


Figure C - 12 SDB Series Double-Deck Floor Support

SDA HDD Series Multiple-Level Floor Supports

Dimension H

- Leg height = maximum support height.
  - 8 feet
  - 10 feet
  - 12 feet
  - 14 feet

Dimensions C, D, E, F, and G

- Variable.

Support Top Available

- Type A.

Support Legs

- 4" x 1 1/4" x 12 gauge steel channel with 1 5/8" x 1 5/8" x 12 gauge steel strut and welded 12 gauge steel support feet.

Cross Brace

- 1 1/2” x 1 1/2” x 3/16” thick angle with welded 1/4" steel end plates.

Finish

- Powder-coated standard color.

Dimension W (Conveyor Width)	15”	16”	21”	22”	27”	28”	33”	34”	39”	40”
Dimension W + 2 $^{7}/_{8}$”	17 $^{7}/_{8}$”	18 $^{7}/_{8}$”	23 $^{7}/_{8}$”	24 $^{7}/_{8}$”	29 $^{7}/_{8}$”	30 $^{7}/_{8}$”	35 $^{7}/_{8}$”	36 $^{7}/_{8}$”	41 $^{7}/_{8}$”	42 $^{7}/_{8}$”

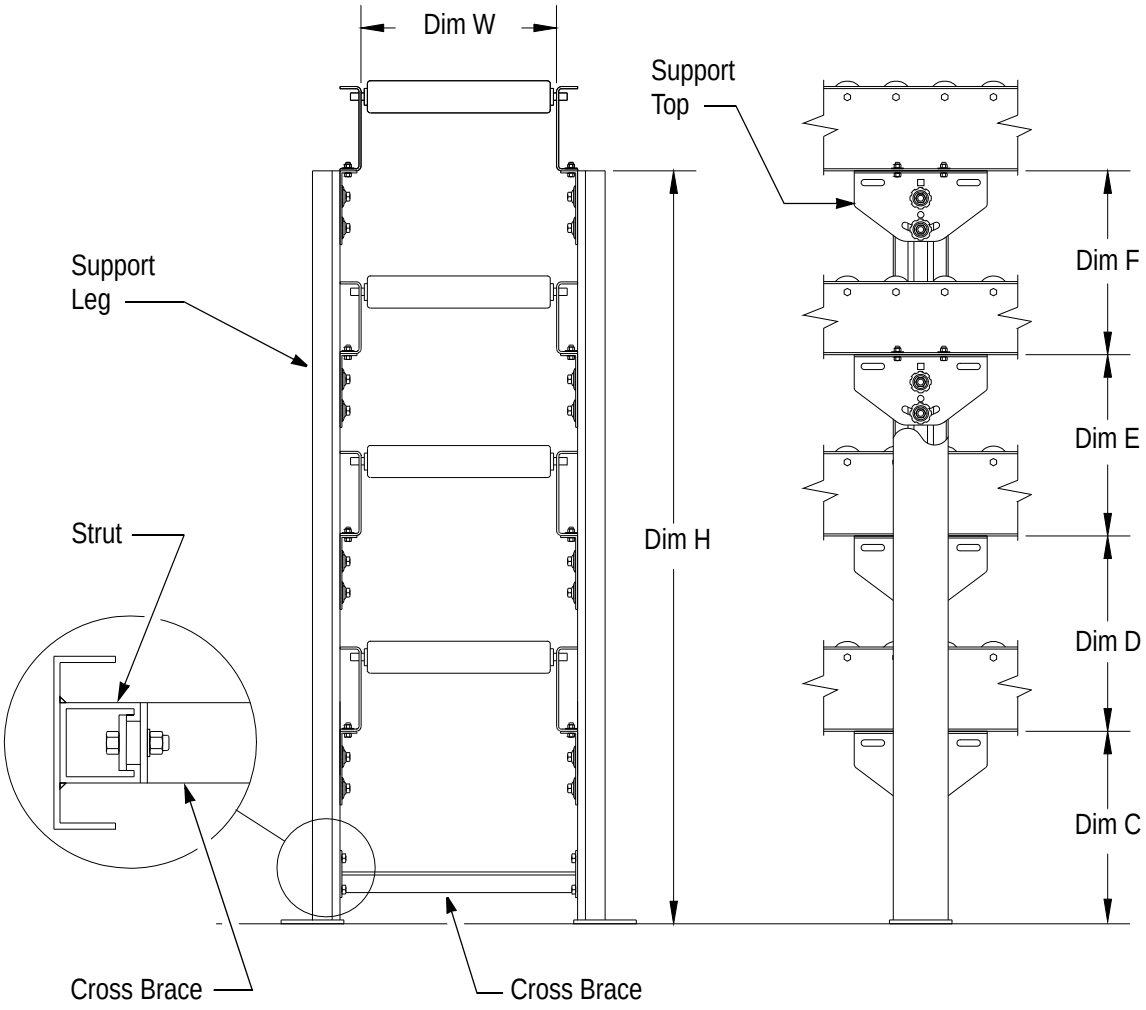


Figure C - 13 SDA HDD Multiple-Level Floor Support

SDB HDD Series Multiple-Level Floor Supports

Dimension H

- Leg height = maximum support height.
  - 8 feet
  - 10 feet
  - 12 feet
  - 14 feet

Dimensions C, D, E & F

- Variable.

Support Leg

- 4" x 1 1/4" x 12 gauge steel channel with 1 5/8” x 1 5/8” x 12 gauge steel strut with welded 12 gauge steel support feet.

Cross Tube

- 1 3/4" O. D. x 11 gauge steel tube with 1/4" end plates.

Mounting Hardware

- 5/16-18 x 1 3/4" x 2 11/16" U-bolts with flanged hex nuts.

Finish

- Powder-coated standard color.

Dimension W (Conveyor Width)	15”	16”	21”	22”	27”	28”	33”	34”	39”	40”
Dimension W + 6”	21”	22”	27”	28”	33”	34”	37”	40”	45”	46”

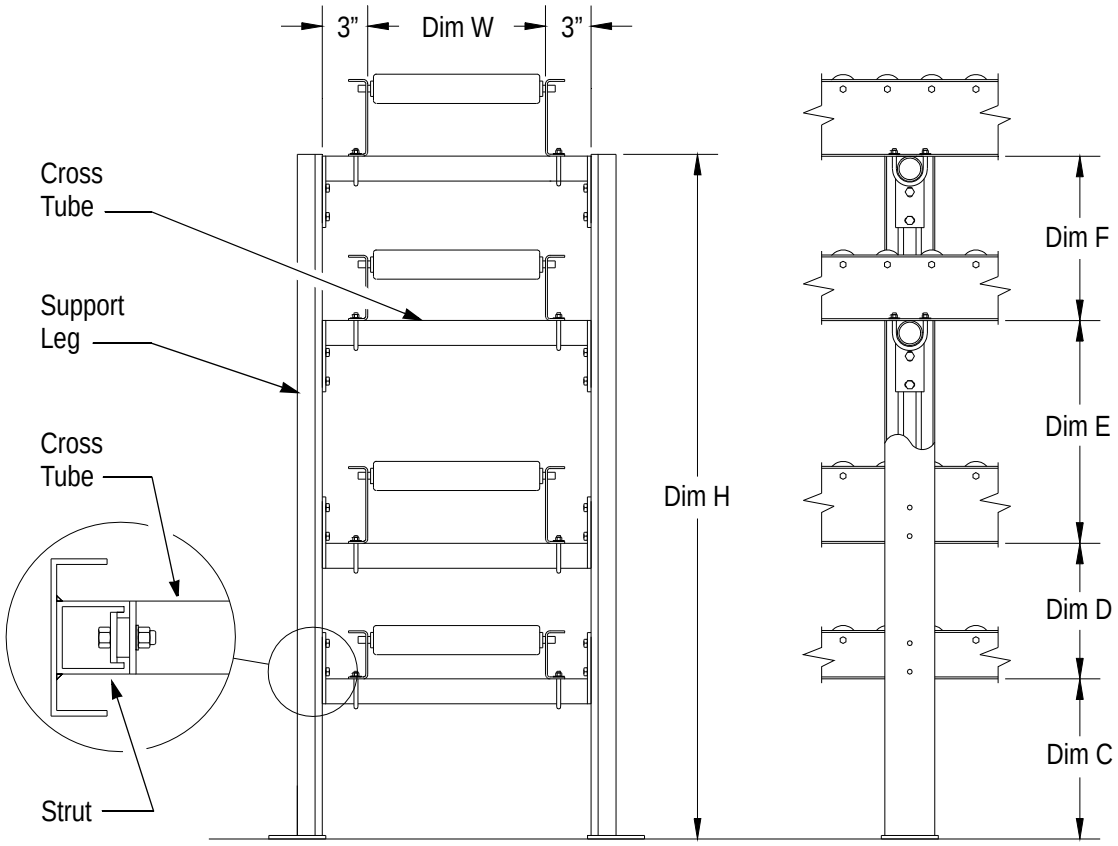


Figure C - 14 SDB HDD Series Multiple-Level Floor Support

SMS Series Mobile Floor Supports

Conveyor Widths Available (Dimension W)

- 16", 22", 28", 34" & 40"

Weight Capacity

- 2500 lbs.

Height (Dimension H)

- From 19” to 47”, variable determined by customer and engineering.

Method of Attachment

- Bolts to10’ long or 5’ long straight gravity conveyor section.

Support Tops Available

- Type A.

Support Leg

- Standard FSM support leg.

Knee Brace

- Attached at both supports.

Foot

- Standard FSM foot, with a pad welded to the bottom for attaching the swivel caster.

Caster

- 4” diameter semi-steel; swivel-type with lock.

Floor Lock (Optional)

- Faultless foot lock assembly (part Number 66-0295), foot-operated.

Finish

- Powder-coated standard color.

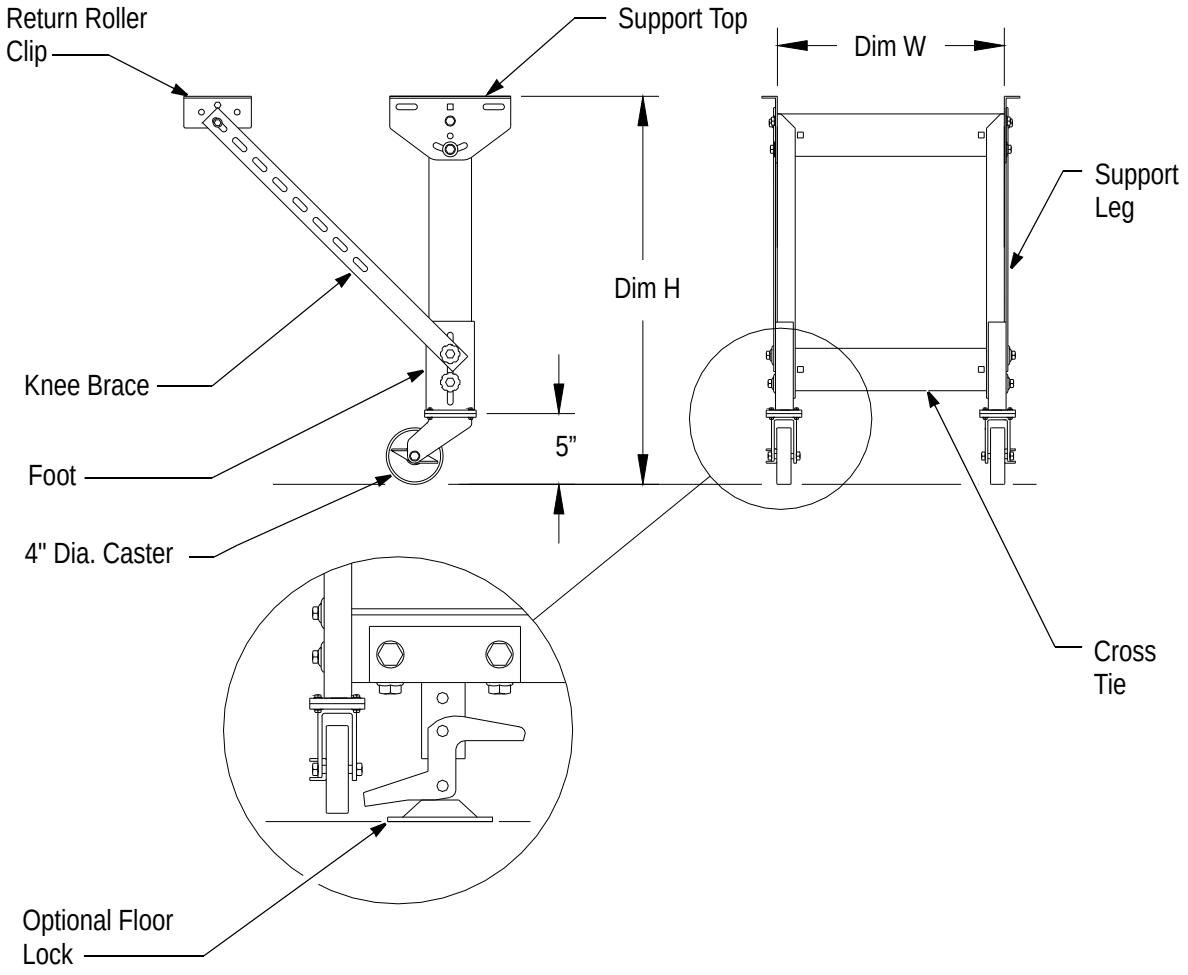


Figure C - 15 SMS Series Mobile Floor Supports

Model	Dimension H		Foot	Leg Length	Cross Ties
	Minimum	Maximum			
SMS-1316	13"	16"	6 1/4”	7”	1
SMS-1518	15"	18”	6 1/4”	9”	1
SMS-1720	17”	20”	6 1/4”	10 1/4”	1
SMS-1922	19”	22”	12”	12 1/4”	1
SMS-2124	21"	24”	12”	14 1/4”	1
SMS-2229	22”	29”	12”	16”	2
SMS-2735	27”	35”	12”	21”	2
SMS-3341	33”	41”	12”	27”	2
SMS-3947	39”	47”	12”	33”	2

SMC Series Mobile Floor Support

Conveyor Widths Available (Dimension W)

- 16", 22", 28", 34" & 40".

Method of Attachment

- Bolts to 90° curve gravity conveyor section.

Capacity

- 2500 lbs.

Support Tops Available

- Type A.

Support Leg

- Standard FSM support leg.

Knee Brace

- Attached at both supports and single leg.

Foot

- Standard FSM foot, with a pad welded to the bottom for attaching the swivel caster.

Caster

- 4” diameter semi-steel; swivel-type with lock.

Floor Lock (Optional)

- Faultless foot lock assembly (part number 66-0295), foot-operated.

Finish

- Powder-coated standard color.

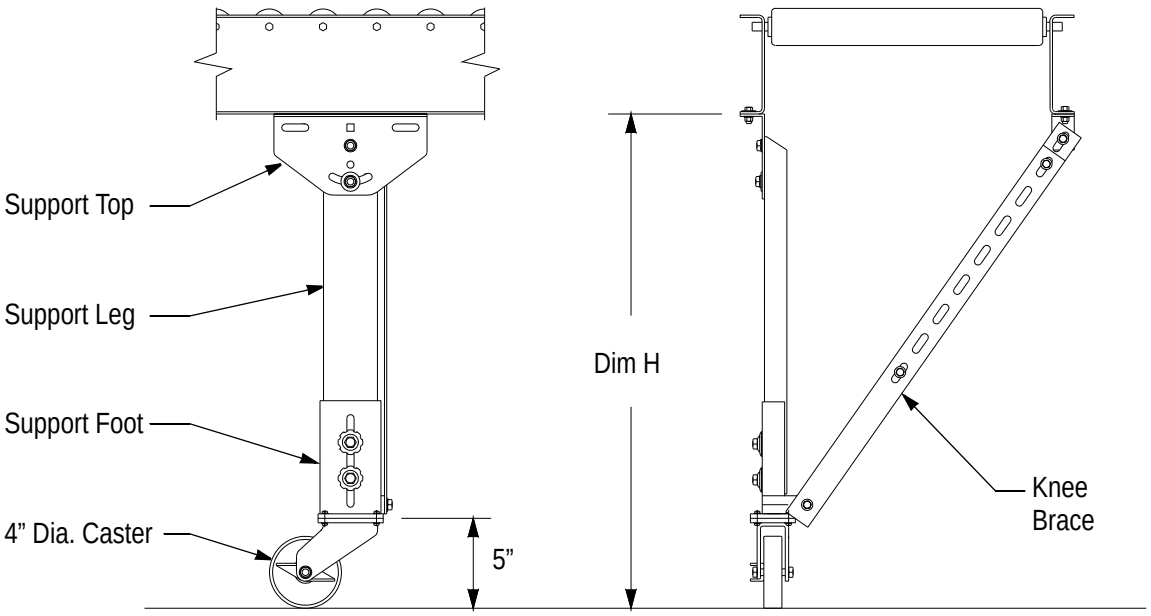


Figure C - 16 SMC Series Mobile Floor Supports

Model	Dimension H		Foot	Leg Length
	Minimum	Maximum		
SMC-1316	13"	16"	6 1/4”	7”
SMC-1518	15"	18”	6 1/4”	9”
SMC-1720	17”	20”	6 1/4”	10 1/4”
SMC-1922	19”	22”	12”	12 1/4”
SMC-2124	21"	24”	12”	14 1/4”
SMC-2229	22”	29”	12”	16”
SMC-2735	27”	35”	12”	21”
SMC-3341	33”	41”	12”	27”
SMC-3947	39”	47”	12”	33”

Floor Support Fasteners

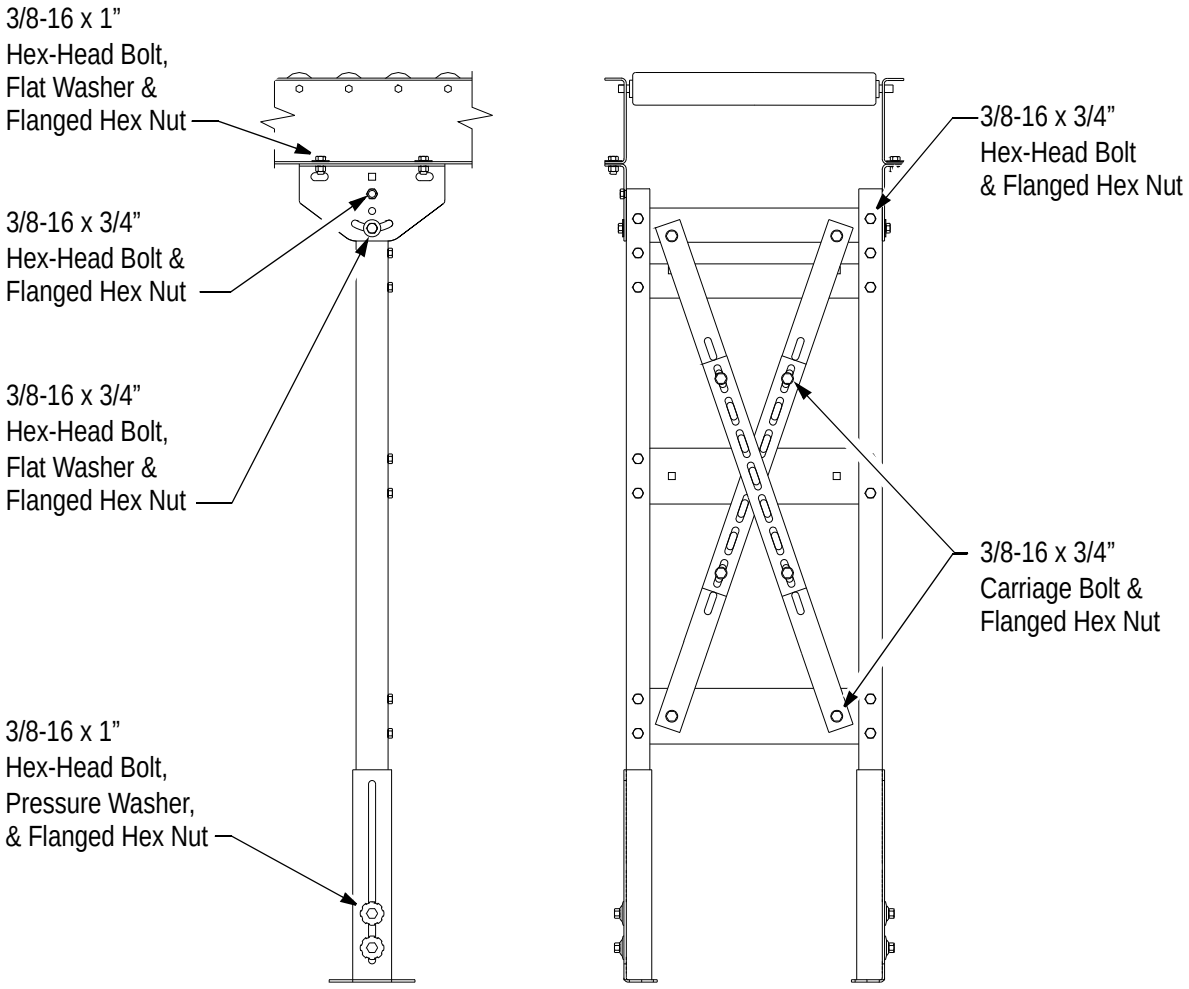


Figure C - 17 Floor Support Fasteners

Ceiling Hangers

Models CH1-A & CH1-B Ceiling Hangers

Capacity

- 1500 lbs.

