

Technical Information

The following information is based on previously designed conveyors utilizing application specific parameters. Part numbers for non-Mod Tech parts are a reference only and may not depict actual or up to date information regarding those parts or the Mod Tech conveyor solutions for those parts. Each conveyor system must be **DESIGNED** by your engineering department to insure correct operational functionality.

The first section shows **COMPONENT LISTS** which assists you in determining Mod Tech components used with specific chain. Then, a sample of **CROSS-SECTIONAL DRAWINGS** are shown. All of the chains listed have cross-sections available. Please contact Mod Tech for the cross-section that best fits your application.

A listing of Mod Tech standard **SETUP PARAMETERS** is included to assist the designers in creating a complete solution including BOM.

Finally, should you need direct assistance with engineering or complete build, a list of **Integrators/Partners** is included.

Flat Top Chain Manufacturers

The following listing of Flat Top chain manufacturers may not be complete. Mod Tech does not endorse or promote one chain manufacturer over another. However, Mod Tech does use Rexnord chain as a bases for chain model numbers and has used Rexnord chain data for configuring conveyor solutions.

Intralox
201 Laitram Lane
Harahan, LA 70123
(800) 535-8848
www.intralox.com

Morse, Emerson Power Transmission
620-T S, Aurora St.
Ithaca, NY 14850
(800) 831-5102

Regina USA Inc.
P.O. Box 109
Cambridge, MD 21613
(410) 221-2800
www.reginausa.com

Rexnord Corporation
Plastics Division
P.O. Box 480
Grafton, WI 53024
(414) 376-4710
www.rexnord.com

uni-chains Mfg., Inc.
500 Brentwood Drive
Reading, PA 19611
(800) 937-2864
www.unichains.com

CONVEYOR COMPONENT SELECTION LIST

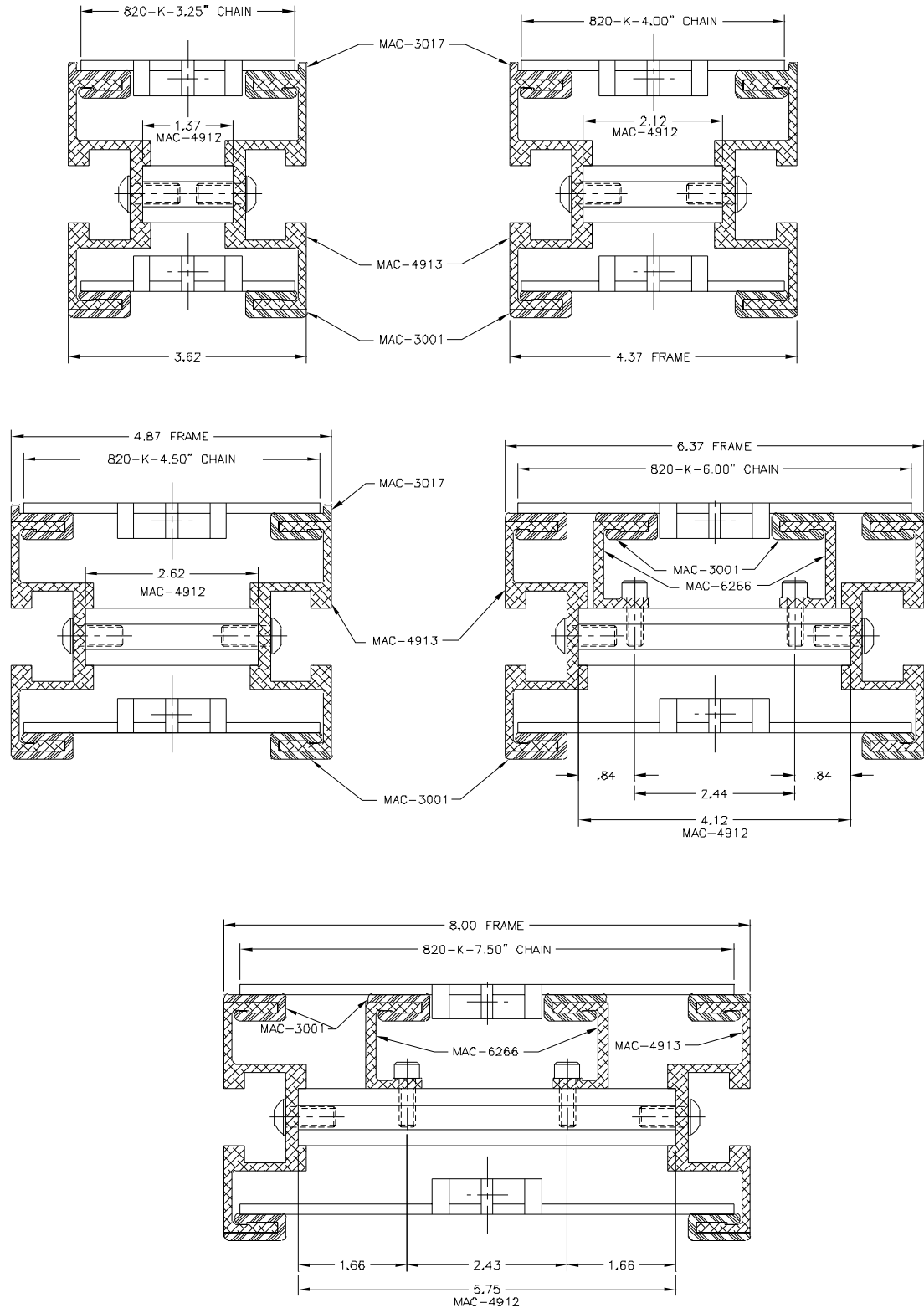
CHAIN (REXNORD #)	FRAME RAIL C-CHANNEL PART #	H-BEAM PART #	TOP FRAME RAIL GLIDE PART #	LOWER FRAME RAIL GLIDE PART #
1874-K-3.25"	MAC-4913	N/A	MAC-4912-1.00	MAC-3001
1883T-K-3.25"	MAC-5095	N/A	MAC-4912-2.16	MAC-3001
4874A-K-3.25"	MAC-4913	N/A	MAC-4912-1.00	MAC-3001
LBP882T-K-3.75	MAC-4913	N/A	MAC-4912-2.00	MAC-3001
LBP883T-K-7.50"	MAC-4913	MAC-6266	MAC-4912-5.50	MAC-3001
LF1701	MAC-4913	N/A	MAC-4912-1.84	MAC-3001
LF1701	MAC-5159	N/A	MAC-4912-1.97	MAC-3017
LF1843T-K-1.25"	MAC-5159	N/A	MAC-4912-0.59	MAC-3016
LF1843T-K-1.25" DL	MAC-5159	N/A	MAC-4912-Variable	MAC-3016
LF1843T-K-1.37"	MAC-5159	N/A	MAC-4912-0.59	MAC-3016
LF1843T-K-2.00"	MAC-5159	N/A	MAC-4912-0.59	MAC-3016
LF1863T-K-2.25"	MAC-4913	N/A	MAC-4912-1.00	MAC-3001
LF1863T-K-2.25"	MAC-5207	N/A	MAC-4912-0.37	MAC-3018
LF1873T-K-2.25"	MAC-4913	N/A	MAC-4913-1.00	MAC-3001
LF1873T-K-2.25" DL	MAC-4913	MAC-6266	MAC-4912-Variable	MAC-3001
LF1873T-K10.00"	MAC-5095	MAC-6266	MAC-4912-8.25	MAC-3001
LF1873T-K-12.00"	MAC-4913	MAC-6266	MAC-4912-10.00	MAC-3001
LF1873T-K-12.00"	MAC-5095	MAC-6266	MAC-4912-10.25	MAC-3001
LF1873T-K-3.00"	MAC-4913	N/A	MAC-4912-1.00	MAC-3001
LF1873T-K-3.25"	MAC-4913	N/A	MAC-4912-1.00	MAC-3001
LF1873T-K-4.50"	MAC-5159	MAC-6266	MAC-4912-3.50	MAC-3016
LF1873T-K-6.00"	MAC-4913	MAC-6266	MAC-4912-4.00	MAC-3001
LF1873T-K-7.50"	MAC-4913	MAC-6266	MAC-4912-5.75	MAC-3001
LF1873T-K-7.50"	MAC-5095	MAC-6266	MAC-4912-6.00	MAC-3001
LF820-K-3.25"	MAC-4913	N/A	MAC-4912-1.37	MAC-3017
LF820-K-4.00"	MAC-4913	N/A	MAC-4912-2.12	MAC-3017
LF820-K-4.50"	MAC-4913	N/A	MAC-4912-2.62	MAC-3017
LF820-K-6.00"	MAC-4913	MAC-6266	MAC-4912-4.12	MAC-3001
LF820-K-7.50"	MAC-4913	MAC-6266	MAC-4912-5.75	MAC-3001
LF821-K-10.00"	MAC-4913	MAC-6266	MAC-4912-8.25	MAC-3001
LF821-K-10.00" QL	MAC-4913	MAC-6266	MAC-4912-39.94	MAC-3001/3017
LF821-K-12.00"	MAC-4913	MAC-6266	MAC-4912-10.25	MAC-3001
LF821-K-7.50"	MAC-5095	N/A	MAC-4912-6.00	MAC-3001
LF831-K-3.25"	MAC-4913	N/A	MAC-4912-1.37	MAC-3017
LF831-K-4.50"	MAC-4913	N/A	MAC-4912-2.62	MAC-3017
LF831-K-7.50"	MAC-4913	MAC-6266	MAC-4912-5.75	MAC-3001
LF843-K-1.37"	MAC-5159	N/A	MAC-4912-0.69	MAC-3016
LF843-K-1.44"	MAC-5159	N/A	MAC-4912-0.69	MAC-3016
LF843-K-2.00"	MAC-4913	N/A	MAC-4912-0.56	MAC-3001
LF843-K-3.25"	MAC-5095	N/A	MAC-4912-1.44	MAC-3001
LF845-K-1.37"	MAC-5159	N/A	MAC-4912-0.69	MAC-3016
LF880T-K-3.25"	MAC-4913	N/A	MAC-4912-1.44	MAC-3001
LF880T-K-4.50"	MAC-5159	MAC-6266	MAC-4912-3.88	MAC-3016
LF882T-K-7.50"	MAC-4913	MAC-6266	MAC-4912-5.50	MAC-3001
LF882T-K-7.50"	MAC-5095	MAC-6266	MAC-4912-6.00	MAC-3001
LF963-K-3.25"	MAC-4913	N/A	MAC-4912-1.06	MAC-3001
S815-K-2.63"	MAC-4913	N/A	MAC-4912-1.38	MAC-3001
S815-K-2.63"	MAC-5159	N/A	MAC-4912-1.50	MAC-3016
S815-K-4.50"	MAC-4913	N/A	MAC-4912-2.63	MAC-3017
S815-K-4.50" DL	MAC-4913	MAC-6266	MAC-4912-7.56	MAC-3017
S881T-K-3.25"	MAC-4913	N/A	MAC-4912-1.37	MAC-3001
S881T-K-4.50"	MAC-5095	N/A	MAC-4912-2.25	MAC-3001
S881T-K-4.50"	MAC-5159	MAC-6266	MAC-4912-3.81	MAC-3016
S881T-K-7.50"	MAC-4913	MAC-6266	MAC-4912-5.62	MAC-3001

