

# Bar Clean Tread™ Installation Instructions

## Model: KDBR



### INSTALLATION INSTRUCTIONS - BRONZE BAR GRATING AND FRAMES

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The installation of bronze grating with a frame is relatively simple. However, attention to detail can make the difference between a firm, well-installed grating, or one that appears loose, spongy, and could rattle.

#### **UNCRATING UNITS**

1. Check all grating boxes per packing slip:
  - Correct number of units and frames (if applicable).
  - Shop drawing.
  - Hardware package.
2. Check all merchandise for damage (*If damaged, report freight claim immediately- DO NOT REMOVE FROM CRATE until adjuster verifies*).
3. Grating panels will be fastened to their corresponding frame lengths (if applicable).

#### **INSTALLATION OF FRAMES** *If no frames were provided skip to "Installation of Grating"*

The installation of the frame is a simple operation. However, care must be taken to avoid warping and/or bending of the aluminum extrusions.

1. Remove the grating panel from the framing by loosening the locking devices with the Allen wrench supplied.
  - Depending on the size, the units may consist of more than one frame section.
  - When removing the grating panels from their frames, they may appear to be warped. This is normal and will be corrected with the installation of the locking devices. However, we recommend that the panels be picked up from the ends of the vertical bars to reduce deflection.
  - **NOTE: Because the grating panel(s) were fabricated to fit each specific frame section, each panel must be installed into the same frame section in which it was shipped. Not doing this will result in improper installation.**
  - By following the markings on each frame section, fasten the frame sections together with the hardware provided.
2. Ensure the frames are adequately blocked.
  - This will prevent the pressure of wet concrete or grouting cement from pushing in the sides of the frame.
  - Because the grating and frame tolerances are  $-1/4"$ ,  $+0$ , warping of  $1/4"$  could cause misfit or misalignment of the lockdowns and tapped holes for the lockdown bolts.
3. Place frame into opening and shim as required, allowing for a co-planer installation between the grating and the *finished* floor surface. Fasten the frame to the concrete as required.
4. FOR LEVEL BED APPLICATIONS:
  - Pour in grouting cement around edges level with the inside edge of the perimeter frame.

- Be sure to keep the perimeter frame free of the cement.
  - *NOTE: The recess floor must be flat and level to ensure proper installation.*
5. FOR DRAINAGE APPLICATIONS:
    - The recess must be deep enough to allow for the intermediate supports to fit under the grating panels. The recess floor may be sloped, but the framing must be shimmed accordingly (see section details on enclosed drawings).
  6. Before cement is set, confirm dimensions per the enclosed drawings.
  7. After the cement has hardened, an insert (such as plywood) should be placed in the opening to protect the frame edges.

### **INSTALLATION OF THE GRATING**

1. Set lead anchors (for DRAINAGE Applications, go to step 2).
  - Lay grating panel(s) into recess. *NOTE: For multi-panel units, be sure the panels are laid out in the proper configuration (as shown on the enclosed drawing). The panels are marked accordingly.*
  - Mark the location of the locking devices.
  - Remove grating and drill holes in concrete for the lead anchors.
  - Install anchors into holes; epoxy may be used to help ensure that the anchors hold in place.
2. Install the hidden lockdown bolts.
  - From the underside of the panel, slide the bolt into slot in the lockdown tab (we recommend using a piece of transparent tape to hold the bolt in place).
  - The locking devices will be located approximately 18" to 24" on center
3. Lay grating panel(s) into frame and align all lockdowns with the lead anchors (or tapped holes in subframe for drainage application).
4. Using the Allen Wrench provided, tighten firmly, but not completely.
  - At the completion of tightening the last lockdown, repeat the procedure (much like tightening the lug nuts on a tire). This will remove any slack or warping caused by uneven initial tightening.
  - With multiple panel units, variance within the "on center" parameters may cause some bars and/or rods not to align with adjacent panels.
  - If the floor of the recess is flat, then the grating will fit tightly onto the recess floor with minimal rattling or deflection.
5. After installation, inspect the grating regularly to ensure that all the lockdown bolts are tight, and the grating is level (co-planer with adjoining floor) and obstruction-free. Refer to Kadee Maintenance Instructions included in this packet.

**USE ALL OF THE LOCKDOWNS PROVIDED.**