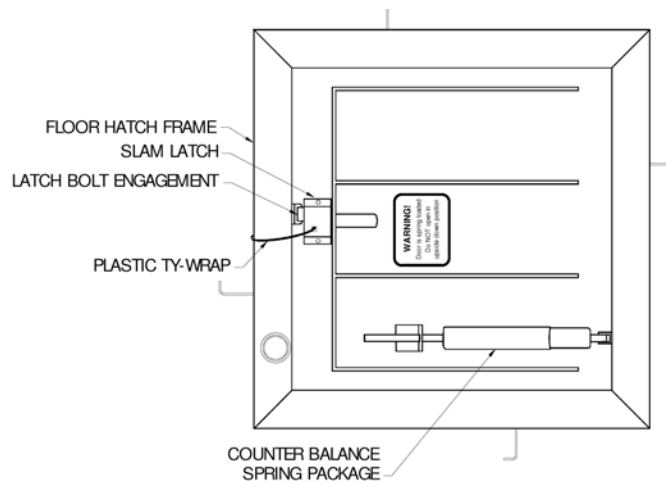


Overview:

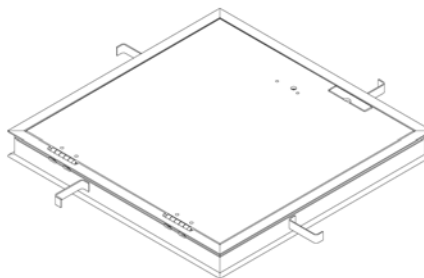
Floor Door products are designed and built for years of convenient and weather tight access for personnel as well as equipment. The following are general instructions for installing, operating and maintaining floor door products. These are recommended general guidelines only. Locally accepted installation, sealing practices and procedures should be followed to ensure the ultimate weather-ability of floor hatches installed into various types of flooring systems.

Set Up/Unpack/Preparation:**WARNING**

- The cover of this floor door is **SPRING LOADED**
- **DO NOT** release slam latch in upside down position (see diagram)

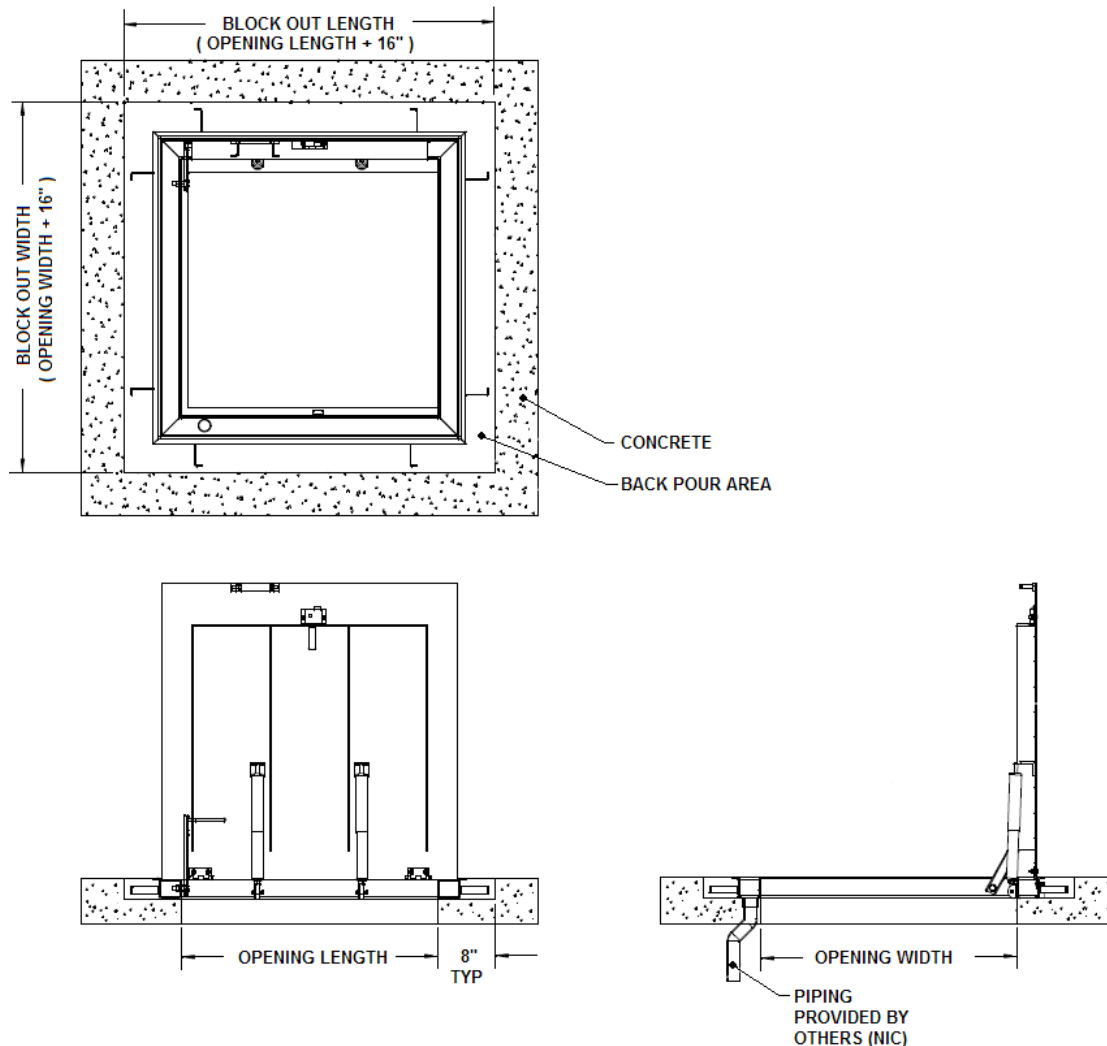


1. Visually inspect slam latch to ensure latch bolt is engaged over frame (see diagram)
2. Cut plastic Ty-Wrap and remove envelope.
3. Orient floor hatch in upright position. This is the correct position to handle the floor door.



