ASSA ABLOY

Albany RR300 Freeze & RR300 Chill Doors

Mechanical Install & Owner's Manual

INTRODUCTION

The contents of this manual are designed to help you install and setup Albany RR300Freeze™ and RR300 Chill™ high speed doors. **DO NOT operate or perform maintenance on 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   **DANGER indicates a hazard that, if not avoided, will result in death or serious injury.**

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

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

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

NOTICE   **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

DOOR INSTALLATION

⚠ 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.

⚠ 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 de-energize electrical circuits and disable equipment during installation and/or maintenance could result in death or serious injury.

⚠ 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.

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

SITE PREPARATION

Electrical Supply

Qualified electrician must make all electrical mountings and connections in accordance with all applicable regulating body(s) electrical codes and standards. See applicable electrical manual for specifications and wiring instructions.

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.

TOOLS AND MATERIALS REQUIRED

Personnel
- 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
- Tape measure
- Carpenter's square
- Level (4ft minimum recommended)
- 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. Albany Doors 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.

UNPACKING AND PREPARING

1. Inspect and unpack the components. Report any damage immediately to ASSA ABLOY at 877-925-2468. Refer to the serial number tag located on the right door column.
2. DO NOT cut the banding which holds the door in a roll until instructed to do so in a later procedure.

CAUTION

The door panel and roll assembly could be damaged. 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.
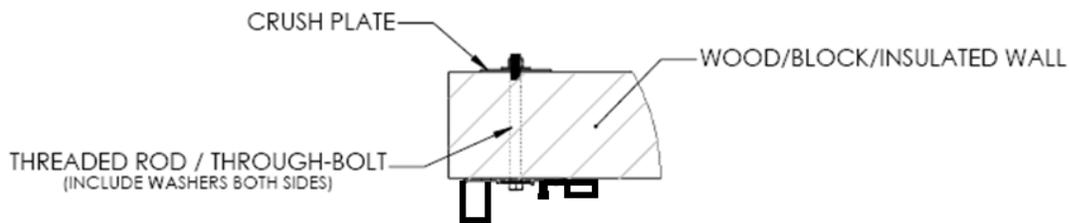
INSTALLATION REFERENCE MARKS

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

$$\frac{DoorWidth}{2}$$

   to the left and to the right of the door opening centerline.

3. Measure the distance between the two new marks. The correct distance should be equal to the ordered door width.
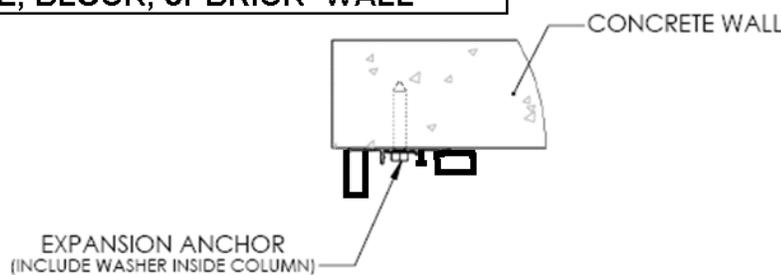
$$\frac{DoorWidth}{2}$$

$$\frac{DoorWidth}{2}$$
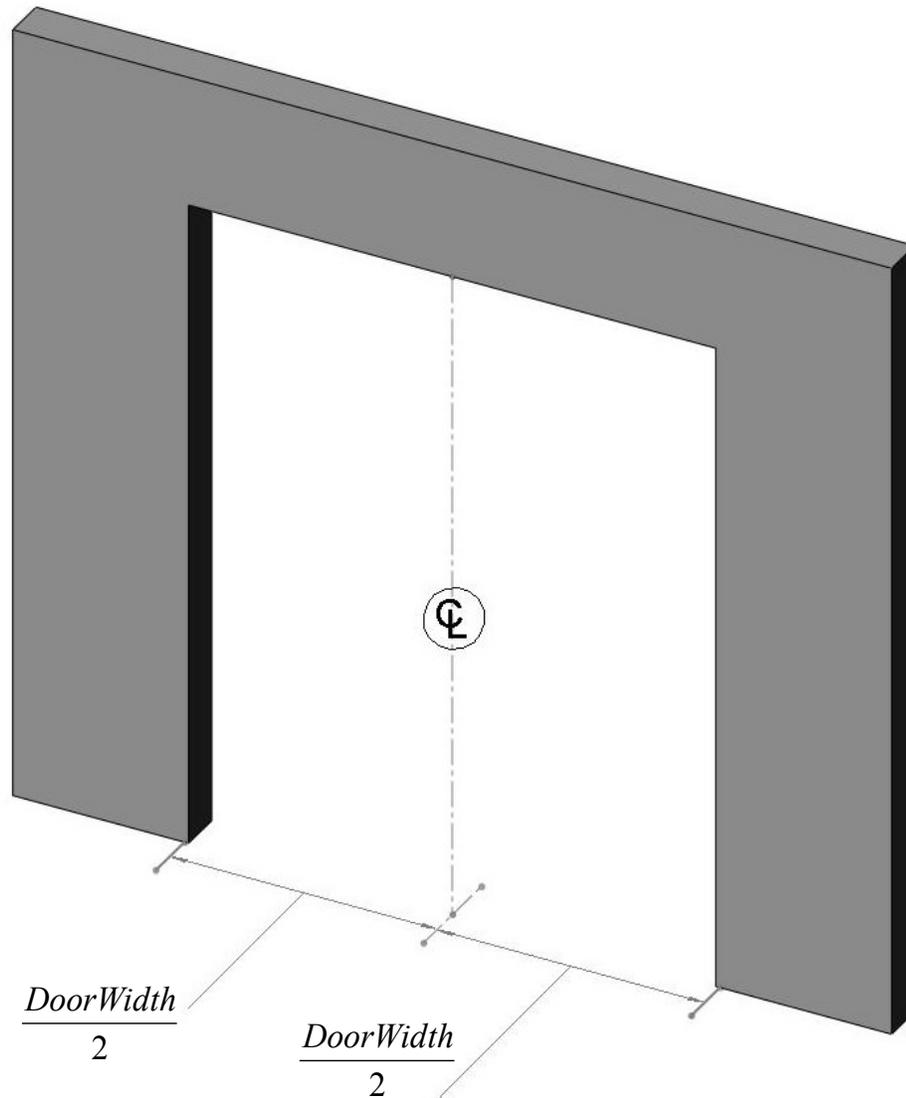
WALL ANCHORING GUIDE

ASSA ABLOY does not supply hardware for mounting the door to the wall. Use proper hardware 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, Albany Doors recommends through-bolting wherever possible using 1/2 inch diameter bolts/threaded-rods or 1/2 inch diameter concrete expansion anchors.

