

## ! 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.

## <u>! SAFETY !</u>

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

\*\*\*

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



## <mark>! DANGER !</mark>

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 !

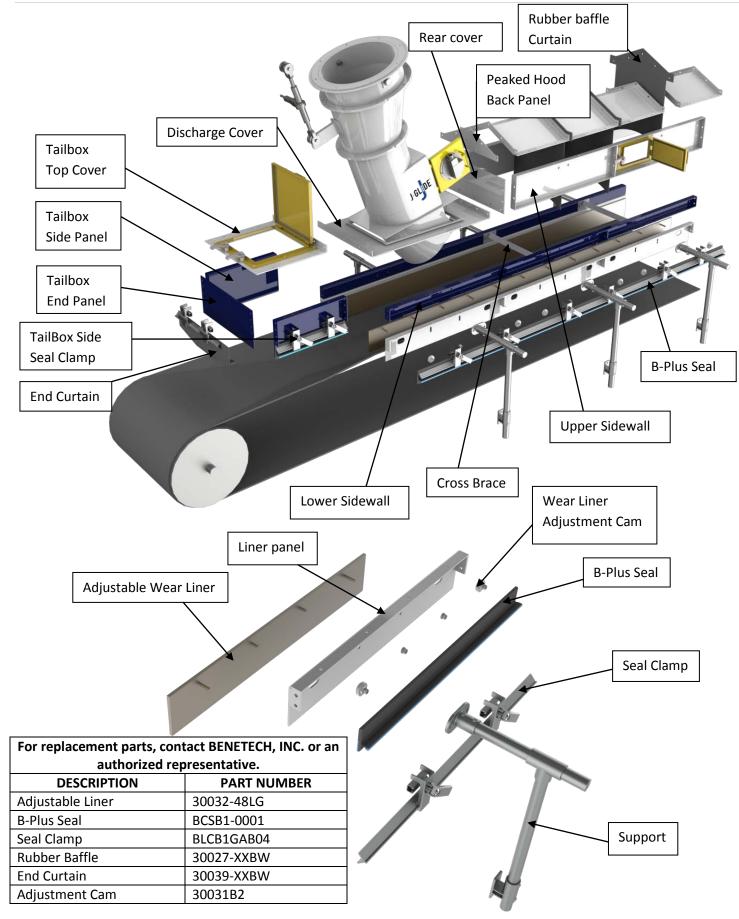
Before using a cutting torch, welders, or grinding equipment, cover the conveyor belt with a fire retardant/resistant cover. Make sure a water source/fire hose is readily available AND OPERATIONAL. Failure to do so can allow the belt to catch fire.

#### **! 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

Provided Components	
Part Ordering Information5	
Pre-Install Safety6	
Installation Instructions7-2	1



