

BENETECH® 

MAXZONE

INSTALLATION GUIDE

! IMPORTANT !**BENETECH, INC. HEREBY DISCLAIMS ANY LIABILITY FOR, BUT NOT LIMITED TO:**

- IMPROPER INSTALLATION OF EQUIPMENT
- IMPROPER SIZING OF EQUIPMENT
- DAMAGE DUE TO CONTAMINATION OF MATERIAL
- USER'S FAILURE TO INSPECT EQUIPMENT
- USER'S FAILURE TO MAINTAIN EQUIPMENT
- USER'S FAILURE TO TAKE REASONABLE CARE OF THE EQUIPMENT
- INJURIES OR DAMAGE RESULTING FROM USE OR APPLICATION OF THIS PRODUCT CONTRARY TO INSTRUCTIONS AND SPECIFICATIONS CONTAINED HEREIN.

BENETECH, INC.'S LIABILITY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF EQUIPMENT SHOWN TO BE DEFECTIVE.**! SAFETY !**

Review and understand all safety rules given herein along with local and Governmental standards and regulations. Know and understand the American National Standards Institute (ANSI) z244.1-1982 lockout/tagout procedures, the American National Standard for Personnel Protection - Lockout/Tagout of Energy Sources - Minimum Safety Requirements and the Occupational Safety and Health Administration (OSHA) Federal Register, Part IV, 29 CFR Part 1910, Control of Hazardous Energy Source (Lockout/Tagout); Final Rule.

Also observe all local and Governmental regulations concerning entry into confined spaces, welding, cutting, grinding, wash-down procedures and all Personal Protective Equipment (PPE) regulations.

The following notations are used throughout in this manual.

! DANGER !

Danger: Denotes immediate hazards that will result in severe personal injury or death.

! WARNING !

Warning: Denotes hazards or unsafe practices that could result in personal injury.

! IMPORTANT !

Important: Denotes instructions that must be followed for proper installation and/or operation of equipment.

NOTE

Note: Denotes general items to assist the reader/ installer/ operator.

Please pay close attention to all of these items and warnings.
They have been included here for your safety and for ease of installation.

All safety rules defined in this document and all owner/employer as well as State and Federal safety rules must be strictly adhered to when working on/with this, or any, conveyor plow system.



! DANGER !

Do not touch or go near the conveyor belt or conveyor accessories when the belt is running. Your body or clothing can get caught and you can be pulled into the conveyor, resulting in severe injury or death

! DANGER !

Before installing, servicing, or adjusting the MaxZone, turn off AND lock out/tag out all energy sources to the conveyor and conveyor accessories according to ANSI standards. Failure to do so could result in serious injury or death.

! DANGER !

If this equipment is to be installed in an enclosed area, observe all confined space entry regulations and test the atmosphere for gas levels and dust content levels before using a cutting torch, welding equipment or electric hand tools. Using a torch, welding, grinding or drilling in an area with gas or dust may cause an explosion and/or fire resulting in serious injury or death.

! WARNING !

Before using a cutting torch, welders, or grinding equipment, cover the conveyor belt with a fire retardant/resistant cover. Make sure a water source/fire hose is readily available AND OPERATIONAL. Failure to do so can allow the belt to catch fire.

! WARNING !

Conveyor plows are heavy and may require two people to lift. Attempting to lift the plow without assistance could result in injuries or damage to the equipment.

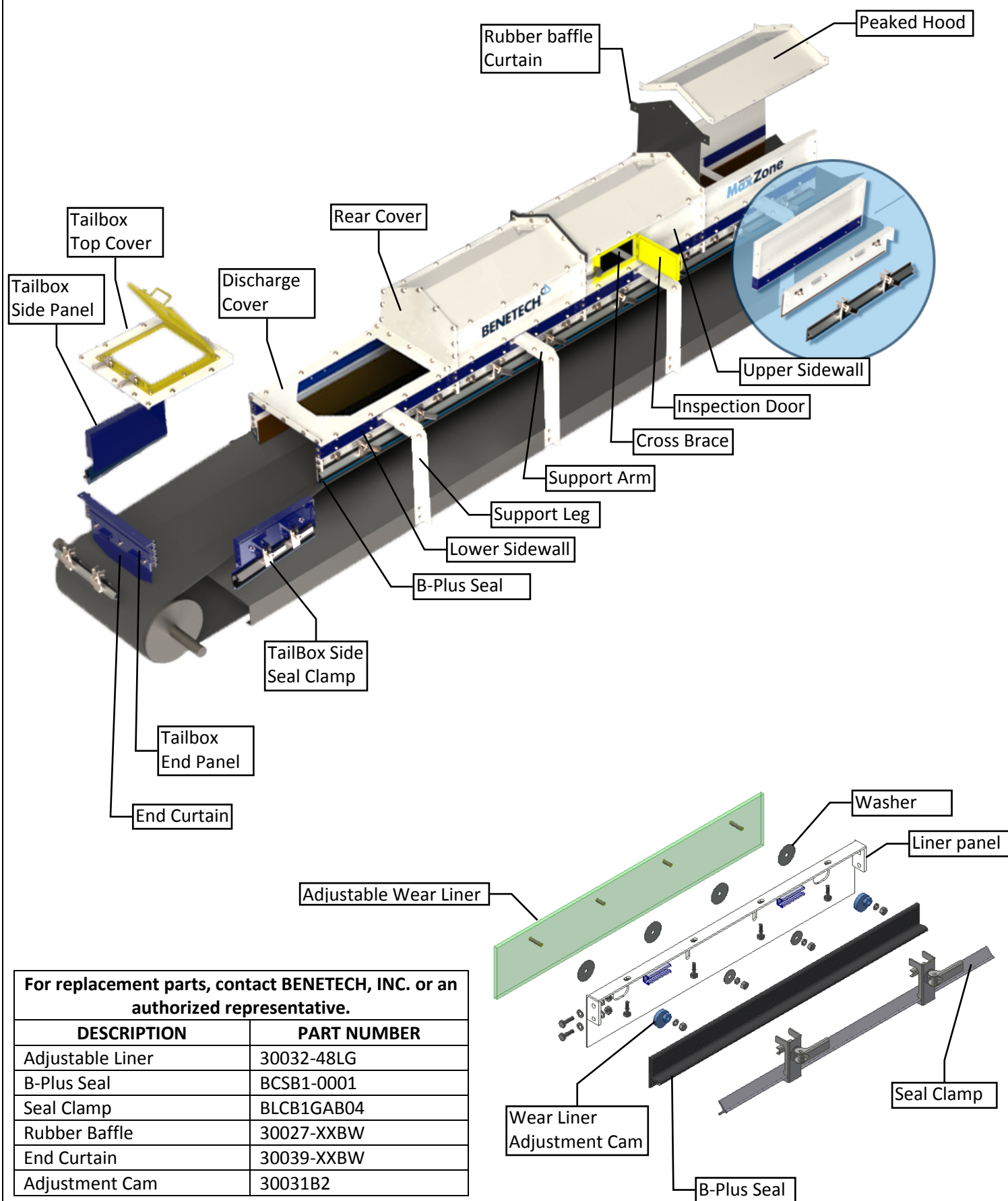
Table of Contents

Safety/Warnings.....2-3

Provided Components.....5

Pre-Install Safety.....6

Installation Instructions.....7-20



For replacement parts, contact BENETECH, INC. or an authorized representative.

DESCRIPTION	PART NUMBER
Adjustable Liner	30032-48LG
B-Plus Seal	BCSB1-0001
Seal Clamp	BLCB1GAB04
Rubber Baffle	30027-XXBW
End Curtain	30039-XXBW
Adjustment Cam	30031B2

See sheet 11A for part references

Before Installing the MaxZone

1. Inspect ALL shipping containers for damage and correct number of items (skids, pallets, cartons, boxes, etc.) being delivered. Report damage and/or shortages to delivery service immediately and fill out delivery service's claim form. Keep ALL damaged goods for examination. Benetech Inc is NOT responsible for damage occurring during transit.

2. All Benetech Inc. MaxZones are shipped from our facilities in parts. Care should be taken while unpacking to ensure no parts are lost or damaged as the equipment is moved to its desired location. Dispose of shipping containers in an approved manner

3. If any items are missing, IMMEDIATELY contact BENETECH, INC. or an authorized representative.

4. Gather tools. Minimum tools required for installation are:

- Tape measure/ String
- Torch/Hole Saw
- Level/Straight Edge
- Welder/Drill
- Open/Box End Wrenches
- Socket Set
- Marker/Soapstone (Welders chalk)



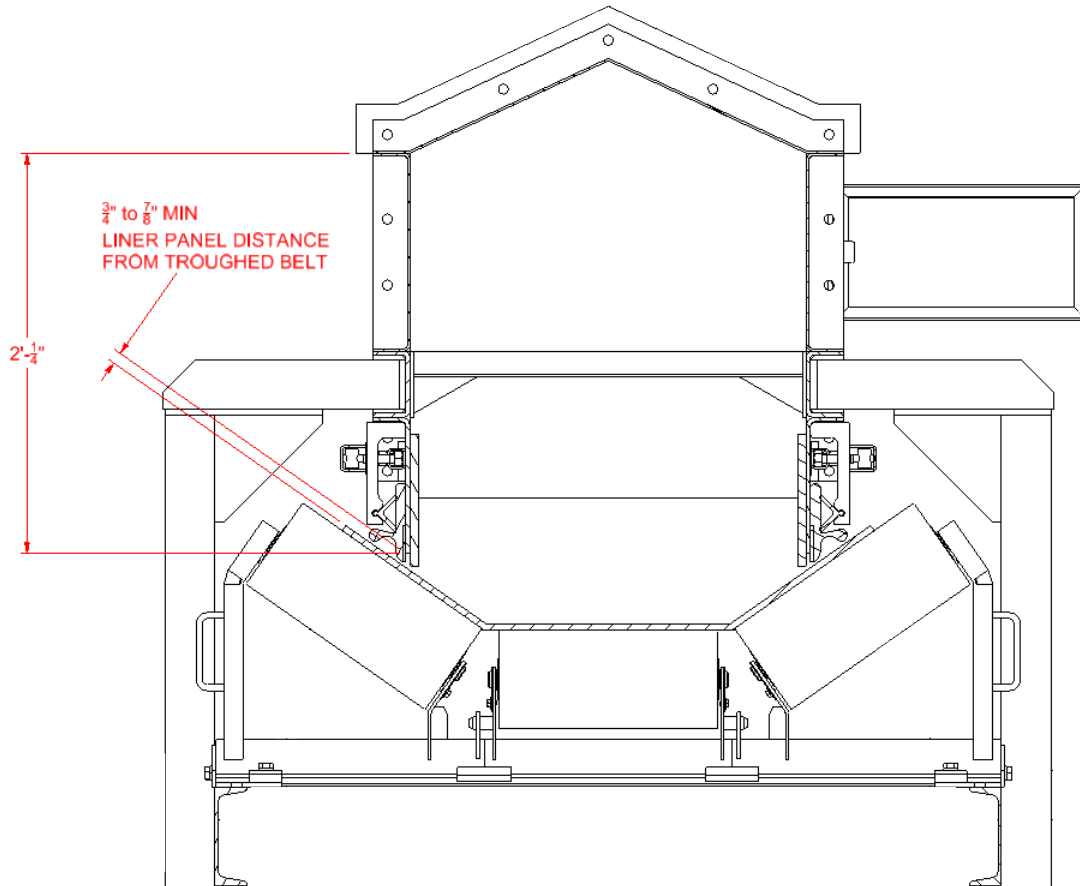
5. If using a cutting torch or welding, test atmosphere for gas level or dust content. Cover conveyor belt with fire retardant cover. Verify locations of fire extinguishers and operational water hoses prior to begin cutting/welding operations.

! WARNING !

Before installing equipment, turn off AND lock out/tag out all energy sources to the conveyor and conveyor accessories according to ANSI standards and local plant regulations. Failure to do so could result in serious injury or death.

If equipment will be installed in an enclosed area, the atmosphere in the structure/area must be tested for gas levels and dust content levels before using a cutting torch, welding equipment, grinding equipment or electric powered tools. Using a cutting torch, welding, drilling or grinding in an area with gas or dust may cause an explosion.