Threaded Rod

- 5/8-11 x 12’-0” steel threaded rod.

Coupler Nut

- 5/8-11 hex coupler nut.

Lock Nut

- 5/8-11 hex nut.

Ceiling Hanger

- 1 3/4” x 1 1/4” x 8” long structural steel angle.

Hanger Pipe

- 1 1/2” Diameter x 12 gauge steel tubing.

Pipe Strap

- 1 1/4” wide x 10 gauge steel.

Splice Channel (CH1-B Only)

- 1 1/4" x 2 1/2" x 8" steel channel.

Finish

- Powder-coated standard color

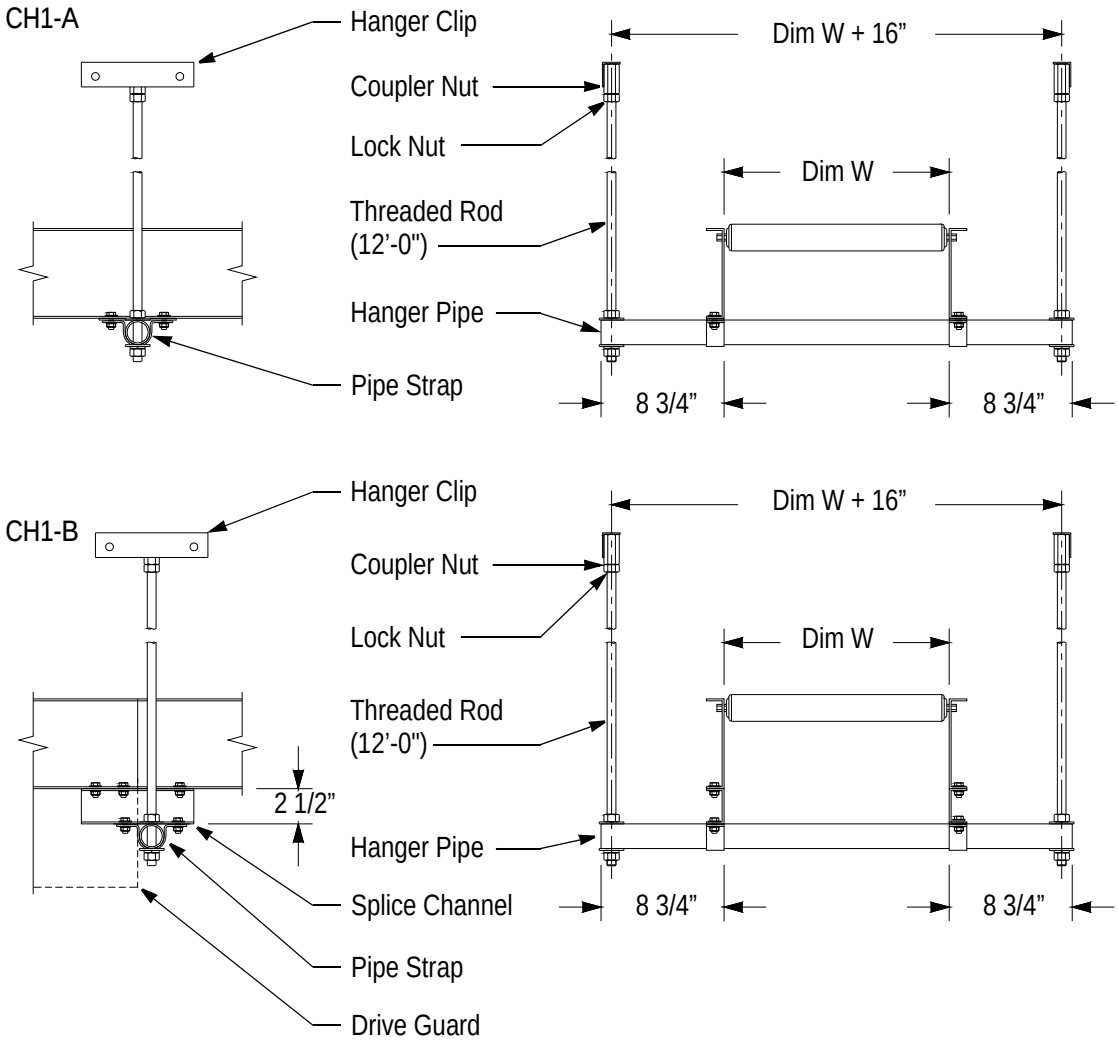


Figure C - 18 CH1-A & CH1-B Series Ceiling Hangers

Dimension W (Conveyor Width)	16"	22"	28"	34"	40"
Rod Centers (Dimension W + 16")	32"	38"	44"	50"	56"

Models CH2-A & CH2-B Ceiling Hangers

Capacity

- 1500 lbs.

Threaded Rod

- 5/8-11 x 18” steel threaded rod.

Coupler Nut

- 5/8-11 hex coupler nut.

Lock Nut

- 5/8-11 hex nut.

Hanger Pipe

- 1 1/2” Diameter x 12 gauge steel tubing.

Pipe Strap

- 1 1/4” wide x 10 gauge steel.

Splice Channel (CH2-B Only)

- 1 1/4" x 2 1/2" x 8" steel channel.

Finish

- Powder-coated standard color.

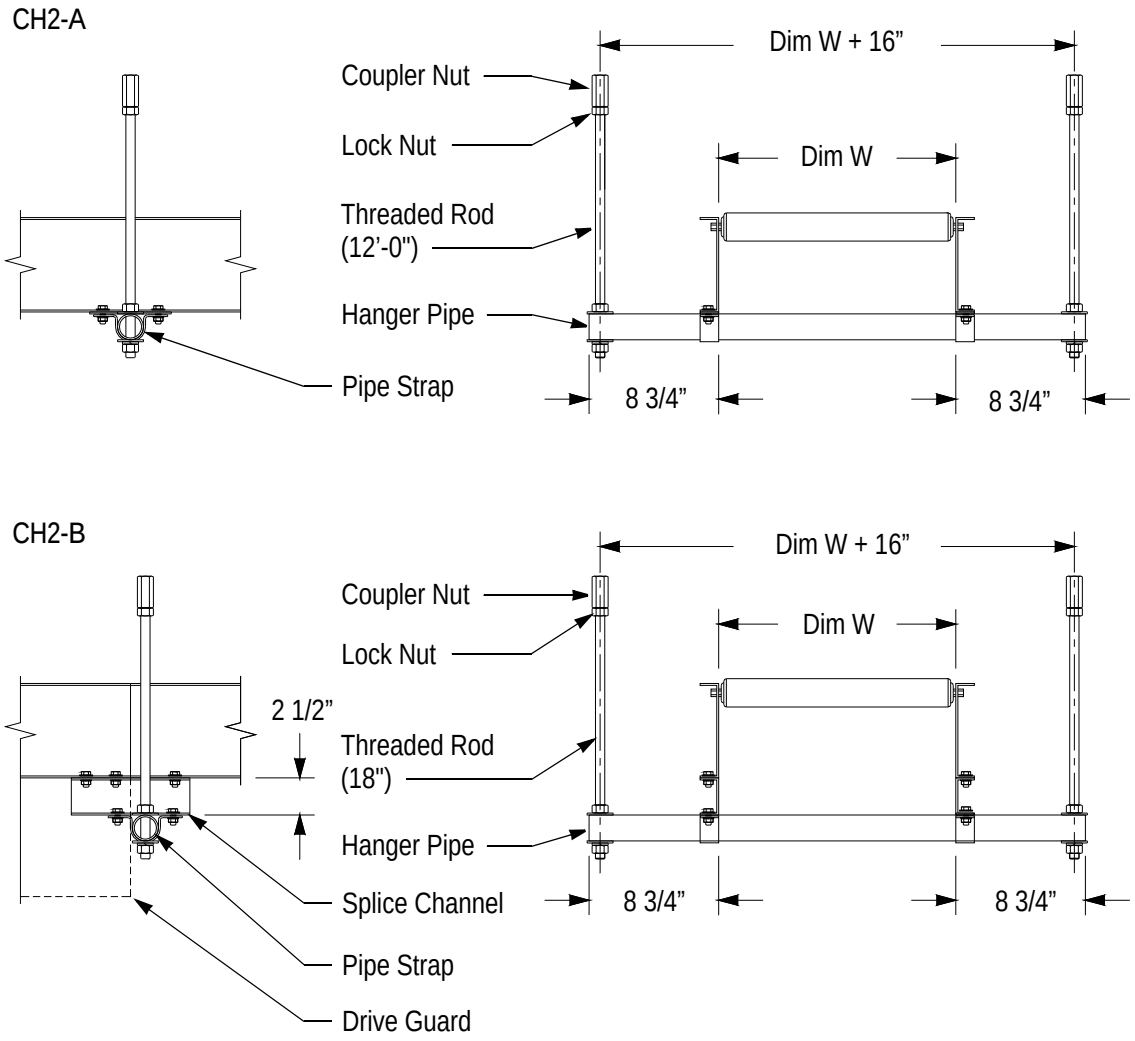


Figure C - 19 CH2-A & CH2-B Series Ceiling Hangers

Dimension W (Conveyor Width)	16”	22”	28”	34”	40”
Rod Centers (Dimension W + 16”)	32”	38”	44”	50”	56”

Models CH3-A & CH3-B Ceiling Hangers

Capacity

- 1500 lbs.

Hanger Pipe

- 1 1/2” x 12 gauge steel tubing.

Pipe Strap

- 1 1/2” x 10 gauge steel.

Splice Channel (CH3-B Only)

- 1 1/4" x 2 1/2" x 8" steel channel.

Finish

- Powder-coated standard color.

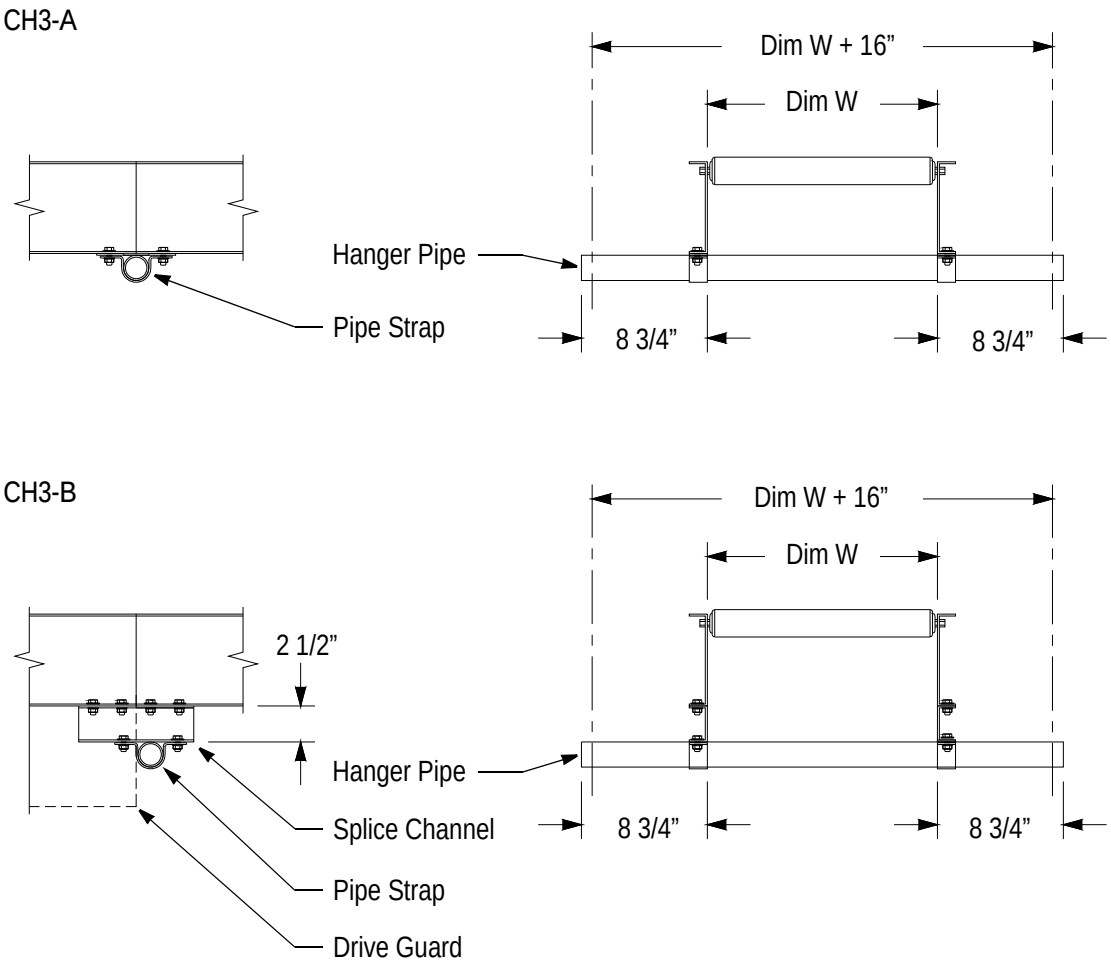


Figure C - 20 CH3-A & CH3-B Series Ceiling Hangers

Dimension W (Conveyor Width)	16”	22”	28”	34”	40”
Rod Centers (Dimension W + 16“)	32”	38”	44”	50”	56”

Models CM1-A & CM1-B Ceiling Hangers

Weight Capacity

- 1500 lbs.

Hanger Clip

- 1 3/4” x 1 1/4” x 8” long structural angle with welded 5/8-11 hex coupler nut.

Threaded Rod

- 5/8-11 x 12’-0" steel threaded rod.

Cross Channel (CM1-A Only)

- 10” x 1 1/2” x 10 gauge formed channel.

Partial Cross Pipe

- 1 1/2" O. D x 11 gauge steel pipe.

Pipe Strap

- 1 1/4” wide x 10 gauge steel.

Finish

- Powder-coated standard color.

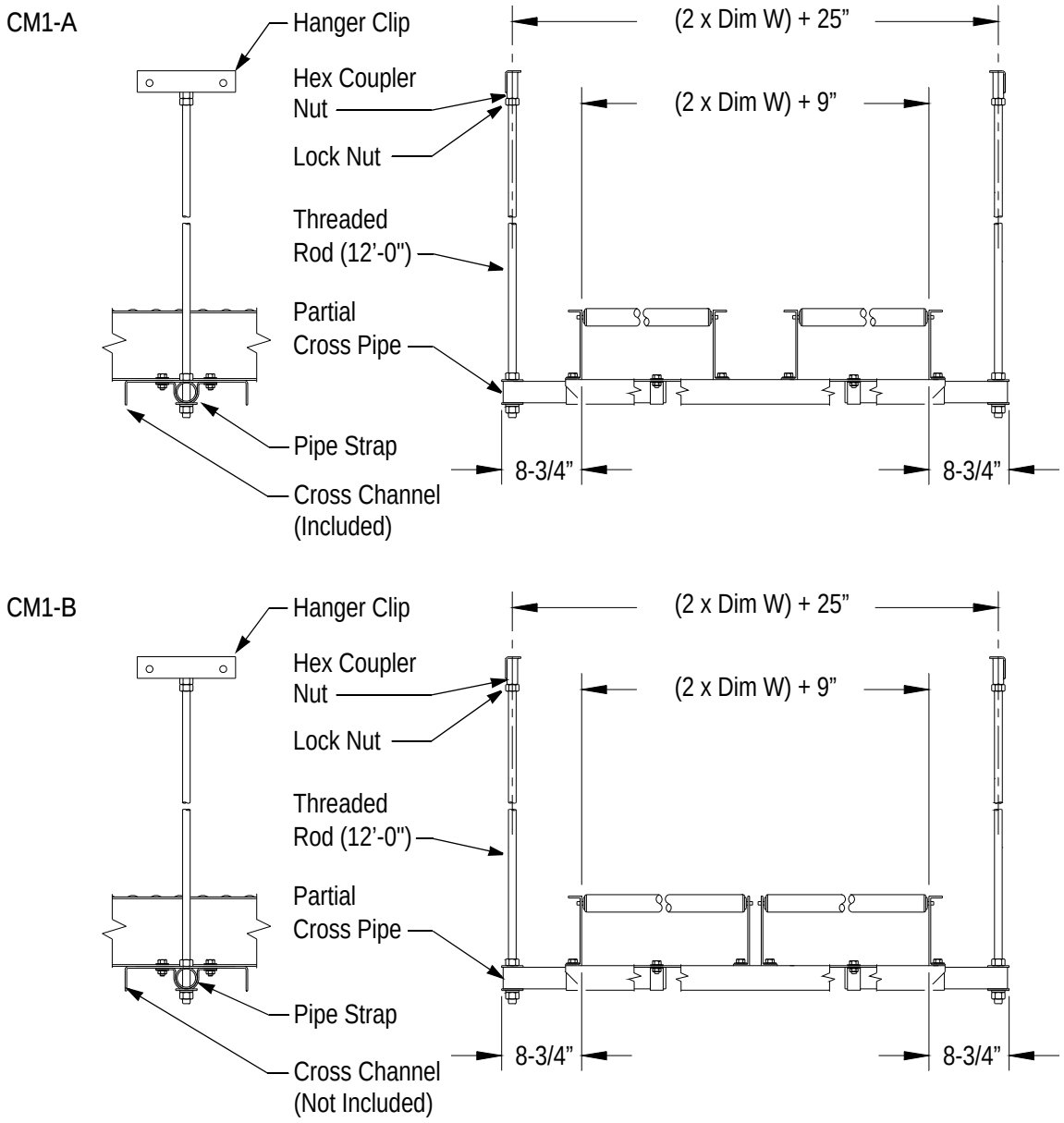


Figure C - 21 – CM1-A & CM1-B Series Ceiling Hangers

Dimension W (Conveyor Width)	16"	22"	28"	34'	40"
Dimension 2W + 9"	41"	53"	65"	77"	89"
Rod Centers (Dimension 2W + 25")	57"	69"	81"	93"	105"

Models CM2-A & CM2-B Ceiling Hangers

Weight Capacity

- 1500 lbs.

