Before You Begin

Read this entire manual.

Before starting the installation, verify the job site dimensions and the dimensions of the delivered materials against the PFlow Industries, Inc. General Arrangement (GA) drawing. Review and verify the enclosure positions and attachment fit-up to the gate post enclosure angle. If the site conditions do not match the GA drawing, please consult the PFlow Industries, Inc. Customer Support Department.

⚠️ DANGER

Falling gate hazard! The installation of this equipment requires a qualified installer with extensive knowledge and experience on how to rig and erect structural steel. Make sure to properly support, tie off, or temporarily brace the gate posts, gate panels, and gate assembly during installation. Do not depend on the gate post feet to support the gate posts while the gate is being positioned or assembled. Final bracing of the gate assembly must be to the Vertical Reciprocating Conveyor (VRC) or building structure. The use of structural angle is recommended.

⚠️ CAUTION

Falling hazard! The gate panel safety latch may not be operational while the gate is being installed. If you must leave a gate or gate panel unattended, put up barriers and signs warning personnel to stay clear.

⚠️ NOTICE

Lifting hazard! Components and accessories are heavy. To prevent serious personal injury, use the appropriate lifting apparatus, tie offs, or help when moving, lifting or assembling the components or accessories.

A qualified person is defined as a person who, by possession of a recognized degree or certificate of professional standing, or by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve problems relating to the subject matter and work.

Identify Components

Gate components, posts, panels, and header assembly have color coded tags. Each gate tag is a different color.

<table>
<thead>
<tr>
<th>Level</th>
<th>Tag Color</th>
<th>Part</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st (bottom)</td>
<td>Green</td>
<td>J#-0101</td>
<td>380 lbs (172 kg)</td>
</tr>
<tr>
<td>2nd</td>
<td>Yellow</td>
<td>J#-0102</td>
<td>380 lbs (172 kg)</td>
</tr>
<tr>
<td>3rd</td>
<td>Red</td>
<td>J#-0103</td>
<td>380 lbs (172 kg)</td>
</tr>
<tr>
<td>4th</td>
<td>Blue</td>
<td>J#-0104</td>
<td>380 lbs (172 kg)</td>
</tr>
<tr>
<td>5th</td>
<td>Cream</td>
<td>J#-0105</td>
<td>380 lbs (172 kg)</td>
</tr>
</tbody>
</table>

The preferred method of installing a gate is to pre-assemble the full gate assembly on the floor, secure the pieces, and then stand it up. If for some reason pre-assembly is not possible, use these instructions as a general guide for the assembling, positioning, and securing of the gates.
### Tools Required

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA Drawing</td>
<td>Four (4) 4’ Lifting Straps and Clevises</td>
</tr>
<tr>
<td>25' (7.62 m) Measuring Tape</td>
<td>Four (4) 6’ Lifting Straps and Clevises</td>
</tr>
<tr>
<td>Come-Along</td>
<td>Four (4) Lifting Strap Sleeve</td>
</tr>
<tr>
<td>Extension Cords</td>
<td>Sledge Hammer</td>
</tr>
<tr>
<td>Hammer</td>
<td>C-Clamps, Four (4) 6” and Four (4) 8”</td>
</tr>
<tr>
<td>Temporary Anchors</td>
<td>Pry Bar</td>
</tr>
<tr>
<td>Welding Curtain</td>
<td>Hot Works Permit</td>
</tr>
<tr>
<td>Fire Extinguisher</td>
<td>Welding Machine and Equipment</td>
</tr>
<tr>
<td>4’ (1.22 m) Level</td>
<td>Welding and Grinding PPE</td>
</tr>
<tr>
<td>Torpedo Level</td>
<td>1/2” x 4” Long Wedge Style Anchors</td>
</tr>
<tr>
<td>1/2” Concrete Drill Bit</td>
<td>Hammer Drill</td>
</tr>
<tr>
<td>Open or Box-end Wrenches to 1-5/16”</td>
<td>Carpenter Square</td>
</tr>
<tr>
<td>Chalk Line</td>
<td>Pencil</td>
</tr>
<tr>
<td>Fork Lift: 2,000 lb. (907 kg) Capacity</td>
<td></td>
</tr>
<tr>
<td>Two (2) Chain Falls: 2,000 lb. (907 kg)</td>
<td></td>
</tr>
</tbody>
</table>

### Number of People

Two (2) people are recommended for this portion of the installation.
1. Lay the gate posts (item 3 and item 7) on the floor parallel to each other. See Figure 1.

