

Installation, Operation + Maintenance Manual

RETROFIT SAFETY GRATE

Model: SGT-R



The Nystrom, OSHA-compliant Retrofit Safety Grating provides permanent fall protection for most floor door styles, designed to fit any manufacturer. Built with 6inch side access, it features positive locking in both open and closed positions. The grate includes a padlock hasp for owner-supplied lock.

IMPORTANT: Make sure grate is properly sized. Use the <u>Order Form - Retrofit Safety Grate</u>, available at Nystrom.com.

GENERAL SAFETY PRECAUTIONS Improper selection, installation, or use can cause personal injury or property damage. It is solely the responsibility of the user, through their own analysis, to select products suitable to the specific application requirements, ensure proper maintenance and use as intended. Follow local, state, and federal regulations for proper installation and operation requirements.

Introduction + Safety

Please read the complete instructions carefully before beginning any work. To ensure proper installation and performance of the product, the following actions must be completed by the installing contractor. Failure to do so will affect product warranty.

Transportation + Storage

- Inspect all shipments and materials for missing or damaged components and hardware.
- Material must be stored in a clean, dry location.

Preparation

- Locate the packing slip(s) and/or shop drawings.
- Verify that all products listed on the packing slip are included in the package.
- Check the products for damage. If products are damaged, report a freight claim immediately and leave the products in their packaging. If you sign for products without reporting damage you waive your right to a freight claim and will be responsible for their replacement cost.
- Read the instructions thoroughly before beginning installation.

Tool List

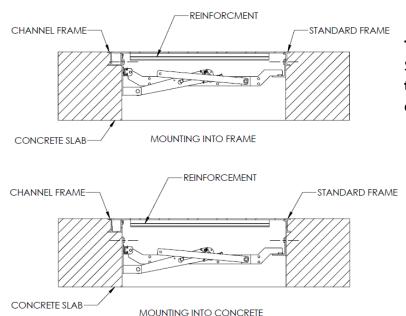
- Safety glasses
- Tape measure
- Level
- Marker, felt tip
- Hammer drill, or standard drill

- Chisel
- Hex key wrench, 3/16"
- Wrenches and/or sockets
- Pliers, needle-nose

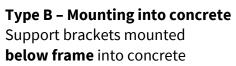
Pre-Installation

- Secure area against falling, as the floor door cover must be in the open position.
- Grate will open perpendicular to the existing floor door cover.
- Check condition of concrete where brackets are to be mounted and chisel smooth, if necessary.
- Retrofit Safety Grates are built for bolt-in installation and are provided with mounting brackets that have clearance holes for 3/8-inch hardware. (Anchor bolts are recommended for concrete openings. Lag bolts are recommended for wood openings.)
- Mounting hardware provided by others.
- Two-person installation is recommended.

Acceptable Mounting Locations



Type A – Mounting into frame Support brackets mounted through frame into concrete or into C-channel



Since 1948, Nystrom has been the go-to manufacturer of specialty building products providing a wide range of floor, roof, wall, ceiling, and stair access products that create safer, more accessible buildings. We offer hassle-free services including access to technical experts, REVIT tools for BIM, HPDs for LEED v4, 3-part specifications and AIA-accredited continuing education courses.

ITEM NO.	DESCRIPTION
1	GRATE ASSEMBLY
2	HOLD OPEN ARM
3	LIFT HANDLE WITH RED HANDLE
4	PIVOT BRACKET
5	SUPPORT BRACKET
6	PADLOCK HASP
7	ALUM BOSS/STRIKER BOLT

Retrofit Safety Grate Components

INSTALLATION

1. Determine proper mounting location, as shown on page 2. Place brackets perpendicular to the floor door cover hinges.

2. Mark Drill Hole Locations for Mounting Brackets

- a. Set the pivot bracket into position per determined mounting location, making sure both ends are level and equally distant to the sides of the opening.
- b. While holding the pivot bracket in place, mark the mounting holes.
- c. Set bracket aside and drill mounting holes for customer supplied hardware.
- d. Bolt pivot bracket into place using customer supplied hardware.
- e. Set the support bracket into position on the opposite side, making sure the top is level with the top of the pivot bracket, and both sides are equally distanced from the opening. This will allow for correct placement of the safety grate.
- f. Mark and drill mounting holes. Bolt support bracket into place with customer supplied hardware.