Hanger Clip

- 1 3/4” x 1 1/4” x 8” long structural angle with welded 5/8-11 hex coupler nut.

Threaded Rod

- 5/8-11 x 18" steel threaded rod.

Cross Channel (CM2-A Only)

- 10” x 1 1/2” x 10 gauge formed channel.

Partial Cross Pipe

- 1 1/2" O. D x 11 gauge steel pipe.

Pipe Strap

- 1 1/4” wide x 10 gauge steel.

Finish

- Powder-coated standard color.

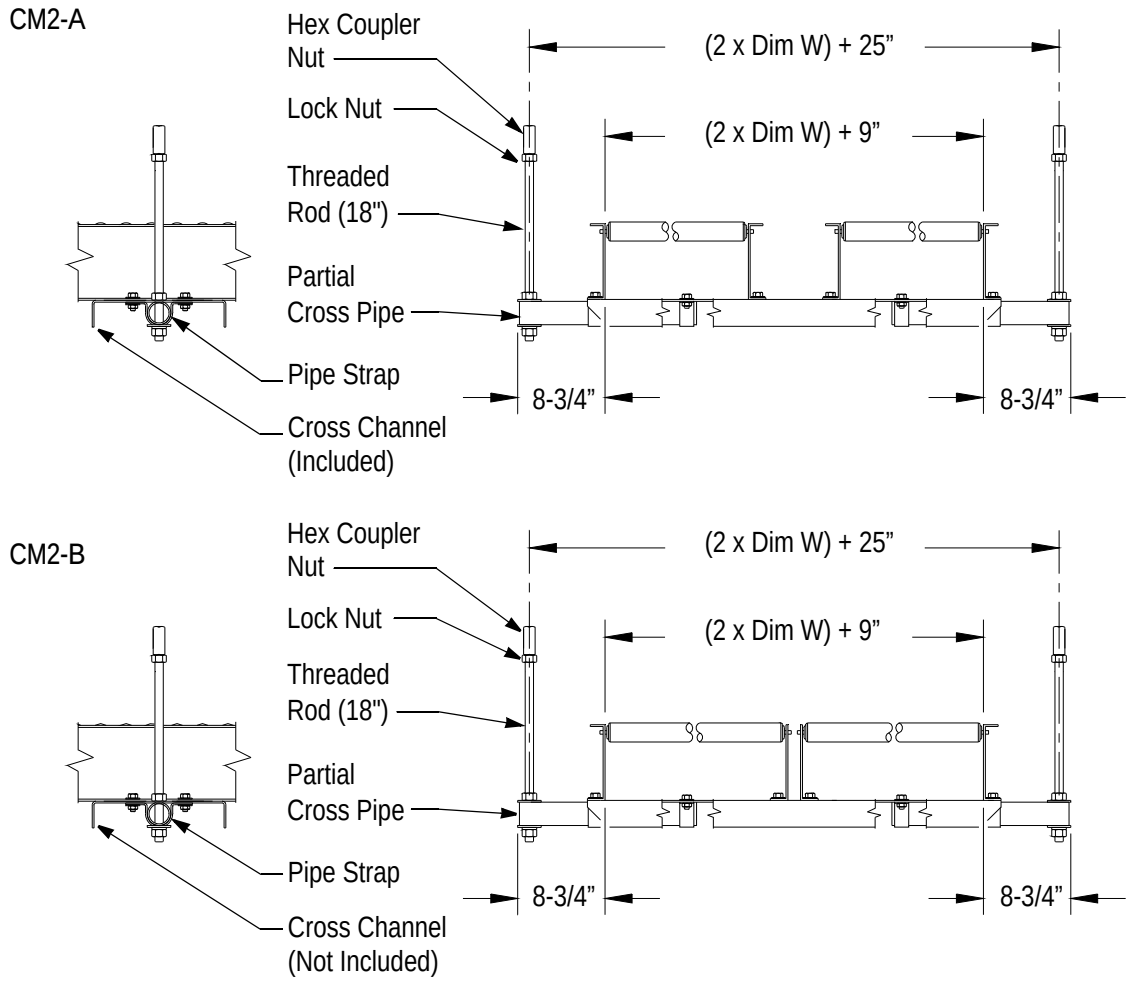


Figure C - 22 – CM2-A & CM2-B Series Ceiling Hangers

Dimension W (Conveyor Width)	16”	22”	28”	34’	40”
Dimension 2W + 9”	41”	53”	65”	77”	89”
Rod Centers (Dimension 2W + 25”)	57”	69”	81”	93”	105”

Models CM3-A & CM3-B Ceiling Hangers

Weight Capacity

- 1500 lbs.

Hanger Clip

- 1 3/4” x 1 1/4” x 8” long structural angle with welded 5/8-11 hex coupler nut.

Threaded Rod

- 10-foot long, 5/8-11 steel threaded rod.

Cross Channel (CM3-A Only)

- 10” x 1 1/2” x 10 gauge formed channel.

Partial Cross Pipe

- 1 1/2" O. D x 11 gauge steel pipe.

Pipe Strap

- 1 1/4” wide x 10 gauge pipe steel.

Finish

- Powder-coated standard color.

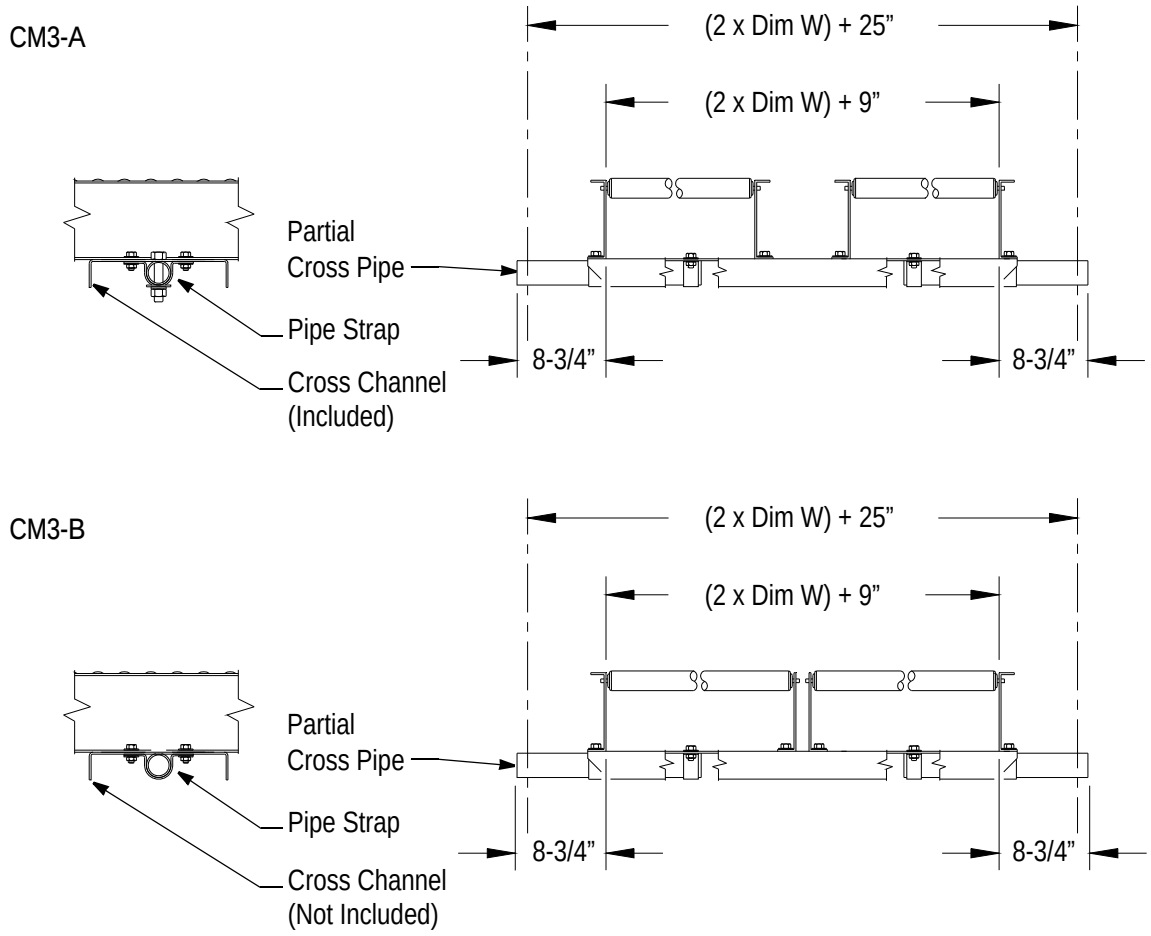


Figure C - 23 CM3-A & CM3-B Series Ceiling Hangers

Dimension W (Conveyor Width)	16”	22”	28”	34’	40”
Dimension 2W + 9”	41”	53”	65”	77”	89”
Rod Centers (Dimension 2W + 25”)	57”	69”	81”	93”	105”

Models CH1-T, CH2-T & CH3-T Ceiling Hangers

Application

- Intermediate sections of Trash Belt conveyors.

Weight Capacity

- 1500 lbs.

Hanger Clip (CH1-T Only)

- CH1-T only: 1 3/4” x 1 1/4” x 8” long structural angle with welded 5/8-11 hex coupler nut.

Threaded Rod

- CH1-T – 12-foot long, 5/8-11 steel threaded rod.
- CH2-T – 18-inch long, 5/8-11 steel threaded rod.
- CH3-T – None.

Spreader Pipes

- Four 27/32” O. D. steel pipes, with mounting hardware.

Finish

- Powder-coated standard color.

Conveyor Width (Dimension W)	15”	21”	27”	39”	45”	51”
Rod Centers (Dimension W + 8 $^{3}/_{4}$“)	23 $^{3}/_{4}$”	29 $^{3}/_{4}$”	35 $^{3}/_{4}$”	41 $^{3}/_{4}$”	53 $^{3}/_{4}$”	59$^{3}/_{4}$”

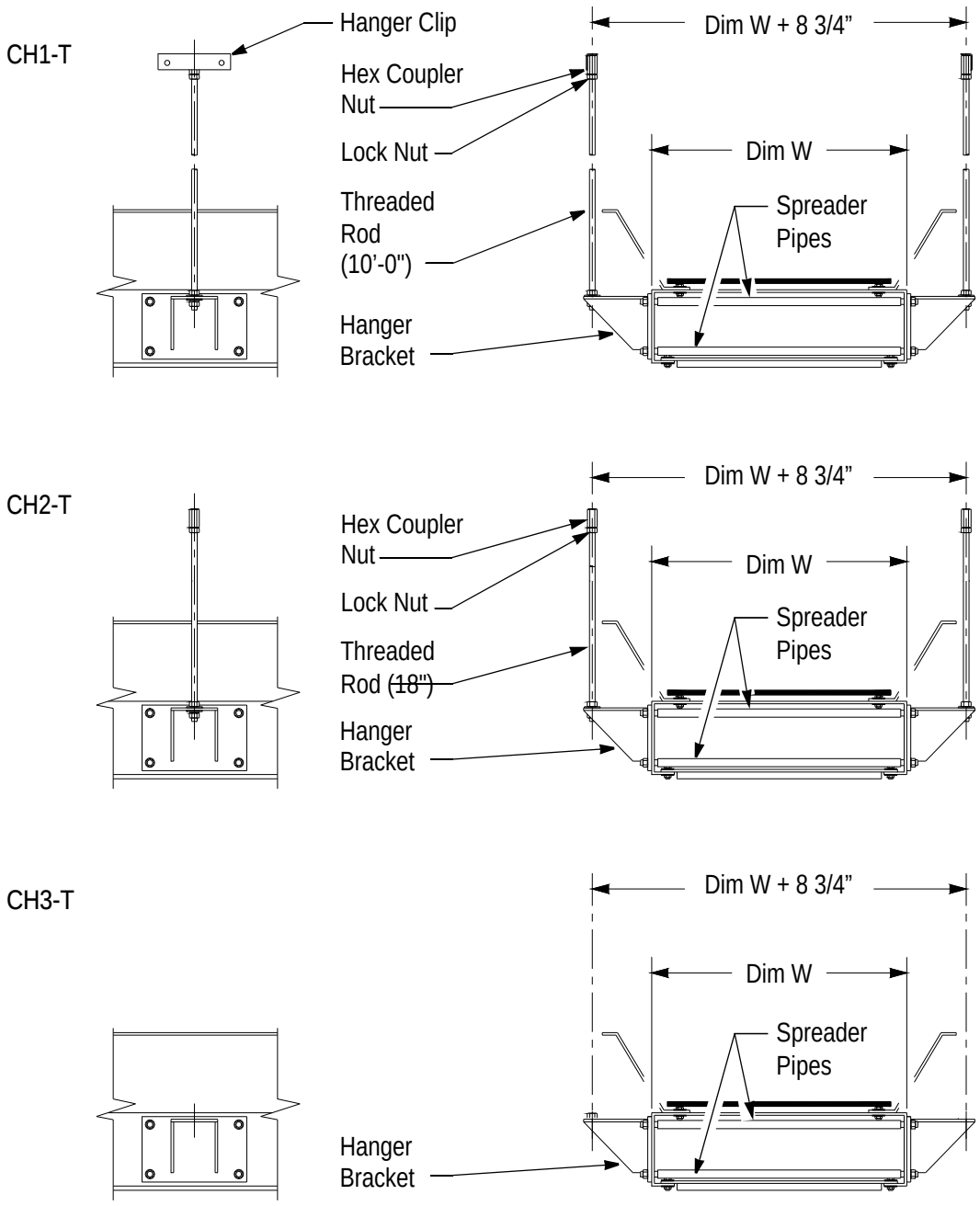


Figure C - 24 CH1-T Series Ceiling Hanger

Miscellaneous Components

Model SCC Fill Channel

Connector Channel

- Dimension C = height of fill channel x 4” L x 1 1/4 “W x 10 gauge formed steel channel

Mounting Hardware

- 3/8” x 3/4” carriage head bolt with flat washer and flange nut

Finish

- Powder-coated standard color

Table C 6: – Model SCC Fill Channel Height (Dimension C)

Dimension A	**Dimension B**			
	10”	**6 3/8”**	**3 1/2”**	**2 1/2”**
10”		3 5/8”	6 1/2”	6 1/2”
6 3/8”	3 5/8”		2 7/8”	3 7/8”
3 1/2”	6 1/2”	2 7/8”		NA
2 1/2”	7 1/2”	3 7/8”	NA	

