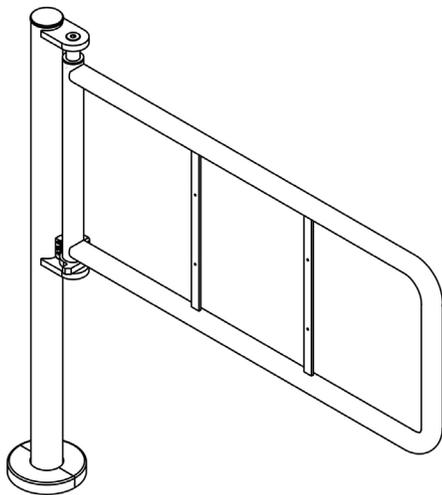
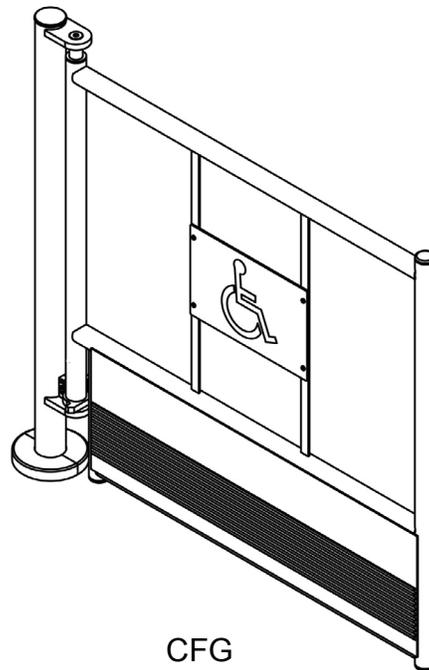


CSG/SSG/CFG
BI-DIRECTIONAL WAIST HIGH SECURITY GATE



CSG/SSG



CFG

Installation and Maintenance Instructions

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Safety Icons

The following symbols are used throughout the manual to highlight important information and potential risks when installing, servicing or using the gates covered in this manual.



This symbol is used in this manual to warn installers and operators of potential harm. Please read these instructions very carefully.



This symbol is used in this manual to designate potential conditions that may pose a risk to pedestrians, personnel, property and equipment. Please read these instructions very carefully.



This symbol is used in this manual to designate useful information for the installer and operator. Please read these instructions.



For questions, please contact Alvarado at (909) 591-8431, Monday – Friday 6:30am to 4:30 PST. Please read this manual completely before installing or operating the product.

Safety Precautions



- Use only skilled individuals to install and service the gate. Read these instructions carefully before beginning.
- The gate is not a toy. Do not allow children to play on or near the gate.
- Pedestrian traffic patterns must be considered when determining installation location. Do not install this product in a location where cross traffic could bring pedestrians within the gate swing path.
- Follow a proper maintenance schedule using skilled individuals.
- Do not operate the gate if it has been damaged or is functioning incorrectly. Have the gate repaired by a skilled service person before placing back in use.
- Do not modify or alter the gate.
- Only use Alvarado parts when repairing or maintaining the gate.

SAVE THESE INSTRUCTIONS

After installation and adjustment, the installer is responsible for providing the owner or site manager with these instructions.

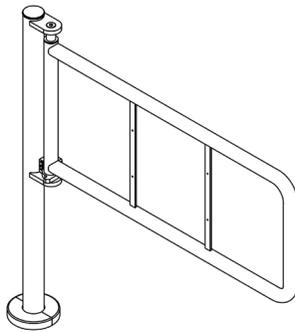


Installation Tools

- Hammer Drill
- 5/8" Concrete Drill Bit
- Socket Wrench
- 9/16" Socket
- Torque Wrench (ft-lbs.)
- 1/8" Allen Wrench
- 3/16" Allen Wrench
- #2 Phillips Head Screwdriver
- Shop Vac
- Tape Measure
- Level
- Chalk Line
- Rubber Mallet
- Pencil
- Washer Shims

Parts List

This product is shipped with the required installation hardware. Make sure that none of these parts are missing and/or damaged before beginning installation. If there are parts missing and/or damaged, please stop the installation and contact Alvarado. If additional copies of installation instructions are required, please visit www.alvaradomfg.com.