DRIVE COMPONENT SELECTION LIST

CHAIN (REXNORD #)	FRAME RAIL PART #	PLATE KIT PART#	IDLER RE-ENTRY KIT PART#	CATENARY RE-ENTRY KIT PART#
1874-K-3.25"	MAC-4913	MAC-4010	MAC-4404	MAC-42__
1883T-K-3.25"	MAC-5095	MAC-4013		MAC-42__
4874A-K-3.25"	MAC-4913	MAC-4010	MAC-4404	MAC-42__
LBP882T-K-3.75	MAC-4913	MAC-4010	MAC-4401	MAC-4227
LBP883T-K-7.50"	MAC-4913	MAC-4010	MAC-4401	MAC-4227
LF1701	MAC-4913	MAC-4010	MAC-4404	MAC-42__
LF1701	MAC-5159	MAC-4011	MAC-4404	MAC-42__
LF1843T-K-1.25"	MAC-5159	MAC-4011	MAC-4403	MAC-4223
LF1843T-K-1.25" DL	MAC-5159	MAC-4011	MAC-4403	MAC-42__
LF1843T-K-1.37"	MAC-5159	MAC-4011	MAC-4403	MAC-4223
LF1843T-K-2.00"	MAC-5159	MAC-4011	MAC-4403	MAC-4223
LF1863T-K-2.25"	MAC-4913	MAC-4010		MAC-42__
LF1863T-K-2.25"	MAC-5207	MAC-4012		MAC-42__
LF1873T-K-2.25"	MAC-4913	MAC-4010	MAC-4402	MAC-4229
LF1873T-K-2.25" DL	MAC-4913	MAC-4010	MAC-4402	MAC-4228
LF1873T-K10.00"	MAC-5095	MAC-4013	MAC-4402	MAC-4226
LF1873T-K-12.00"	MAC-4913	MAC-4010	MAC-4402	MAC-4226
LF1873T-K-12.00"	MAC-5095	MAC-4013	MAC-4402	MAC-4226
LF1873T-K-3.00"	MAC-4913	MAC-4010	MAC-4402	MAC-4226
LF1873T-K-3.25"	MAC-4913	MAC-4010	MAC-4402	MAC-4226
LF1873T-K-4.50"	MAC-5159	MAC-4011	MAC-4402	MAC-4226
LF1873T-K-6.00"	MAC-4913	MAC-4010	MAC-4402	MAC-4226
LF1873T-K-7.50"	MAC-4913	MAC-4010	MAC-4402	MAC-4226
LF1873T-K-7.50"	MAC-5095	MAC-4013	MAC-4402	MAC-4226
LF820-K-3.25"	MAC-4913	MAC-4010	MAC-4404	MAC-4222
LF820-K-4.00"	MAC-4913	MAC-4010	MAC-4404	MAC-4220
LF820-K-4.50"	MAC-4913	MAC-4010	MAC-4404	MAC-4220
LF820-K-6.00"	MAC-4913	MAC-4010	MAC-4404	MAC-4220
LF820-K-7.50"	MAC-4913	MAC-4010	MAC-4404	MAC-4220
LF821-K-10.00"	MAC-4913	MAC-4010	MAC-4404	MAC-4221
LF821-K-10.00" QL	MAC-4913	MAC-4010	MAC-4404	MAC-4221
LF821-K-12.00"	MAC-4913	MAC-4010	MAC-4404	MAC-4221
LF821-K-7.50"	MAC-5095	MAC-4013	MAC-4404	MAC-4221
LF831-K-3.25"	MAC-4913	MAC-4010	MAC-4408	MAC-4222
LF831-K-4.50"	MAC-4913	MAC-4010	MAC-4408	MAC-4221
LF831-K-7.50"	MAC-4913	MAC-4010	MAC-4408	MAC-4221
LF843-K-1.37"	MAC-5159	MAC-4011	MAC-4404	MAC-42__
LF843-K-1.44"	MAC-5159	MAC-4011	MAC-4404	MAC-42__
LF843-K-2.00"	MAC-4913	MAC-4010	MAC-4404	MAC-42__
LF843-K-3.25"	MAC-5095	MAC-4013	MAC-4404	MAC-42__
LF845-K-1.37"	MAC-5159	MAC-4011	MAC-4404	MAC-42__
LF880T-K-3.25"	MAC-4913	MAC-4010	MAC-4403	MAC-4224
LF880T-K-4.50"	MAC-5159	MAC-4011	MAC-4403	MAC-4224
LF882T-K-7.50"	MAC-4913	MAC-4010	MAC-4405	MAC-4225
LF882T-K-7.50"	MAC-5095	MAC-4013	MAC-4405	MAC-4225
LF963-K-3.25"	MAC-4913	MAC-4010	MAC-4404	MAC-42__
S815-K-2.63"	MAC-4913	MAC-4010	MAC-4404	MAC-42__
S815-K-2.63"	MAC-5159	MAC-4011	MAC-4404	MAC-42__
S815-K-4.50"	MAC-4913	MAC-4010	MAC-4404	MAC-42__
S815-K-4.50" DL	MAC-4913	MAC-4010	MAC-4404	MAC-42__
S881T-K-3.25"	MAC-4913	MAC-4010	MAC-4403	MAC-4224
S881T-K-4.50"	MAC-5095	MAC-4013	MAC-4403	MAC-4224
S881T-K-4.50"	MAC-5159	MAC-4011	MAC-4403	MAC-4224
S881T-K-7.50"	MAC-4913	MAC-4010	MAC-4403	MAC-4224