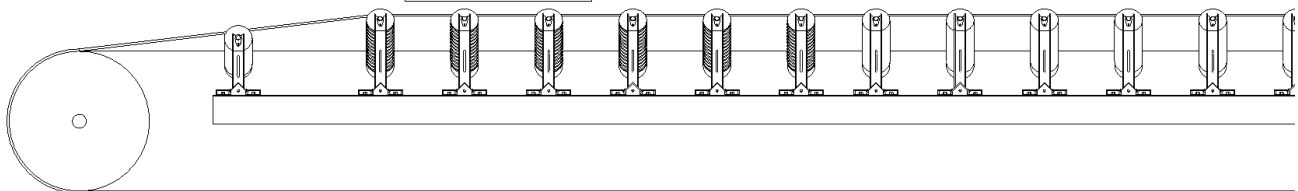
- 1) After existing structure is removed, align new parts spaced 1" from the bottom of the panel that the liner attaches to. *Mark the height of the flat cover on the existing discharge chute (approximately 1'-1/4" from liner panel bottom).*



Customer chute

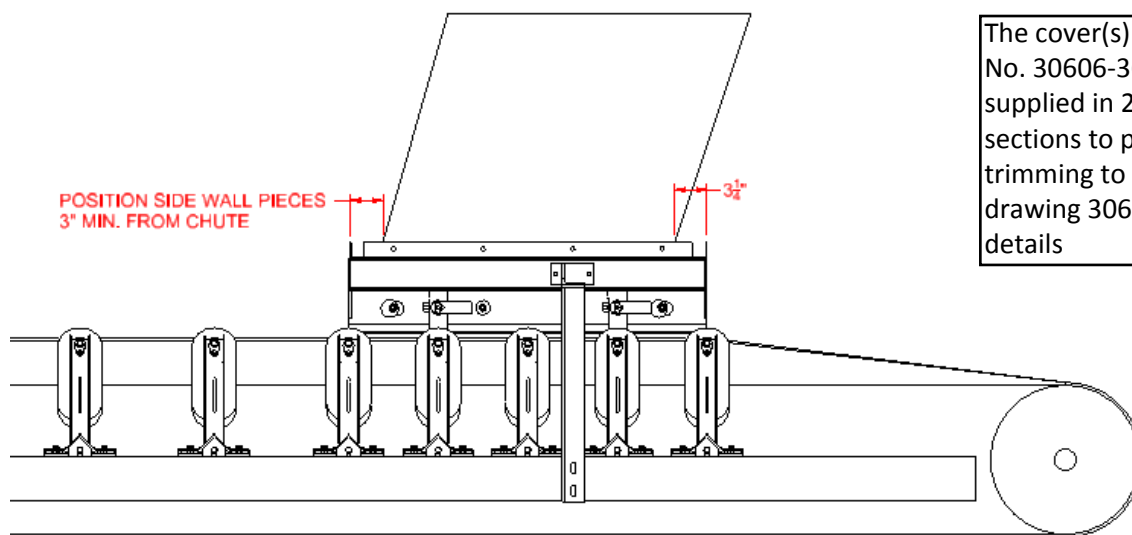
Leave chute back and part of the side walls (if possible) intact below the marked line.

Below the line marked from the belt trough, remove the *front* chute section.



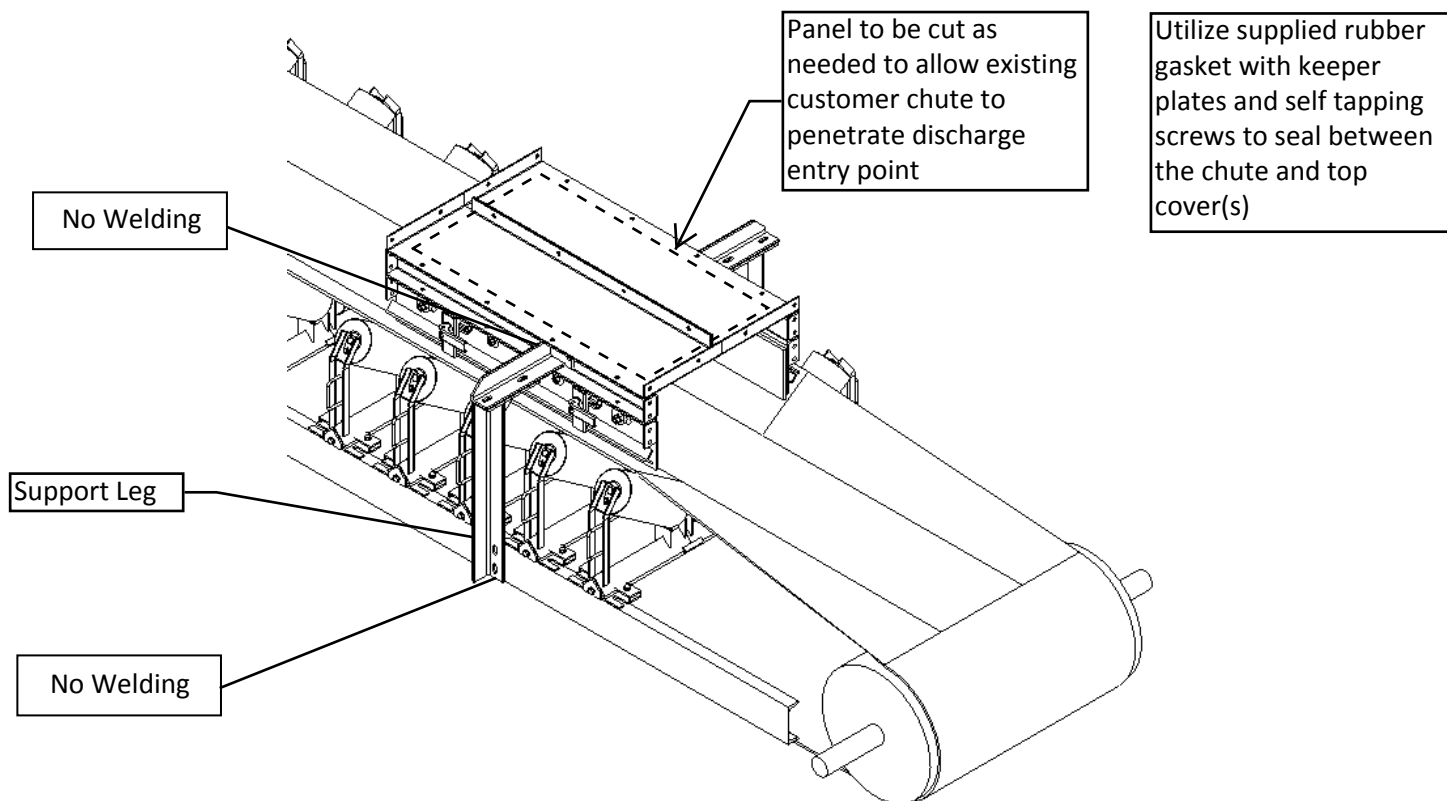
- 2) Position side wall and discharge cover at the height of the drawn line, and space the covers a minimum of 3" from either the front or back end to chute. Measure from the point where the line intersects with the front or back slope of the chute.

NOTE: Chute can be located anywhere lengthwise on top cover, but the 3" minimum must be maintained so hardware can be installed. ½-13 hardware is used for all connections.



The cover(s) with Part No. 30606-36BW are supplied in 2-4 ft sections to permit trimming to fit. See drawing 30606 for details

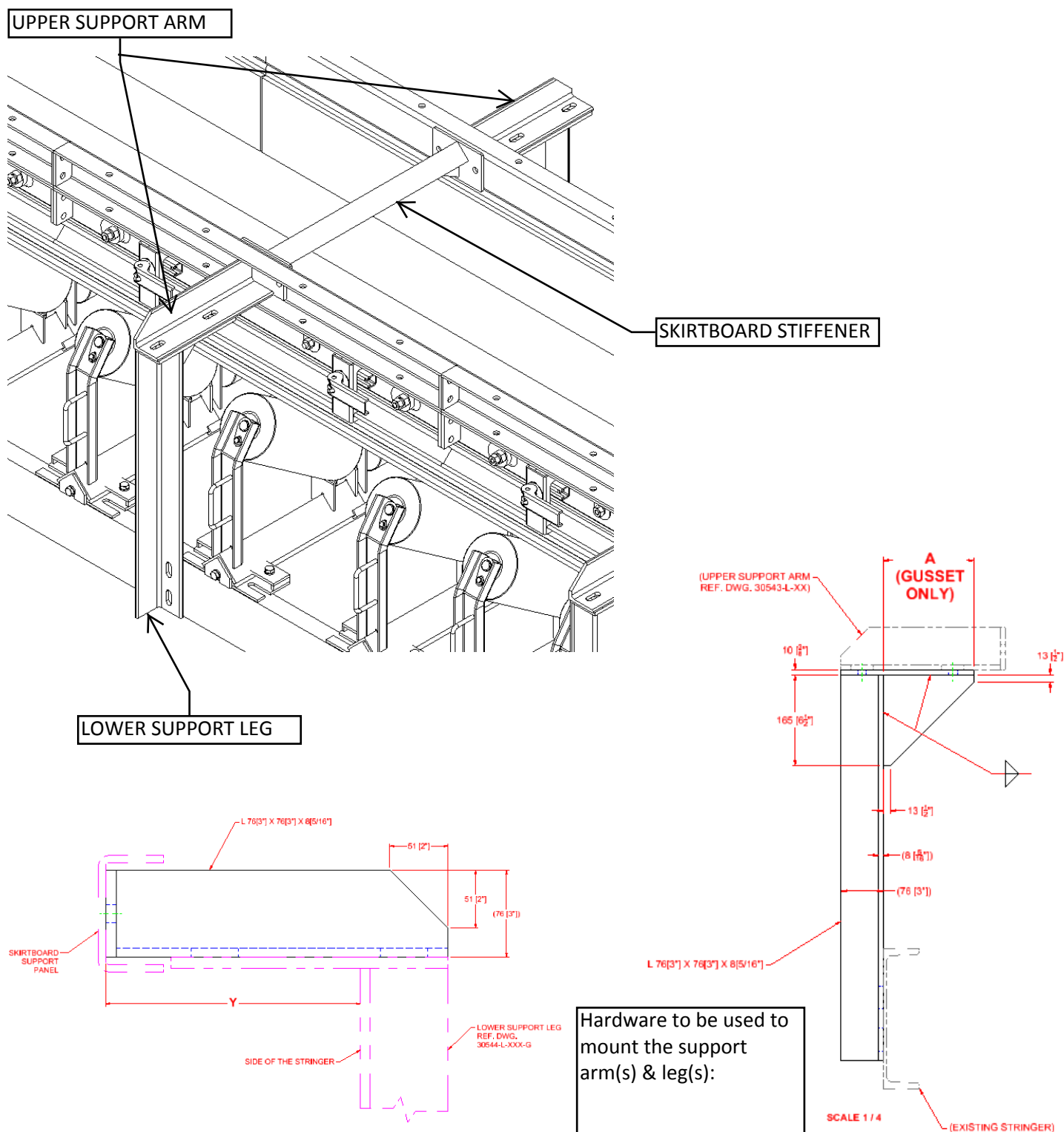
- 3) Cut opening on flat cover (centered) and locate at height determined in step 1. Mount support legs and attach side wall/liner panels using 1/2"-13-1-1/2" hardware with flat and lock washers. Double check the liner panel distance from the belt (shown in step 1).



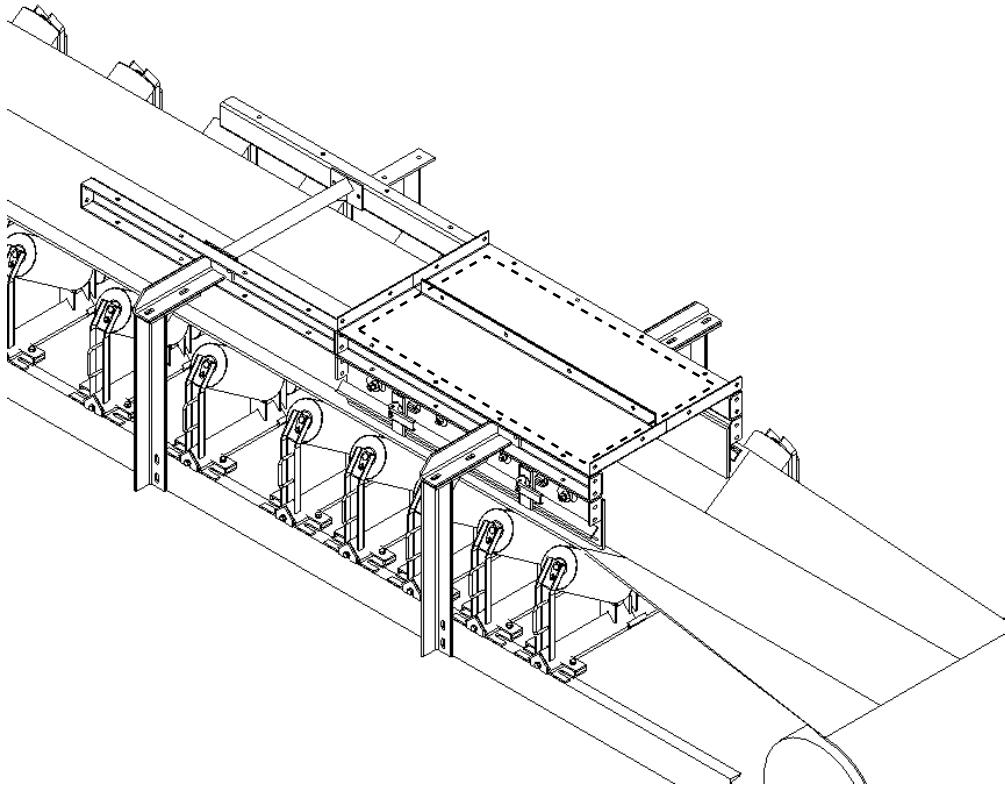
3b) Crucial Support Leg mounting details

Additional support material/modifications may be required if piping or other interference is running along the conveyor frame (stringers) where the Maxzone support bracket would be attached to the conveyor frame.