Gate & Hinge Post
(CSG/SSG Shown)



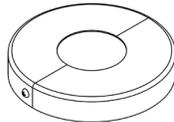
Directional Adapter
Bracket

Also Included:

- 1/4"-28 x 1" Socket Cap Head Screws (Qty 2)
- 1/4"-28 x 3/8" Flat Point Set Screws (Qty 4)



Protective Pads (CFG Model Only)
(Qty 2)



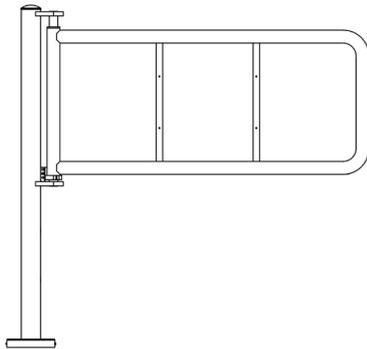
Base Cover

Anchor Package (Optional)

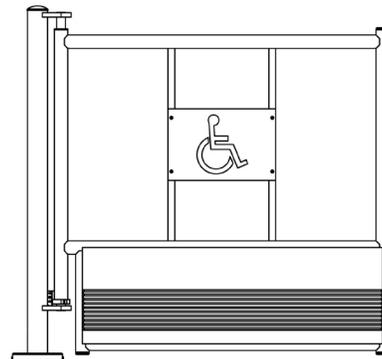
- 3/8" Anchors (Qty 4)
- 3/8"-16 x 2 1/2" Hex Head Cap Screws (Qty 4)
- 3/8" Flat Washers (Qty 4)

Before You Begin

This installation manual is applicable to the following gate models: **CSG, SSG, CFG**. This manual focuses on the CSG/SSG for the basis of instruction; however, most steps are identical across models. Any differences will be called out as applicable.



CSG (Chrome Steel Gate)
SSG (Stainless Steel Gate)



CFG (Chrome Floor Gate)



Site Preparation

Use only skilled technicians for site preparation and installation of the gate using Alvarado's instructions.

Slab Requirements

- Install gate on a solid, level concrete slab with a minimum thickness of 4".
- Do not install the gate on asphalt.

Space Requirements

The following must be taken into consideration when determining space requirements:

- Refer to the Plan and Elevation drawings below for gate dimensions.
- Provide a minimum of 2" of space between the gate arm and adjacent barrier to prevent pinch points.

