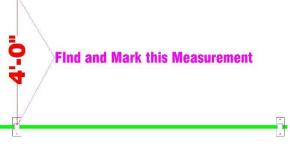
Eagle Steel Inc. 1870 Gage Crt Mississauga, ON L5S 1S1 Fencing Installation Guidelines

Included are general guidelines for the installation of our standard fencing products. It is recommended installation be done with at least <u>TWO</u> or <u>MORE</u> individuals. <u>ALWAYS</u> refer to the specific installation instructions included with your project.

Initial Assembly

- 1. Select a starting point, this will be one end of the fence, usually nearest to an existing structure.
- Measure to find the *location of the first post*. Mark out and install the first post with the included wedge anchors. (Anchors can be sunk, but do not tighten yet. Ensure sufficient drilling depth for the anchors.)
- 3. **Pick a spot** extending out from the first post any distance to mark out where the fence line will continue, snap a chalk line connecting the first post to that mark.

(IMPORTANT: Measure and mark to the *same side* of the post when running your chalk line.)



Starting Point

4. Following the blueprints, continue assembling

the fence line, leaving all the hardware loose. Sink – but don't tighten – the anchors.

(TIP: When assembling the fence line, only attach the bottom panels, once the entire fence is laid out, come back to mount the next layer of panels.)

Tightening & Leveling

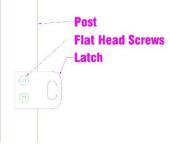
- Using a level, confirm the end post of each line of fence is level in line with the fence. To adjust the level of these posts you can *lift the panels* to pull the post in or *lower them* to push the post out. (NOTE: There is 2 parts to leveling, one direction is achieved by tightening the bolts in the fence, the other is by adjusting the anchors in the floor.)
- 2. **Tighten** all the remaining hardware on the fence posts and panels.
- 3. Adjust the posts to bring them into level by inserting washers under the plates where necessary and tightening all the wedge anchors.
- 4. Brace the fence on each end using any 2" angle brackets included. On the inside of the fence, tek screw the bracket near the top of the post nearest to a wall. Depending on the wall you're bracing to you may need to use different hardware. Typically, a 1/4" wall nail will be used.

<u>Doors</u>

Measure the opening dimension of each door as you come across them in the fence line. Anchor the next post to frame in the door opening. When installing a door or gate, note that the plate will stick out inside the dimensions of the door by 1/2". Ex. – if a swing door is 3'-0" and the fence posts have 3" x 7" baseplates, you would measure from the face of the starting post out 2'-11 ½" to mark the plate of the next post.

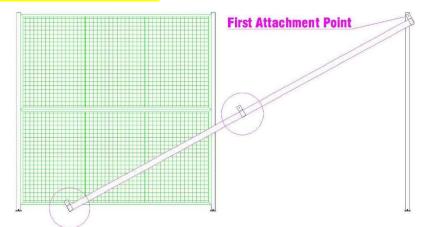


- After you've marked out any door openings in the fence, continue to assemble, tighten and level all the remaining fence. The doors themselves will be installed after the main fence structure is complete. (Don't forget to install any transom panels above doors.)
- 3. **Mounting** a swing door is recommended to be done with 2 individuals. After determining which way the door swings, place a spacer (Ex. Mini-sledge hammer head, approx. **2**") on the hinge side of the door opening, underneath the hinge side of the door to prop up the hinge for mounting.
- 4. **Use** the included flat head screws to put one screw in the bottom hinge. Have the second person tilt up the door to bring the top hinge in line with the bottom hinge and put one screw in the top hinge.
- 5. **Confirm** the door swings properly and your opening is the correct size. Fill in the remaining holes on the hinges with flat head screws.
- Install any included latches or door strikes using flat head screws, ensuring to mount them at the same height as the hardware on the door.



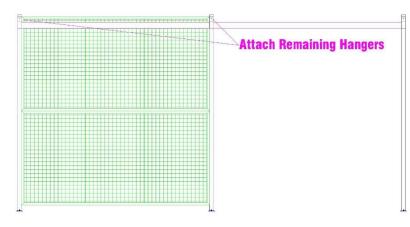
Sliding Gates

- 1. Layout the gate opening the same as a swing door, tighten and level the fence.
- Hang the track. To begin, using a tek screw and a washer, mount the first track hanger on the latch side of the gate opening. The top of the hanger should be mounted at + 9" on the gate height. Ex. If the sliding gate is 7'-6", mount the hanger with the top at 8'-3".
- Insert one end of the track into the hanger you just mounted, you can place a tek screw into the hole in the top of the hanger and through the hole in the track to prevent it from slipping out. (TIP: Leave the first hanger slightly loose so you can easily maneuver the track into place.)