# 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.

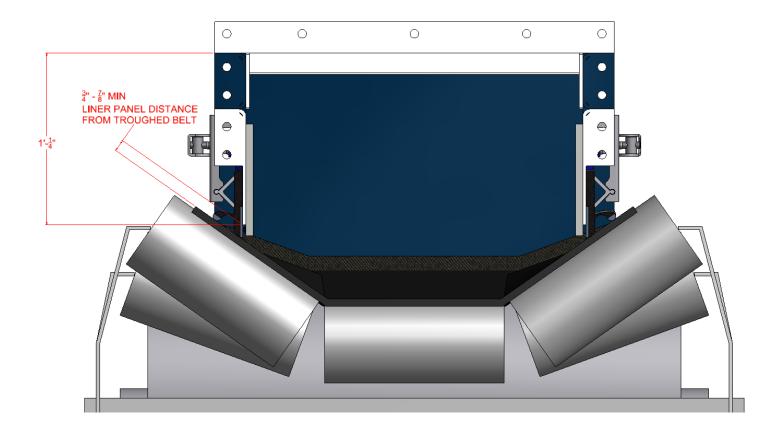
## <mark>! WARNING !</mark>

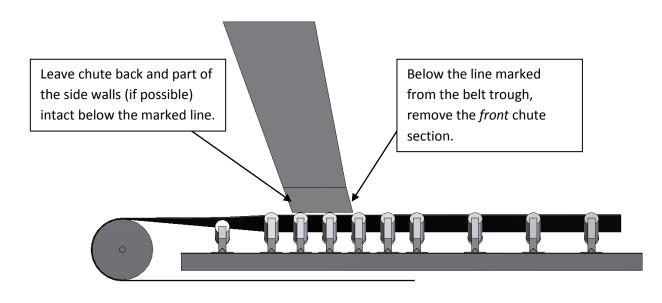
Before installing equipment, turn off AND lock out/tag out all energy sources to the conveyor and conveyor accessories according to ANSI standards and local plant regulations. Failure to do so could result in serious injury or death.

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.

## Installation Instructions

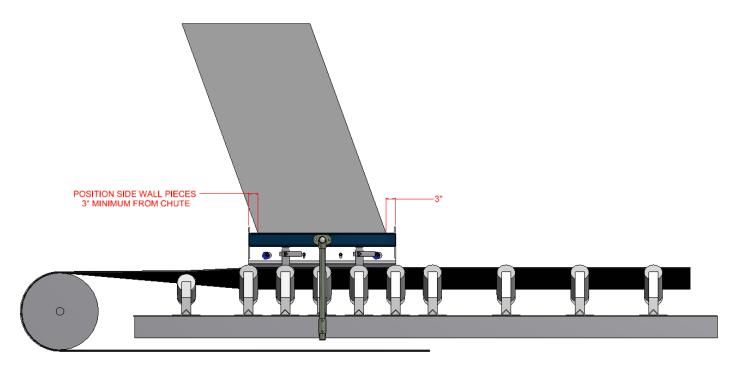
1) After existing structure is removed, align new parts spaced 1" from the bottom of the liner **panel** sidewall to troughed belt. *Mark the height of the flat cover on existing discharge chute* (approximately 1'-1/4" from liner panel bottom).



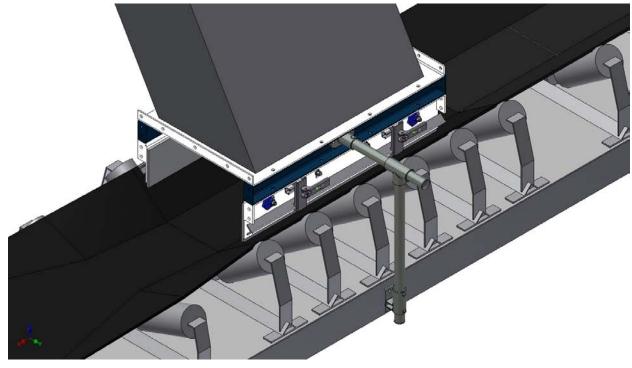


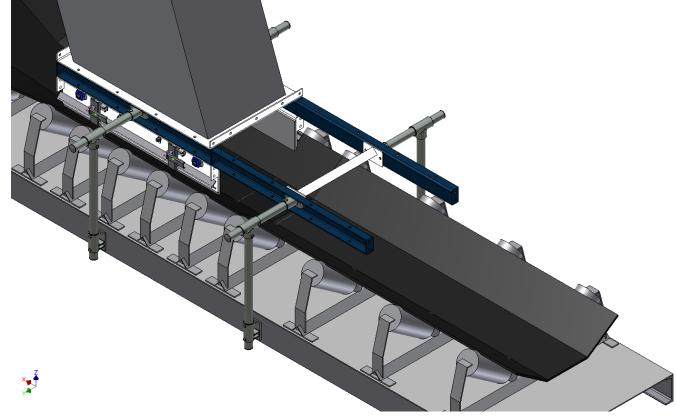
2) Position side wall and discharge cover at the height of the drawn line, and space them a minimum of 3" from either the front or back end to chute. Measure from the point where the line intersects with the front or back slope of the chute.

**NOTE:** Chute can be located anywhere lengthwise on top cover, but the 3" minimum must be maintained so hardware can be installed.



