# DALDORADO

# PERPENDICULAR GRATE INSTALLATION INSTRUCTIONS

# DPE 12", 14" AND 16" WIDE

# FOR INDOOR AND OUTDOOR USE

## CERTIFIED by IAPMO R&T to NSF/ANSI/CAN 50 2020

## 40% OPEN AREA of unrestricted flow through grating

#### **Read carefully BEFORE installation**

Installation Note: Modifying or altering grate without the written consent of Daldorado LLC will void the manufacturer's 10-year warranty.

Product Numbers: DPE-12, DPE-14, DPE-16

Maximum Load:

- DPE-12 5,462lbs
- DPE-14 6,227lbs
- DPE-16 5,058lbs

## **DPE: Daldorado Perpendicular Grate**

Grate is supplied in sections ready to install. Always begin installation at a corner, connecting the initial section to the Daldorado factory fabricated reinforced corner working clockwise around the perimeter of the pool from corner to corner. Do not attempt to meet in the middle. **Fig-1, 2** 

**IMPORTANT:** The horizontal ledge (or lip) must be level and even on both the vertical and horizontal directions. For best results use, **Daldorado PVC Curb Angle.** Minimum ledge (lip) is to be 1.25" wide and 1" in depth from deck surface finish.

NOTE: If grate is to be sloped, ledge (lip) must correspond across the gutter opening.

Install first Daldorado factory fabricated corner into the gutter with the connector pins going in the clockwise direction. Fasten down with Daldorado supplied 316-SS clips, screws and plastic anchors. **Fig-3** 

**NOTE:** All corners must be fabricated by Daldorado LLC; If not fabricated by Daldorado, the manufacturers 10-year warranty is voided. For any corner that is not exactly 45 or 90-degree, Daldorado requires a <u>ridged material</u> (*plywood, masonry board preferred; foam board, core board only when necessary*) template or a Special-Corner-Order-Form (when applicable), for fabrication. Cardboard and other bendable materials are not acceptable. Templates must be cut to fit the corner in the same manner and shape as the grate; templates must be cut accurately and without jagged edges. Templates must be accompanied with a numbered pool plan corner location map showing the direction of the grate connector pins and marked with the number corresponding with the pool plan. The pool side, the deck side, the top, and the bottom, to ensure the fabricated corner is properly oriented.

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Begin laying the grate into the gutter starting at the corner. DO NOT hammer the grate sections into each other and leave a small gap for thermal expansion between each section. The grate is designed to fit together "hand tight". Fastening is only required at 10-feet intervals. Design Professionals and/or Building Inspectors may require more frequent fastening per design specifications. The Daldoardo grate is designed to BS EN 13451-1 2020 Finger and Toe entrapment guidelines when used straight thus ensuring that the grate requires a tool to lift out. **Fig-3** (Refer to Radius Installation note below)

When installing the grate outdoors, a 5/16"(8mm) expansion joint should be provided at each corner and approximately every 20-feet thereafter to allow for thermal expansion and contraction due to weather temperature fluctuations. If a gutter drop-out access point is required, calculate position ahead of installation, as this should be used as an ideal position to place an expansion joint. When a chosen position for either an access section or for an additional expansion joint, cut off the male pins cleanly from the side of the removable section of grate. Leave a 5/16"(8mm) gap before installing the next section. Fasten down both sides of the access section to eliminate possible tampering. To access under the grate, remove the fasteners and using tools, lift out the section of grate.

#### Daldorado Fabricated 45-degree, 90-degree and Special Corners:

Each corner is fabricated by Daldorado to fit into the gutter and is strengthened across the grate with an FRP T-bar for stabilization and durability. Corners can also be sloped to fit the contour of the gutter profile.

**IMPORTANT:** It is important to have the corners installed correctly so they line up with the gutter grate to ensure that there is no looseness or stress and to eliminate any tampering with the corners or grate. Fasten corners with one Daldorado supplied anchor on each side.

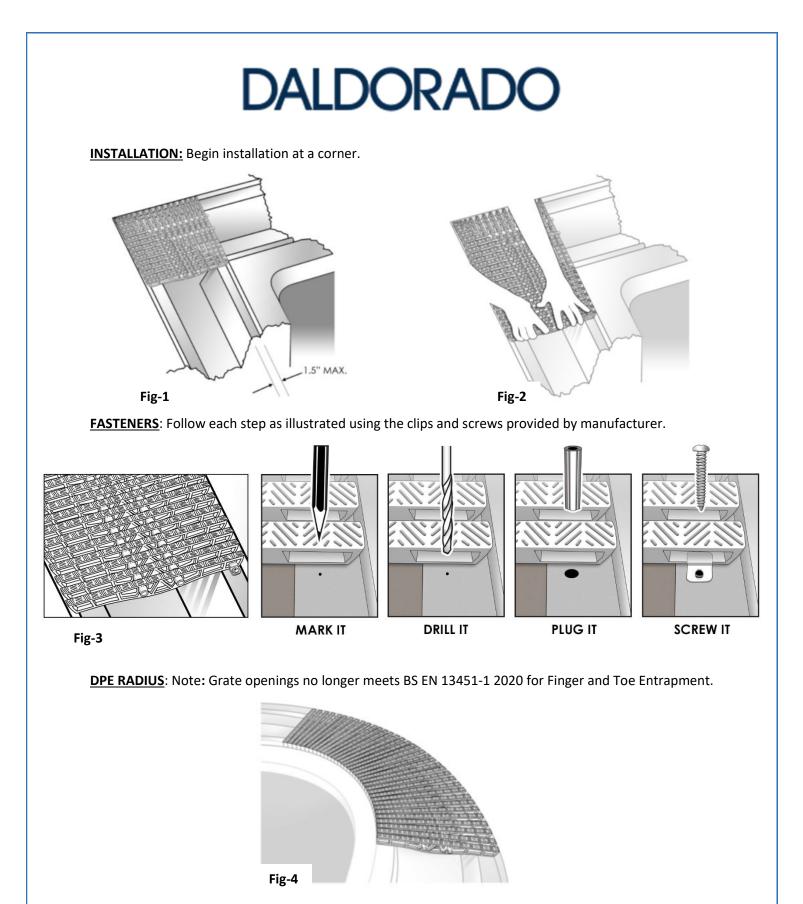
**NOTE:** If Daldorado manufactured corners are not used the Daldorado's 10-year grate warranty is void.

## DPE: Daldorado Perpendicular Grate for a Radius Installation

**NOTE:** Perpendicular grate when used for a radius no longer meets BS EN 13451-1 2020 for Finger and Toe Entrapment. When the grate forms the radius the grate openings widen on the outer edge of the radius. **Fig-5** 

#### **Cleaning and Maintenance:**

To keep the grate looking new, the grate must be maintained free of debris. A mild detergent with water and a brush will keep stains from occurring. DO NOT acid wash with harsh chemicals. Regularly inspect the fasteners to ensure that the grate is properly secured to avoid any possible injuries.



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For Inquiries or Assistance please call: (888)-509-8128