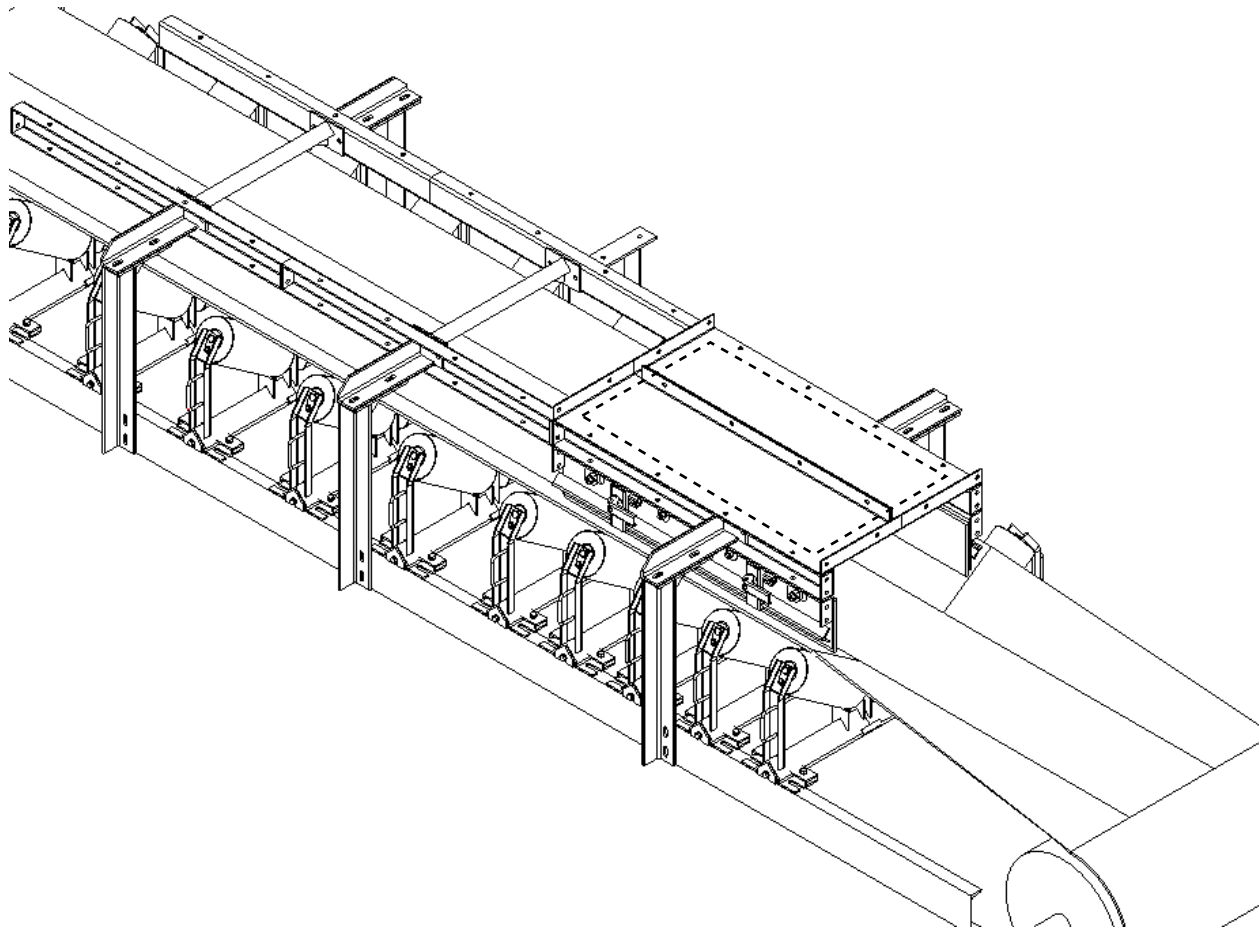
Benetech highly recommends field drilling and BOLTING the lower support bracket post holders to the conveyor frame “or other suitable structure”, NOT welding the lower support bracket post holders.



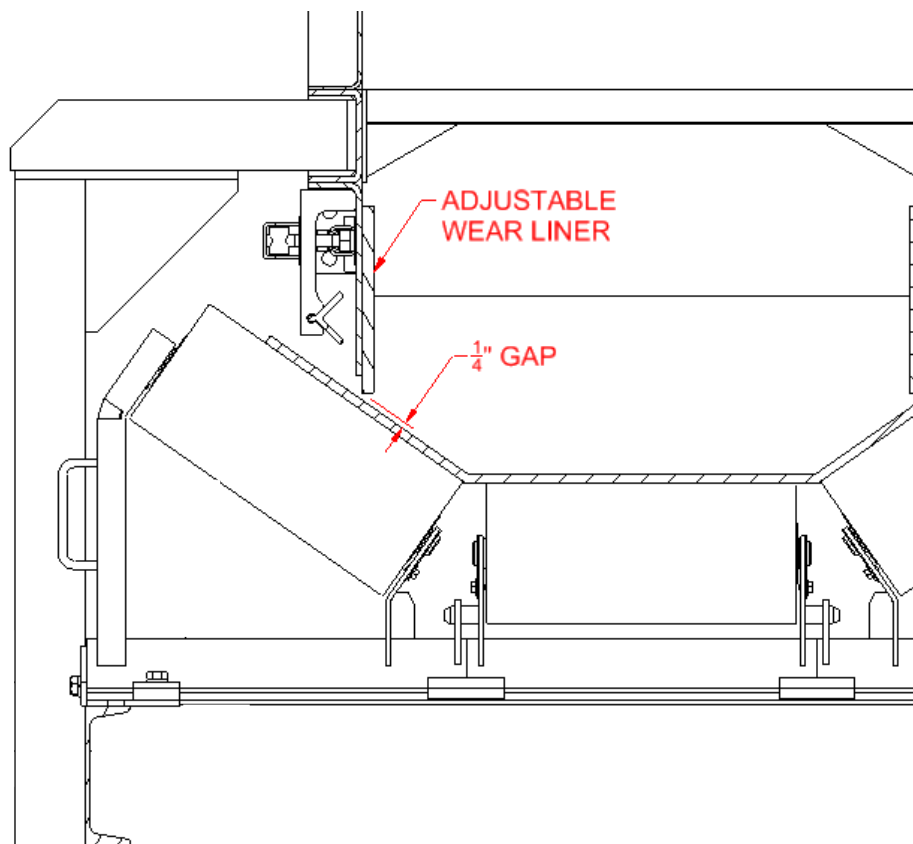
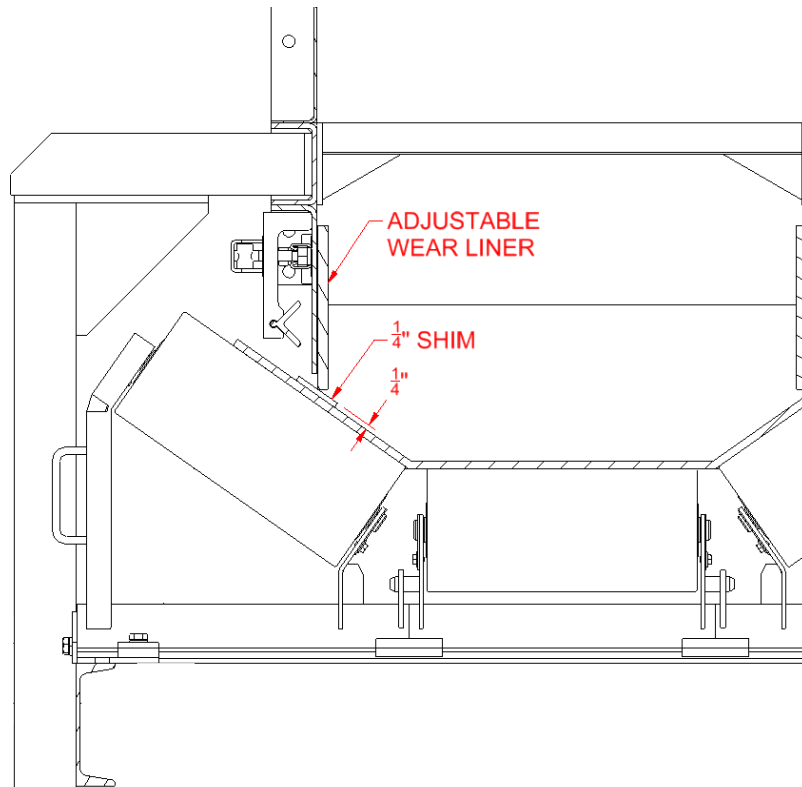
- 4) Attach the next set of lower sidewalls and supports with the addition of the cross brace.



- 5) Repeat step 4 until the remaining of the supplied sections are completed.

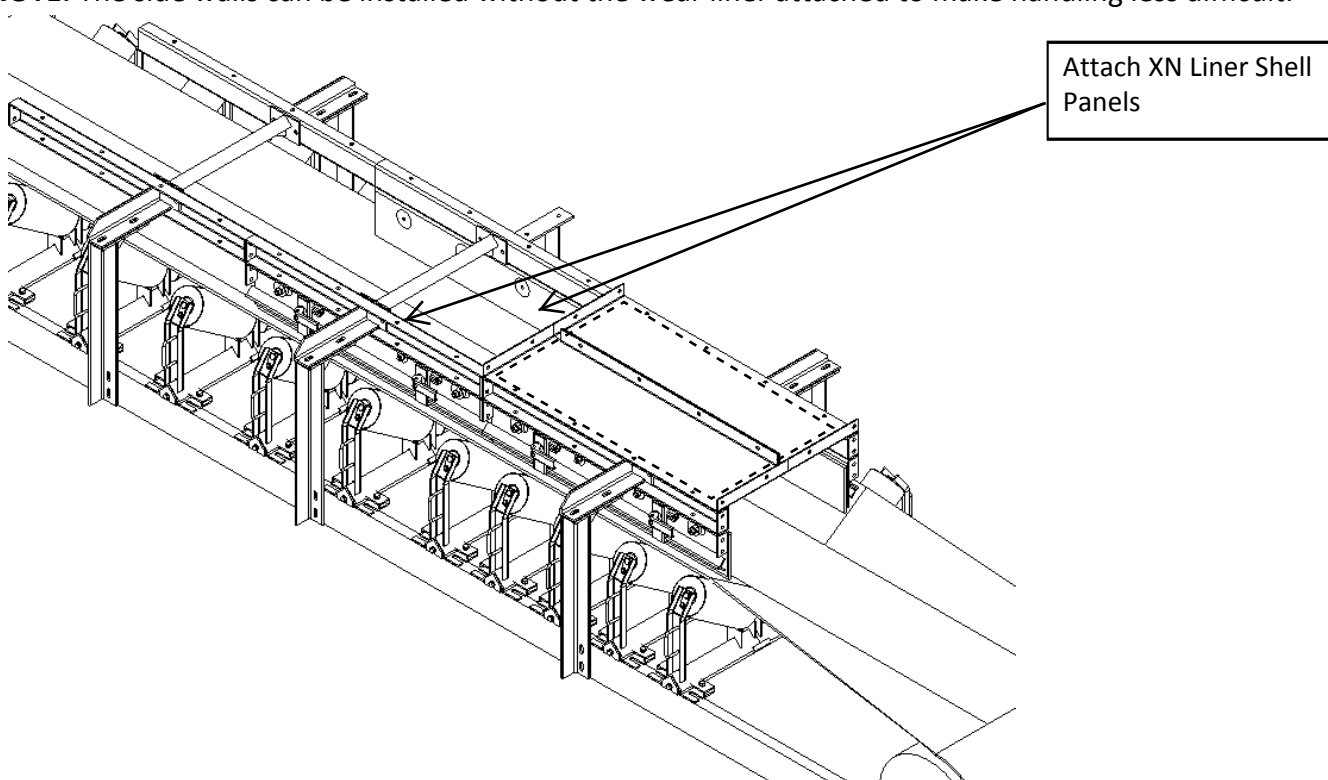


- 6) The adjustable wear liners mounted at the chute discharge should now be adjusted down so that the liners are set approximately $\frac{1}{4}$ " from the belt trough. Placing a $\frac{1}{4}$ " shim on the trough will make this adjustment easier.

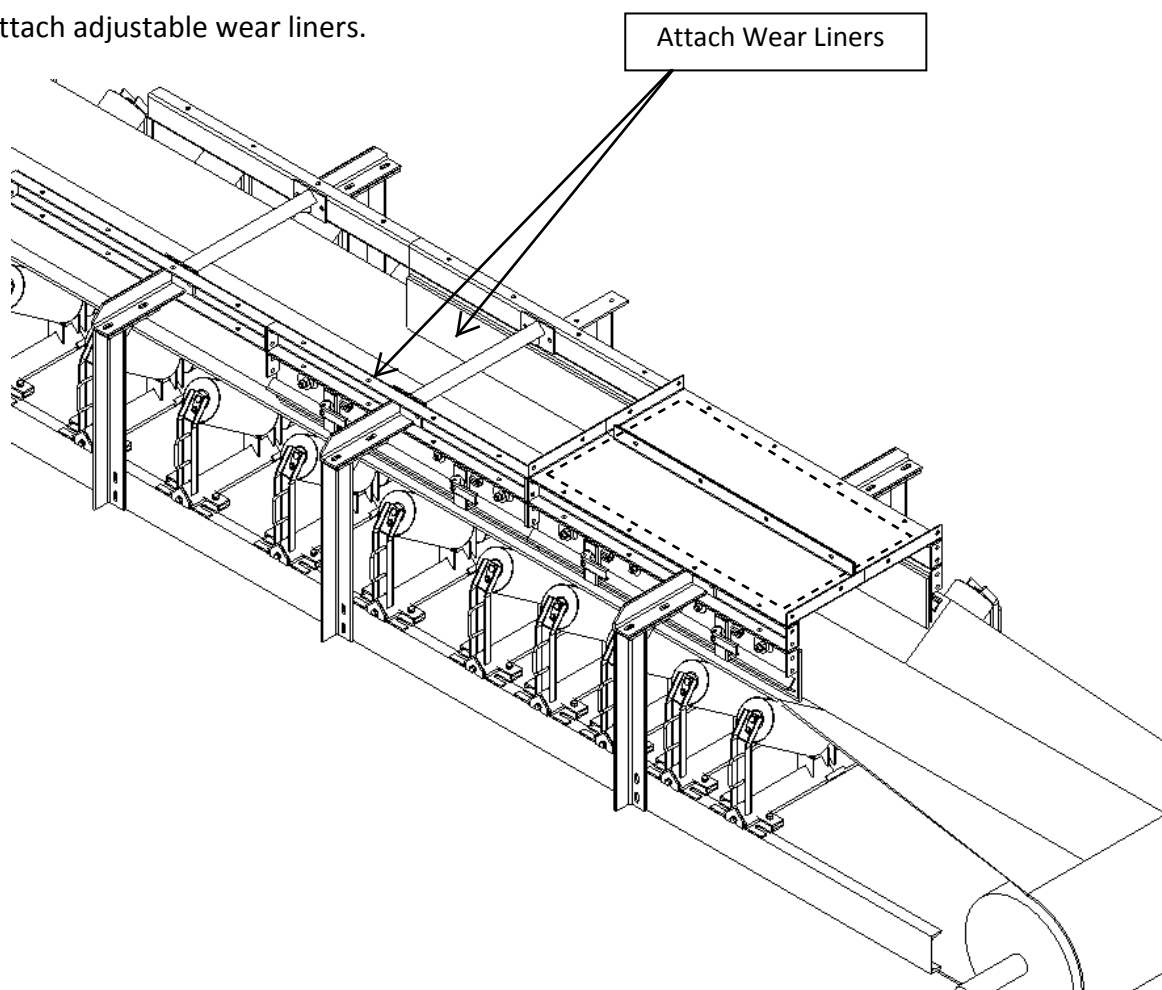


- 7) Attach the next set of liner panels below the lower sidewalls.

