ASSA ABLOY

Mechanical Installation Manual

Albany RR1000

Manufacturer:

ASSA ABLOY Entrance Systems
High Performance Door Solutions
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Safety Definitions

The contents of this manual are designed to help you install the Albany RR1000 high performance doors. **DO NOT begin to install the high speed door unless you have read through the instructions in this manual.**

The safety alert symbol is used to identify safety information about hazards that can result in personal injury. A signal word (DANGER, WARNING, or CAUTION) is used with the safety alert symbol to indicate the likelihood and the potential severity of injury. In addition, a hazard symbol may be used to represent the type of hazard.

DANGER indicates a hazard that, if not avoided, will result in death or serious injury.

WARNING indicates a hazard that, if not avoided, could result in death or serious injury.

CAUTION indicates a hazard that, if not avoided, might result in minor or moderate injury.

CAUTION, when used without the alert symbol, indicates a situation that could result in damage to the door.

NOTICE is used to inform you of a method, reference, or procedure that could assist with specific operations or procedures.

Other symbols that may be used in this manual are:

**Lock Out /
Tag Out**   **Crushing**   **Fire**   **Shock**   **Read Manual**

Delivery and Inspection

Secure the work area so that persons not working directly on the installation do not enter the work area.

Inspect and unpack the components. Report any damage immediately to ASSA ABLOY Entrance Systems Technical Support at 800-252-2691. Refer to the serial number tag located on the door side frame.

DO NOT cut the banding which holds the door in a roll until instructed to do so in a later procedure.

⚠ WARNING

Use proper lifting equipment and techniques. Properly secure all loads. Failure to properly secure all lifting loads could result in death or serious injury.
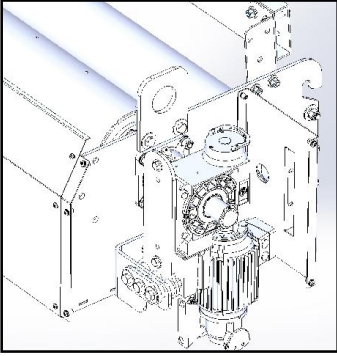
CAUTION

The door panel and roll assembly could be damaged during transportation and lifting. Use evenly spaced padded supports to prevent rips, tears, or bending of the roll assembly. Failure to protect the roll assembly could result in damage to the door.

The top roll header assembly is partly pre-assembled when it is shipped. The header assembly with the rolled up curtain is either shipped in a transportation crate or independently secured and transported by flatbed depending on the door size.

Special notes for proper lifting techniques of the header assembly are shown on page 5.

The side frames and roll covers (if applicable) are packaged separately in a protected transportation crate with the control unit and accessories packed in a cardboard box.

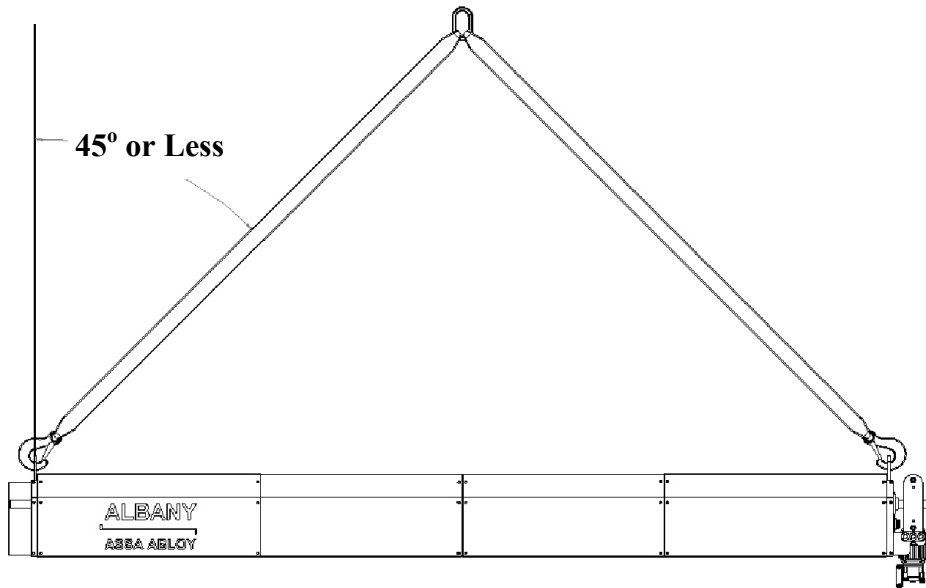### Lifting By Crane or with Chains or Lift Straps

There are eyebolts for lifting the header assembly into place located on the header plates. Attach cable or chain that is rated for the weight of the header assembly. Be sure to balance the header assembly before lifting into place.

WARNING

The cable or chain used for lifting the header assembly must not exceed a 45° angle from vertical. Vertical lifting from the lift plates is recommended whenever possible.
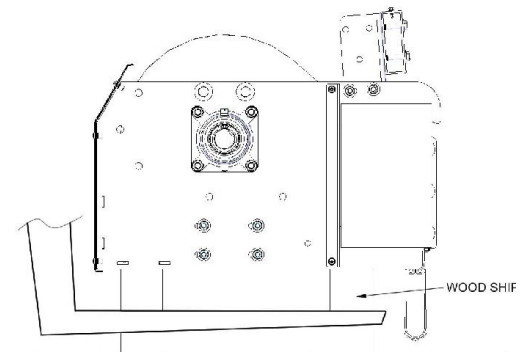
DANGER

A falling header assembly can result in SEVERE INJURY and POSSIBLY DEATH!

