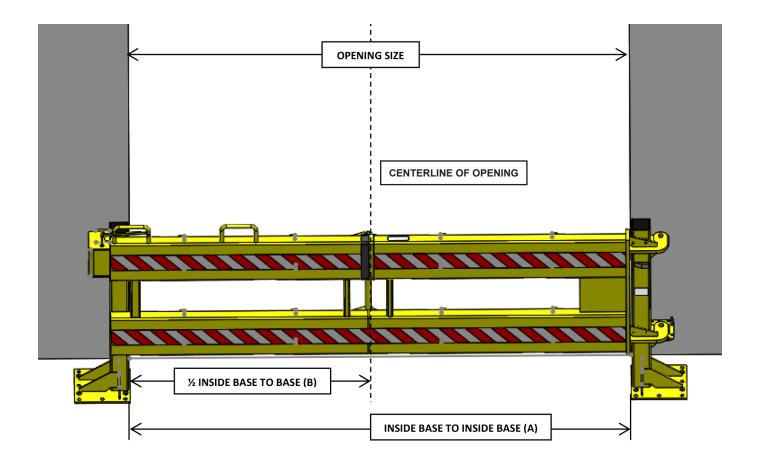


Defender Gate[™] 10 & 20 Installation Manual





Defender Gate™ Sizing Chart		
DEFENDER GATE™ SIZE	INSIDE BASE TO INSIDE BASE	1/2 FROM BASE TO BASE
72 INCHES	72-1/4 INCHES	36-1/8 INCHES
78 INCHES	78-1/4 INCHES	39-1/8 INCHES
84 INCHES	84-1/4 INCHES	42-1/8 INCHES
90 INCHES	90-1/4 INCHES	45-1/8 INCHES
96 INCHES	96-1/4 INCHES	48-1/8 INCHES
102 INCHES	102-1/4 INCHES	51-1/8 INCHES
108 INCHES	108-1/4 INCHES	54-1/8 INCHES
114 INCHES	114-1/4 INCHES	57-1/8 INCHES
120 INCHES	120-1/4 INCHES	60-1/8 INCHES

The Defender Gate[™] 10 or 20 arrives in three pieces, all of which are securely wrapped and attached to a pallet. All hardware is included.

SHIPMENT CONTAINS:

- Bag of Hardware (1)
- Latch Post Bollard (1)
- Hinge Post Bollard (1)
- Gate (1)
- Instruction Manual (1)



HARDWARE:

- 5/8" x 6" Wedge Anchors (14)
- Flat Washers (14)
- Nuts (14)
- Cotter Pins (2)



REQUIRED TOOLS: (not included)

- Hammer Drill
- Level
- Tape Measure
- 3/4" Wrench or Socket Wrench
- Hammer
- Allen Wrench
- 5/8" Masonary Drill Bit