NOTE: The side walls can be installed without the wear liner attached to make handling less difficult.

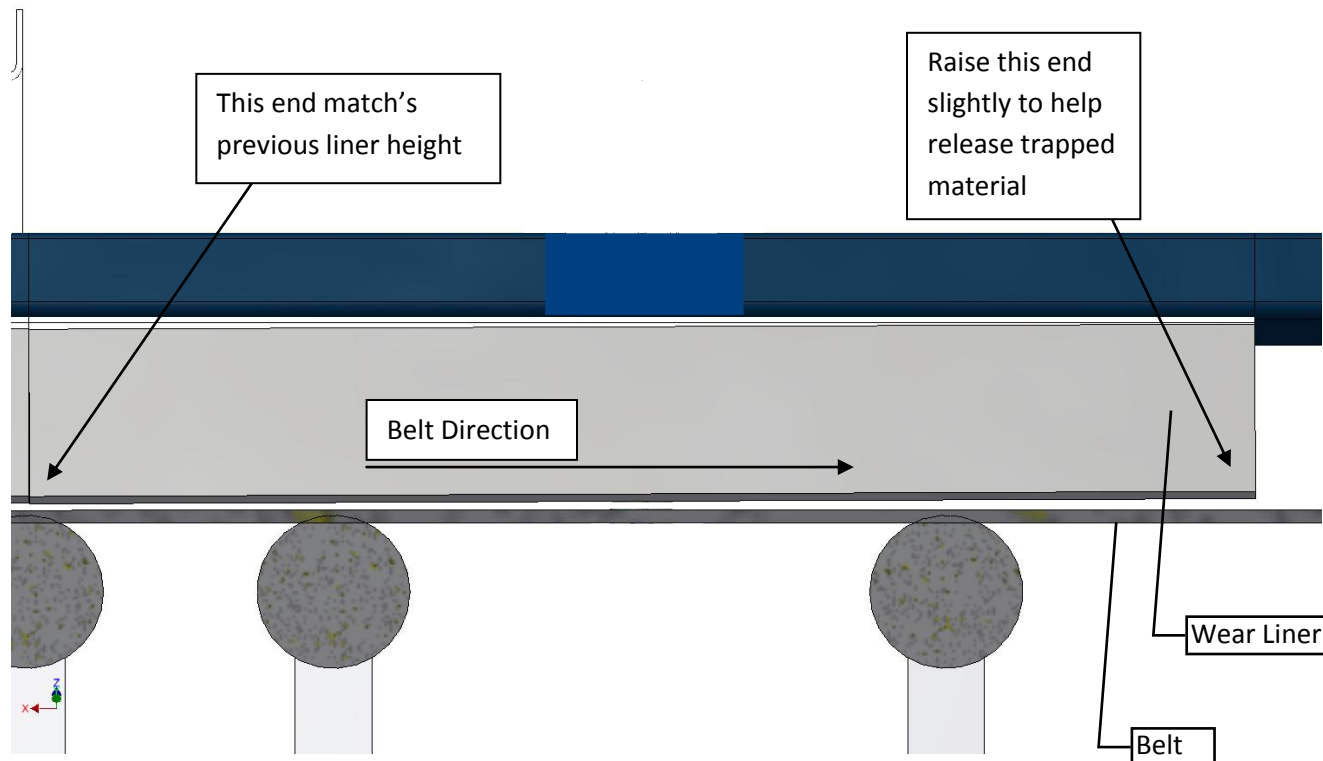


- 8) Attach adjustable wear liners.



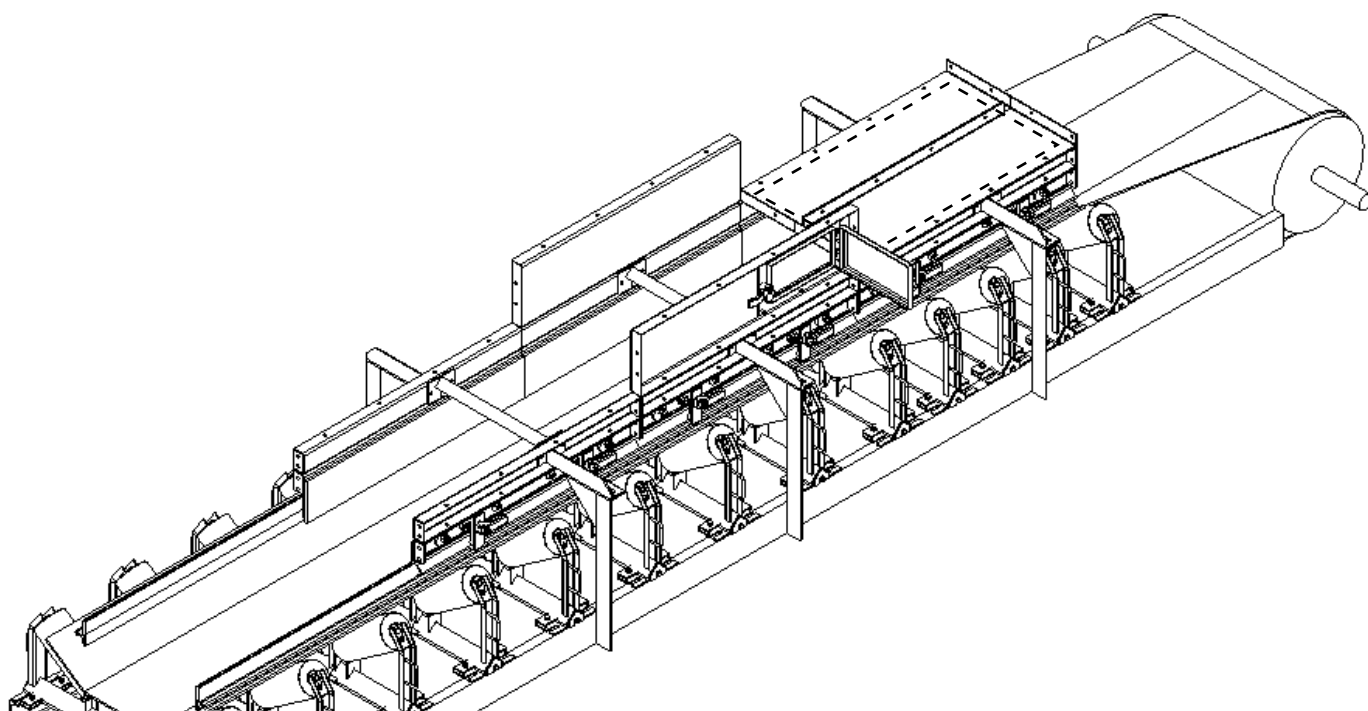
- 9) These adjustable wear liners need to be lowered and shimmed from the trough just like the first set in step 6. *However*, the exit side of these liners should be adjusted slightly upward thus allowing trapped material to loosen and move away with the belt.

NOTE: The first set of liners may need to be re-positioned.



- 10) Attach first set of upper side walls.

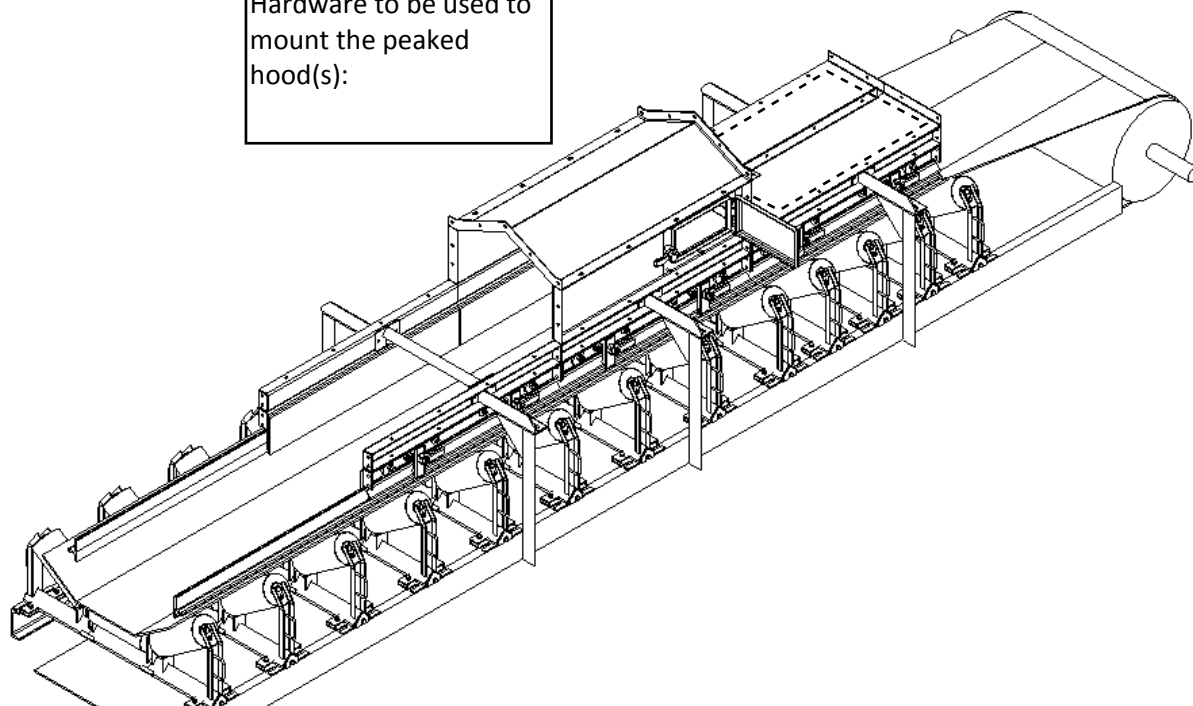
NOTE: Since space restrictions vary, these pieces may not have been included for all sections on the system.



- 11) Attach one of the provided peaked hood (or flat panel cover) covers to the upper sidewalls.

NOTE: These can also be attached to the lower sidewalls in the event that the upper sidewalls were not used/provided.

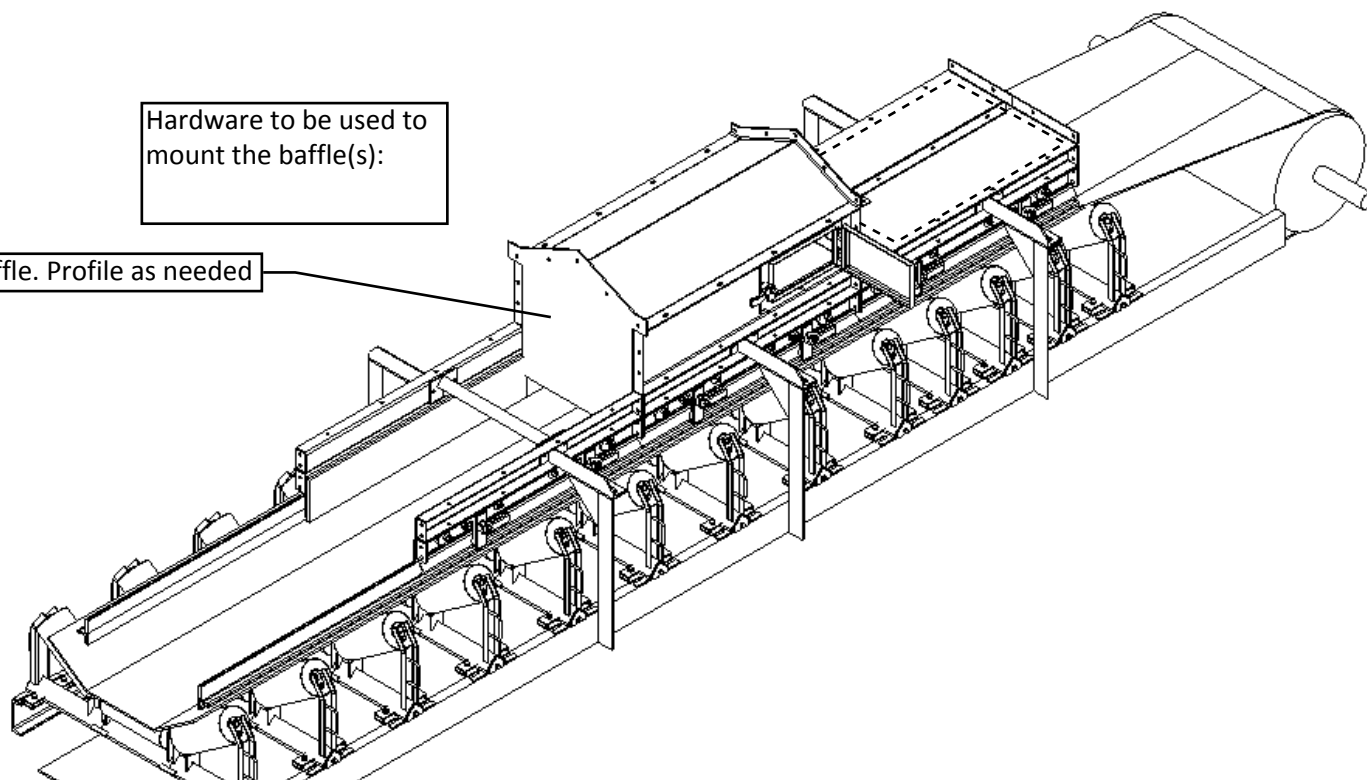
Hardware to be used to
mount the peaked
hood(s):



