

REVIEW ALL INSTRUCTIONS COMPLETELY BEFORE ATTEMPTING INSTALLATION

GENERAL NOTES:

- Instructions are intended for trained door systems technicians using proper tools and equipment.
- High performance doors and grilles do not have counterbalance springs. Releasing the brake on the motor operator, or loosening or removing any part of the motor operator drive system, can cause the curtain to uncoil and free-fall if open.



WARNING! – Components under extreme load can cause death or serious injury.



WARNING! – Releasing the door operator brake, or loosening or removing any part of the drive system, can cause the door to move uncontrolled and cause death or serious injury.

- The terms “door” and “doors” apply generally to high performance doors and grilles. If an instruction refers to a specific type, it will be noted as such.
- Instructions refer to doors operated from the left side (motor operator located on the left side).
- Illustrations refer to high performance grilles – high performance doors are similar.
- Wall bolts are not provided. Refer to the “WALL BOLT SCHEDULE” for suggested wall bolts. Wall construction and wall bolts must be adequate for the size and weight of door and its intended use.
- The included HGH motor operator and wall mount control panel are rated NEMA 1 and intended for interior applications. If the operator is exterior mounted, it must be provided with a motor cover. The wall mount control panel cannot be covered and must be installed on the interior of the building.

INSTALLATION:

NOTE: If the door is to be mounted between the jambs, it is provided with extra “filler” angle(s) or tube(s). Install the filler(s) as shown in the installation drawings, following the same procedure as for the installation of wall angles for face mount doors.

NOTE: If the door is tube mount, no wall angles are provided – guides and brackets attach directly to the tube supports. Install the tubes following a similar procedure as for the installation of the wall angles. Tube support mounting plates must be adequately attached to the slab and the supporting structure. Tube supports may also require additional bracing.

NOTE: If a fascia is provided, evaluate field conditions and decide when the best time would be to install it. The fascia may attach to separate fascia mounting angles installed on each jamb or directly to the filler angles or tubes. If intermediate support(s) are included, space support(s) equally between the jambs. Drill holes as indicated on the “WALL BOLT SCHEDULE” and attach support(s) to the header. Attach the fascia with the sheet metal screws provided.

- 1) Measure the door opening and verify that the door size is correct for the opening. If it is not correct, contact the factory for further instruction.
- 2) Unbolt and remove guide channels/angles from wall angles.
If the door is face mount: Level across the opening and mark the “heels” dimension on the jambs as shown on the “DOOR SCHEDULE”. (For a door installed with a “Z” guide configuration, “heels” is the same as the door width plus the width of both guides. For a door installed with an “E” guide configuration, “heels” is the same as the door width plus the width of both guides and the thickness of both wall angles.)
If the door is tube mount: Level across the opening and mark the “heels” dimension on the floor as shown on the “DOOR SCHEDULE”.
- 3) Set the wall angles/tubes on the floor/sill at the “heels” marks. Wall angles/ tubes must be installed level and plumb. Shim up the lower wall angle/tube, if necessary, to be level.
- 4) (*Omit this step if the door is tube mount*) Using the wall angles as templates, mark, or drill through slots, for wall bolts.
 - Drill holes as indicated on the “WALL BOLT SCHEDULE” for the wall bolt type used.
 - Locate all holes at the center of the slots in the wall angles.
- 5) **If the door is face mount:** Secure the wall angles to the jambs. All wall bolts require a washer between the bolt head and the wall angle.
If the door is tube mount: Secure tube mounting plates to the slab and the supporting structure. Tubes may also require additional bracing.
- 6) Slide the bracket plates onto the barrel shafts.
 - The drive side bracket plate (side with motor operator) goes on the end of the barrel with the keyed shaft. Set the end of the barrel tight against the bearing on the bracket plate.
 - The idle (non-drive) side bracket plate (side opposite motor operator) goes on the other end of the barrel. There should be clearance between the barrel and the bearing on the bracket plate.
- 7) It is recommended that the motor operator be attached to the drive side bracket plate and other drive components be installed now. There must not be any space between the driven sprocket and the outside of the drive side bracket plate. Use washers to shim for alignment if necessary. *The control panel should NOT be installed now.* (As an alternative, the motor operator may be installed after the assembled barrel and bracket plates are installed.) *Refer to the installation instructions provided with the motor operator.*
- 8) Remove the truss head bolts and washers from across the barrel.

- 9) Raise the assembled barrel and bracket plates into position between the tops of the wall angles or tube supports. **CAUTION: Use a hoisting method adequate to safely lift the size and weight of the assembled barrel and brackets.** Bolt the bracket plates to the inside of the wall angles/tubes with the flat head bolts, washers and hex nuts provided.

