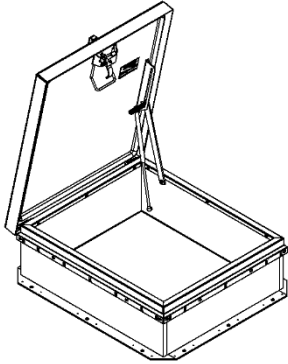


Personnel, Security, SunLit™ or Equipment Roof Hatch

Model(s): RHU/RHS/RHL/RHE

GENERAL DESCRIPTION



Roof Hatch products provide safe and convenient access to roof areas using interior ladders, alternating tread devices, and stairs. Roof hatches are designed and built for years of safe, convenient access to roof top areas on commercial buildings.

The following are general instructions for installing, operating, and maintaining Personnel, Security, SunLit™ and Equipment Roof Hatches.

Introduction + Safety

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

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

Transportation + Storage

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

INSTALLATION

Roof hatches are intended for commercial building applications. Because condensation may occur as a natural result of humidity levels and temperature variations between indoor and outdoor temperatures, residential type applications are not recommended.

Installation, Operation & Maintenance

Roof hatch products may be installed on a flat or sloping roof with up to a 3:12 pitch. When installed on a slope, the hinge side should run parallel with the slope.

1. Place the roof hatch over the existing opening in the roof. The roof rough opening dimensions are equal to hatch dimensions as measured from the inside curb to inside curb. For example, a 36 inch by 30-inch fixed ladder access hatch will have a rough opening of 36 inches by 30 inches.
2. The roof hatch curb flange includes 5/8-inch diameter pre-drilled mounting holes for anchoring to the curb. Mark and drill the curb as required and secure the curb flange using appropriate fasteners (provided by others) in accordance with project requirements and applicable building codes.
3. Mount cant strips (not included) surrounding the roof curb when applicable. The size is to be determined by a roofing installer, based on the roofing material to be provided.
4. Install roofing material up to and surrounding the roof curb, and under the counterflashing at the top of the curb. Use the EZ tab feature, *figure 1*, to provide additional mechanical support to hold and secure roofing membrane. Lap and seal all joints in roofing material to provide a weather-tight seal.

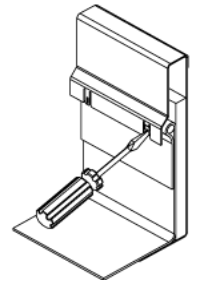


Figure 1

OPERATION

Roof hatches are designed and built for years of dependable roof access. To meet the demands of an exterior application, the doors are manufactured from steel or aluminum. The curb and cover are insulated and have a continuous extruded thermal EPDM gasket that creates a weather resistant seal. The standard curb comes with a counterflashing incorporating EZ tabs to assist with mechanically securing roofing material/membrane. The steel roof hatches come standard with a finished baked on powder coat paint that offers the best corrosion protection in the industry.

The basic components for door operation include turn handle latches incorporating padlock hasps, spring hinge assemblies, and a locking hold open arm as detailed:

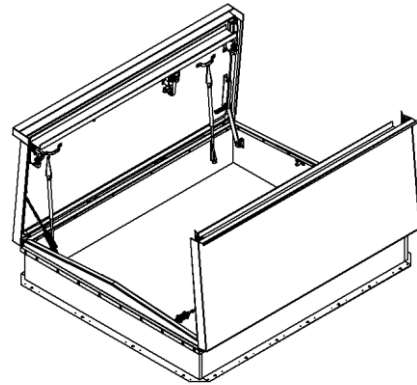
- **Latch:** Latch with interior handle and exterior gasketed turn handle, both incorporating padlock hasps to accommodate interior and/or exterior locking options.
- **Spring/Hinge:** Concealed, tamperproof, heavy-duty zinc plated steel spring/hinge packs integrated with counterbalance compression springs to ensure ease of opening and closing during use.

Installation, Operation & Maintenance

- **Hold Open Arm:** Locking hold open arm automatically engages and locks when the door fully opens. The hold open arm must be engaged in the locked position to ensure that the door does not close unintentionally. Pull the red grip handle to unlock and safely close the door.
- **Gasket:** Weather tight, continuous adhesive backed gasket on curb.

Note: Larger hatches, especially over 72 inches in length, may need two people to ensure proper closure.

The following instructions provide general guidance for installing, operating, and maintaining two-piece, spliced-curb roof hatch products. They are intended as general guidelines only.

