

Installation, Operation + Maintenance Manual

eleGRIL Stainless Steel Grille DEEP PIT FRAME Model: GE98SH, Frame FE98DAMH



eleGRIL Stainless Steel Entrance Grilles are elegant and durable. This grille is most often used in high traffic venues as they stand up to extremely heavy pedestrian and rolling traffic. The eleGRIL system provides scraping functionality and can be used in zones 1 - 3.

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.

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.

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.
- Stainless Steel grilles are not recommended for exterior applications that experience cold, wintery climates. Snow and metal grilles typically lead to slippery, walking surfaces.

Tool List

- Marking Pen
- Drill/Driver, and 1/4" Drill Bit
- Hammer Drill
- Drill Bits, 1/4", 3/8", for concrete/masonry
- Masking tape
- Screwdrivers, Phillips & flat head
- Wrench, Adjustable
- Level
- Silicone caulk, Caulk gun
- Utility Knife
- Pry Bar

INSTALLATION

INSTALL THE FRAME (DEEP PIT)

Properly installed frames are critical to the overall performance of the grille. Improperly installed frames may cause deflection in the grille and may possibly cause tripping hazards.

- Site preparation: Wood forms should be used to prepare a recess in the concrete. The recess depth can vary (2-7/8 inch min. to 7-1/8 inch max.). Recess should be made 1/16 inch larger all around than the outside frame size of the grille. A 1-1/4 inch by 2 inch wide ledge is to be poured at the perimeter to support the frame. Allow the concrete to cure.
- 2. Assemble the frame sections according to the shop drawings.
- 3. Set the frame in along the ledge of the formed recess. If necessary, shim the frame to the finished floor height and verify that the frame is square.
- 4. Drill 5/32 inch diameter holes in the concrete to match the pre-drilled hole locations in the frames.
- 5. Secure perimeter frame to concrete using the provided hardware.
- 6. If applicable, lay the drain pan sections on the bottom of the recess and caulk all seams. (All caulking to be provided by others). Make any drain or trap connections. (All drain accessories provided by others).
- 7. Lay cross support angles at locations marked on perimeter frame. See Figure 1.
- 8. Pre-assemble the support legs and place one (1) assembly at each pre-drilled hole in the cross support. See Figure 2.

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- 9. Label each support leg with the corresponding locations for matching up after the support legs have been cut to size. See Figure 2.
- 10. Center the support legs with the pre-drilled holes on the cross supports and mark the following:
 - a. Using the top of the cross support, mark on the 1/4" bar the required height and angle of the support leg. See Figure 2.
 - b. Using the pre-drilled holes on the support leg footings, mark on the concrete the required mounting hole locations.
- 11. Cut the support legs down to the required heights and angles.
- 12. Drill 5/32 inch diameter holes in the concrete as marked.
- 13. Match support leg assemblies with the corresponding locations.
- 14. Secure support legs to concrete.



- 16. Secure support legs to cross supports using the provided 5/16 inch locking nut and bolt. Figure 3
- 17. Verify that all cross supports are level and adjust if necessary.

INSTALL THE GRILLE (FRAME SHIPPED TOGETHER WITH GRILLE)

- 1. Clean the recess thoroughly. Note that debris will cause irregularities in the recess that will in turn cause the grille to rock or create a tripping hazard.
- 2. Refer to the shop drawings and the marks on the sections to determine the correct location of each section. Note that the grille sections are not interchangeable.
- 3. Set the grille sections in the proper locations and start threading all hold-down screws in the pre-drilled holes. Adjust the grilles to create an even clearance around the edges

Figure 1









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and tighten all screws. Do not over-tighten the screws. There should still be some play in the hold-down straps. *DO NOT attempt to pry apart the surface wires to access the screws. This will cause irreversible damage that is not covered by the warranty.*

4. Save the installation and maintenance instructions and include them with the closeout documentation for the owner and maintenance personnel.

INSTALL THE GRILLE (FRAME SHIPPED SEPARATELY FROM GRILLE)

It is recommended that the grille and frame be shipped as an assembly. When frames are shipped separately from the grilles, it is critical that the installers follow instructions carefully. Please note that the labor involved will be significantly greater and Nystrom is not responsible for any additional labor charges incurred.

- 1. Clean the recess thoroughly. Note that debris will cause irregularities in the recess that will in turn cause the grille to rock or create a tripping hazard.
- Refer to the shop drawings and the marks on the sections to determine the correct location of each section. Note that the grille sections are not interchangeable.
 Illustration 1: Hold-downs must be assembled as illustrated.
- 3. Refer to the following hold-down illustration below while assembling hold-downs. *Holddowns must be assembled as illustrated*. Place the stainlesssteel screws in all hold-downs on the grille sections. Use the plastic washers provided to hold the screws in the lock-downs before putting the grilles into the recess.



DO NOT attempt to put the lock-down screws in by prying apart the surface wires and installing from the top of the grille. This will cause irreversible damage that is not covered by the warranty.

4. Install the hold-down clips in the grille. They should be placed 3 inches in from corners around the perimeter of each section and spaced at a maximum distance of 36 inches apart throughout each section and over the cross supports.

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Figure 5

5. To install the clips, place the clip into the underside of the grille at an angle and use a pry bar to insert the clip into the grille. *See Figure 4*. Press/Tap the clip into place using a flat head screwdriver so the fingers of the clips snap



into the spaces between the surface wires. See Figure 5.

- 6. Place the grille sections in position within the frame. Refer to the shop drawings for the proper location of the sections. Mark the locations of lock-down holes on the frames and cross supports.
- 7. Remove the grating and set aside. Drill and tap the marked fastening points for the 10-24 machine screws provided.
- 8. Set the grille sections back into the recess and start threading all hold-down screws in the embedded anchors. Adjust the grilles to create an even clearance around the edges and tighten all screws. *Do not over-tighten the screws.* There should still be some play in the hold-down straps.
- 9. Save the installation and maintenance instructions and include them with the closeout documentation for the owner and maintenance personnel.

MAINTENANCE

Continued maintenance is critical to the long-term safety and performance of the grille. Remove the grille and clean the floor periodically to prevent the surface from becoming uneven. Debris build-up under the grille could lead to deflection in the grille and may possibly cause tripping hazards. *Gloves are recommended when handling the grilles to protect against sharp edges*.

- General cleaning can be done from the surface with a vacuum and brush to remove debris between the bars.
- Surface wires can be cleaned with a non-ferrous cleaner such as 3M's Scotch Brite™.
- Do not use steel wool or abrasive pads. The steel in these products will embed in the wires and subsequently rust.

QUESTIONS?

For more information on installation, repair or replacement, please contact Customer & Sales Support at 800-547-2635 or visit <u>nystrom.com</u>

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