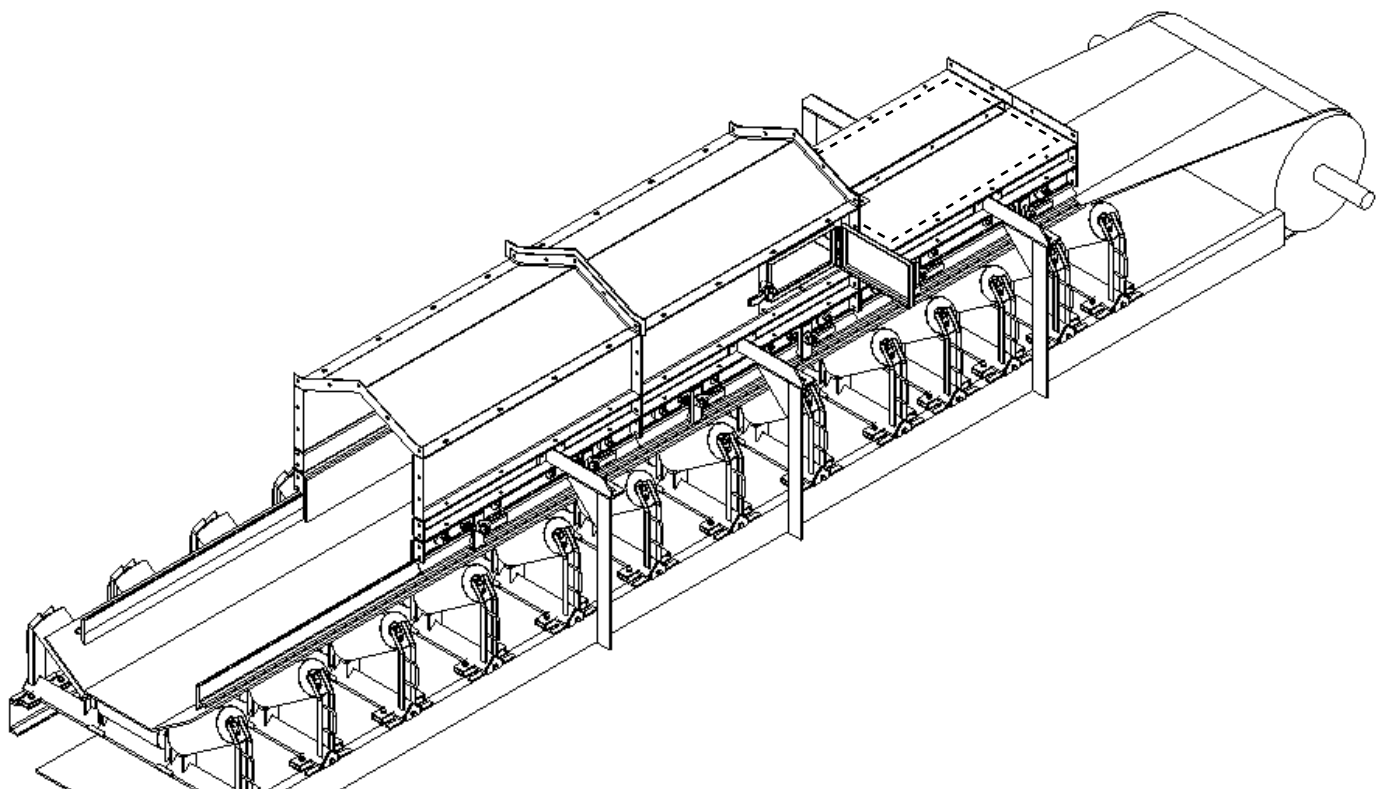
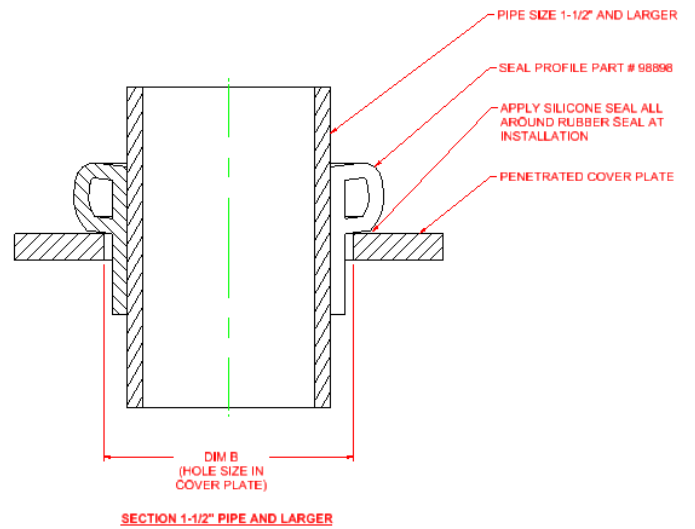
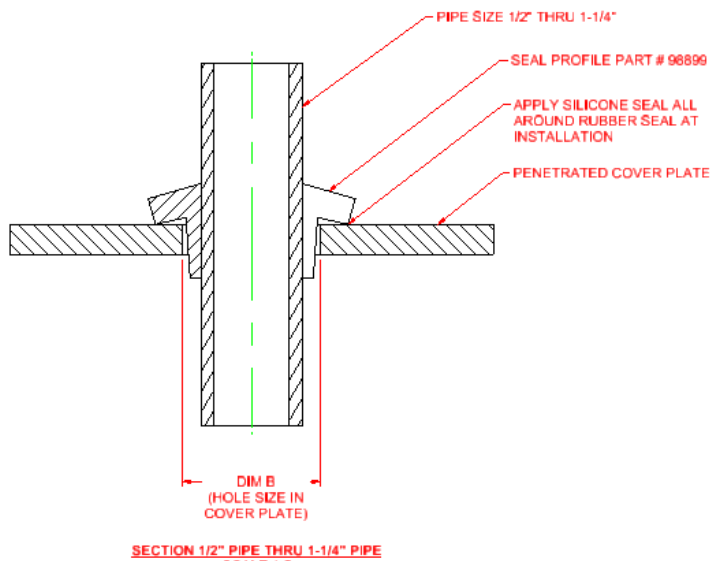
- 12) Attach next peaked hood cover (or flat panel cover) *with* a rubber baffle curtain.

Hardware to be used to
mount the baffle(s):

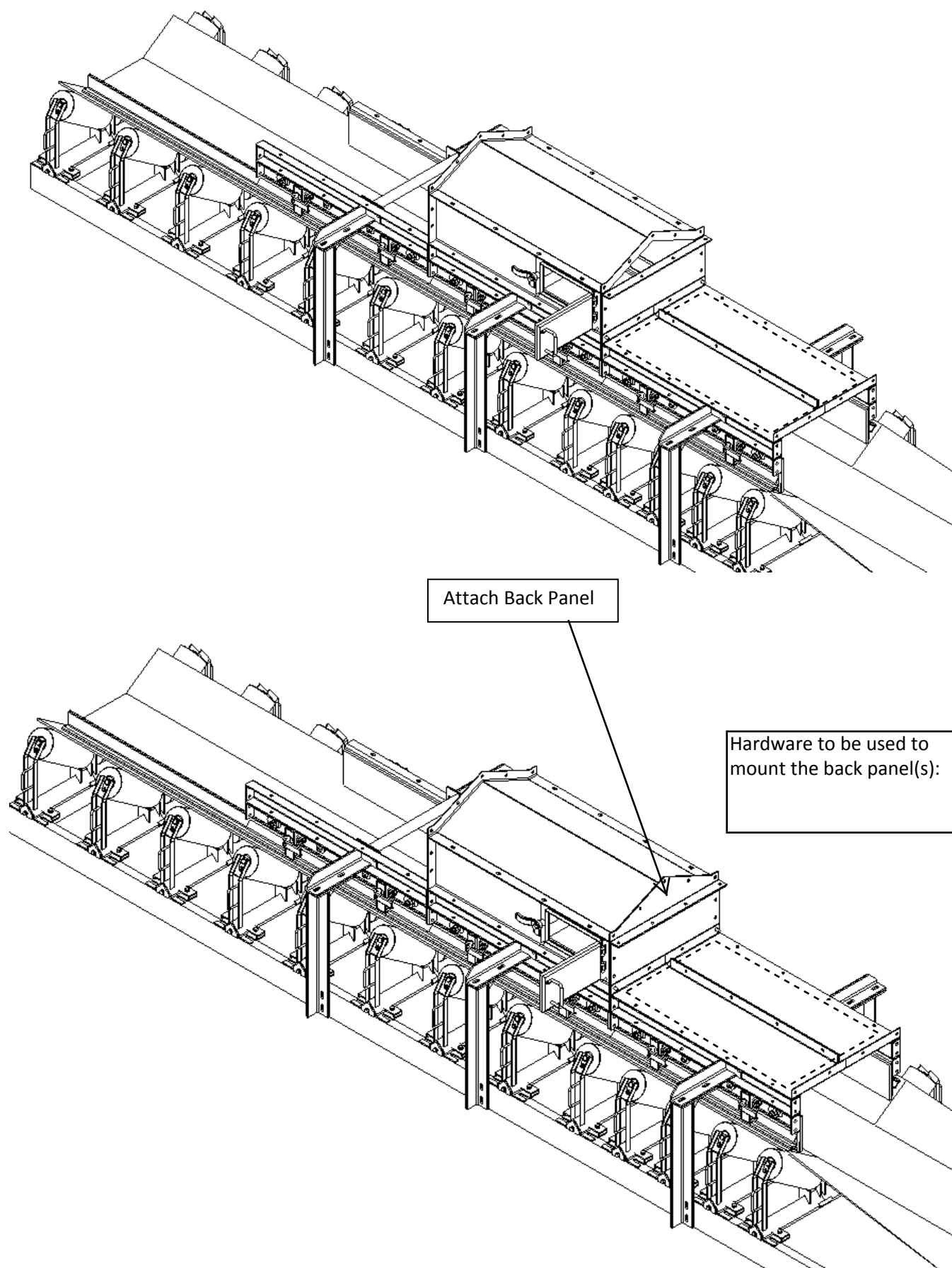
Baffle. Profile as needed



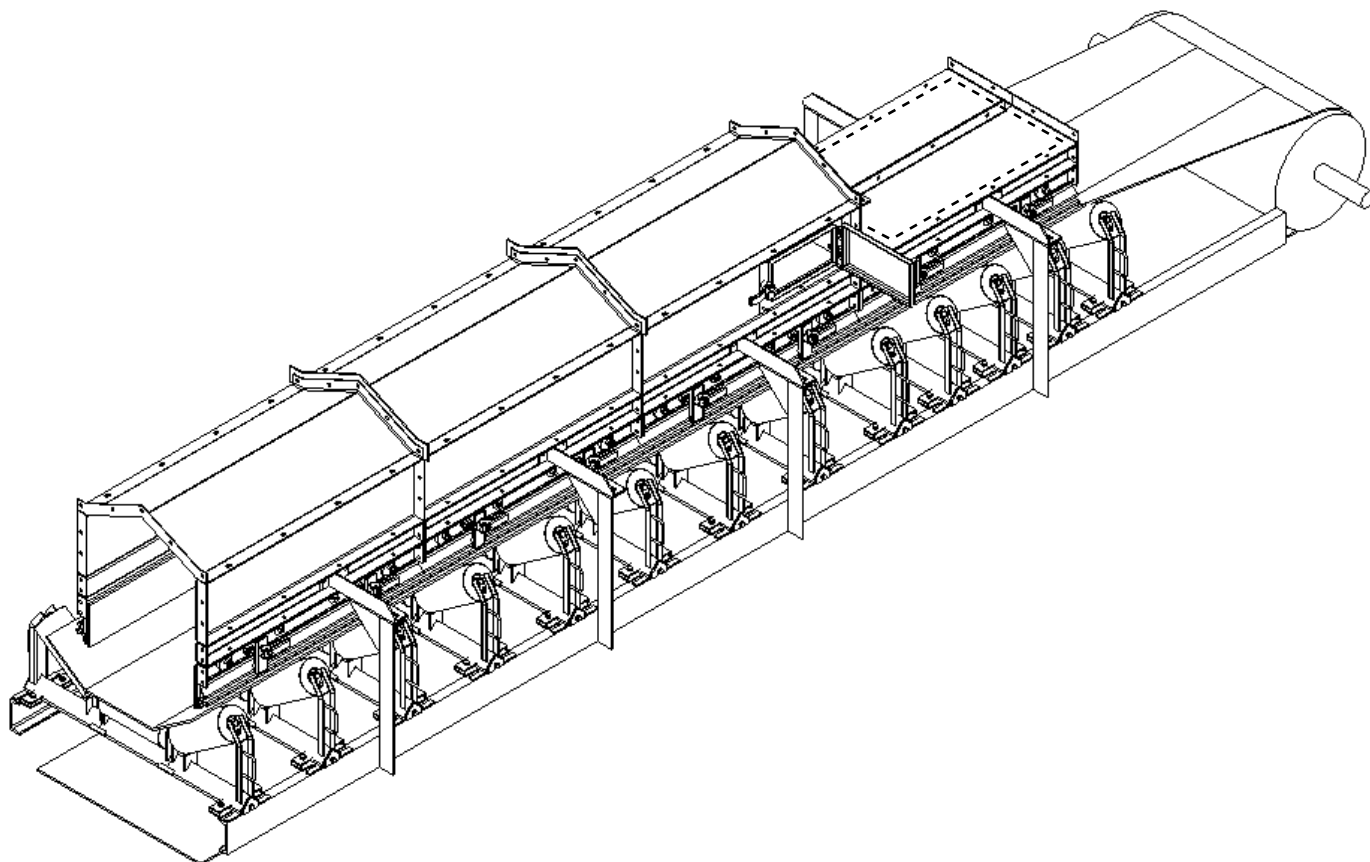
13) Penetrations See drawing 30607.