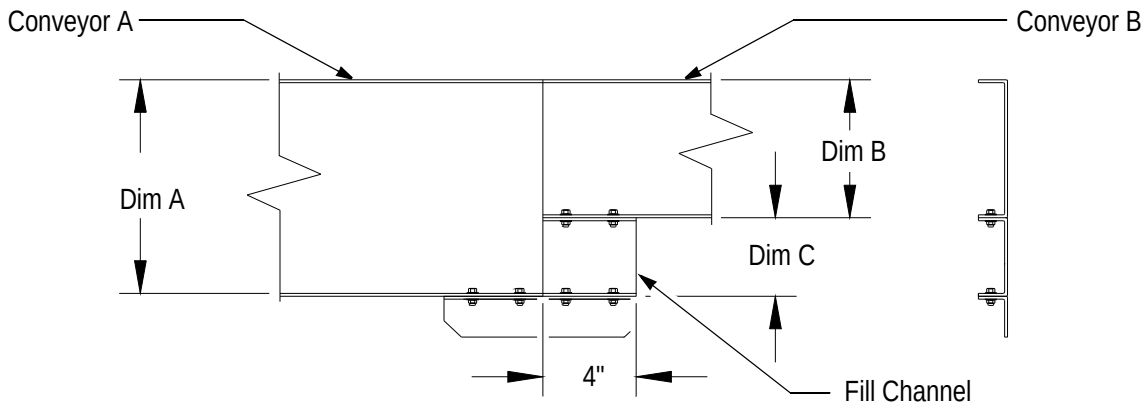


Figure C - 25 Model SCC Fill Channel

Hanger Safety End Cover

Part Number

- 210249

Material

- 60-to-70 durometer neoprene, or equal

Color

- Safety yellow

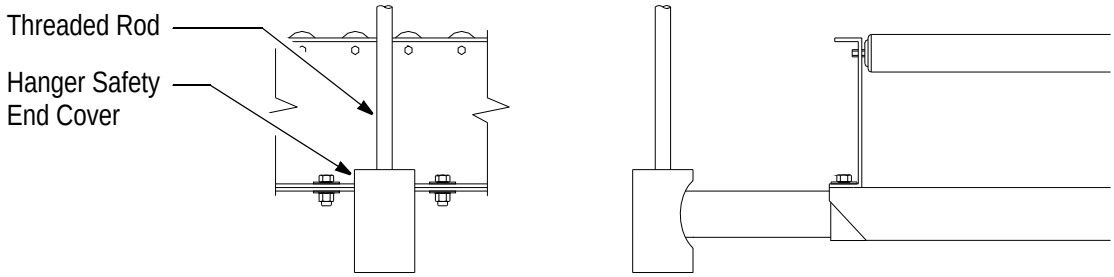


Figure C - 26 Hanger Safety End Cover

Intermediate Splice Angle

Material

- 8 1/2” long x 7 gauge formed angle

Finish

- Powder-coated standard color

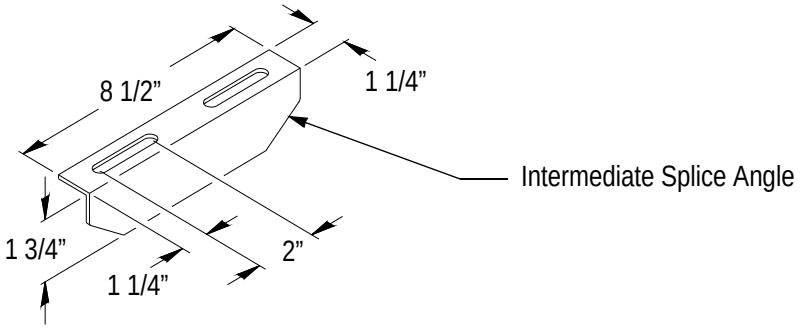


Figure C - 27 Intermediate Splice Angle

Model SCC Fill Flat

Material

- 1 1/4” x 4” x 3/16” steel

Mounting Hardware

- 3/8” x 3/4” carriage bolt with flat washer and flange nut

Finish

- Powder-coated standard color

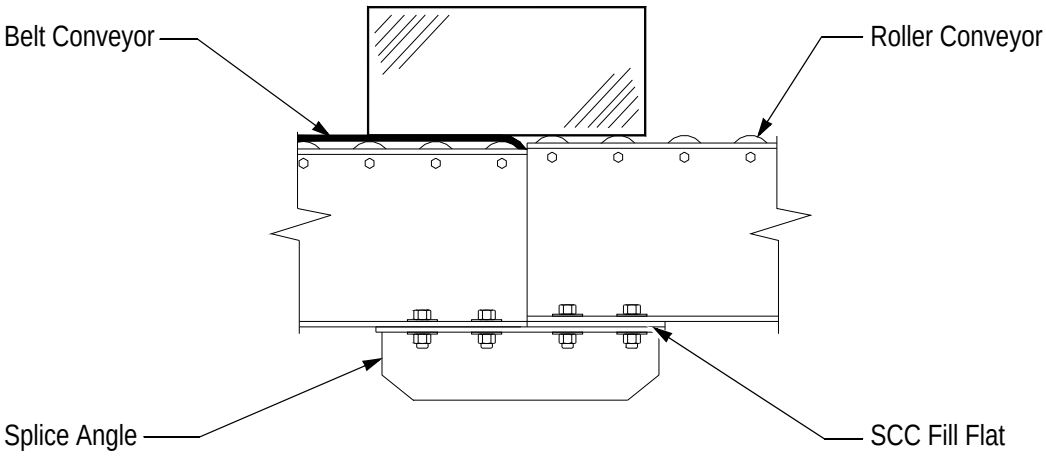


Figure C - 28 Model SCC Fill Flat

Trapezoidal Splice Plate

Material

- 1 1/4” x 10 gauge formed angle

Finish

- Powder-coated standard color

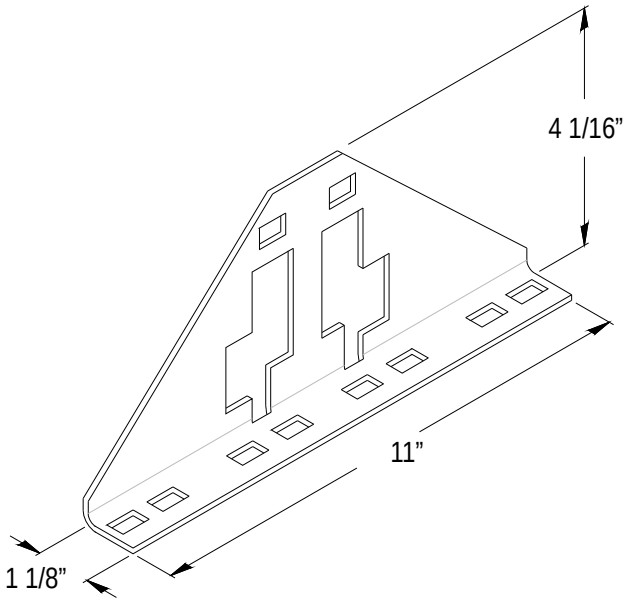


Figure C - 29 Trapezoidal Splice Plate

Boxbed-to-Boxbed Splice Plate

Material

- 1/8 inch steel

Finish

- Powder-coated standard color

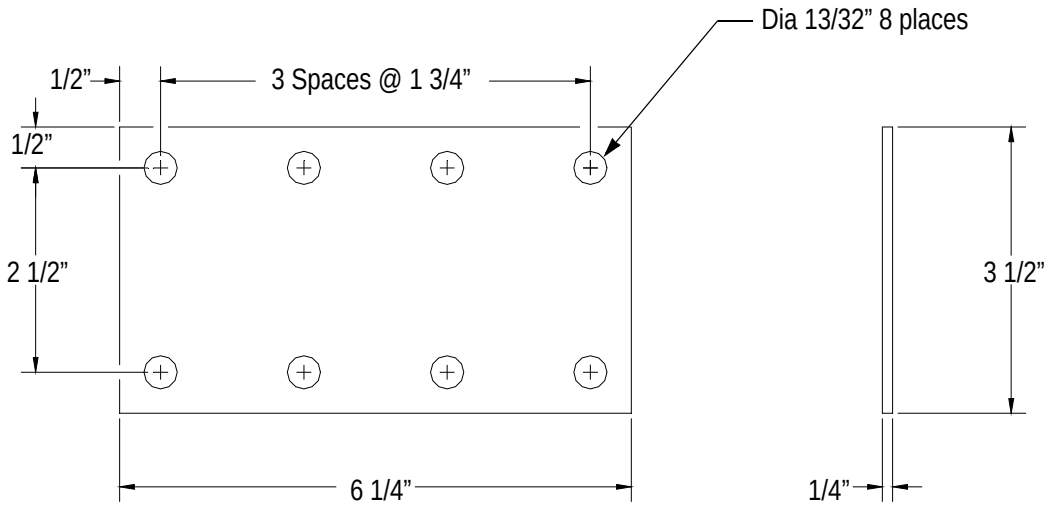


Figure C - 30 Boxbed-to-Boxbed Splice Plate

Coupling Strap

Material

- 1/8 inch steel

Finish

- Powder-coated standard color.

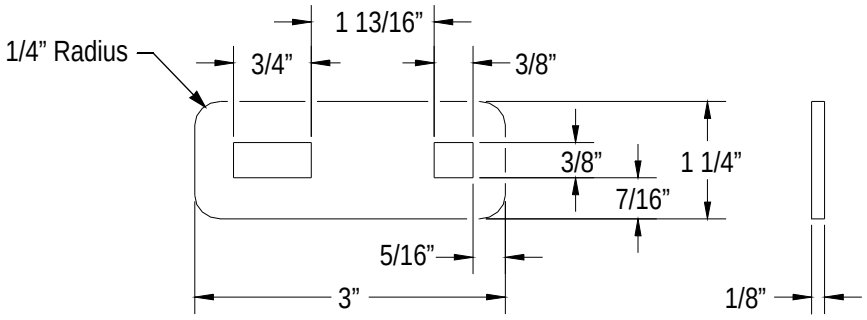


Figure C - 31 Coupling Strap

Intermediate Splice Flat

Material

- 1/8 inch steel

Finish

- Powder-coated standard color.

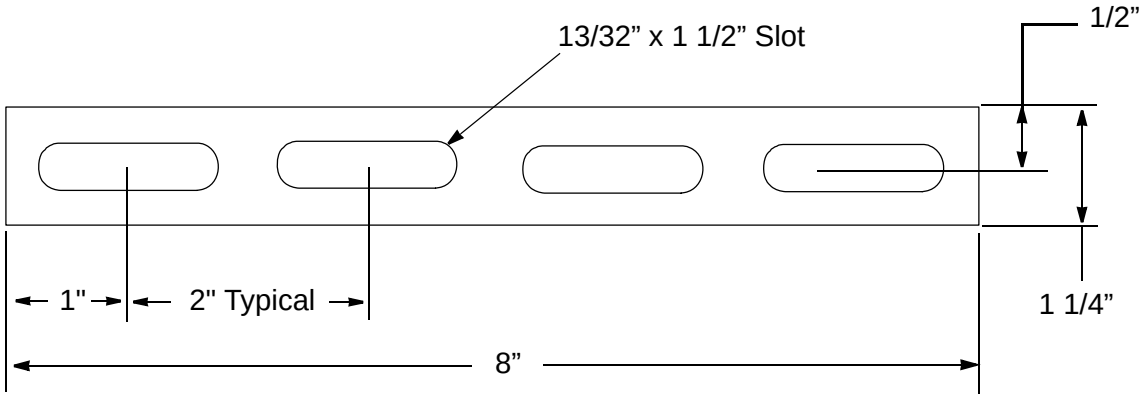


Figure C - 32 Intermediate Splice Flat

SECTION D:ENGINEERING DATA

Engineering Data

For engineering data pertaining to floor supports and ceiling hangers, refer to the *Application Guidelines* and *Engineering Data* sections of the Product Manual for the affected conveyor product line.

SECTION E: LAYOUT DIMENSIONS

Layout Dimensions

For layout dimensions, refer to Section C, *Specifications and Dimensions*.

SECTION F: ACCESSORIES

Accessories

For information on all components, including accessories, refer to Section C, *Specifications and Dimensions*.

SECTION G:INSTALLATION PROCEDURES

Codes and Standards

The conveyor equipment is designed and manufactured to comply with the American National Standard Institute's *Safety Standards For Conveyors and Related Equipment* (ANSI B20.1) and with the National Electrical Code (ANSI/NFPA70).

The Purchaser shall be familiar with, and responsible for, compliance with all codes and regulations having jurisdiction regarding the installation, use, and maintenance of this equipment. Appropriate lockout and tagout policies and procedures shall comply with the minimum safety requirements outlined in the American National Standard Institute's current publication (ANSI Z244.1).

Warning Signs

Warning signs and labels posted on or near the conveyor equipment shall not be removed, painted over, or altered at any time. All safety devices, warning lights, and alarms associated with the conveyor system should be regularly tested for proper operation and serviced as needed. If the original safety item(s) become defective or damaged, refer to the conveyor parts list(s) or bill(s)-of-materials for replacement part numbers.

Safety Features

- Do turn off conveyor power source(s) and affix appropriate lockout/tagout device(s) to operating controls before servicing the equipment. ONLY trained and qualified personnel who are aware of the safety hazards should perform equipment adjustments or required maintenance while the conveyor is in operation.
- Do observe all warning signs, lights, and alarms associated with the conveyor operation and maintenance, and be alert at all times to automatic operation(s) of adjacent equipment.
- Do use extreme caution near moving conveyor parts to avoid the hazard of hands, hair, and clothing being caught.
- Do not sit on, stand on, walk, ride, or cross (over or under) the conveyor at any time except where suitable catwalks, gates, or bridges are provided for personnel travel.
- Do not attempt to repair any equipment while the conveyor is running, replace any conveyor component without appropriate replacement parts, or modify the conveyor system without prior approval by the manufacturer.
- Do not operate the conveyor until all safety guards are securely in place, all tools and non-product materials are removed from or near the conveying surfaces, and all personnel are in safe positions.
- Do not remove or modify any safety devices provided on or with the conveyor.
- Do not clear jams or reach into any unit before first turning off the equipment power source(s) and affixing appropriate lockout/tagout device(s).

Parts Replacement

To minimize production downtime, selected conveyor spare parts should be stocked for replacement of defective components when required. Refer to the equipment bill(s)-of-materials where quantity requirements or code numbers are not indicated on the conveyor parts list. For added convenience, a list of selected spare parts for standard products is included in this manual (see Section I).

Factory Assistance

Contact Field Service for installation, operation, or maintenance assistance, or Customer One Protection (COP) for replacement parts.

Installing a Conveyor With Floor Supports

Note	The following instructions are provided as a guide to procedure and apply to a typical installation. Instructions indicated on project layout drawings and in project specifications always take precedence over the instructions presented herein.

While the following instructions apply specifically to the installation of single-level floor supports, they also apply in general to the multiple-level floor supports. For application-specific information, refer to the installation section of the corresponding product manual.

Preparation

To locate base lines, and for any other project-specific information, refer to the project layout drawings and specifications. Measure from the base lines to the centerline and location of each conveyor. Snap a chalk line on the floor to establish the centerline for each conveyor. To protect the chalk lines throughout the installation process, spray over them with a clear shellac.

Note that each section of conveyor has a label showing the conveyor number. The location for each conveyor number is shown in the project layout drawings. Arrange the conveyor sections and the corresponding floor supports alongside the chalk line near their respective installation locations according to the project layout drawings. Check that all components are complete and ready for installation.

Mount the Floor Supports

Make sure that each conveyor section is squared up by measuring diagonally from corner to corner across the conveyor in both directions. Both measurements should be equal.

Mount the floor supports to the underside of the conveyor sections and adjust the floor supports to their approximate correct heights. Mount any floor support that must straddle two adjoining sections to whichever section of the two will be installed first.

Check whether Unisorb pads are specified for the installation. Note that Unisorb pads are always required with Unisort V and Unisort X conveyors. If Unisorb pads are specified, be certain to insert a Unisorb pad between each support and the bottom flange of the conveyor side rail.

To attach a floor support to a conveyor, use two fastener sets per floor support (see Figure G - 1). Insert a 3/8-16 x 1" hex head bolt with a flat washer through the bottom flange of the conveyor side rail and through the flange of the support top. From the underside of the support-top flange, fasten a 3/8-16 flanged hex nut to the bolt. Do not use a washer between the flange of the support top and the flanged hex nut. Tighten the fasteners.

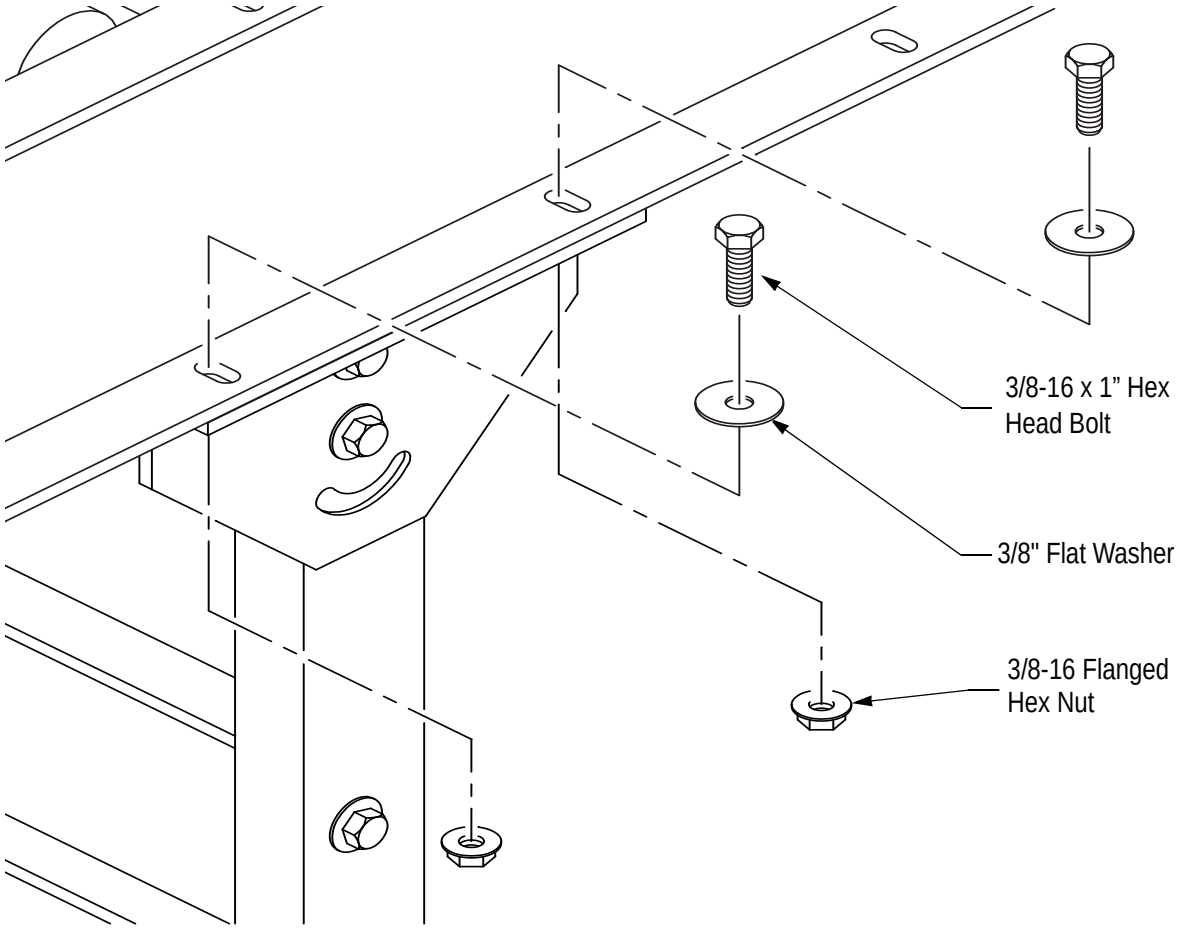


Figure G - 1 Mounting a Floor Support (FSL, FSM)

Position the Conveyor

Position the first section of conveyor in its proper location according to the project layout drawings. Make certain that the direction of product flow is oriented correctly.

- To install sorters, begin at the infeed end.
- To install presort conveyors, begin at the discharge end, where the conveyor abuts the sorter.
- To install after-sort conveyors, begin at the infeed end, where the conveyor abuts the sorter.

To center a section of conveyor, find the center point at each end by measuring between the side rails. From each center point, suspend a plumb bob down to the chalk centerline on the floor. Adjust the position of the conveyor section as necessary until the plumb bob is directly above the chalk centerline. Anchor the floor-support feet to the floor (see Figure G - 2).

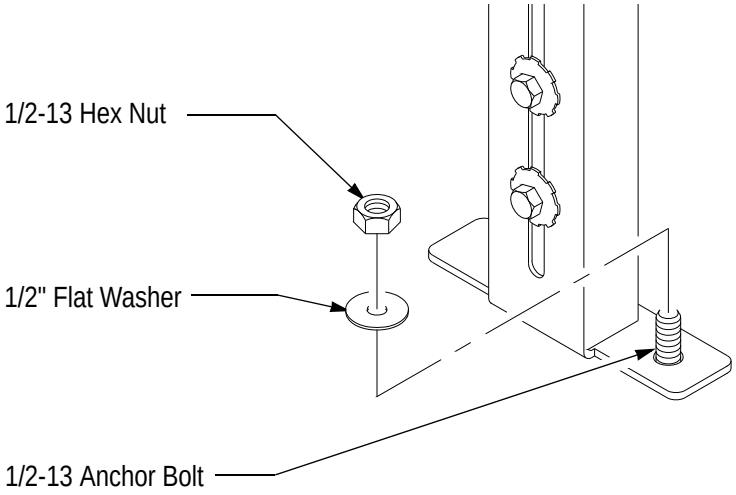


Figure G - 2 Anchoring Floor Supports

Connect Conveyor Sections Together

Position the sections of the conveyor sequentially. Make certain that the direction of product flow is oriented correctly. Center each section on the centerline, making certain that side rails of adjoining sections align properly. Anchor the floor-support feet to the floor.

When connecting adjoining conveyor sections, observe the following guidelines (see Figure G - 3 through Figure G - 5):

- If a section of roller conveyor adjoins a downstream section of belt conveyor, insert a fill flat between the bottom flange of the roller conveyor and the support top.
- If a section of conveyor has shallower side rails than the adjoining conveyor section, insert a fill channel between the shallow side rails and the support top.
- If a section of roller conveyor adjoins a downstream section of belt conveyor and one of the conveyors has shallower side rails, use both fill flats and fill channels as required.
- At adjoining sections of T/C chain-powered conveyor, mount a splice flat to the underside of the top flange of the side rails, straddling the section joint.
- Connect adjoining sections of Trash Belt conveyor using a boxbed-to-boxbed splice plate inside the boxbed frame.
- At adjoining sections of Powered Belt conveyor and at adjoining sections of E-Z Set conveyor, mount a coupling strap to the web of the side rails, straddling the section joint.
- If a section joint cannot be located directly over a support, mount a splice angle or trapezoidal coupling straddling the section joint.