NOTE: It is recommended that the motor operator auxiliary hand chain be used for the following 2 steps. If the motor operator is to be used electrically for the next 2 steps, then the control panel and control station will need to be installed and connected now – see steps 18 and 19. **CAUTION: This is a high speed product – the curtain will want to coil very quickly if the motor operator is used electrically. Switch “JOG” mode ON in the control panel to reduce speed during installation for better control (remember to switch “JOG” mode OFF when installation is complete).**

- 10) Raise the curtain, with the starter slats pointing away from the wall, to below the barrel.
CAUTION: Use a hoisting method adequate to safely lift the size and weight of the curtain.
Set slings around the barrel and the curtain. **CAUTION: Use a minimum of 2 slings spaced across the barrel, but as many as required to safely support the size and weight of the curtain.**
Set the curtain into the slings and cut the bands around the curtain. Unroll enough of the curtain to reach the barrel. Feed the curtain between the back of the barrel and the slings. Turn the barrel to bring the curtain over the top and around to the front of the barrel. Center the curtain between the bracket plates. Align the slots in the starter slats with the nuts welded to the barrel. The starter slat at each side of the curtain must be against the endlock. Attach the starter slats to the barrel with the truss head bolts and washers previously removed.
- 11) Carefully coil the curtain until it is nearly completely coiled around the barrel. Secure the position of the curtain.
- 12) Attach U-channel guides with special headed bolts through the channels and required washers under the flange nuts (washers/nuts not used for tube mount).
- 13) Carefully lower the curtain into the guides just below the position of the curtain stops. Slide the curtain stop bars to the stop holders and attach with screws provided.
- 14) Remove the slings from around the curtain and barrel.



WARNING! – Components under extreme load can cause death or serious injury.



WARNING! – Releasing the door operator brake, or loosening or removing any part of the drive system, can cause the door to move uncontrolled and cause death or serious injury.

- 15) **For PD High Performance Doors:** With the door closed, use the hand chain to slightly over close (without running past the closed limit switch) and install *Scratch-Guards* on the curtain. Attach straps to the fasteners located on the bottom bar. Stretch straps vertically and hook to the same slat behind the barrel so they are held in place by the barrel when the door is closed. Make sure the top and bottom of the straps are aligned and spaced evenly across the curtain.

16) *(Omit this step if no hood is provided)* If intermediate hood support is provided, install now. Space support equally between the bracket plates. Locate the top of the hood support angle so the top of the hood ring – not the top of the support angle – is even with the top of the brackets. Drill holes as indicated on the “WALL BOLT SCHEDULE” for the wall bolt type used and attach hood support angle. Bolt hood ring to the support angle and adjust so the front of the hood ring is even with the front of the brackets.

17) *(Omit this step if no hood is provided)* Align the bracket plates so they are square (not “toed in” or “toed out”). If a hood is provided, lift the hood, set in place centered between the bracket plates, and attach to the band on each bracket plate (and intermediate support) with sheet metal screws provided.

NOTE: Field bracing of bracket plates and motor operator may be necessary.

18) Install the motor operator control panel. Locate the panel within a distance to the motor operator that is suitable for the length of connection cables provided (standard length is 18 ft. – longer lengths are available). Refer to the installation instructions provided with the motor operator.

19) Complete all power and control connections to the motor operator and adjust limits and any settings as necessary. Refer to the installation instructions provided with the motor operator.



WARNING! – Components under extreme load can cause death or serious injury.



WARNING! – Releasing the door operator brake or loosening or removing any part of the drive system can cause the door to move uncontrolled and cause death or serious injury.

20) Make sure all sensing devices are installed, connected and functioning properly.

Required sensing devices for PG High Performance Grilles:

- Primary monitored sensing edge.
- Secondary monitored light curtain.
- Non-monitored photo eyes near the top of the guides (connect as NC device – intended to stop an opening grille if the photo eyes sense a person hanging onto the curtain).

Additional monitored or non-monitored sensing devices may also be provided.

Required sensing devices for PD High Performance Doors:

- Primary monitored sensing edge.
- Secondary monitored light curtain.

Additional monitored or non-monitored sensing devices may also be provided.

21) Make sure warning labels are attached to the door as follows:

- L70011 Guide Label is attached to the guide (or to the wall if the guides are concealed) at eye level on the operating side of the door
- L70027 Operator Label is attached to the operating bracket

