



INSTALLATION INSTRUCTIONS

Model: Entec-58

Type: Stainless Steel Grating and Frames

INTRODUCTION

Installing grating is a straightforward process. However, attention to detail is critical to ensure a secure and stable fit. Proper installation helps prevent the grating system from becoming loose, rattling, or warping over time.

UNCRATING UNITS

Before beginning installation, verify that all grating boxes match the packing slip. This includes checking that the correct number of units and frames are present, confirming that the appropriate shop drawings are included, and ensuring the hardware package is complete. Once verified, inspect all items carefully for any damage. If damage is discovered, a freight claim should be filed immediately, and the contents should not be removed from the crate until the damage is verified by a freight adjuster. If applicable, grating panels will be shipped within their corresponding frames.

INSTALLATION OF FRAMES

If no frames are provided, this section may be skipped. For installations that include frames, begin by inserting four-inch grouting straps into the threaded channels located either on the outside or the underside of the frame. These straps should be spaced approximately every two feet and bent as needed. Next, assemble the frame sections using the provided hardware, following any alignment markings included with the shipment.

The frames must be properly blocked to prevent them from warping or bending due to the pressure of wet concrete or grout during installation. Once blocked, the frame should be carefully placed into the opening and shimmed as needed to ensure that it will sit level (co-planar) with the finished floor surface. Grouting cement should then be poured around the edges of the frame, taking care to keep the top surface of the perimeter frame free of cement. It is essential that the recess floor is both flat and level to ensure proper installation.

Before the cement has fully set, check all dimensions against the provided shop drawings. To install the locking devices, place the grating panels into the recess in their marked configuration, then mark the positions where the locking devices will be installed. Remove the grating panels and drill the required holes for the lead anchors. Install the anchors in the holes, optionally using epoxy to improve holding strength. After the cement has hardened, place inserts such as plywood in the opening to protect the frame edges during the remainder of the installation process.

INSTALLATION OF GRATING (WITH FRAME)

Begin by positioning the grating panels into the installed frame, ensuring all lockdown mechanisms align properly. If the installation includes multiple panels, arrange them according to the enclosed shop drawings. Use the Allen wrench provided to tighten the lockdown bolts firmly, though not completely at first. Once all bolts have been initially tightened, go back and re-tighten each bolt in sequence, similar to the process of tightening lug nuts on a tire. This ensures even pressure and eliminates any slack or warping that may have occurred during the initial tightening.

It is normal for there to be slight misalignment between surface wires and support rods, as long as these remain within the specified manufacturing tolerances. Provided that the recess floor is flat and level, the grating should sit tightly and securely with minimal movement, rattling, or deflection. After installation, perform regular inspections to ensure that all lockdown bolts remain tight, the grating panels remain level and flush with the adjoining floor, and that the system is free of obstructions. Additional care and maintenance information can be found in the Kadee Maintenance Instructions included with this packet.

INSTALLATION OF GRATING (WITHOUT FRAME)

If the grating is being installed without a frame, begin by pouring a concrete slab at the appropriate depth to allow the grating to sit flush with the surrounding floor surface. Place the grating panels in the recess in their marked configuration and mark the locations where the locking devices will be installed. Remove the grating panels and drill holes for the lead anchors. These anchors should then be installed in the holes, with epoxy used if additional holding strength is desired.

Once the anchors are in place, return the grating panels to the opening and align the lockdown holes with the anchor positions. Using the Allen wrench provided, tighten the lockdown bolts securely, but not all the way at first. As with frame installations, go back and tighten all bolts again in sequence to evenly distribute pressure and reduce the chance of warping or slack. Some minor misalignment of the surface wires and support rods is acceptable as long as it remains within tolerance.

With a properly prepared flat and level recess, the grating will install snugly with minimal deflection or rattling. Continue to inspect the installation periodically to ensure the bolts remain secure, the grating stays level with the surrounding floor, and that there are no obstructions or issues affecting the performance of the system. Maintenance guidance can be found in the included Kadee Maintenance Instructions.