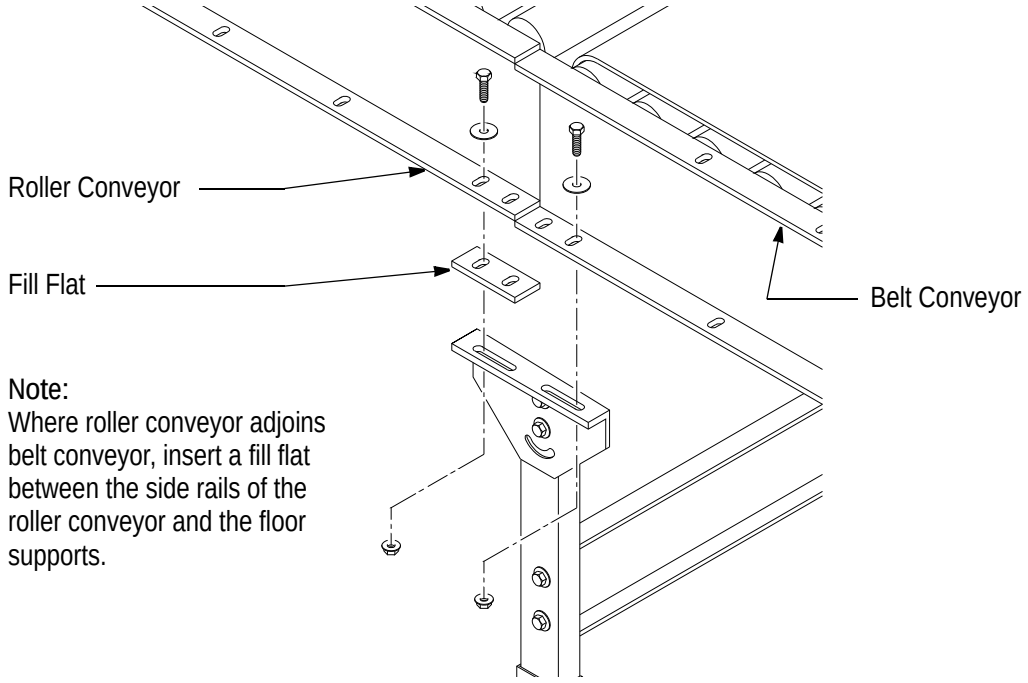


Figure G - 3 Roller-to-Belt Junctions

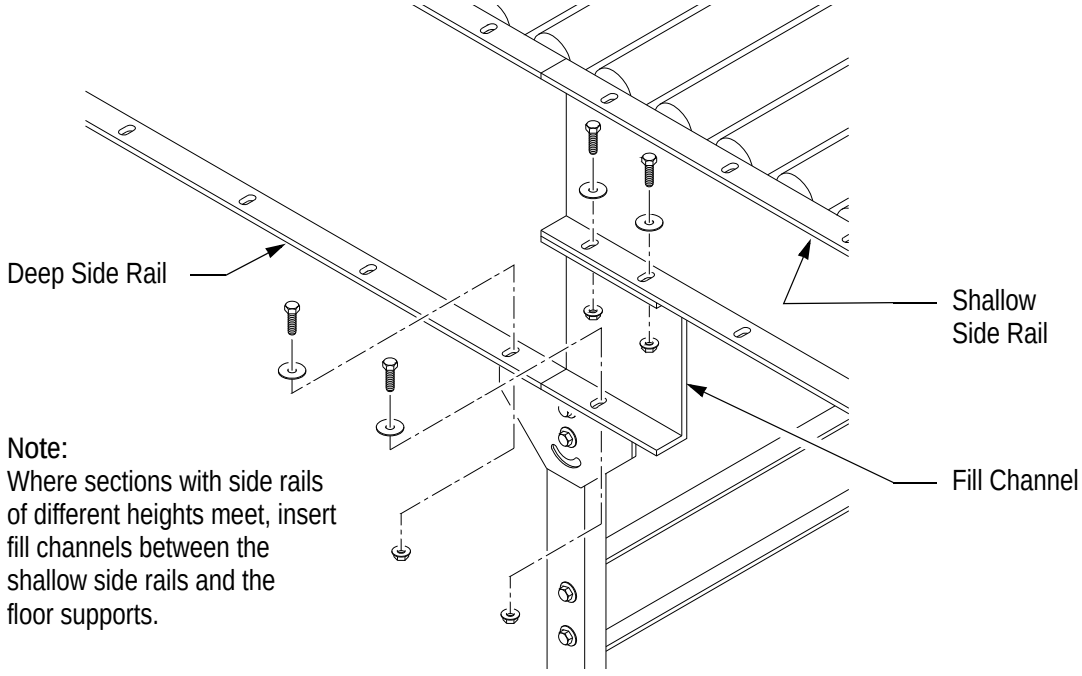


Figure G - 4 Adjoining Conveyors With Different Side Rail Heights

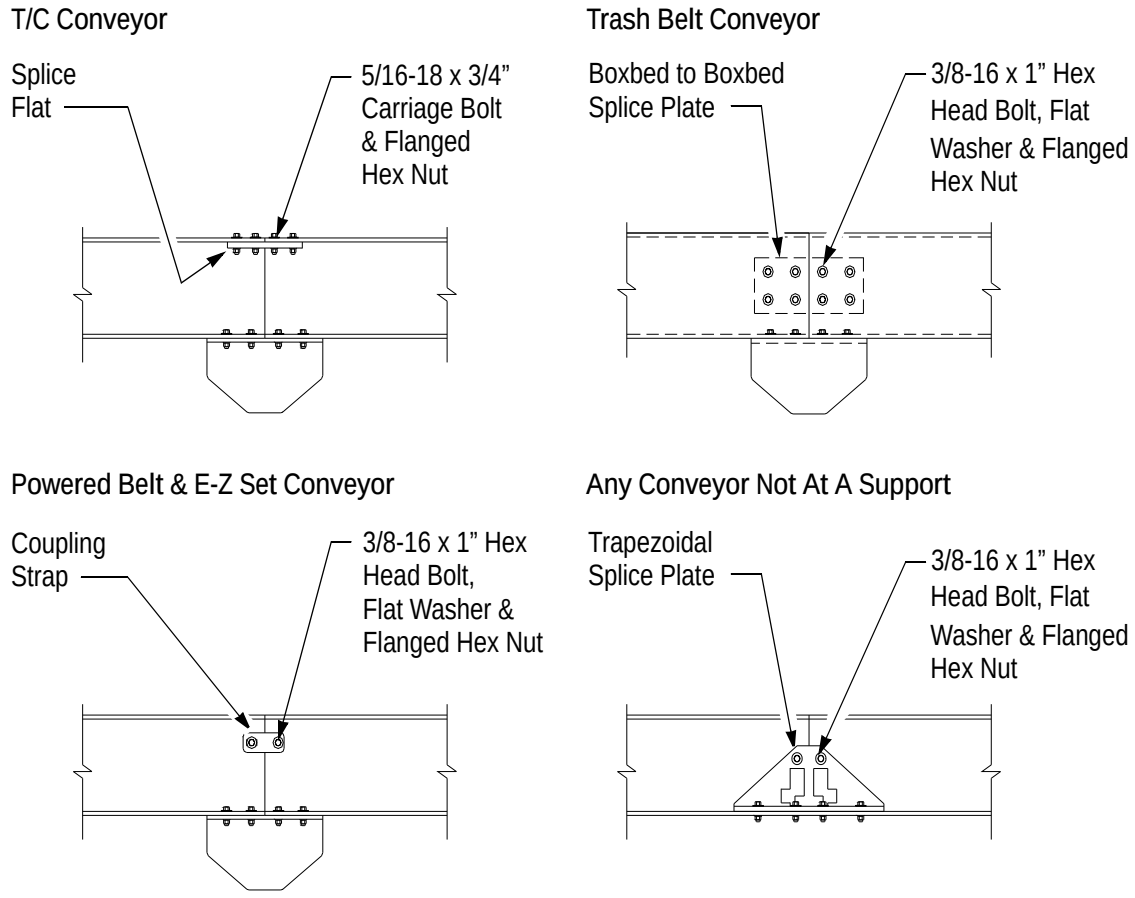


Figure G - 5 Intermediate Section Splice Connections

Merge, Diverge & Crossover Conveyors

Support a double-wide merge, diverge or crossover conveyor at the infeed and discharge ends and at each section joint (see Figure G - 6).

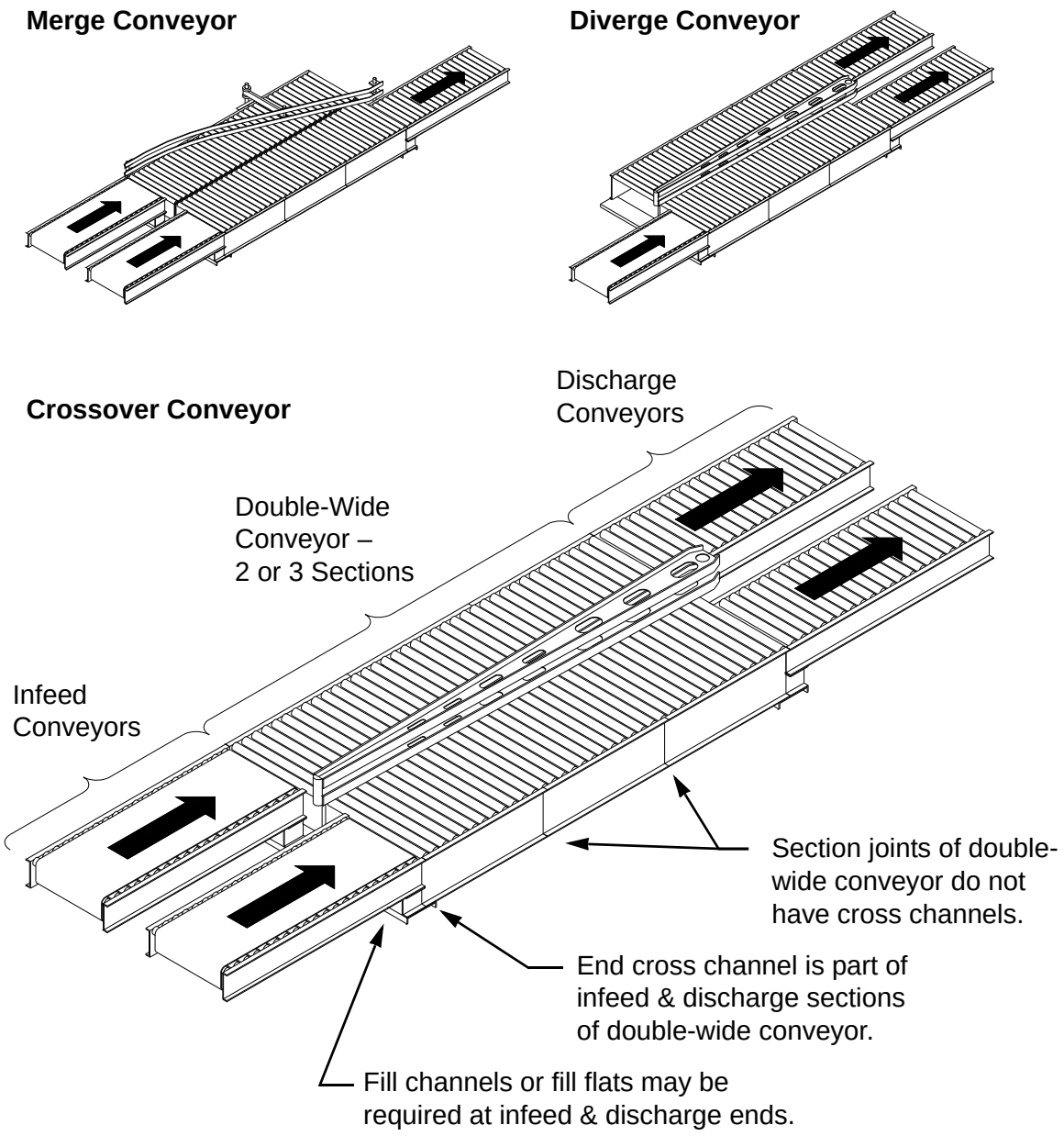


Figure G - 6 Merge, Diverge & Crossover Conveyors

Note that the double-wide conveyor is furnished with a cross channel at the infeed and discharge ends. If the infeed or discharge conveyors have shallower side rails than the double-wide conveyor, then fill channels are required.

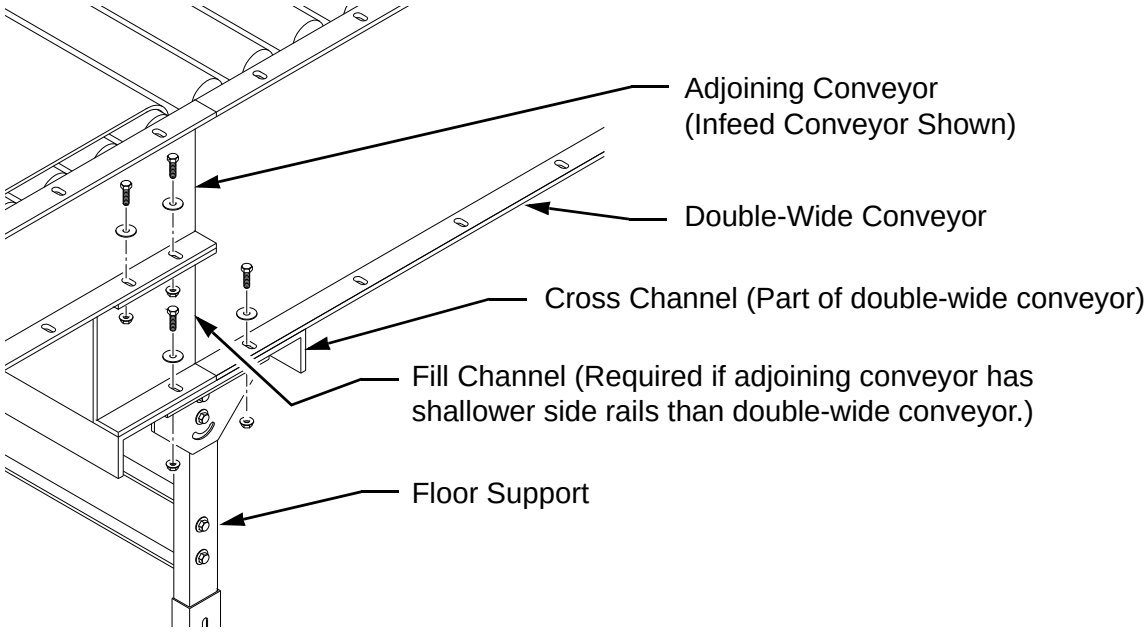


Figure G - 7 Merge, Diverge & Crossover Conveyors – Infeed & Discharge Ends

At section joints of the double-wide conveyor, install an assembly consisting of a support top, a support leg, and a foot to the bottom flange of each of the outside side rails. It is not necessary to use a cross tie between support legs under the double-wide conveyor.

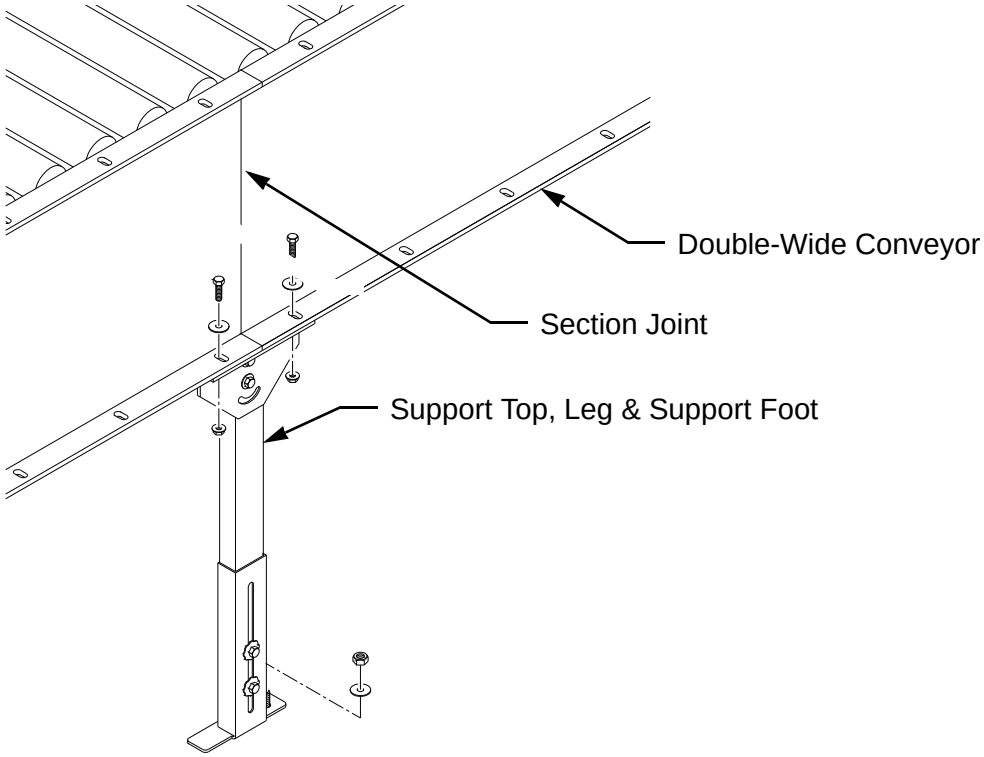


Figure G - 8 Section Joint of Double-Wide Conveyor

Knee Braces

Install a pair of knee braces between the conveyor side rail and the floor support as follows (see Figure G - 9):

- On long, straight runs, about every 50 feet.
- At the ends of straight runs.
- Before case stops.
- At each end of a gate section.
- Near drive units.

Locate knee braces as necessary to put them in tension, normally on the downstream side of a support. For best results, the support-leg-to-brace angle should be not less than 30° and not greater than 45°. On short supports requiring an angle less than 30°, knee braces may be shortened.

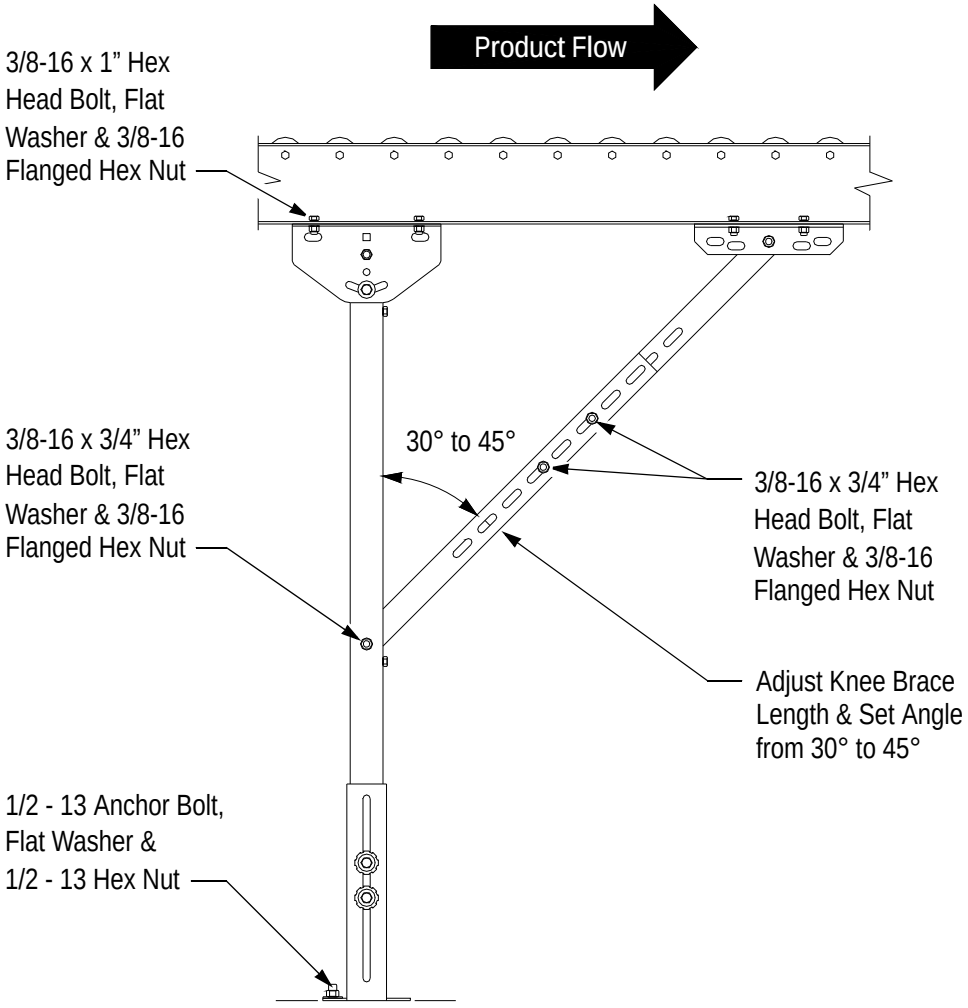


Figure G - 9 Installing a Knee Brace

Level the Conveyor

After the sections of conveyor are anchored in their correct locations, adjust the levelness of the conveyor. A laser-leveling method is recommended.