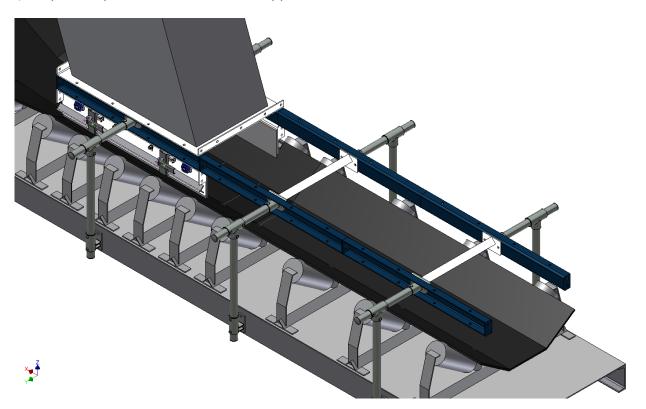
3) Cut opening on flat cover (centered) and locate at height determined in step 1. Mount support legs and attach side wall/liner panels. Double check the liner panel distance from the belt (shown in step 1) then caulk around the chute to seal.



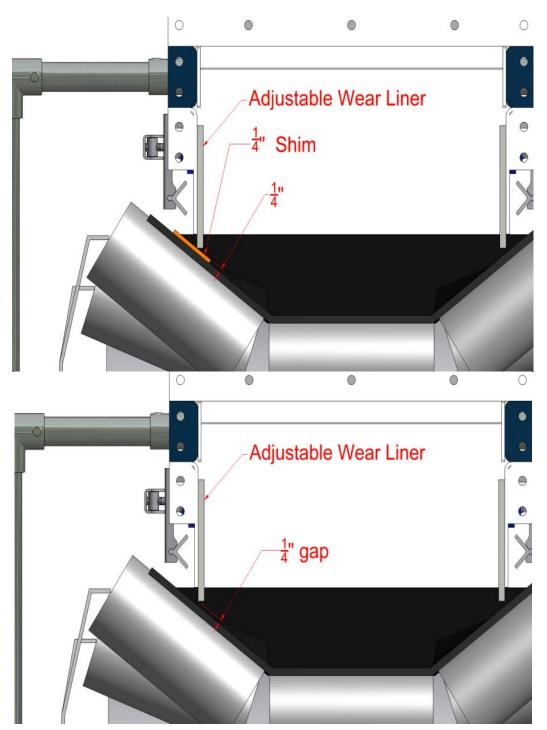


4) Attach the next set of lower sidewalls and supports with the addition of the cross brace.

5) Repeat step 4 until the rest of the supplied sections are used.

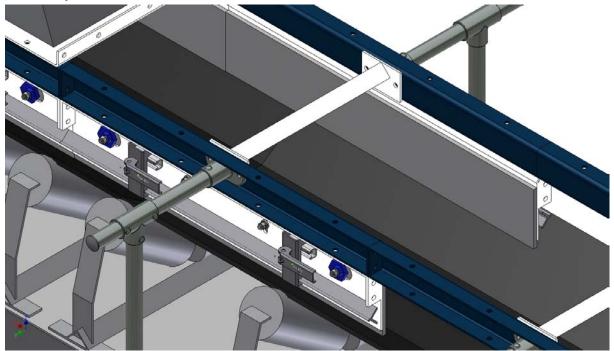


6) The adjustable wear liners mounted at the chute discharge should now be adjusted down so that they sit approximately ¼" from the belt trough. Placing a ¼ shim on the trough will make this adjustment easier.