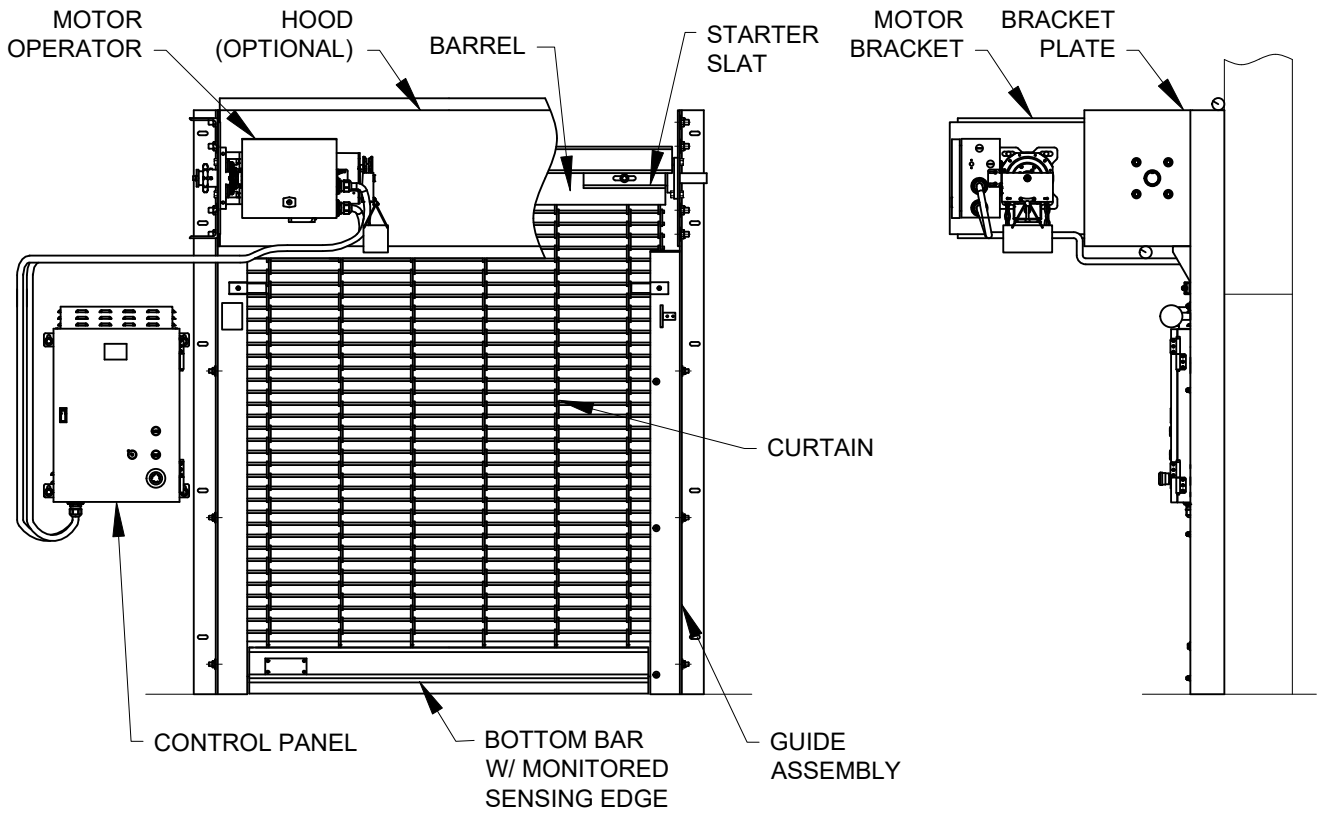
If any warning labels are missing or not legible, contact the factory for replacement labels.

WALL BOLT SCHEDULE

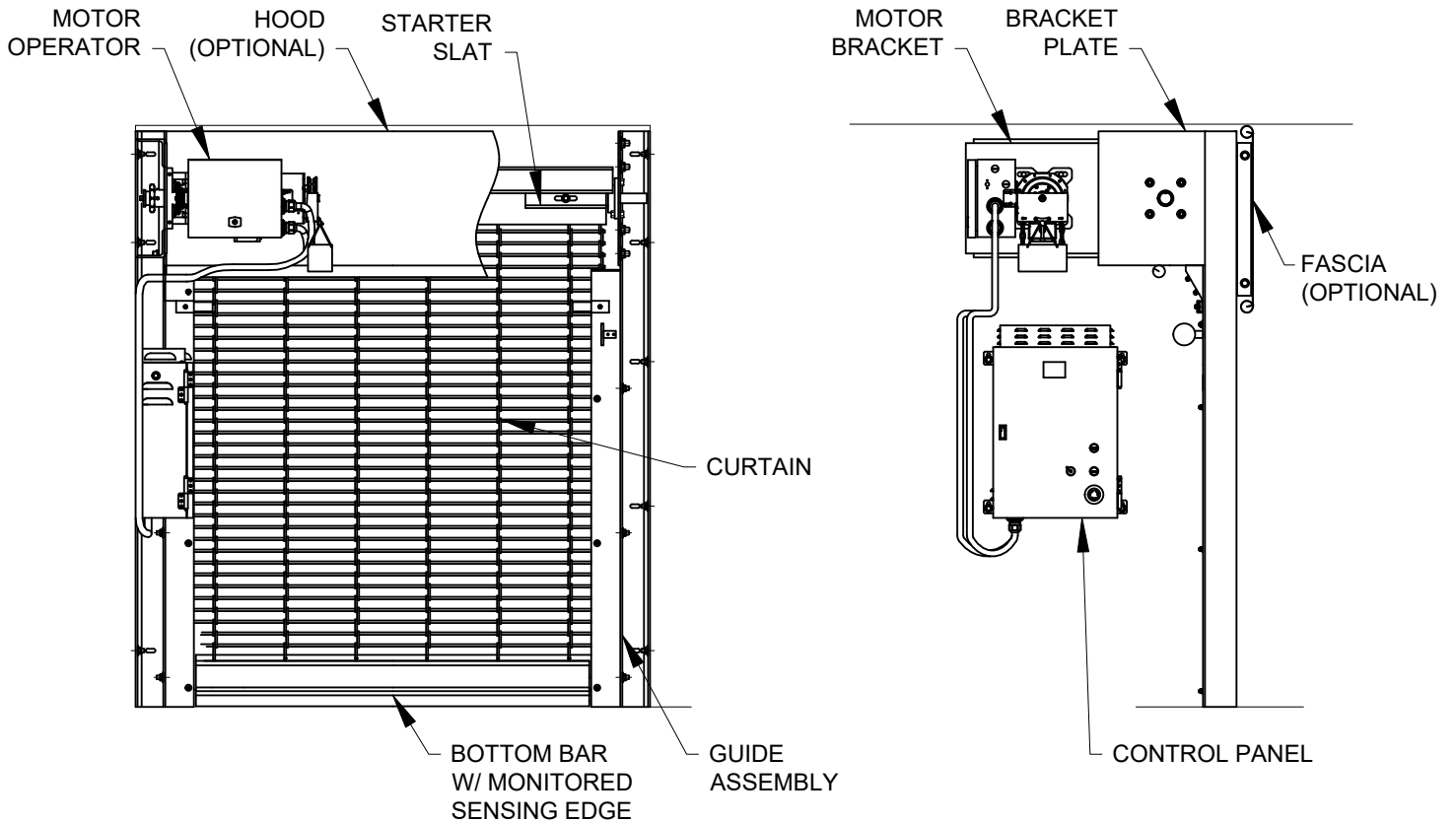
JAMB CONSTRUCTION	WALL BOLT TYPE	WALL BOLT SIZE	HOLE SIZE	HOLE DEPTH
Concrete	Wedge anchor	1/2" x 4"	1/2"	3"
Filled CMU, brick or concrete	Sleeve anchor	5/8" x 4"	5/8"	4"
3/16" (min.) structural steel	Machine screw	1/2" x 1"	27/64"	N/A