45° or Less

Lifting By Fork Lift

Place the forks of the forklift directly up under the top roll and not the header framework or the Idler Barrel.

Be careful to have the header assembly properly balanced on the forks. Secure the header assembly

WOOD SHIM

CAUTION

Never lift using the bottom beam or idler barrel between the forks and header assembly, damage can occur.

Equipment Required

Personnel (recommended minimum)
- Two people to install the door
- One person qualified to operate forklift, hoist, or crane
- One electrician to install and connect the control panel and all electrical wiring
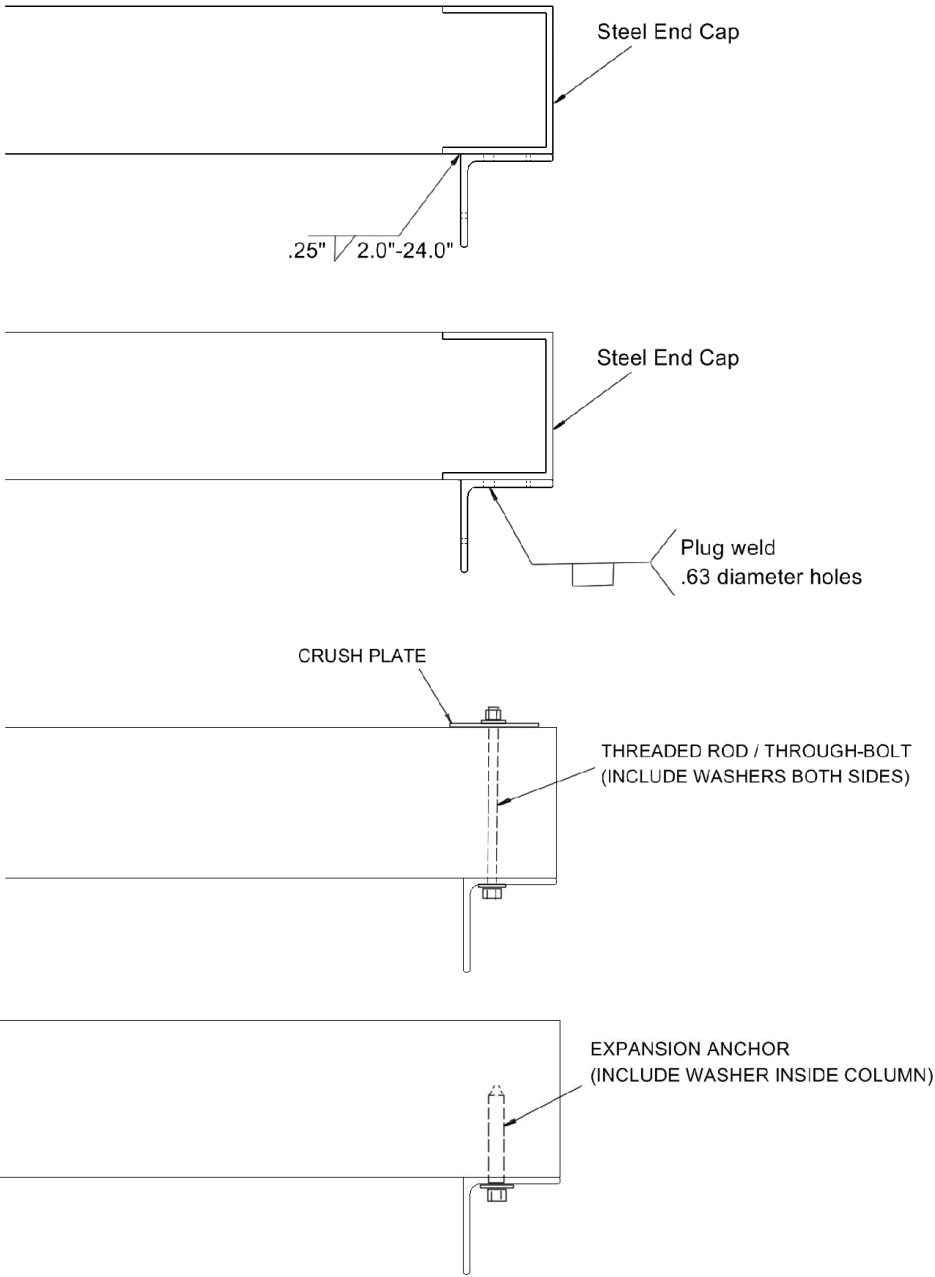
Tools
- Assorted wrenches and sockets in the following sizes (1/2", 9/16", 15/16")
- Tape measure
- Carpenter's square
- Level (4ft minimum)
- Lifting device (fork lift, hoist, crane)
- Lifting Straps
- 2 ladders or personnel lifts (tall enough to reach above the door head)
- Other tools as needed for the type of anchoring chosen
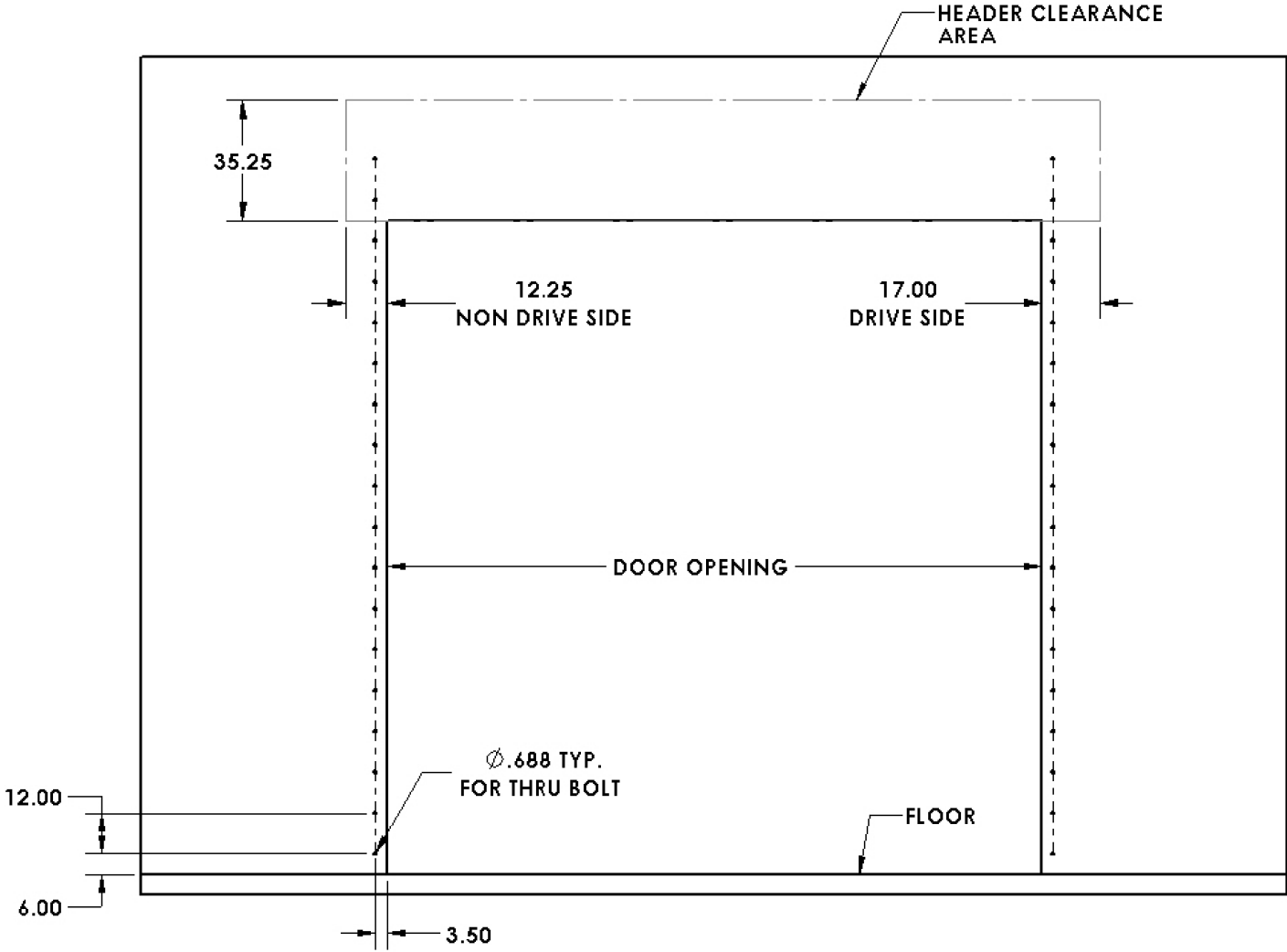
Materials
- Anchors appropriate for the type of wall the door and accessories are to be installed onto. ASSA ABLOY Entrance Systems recommends through-bolting doors whenever possible.
- Wire as specified on the electrical schematic
- Electrical supplies needed to comply with all regulating body electrical codes and standards.
- Caulking