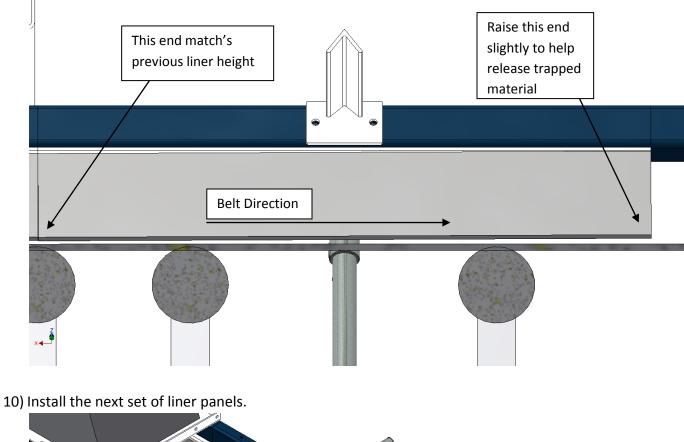
- the second second
- 7) Attach the next set of liner panels below the lower sidewalls.NOTE: Install these pieces without the wear liner attached to make handling easier.

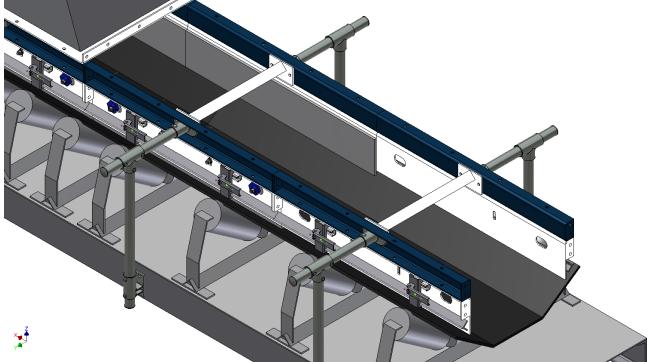
8) Attach adjustable wear liners.

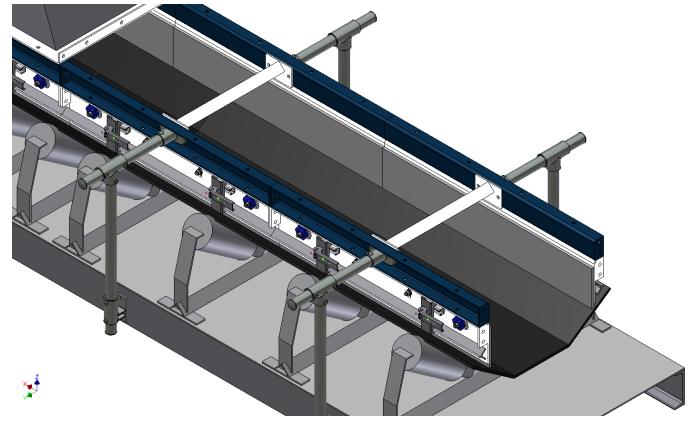


9) These adjustable wear liners need to be lowered and shimmed from the trough just like the first set in step 6. *However*, the exit side of these liners should be adjusted slightly upward thus allowing trapped material to loosen and move away with the belt.

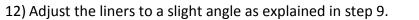
**NOTE:** The first set of liners may need to be re-positioned.

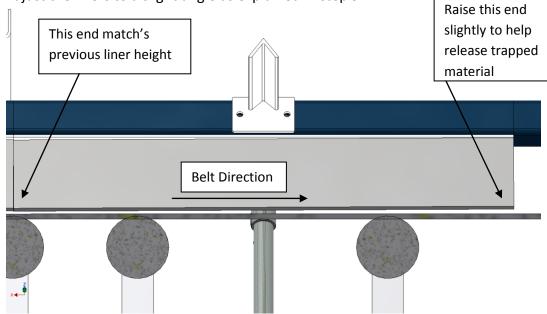




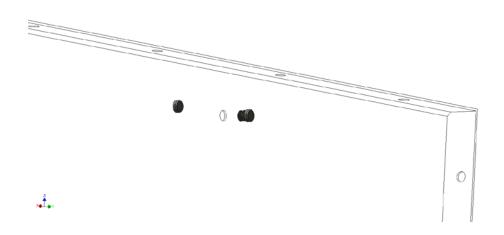


11) Attach the next set of adjustable wear liners.