GENERAL NOTES

- 1) Length of wall bolts is generally referenced from the bottom of the head, except for wedge anchors which are referenced by overall length.
- 2) Length of wall bolts must be increased accordingly if the door is attached to the jambs through another material (such as drywall, veneer, stucco, plaster, tile, etc.) depending on the thickness of that material.

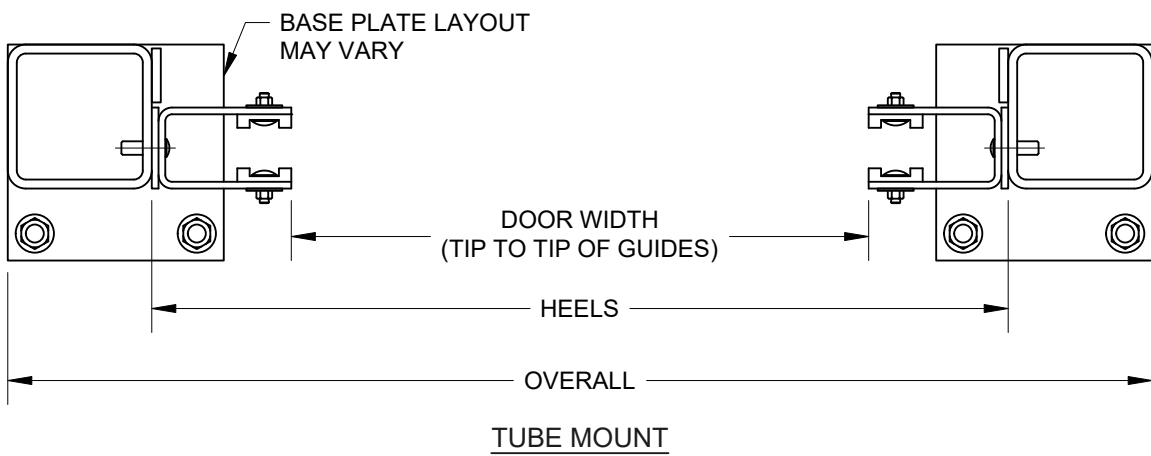
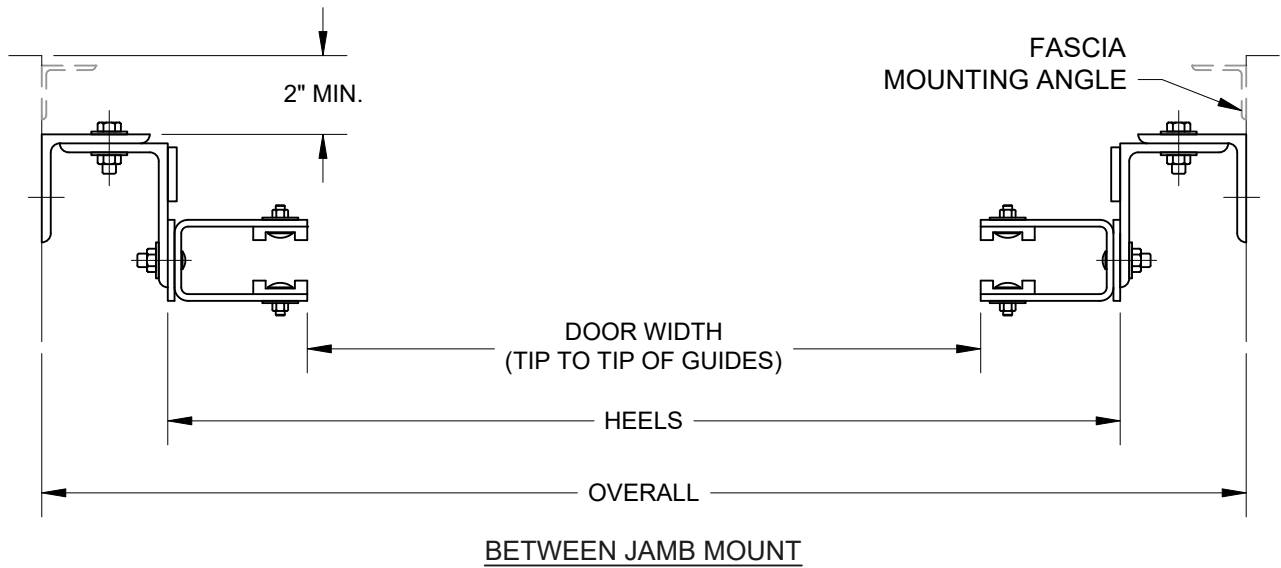
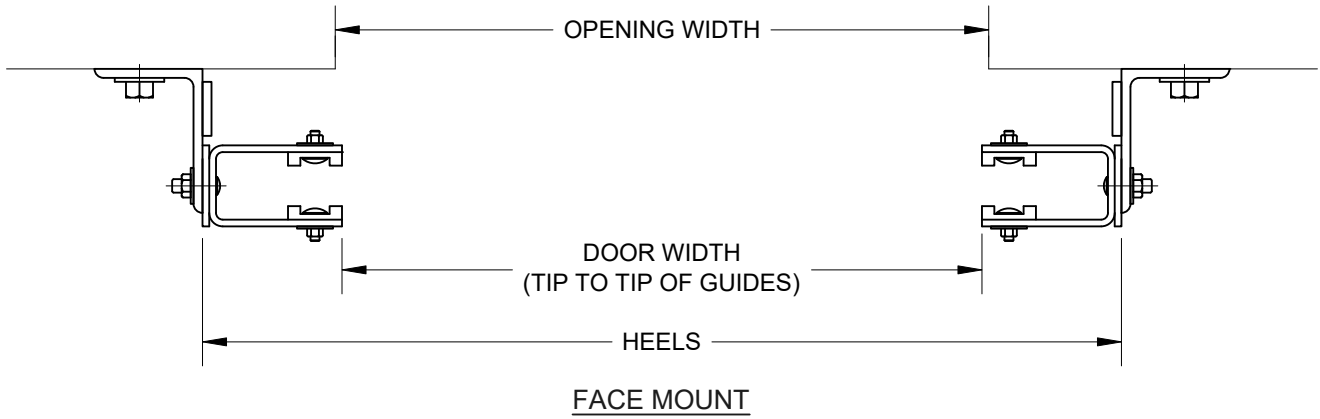