Wall Anchoring Guide:

Mounting hardware to fasten the door to the wall is not provided with the door. Use the proper mounting method best suited for each particular door installation. Some examples are shown below. It is the responsibility of the door owner to ensure that the wall material is strong enough to support the forces of the door and all anchoring hardware. In general, through-bolting is recommended wherever possible using 1/2 inch diameter bolts/threaded-rods, or 1/2 inch diameter concrete expansion anchors for masonry walls, or proper welding joints for structural steel substrates.

Mounting Surface Preparation

HEADER CLEARANCE AREA

35.25

12.25
NON DRIVE SIDE

17.00
DRIVE SIDE

DOOR OPENING

Ø.688 TYP.
FOR THRU BOLT
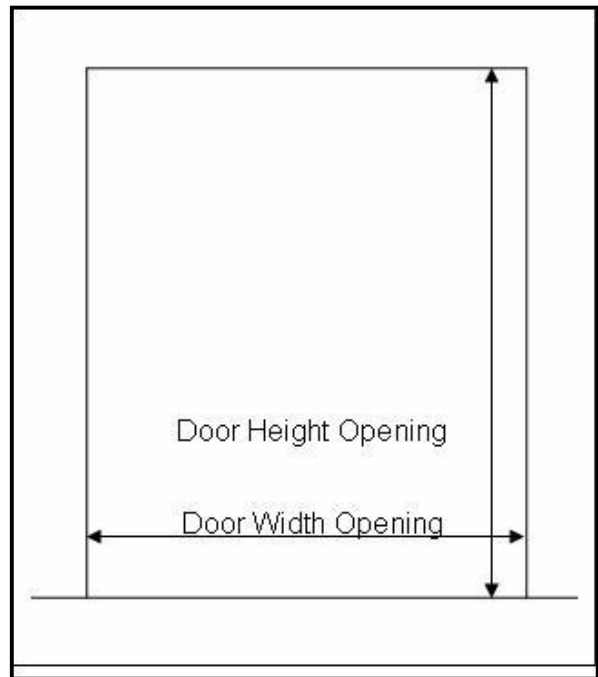
FLOOR

12.00

6.00

3.50

NOTICE

Mounting surfaces that are not ideal may require additional preparation to ensure side frames can be securely mounted flat and plumb. Proper installation will help prevent photocell misalignment problems and curtain binding issues.