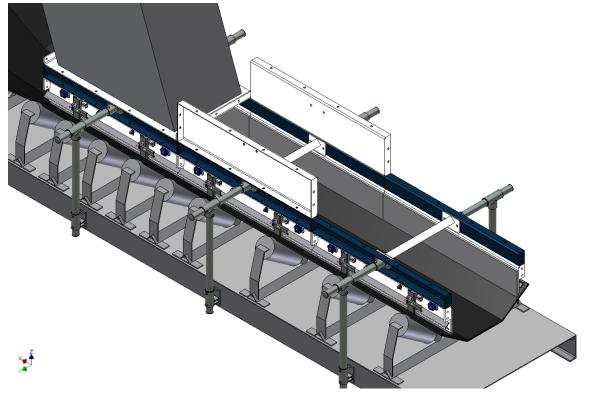


13) Install hole plugs into upper sidewalls.

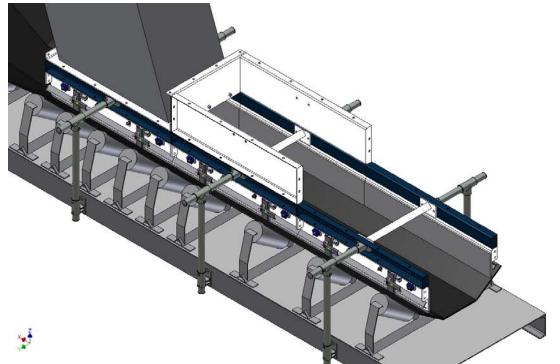


14) Attach first set of upper side walls.

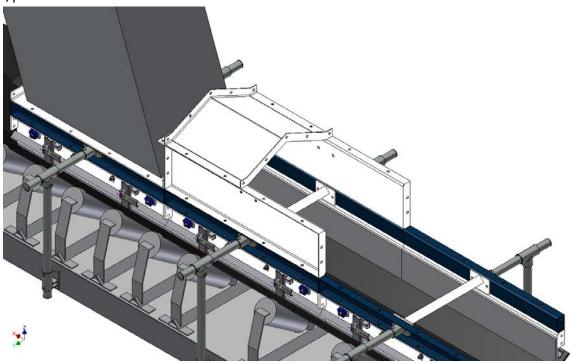
**NOTE**: Since space restrictions vary, these pieces may not have been included for all sections on the system. If this is the case, the upper sidewalls won't necessarily fit on the section shown and may need to be installed on another section.

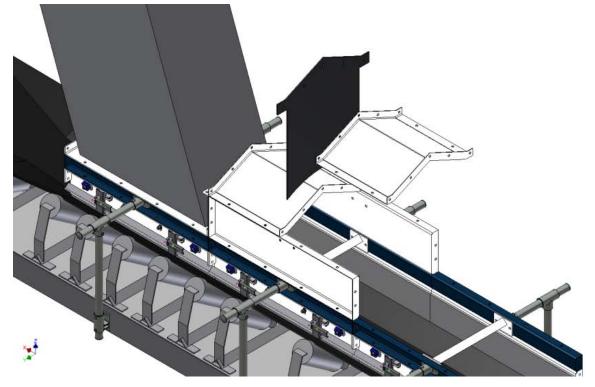


15) Attach rear cover plate (if provided).