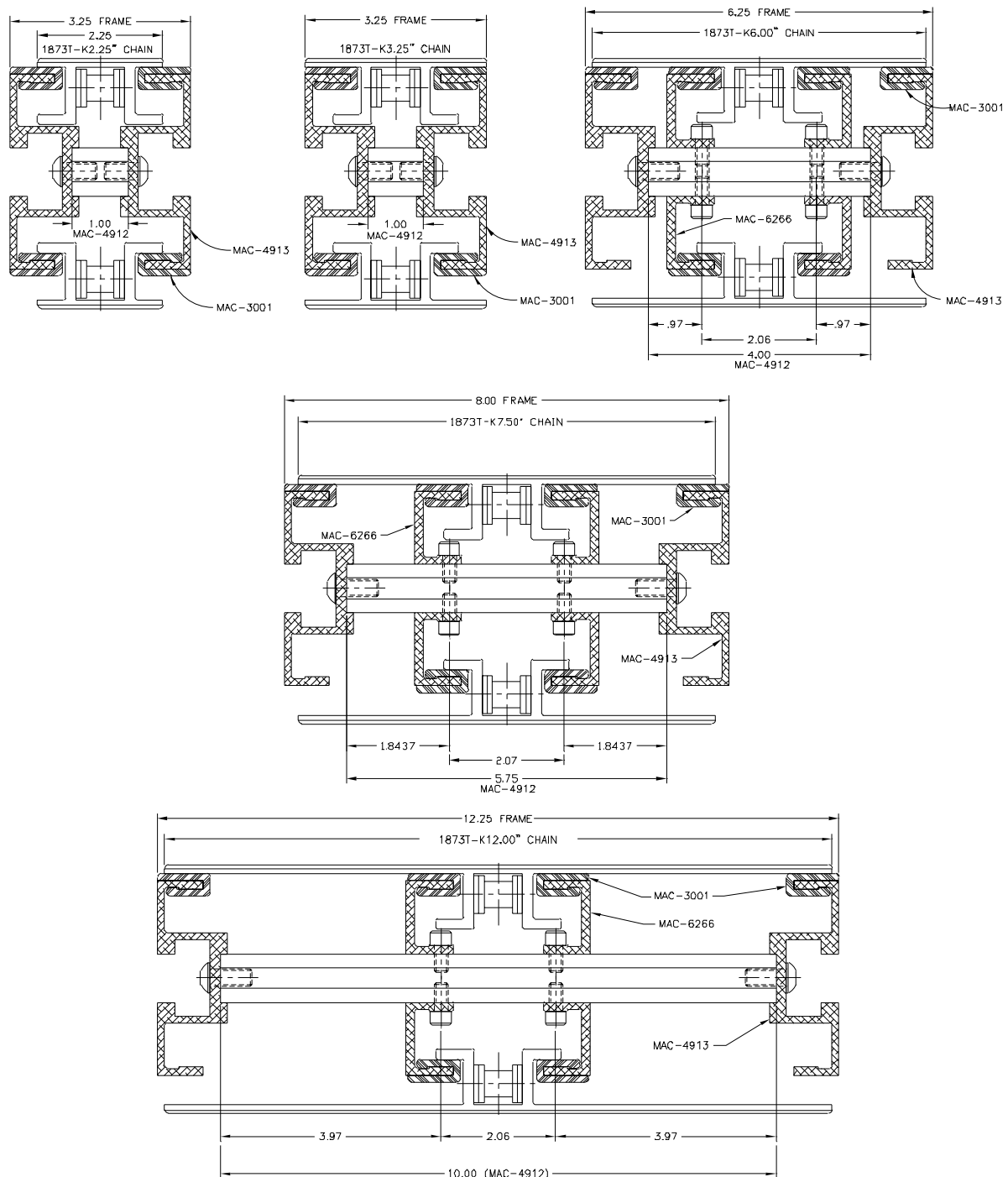
STRAIGHT RUNNING CHAIN

820T Chain Solutions Using MAC-4913 Conveyor Rail



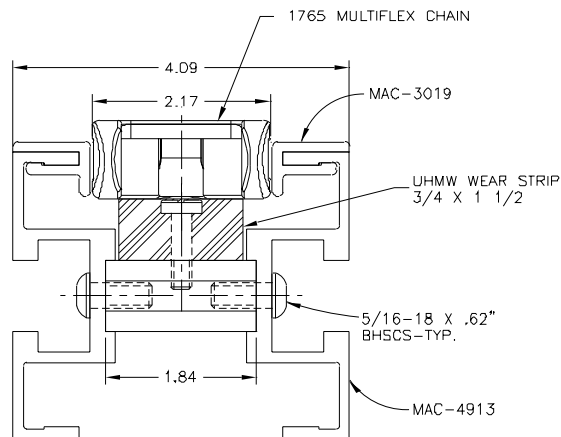
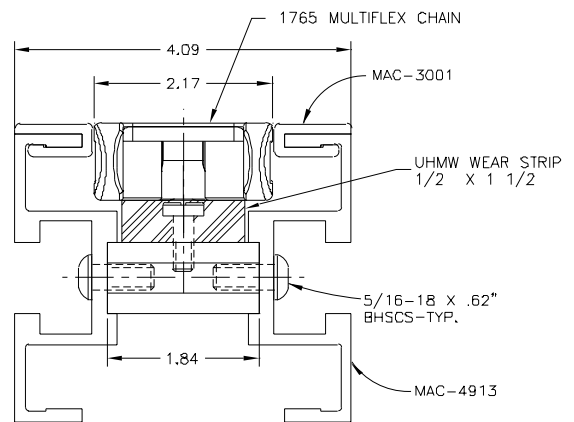
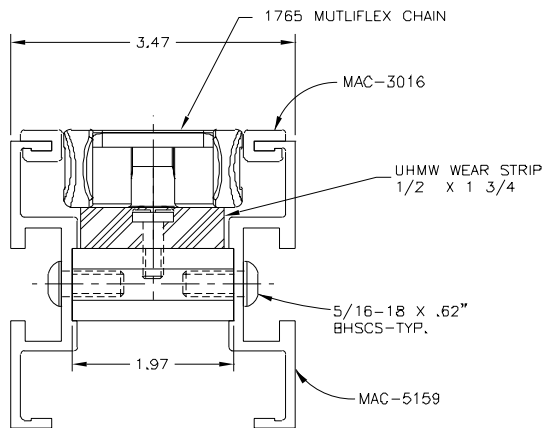
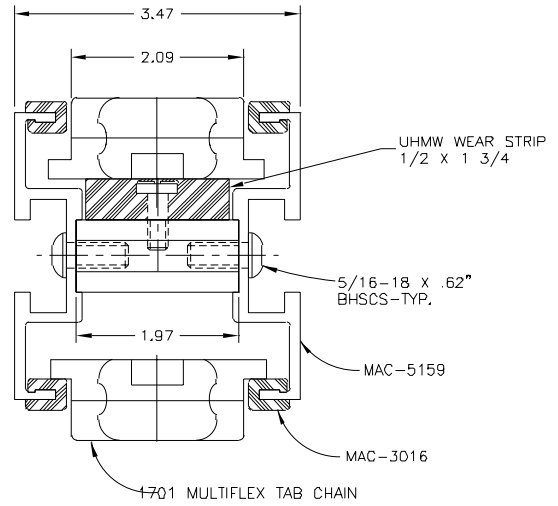
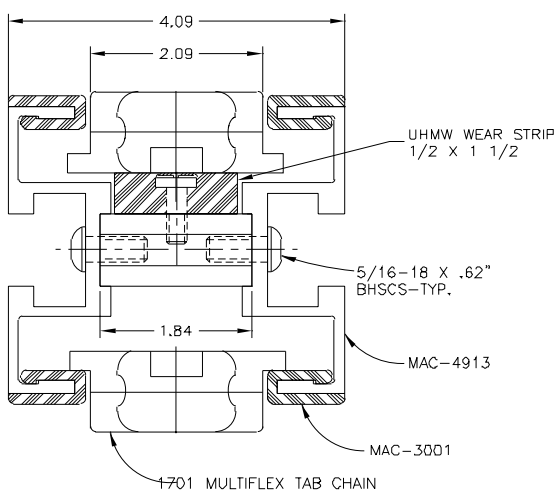
SIDEFLEXING CHAIN CROSS SECTIONS