Fig. 1A SSG/CSG Elevation View

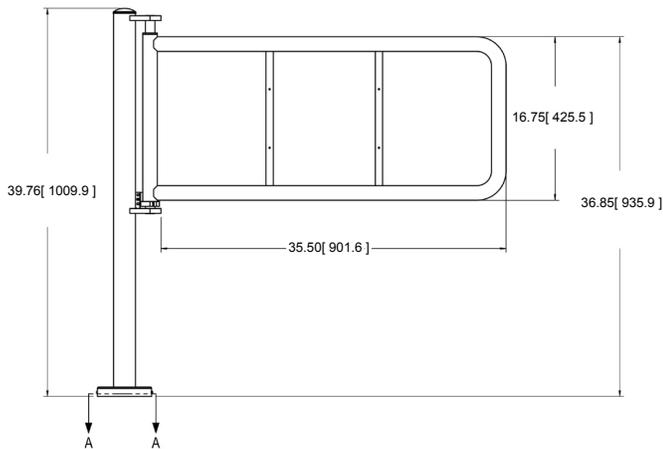


Fig. 2A CFG Elevation View

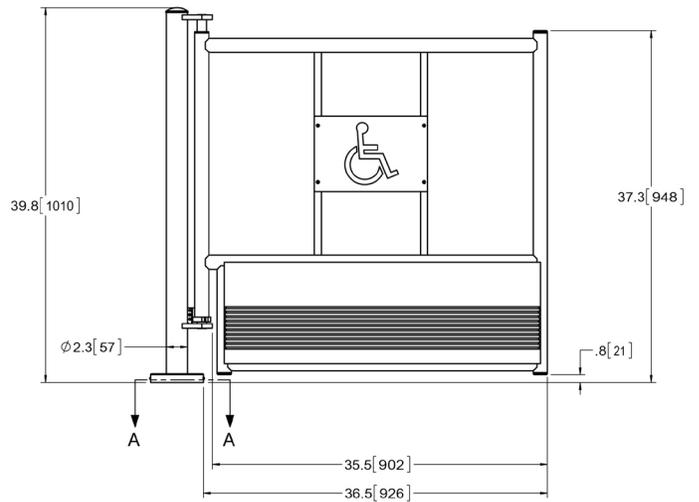


Fig. 1B SSG/CSG Plan View

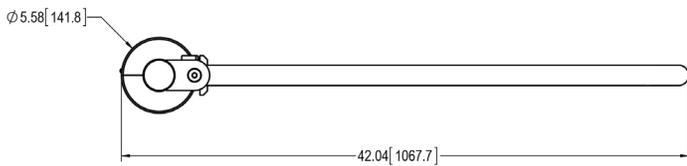


Fig. 2B CFG Plan View



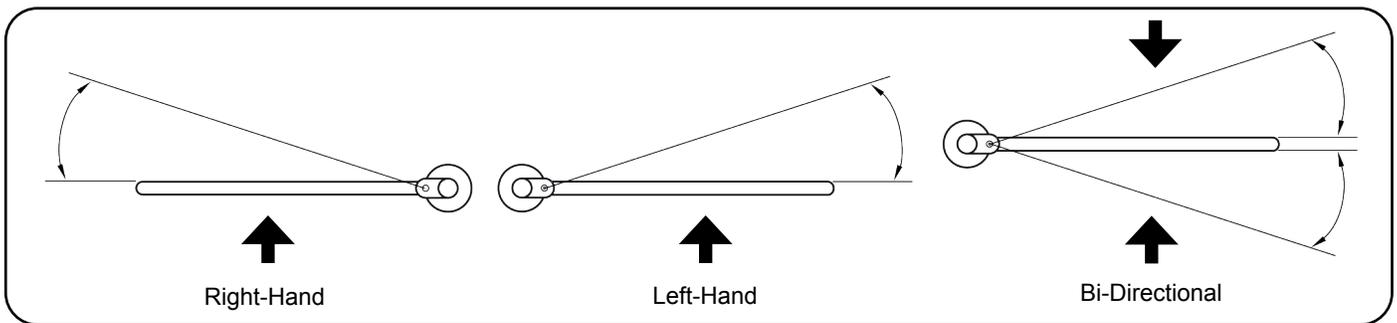
NOTE All dimensions are approximate.

Gate Swing Configuration

The gate can be configured for right-hand, left-hand, or bi-directional swing [Figure 3].

- Ensure the gate swing path does not open into a pedestrian walkway.

Fig. 3 Gate Swing Directions





Installation Instructions

Anchoring the Hinge Post

1. Once the installation location has been determined, snap a chalk line on the floor to mark the gate centerline [Figure 4].
2. Mark the hinge post center and end-of-gate locations (approximately 41.5") along the centerline. Snap a chalk line to mark the hinge post centerline [Figure 4].
3. Center the hinge post where the centerlines meet. Starting with the flange hole directly under the gate arm, mark every other hole for a total of (4) anchor holes [Figure 5]. Set hinge post aside.

NOTE

In some situations, you may not be able to use every other flange hole (e.g. hitting rebar). In this case use adjacent flange holes as necessary.

4. Using a hammer drill fitted with a 5/8" concrete drill bit, drill each anchor hole to a depth of 3".

NOTE

For terrazzo, ceramic tile, or brick veneer installations, add the thickness of the finished floor material to the anchor hole depth. Longer anchor bolts and spacers may be required.