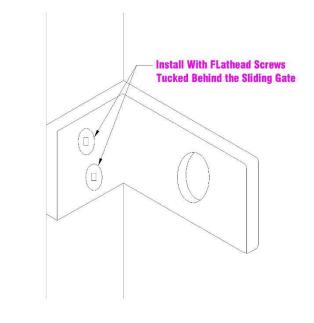
4. **Attach** the remaining hangers to the track by sliding them on. Lifting the track into place with the hangers attached, mount the furthest hanger to its post at the same height as the first. Then attach any remaining hangers in the middle.

(If you left that first hanger loose, don't forget to tighten it after the track is mounted in place.)



- 5. Assemble the gate if not it's not pre-fab, this is easiest done with the panels lying face down on the floor. Ensure the 1 ½" tubing is oriented correctly and insert the wheels in the top tube. Gates are assembled using regular fence bolts to join the panels, and tek screws to tie the tubing together. (TIP: Insert the wheels into the gate *before* tek screwing the tubing to the panels to avoid difficulty inserting them.)
- 6. **Slide** the gate onto the track by lifting the gate up and inserting the wheels into the track. Slide the gate all the way into the closed position, drill a screw into the face of the track where the end of the wheel is to serve as a stopper for the gate do the same for the open position.
- 7. **Adjust** the level of the gate by tightening or loosening the nuts on the bottom of the wheels. Then lock them in place by snugging down the square nut on top.
- Install the included latch at the correct height, as well as the two "Z" guides below the gate to ensure smooth operation of the gate.

(You may also put a screw through the two end hangers into the track to ensure the track doesn't move after installation.)



REQUIRED SAFETY EQUIPMENT:

- Hard hat
- Steel-toed boots
- Safety glasses

REQUIRED TOOLS:

- Cordless Impact Drill
- Hammer Drill
- Sockets: 1/2", 9/16"
- Bits: 3/8" Impact Nut Driver, #2 Robertson
 Impact Driver, 3/8" Concrete Drill Bit,
 1/4" Concrete Drill Bit

- Abrasion resistant gloves
- Hearing Protection
- High-visibility vest
- Chalk Line
- Ladder
- Shop-Vac for cleanup
- Level
- 3/4"+ Drill Bit (ONLY FOR CANE BOLT)

- Hammer
- Adjustable Wrench

Additional Notes:

To install the strike for a panic bar swing gate, stand on the inside of the door, with the strike in one hand, line it up on the post with the height of the latching mechanism.
 Without screwing the strike in place, slowly shut the door on the strike ensuring good alignment.
 As the latch closes on the strike, pull the strike itself inward to allow for a snug fitment.
 While still holding the strike firmly in place, push the panic bar, opening the door, and screw the strike in place with two flat head screws.

(TIP: Keep your drill and flat head screws by your feet so you can easily attach the strike without losing alignment.)

- If your gate has a cane bolt, you will require an additional concrete drill bit at least 3/4" in diameter. Slide or swing the gate into the closed position, lower the cane bolt until it's touching the floor, using a marker, outline the cane bolt in its place on the floor. Open the door and drill the hole. Try to keep this hole as close to vertical as you can to allow the cane bolt to slide freely.
- For installation of a hydraulic door closer, follow the instructions inside the package. You may want a flathead screwdriver to adjust swing/latching speeds.

DISCLAIMER: EAGLE STEEL INC. is not responsible for <u>any</u> injury to self, others or property resulting from improper installation practices, or the misuse of the instructions contained within these guidelines. EAGLE STEEL INC. does not guarantee any products modified without the consent from Professional Engineer employed by EAGLE STEEL INC.

Reference Photos:



Standard 2" Wire Mesh Partition w/ Panic Bar Swing Door



Inside View of Panic Bar Strike Installed



Typical Sliding Gate



Track Hanger Mounted



"Z" Guide Installed