

## eleGRIL SURFACE MOUNT ALUMINUM FRAMES

Model: BFE38SAMH



eleGRIL Stainless Steel Grilles are elegant and durable. This grill 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 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

### 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

- 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 (SURFACE MOUNT)

*A flat floor and accurately installed frames are critical to the overall performance of the grille.*

1. Verify that the floor is flat within 1/8" over 10'. Floor must be flat to prevent damage to the mat / grille. Utilize a self-leveling compound (provided by others) if necessary to ensure a level floor surface.
2. Position the pre-cut and pre-mitered frame pieces on the floor as indicated on the shop drawings.
3. Mark the fastening point locations on the frames. The required locations are indicated on the shop drawings. Otherwise, evenly space the fastening points at a maximum distance of 24" on all sides of the frame. Drill and countersink 1/4" diameter holes at the marked locations.
4. Mark and drill 1/4" diameter holes in the floor for the anchors.
5. Using the provided anchors, secure the frame to the floor.

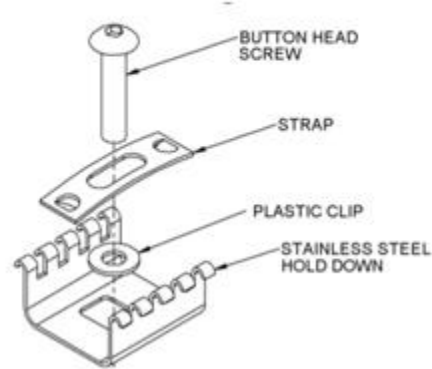
### INSTALL THE GRILLE

1. Clean the floor thoroughly. Note that debris will cause irregularities on the floor that may cause the grille to rock or create a tripping hazard.
2. Consult the shop drawings and the marks on the sections to determine the correct location of each grille section. Note that the grille sections are not interchangeable.

3. Refer to the following hold-down illustration below while assembling hold-downs.

Place the stainless-steel screws in all hold-downs on the grille sections. Use the plastic clips (washers) provided to hold the screws in the lock-downs before putting the grilles onto the floor. *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.*

*Illustration 1: Hold-downs must be assembled as illustrated.*



4. **Placement of Hold-Down Clips**

First install clips at each corner of each grille section. Clips should be placed approximately 3 inches in from section corners. Continue placing clips uniformly along the perimeter and throughout the entire grate section. Clips should be placed evenly spaced apart, between 24 inches and 36 inches maximum.

After subtracting for the corners divide the remaining space by 2, 3, 4, spaces etc. until the result is between 24 and 36 inches. This determines the quantity of hold-down clips required. If you divided by 2 spaces, then you have 1 hold-down between the corner clips. If you divided by 3 spaces, then you would have 2 hold-downs placed between the outer 2 corner clips, and so forth.

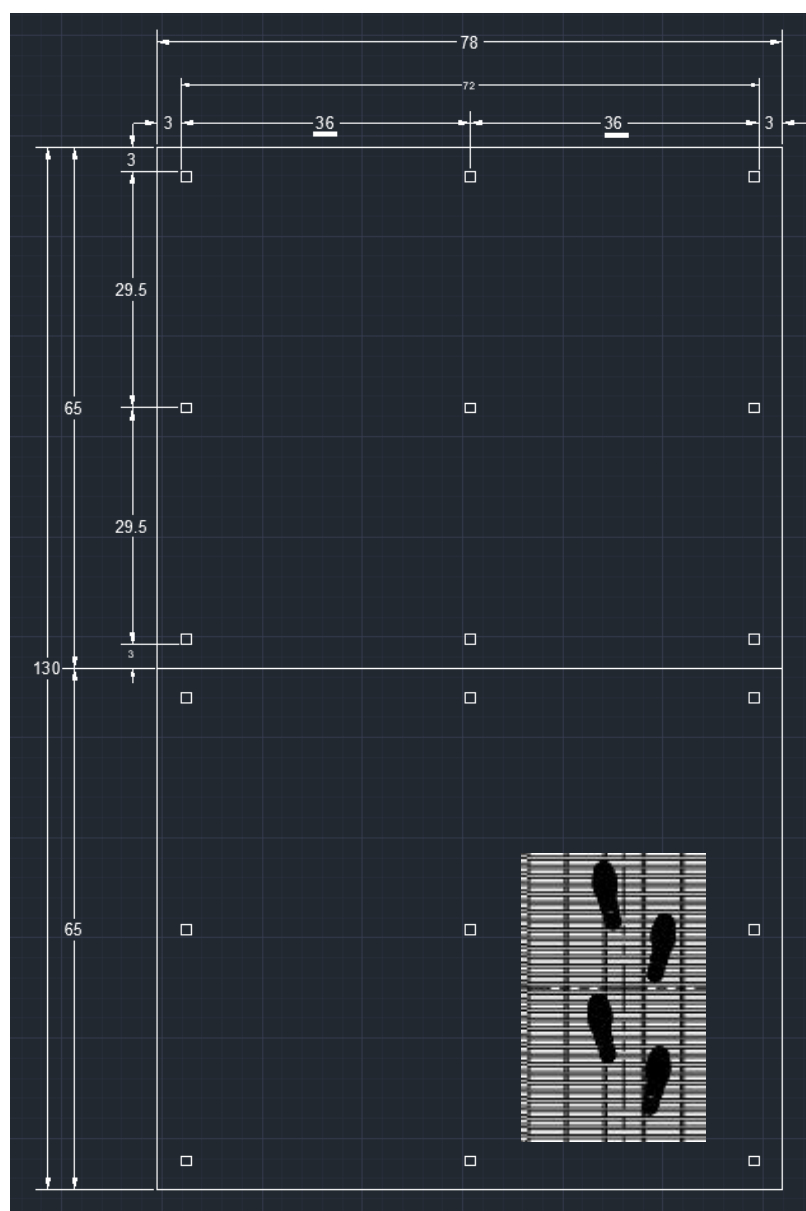
Example: Unit is 78" Width X 130" Length (made of two sections, each 78" X 65").