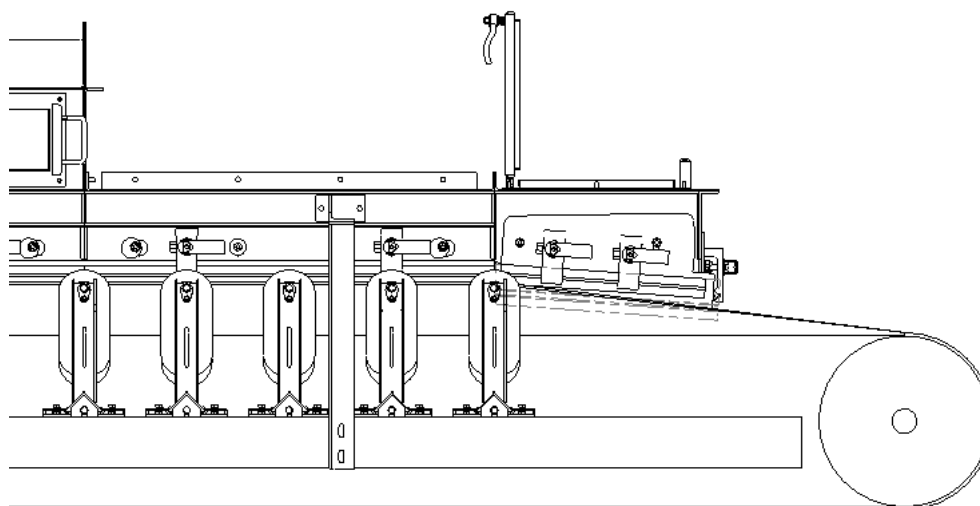
14) Attach peaked hood back panel (if provided).



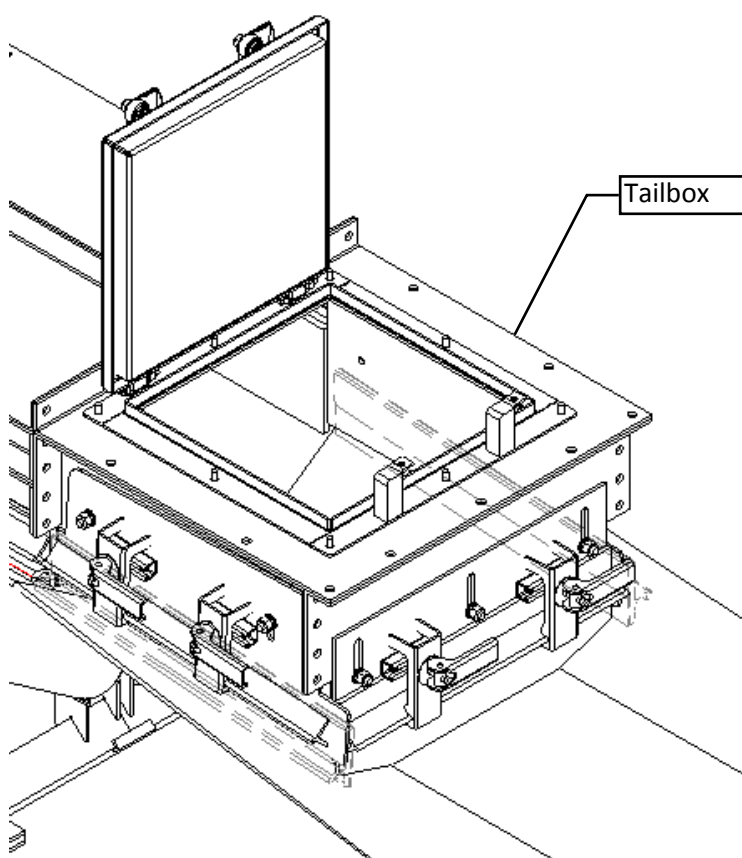
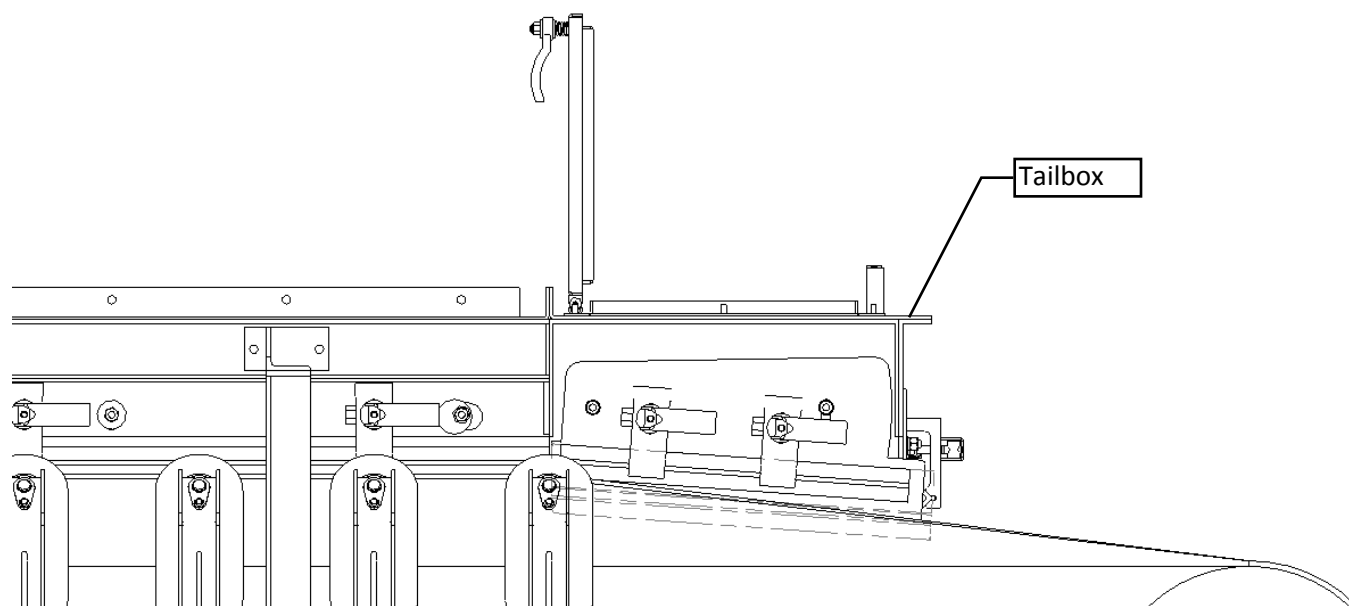
15) Repeat steps above until all required sections are completed, including the door(s) panel if provided.



16) The tail box side panels are designed to be adjusted in the field. Loosen side and rear panel fasteners and adjust panels to approximately $7/8$ " clearance off the belt (Just like the liner panels in step 1) and tighten the tail box side panels, end panel, and cover panel.

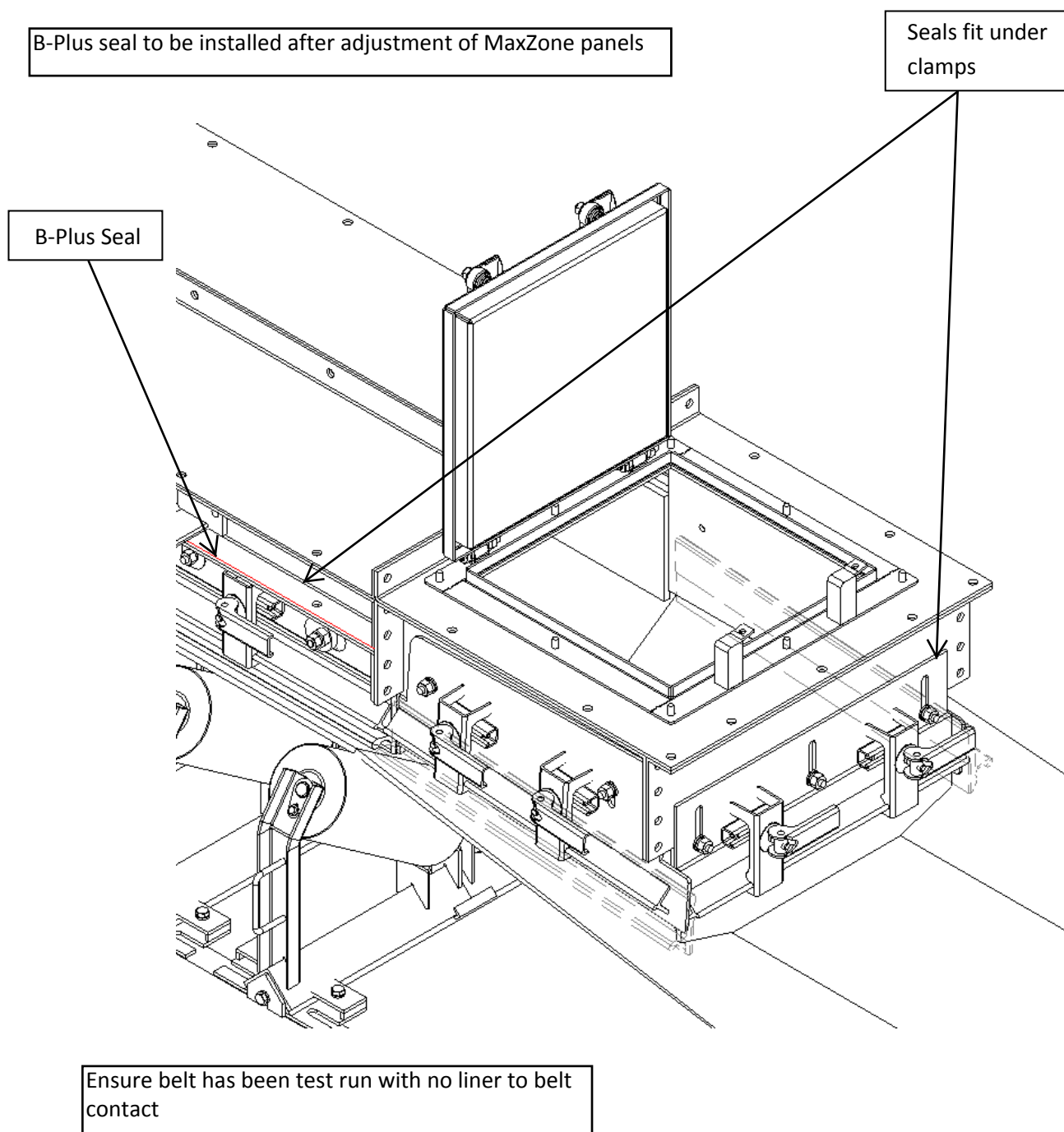


Adjust to fit transition with $7/8$ " clearance



17) Attach tailbox seal and end curtain.