WOOD, BLOCK, BRICK, or INSULATED WALL

CRUSH PLATE

WOOD/BLOCK/INSULATED WALL

THREADED ROD / THROUGH-BOLT
(INCLUDE WASHERS BOTH SIDES)

CONCRETE, BLOCK, or BRICK WALL

CONCRETE WALL

EXPANSION ANCHOR
(INCLUDE WASHER INSIDE COLUMN)

INSULATED WALL

ALUMINUM-CLAD LUMBER

INSULATED WALL

THREADED ROD / THROUGH-BOLT
(INCLUDE WASHERS BOTH SIDES)

INSULATED WALL

ALUMINUM-CLAD LUMBER

INSULATED WALL

THREADED ROD / THROUGH-BOLT
(INCLUDE WASHERS BOTH SIDES)

DOOR JAMB DETAIL

6.61

2X ⌀.50

25.33

17.33

HEADER MOUNT POINTS

ANCHOR LOCATIONS

HEADER MOUNT POINTS

CONTINUE TO TOP

DOOR OPENING HEIGHT

PHOTO EYE MOUNTING BRACKET
(OPTIONAL EQUIPMENT)

7.42"

3.34"

5.83"

6.04"

3.25"

AXIS OF FASTENER HARDWARE

36.00

36.00

36.00

12.00

MOUNTING THE DOOR ASSEMBLY (optional methods shown)
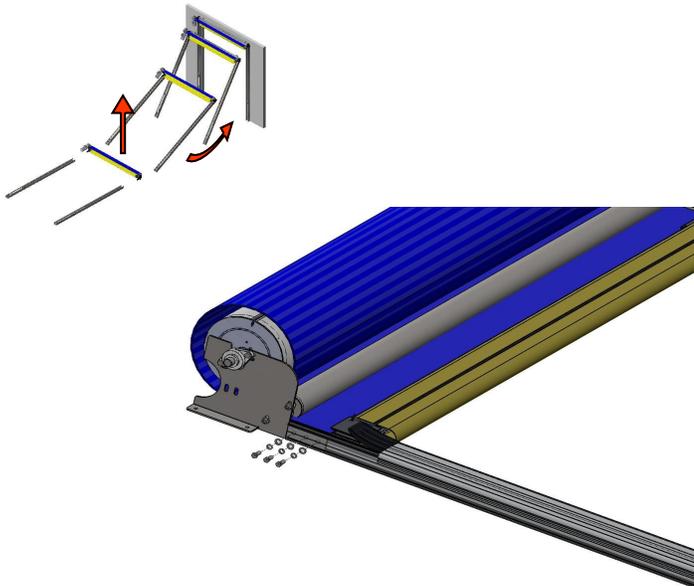
ASSEMBLE ON FLOOR

1. Lay the head assembly on its back on the floor in a clean area in front of the door opening.
2. Slide each side column onto the head assembly. Install the three 3/8" flat washers, lock washers, and 3/8"x1" bolts in each bracket.
3. Using a safe lifting device, carefully lift the entire door assembly up to a vertical position against the door jambs.
4. Hold the left side column in place against the wall. Align the base with the marking placed on the floor earlier and bring the column into plumb.
5. Drill and prepare the holes in each side column and anchor as needed (see page 6 for hole locations).
6. Loosely install the anchors, recheck for plumb, and tighten the anchors.
7. Repeat steps 4-6 for the right side column. See next page for final steps.

⚠ CAUTION

The head assembly is heavy. Use proper lifting devices and techniques to securely and safely lift the head assembly. Failure to properly secure the head assembly could result in death or serious injury.
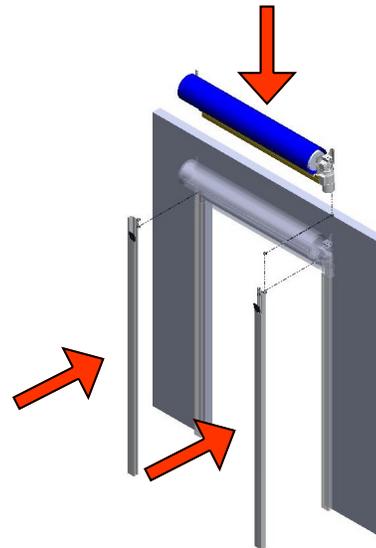
ASSEMBLE ON WALL

1. Hold the left side column in place against the wall. Align the base with the marking placed on the floor earlier and bring the column into plumb.
2. Drill and prepare the holes and anchor as needed (see page 5 for hole locations).
3. Loosely install the anchors, recheck for plumb, and tighten the anchors.
4. Repeat steps 1-3 for the right side column.
5. Install the top roll seal as shown on the next page.
6. Using a safe lifting device, carefully lift the head roll assembly up into position above the side columns.
7. Slide each corner bracket of the head assembly into the slot provided in its associated side column. Install the three 3/8" flat washers, lock washers, and 3/8"x1" bolts in each bracket.
8. See next page for final steps.

⚠ CAUTION

The head assembly is heavy. Use proper lifting devices and techniques to securely and safely lift the head assembly. Failure to properly secure the head assembly could result in death or serious injury.

CAUTION

The head assembly must be lifted level (balanced) and with the mounting brackets and motor hanging straight down. Failure to properly position the head assembly could result in damage to the mounting brackets and/or the side columns.

MOUNTING THE DOOR ASSEMBLY (for both wall and floor assembly)

8. Attach the front member of the side columns to the rear member at 36" intervals through the screw positioning line in the aluminum using the self-drilling screws provided.
9. Install the header seal to the wall as shown below. Removal of the bottom bolts in the idler barrel bearing and pushing the idler up will be required to install the seal. Anchoring hardware will be determined by wall type.
10. Caulk door jambs to seal the opening when finished.
11. See the accompanying electrical manual for wiring of the door and control.

See step 8 above. Yellow line is the screw location line.

Header seal 12" above door opening.