$78" - 3" - 3" \text{ (both corners)} = 72"$ .  $72" \div 2 = 36"$  spacing across the width.

$65" - 3" - 3" \text{ (both corners)} = 59"$ .  $59" \div 2 = 29.5"$  spacing across the length.

See Diagram on next page

Hold-Down Clip Placement Diagram



## 5. Installation of Hold-Down Clips

Place the clip in the frame at an angle and use a pry bar to insert the clip into the underside of the grille. (See Figure 1). Press/Tap the clip into place using a flat head screwdriver so the fingers of the clips snap into the space between the surface wires. (See Figure 2).



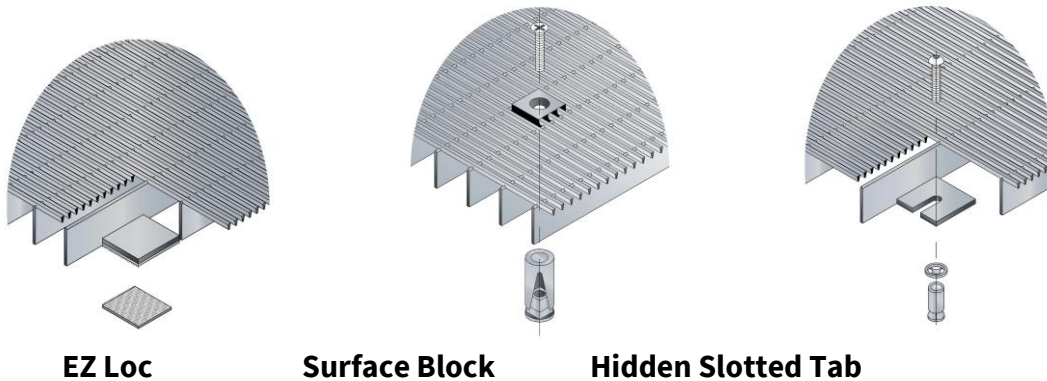
*Figure 1*



*Figure 2*

6. Place the grille sections in position on the floor. Refer to the shop drawings for the proper location of the sections. Mark the locations of lock-down holes in the floor.
7. Remove the grating and set aside.
8. **Prepare Concrete for Anchors**  
Use a hammer drill with a 3/8" concrete bit. First, mark the bit at 5/8" with masking tape so as not to drill too deep. Drill hole 5/8" deep. The anchor should bottom out and still sit above the surface.
9. **Clear the hole of all debris.**
10. **Insert the anchor into the hole.**  
Set the anchor into the clean hole, it should bottom out with a portion of the anchor sitting above the surface. The setting tool will allow you to hammer the anchor into the opening and set it on the wedge. The anchor will now sit flush with the surface for ease of starting the screw.
11. Set the grille sections back on the floor 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 overtighten the screws. There should still be some play in the hold-downs.
12. Save the installation and maintenance instructions and include them with the closeout documentation for the owner and maintenance personnel.

## OTHER MOUNTING OPTIONS



1. Cuts should be made using a grinder with a new wafer wheel. CGW 6 x .045 x 7/8 is recommended. Take particular care to deburr ends of bars and supports after cutting.
2. Set sections into place being sure that all wires and supports align. Mark all surface fastener locations on the surface for each section.
3. Remove sections and drill all fastener holes at marked locations in base and install lead anchors to bed.
4. Place grates back into their locations and fasten down using the flathead machine screws supplied with grating. Start each screw in its location and once engaged snug all fasteners tightly starting from the center and working outwards in a circular manner. Repeat for all sections.

## 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 visit [babcockdavis.com](http://babcockdavis.com)