Door Opening

1. Are the door jambs and support wall structurally sound providing a flat surface for the side columns to mount against?

2. Check the width and height of the door opening and verify the measurements against the dimensions of the door.

3. Is the opening square? Plumb?

4. Is the floor level across the opening?

Make all necessary structural repairs and improvements to provide a "yes" answer to each of the questions above.

Door Height Opening

Door Width Opening

Checking for Level Floor

First establish a level line or mark on each side of the door opening. This can be accomplished using either a water level or an optical measuring device. Measure down from this mark to the floor on each side of the door opening.

⇒ If the measurements are the same on both sides of the door, the floor is level.

⇒ If the measurements are not the same, shim or raise the floor of the longer side so that it matches the measurement on the shorter side before installing the side frames.

Example: *If the left side measures 46" from the level mark to the floor and the right side measures 47", install the left side frame resting directly on the floor and shim the floor on the right side 1" before setting the side frame in place.*
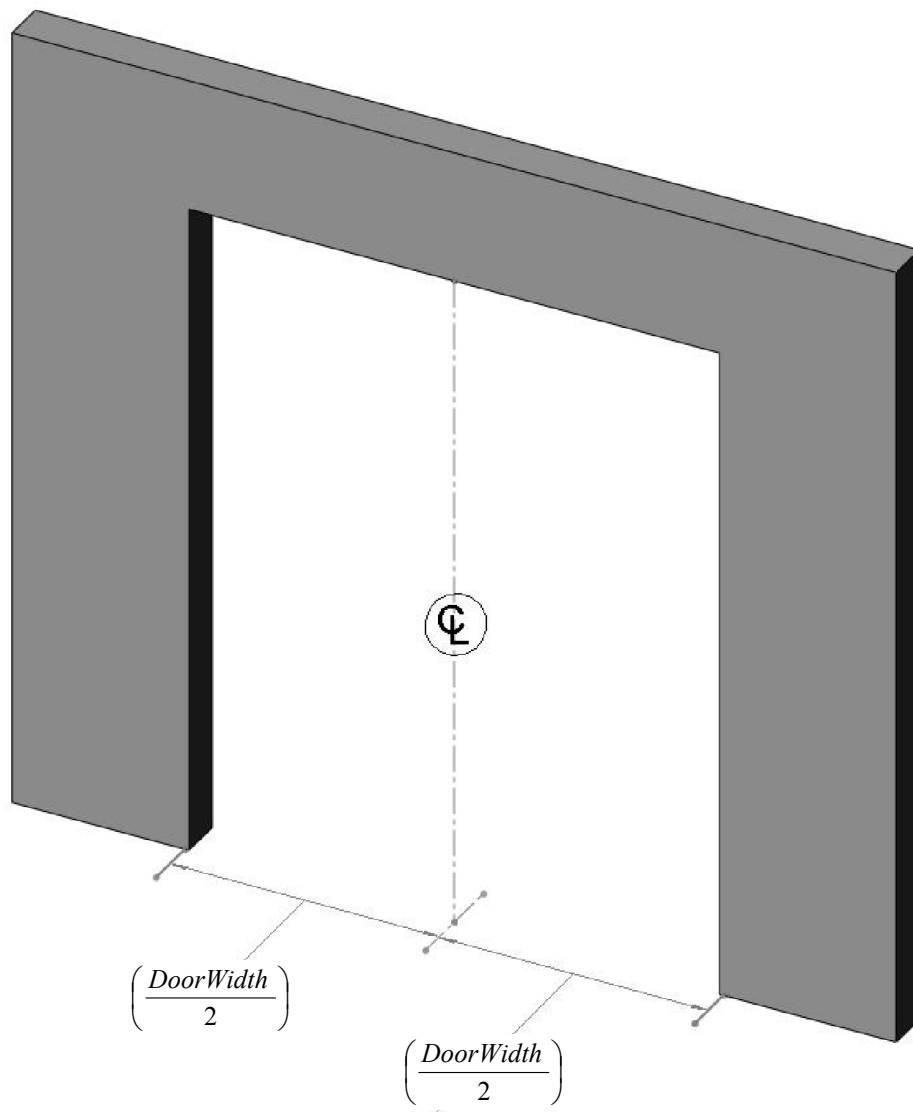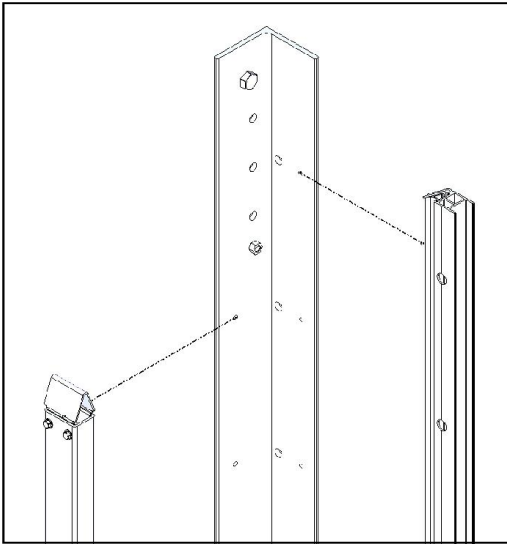
Mechanical Door Installation

NOTICE 📖 **Ensure the opening has been inspected and the mounting surfaces have been prepared according to the instructions on pages 8 and 9 before proceeding with the mechanical installation.**

1. Measure from the inside of the left door jamb to the inside of the right door jamb and place a mark on the floor on the door opening centerline.