12"
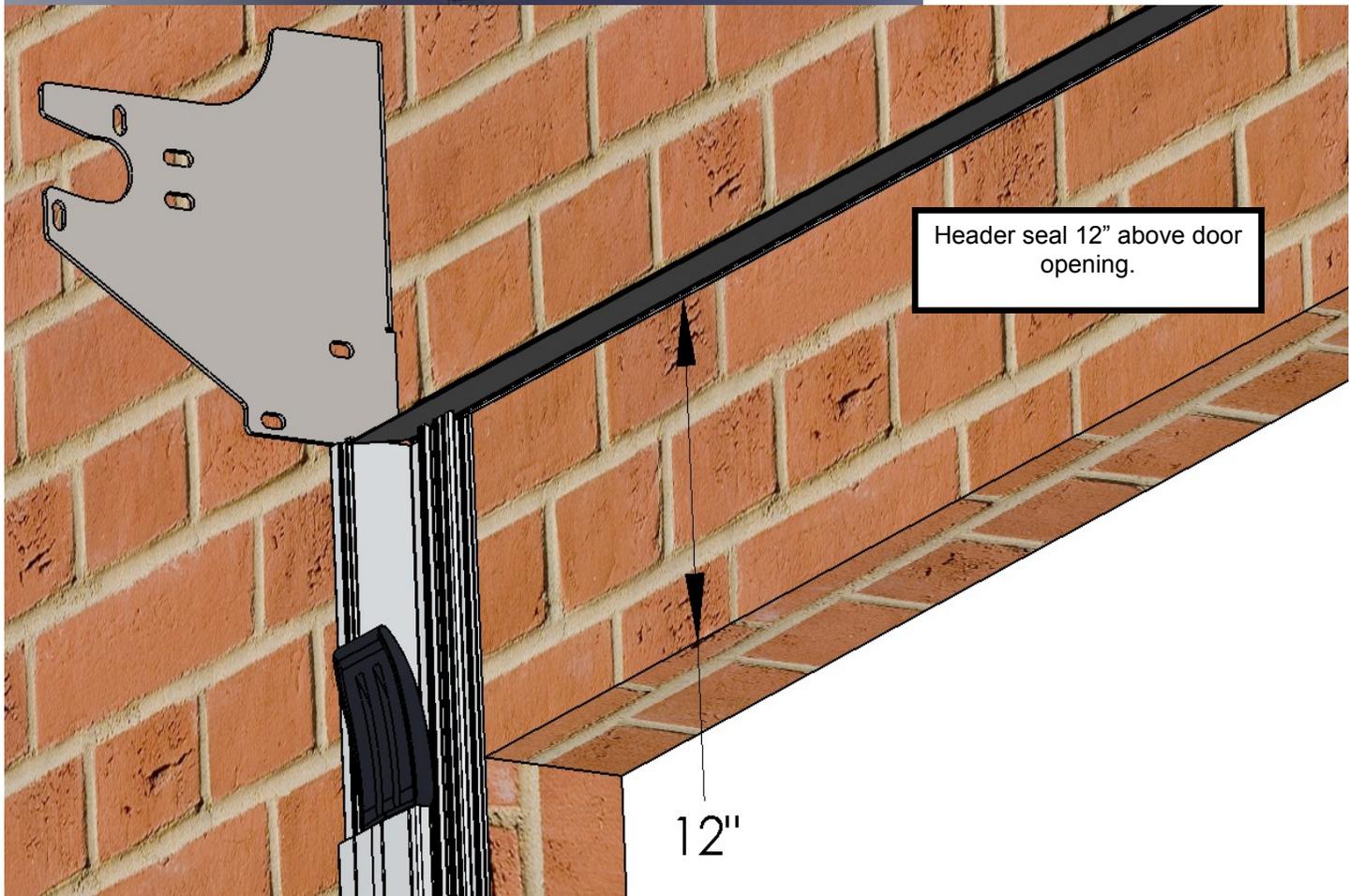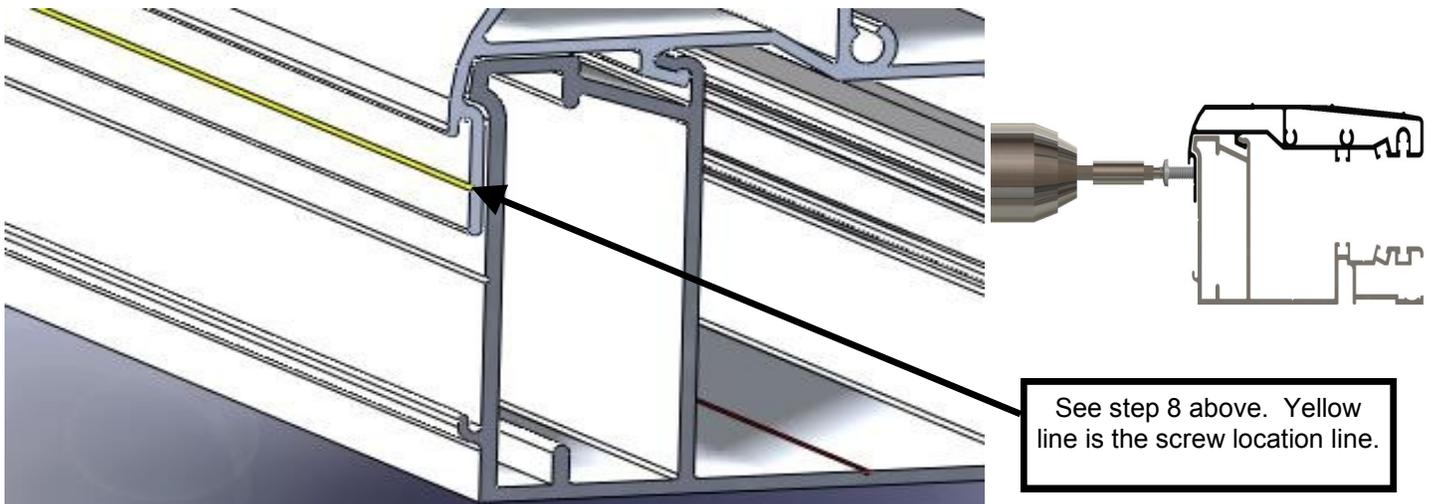
Installing Low Volume Blowers - Optional Equipment
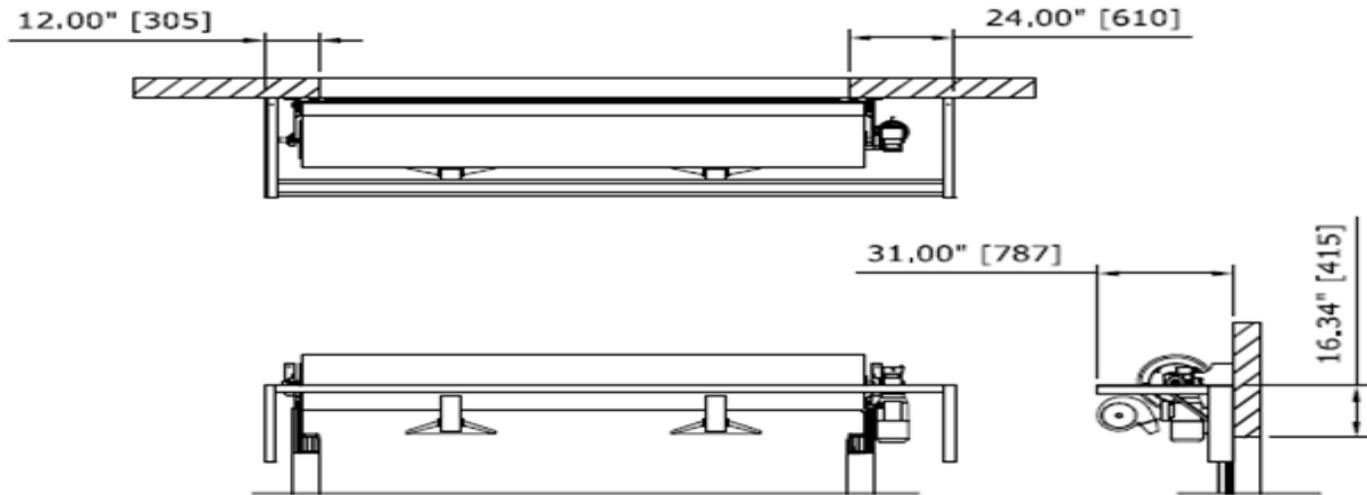
BLOWER UNIT SPACE REQUIRMENTS