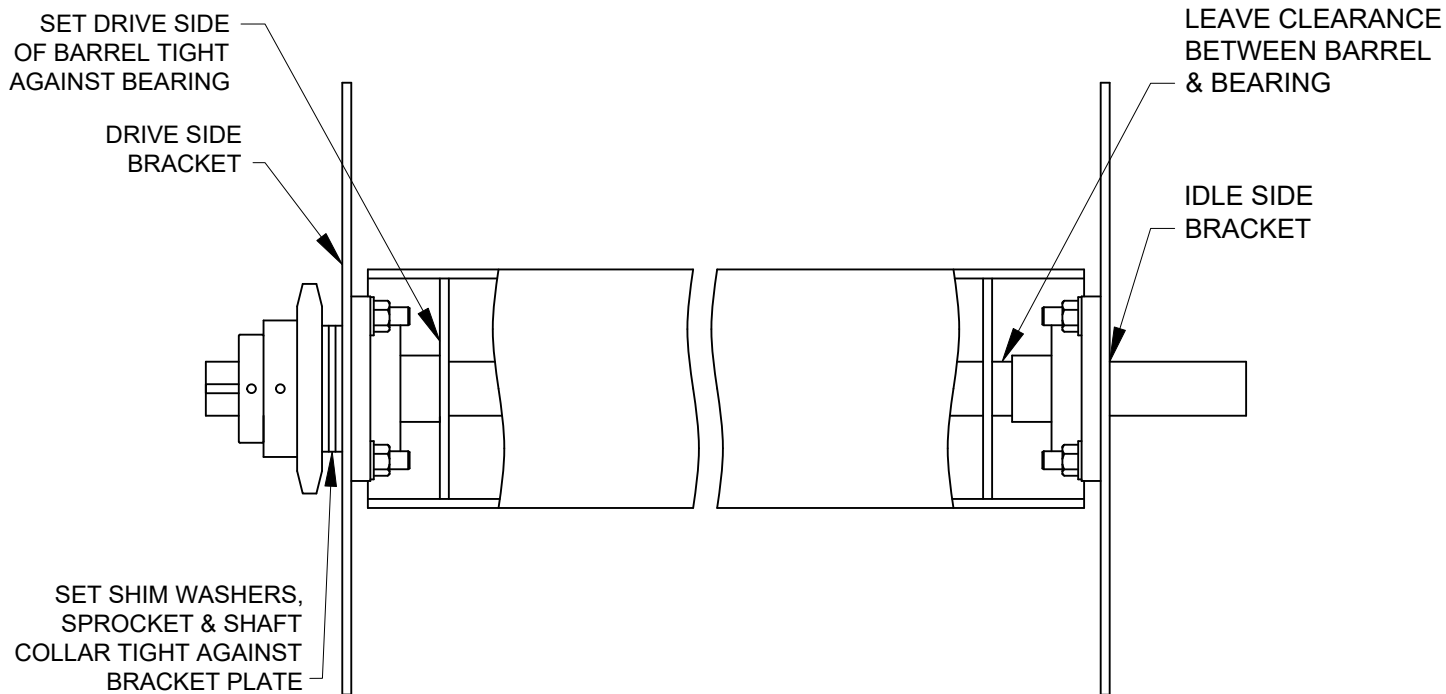
FACE MOUNT



BETWEEN JAMB MOUNT

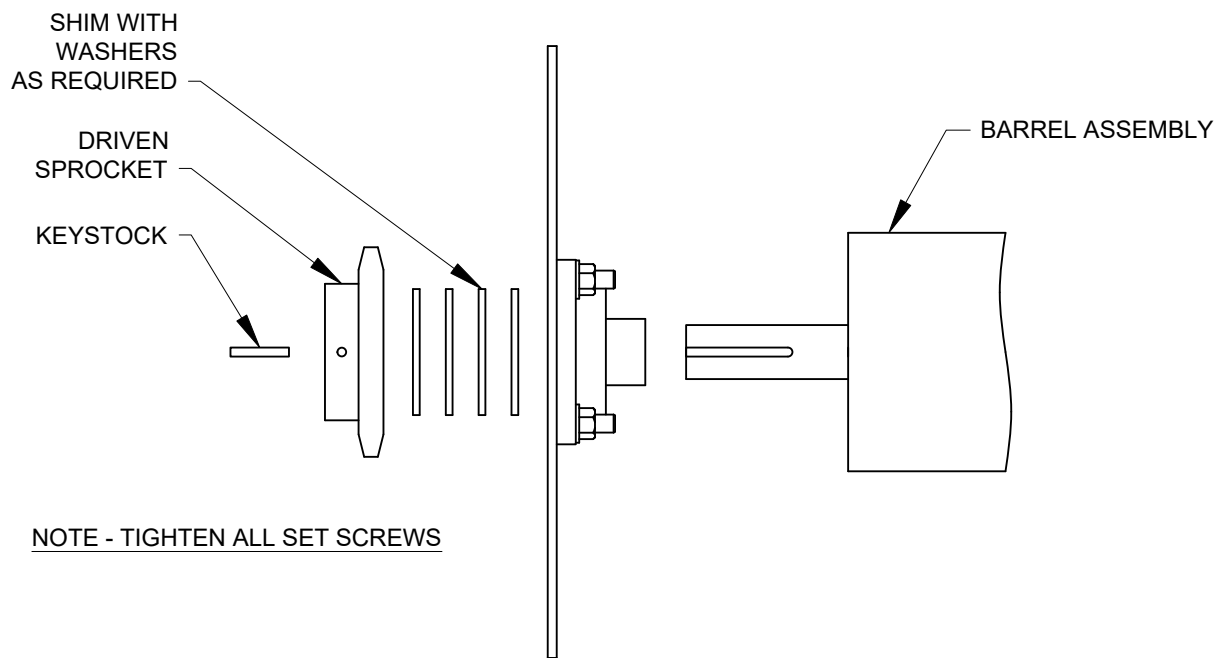
GENERAL NOTE:
DOOR WIDTHS MAY NOT BE
