

4-INCH DECK DRAIN PACKAGE INSTALL INSTRUCTIONS

Read carefully BEFORE installation.

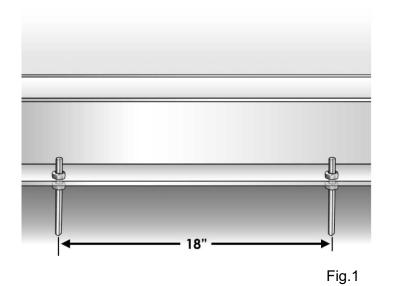
Installation Note: Modifying or altering grating without the written consent of Daldorado, LLC will void the 10-year warranty.

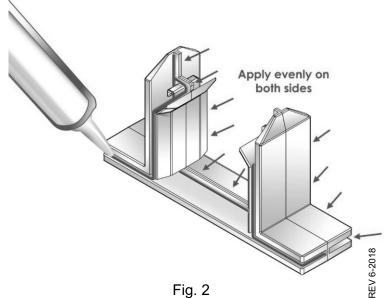
DO NOT mishandle or throw the 4-inch deck drain base, cap or its components as they may become cracked or broken. Misuse or mishandling is not covered by the warranty.

Safe cutting of deck drain base and cap: Mark deck drain to the desired length including space for the rubber joiner. With the cap installed, use a 12-inch chop saw and after saw has reached maximum speed cut the base and cap slowly to avoid splintering of the material. Always wear safety glasses while cutting the base.

Installing Base Into a Preformed Trough in the Concrete Decking

- 1) If preforming a trough, the trough must be a minimum of 10-12 inches wide and the depth will be determined by the thickness of the decking material or any other material used to finish the decking. Some additional depth may be added for the use of the pre-drilled holes in the base for the insertion of threaded rods and lock nuts for accurate leveling of the drain system. (not supplied by Daldorado, LLC.) **Fig. 1**
- 2) Begin at an end or a corner and connect the next piece of base to the previous piece. If there is a drop out then it will need to be installed and glued into place. The base pieces on each side may need to be cut to fit the design measurements. Each drop out or corner will require two of the rubber joiners to hold it together and to allow for thermal expansion. Glue these into place and if necessary seal around joiner with a waterproof sealant. Fig. 2
- 3) After the base is installed and level, reinstall the disposable cap into the base and all its components to keep the drain free of debris. The cap eliminates the need to cut plywood or to install the grating and then tape over it to keep it clean. Radius sections will also come with a radius cap to fit the supplied dimensions. The cap also keeps the base at the correct width for installation of the grating. Not installing the cap could result in the base becoming too narrow for the grating.
- **4)** When the base is level, all joiners have been sealed (if necessary) and the cap has been installed, begin to pour the concrete slowly into the remaining open area around the base, ensure that it is gently vibrated into place. The weight of concrete even in a small area can dislodge the base or its smaller components.







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Installation (cont'd)

Installing Base & Pouring Concrete in a Monolithic Pour

- 1) Begin at an end or a corner and connect the next piece of base to the previous piece. If there is a drop out then it will need to be installed and glued into place. The base pieces on each side may need to be cut to fit the design measurements. Each drop out or corner will require 2 of the rubber joiners to hold it together and to allow for thermal expansion. Glue these into place and if necessary seal around joiner with a waterproof sealant.
- 2) Install the cap into the base to keep base from becoming deformed by the force of the concrete. This cap will keep the base the correct width for the installation of the grating. The cap will also keep any concrete from pouring over the top and into the base.
- 3) Drive the leveling rods into the ground for stability during the pouring of the concrete. The weight of concrete in a single pour is great therefore additional fastening of the base with rods may be necessary. Fig. 3

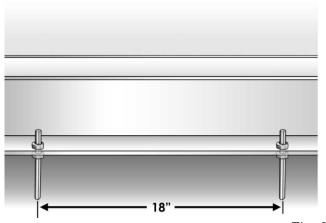


Fig. 3

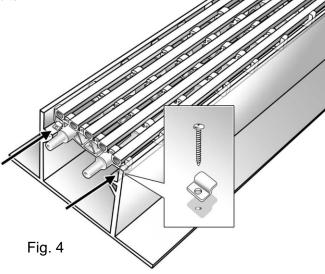
Installation of the 4-Inch Radius Grating

Begin at an end or at one of the prefabricated corners. The radius Parallel grate comes in two pieces, the radial supports and the curved strips. The curved strips are snapped into place after the supports are installed and fastened down. **Fig. 4**

The radial supports are set into the gutter and the inside edge of the radius section will have the connector pins pushed closer than the outside edge of the supports. Do not hammer them together so there is room for thermal expansion. You will need to fasten them down, possible every 12" depending on the size of the radius and alternating from deck side to pool side on the supports.

On tight radiuses, it is possible that you will need to shave some material off the inside male pins to acquire the desired radius. Any radius that is under 5' will need to be fabricated by Daldorado. A 3' radius is the smallest radius that can be fabricated.

The curved strips come in 24" lengths and are joined using the male and female connectors. Assemble 3-4 of the curved strips and snap into place. You do not have to stagger splices and the radial supports will keep the strips in place so there is no need for adhesives.



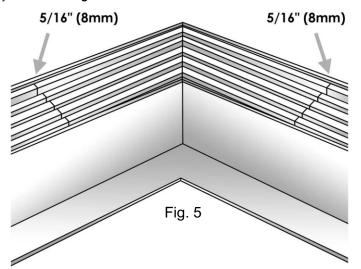


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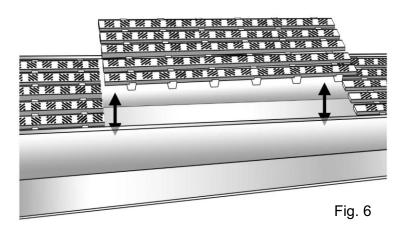
Installation (cont'd)

Expansion Joints

When installing the grating outdoors, a 5/15"(8mm) expansion joint should be allowed at each corner and approximately every 20 feet thereafter to allow for thermal expansion and contraction. If an point is needed calculate ahead as this can be used as an expansion joint as well. **Fig. 5**

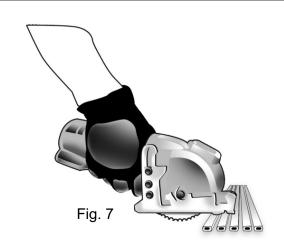


When you reach the point chosen for either an access section or for an expansion joint, cut off the male pins cleanly from each side of the removable section of grating. Leave a 5/16"(8mm) gap before installing the next piece. Fasten down both sides of the access section to eliminate possible tampering. To access under the grate, just remove the fasteners and lift out the section of grating. **Fig. 6**



Cutting of Grating

While installing, when you arrive at a corner, a squared off or angled gutter ending, place a strip of masking tape across the grate and mark with a pen or pencil to the required length and angle. Using a circular saw with a fine-tooth blade (40 tooth minimum), begin to cut the grate along the line. Let the saw come to full speed before beginning to cut and cut slowly across the grate to reduce the risk of shattering the grate. Always wear safety glasses during this process to avoid eye damage. When finished, check for sharp edges and if found, slightly buff edge with a fine sandpaper then install grate. **Fig. 7**



Cleaning & Maintenance

- To keep the grating looking new, the grate must be kept free of debris.
- A mild detergent with water and a brush will keep stains from occurring.
- Remember to regularly inspect the fasteners to ensure that the grate is properly secured to avoid any possible injuries.