a. Attach B- Plus Sea



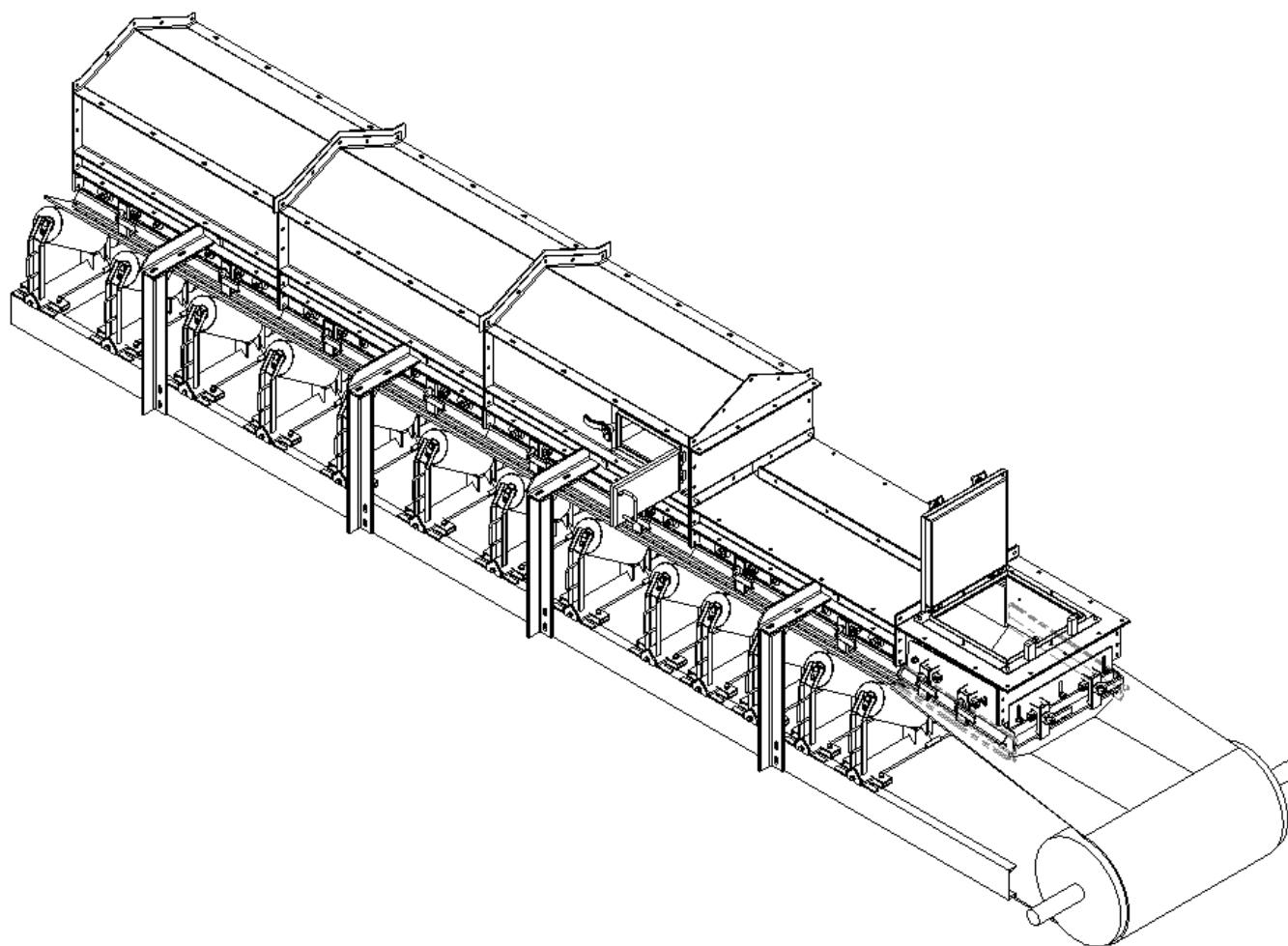
! WARNING !

Failure to remove tools from installation area and conveyor belt before turning on energy source can cause serious injury to personnel and damage to belt.

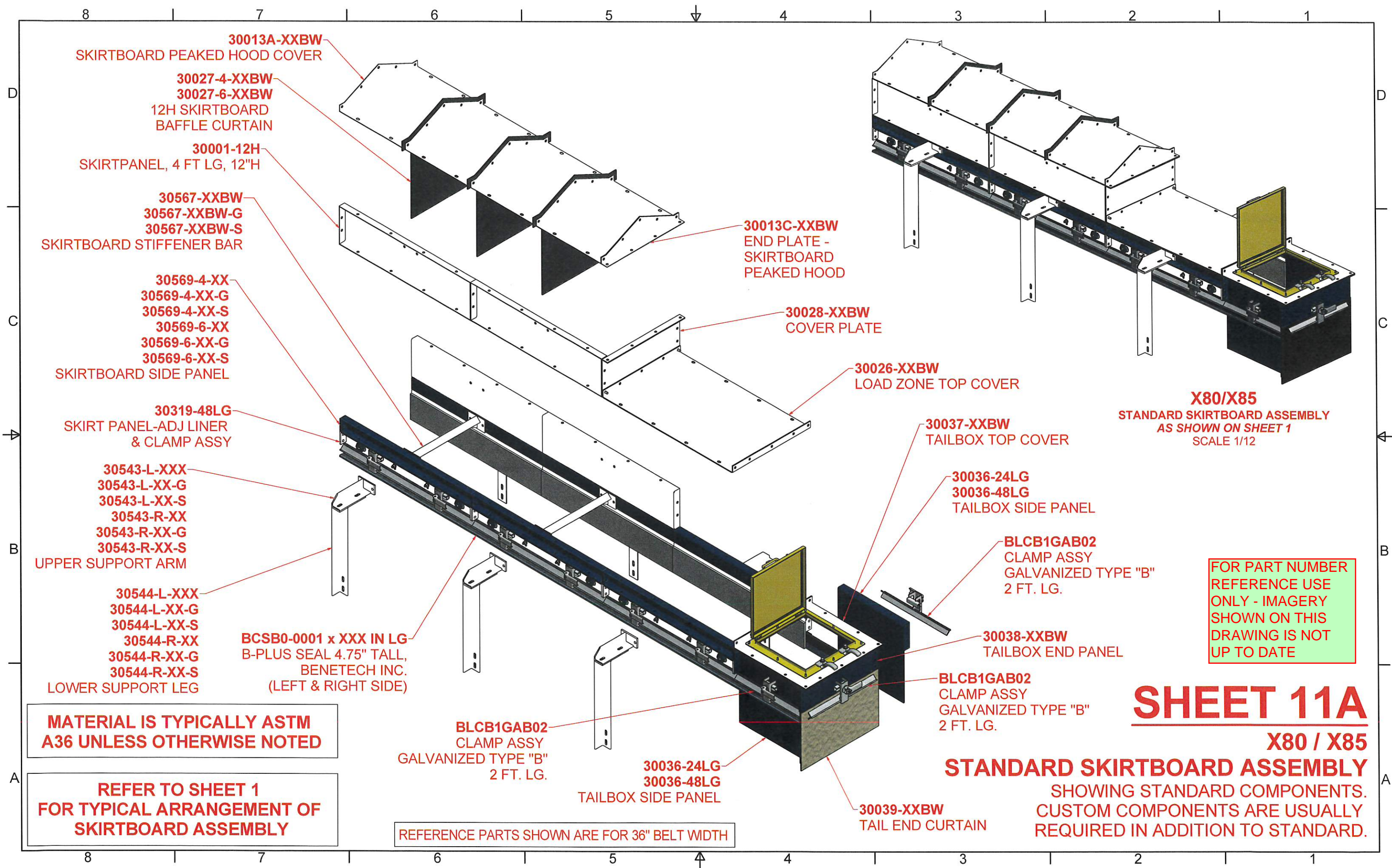
! WARNING !

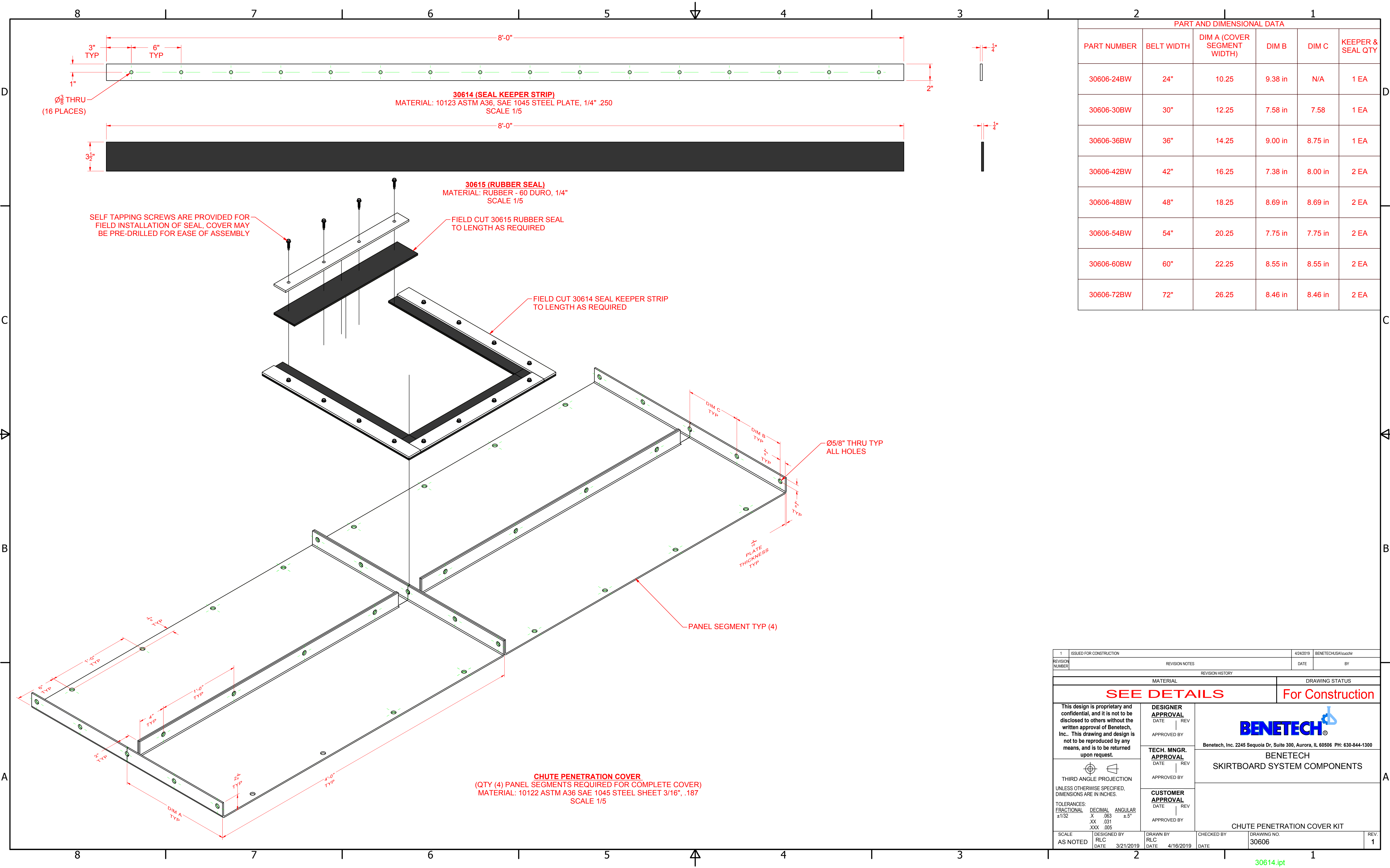
Do not touch or go near conveyor belt or conveyor accessories when conveyor belt is running. Body or clothing can get caught and pull body into conveyor belt, causing severe injury or death.

The system is fully assembled.



305

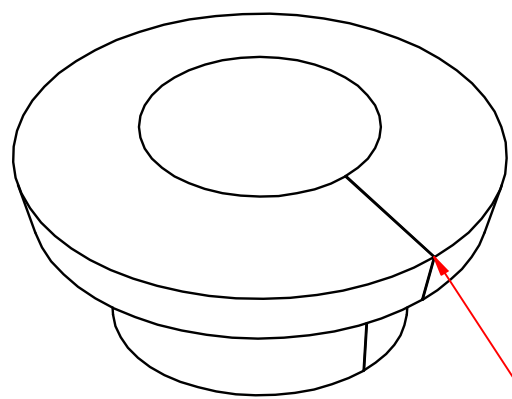




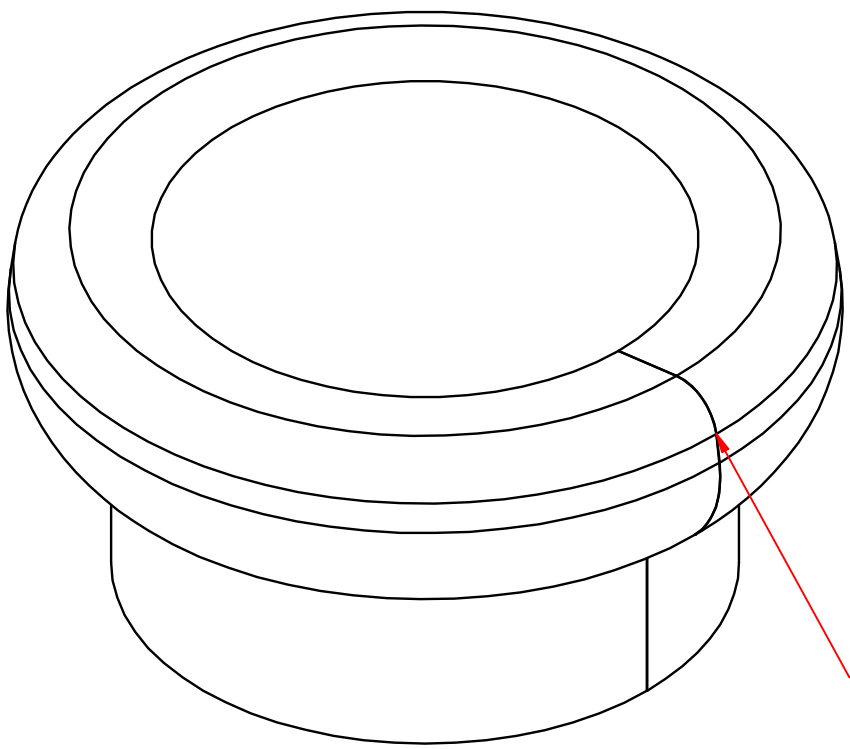
PART AND DIMENSIONAL DATA					
PART NUMBER	BELT WIDTH	DIM A (COVER SEGMENT WIDTH)	DIM B	DIM C	KEEPER & SEAL QTY
30606-24BW	24"	10.25	9.38 in	N/A	1 EA
30606-30BW	30"	12.25	7.58 in	7.58	1 EA
30606-36BW	36"	14.25	9.00 in	8.75 in	1 EA
30606-42BW	42"	16.25	7.38 in	8.00 in	2 EA
30606-48BW	48"	18.25	8.69 in	8.69 in	2 EA
30606-54BW	54"	20.25	7.75 in	7.75 in	2 EA
30606-60BW	60"	22.25	8.55 in	8.55 in	2 EA
30606-72BW	72"	26.25	8.46 in	8.46 in	2 EA