THE SAME AS OPENING WIDTHS



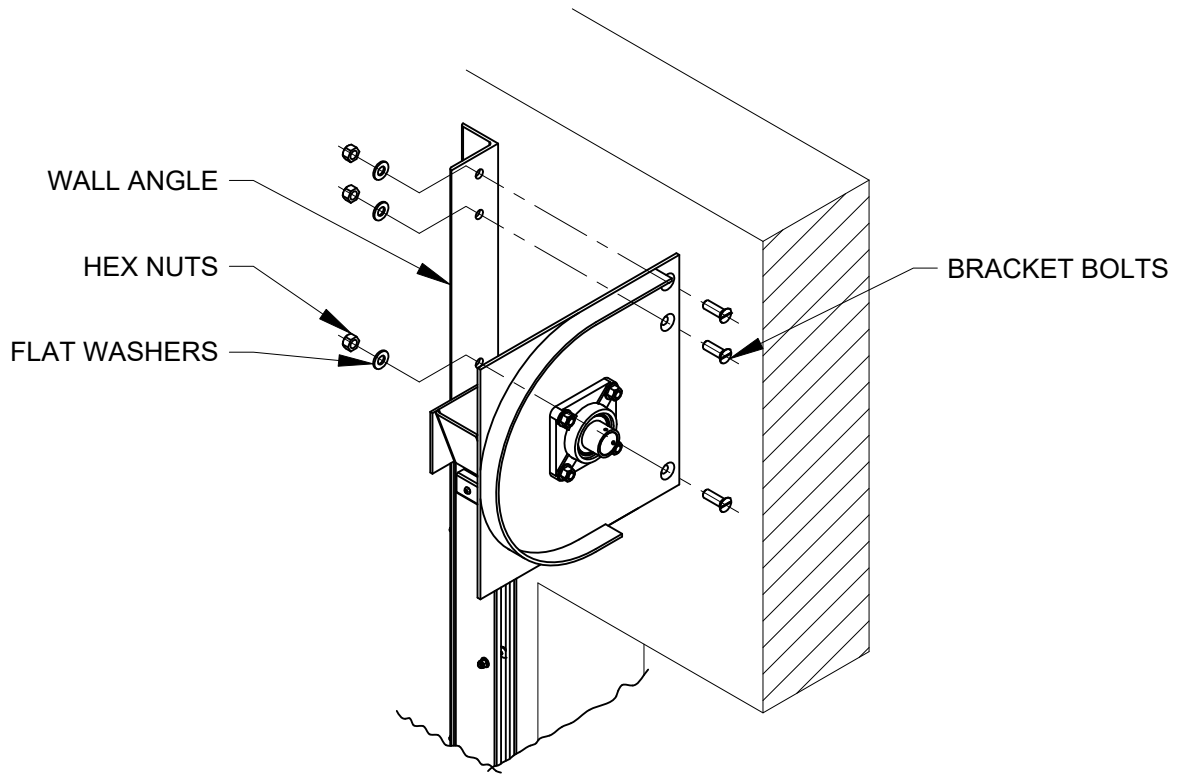


BARREL AND SPROCKET ASSEMBLY

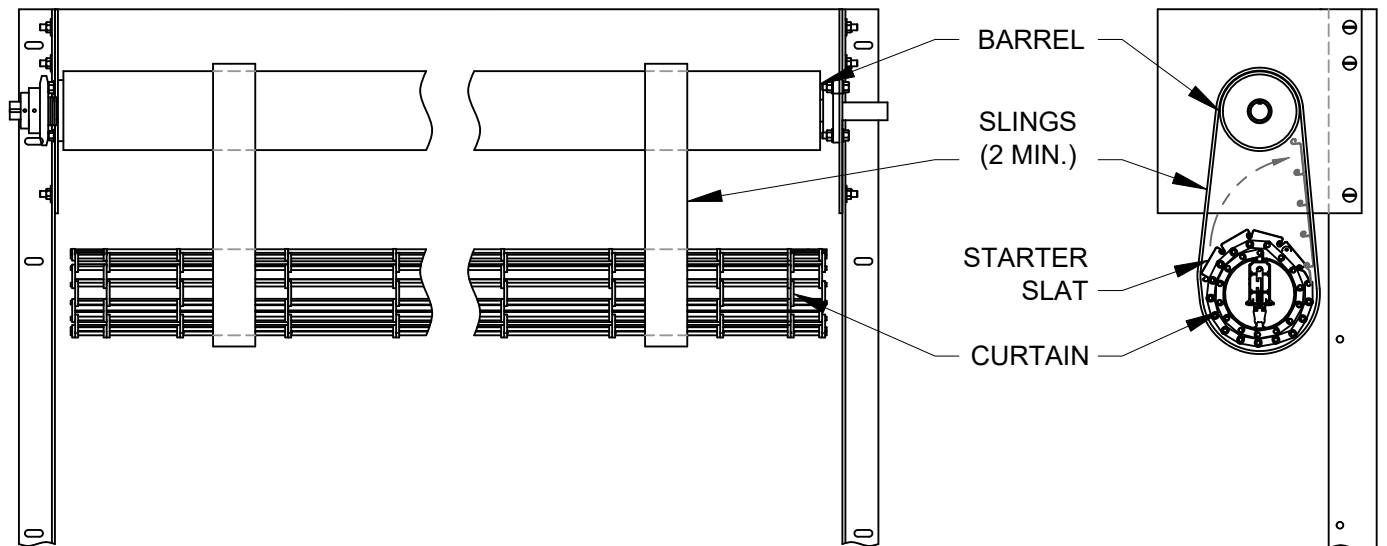
LEFT HAND OPERATION IS SHOWN-