Referencing the drawing above, locate the placement of the wall mount brackets per the drawing. The width between the two brackets can vary due to obstructions that may exist on the wall outside of the tolerances given in the drawing. The drawing allows for service clearances in the event that the drive unit will need to be serviced or removed and this clearance should be given consideration when mounting the brackets. You can utilize the included unistrut in conjunction with a level so that the wall brackets are mounted level. The unistrut will be supplied at a longer length then what is required and need to be cut to length for final fit in a later step.

1. Hang the blowers in the unistrut with the provided blower mounting bracket and unistrut nuts. Position the blowers so that they are evenly spaced in front of the curtain. Position the blower and unistrut assembly so that it rests on top of the wall mount bracket so that the blower is within 1/2" of contact with the top roll. Make sure the blowers are facing the correct direction as shown on the drawing above.

2. Mark the inside face of the wall mount bracket at the center line of the unistrut. This will be the position of the unistrut once it is cut to length and positioned in between the wall brackets. Measure down 1" from the top of the bracket at the centerline mark you made previously and drill a clearance hole for a 1/2" bolt to mount the unistrut.

3. Measure the distance between the wall brackets and cut the unistrut to the same length as the measurement. Bolt the unistrut mounting angles on each end of the strut as shown in the picture below. The unistrut can now be bolted in place between the wall mount brackets. The blowers should be positioned so that the blower nozzle is pointed in towards the curtain. Final adjustment will be made once the blowers are running.

4. Mark the inside face of the wall mount bracket at the center line of the unistrut. This will be the position of the unistrut once it is cut to length and positioned in between the wall brackets. Measure down 1" from the top of the bracket at the centerline mark you made previously and drill a clearance hole for a 1/2" bolt to mount the unistrut.

5. Measure the distance between the wall brackets and cut the unistrut to the same length as the measurement. Bolt the unistrut mounting angles on each end of the strut as shown in the picture to the right. The unistrut can now be bolted in place between the wall mount brackets. The blowers should be positioned so that the blower nozzle is pointed in towards the curtain. Final adjustment will be made once the blowers are running to provide correct airflow across the curtain.

Refer to the supplied door schematics for wiring of the blowers.

The low volume blowers are 120VAC

Installing Manual Hoist Brake Release—Optional equipment

Doors equipped with a manual chain hoist will require the installation of a mechanical brake release rod that when actuated will pull down on the manual brake release rod of the motor so that hoisting the door can be performed without having to drive thru the brake of the motor.

Install the 'Z' bracket to chain hoist housing.

Use the nut and bolt to secure bracket to housing.

Locate the brake release cable, hose clamp, one 8-32x1/2" bolt and 8-32 Nyloc nut.

Install hose clamp to brake release cable. Place hose clamp approximately 30mm away from end of cable sheath.

Install 8-32x1/2" bolt into the hose clamp

Place exposed end of brake release cable through the thru-hole on brake release arm.

Install brake release cable assembly to the 'Z' bracket.

Fasten the 8-32 nut to bolt to secure hose clamp to 'Z' bracket.

T-handle must be in the fully retracted position during the install and mounting process.

Verify the brake release arm is in the 'Disengaged' or upper position.

Install cable clamp to the exposed end of brake release cable and tighten the two nuts to secure clamp.

The T-handle mounting bracket can now be wall mount to desired height. Once mounted you will need to verify the functionality of the brake release cable along with the functioning of the manual hoist. If the release rod is working properly the hoist should require little effort to operate. Improper adjustment of the brake release will allow the brake to drag during the hoisting of the door.

⚠ WARNING

It is imperative that you verify the electrical interlock function of the hoist. When the hoist is engaged (red handle pulled down) the hoist disengagement switch will open and if properly connected to the control will act as a stop input function disabling the control from operating the door electrically. The control system should not be able to electrically function the door while the hoist is engaged. Refer to the schematics supplied with the door for hoist interlock switch wiring.

Periodic Maintenance

ASSA ABLOY high speed doors are engineered for low maintenance operation. The door should be visually inspected daily for wear and tear, and operated to verify functions. Quarterly maintenance should be performed to clean components and to check all safety functions and check for mechanical and electrical integrity.

Daily Inspection

1. Inspect the door fabric for wear or damage.

2. Operate the door through several openings and closings. Verify that the door seats against the floor and that the door fabric remains tight and does not wrinkle. Verify that the door opens fully, slightly beyond the wall opening, and does not open too far.

    *   If the door does not seat against the floor properly or opens to the wrong position, refer to "Setting Door Limit Adjustments".

    *   If the door fabric has diagonal wrinkles the door fabric roll at the top of the door is not level and perpendicular to the side rails. Leveling adjustments should be made as soon as possible to prevent wear or damage. Refer to the installation instructions or contact Albany Door Systems.

3. With the door closing, place an object through the light curtain, or photoeyes, on each side of the door. Verify that the door stops immediately.

4. If a multiple panel door is installed, check at each end of the ribs to verify that they are in place and centered.

5. Inspect the coiled electrical wire for wear or damage if equipped.

6. Check the light curtain slots for dirt or dust accumulation and clean as necessary.

⚠ CAUTION

7. While the door is closing, tap the bottom of the door edge wand verify that the door stops and reverses to a fully open position.

