



## **INSTALLATION INSTRUCTIONS**

**Model: ENTEC 98**

**Type: Stainless Steel Grating and Frames**

### **INTRODUCTION**

The installation of ENTEC 98 stainless steel grating, is a straightforward process. However, success relies on careful attention to detail. A properly executed installation will ensure the system is secure and stable, avoiding issues such as looseness, rattling, or warping.

### **UNCRATING UNITS**

Begin by verifying the contents of all grating boxes against the packing slip. This includes confirming the correct number of units and frames (if applicable), reviewing the shop drawings, and ensuring the hardware package is complete. Inspect all merchandise for any damage. If damage is present, report a freight claim immediately and do not remove the materials from the crate until the damage has been verified by an adjuster. If frames are included, the grating panels will be shipped already installed in their corresponding frames.

### **INSTALLATION OF FRAMES**

If no frames are included with the shipment, proceed directly to the grating installation section. If frames are provided, begin by installing 4-inch grouting straps into the threaded channels located on the outside or underside of the frame. These should be spaced at 2-foot centers, and the straps should be bent as necessary to fit. Next, connect the frame sections using the provided hardware, aligning the pieces according to the markings found on each section.

Ensure the frames are adequately blocked to prevent deformation caused by the pressure of concrete or grout during the pouring process. Once blocked, place the frame into the designated opening and use shims as needed to achieve a co-planar fit with the surrounding finished floor surface. Grouting cement should then be poured around the outer edges of the frame. Be careful to keep the top of the perimeter frame clean and free of cement. For best results, the recess floor must be flat and level to support a proper installation.

Before the cement cures, verify that the dimensions of the frame and opening match the enclosed shop drawings. To install lead anchors for the grating lockdown devices, begin by placing the grating panels into the recess in the configuration indicated by their markings. Mark the intended locations for the locking devices, then remove the grating and drill holes at the marked locations. Anchors can be installed at this stage, with epoxy added if extra hold is desired. Once the cement has hardened completely, place an insert—such as a piece of plywood—into the opening to protect the exposed edges of the frame.

### **INSTALLATION OF GRATING (WITH FRAME)**

To begin installing the grating within a frame, place the grating panels into the frame, taking care to align all the lockdown mechanisms. For assemblies that involve multiple panels, ensure that each one is laid out according to the configuration shown in the shop drawings. Use the Allen wrench provided in the hardware kit to tighten the lockdown bolts. Tighten each bolt firmly, but not fully, on the first pass.

Once the final bolt has been initially tightened, repeat the process for all bolts, tightening them evenly and progressively. This step is important for eliminating slack or uneven tension and should be approached similarly to tightening the lug nuts on a car tire. It is common for minor misalignment of surface wires and support rods to occur, but such variations are typically within accepted tolerance levels.

If the recess floor is flat and level, the grating will seat firmly with minimal movement or deflection. After installation, the grating system should be inspected regularly to ensure all lockdown bolts remain tight, panels are flush with adjacent flooring, and no obstructions interfere with performance. Maintenance guidelines are included in the Kadee Maintenance Instructions packet.

### **INSTALLATION OF GRATING (WITHOUT FRAME)**

When installing grating without a frame, the first step is to pour a concrete slab deep enough to allow the top of the grating to sit flush with the adjacent floor surface. With the grating panels placed temporarily in their correct configuration—each one marked accordingly—identify and mark the positions for the locking devices. Remove the grating panels and drill holes at the marked locations. Insert lead anchors into these holes, using epoxy if additional holding strength is needed.

Once the anchors are set, return the grating panels to the opening and align the holes in the grating with the anchors in the floor. Use the supplied Allen wrench to tighten the lockdown bolts firmly but not completely. After all bolts have been engaged, repeat the process to tighten them evenly and completely, which will help remove slack and avoid warping. As with framed installations, slight misalignment between wires and rods may be observed but will typically remain within acceptable tolerance.

When installed over a flat and level recess floor, the grating should fit tightly with little to no rattling or movement. Ongoing inspections are recommended to confirm that all locking bolts are securely in place, that panels are level and even with the surrounding floor, and that the system remains free of obstructions. Further maintenance instructions can be found in the documentation provided.