2. Reference the door's documentation and place two marks on the floor at 1/2 of the manufactured door width to the left and to the right of the door opening centerline.

3. Measure the distance between the two new marks to ensure they match the manufactured door width.

$$\left(\frac{DoorWidth}{2} \right)$$
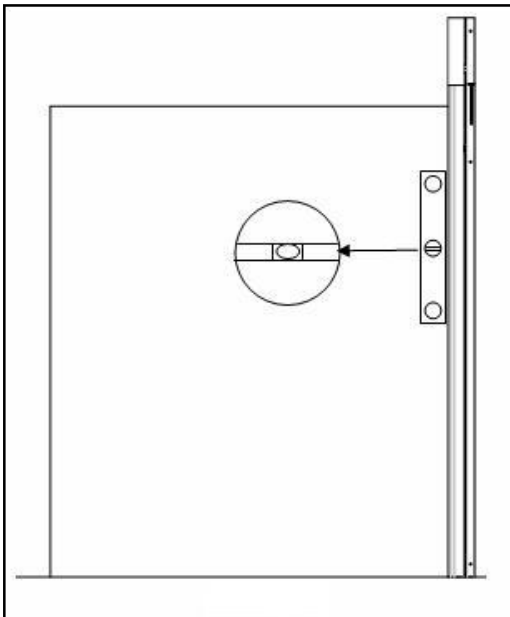
$$\left(\frac{DoorWidth}{2} \right)$$

Temporarily remove the 2" x 3" steel tubes from the side frame angles prior to proceeding.

Optionally, the aluminum retainer profiles can also be removed to provide additional clearance for wall drilling depending on the equipment used. This is typically not necessary.
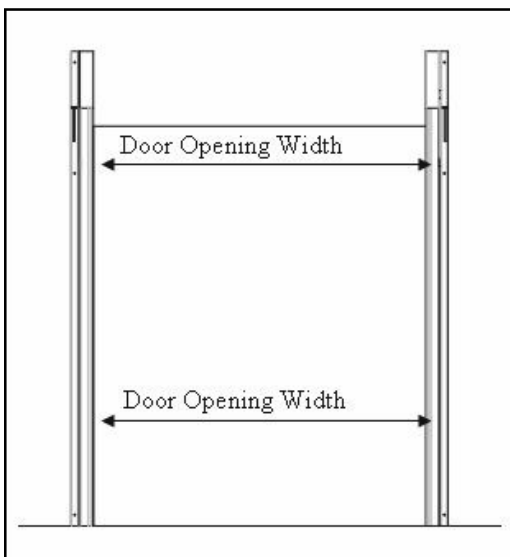
Carefully set these items aside for later reassembly.

Place the first side frame on the door opening jamb and temporarily clamp or hold it in position (centering the door in the doorway opening will allow for minor variations in the existing door opening). Ensure the side frame is fully plumb and level as shown and fasten the first side frame to the wall in accordance with the Wall Anchoring Guide on page 7.

⚠ WARNING

Improper installation of anchoring devices or installation into aged or unsound concrete block, or other wall material may result in premature wear, product failure, property damage, or serious personal injury.
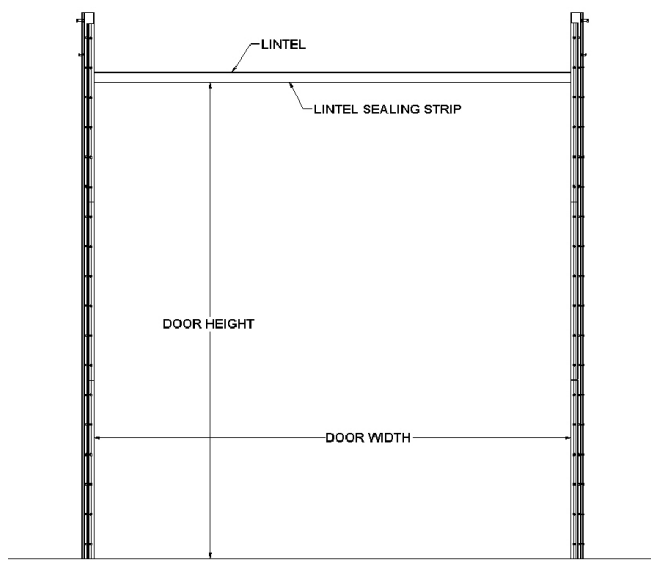
Place the second side frame on the door opening jamb and temporarily clamp or hold it in position. Ensure the side frame is fully plumb and set apart from the first side frame at the exact manufactured door opening width. Check this spacing at the top and bottom before fastening the second side frame to the wall.
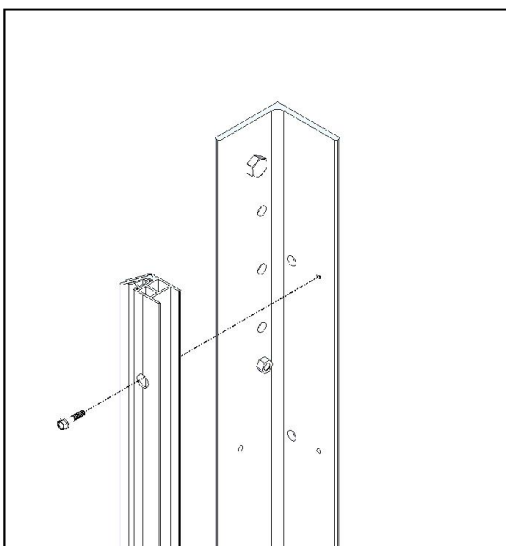
Installing the Lintel Brush Seal