1873T Chain Solutions Using MAC-4913 Conveyor Rail



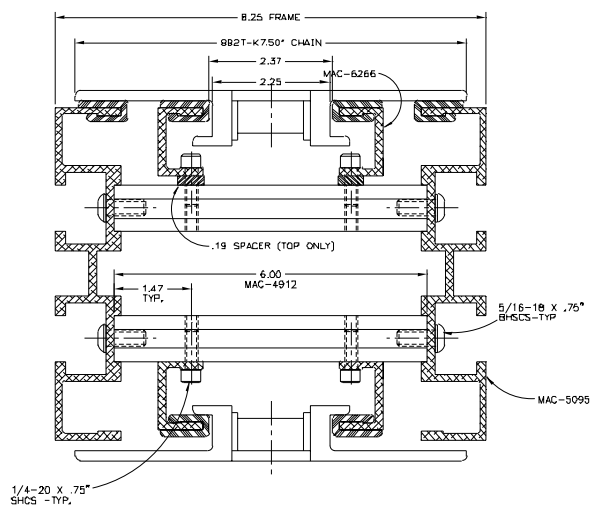
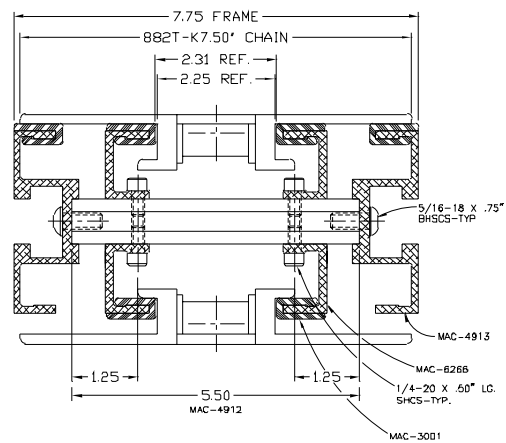
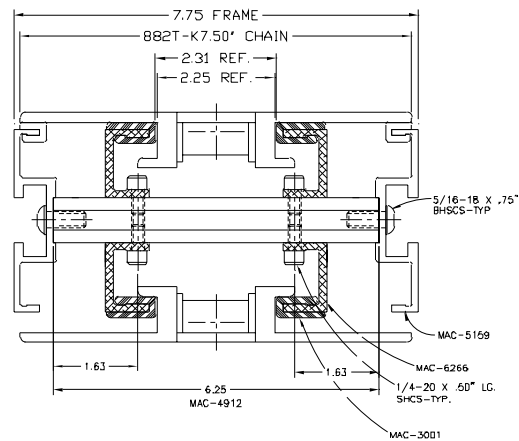
MULTIFLEX CHAIN CROSS SECTIONS

1701 & 1765 MULTIFLEX Chain with various Mod Tech rails

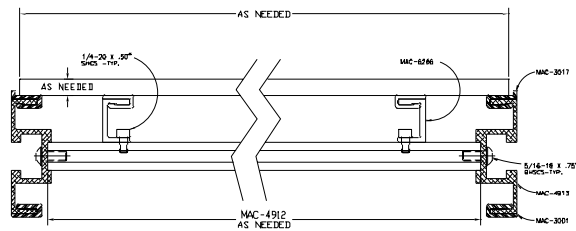
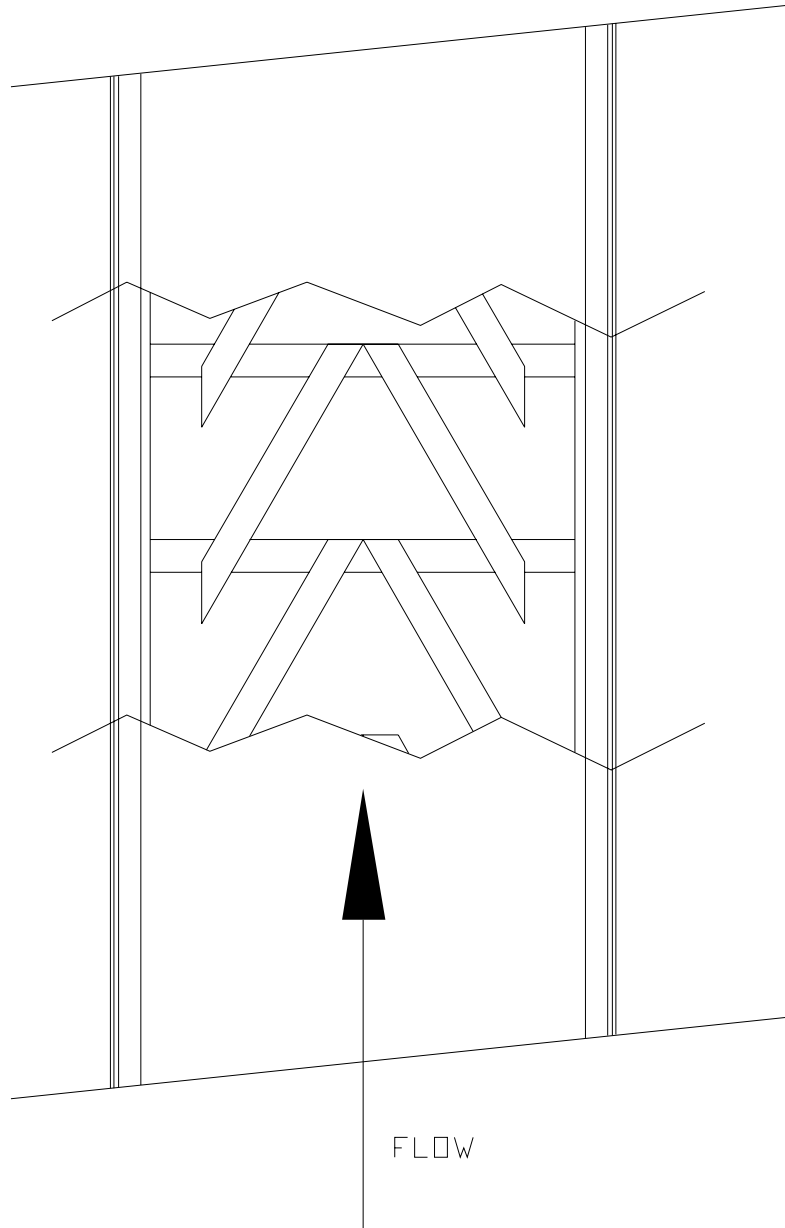