Do not stand under the door when performing the following inspection. If the bottom bar reversing switch is not functioning correctly injury can occur.

8. Perform daily inspection.

9. Check all mounting hardware and verify that all nuts and bolts are tight. Hardware includes: wall anchors, cover hardware, motor mounting hardware, and bearing bolt nuts.

10. Check the break away function by performing the following steps:

    *   Stop the door so the bottom rail is between waist and chest high.

    *   Push the bottom bar out of one of the side columns.

    *   Press the open key pad and verify that the door opens to the break away opening height and that the bottom bar centers in the side rails.

    *   Press the close key pad and verify that the bottom rail is centered and the door closes fully.

11. Inspect all side and top weather seals for wear or damage.
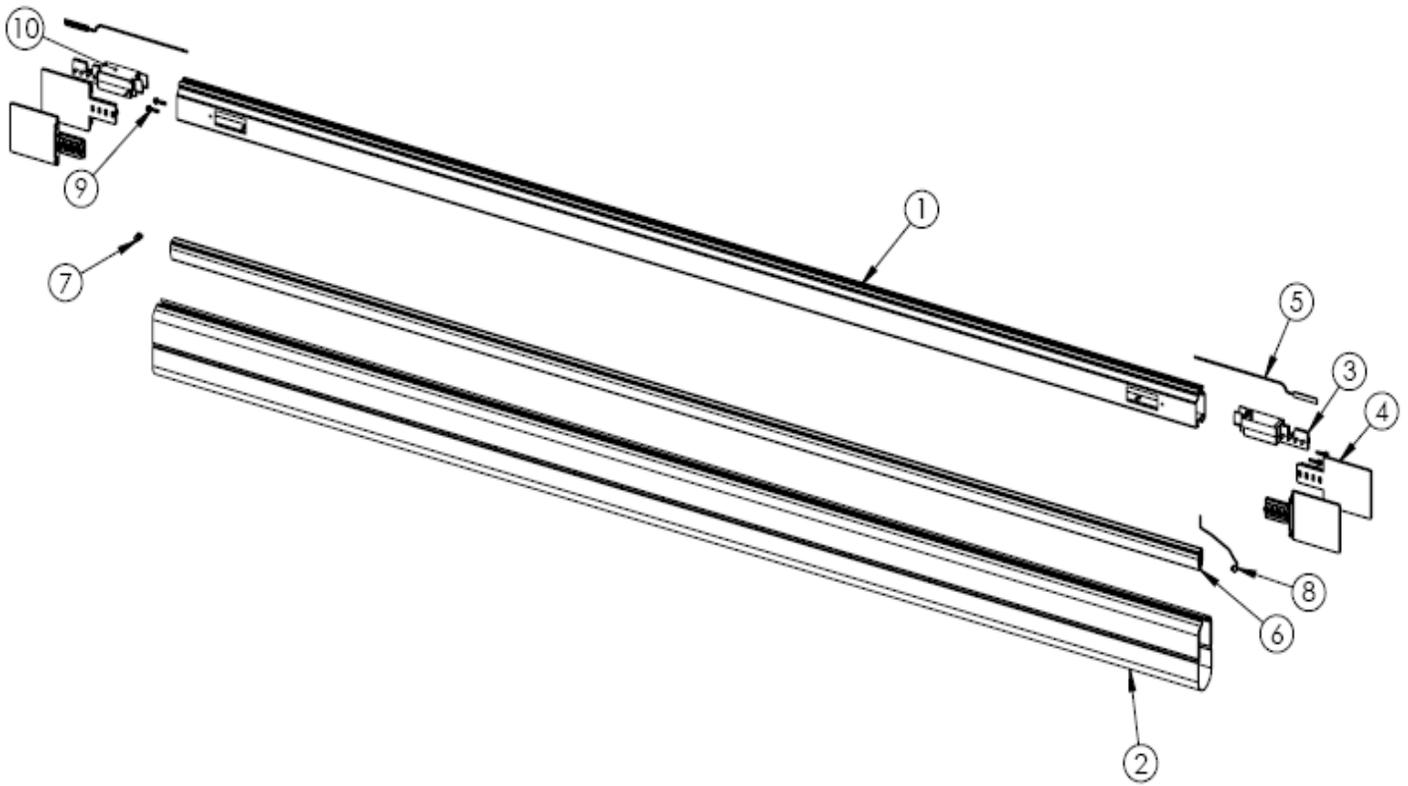
ITEM #	PART NUMBER	DESCRIPTION	QTY
1	CONSULT FACTORY	BOTTOM BAR EXTRUSION	1
2	4050T0023	BOTTOM BAR LOOP SEAL	1
3	000675	BLOCK, ENDCAP, BOTTOM BAR	1
4	000749	BREAKAWAY TAB	4
5	000967	3.5" BREAKAWAY SWITCH LOW SENSITIVITY	2
6	001180	REVERSING EDGE CONDUCTIVE EXTRUSION GE245TK	1
7	001292	PLUG, SAFETY EDGE, 68.1KOhm	1
8	001005	PLUG, SAFETY EDGE WITH CABLE	1
9	000036	BOLT HHC 1/4 -20 X 1	4
10	000771	RF BOTTOM BAR UNT	1