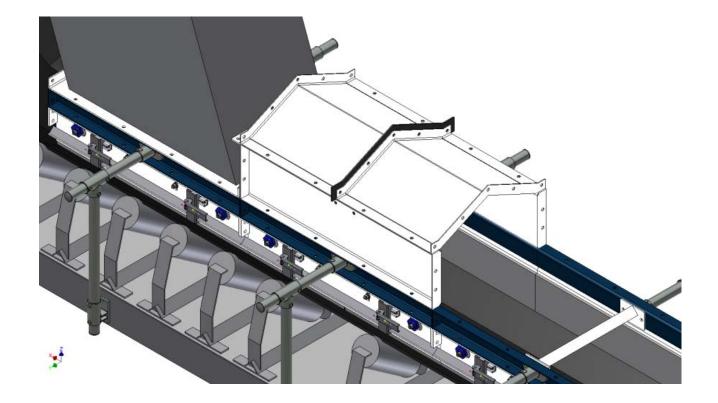


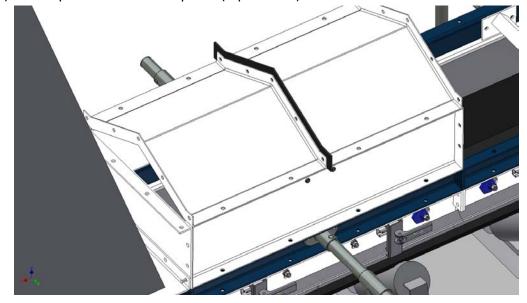
16) Attach one of the provided peaked hood (or flat panel cover) covers to the upper sidewalls.NOTE: These can also be attached to the lower sidewalls in the event that the upper sidewalls were not used/provided.



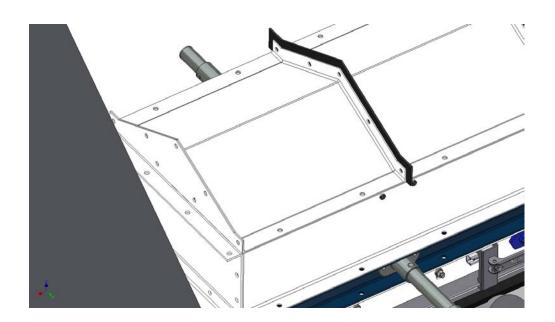


17) Attach next peaked hood cover (or flat panel cover) with a rubber baffle curtain.

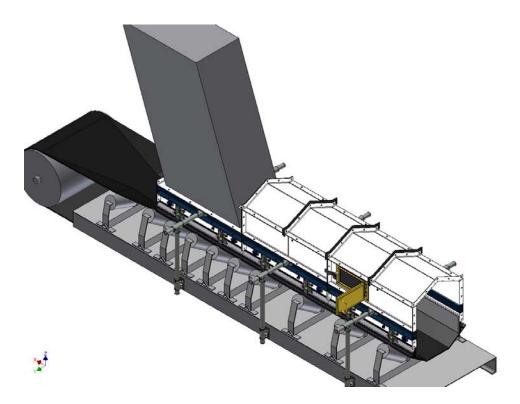




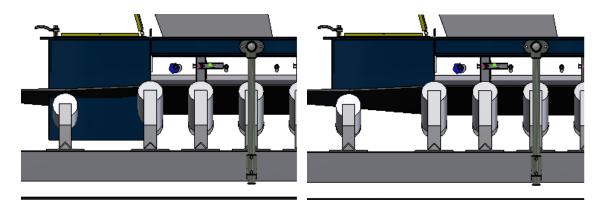
18) Attach peaked hood back panel (if provided).



19) Repeat steps 13-18 until all available sections are used, including the door panel if provided.