3. Center Hinge Brackets on Nut Rails

a. Remove clevis and cotter pins from hinge brackets. (See Fig. 1)

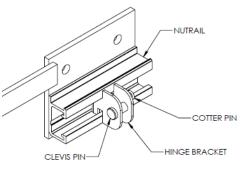


Figure 1

Direct Service Done Right

Since 1948, Nystrom has been the go-to manufacturer of specialty building products providing a wide range of floor, roof, wall, ceiling, and stair access products that create safer, more accessible buildings. We offer hassle-free services including access to technical experts, REVIT tools for BIM, HPDs for LEED v4, 3-part specifications and AIA-accredited continuing education courses. b. Make sure hinge brackets are centered on nut rails with 2-1/8" on either side. (See Fig. 2) If necessary, loosen the set screws in the hinge brackets with a 3/16" hex key wrench and adjust as needed. The center distance between the hinge brackets should be equal to the center distance between the safety grate plates for proper installation. (See Fig. 2 & 3) Tighten set screws.

4. Install Safety Grate into Hinge Brackets

(Two crew members recommended)

- a. With a crew member at each end lower the safety grate onto the support bracket so the end of the grate rests on the angles.
- b. On the pivot bracket end, line up the mounting holes in the grate plates with the holes in the hinge brackets. (See Fig. 3)
- c. Insert the clevis pins through the hinge brackets and grate plates. (See Fig. 1)
- d. Insert the cotter pins into the clevis pins to lock the safety grate into place.

5. Attach Hold Open Arm

- a. Remove striker bolt from aluminum boss on grate plate. (See Fig. 4)
- b. Rotate the hold open arm up until the slot lines up with the aluminum boss.
- c. Insert the striker bolt through the arm slot and thread into boss until tight, using a 5/8" wrench or socket.

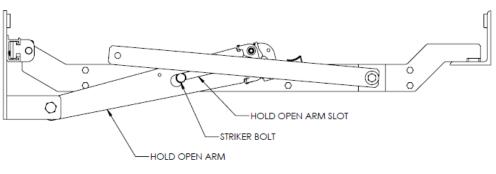


Figure 4

HINGE BRACKET CETNERED ON NUTRAIL

 \bigcirc

2.125



2.125

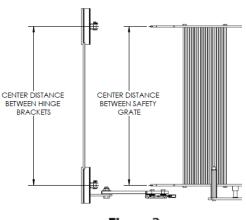


Figure 3

Figure 5

LIFT HANDLE

OPERATION

To Open Safety Grate

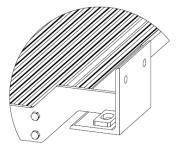
Standing at the hinge side of the grate, grip the red-handled lift handle^{*} and pull grate towards you until the hold open arm locks into place in the vertical position. *(See Fig. 5)*

*Sizes below 34" in length do not have a lift handle. To open, grasp the grate and pull towards you.

To Close Safety Grate

While holding the lift handle, push the black lever on the hold open arm forward to release the lock. Let the grate down slowly until it rests on the support brackets.

<u>Note</u>: If the included padlock hasp is to be used (with a customer supplied padlock) a hole must be drilled in the support bracket. With grate in the closed position mark and drill hole to accommodate padlock. *(See Fig. 6)*



HOLD OPEN ARM



MAINTENANCE

- Make sure the anchor bolts are tight and secure.
- Keep the grate brackets, pivots, and treads clean from debris.

QUESTIONS?

For more information on installation, repair, or replacement, please visit nystrom.com