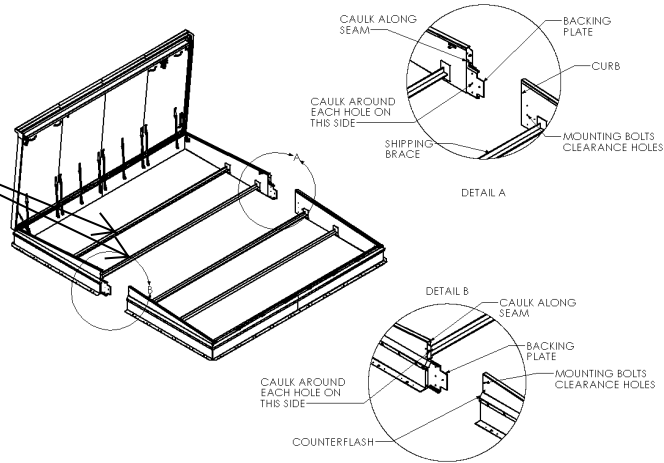


INSTALLATION OF 2-PIECE CURB

1. Locate the 2 pieces of curb and cover around roof opening in the appropriate orientation.
 - a. The roof rough opening dimensions are equal to hatch dimensions as measured from the inside curb to inside curb. For example, a 144 inch by 144 inch equipment access hatch, will have a roof rough opening of 144 inches by 144 inches.
2. Mate sections together. Match like-marked sections of multiple units together to ensure a proper fit.
3. Fit Backing Plate (Male) to Backing Plate (Female). Caulk with appropriate caulking (not included).
4. Line up hole pattern in Backing Plate (Male) to hole pattern in curb and bolt sections together with hardware provided, 3/8 inch bolts and nuts; *reference View A-2 (next page)*.
5. Fasten counterflash and clip together with hardware provided, 1/4-20 fastener.
6. Seal the seam between the two halves above the backing plates with caulk. *reference View A-1 (next page)*.
7. Place insulation (shipped loose) over backing plates to fully insulate curb. Tape in place if necessary.
8. The roof hatch curb flange includes 5/8-inch diameter pre-drilled mounting holes for anchoring to the curb. Mark and drill the curb as required and secure the curb flange using appropriate fasteners (provided by others) in accordance with project requirements and applicable building codes.

Installation, Operation & Maintenance

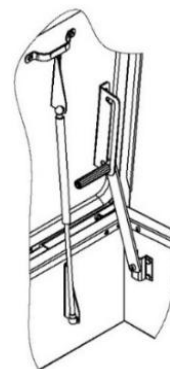
2-4 temporary shipping
braces, remove after.



9. Open door and Install Springs provided into spring cylinder as shown.
10. Cycle doors open and closed to ensure they both move freely without interference or binding.
11. Remove temporary shipping braces (2 or 4) and discard. Replace bolts in curb to seal holes.
12. Install roofing material up to and around the roof curb under the counterflash. Use the EZ tab feature as described below to provide additional mechanical support to hold and secure roofing membrane. Lap and seal all joints in roofing material to provide a weathertight seal.

INSTALLATION OF SPRINGS

1. For extra-large roof hatches, the gas springs may be removed for shipping.
2. Open door until the locking hold-open arm fully engages and insert gas spring on curb side first.
3. Connect gas spring to the curb last.



OPERATION

The basic components for door operation include turn handle latches, compression springs with hinges and a locking hold open arm as detailed:

- **Latch:** Is a two-point rotary latch with interior and exterior rotating handle unless the hatch is ordered with stainless steel hardware in which case it would be a two-point slam latch.
- **Spring:** Gas-spring with damper for smooth, controlled lift assistance.
- **Hinge:** Stainless Steel tamper proof.
- **Hold Open Arm:** Locking hold open arm automatically engages and locks when the door fully opens. The hold open arm must be engaged in the locked position to ensure that the door does not close unintentionally. Pull the red grip handle to unlock and safely close the door.
- EPDM adhesive backed gasket seal.

Note: Larger hatches, especially hatches that are over 72 inches in length, may need two people to ensure proper closure.

MAINTENANCE

- Roof hatches should be manually operated once a year to check performance.
- Lubricate moving parts such as hinges and latches with a silicone spray lube as required to maintain a smooth opening and closing of the door. Do not use regular lubricating oil as it can attract dust and grit.
- Non-moving parts can be cleaned with a mild soap or dishwashing detergent and water solution.
- Gaskets can be cleaned with a clean, damp, lint-free cloth. Do not apply mineral oils, vinyl dressings, or other lubricants to the gasket as they can cause the gasket to break down over time.

Follow the maintenance instructions to ensure the long life of the product. Contact Nystrom for information on replacing damaged parts.

Installation, Operation & Maintenance

PARTS LIST

Part Number	Description
RH-KIT-HOA	Hold Open Arm Kit
RH-KIT-HOA-LH	Left Hand Hold Open Arm Kit
RH-KIT-DD-LATCH	Double Door Rotary Turn Handle, Zinc Plated Steel
RH-KIT-SD-LATCH	Single Point Turn Handle, Zinc Plated Steel
RH-KIT-SD-2PTLATCH	2-Point Turn Handle, Zinc Plated Steel
RH-KIT-SD-CATCH	Single Door Strike Latch with Padlock Hasp
RH-KIT-2PTCATCH	Single Door 2-Point Catch, Zinc Plated Steel
RH-KIT-DD-CATCH	Double Door Latch Strike, Zinc Plated Steel
RH-KIT-HINGE	Hinge, Zinc Plated Steel
RH-KIT-SPRING-150	Gas Spring
RH-KIT-SPRING-250	Gas Spring
RH-KIT-SPRING-500	Gas Spring
RH-KIT-SPRING-600	Gas Spring
RH-KIT-LIFTHANDLE	1" x 6" Lift Handle, Zinc Plated Steel
RH-KIT-GASKET	10 Feet Gasket

QUESTIONS?

For more information on installation, repair, or replacement, please visit www.Nystrom.com or call 800.547.2635.