Determine the starting point for leveling the conveyor. Select one side rail as a starting point according to the following guidelines:

- For a sorter, the starting point is normally at the infeed end.
- For presort conveyors, the starting point is at the junction at the sorter. The conveying surface of the presort conveyor should be 1/16” above the conveying surface of the sorter.
- For after-sort conveyors, the starting point is at the junction at the sorter. If the after-sort conveyor is gravity-operated, the conveying surface should be 1/4” below the conveying surface of the sorter. If the after-sort conveyor is powered, the conveying surface should be 1/16” below the conveying surface of the sorter.

Mount the laser leveler to a column using a column clamp (or use a tripod if applicable). Turn the laser level “On,” and level the unit as described in the manufacturer’s documentation.

While the project layout drawings specify the elevation of the conveying surface, as a matter of practicality, conveyor height should be adjusted by measuring the height of the top flange of the side rails. Determine the correct height of the side rails as follows:

- For standard roller conveyor, subtract 5/16 inch from the specified elevation of the conveying surface.
- For standard belt conveyor, subtract the sum of 5/16 inch plus the thickness of the belt from the specified elevation of the conveying surface.
- If the rollers are set in the side rails lower than the standard depth, make the corresponding adjustment to determine the adjusted side-rail height.

At the starting point for leveling the conveyor, use a tape measure to set the height of one of the side rails. Adjust the side-rail height as follows:

- Place a jack under the bottom flange of the side rail adjacent to the floor support to be adjusted. Use a filler block between the jack and the side rail if necessary. Adjust the jack height until it touches the bottom flange of the side rail.
- Loosen the fasteners connecting the leg to the support foot, but do not remove them.
- Use the jack to raise or lower the side rail as necessary, and measure the height of the top flange of the side rail.
- When the correct height is set, tighten the fasteners connecting the leg to the support foot.
- Remove the jack.

Place the laser receiver on the top flange of the side rail at the point where the height was set. Adjust the height of the laser leveler until the laser beam strikes the receiver at the center photocell, and tighten the height-adjustment mechanism at the adjusted level. The adjusted laser height will be used for leveling the rest of the conveyor.

Place the laser receiver on the top flange of the side rail across from the starting point, on the opposite side rail. Place the jack under the bottom flange of the opposite side rail. Adjust the height of the side rail until the laser beam strikes the receiver at the center photocell.

- If the laser beam strikes the receiver above the center photocell, raise the side rail.
- If the laser beam strikes the receiver below the center photocell, lower the side rail.

Adjust each of the floor supports successively from the starting point to the opposite end until the height of all of the side rails is properly adjusted.

After the conveyor has been leveled, make certain that all support fasteners are tight.

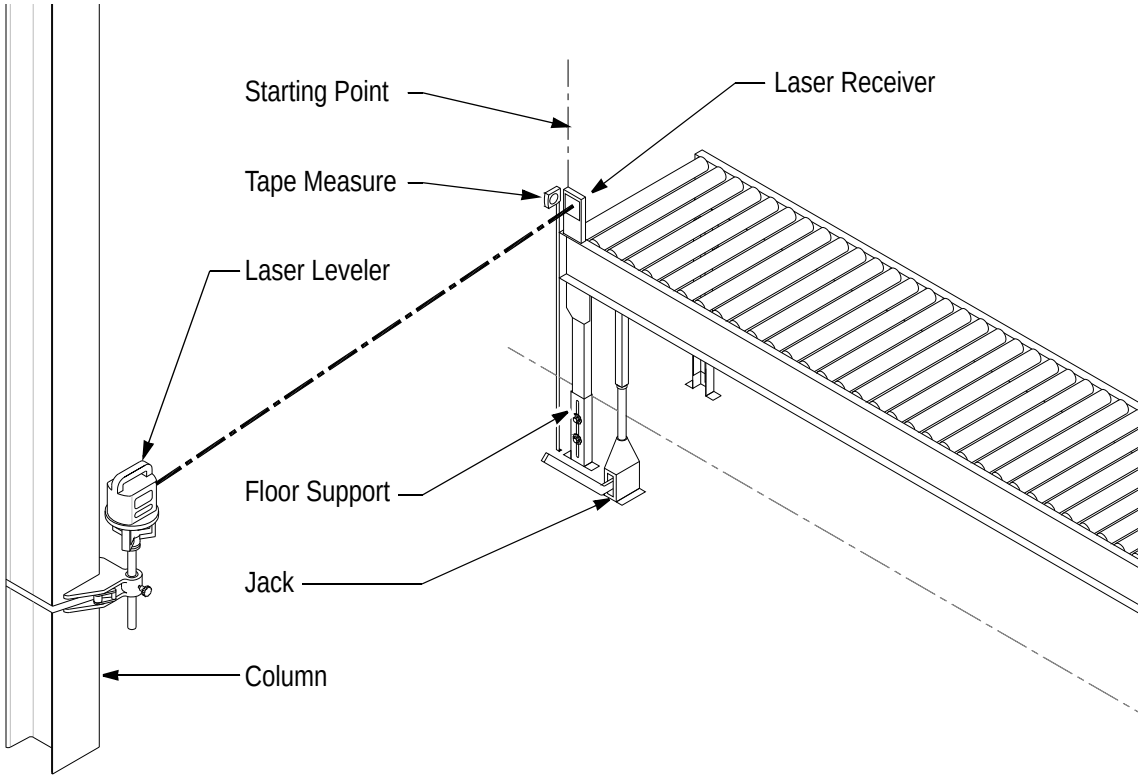


Figure G - 10 Laser Leveling

Installing Mobile Floor Supports

Portable conveyor sections may be straight or curved. Mount mobile floor supports to the portable conveyor section as follows:

- Mount an MSS series floor support to the bottom flanges of both side rails at each end of the conveyor (see Figure G - 11). Attach the knee-brace bracket to the bottom flange of the side rail of the conveyor. Adjust the length of the knee brace as necessary, and set the knee-brace angle at 45°. Tighten all fasteners.
- Mount an MSC series floor support to the bottom flange of the outside side rail of a curved conveyor section at the center of the curve (see Figure G - 12). Attach the knee-brace bracket to the bottom flange of the opposite side rail of the conveyor. Adjust the length of the knee brace as necessary. Tighten all fasteners.

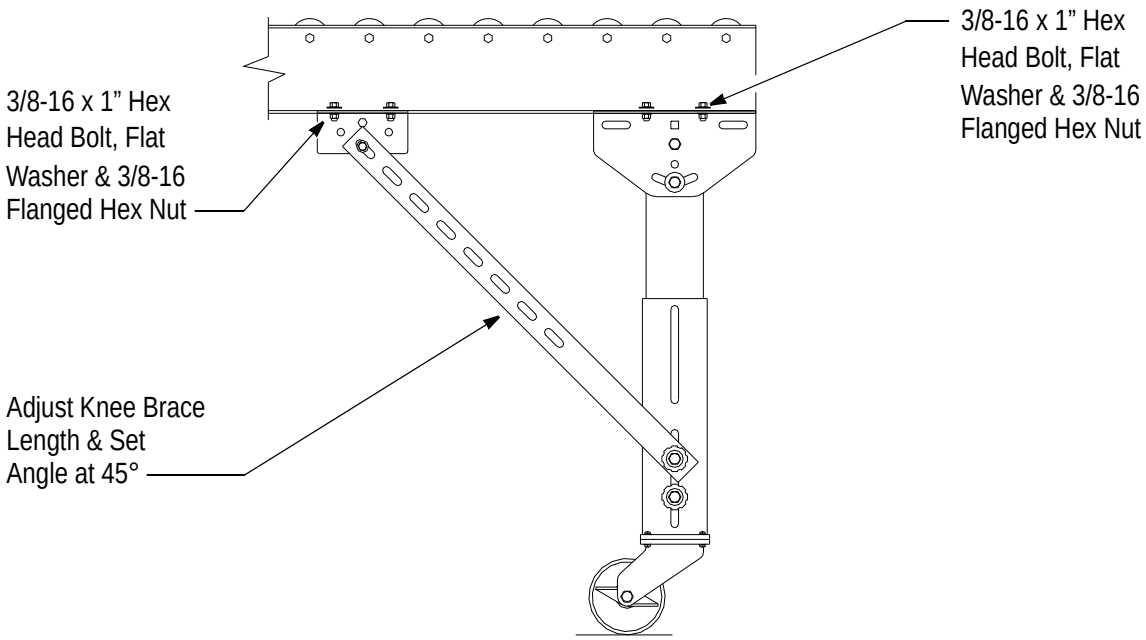


Figure G - 11 MSS Series Mobile Floor Supports

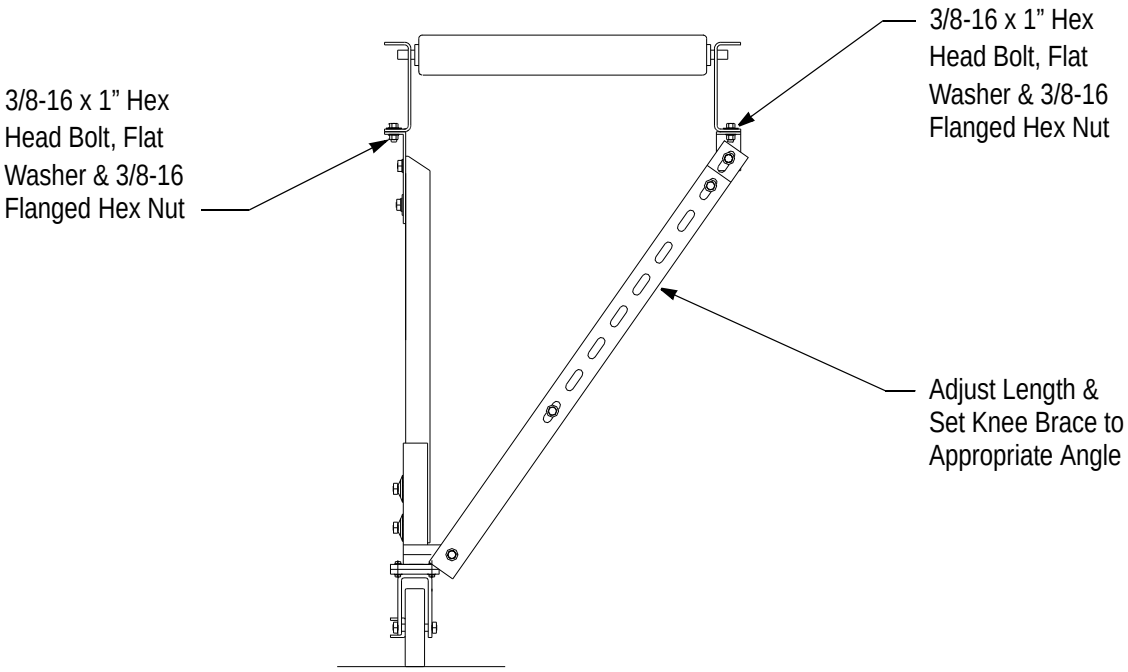


Figure G - 12 Model MSS Mobile Floor Supports

Installing a Conveyor with Ceiling Hangers

Note	The following instructions are provided as a guide to procedure and apply to a typical installation. Instructions indicated on project layout drawings and in project specifications always take precedence over the instructions presented herein.

Ceiling hangers must be attached to the existing building structure (see Figure G - 13). Structural features vary from site to site, and method of installation varies accordingly. The instructions provided therefore apply to the installation of conveyors with ceiling hangers generally. For application-specific information, refer to the "Installation Procedures" section for the model of conveyor to be installed.

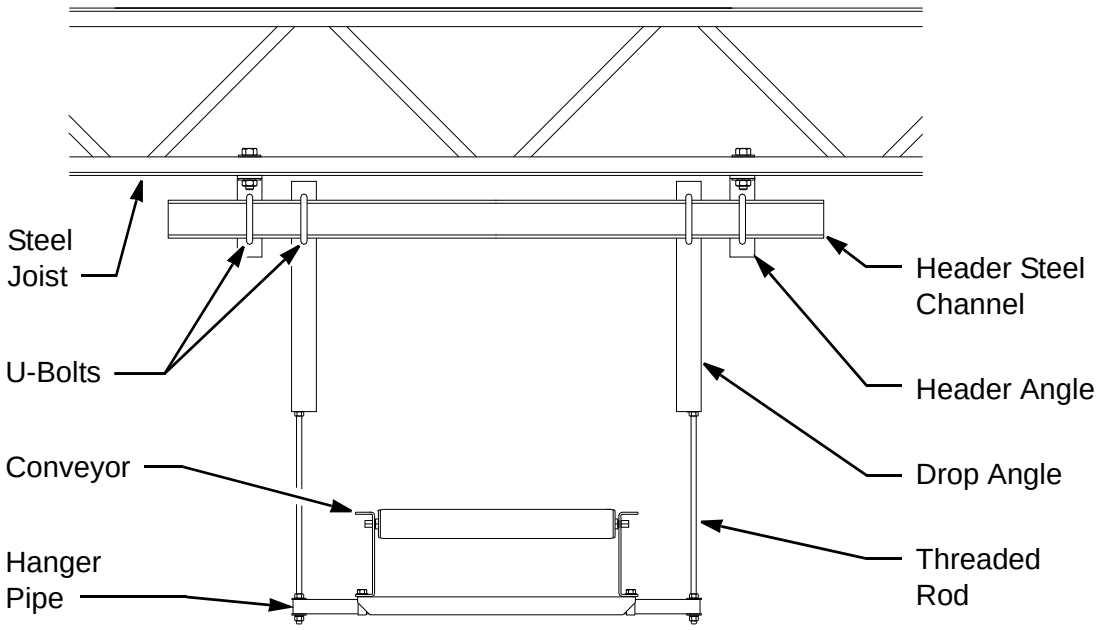


Figure G - 13 Typical Ceiling Hanger Installation (CH2-A Series Shown)

Preparation

To locate base lines, and for any other project-specific information, refer to the project layout drawings and specifications. Measure from the base lines to the centerline and location of each conveyor. Snap a chalk line on the floor to establish the centerline for each conveyor. To protect the chalk lines throughout the installation process, spray over them with a clear shellac.

Note that each section of conveyor has a label showing the conveyor number. The location for each conveyor number is shown in the project layout drawings. Arrange the conveyor sections and the corresponding ceiling hangers alongside the chalk line near their respective installation locations according to the project layout drawings. Check that all components are complete and ready for installation.

Install Ceiling Hangers

Attach the ceiling hangers to the steel joists or other structural features using header steel channels and header angles or other mounting devices, according to the specifications shown in the project layout drawings. Adjust the hanger-pipes to the approximate height required. Make certain that the ceiling hangers are attached to the building structure securely.

Position the Conveyor

Determine the most appropriate location to begin installation. Installing ceiling-hung conveyor from an upper level to a lower level is recommended. For example, if inclined ceiling-hung conveyor is to extend from a sorter located on a mezzanine to floor-supported conveyor at a shipping dock on the lower level, beginning with the divert junctions at the sorter would be appropriate.

Hoist the first section of conveyor, and gently guide it onto the hanger pipes of the corresponding ceiling hangers. Lower the conveyor section until the bottom flanges of the side rails rest on the hanger pipe.

Check whether Unisorb pads are specified for the installation. Note that Unisorb pads are always required with Unisort V and Unisort X conveyors. If Unisorb pads are specified, be certain to insert a Unisorb pad between each ceiling hanger and the bottom flange of the conveyor side rail.

Attach the conveyor side rails to the hanger pipes by installing pipe straps from under the hanger pipes. Use two fastener sets per pipe strap (see Figure G - 1). Insert a 3/8-16 x 1" hex head bolt with a flat washer through the bottom flange of the conveyor side rail and through each tab of the pipe strap.

- If the ceiling hanger is to be centered on a section joint, insert a splice flat between the cross pipe and the bottom flanges of the adjoining side rails (see Figure G - 14).
- If the ceiling hanger is to be offset from a section joint (to accommodate the guard for an underhung end drive), insert a splice channel between the cross pipe and the bottom flanges of the adjoining side rails (see Figure G - 15).
- If a section of conveyor has shallower side rails than the adjoining conveyor section, insert a fill channel between the shallow side rails and the splice flat or splice channel (see Figure G - 16).
- If a section of roller conveyor adjoins a downstream section of belt conveyor, insert a fill flat between the bottom flange of the roller conveyor and the splice flat or splice channel.
- If a section of roller conveyor adjoins a downstream section of belt conveyor and one of the conveyors has shallower side rails, use both fill flats and fill channels as required.