MULTIPLE SOLUTIONS WITH THE SAME CHAIN CROSS SECTIONS

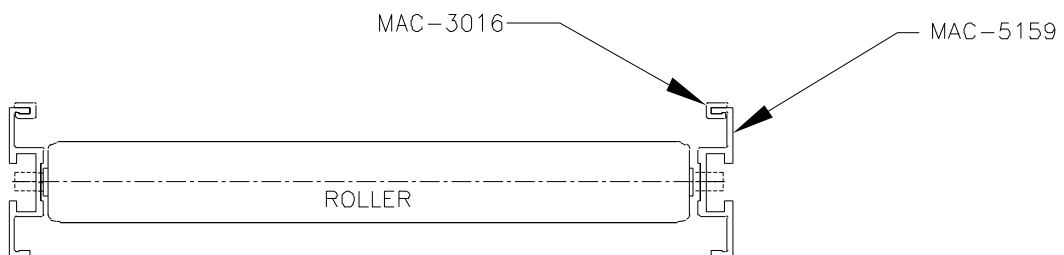
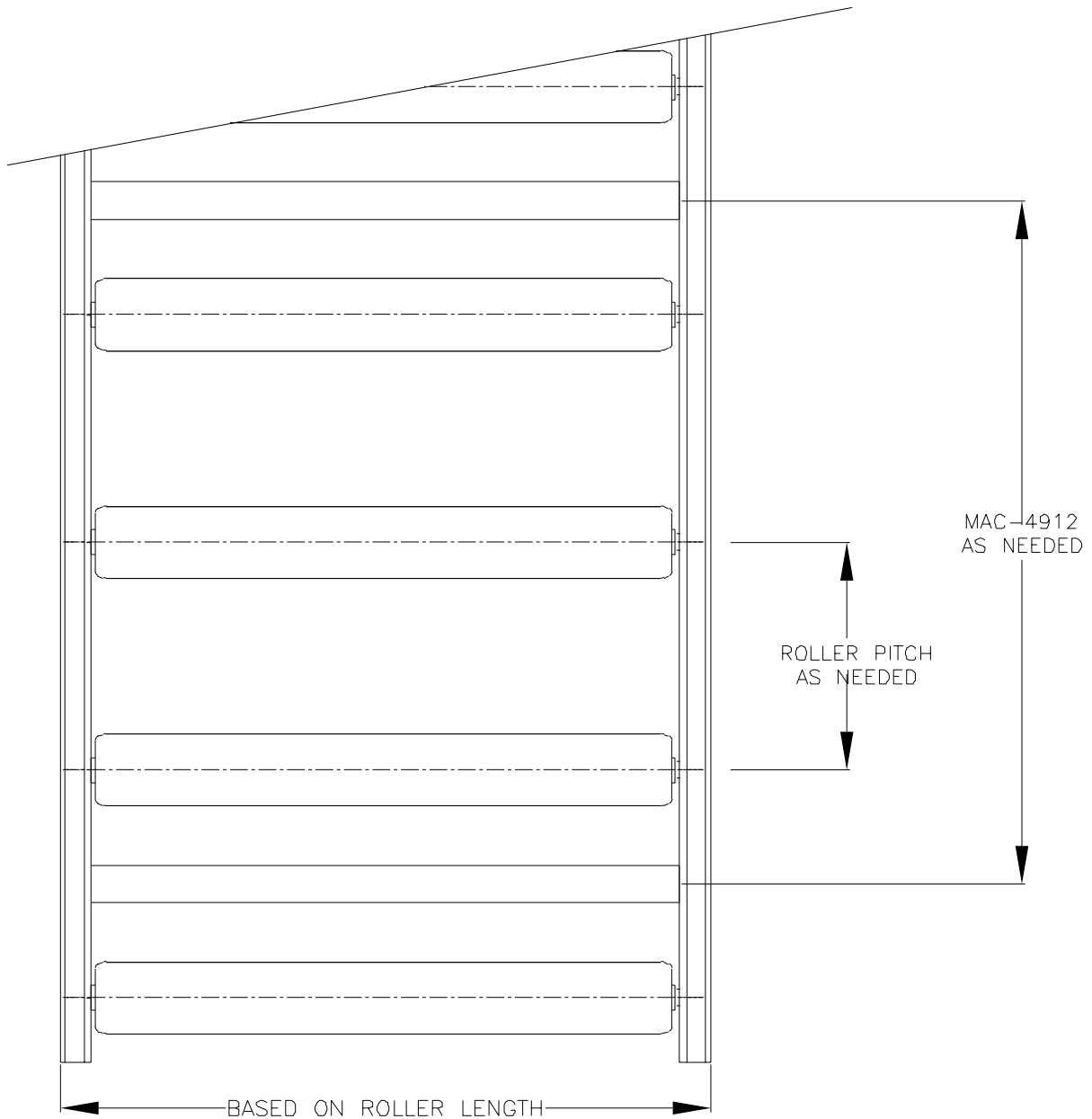
882T-K7.50 Solutions with Various Rails