A lintel seal is provided to seal the area between the wall and the back side of the curtain across the door header. This must be installed on the same mounting plane as the side frames

Use fasteners appropriate for the lintel surface material (¼" self-tapping screws are supplied with each door for common metal substrates).

Mark a level horizontal line 12" higher than the ordered door height.

Center the lintel seal retainer across the opening width leaving a 1/2" gap to the side frame at each end.
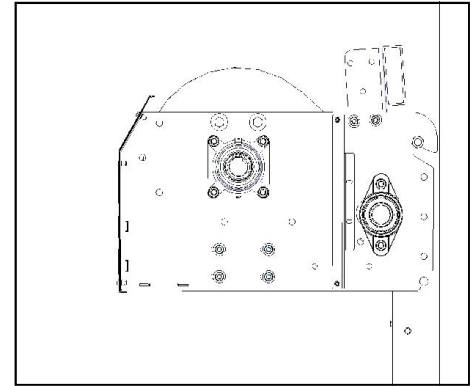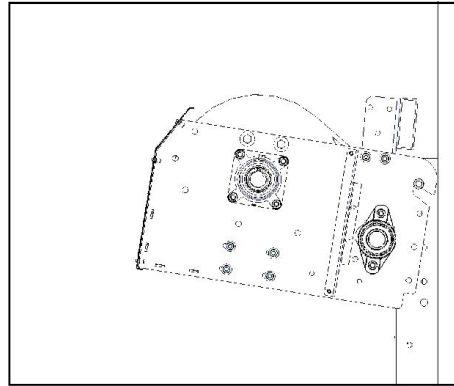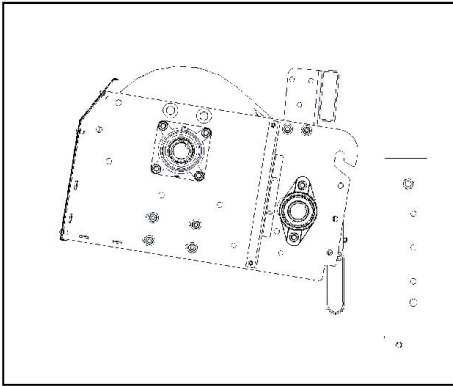

If the aluminum panel retainers were optionally removed earlier, reinstall them to the steel angles now. This must be done prior to proceeding with setting the header.
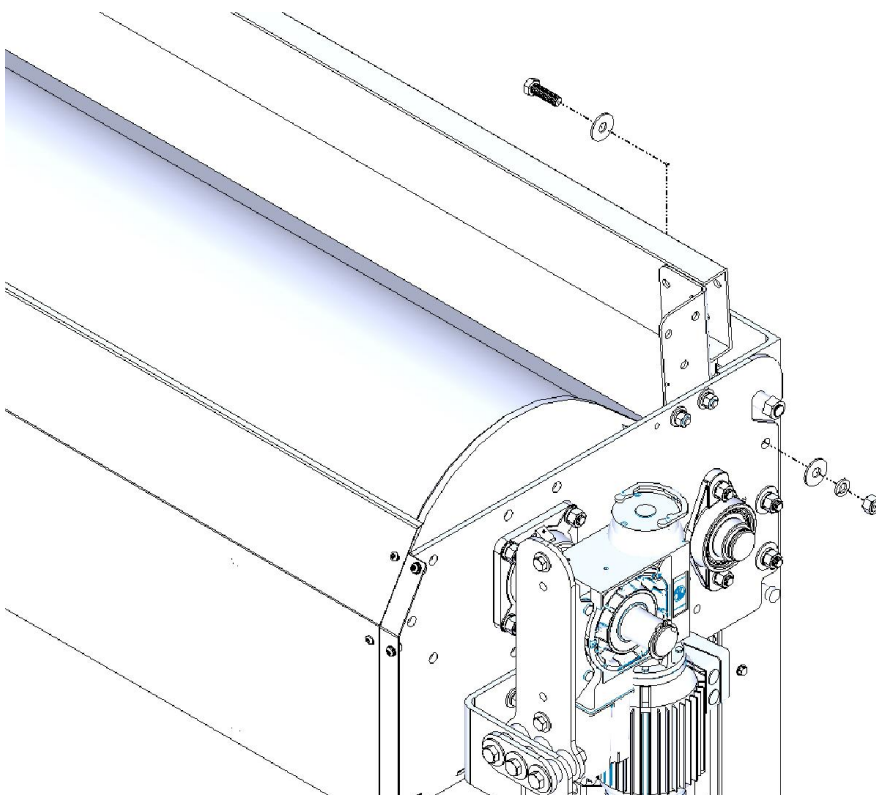
NOTICE

Ensure to read and be familiar with the lifting restrictions details shown on page 5 prior to proceeding.