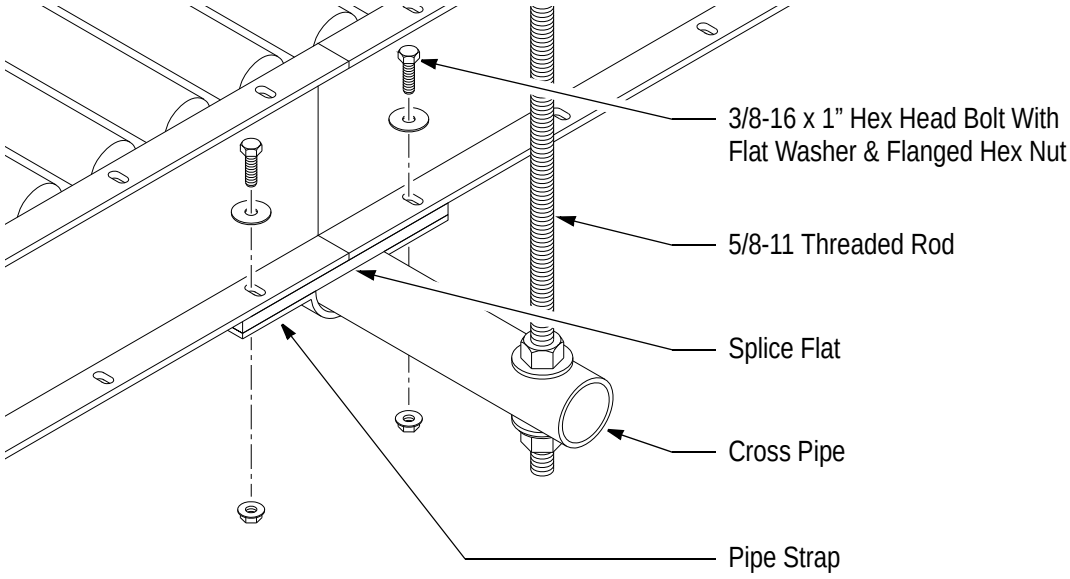


Figure G - 14 Installing a Ceiling Hanger Centered on a Section Joint

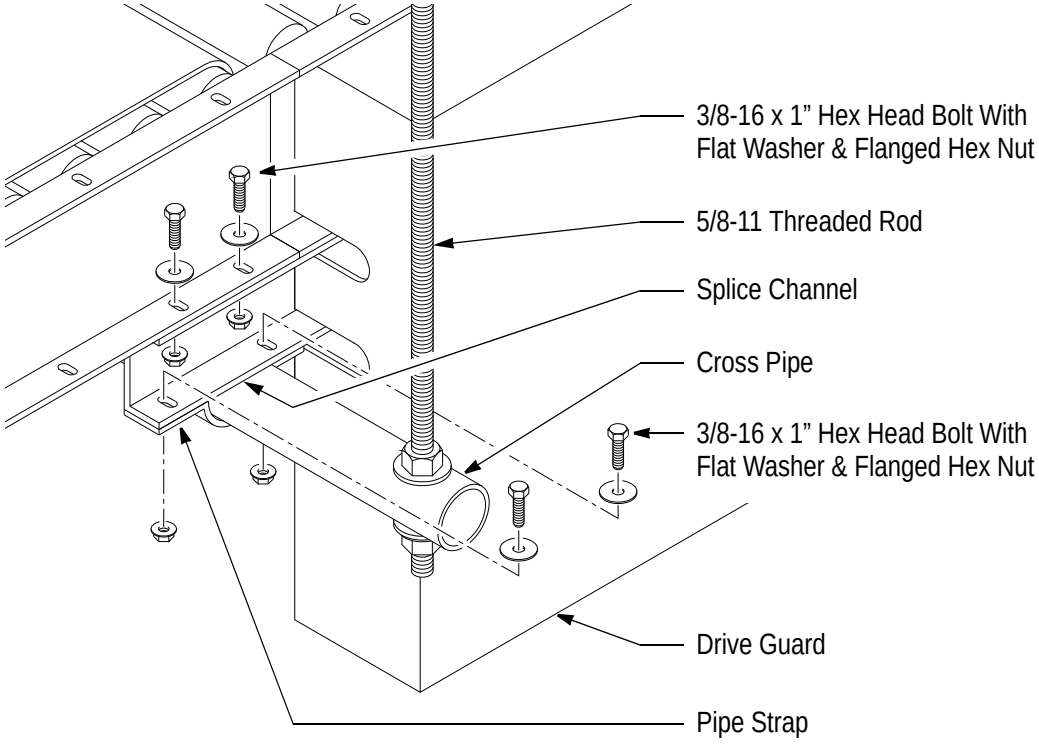


Figure G - 15 Installing a Ceiling Hanger Offset from a Section Joint

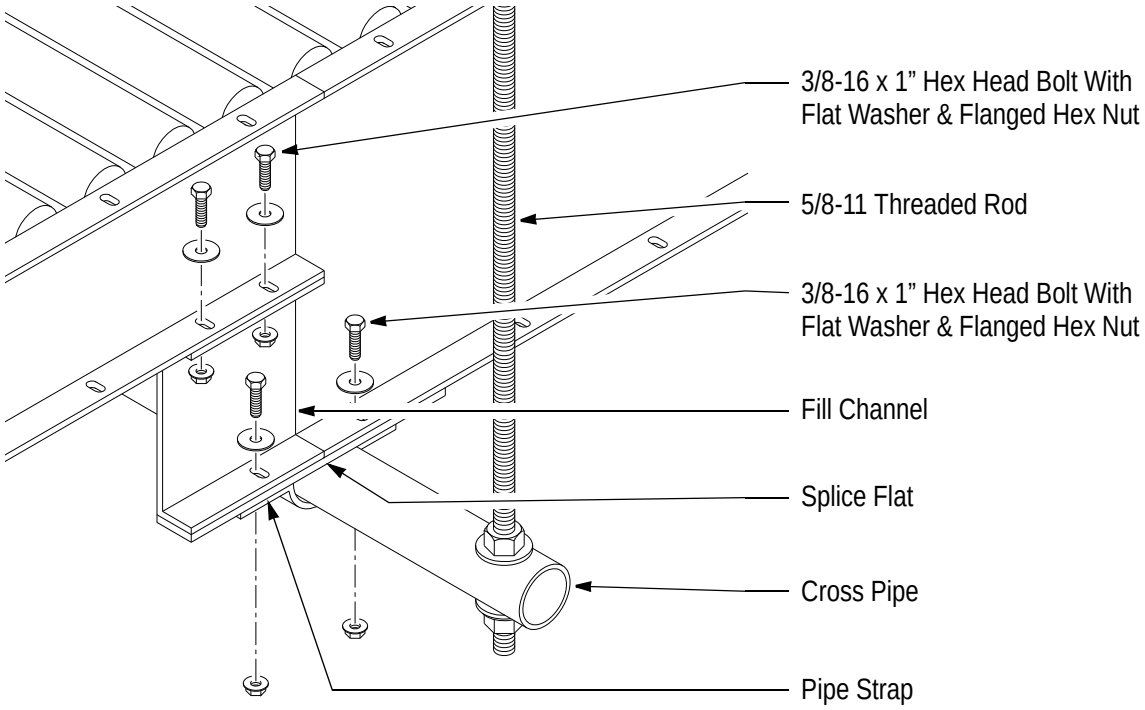


Figure G - 16 Adjoining Conveyors With Side Rails of Different Heights

Merge, Diverge & Crossover Conveyors

Support a double-wide merge, diverge or crossover conveyor at the infeed and discharge ends and at each section joint (see Figure G - 17).

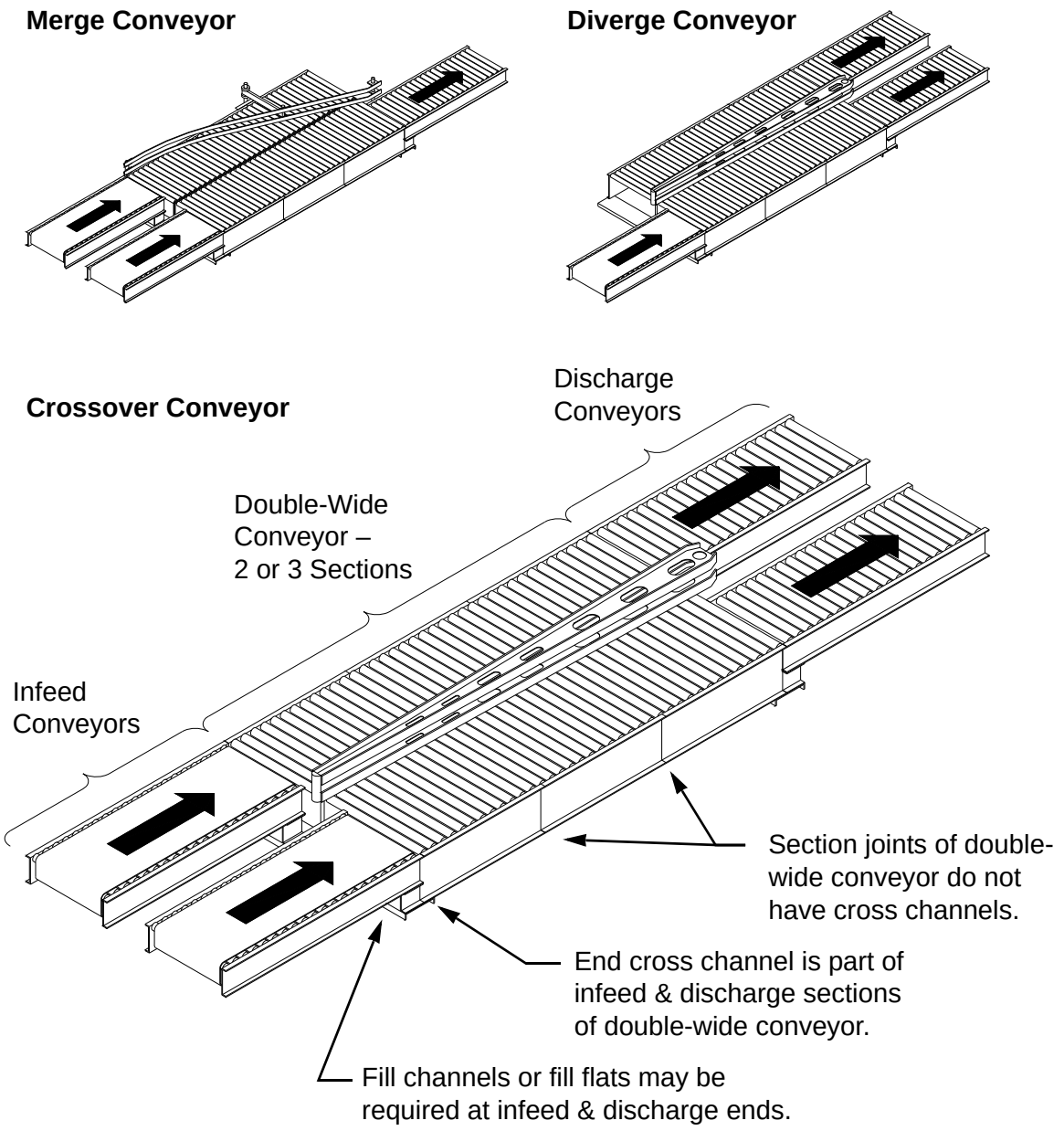


Figure G - 17 Merge, Diverge & Crossover Conveyors

Since the infeed and discharge ends of the double-wide conveyor are furnished with cross channels, use a CM1-B, CM2-B, or CM3-B ceiling hanger at both ends (see Figure G - 18).

- Mount each partial cross pipe to the cross channel using a pipe strap at two points – under the side rail and at the inside end of the partial cross pipe. Be certain to tighten the fasteners securely.

- If infeed or discharge conveyor sections have side rails shallower than the side rails of the double-wide conveyor, insert a fill channel between the cross channel and each side rail of the infeed or discharge conveyor.
- If the ceiling hanger is to be offset from a section joint (to accommodate the guard for an underhung end drive), insert a splice channel between the cross channel and the bottom flanges of the adjoining side rails.

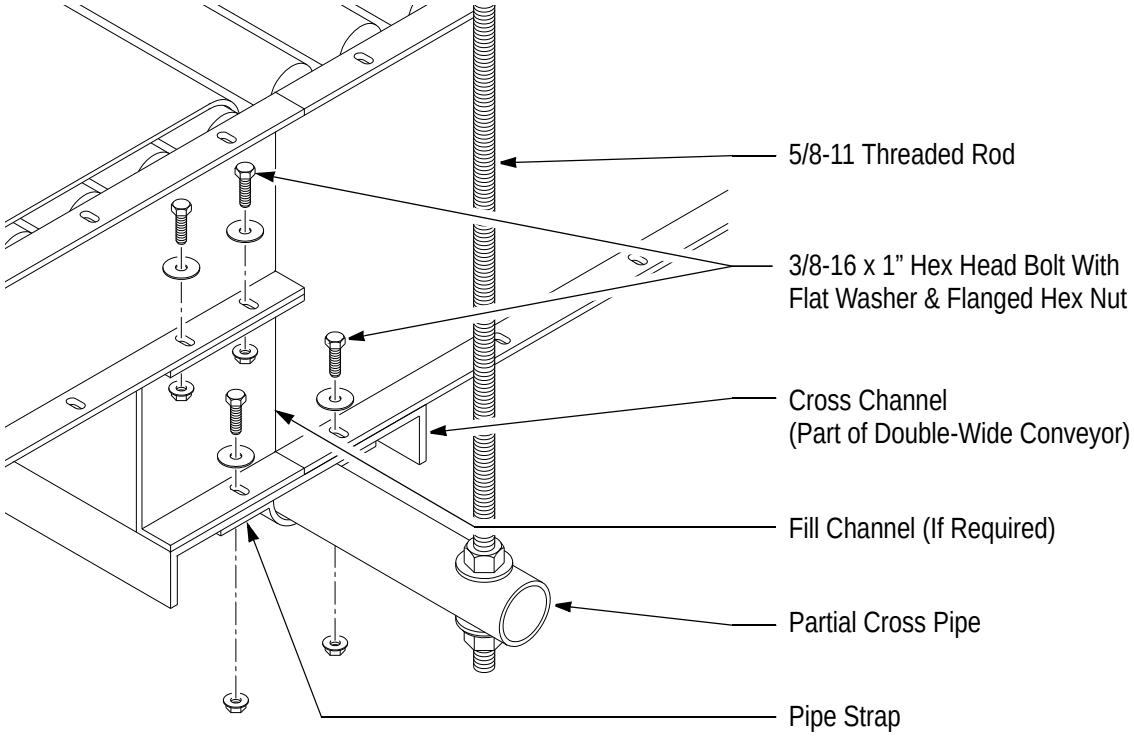


Figure G - 18 Merge, Diverge & Crossover – Infeed & Discharge Ends

At each section joint within the double-wide conveyor, use a CM1-A, CM2-A or CM3-A ceiling hanger, which is furnished with a cross channel (see Figure G - 19).

- If the drive unit for a deflector arm is not located at the section joint, center the ceiling hanger on the section joint.
- If the drive unit for a deflector is located at the section joint, locate the cross channel off-set from the section joint, and mount splice angles to the bottom flanges of the side rails, straddling the section joint.

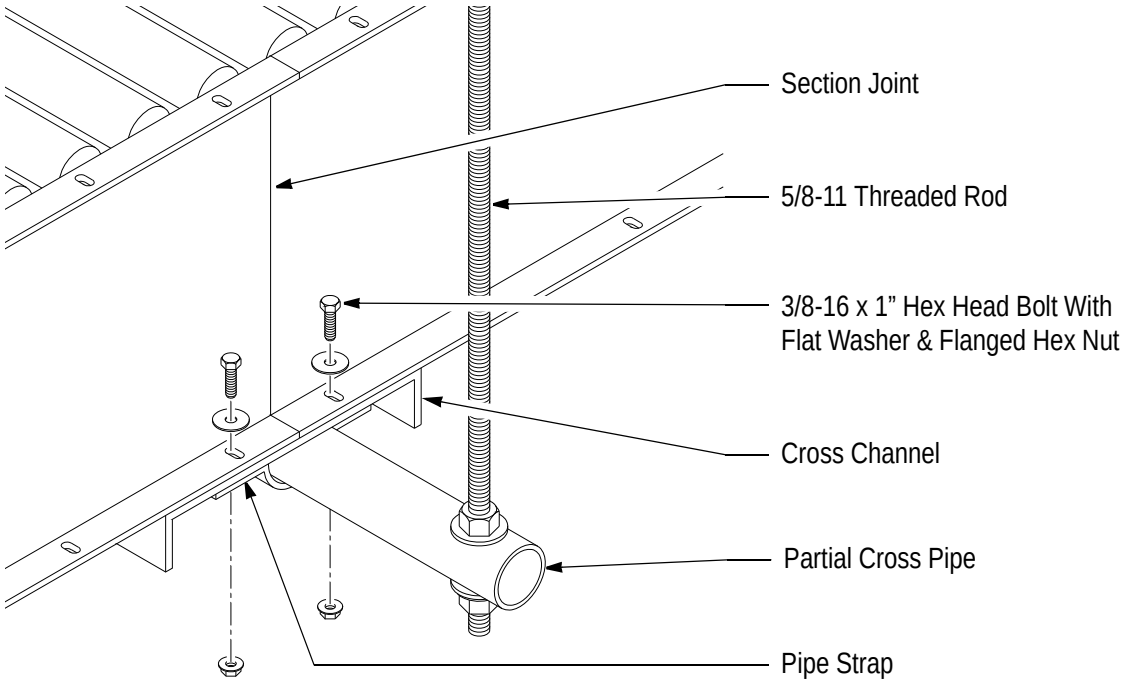


Figure G - 19 Installing a Ceiling Hanger at a Double-Wide Conveyor Section Joint

Adjust Partial Cross Pipes

Make certain that the partial cross pipes are positioned properly at both ends (see Figure G - 20). The centerline of the threaded rod should be 8 inches from the inside surface of the adjacent side rail, and the outside end of the partial cross pipe should be 8 3/4 inches from the inside edge of the pipe strap. When the partial pipes are properly positioned, make certain that all pipe-strap fasteners are tight.

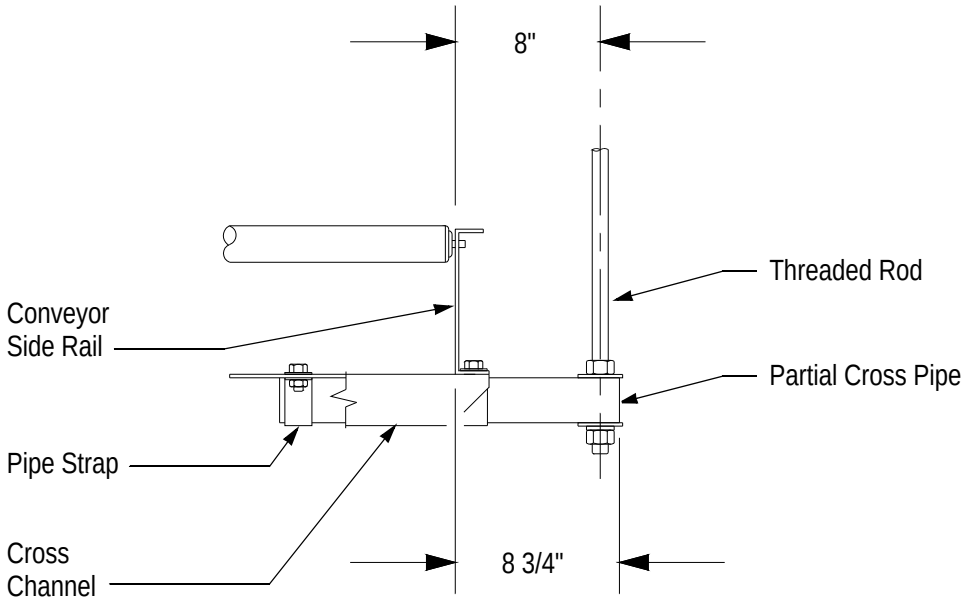


Figure G - 20 Locating the Partial Cross Pipe

Trash Belt Conveyors – Intermediate Sections

Install Trash Belt intermediate sections using CH1-T, CH2-T or CH3-T ceiling hangers. Remove the bottom guarding from the Trash Belt intermediate boxbed frames. Place four spreader pipes inside the boxbed frame in line with the mounting holes (see Figure G - 21). Mount one hanger bracket to each side of the boxbed frame. Insert one flanged hex bolt through each of the mounting holes in the hanger bracket base plate, through the corresponding mounting hole in the side of the boxbed frame, and into the tapped spreader pipe. Tighten the bolts. Replace the bottom guarding on the boxbed frames.