RIGHT HAND OPERATION IS OPPOSITE



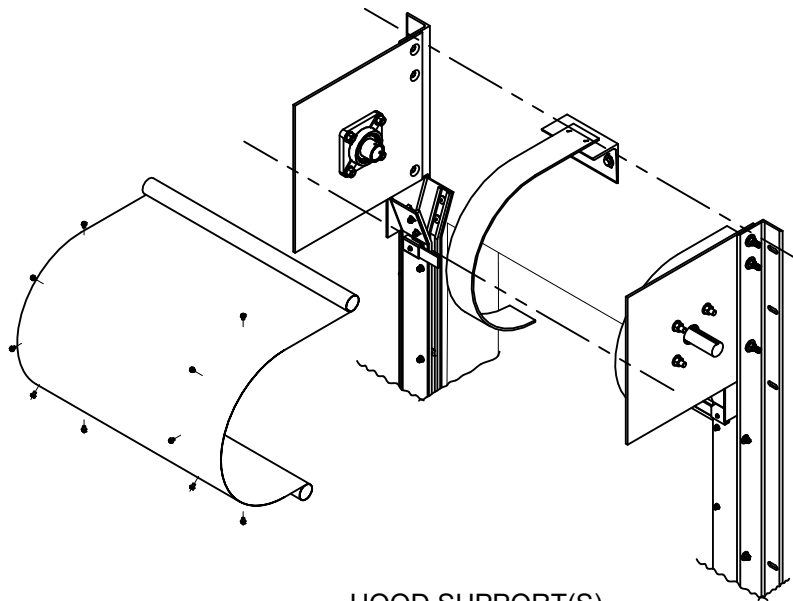
DRIVE SIDE EXPLODED VIEW



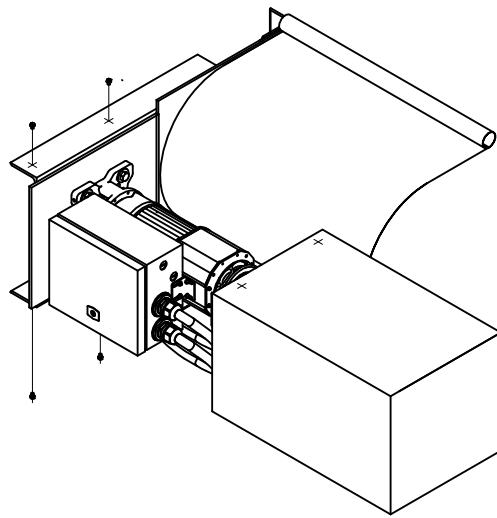
BRACKET ATTACHMENT