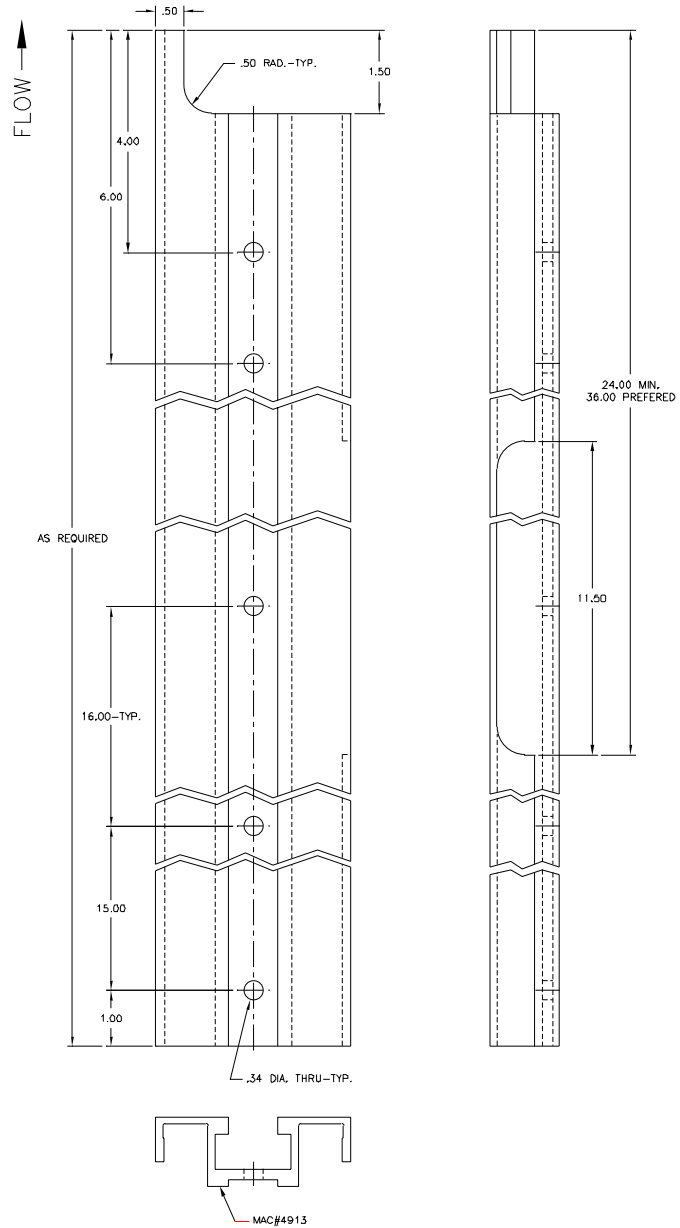
PLASTIC BELT CROSS SECTION



ROLLER CONVEYOR CROSS SECTION

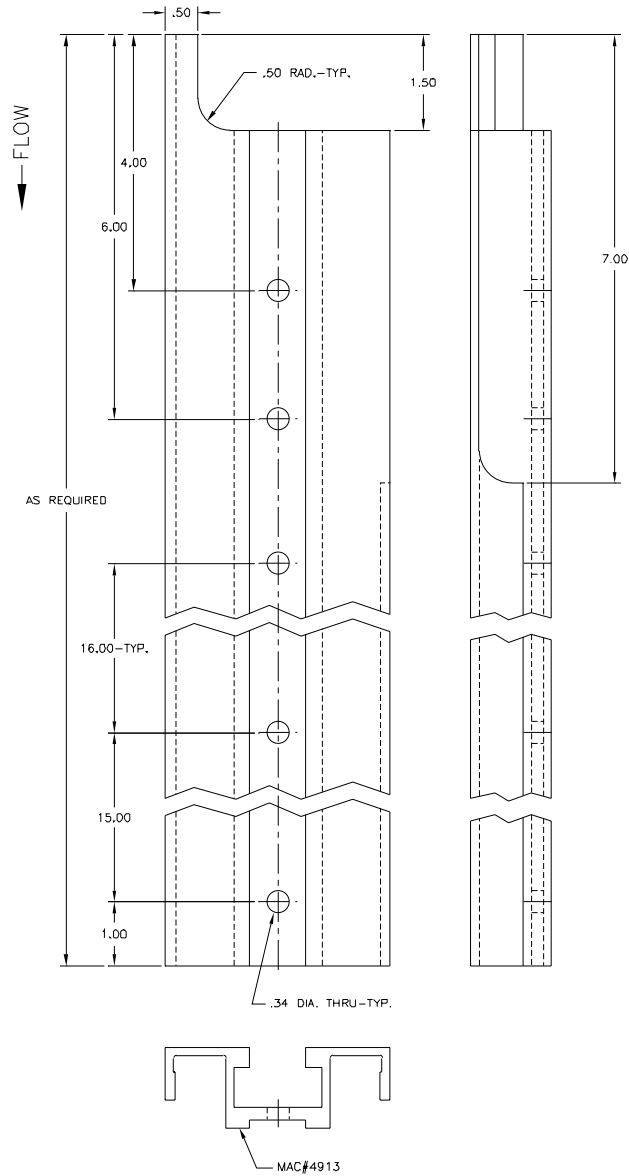


Setup Parameters Typical Drive Rail



**NOTE: DIMENSIONS APPLY TO ALL RAILS.
2 PCS. REQUIRED PER END DRIVE ASSEMBLY
(ONE LEFT AND ONE RIGHT) RIGHT SHOWN**

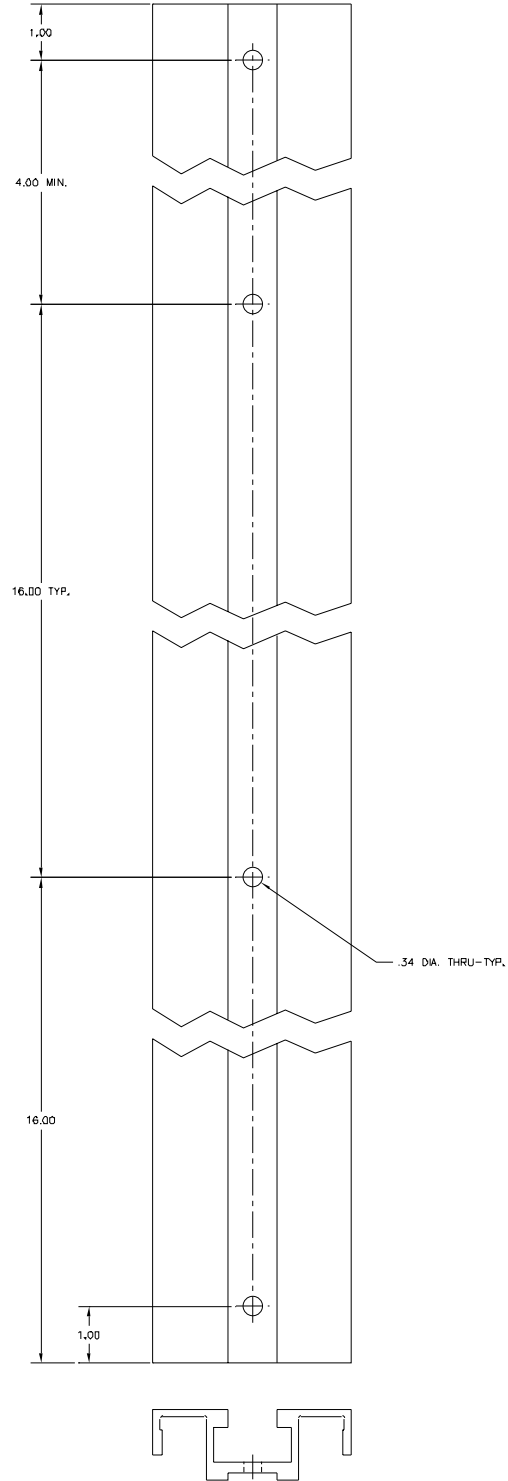
Setup Parameters Typical Idler Rail



**NOTE: DIMENSIONS APPLY TO ALL RAILS.
2 PCS. REQUIRED PER END DRIVE ASSEMBLY
(ONE LEFT AND ONE RIGHT) RIGHT SHOWN**

Setup Parameters

Typical Rail Hole Spacing



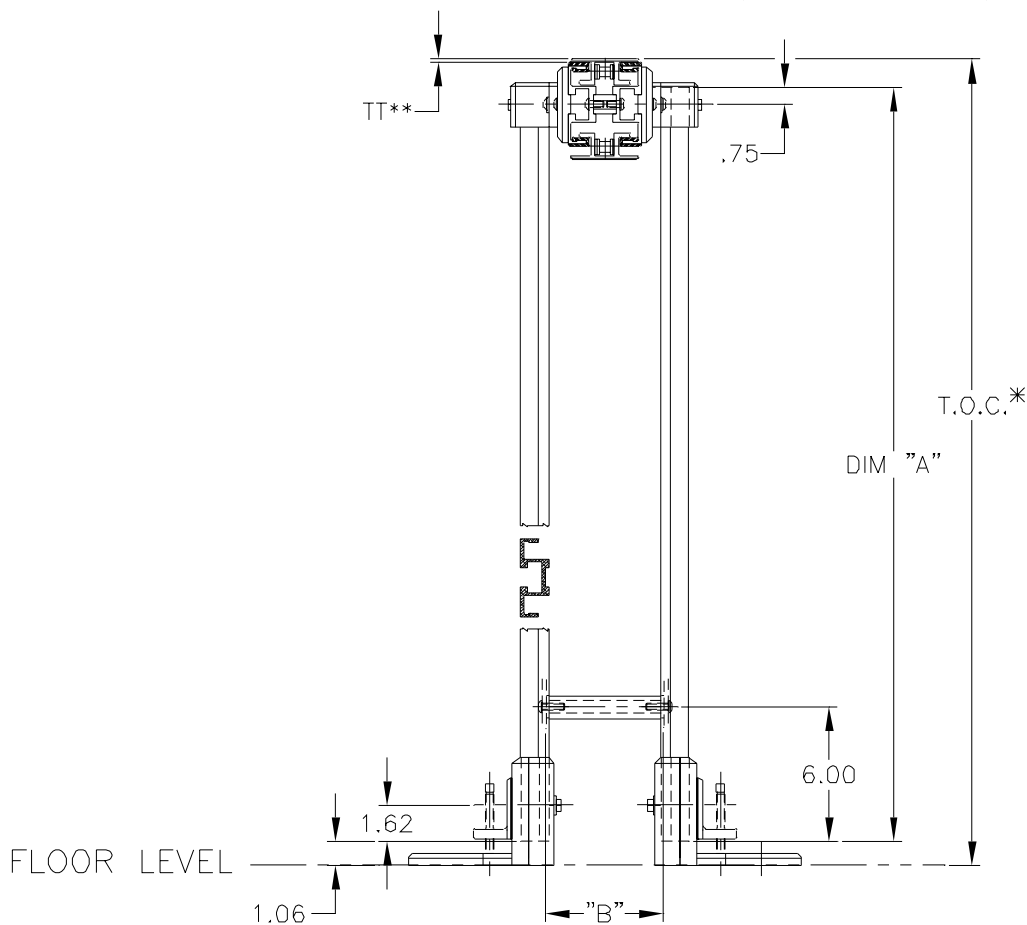
4912locinter.dwg

Setup Parameters

Typical Single Leg Support

CUT LENGTH FOR SUPPORT LEGS FOR CONVEYORS WITH THE FOLLOWING BOX FRAME CONFIGURATIONS.

		DIM "A" =
MAC-4913	$\text{DIM "A"} = \text{T.O.C.} - (\text{TT}^{**} + 2.188)$	
MAC-5159	$\text{DIM "A"} = \text{T.O.C.} - (\text{TT}^{**} + 2.188)$	
MAC-5095	$\text{DIM "A"} = \text{T.O.C.} - (\text{TT}^{**} + 3.625)$	
MAC-5207	$\text{DIM "A"} = \text{T.O.C.} - (\text{TT}^{**} + 2.312)$	



FOR CUT LENGTH OF MAC-4912 SPACER BAR FOR SINGLE COLUMN SUPPORTS USING MAC-4913 EXTR. WITH MAC-2921,22,23 ASS'Y.