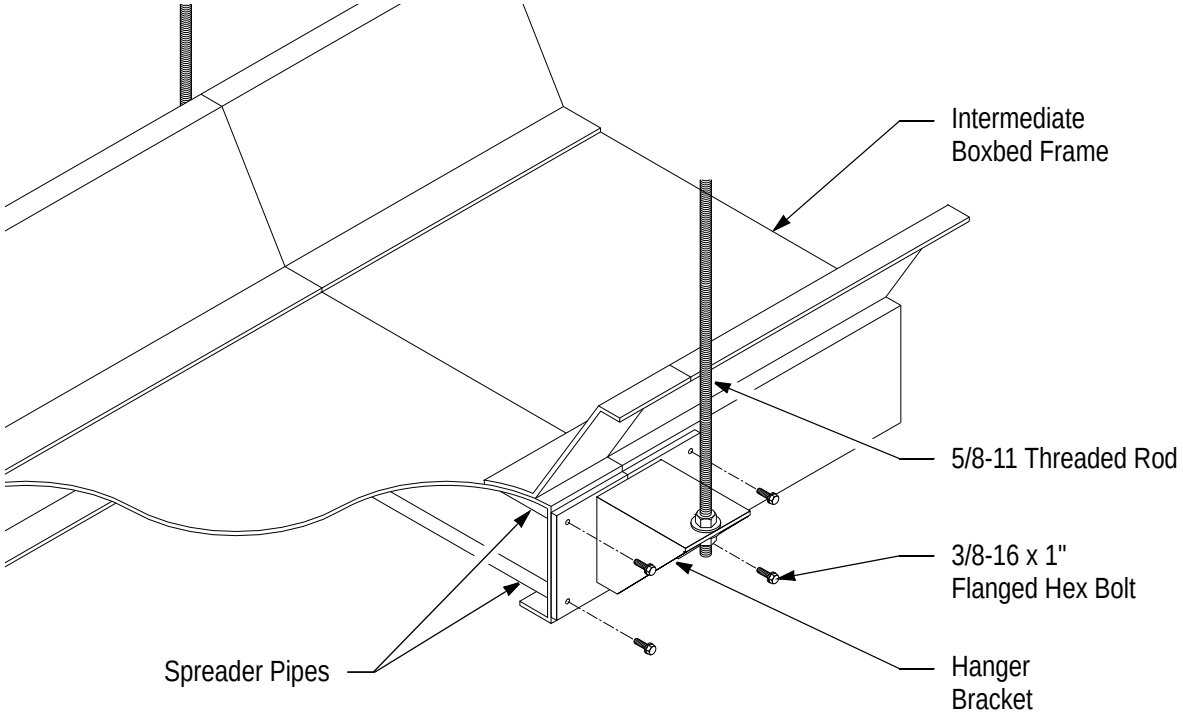


Figure G - 21 Connecting Trash Belt Intermediate Sections

Level the Conveyor

After the sections of conveyor are anchored in their correct locations, adjust the levelness of the conveyor. A laser-leveling method is recommended, as described under the heading "Level the Conveyor" in the previous section "Installing a Conveyor With Floor Supports."

Adjust the height of a ceiling hanger by using the hex nuts located on the threaded rod, one above the cross pipe, and the other underneath the cross pipe. To raise the cross pipe, loosen the top nut and tighten the bottom nut. To lower the cross pipe, loosen the bottom nut and tighten the top nut.

After the conveyor has been leveled, make certain that all ceiling-hanger fasteners are tight.

SECTION H:MAINTENANCE

Recommended service checks and equipment maintenance are outlined below for typical, intermittent-duty conveyor applications. Additional maintenance and servicing schedule adjustments may be required for continuous-duty operation or extreme environmental conditions.

All newly installed equipment should be frequently inspected and serviced as needed during the first 40 hours of operation; thereafter, an appropriate maintenance program should be established and followed (see Table H 1).

Maintaining separate service log sheets on each type of conveyor is recommended for plants operating more than one shift. Each log sheet includes dates, detailed inspection service information, and name or initials of person(s) performing the equipment inspection or service for future reference.

WARNING: Before performing maintenance on a conveyor, make certain that the conveyor's power disconnect is locked in the "Open" position and tagged to prevent accidental or unexpected application of power. Do not perform maintenance while the conveyor is running unless specifically instructed to do so in this manual.

Note:

It is not necessary to have the conveyor turned ON in order to perform any of the work described in this section. Maintenance must be performed only by qualified personnel who are trained in normal and emergency operations of the conveyor and who are knowledgeable of all safety devices, their locations, and functions.

Before restarting a conveyor:

- Remove all foreign objects from the conveyor.
- Be sure that all guards and safety devices are properly installed and working.
- Make sure that all persons are clear of the conveyor and are aware that the conveyor is about to be restarted.

Scheduled Maintenance

Table H 1: Maintenance Schedule

Interval	Components	Item Check	
		Fasteners	Physical Condition
Monthly	Floor Supports	X	X
	Ceiling Hangers	X	X

The intervals for performing maintenance indicated in Table H 1 are based on eight hours per day operation. An application may subject the equipment to conditions that require more frequent maintenance. This may be determined by performing maintenance more frequently when the conveyor is first put into operation and lengthening the intervals based on experience.

SECTION I: SPARE PARTS

General Information

The purpose of this section is to identify parts for a quality preventive maintenance program and to minimize the chances for extended down time.

The following page illustrate the location of these parts as they apply to each particular unit. Keep in mind that this illustration applies to the standard product line only. These items will show on the bill-of-material as a coded item.

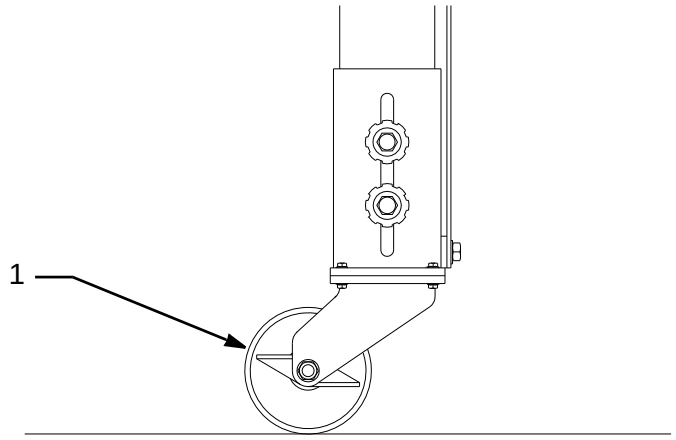


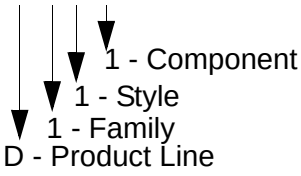
Figure I - 1 Caster for Mobile Supports

Key #	Part No.	Description	Qty.
1	240651	4” Dia. Swivel Caster Semi-Steel with Lock	1

SECTION J: PRODUCT INDEX

SLE Series Floor Supports

Item Class D 1 1 1



The items listed below have no features. Each low elevation support assembly includes two feet and two tops with bolts; used for FSL and FSM duty only.

Description	Dwg. No.	Part No.
SLE 1/2-2 3/8	D111A00 B	D111A02
SLE 2 3/16-4 11/16	D111B00 B	D111B04
SLE 4 3/16-6 11/16	D111B00 B	D111B06

FSL Series Floor Supports

(F1) Tops

Description	Dwg. No.	Base No.
FSL-0608	D111C00 D	D111C08

(F1) Width
(F2) Tops

Description	Dwg. No.	Base No.
FSL-0811	D111D00 D	D111D11
FSL-1013	D111D00 D	D111D13

FSL Series Floor Supports

Item Class D 1 1 1

(F1) Width
(F2) Tops
(F3) Seismic (Not-required at this time)

Description	Dwg. No.	Base No.
FSL-1215	D111E00 D	D111E15
FSL-1417	D111E00 D	D111E17
FSL-1619	D111E00 D	D111E19
FSL-1724	D111E00 D	D111E24
FSL-2230	D111E00 D	D111E30
FSL-2836	D111E00 D	D111E36
FSL-3442	D111E00 D	D111E42
FSL-4048	D111F00 D	D111F48
FSL-4654	D111F00 D	D111F54
FSL-5260	D111F00 D	D111F60
FSL-5866	D111F00 D	D111F66
FSL-6472	D111G00 D	D111G72
FSL-7078	D111G00 D	D111G78
FSL-7684	D111H00 D	D111H84
FSL-8290	D111H00 D	D111H90
FSL-8896	D111H00 D	D111H96
FSL-94102	D111H00 D	D111H102
FSL-100108	D111H00 D	D111H108

The -SL items listed below have no features.

Description	Dwg. No.	Part No.
FSL-0608-SL	D111J00 D	D111J08
FSL-0811-SL	D111K00 D	D111K11
FSL-1013-SL	D111K00 D	D111K13
FSL-1215-SL	D111L00 D	D111L15
FSL-1417-SL	D111L00 D	D111L17
FSL-1619-SL	D111L00 D	D111L19
FSL-1724-SL	D111L00 D	D111L24
FSL-2230-SL	D111L00 D	D111L30
FSL-2836-SL	D111L00 D	D111L36
FSL-3442-SL	D111L00 D	D111L42
FSL-4048-SL	D111L00 D	D111L48
FSL-4654-SL	D111L00 D	D111L54
FSL-5260-SL	D111L00 D	D111L60
FSL-5866-SL	D111L00 D	D111L66
FSL-6472-SL	D111L00 D	D111L72
FSL-7078-SL	D111L00 D	D111L78

* When using with Line-Shaft Conveyor:

1. Height ranges from 0608 to 1417, use single leg floor supports only
2. Height ranges from 1419 to 100108, use options 60 through 63 in Feature (F1) width
3. Feature (F2) tops use options 02 tops turned in only

FSM Series Floor Supports

Item Class D 1 1 1

(F1) Tops

Description	Dwg. No.	Base No.
FSM-0608	16271 A	415160

(F1) Width
(F2) Tops

Description	Dwg. No.	Base No.
FSM-0811	16272 A	415162
FSM-1013	16273 A	415163
FSM-1215	16274 A	415164
FSM-1417	16275 A	415165
FSM-1619	16276 A	415166
FSM-1724	16277 A	415167
FSM-2230	16278 A	415168
FSM-2836	16279 A	415169
FSM-3442	16280 A	415170
FSM-4048	16281 A	415171
FSM-4654	16282 A	415172
FSM-5260	16283 A	415173
FSM-5866	16284 A	415174
FSM-6472	16285 A	415175
FSM-7078	16286 A	415176
FSM-7684	19221 A	415177
FSM-8290	19221 A	415178
FSM-8896	19221 A	415179
FSM-94102	19221 A	415184
FSM-100108	19221 A	415185

The -SL items listed below have no features.

Description	Dwg. No.	Part No.
FSM-0608-SL	16287 A	414240
FSM-0811-SL	16287 A	414242
FSM-1013-SL	16287 A	414244
FSM-1215-SL	16288 A	414246
FSM-1417-SL	16288 A	414248
FSM-1619-SL	16288 A	414250
FSM-1724-SL	16289 A	414252
FSM-2230-SL	16289 A	414254
FSM-2836-SL	16289 A	414256
FSM-3442-SL	16289 A	414258
FSM-4048-SL	16289 A	414260
FSM-4654-SL	16289 A	414262
FSM-5260-SL	16289 A	414264
FSM-5866-SL	16289 A	414266
FSM-6472-SL	16289 A	414268
FSM-7078-SL	16289 A	414270

SDA & SDB Series Floor Supports

Item Class D 1 1 2

(F1) Width

Description	Dwg. No.	Base No.
SDA 6-0 Chan Flush	15005 B	413851
SDA 6-0 PBS Flush	15005 B	413852
SDA 4-0 Chan Flush	15005 B	413853
SDA 4-0 PBS Flush	15005 B	413854
SDB 6-0 Chan Set Out	15006 B	413855
SDB 4-0 Chan Set Out	15006 B	413856

(F1) Width
(F2) X-Brace (not used at this time)

Description	Dwg. No.	1- Level	2-Level	3-Level	4-Level
SDA HDD 8-0 __- Level	15005 B	414000	414001	414002	414003
SDA HDD 10-0 __- Level	15005 B	414004	414005	414006	414007
SDA HDD 12-0 __- Level	15005 B	414008	414009	414010	414011
SDA HDD 14-0 __- Level	15005 B	414012	414013	4140014	414015
SDB HDD 8-0 __- Level	15006 B		414016	414017	414018
SDB HDD 10-0 __- Level	15006 B		414019	414020	414021
SDB HDD 12-0 __- Level	15006 B		414022	414023	414024
SDB HDD 14-0 __- Level	15006 B		414025	414026	414027

SDA = Support channel flush
SDB = Support channel set-out

FSMU4 Series Floor Supports

Item Class D 1 1 1

The support assembly below has no options.

Description	Dwg. No.	Part No.
FSMU4-0608	18170 A	415321

Description	Dwg. No.	Base No.
FSMU4-0811	18171 A	415322
FSMU4-1013	18172 A	415323
FSMU4-1215	18173 A	415324
FSMU4-1417	18174 A	415325
FSMU4-1619	18175 A	415326
FSMU4-1724	18176 A	415327
FSMU4-2230	18177 A	415328
FSMU4-2836	18178 A	415329
FSMU4-3442	18179 A	415330
FSMU4-4048	18180 A	415331
FSMU4-4654	18181 A	415332
FSMU4-5260	18182 A	415333
FSMU4-5866	18183 A	415334
FSMU4-6472	18184 A	415335
FSMU4-7078	18185 A	415336

Note: The supports are for use with intermediate sections only. For supporting diverter sections, see FSM.

FSU15 Series Floor Supports

CALL-UP Template (30 Characters max.)

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Suffix						Width			Height																					
E	0	0	3	2	-	2	2	-	2	4	6																		

CALL-UP Options

01	02	03	04	05	SUFFIX
E	0	0	3	2	FSU15 Support

07	08	WIDTH
2	2	= 22”
2	8	= 28”
3	4	= 34”
4	0	= 40”

10	11	12	HEIGHT
0	1	1	11” thru 246” in 1” increments
2	4	6	

SMS & SMC Series Mobile Floor Supports

Item Class D 1 1 9

(F1) Width
(F2) Floor Locks

Description	Dwg. No.	Base No.
Mobile Support 1316	15013 B	415230
Mobile Support 1518	15013 B	415231
Mobile Support 1720	15013 B	415232
Mobile Support 1922	15013 B	415233
Mobile Support 2124	15013 B	415234
Mobile Support 2229	15013 B	415235
Mobile Support 2735	15013 B	415236
Mobile Support 3341	15013 B	415237
Mobile Support 3947	15013 B	415238

Note: The knee base assembly is in a field kit (610041), which is attached to the base numbers.

The assemblies below have no options for single leg mobile supports. They are individual supports with knee brace assembly. Use one with curve mobile unit (SMC)

Description	Dwg. No.	Part No.
Mobile Support 1316-SL	15014 B	415247
Mobile Support 1518-SL	15014 B	415239
Mobile Support 1720-SL	15014 B	415240
Mobile Support 1922-SL	15014 B	415241
Mobile Support 2124-SL	15014 B	415242
Mobile Support 2229-SL	15014 B	415243
Mobile Support 2735-SL	15014 B	415244
Mobile Support 3341-SL	15014 B	415245
Mobile Support 3947-SL	15014 B	415246

Note: The knee base assembly is in a field kit (610041), which is attached to the part numbers.

Model CH1-A, CH1-B, CH2-A, CH2-B, CH3-A & CH3-B Ceiling Hangers

Item Class D 1 2 1

The items listed below have no features.

Description	Dwg. No.	16” W 32 C/C	22” W 38 C/C	28” W 44 C/C	34” W 50 C/C	40” W 56 C/C	45” W 62 C/C	51” W 68 C/C
CH1-A 12’ - 0" ROD__W__C/C	19625 D	210251	210252	210253	210254	210280	210667	210661
CH1-B 12’ - 0" ROD__W__C/C	19625 D	210256	210257	210258	210259	210281	210668	210664
CH2-A 18” ROD__W__C/C	19625 D	210261	210262	210263	210264	210282	210669	210662
CH2-B 18” ROD__W__C/C	19625 D	210266	210267	210268	210269	210283	210670	210665
CH3-A W/O ROD__W__C/C	19625 D	210271	210272	210273	210274	210284	210671	210663
CH3-B W/O ROD__W__C/C	19625 D	210276	210277	210278	210279	210285	210672	210666

Ceiling hangers are item type “0” (phantom assemblies). They should be listed on cover sheets as shipped level components.

When using with line-shaft conveyor a spacer channel 4.5 in. assembly is required.

Description	Dwg. No.	Part No.
SCA 4.5 x 1.5 x 10 GA. x 5" long	No Drawing	370169

Model CM1-A, CM1-B, CM2-A, CM2-B, CM3-A & CM3-B Ceiling Hangers

Item Class D 1 2 9

The items listed below are for merges, diverges, and crossovers.

Description	Dwg. No.	Part No.
CM1-B 12’ - 0" ROD PRM DR/TKEND	19625 D	210621
CM2-B 18" ROD PRM DR/TKEND	19625 D	210622
CM3-B W/O ROD PRM DR/TKEND	19625 D	210623

The items listed below are for merges, diverges, and crossovers.

Description	Dwg. No.	16” W 57 C/C	22” W 69 C/C	28” W 81 C/C	34” W 93 C/C	40” W 105 C/C
CM1-A 12’ - 0" ROD PRM IS 16W __C/C	19625 D	210631	210632	210633	210634	210635
CM2-A 18” ROD PRM IS __W __C/C	19625 D	210636	210637	210638	210639	210640
CM3-A W/O ROD PRM IS __W __C/C	19625 D	210641	210642	210643	210644	210645

Model CH1-T, CH2-T & CH3-T Ceiling Hangers

Item Class D 1 2 9

The items listed below are for PBT Trash Belt intermediate sections only.

Description	Dwg. No.	15” W	21” W	27” W	33” W	39” W	45” W	51” W
CHT 12’ - 0" RODS	15068 D	210572	210573	210574	210575	210576	210577	210578
CHT 18" RODS	15068 D	210581	210582	210583	210584	210585	210586	210587
CHT W/O RODS	15068 D	210591	210592	210593	210594	210595	210596	210597

Knee Braces and Connector Channels

Item Class D 1 1 9

The knee brace and connector assemblies below are item type “0” (phantom assemblies). They should be listed on cover sheets as shipped level components.

CSPS	Description	Dwg. No.	Part No.
SKB	SKB SUP Knee Brace Assy	4702206 D	4702206

CSPS	Description	Dwg. No.	Part No.
—	SCC 0.F	15051 A	370161
CC1	SCC 1.5	15051 A	370162
CC2	SCC 2.0	15051 A	370163
CC3	SCC 3.0	15051 A	370164
CC4	SCC 3.5	15051 A	370165
CC5	SCC 5.0	15051 A	370166
CC6	SCC 6.5	15051 A	370167
CC7	SCC 2.875	15051 A	370403
CC8	SCC 3.625	15051 A	370401
CC9	SCC 3.875	15051 A	370402