LEFT SIDE

RIGHT SIDE

RIGHT HAND
BOTTOM VIEW
3:8 SCALE
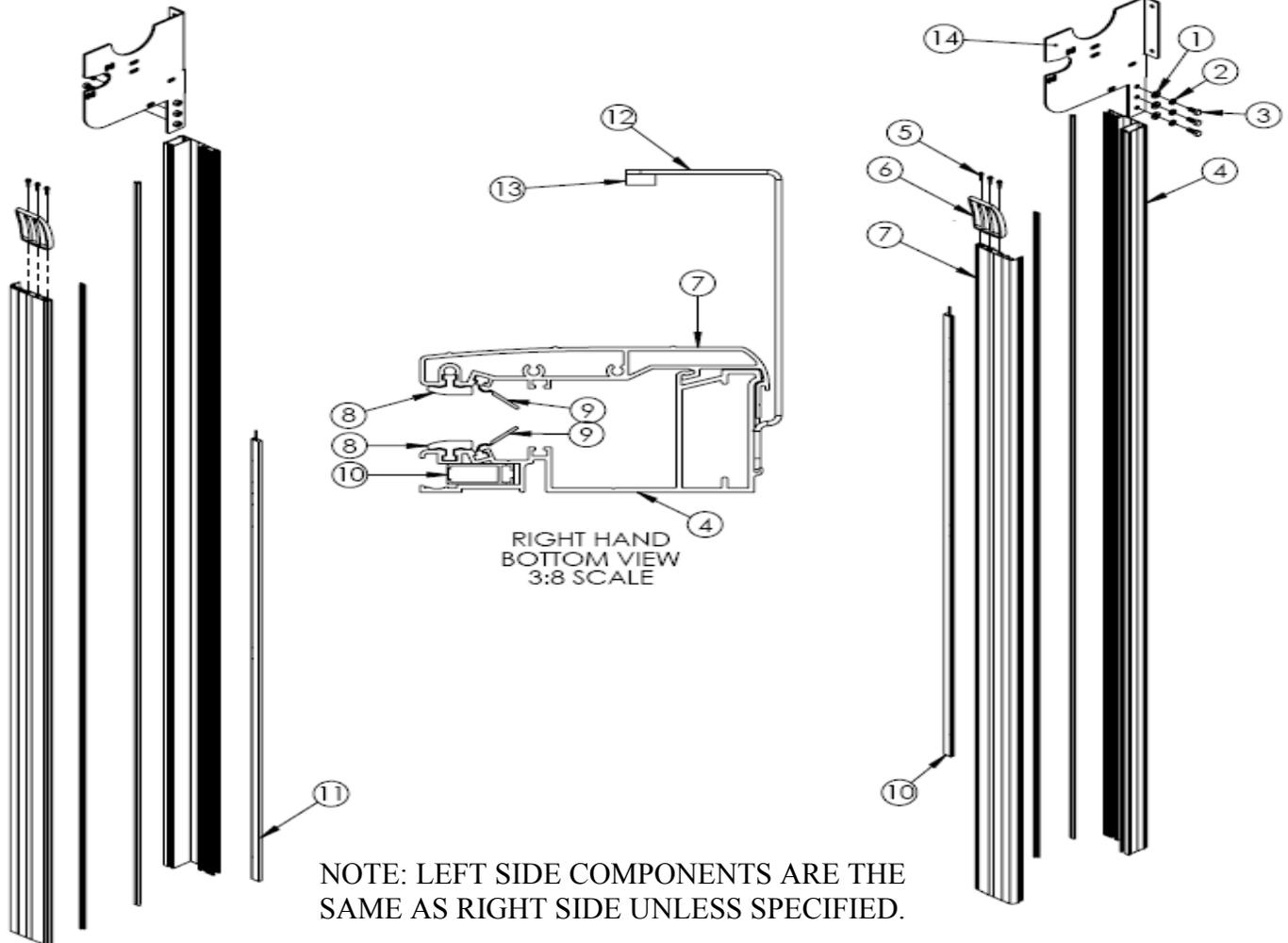
NOTE: LEFT SIDE COMPONENTS ARE THE
SAME AS RIGHT SIDE UNLESS SPECIFIED.

ITEM #	PART NUMBER	DESCRIPTION
1	001412	WASHER FLAT 1/2"
2	000420	WASHER LOCK 1/2"
3	000097	BOLT HHC 1/2-13X1.00"
4	CONSULT FACTORY	SIDE COLUMN LP REAR EXTRUSION
5	000036	BOLT HHC 1/4 -20 X 1
6	001418	RETRACK FLAP, CENTERED HOLES
7	CONSULT FACTORY	SIDE COLUMN LP FRONT EXTRUSION
8	000822	GLIDE STRIP, 16FT LENGTH
9	001762	FRONT COLUMN SEAL LOW ANGLE
10	001198	LIGHT CURTAIN TRANSMITTER
11	001199 OR 001197	LIGHT CURTAIN RECEIVER
12	001430	PHOTO EYE BRACKET
13	001293	PHOTO EYE TRANSMITTER AND RECEIVER SET
14	4521T0426(RT) 4521T0427(LT)	INSULATED DOOR END PLATE ASSEMBLY

Optional Side Frame Heat Tape

Not shown	000508	Heat Tape 110V (must be assembled w/ item below)	DH+9"
Not shown	001088	16Ga-2C SO Cord	
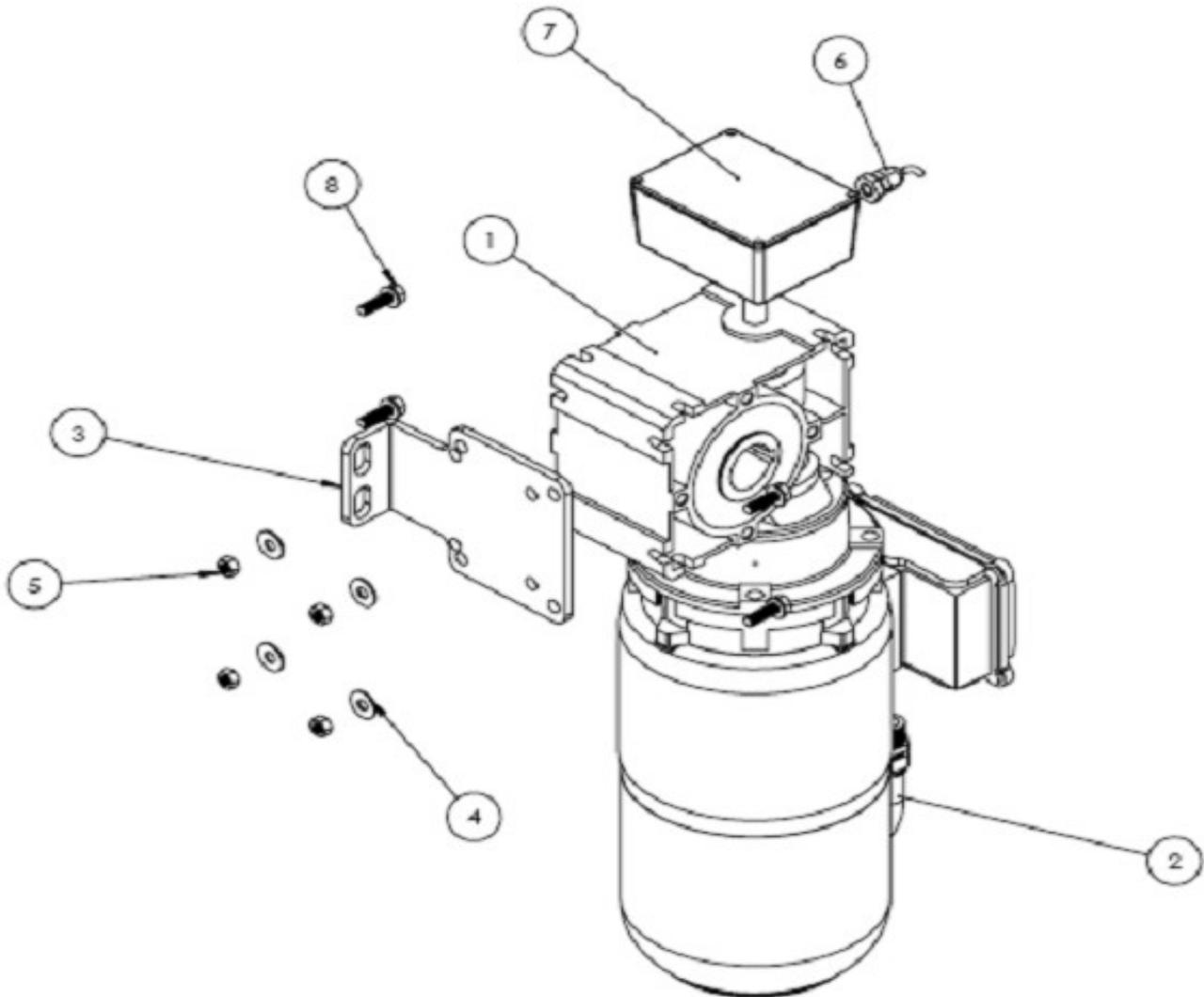
ITEM NO.	PART NUMBER	DESCRIPTION	Qty
1	CONSULT FACTORY	GEAR REDUCER	1
2	CONSULT FACTORY	MOTOR CABLE	1
3	000766	TORQUE ARM, NORD, RH	1
4	000520	5/16" FLAT WASHER ZINC	4
5	000091	NUT, HEX NYLON LOCK, 5/16-18	4
6	000336	ENCODER CABLE	1
7	000079	ENCODER SUB-ASSEMBLY	1
8	000090	5/16-18 X 1 HEX WASH SERR. FLANG SCREW GR5.1 ZINC	4