$$\text{DIM "B"} = \text{BOX FRAME WIDTH} + 2.00$$

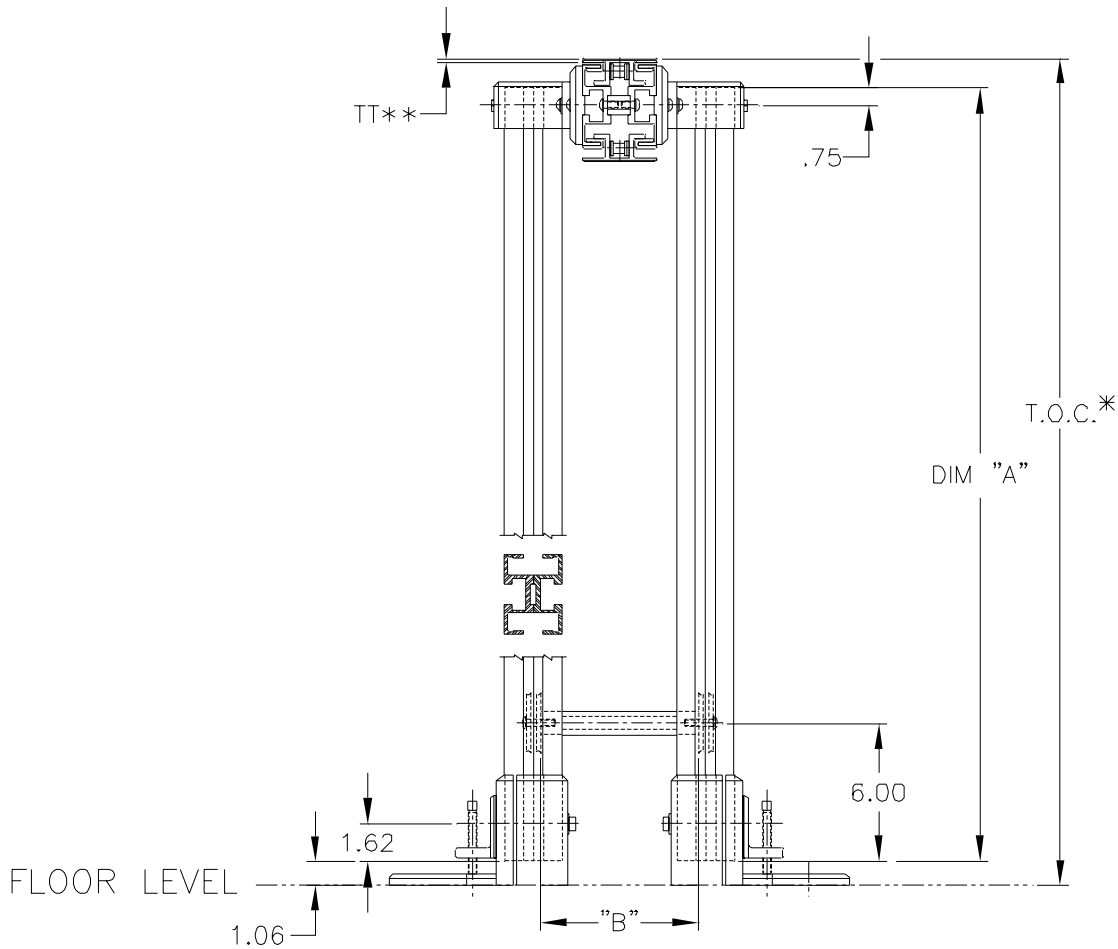
* = TOP OF CHAIN
 TT** = CHAIN FLIGHT THICKNESS

Setup Parameters

Typical Dual Leg Support

CUT LENGTH FOR SUPPORT LEGS FOR CONVEYORS WITH THE FOLLOWING BOX FRAME CONFIGURATIONS.

		DIM "A" =
MAC-4913	$\text{DIM "A"} = \text{T.O.C.} - (\text{TT}^{**} + 2.188)$	
MAC-5159	$\text{DIM "A"} = \text{T.O.C.} - (\text{TT}^{**} + 2.188)$	
MAC-5095	$\text{DIM "A"} = \text{T.O.C.} - (\text{TT}^{**} + 3.625)$	
MAC-5207	$\text{DIM "A"} = \text{T.O.C.} - (\text{TT}^{**} + 2.312)$	



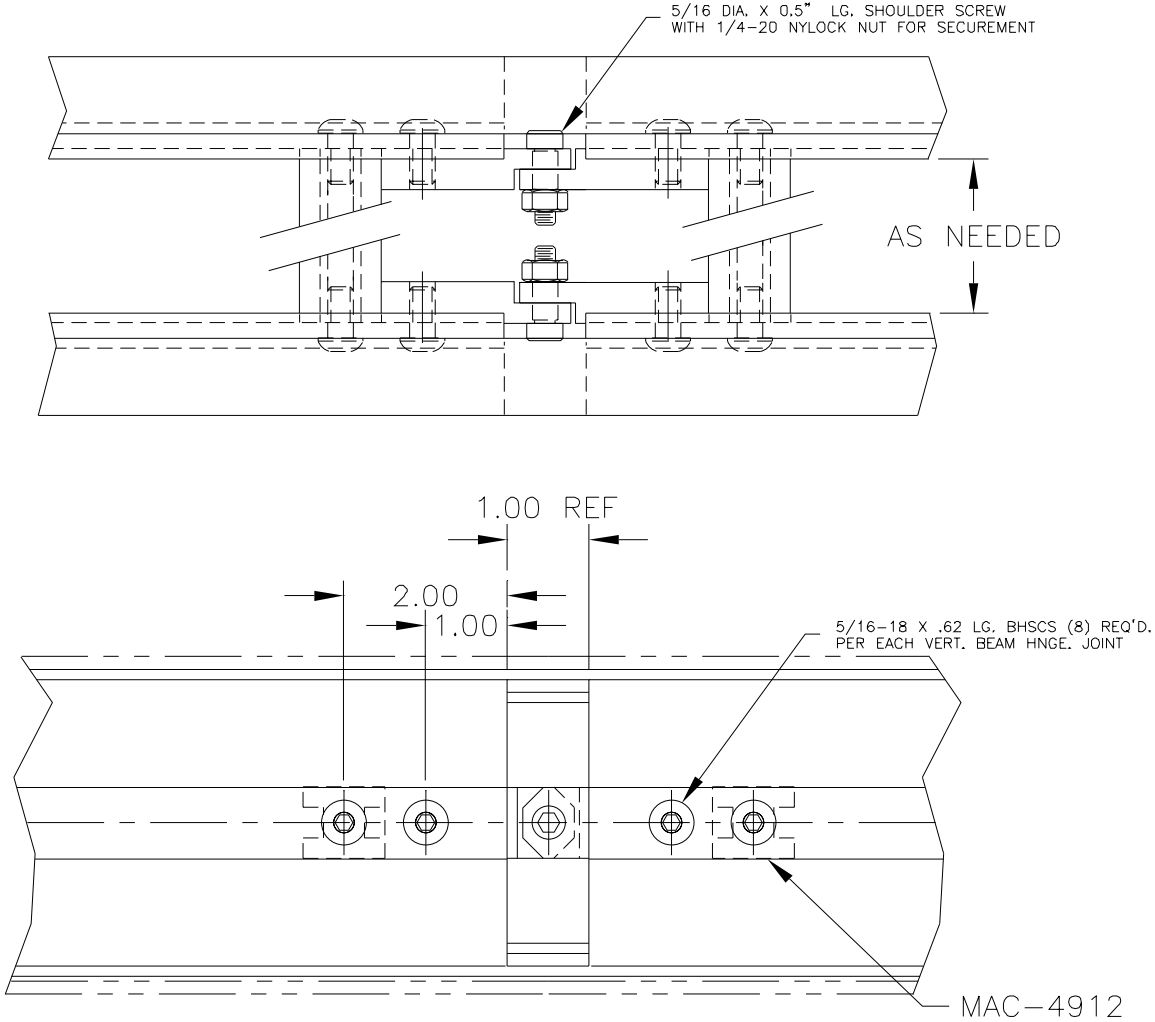
FOR CUT LENGTH OF MAC-4912 SPACER BAR FOR DUAL COLUMN SUPPORTS USING MAC-4913 EXTR. WITH MAC-2921,23,24 ASS'Y.

$\text{DIM "B"} = \text{BOX FRAME WIDTH} + 3.62$

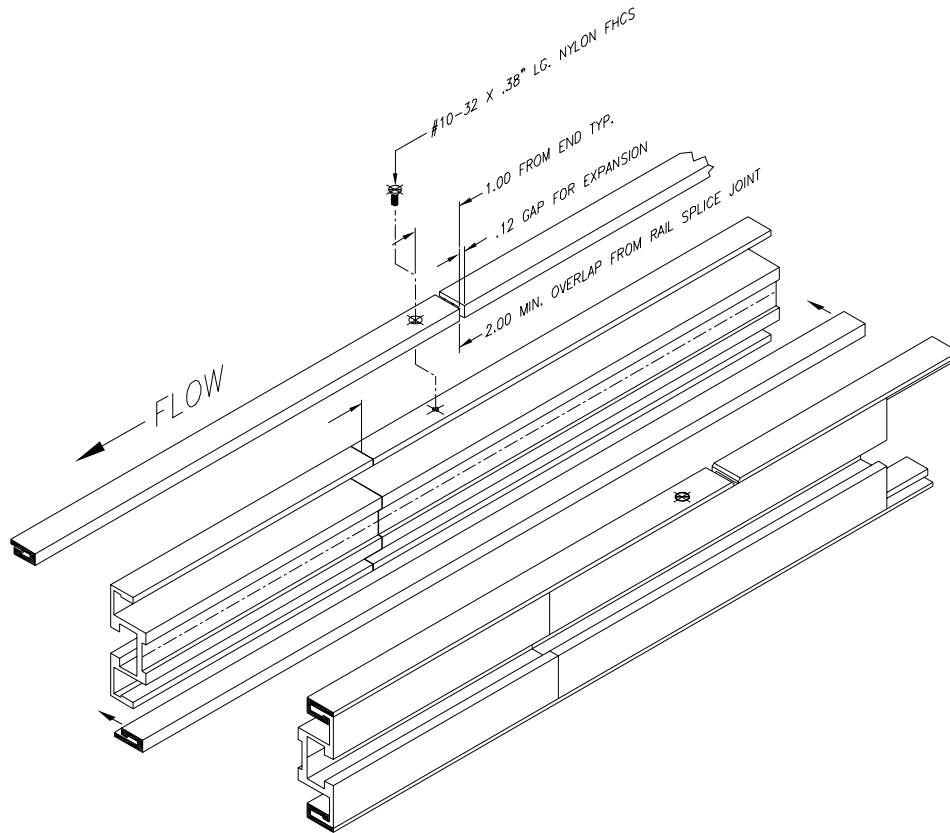
* = TOP OF CHAIN
 TT** = CHAIN FLIGHT THICKNESS