Installing the Header

Carefully lift the header and hang the hook profile on the top plates onto the two mounting pins at the top of the side frames. This may be achieved by tilting the front of the header at a slight upward angle as shown above.

Allow the header to settle down into its horizontal rest position with the bottom of the plate resting against the smaller positioning pin. Maintain the weight of the header with the lifting equipment until the (3) sets of 5/8" hardware installed on each end.

Fasten the header with the (3) sets of 5/8" hardware on both sides of header
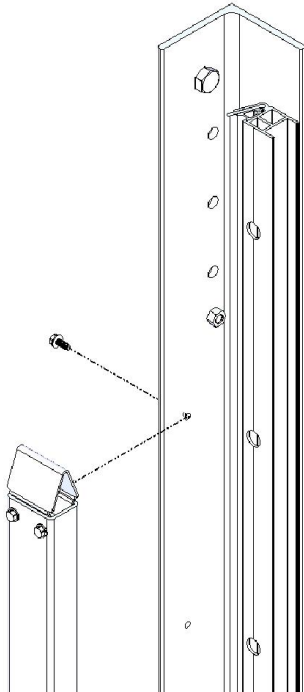
Each nut should be positioned on the inside of the header plates with the bolts, lock washers, and fender washers installed from the outside.

Ensure all hardware is tight-ened prior to removing the header lifting equipment.

The rear support brace for optional top roll covers is shown in illustration; not supplied on all doors.

⚠ CAUTION **Ensure secure attachment of the drive unit and tightness of the drive chain (if applicable) before proceeding.**
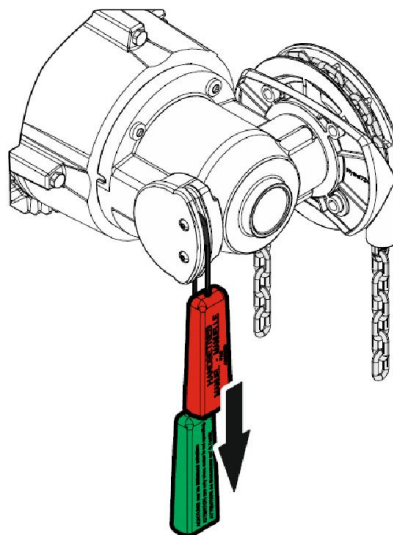
Cut the banding strap(s) on the top roll being careful not to damage the door curtain.

Reinstall the 2" x 3" steel side frame tubes using the 5/16" self-threading hardware provided at this time.

Once the tubes are fastened on both sides of the door, use the manual chain hoist to move the door up and down a short distance to ensure free movement of the curtain.

Manual Hoist Engagement

A manual hand chain is provided to move the door without power. Lightly pull the red handle of the hoist disengagement until it stops. The control circuit is now interrupted and the door can be opened or closed with the hand chain only.

Manual Hoist Disengagement

By lightly pulling the green handle until it stops, the control circuit is re-made and the door is electrically operational and the hoist is disengaged from the drive.

This completes the Mechanical Installation for direct driven doors.

NOTICE **Doors with chain and sprocket drive systems have additional mechanical installation steps and adjustments on page 16.**
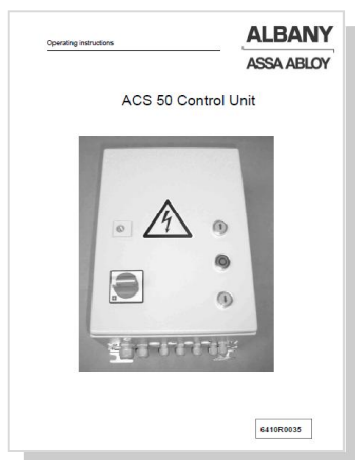
Electrical Installation

⚠ WARNING

Lock-Out Tag-out all electrical power supplied to the door before making any electrical installations or connections. Also Lock-out Tag-out any equipment near the installation site if that equipment may be inadvertently operated into the area used to assemble and install the door. Failure to properly deenergize electrical circuits and disable equipment during installation and/or maintenance could result in death or serious injury.

NOTICE

A qualified electrician must make all electrical mountings and connections in accordance with all applicable regulating body(ies) electrical codes and standards.

Consult the control system manual supplied with the door for additional specifications and detailed instructions for installation and troubleshooting. A full set of electrical schematics are supplied with each door as well. These will either be located inside the control system enclosure, or included packaged with the product manuals. Standard products will utilize one of the two systems shown below.

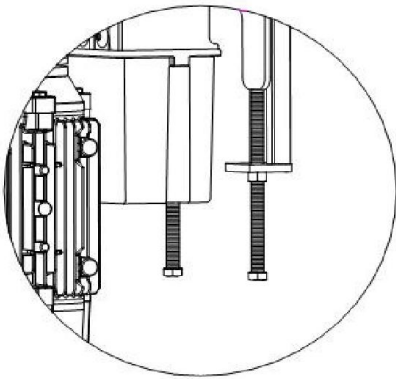**Albany ACS50 Controller**   **Albany MCC Controller**

Install and make all connections to the electrical control system at this point.

Run the door and test all safety functions and door features prior to proceeding.