Consult Factory for Replacement Curtain Panel
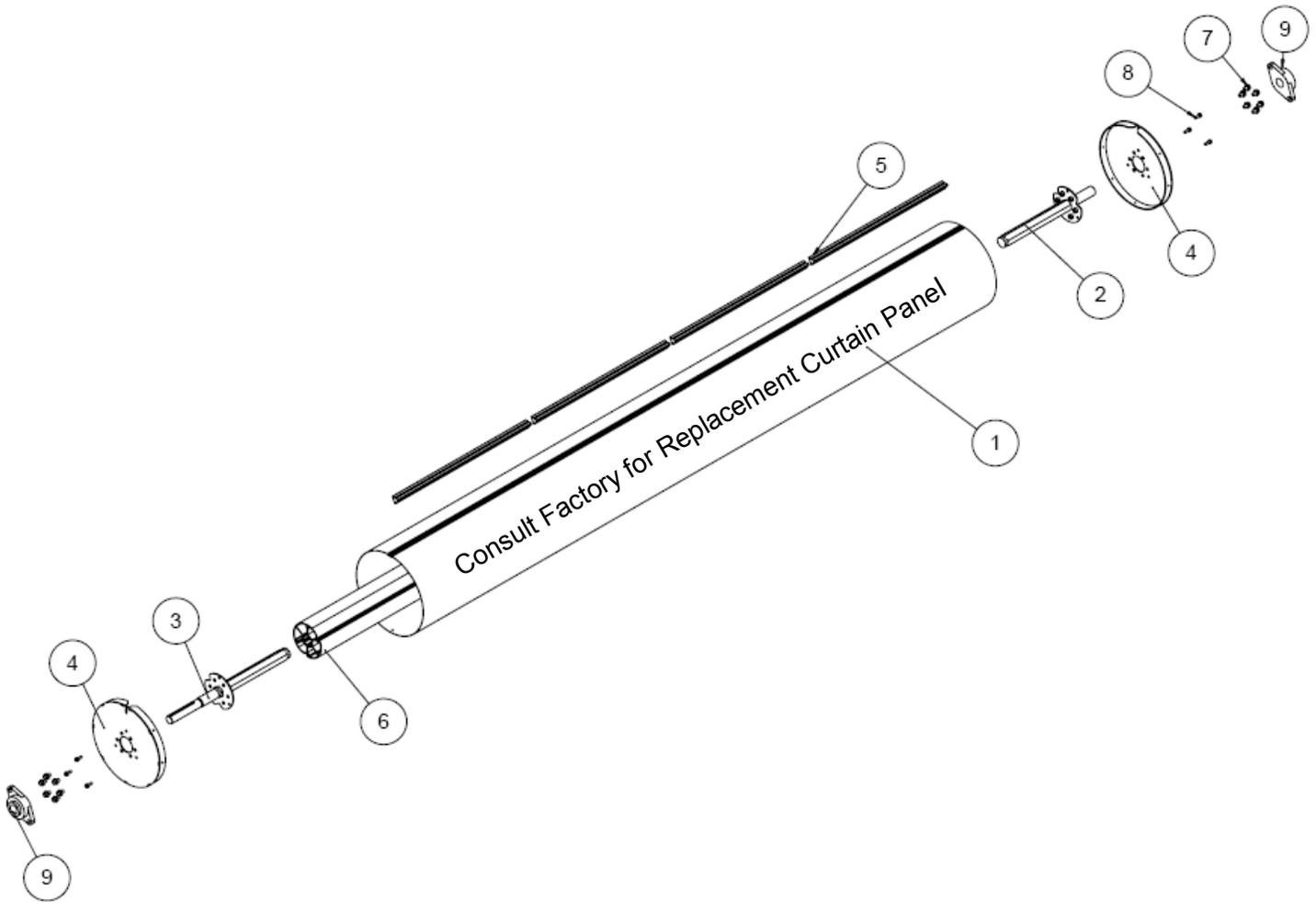
ITEM #	PART NUMBER	DESCRIPTION	QTY.
1	4521T0423	SHEETMETAL DRUM SKIN	1
2	4521T0430	INSULATED DOOR NON-DRIVE AXLE ASSEMBLY	1
3	4521T0429	INSULATED DOOR DRIVE AXLE ASSEMBLY	1
4	4521T0424	DRUM END CAP ASSEMBLY	2
5	4521T0425	INSULATED DRUM RETAINER	4
6	CONSULT FACTORY	LIGHTWEIGHT DRUM EXTRUSION PROFILE	1
7	000415	3/8-16 X 1 HEX HEAD SERRATED FLANGE SCREW 18.8 S/S	12
8	000036	SCREW TAP-TITE 2 HEX WASHER-HEAD 1/4-20 X 1.00" LG	6
9	000030	SHAFT BEARING	2
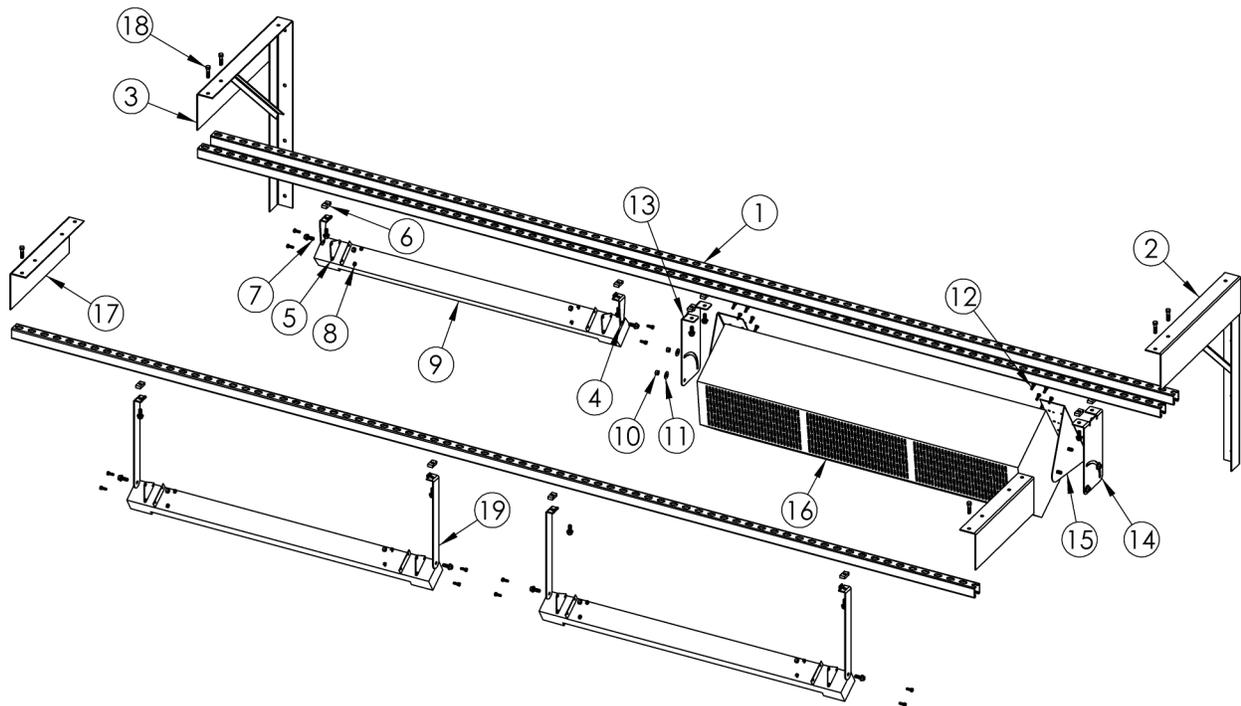
ITEM NO.	PART NUMBER	DESCRIPTION
1	000243	UNI-STRUT
2	000503	DEFROST BRACKET, RIGHT
3	000504	DEFROST BRACKET, LEFT
4	000244	LIGHT BAR MIDDLE SUPPORT
5	000246	LIGHT BAR TRIANGLE
6	000517	UNISTRUT HANGER 3/8 - 16
7	000415	BOLT FLANGE SERRATED 3/8 - 16 X 1" 18.8 SS
8	000423	NUT KEPS 1/4 - 20 18.8 SS
9	CONSULT FACTORY	INFARED HEATER FIXTURE
10	000256	NUT HEX NYLOCK 3/8 - 16
11	000518	WASHER FLAT 3/8"
12	000409	BOLT HHC 1/4 - 20 X 3/4" 18.8 SS
13	000438	BLOWER MOUNTING HANGER, LEFT
14	000439	BLOWER MOUNTING HANGER, RIGHT
15	000431	BLOWER MOUNTING BRACKET
16	CONSULT FACTORY	BLOWER
17	000505	IR LIGHT EXTENSION
18	000731	BOLT HHC 3/8 - 16 X 1.5"
19	000440	LIGHT BAR MIDDLE SUPPORT/BLOWER VERSION