INSTALLATION: PART ONE

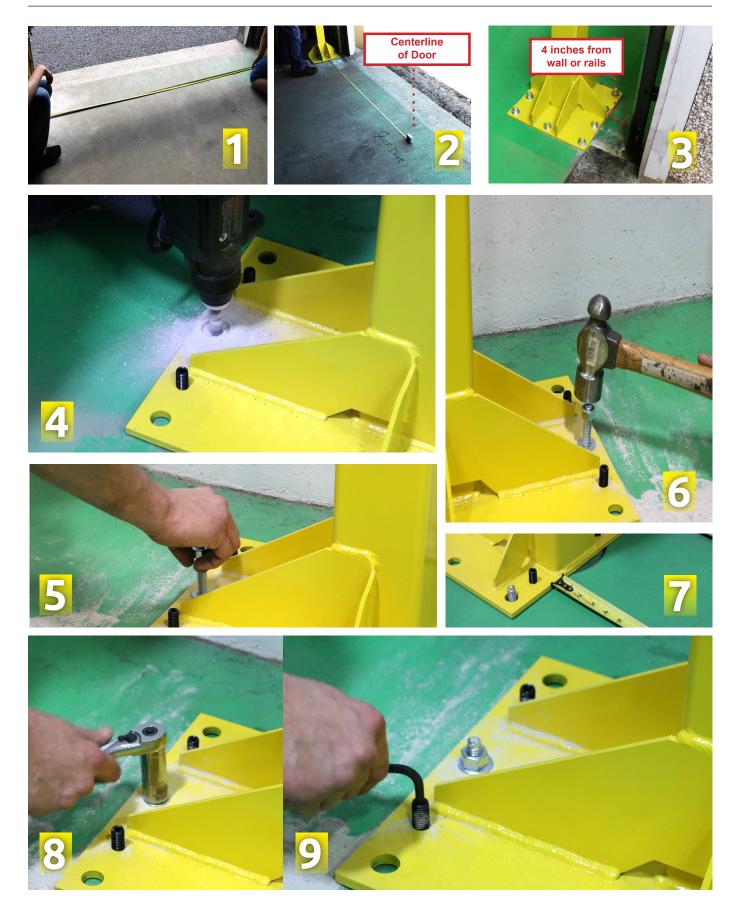
Installing the Bollards.

TOOLS NEEDED:

- Hammer Drill
- Level
- Tape Measure
- 3/4" Wrench or Socket Wrench
- Hammer
- Allen Wrench

Begin with **HINGE BOLLARD**.

- 1. Measure the size of the door opening (A).
- 2. Divide this measurement in half to find the centerline of the door opening, which will align with the center of the gate. Mark the centerline.
- 3. Line the HINGE BOLLARD up with the dock plate and make sure the bollard is at least 4 inches from the wall or dock rails. Set the inside edge of the HINGE BOLLARD baseplate with half of the centerline measurement.
- 4. Use a hammer drill with a 5/8" drill bit to drill seven holes for the anchor bolts. Holes must be at a minimum depth of 5 inches. Use the bollard as a template and mark the holes or simply hold the bollard in place while drilling.
- 5. Place washer and nut on the bolt **before striking**.
- 6. With the bollard in place, insert the seven $5/8'' \times 6''$ anchor bolts with a hammer.
- 7. Measure the distance from the inside edge of the HINGE BOLLARD baseplate to the inside edge of the LATCH BOLLARD baseplate (B). Make sure both bollards are evenly distanced from the wall or frame.
- 8. Repeat steps 3-7 to install LATCH BOLLARD.
- 9. Level both bollards using an Allen wrench and leveling screws. Begin with the HINGE BOLLARD. Use supplied shims as required.
 - a. Place the level on the far left side to check plumb
 - b. Tighten screws until level
 - c. Place the level on the adjacent side
 - d. Loosen/tighten nuts on bollard to level
 - e. Repeat on LATCH BOLLARD



INSTALLATION: PART TWO

Installing the Gate.

TOOLS NEEDED:

- Hammer Drill
- Level
- 3/4" Wrench or Socket Wrench

Although it is possible for one person to install the gate, we recommend using a forklift or an additional helper while lifting or carrying the gate.

- 1. Remove the zip tie that holds the thrust washer to the bollard. Keep the washer in place so that it remains over the hole for the pivot pin.
- 2. With the GATE still folded, insert the pivot pins into the HINGE BOLLARD holes. The handles must be on top and the 3M® striped reflective tape must be facing the dock's interior. Move the GATE slightly back and forth until the GATE is firmly seated.
- 3. Insert the cotter pins into the two pivot pins on the GATE.
- 4. Open gate and check leveling at multiple points.
- 5. Close the gate and latch. A slight leveling adjustment may be necessary to assure clearance between latch housing and latch bollard.

Defender Gate[™] installation is complete and the safety barrier system is now ready to use.







W141N9420 Fountain Blvd Menomonee Falls, WI 53051 Phone 262-502-1591 | 800-236-7325 | fax 262-502-1511 www.novalocks.com