1 ISSUED FOR CONSTRUCTION		4/24/2019		BENETECHUSA\vauchyr	
REVISION NUMBER	REVISION NOTES			DATE	BY
REVISION HISTORY					
MATERIAL			DRAWING STATUS		
SEE DETAILS			For Construction		
<p>This design is proprietary and confidential, and it is not to be disclosed to others without the written approval of Benetech, Inc.. This drawing and design is not to be reproduced by any means, and is to be returned upon request.</p> <p>THIRD ANGLE PROJECTION</p> <p>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.</p> <p>TOLERANCES: FRACTIONAL DECIMAL ANGULAR ±1/32 X .063 ±.5° XX .031 XXX .005</p>		DESIGNER APPROVAL DATE REV APPROVED BY		<p>BENETECH</p> <p>Benetech, Inc. 2245 Sequoia Dr, Suite 300, Aurora, IL 60506 PH: 630-844-1300</p> <p>BENETECH</p> <p>SKIRTBOARD SYSTEM COMPONENTS</p>	
		TECH. MNGR. APPROVAL DATE REV APPROVED BY			
		CUSTOMER APPROVAL DATE REV APPROVED BY		CHUTE PENETRATION COVER KIT	
SCALE AS NOTED	DESIGNED BY RLC DATE 3/21/2019	DRAWN BY RLC DATE 4/16/2019	CHECKED BY DATE	DRAWING NO. 30606	REV. 1

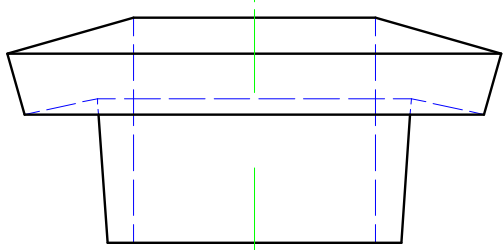
SEAL LENGTH AND HOLE SIZE TABLE				
PART NUMBER	PIPE SIZE	ACTUAL PIPE O.D.	DIM A (CUT LENGTH)	DIM B (DIA HOLE)
30607-050	1/2"	.84 in	2.76 in	1 1/8 in
30607-075	3/4"	1.05 in	3.42 in	1 3/8 in
30607-100	1"	1.32 in	4.26 in	1 5/8 in
30607-125	1-1/4"	1.66 in	5.34 in	2 in
30607-150	1-1/2"	1.90 in	6.09 in	2 3/8 in
30607-200	2"	2.38 in	7.59 in	2 7/8 in
30607-250	2-1/2"	2.88 in	9.16 in	3 3/8 in
30607-300	3"	3.50 in	11.12 in	4 in
30607-350	3-1/2"	4.00 in	12.69 in	4 1/2 in
30607-400	4"	4.50 in	14.26 in	5 in



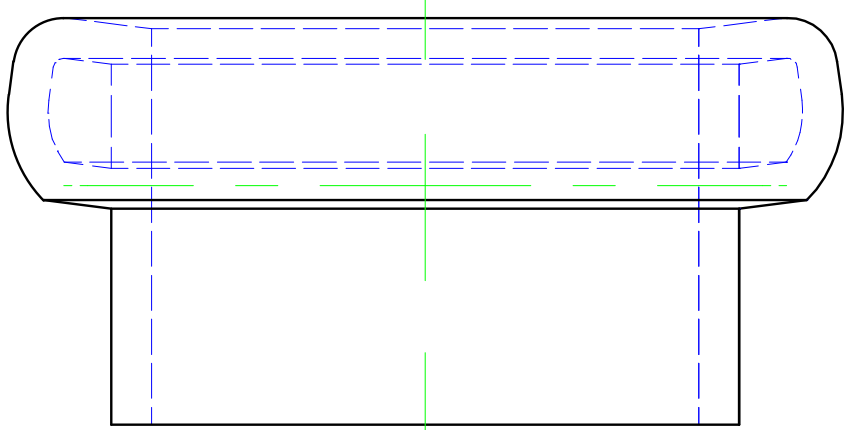
APPLY SILICONE TO SEAL
SPLIT AT INSTALLATION



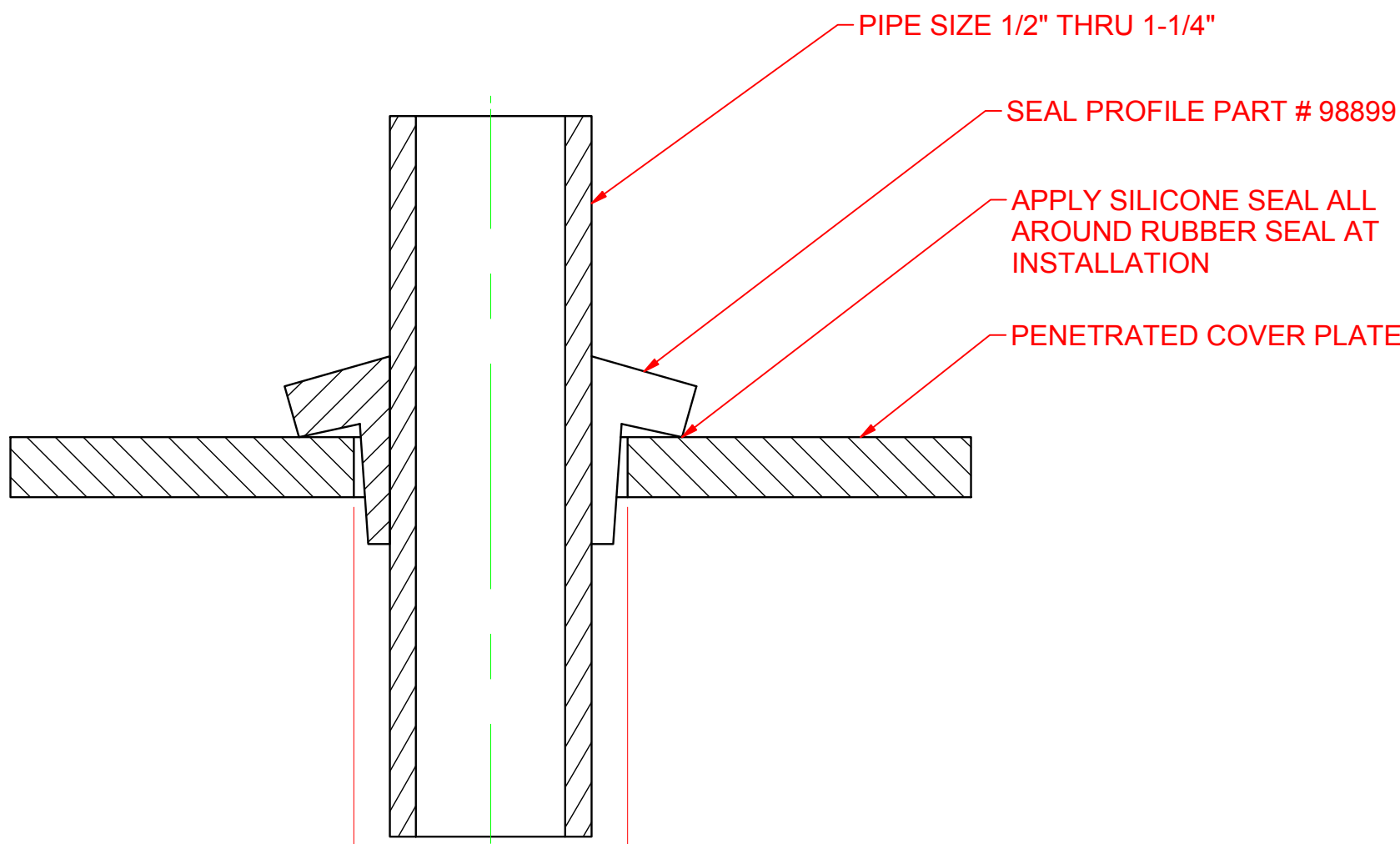
APPLY SILICONE TO SEAL
SPLIT AT INSTALLATION



ROLLED SEAL PART # 98899
SCALE 1.5



ROLLED SEAL PART # 98898
SCALE 1.5

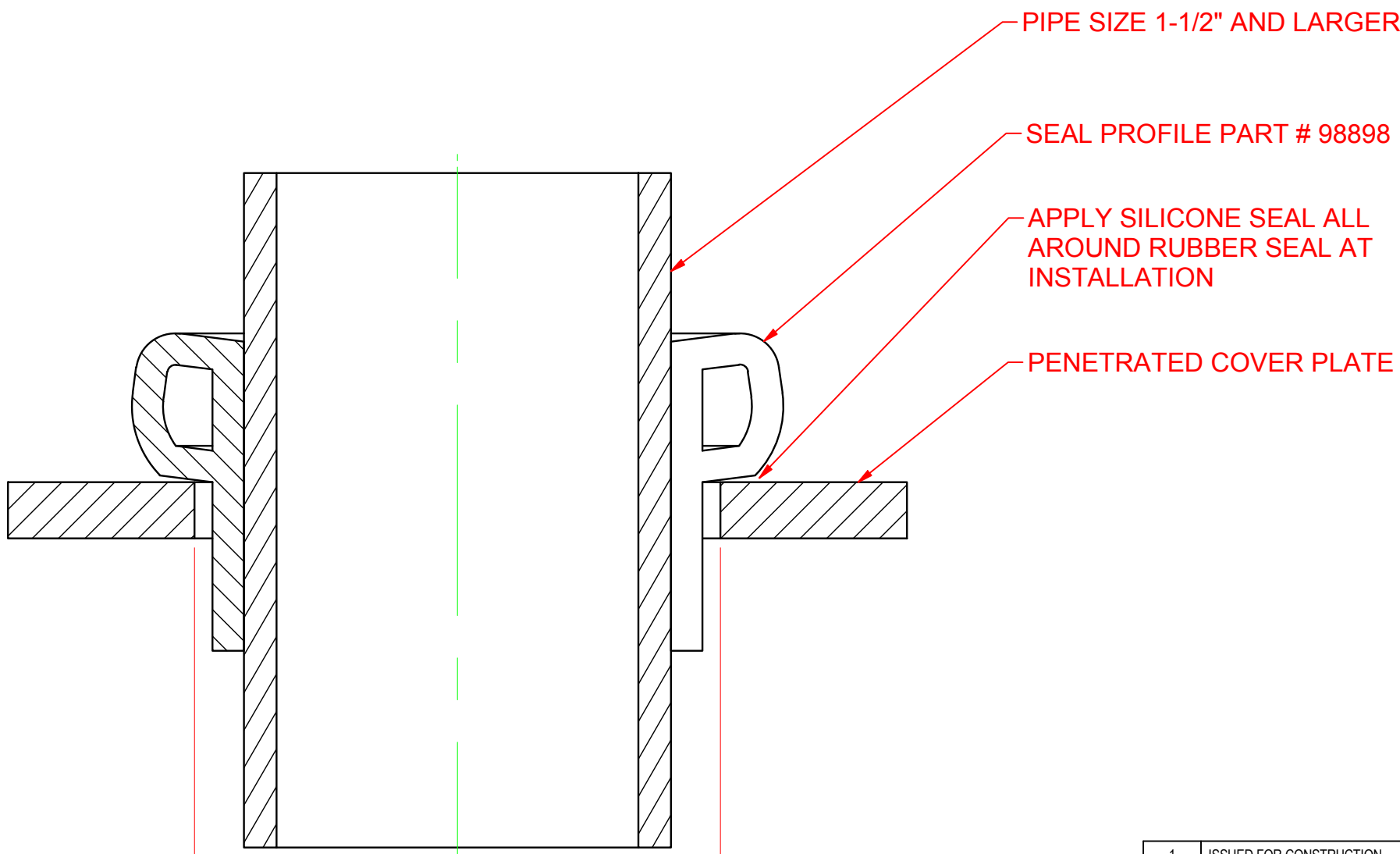


PIPE SIZE 1/2" THRU 1-1/4"

SEAL PROFILE PART # 98899

APPLY SILICONE SEAL ALL
AROUND RUBBER SEAL AT
INSTALLATION

PENETRATED COVER PLATE



PIPE SIZE 1-1/2" AND LARGER

SEAL PROFILE PART # 98898

APPLY SILICONE SEAL ALL
AROUND RUBBER SEAL AT
INSTALLATION

PENETRATED COVER PLATE

PART # 98899 SEAL PROFILE
SCALE 1.5

SECTION 1/2" PIPE THRU 1-1/4" PIPE
SCALE 1.5

PART # 98898 SEAL PROFILE
SCALE 1.5

SECTION 1-1/2" PIPE AND LARGER
SCALE 1.5

1	ISSUED FOR CONSTRUCTION	4/15/2019	BENETECHUSA\cauchhr
REVISION NUMBER	REVISION NOTES	DATE	BY
REVISION HISTORY		DRAWING STATUS	
MATERIAL		SEE SEAL DETAIL	
DESIGNER APPROVAL		For Construction	
TECH. MNGR. APPROVAL		BENETECH	
CUSTOMER APPROVAL		SKIRTBOARD SYSTEM COMPONENTS	
SCALE		PIPE SEAL RUBBER	
AS NOTED	DESIGNED BY RLC DATE 4/15/2019	DRAWN BY RLC DATE 4/15/2019	CHECKED BY DATE
DRAWING NO. 30607		REV. 1	