5. Using a shop vac, remove all debris from the anchor holes before installing the anchors. If the holes are not clear of debris, the anchors may not seat properly.
6. Insert anchors into the drilled holes with the threaded ends down. If needed, use a rubber mallet to tap the anchor into place. Ensure that the anchors are flush with the concrete floor [Figure 6].
7. Reposition the hinge post and align the flange holes with the anchors.
8. Insert a 3/8" anchor bolt and washer through the flange into each of the anchors.
9. Using a socket wrench and 9/16" socket, tighten the (4) 3/8" bolts.
10. Use a torque wrench to torque the bolts to 20 ft-lbs.
11. Using a level, verify that the hinge post is straight and level. If necessary, use washer shims and re-level.

NOTE

It is important that the hinge post is horizontally and vertically level with the floor. If not, the gate arm may not self-close and center properly.

12. Locate the base cover. Using a #2 Phillips head screwdriver, remove the (2) screws fastening the (2) halves together.
13. Position the (2) halves of the base cover around the hinge post flange and secure with the (2) screws [Figure 7].

Fig. 4 Marking Centerlines

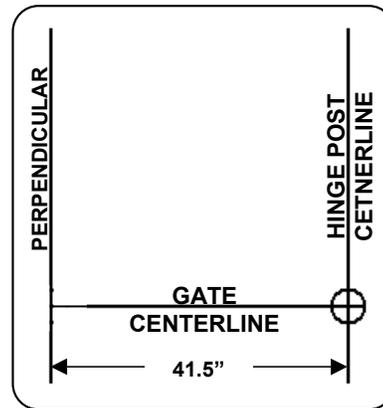


Fig. 5 Marking Anchor Holes

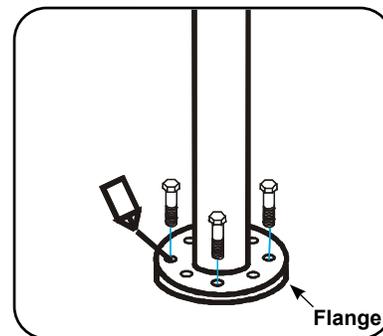


Fig. 6 Inserting Anchors

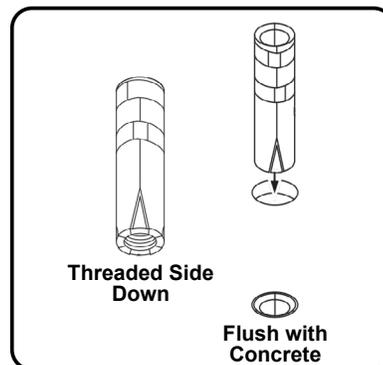
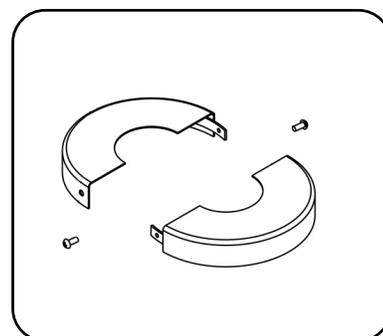