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Additional Steps for Chain Drive Doors

Drive Chain Tension Adjustment

The drive chain tension is preset from the factory. This setting should be checked after the door is cycled a few times. The drive chain is to be tensioned so the deflection of the slack side of the chain is equal to 2% of the distance between the shafts, or about 3/8" (9.5 mm).

If the Chain tension needs to be adjusted, loosen the (4) bolts that attach the operator to the header assembly.

Using the threaded adjustment bolts located on the bottom of the attachment bracket, either raise or lower the operator to achieve the proper tension.

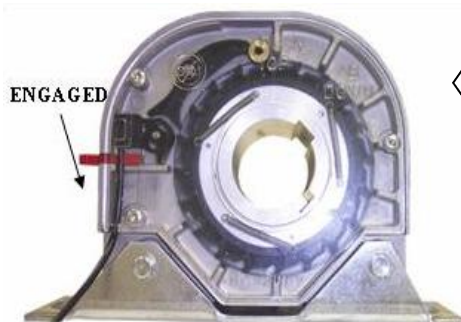Retighten the (4) bolts that attach the operator to the header assembly when finished.

Installing the Inertia Brake

A safety inertia brake is supplied on all chain drive doors. This device engages and locks the top drum from turning if the maximum operation speed is exceeded.

The brake must be installed on the bracket on the non-drive side of the header assembly after the phase rotation has been verified. This must be installed with the correct rotation direction. Installing backwards can cause the brake to engage.

CAUTION **The smaller inertia brake shown below on the left is a <u>one-time use only</u> device. If it has been engaged it must be replaced (P/N 6622T001).**

The larger inertia brake shown below to the right might be reset dependent upon how hard of an activation has taken place. If this brake has been engaged, consult the factory for instructions to properly inspect, repair or replace this brake. Repair parts may be required.
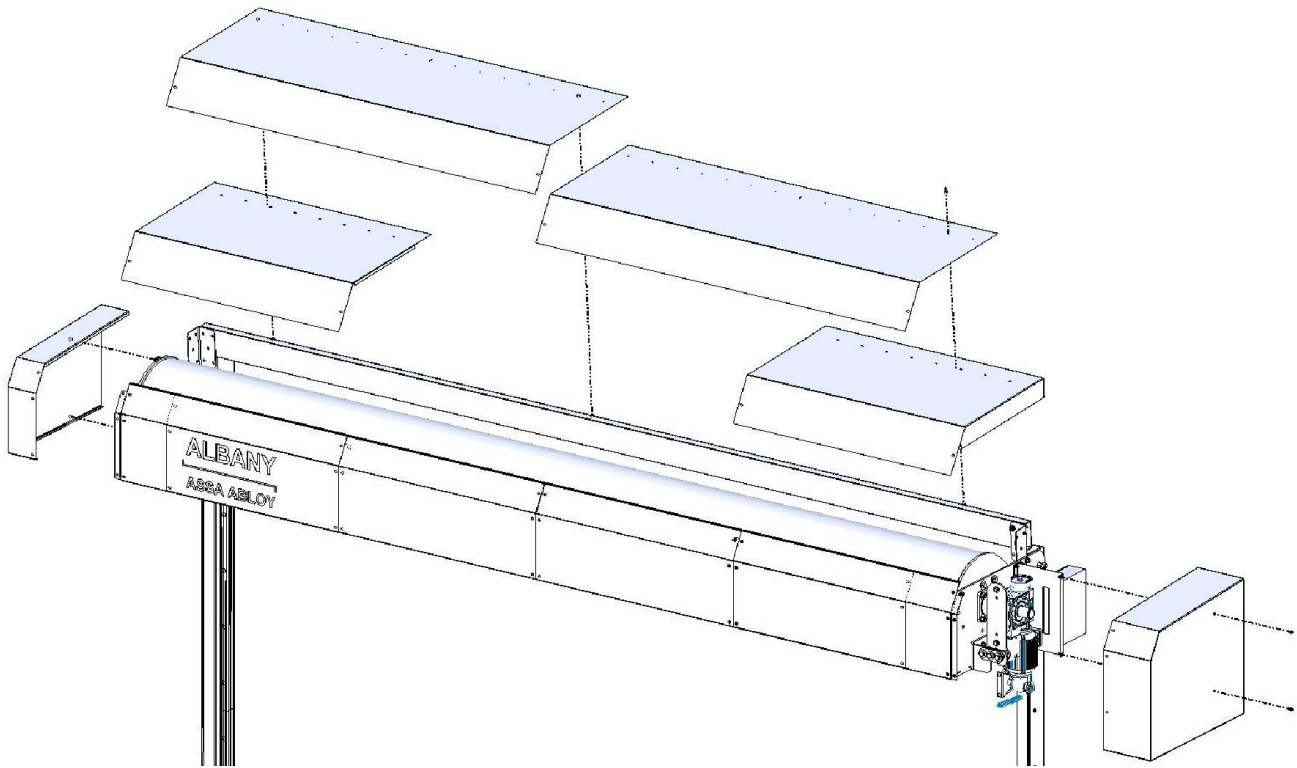

SMALL

LARGE

Top Roll & Motor Cover Installation

If the optional top roll & motor covers are ordered with the door, install these parts using the 5/16" hardware provided in the orientation and order shown above.

Use the self-drilling top roll cover screws only along the top rear edge of the cover to fasten it to the steel support tube spanning the width of the door.

For more information, please contact ASSA ABLOY Entrance Systems:

Sales Support
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Toll free: (800) ALBANY1   *press 1*