INSTALLATION CHECKLIST

Please fill out below and return to Albany Door Systems

Customer: _____   **Installation Date(s):** _____

Location: _____   **Door Serial #('s):** _____

Contact: _____   **Contact Phone #:** _____

Install Company: _____   **Contact & Phone #:** _____

Mechanical Installation (All Doors):   **Yes**   **No**

- Is the door secured to the wall using thru-bolts?   _____ _____

    - If No, what type of anchors were used?   _____

- Are the side columns plumb?   _____ _____

- Is the door caulked or sealed to the wall?   _____ _____

- Are there any visible gaps between the door and the wall?   _____ _____

    - If "No" the above, did the customer contact approve of door to wall seal?   _____ _____

- Is there any visible damage to the door?   _____ _____

    - If Yes, what is the damage: _____

    - Was Albany Customer Service notified of the damage?   _____ _____

    - Was the customer contact notified of the damage?   _____ _____

Electrical Installation: **Yes**   **No**

- Were the factory supplied cables (motor, encoder & etc.) cables long enough?   _____ _____

    - If No, which cables were too short? _____

    - If No, was Albany Customer Support contacted and new cables sent?   _____ _____

- Were the schematics easy to read for electrical hook-up?   _____ _____

- What type of conduit was used to route the cables to the door? _____

- Is the conduit routed to the bottom of the control box?   _____ _____

    - If "No" did the customer approve this?   _____ _____

    - If "No," why? _____

    - If "Yes," who was the customer contact that approved? _____

Door Start-up   **Yes**   **No**

- Was the door start-up procedure easy to follow?   _____   _____

  - If No, what problem(s) did you run into? _____

    _____

    _____

- Was Albany Customer Support Dept. notified of these issues?   _____   _____

- Is the Reversing Edge working?   _____   _____

- Are the light curtains or photo-eyes working?   _____   _____

- Do the bottom bar breakaway switches work?   _____   _____

- Does the door's self-repair feature work when the door is broken away?   _____   _____

- If the door has an optional hoist , does it work correctly?   _____   _____

Activation

- What type of activation is being used? _____

- Was the activation supplied by Albany?   _____   _____

- Did the customer approve of the mounting and operation of the activators? _____   _____

Comments

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