Fig. 7 Base Cover



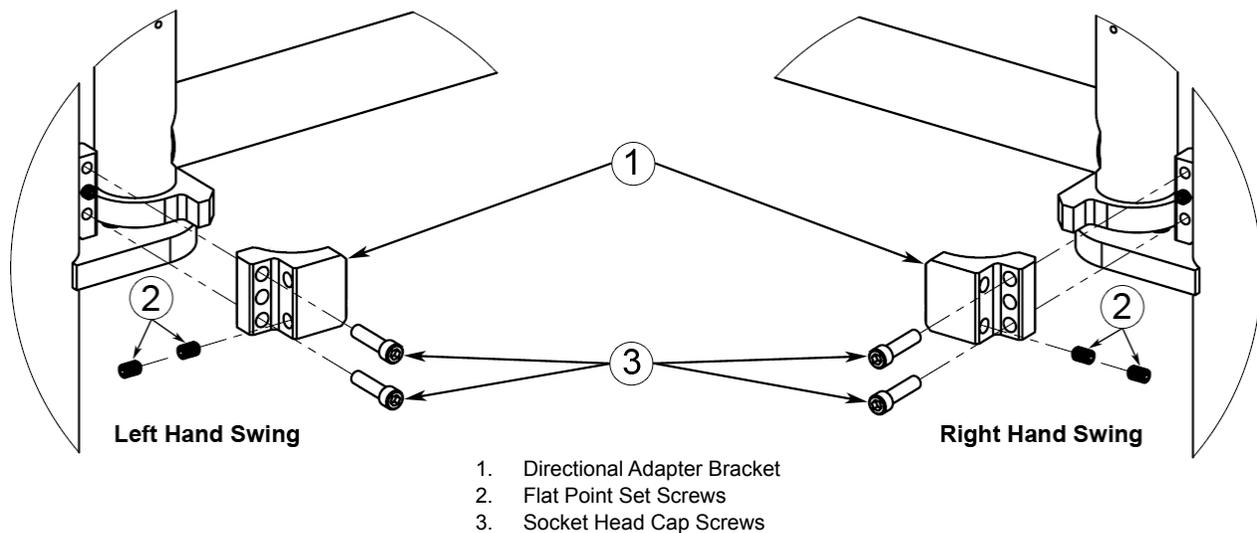


Installing the Directional Adapter Bracket

Alvarado's default configuration for the CFG, CSG, and SSG gates is bi-directional (without the directional adapter bracket installed). To configure a left- or right-hand only swing, install the directional adapter bracket per the instructions below:

14. Swing the gate to the open position.
15. Using a 3/16" Allen wrench and (2) socket head cap screws, secure the directional adapter bracket to the lower hinge post according to the desired swing direction [Figure 8].
16. Insert the first 1/4" flat point set screw and tighten it with an 1/8" Allen wrench until the flat point of the set screw protrudes out of the opposite side of the adapter bracket. Swing the gate into the 'closed' position and adjust the set screw until the gate is in proper visual alignment. Once the 'closed' position is properly aligned, insert the second set screw and tighten it until it's stopped by the first set screw [Figure 8].

Fig. 8 Left-Hand /Right-Hand Swing Configurations



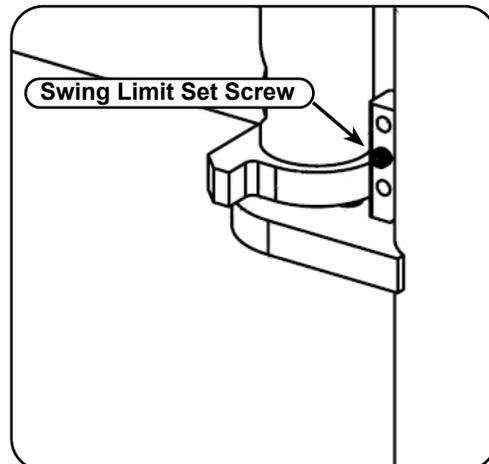
Adjusting the Swing Limit

The swing limit set screw can be used to limit the gate arm's degree of travel and/or prevent overtravel.

Use an 1/8" Allen wrench to adjust the set screw [Figure 10]:

- Turn the set screw counter-clockwise to decrease the gate arm's degree of travel.
- Turn the set screw clockwise to increase the degree of travel (to maximum).

Fig. 10 Adjusting the Swing Limit





Installing the Protective Pads (CFG Only)

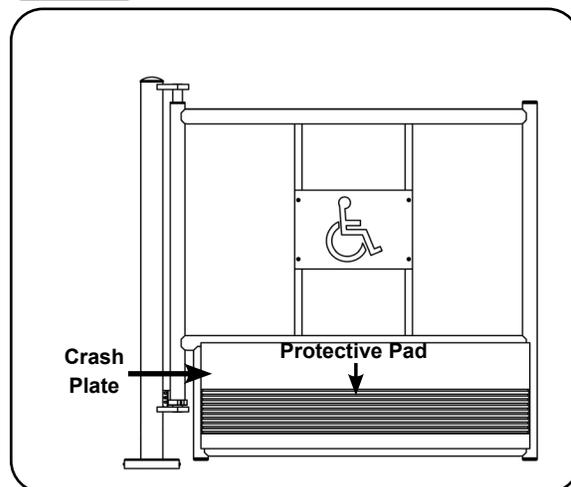
Use the supplied protective pads to dampen metal on metal noise, and minimize wear and tear to the crash plate.