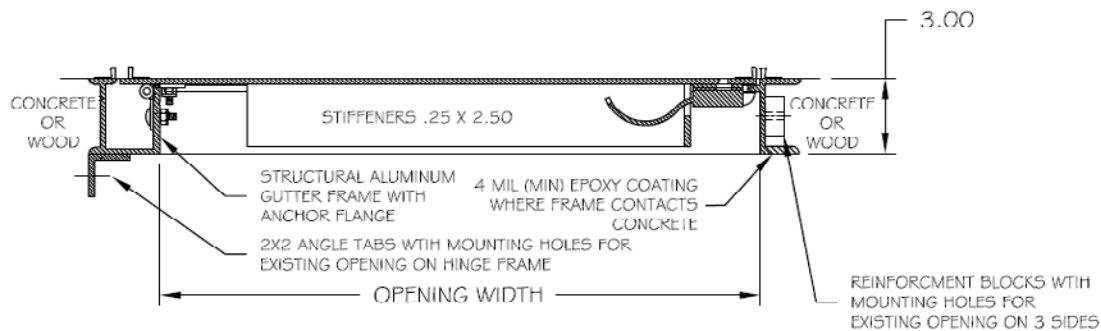
Installation:

1. Special care is required when handling and installing floor doors. Please make sure that all framework and doors are supported during transport and installation to insure against bending or racking of the floor door.
2. All floor doors over 48", on either dimension, are provided with masonry anchors attached (unless otherwise requested. Bend the anchors away from the frame (at a 90 degree angle) prior to installing the units.
3. Set the units into position over the desired opening area. The inside opening of the frame is the "opening size" (I.E. a 60"x60" floor door has an inside opening of 60"). Secure the floor door into the desired area with welding, bolting or other anchorage, making sure not to interfere with the operation of the hatch

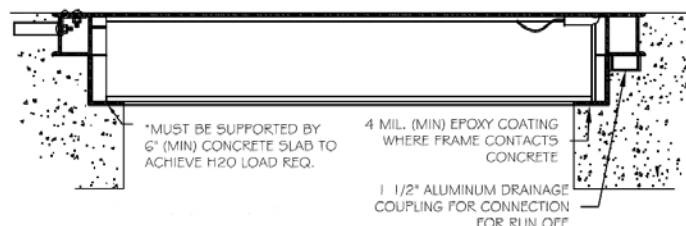


4. Pour concrete to the top edge of the frame, leveling to finish flush with the top of the flange of the floor door. Allow the concrete to cure for 7 days prior to operating the floor door (operating the unit prior to 7 days may crack your concrete).

5. After 7 days, open the door(s) and inspect the unit for excess concrete that may have seeped or fallen into the hinges, latch, gutter or other areas. Remove any concrete to ensure smooth operation.
6. At this point, you may have to adjust the spring packages with a 3/4 inch open end wrench. The springs have an adjustment bolt on the spring rod (near the bottom of the spring housing). The springs may have been adjusted down to remove any undue stress on the frame during transport. Please tighten the bolts until the tube is within 1/8 inch of the door bracket. **DO NOT OVER ADJUST.** Over adjusting will cause the spring to "bottom out" when closing the door. If the door does not close all the way, **DO NOT FORCE IT SHUT.** Adjust the spring(s) down (more gap between the tube and door bracket). Try the door again and adjust springs again as necessary.
7. To install a spring to our floor door simply insert the top of the spring through the door bracket then swing the bottom of the spring assembly towards the frame into the frame bracket and insert the 1/4-20 bolt through the frame bracket and spring rod and fasten with a 1/4-20 nylon nut.
8. For bolt-in installation in concrete, position floor door into existing opening and mark where supplied fastener holes are located on the mounting surface. Remove floor door and install concrete anchor fasteners as directed by fastener manufacturers suggested installation. Replace floor door and secure with fasteners.
9. For bolt-in installation in wood or concrete flooring, secure floor door through supplied fastener holes in 2" x 2" angles (for drainable frame) or reinforcement blocks (for non-drainable frame). Other frame types will have mounting holes provided through the frame for fastener installation.



10. H-20 load rated floor doors should be installed with structural support below the door beams adequate to support H-20 loads.





Right to site.

IO&M

Floor Doors - 08.31.00

Operation:

Floor doors are designed and built for years of dependable access. The floor doors are manufactured from steel, aluminum, and or stainless steel. All floor doors come standard with stainless steel hardware components. The basic components for door operation include turn handle latches, compression springs, stainless steel hinges and a locking hold open arm as detailed:

- Latch: Slam latch with interior rotating handle, and exterior L-handle key.
- Drop down lifting handle
- Spring: Compression springs to ensure ease of opening and closing during use.
- Hinge: Stainless Steel hinges
- 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 vinyl grip handle to unlock and safely close the door.

Maintenance:

- Floor doors should be manually operated once a year to check performance.
- Lubricate moving parts such as springs, hinges, and latches with a silicone spray lube as required to maintain a smooth opening and closing of the door. Do not over grease. 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.
- If any questions arise during the operation or maintenance of the products, please feel free to call our toll-free number for assistance, 1-800-547-2635.