2. Place the gate header (item 1) at the top of the gate posts and bolt or clamp to the gate posts with the header bracket provided (item 2).

3. Position the back side of the gate panel (item 6) between the parallel gate posts and align with the hinge bars (item 5).

4. Attach the gate post (item 3) to the gate panel hinge bar (item 5).

5. Square up the frame and door.

6. Confirm that the spacing between the panel, posts, and header are even throughout.

7. Wrap straps around the gates from side to side to hold in place while the panel is lifted into place.
Align the Sliding Latch Gate

1. Locate and mark the center of the gate panel on the gate panel with a pencil. See Figure 2.

2. Measure the outside edge to the outside edge of the carriage to locate the center line. Mark the center line with a pencil on the top of the carriage deck.

3. Position a carpenter square on the edge of the carriage to extend the center line onto the floor 10" (254mm) away from the carriage.

4. Mark a chalk line on the floor to ensure the center of the panel is on the center line of the carriage.

5. When the measurement from the back side of the gate panel to the carriage has been determined, snap a chalk line to identify the position of the gate panel parallel to the carriage. See Figure 3.

NOTE

The ideal position of the gate panel is a maximum of 6" (152mm) from the inside of the gate panel to the front edge of the carriage. Local codes may have specific requirements concerning this distance.
Gate Installation
Floor Level Swing with Sliding Latch

Raise and Secure the Sliding Latch Gate Assembly

1. Raise and secure the gate assembly.
2. Align the center of the gate to the center of the carriage. See Figure 3.
3. Align the back side of the gate panel on the parallel chalk line. See Figure 2.
4. Drill and anchor the gate post base plates to the floor with 1/2" anchors, 4" (102mm) long.

Anchor the Gate Post Base Plates

Plumb and Square the Gate

Install Support Braces

Verify the Gate Panel Swing

DANGER
Falling gate hazard! Be sure to properly support, tie off, or temporarily brace the gate posts, gate panels, and gate assembly during installation. Do not depend on the gate post feet to support the gate posts while the gate is being positioned or assembled. Final bracing of the gate assembly must be to the Vertical Reciprocating Conveyor (VRC) or building structure. The use of structural angle is recommended.

DANGER
Falling gate hazard! The anchor hole depth should always be deeper than the length of the anchor bolt. The recommended wedge anchor size is 1/2" diameter by 4" (102mm) long.

Plumb and square the gate posts using a level that is 4' (1,22 m) or longer. See Figure 4.

1. Measure the distance from the gate post to the Vertical Reciprocating Conveyor (VRC) column.
2. Cut two (2) 1-1/2" x 1-1/2" (38mm x 38mm) steel angle support braces and weld to each gate post and to the VRC columns or wall. See Figure 5.
3. Remove all straps.

1. Verify the gate panel swing for proper operation and site operational clearance.
2. Verify that the sliding latch engages with the gate frame properly.
3. Confirm that the gate is plumb and square.
4. Weld the gate header to the gate posts. See Figure 6.
Attach Door Upper Stop Plate

1. Attach header stop (item 2) to the top of the gate panel (item 4) using the mounting hardware (item 3). See Figure 7.
2. Tighten screws.

Attach Door Lower Stop Bumper

1. Attach door lower stop bumper (item 3) to the base plate of the gate post (item 1) with hex nuts. See Figure 8.
2. Tighten hex nuts.
Complete Electrical Wiring

1. Remove the access panel from the sliding latch gate frame. See Figure 9.
2. Route the door switch cable through the top of the cover.
3. Connect wires to the mini terminal per the wiring layout on the job specific gate assembly drawing.

All spare wires must be crimp-capped.

4. Replace access panel.

The wires from the control panel to the sliding latch gate are not supplied by PFlow Industries, Inc.

NOTE

Complete Electrical Wiring to Door Interlock
Figure 9