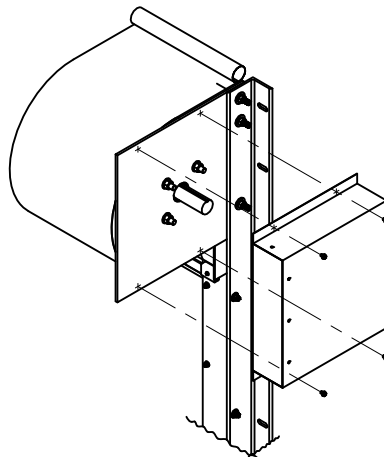
LOADING THE CURTAIN



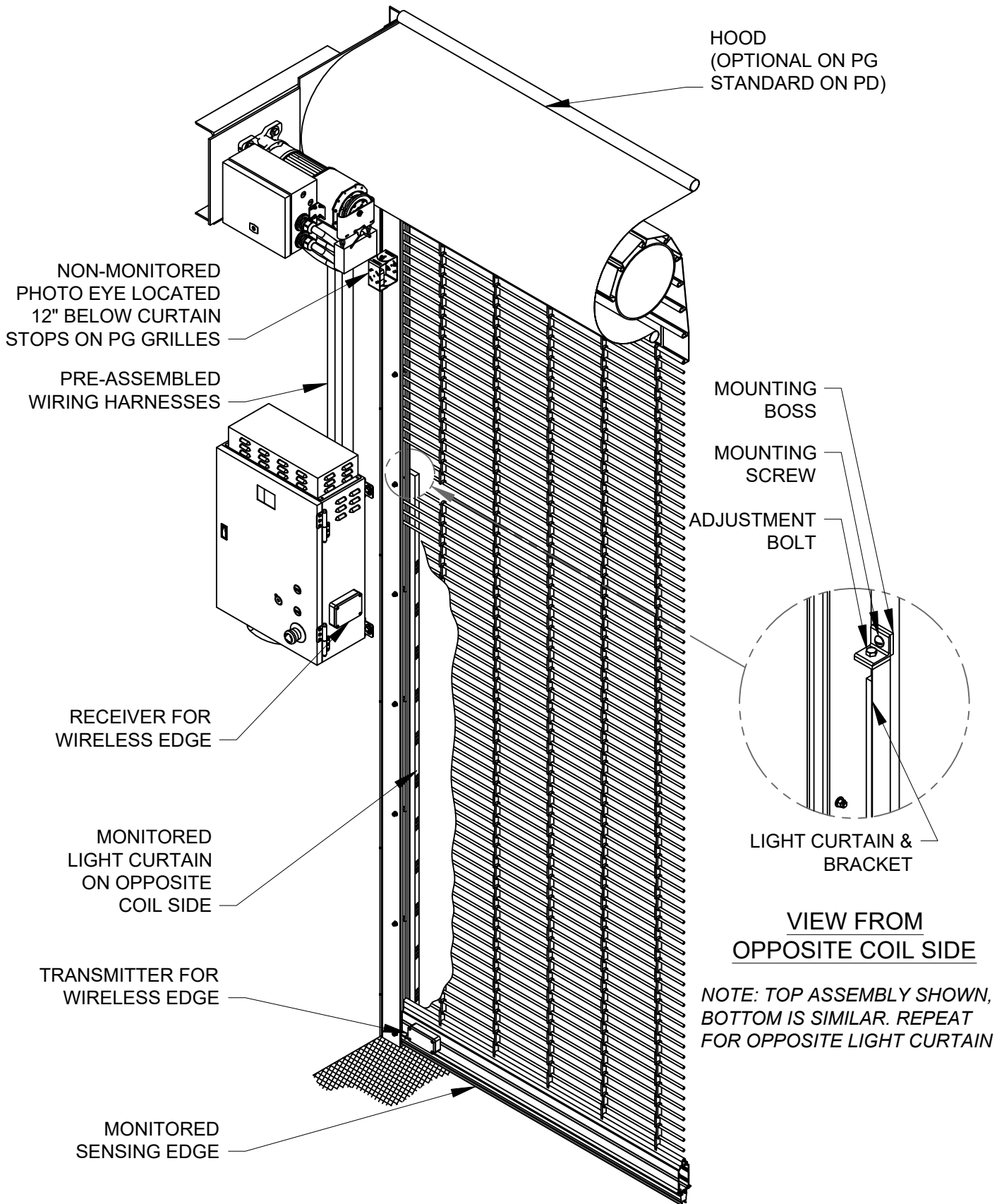
HOOD SUPPORT(S)



MOTOR COVER



END CAP



SENSING DEVICES