17. Using a mild soap and water solution, clean the crash plate surface of any dirt, oil or debris. Be sure to thoroughly wipe dry the surface after cleaning.
18. Peel the backing off a protective pad and apply it to the desired location on the crash plate using even pressure [Figure 9].
19. Repeat steps 1 and 2 using the other protective pad and the other side of the crash plate.

NOTE

Both pads can be applied to the entry side of the crash plate for left- or right-swung configurations.

Fig. 9 CFG Protective Pads



Functions Check

1. Walk through the gate. The gate should move smoothly and return to the closed position.
2. Verify the hinge post and gate arm are horizontally and vertically level.
3. Ensure the gate arm and hinge post form a 90° angle.

Cleaning and Maintenance

Setting up a cleaning and maintenance schedule along with proper maintenance will ensure maximum performance and long service life of the gate. In addition, proper cleaning is required to achieve maximum corrosion resistance and aesthetic appeal.

Exterior Cleaning

The frequency of exterior cleaning will depend on the environment in which the gate is installed. Alvarado recommends cleaning every (60) days for gates installed indoors or in temperate climates. If a stainless steel gate (SSG) is installed outdoors, clean the gate on a more frequent basis. A best practice for preventing build-up of contaminants is to wipe down the gate with a damp cloth on a daily basis. Due to the different types of exterior finishes available, different types of care must be taken to keep the gate looking clean.

- **Stainless Steel** - Regular cleaning is the best way to maintain any stainless steel finish. Regular cleaning can be accomplished by wiping down the gate with a damp cloth. For stubborn stains and heavy spotting, our #1 recommendation is *MAAS Metal Polish* (in the liquid form). Follow the manufacturer's directions, but in brief: (1) wipe down excess dirt from the gate, (2) apply polish to the metal, (3) polish in the direction of the grain with a super fine (0000) or fine (000) **synthetic** steel wool (never use standard steel wool), (4) wipe clean, (5) repeat steps 2 - 4 until clean.
- **Chrome** - Periodic cleaning with a mild glass or all-purpose cleaner is the best way to prevent build-up of contaminants on chrome surfaces. For stubborn stains, heavy spotting and rust, our #1 recommendation is *MAAS Metal Polish* (in the liquid form). Follow the manufacturer's directions. Do not install chrome gates (CSG/CFG) outside.
- **Powder Coat Finishes** – To clean the powder coat finish, use a neutral detergent, such as a car shampoo, and rinse with clean water. In the event that the powder coat finish is chipped, and bare metal is showing, seal the area as soon as possible. If the area is not sealed, the underlying metal will rust, which could eat away the powder coat and cause flaking.



Maintenance

Alvarado recommends performing the maintenance steps below every (60) days. Maintenance should be performed more frequently in high use applications and/or in dusty or humid environments.

1. **Anchoring:** Check that the anchors are tensioned to 20 ft-lbs. Tighten if necessary. Clean any accumulated dust and dirt from the anchors and flange.
2. **Leveling:** Verify the hinge post and gate arm are horizontally and vertically level. Shim as necessary. Ensure the gate arm and hinge post form a 90° angle.
3. **Overtravel:** Check the gate for overtravel. Overtravel is defined as the gate swinging in excess of 90° from the closed position. Overtravel can lead to the gate arm colliding with adjacent fixtures, potentially causing damage to the fixture and/or the gate. If the gate overtravels, refer to the Adjusting Swing Limit section on page 6.

Appendix A - Signage

The CSG,SSG, and CFG gates are equipped with two infill bars for mounting signage.

Fig. A1 SSG with Custom Sign



Fig. A2 CFG with 8" x 12" Handicapped Sign





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