Setup Parameters

Typical VBH Hole Spacing



Glide Strip MAC-3001 Attachment Guide



Assembly Instructions:

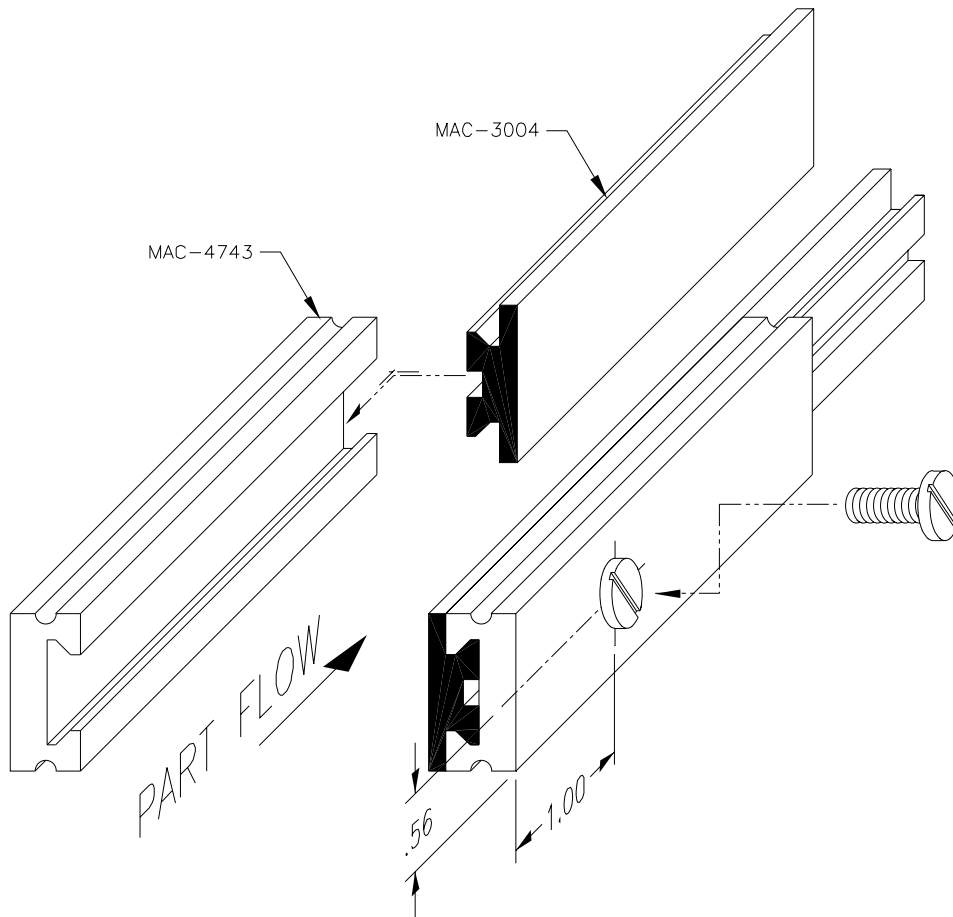
Start assembly of the glide strips at the drive end of the conveyor when attaching the top glide strips. For the return glide strips on the bottom side of the conveyor start at the idler ends. The ends of the glide strips should be offset from each other at least one inch to avoid a chain clicking noise. It is recommended not to have gaps in the glide strips in curves or corners.

Snap MAC-3001 glide strip into the mating Conveyor Rail tab (MAC-4913). Insure the tab of the glide strip is oriented correctly to engage the snap feature in the conveyor rail frame. A 2 inch minimum overlap between the conveyor rail splice joint and the ends of the glide strip is required. A gap of at least 1/8 inch is required between each glide strip to allow for expansion. Slightly bevel the leading edge of each strip.

At the leading edge of each glide strip secure it to the Guide Rail by drilling, tapping, and c'sink for a nylon 10-32 x 3/8 flat head screw. After assembly trim off any portion of the screw protrudes out beyond the glide strip.

When attaching the MAC-3016 Glide Strip to MAC-5159 Conveyor Rail use a 8-32 x 3/8 flat head screw.

Glide Strip MAC-3004 Attachment Guide



Assembly Instructions:

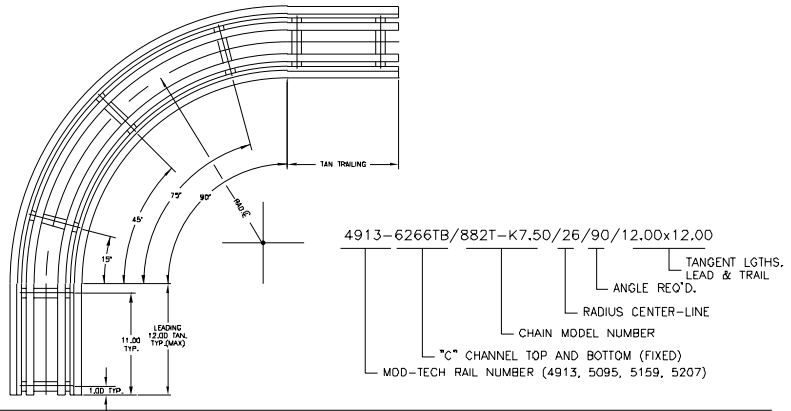
Slide Glide Strip (MAC-3004) into the mating dove tail slot of Guide Rail (MAC-4743). Insure that there is at least a 2 inch overlap between the ends of the guide rail and the ends of the glide strip.

A gap of at least 1/8 inch is required between each glide strips to allow for expansion. Slightly bevel the leading edge of each strip.

At the leading edge of each glide strip secure it to the Guide Rail by drilling and tapping thru for a nylon 1/4-20 x 5/8 pan head screw. After assembly trim off any portion of the screw protrudes out beyond the glide strip.

HOW TO ORDER A CURVE

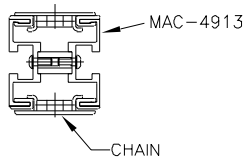
SAMPLE



FOR QUOTING SPECIFY MAC-74XX
BASED ON YOUR CONVEYOR CONFIGURATION:

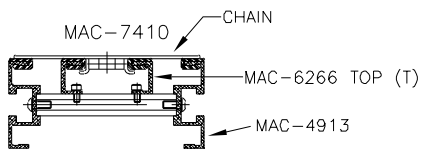
TO ORDER FILL IN BELOW BASED
ON YOUR CONVEYOR CONFIGURATION.
INCLUDE AUTOCAD DRAWING SHOWING
ALL DETAILS OF THE CURVE

MAC-7400



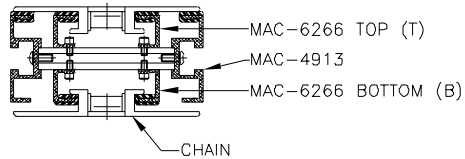
-----000000/-----/---/---/-----x-----

MAC-7410



-----6266T/-----/---/---/-----x-----

MAC-7420



-----6266TB/-----/---/---/-----x-----

Integrators / Partners

Conveyor Integrators:

Bel-Fab Automation

PO Box 786
Highway 66 South
Rogersville, TN 37857
Phone: (423) 235-4163
Fax: (423) 235-6076
www.bel-fab.com

Larry Sullins - Sales

bel-fab@usit.net

Joe Sams - Engineering Manager

bel-fab@usit.net

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4858 East Stae Road, 46
Greensburg, IN 47240
Phone: (812) 663-2023
Fax: (812) 663-7079
www.CustomConveyor.com

Tim Stapp - V.P. Sales

Mial @CustomConveyor.com

Ronald Comus - Engineering Manager

DiversiTech Systems, Inc.

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