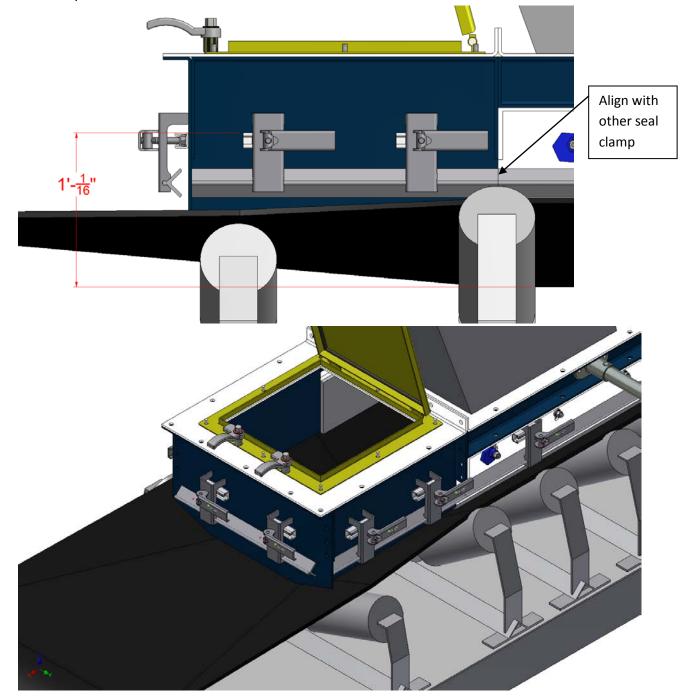


20) The tail box side panels are designed to be cut to length in the field. A measurement must be taken from the top of the discharge cover to the belt transition. Cut the tail box side panels at an angle that gives them approximately 7/8" clearance off the belt (Just like the liner panels in step 1) and attach the tail box side panels, end panel, and cover panel.

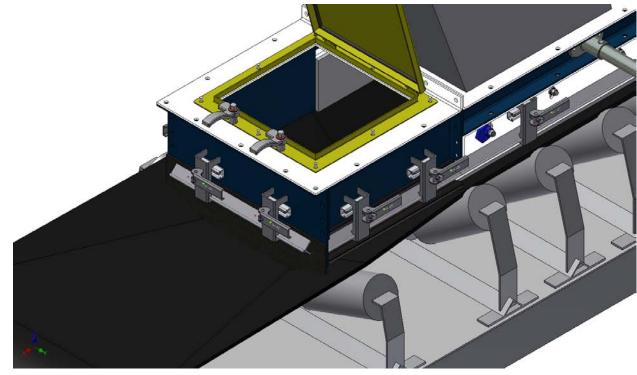


Tail box interferes

Cut to fit transition with 1" clearance

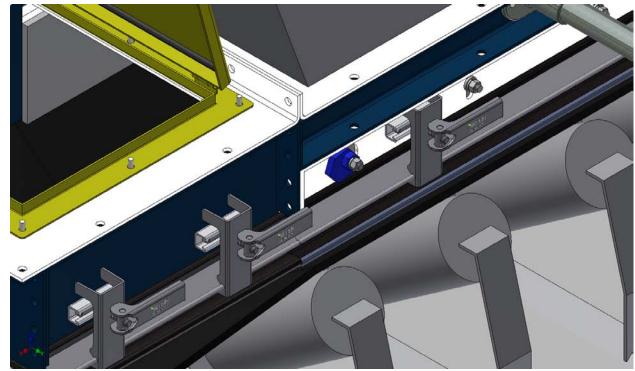


21) Weld on tailbox seal clamps at dimension shown. These clamps should sit against the seal clamps on the liner panels.



22) Attach tailbox seals and end curtain.

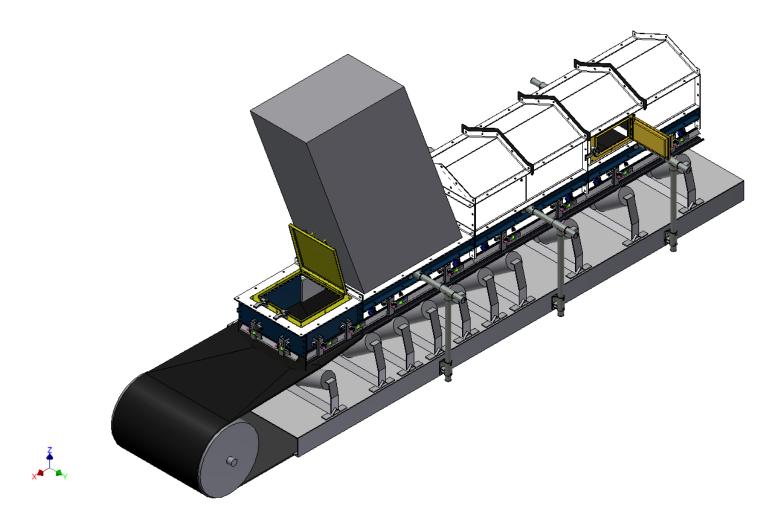
23) Attach skirtboard B-Plus side seals.



**! 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.



Benetech, Inc 2245 Sequoia Drive Suite 300 Aurora, IL 60506 P: 630-844-1300 F: 630-844-8690 www.benetechusa.com