DalLUX GRATE INSTALLATION INSTRUCTIONS DalLUX-STONE TILE SUPPORT GRATE 12"(304mm) long X 12" (304mm) wide

FOR INDOOR AND OUTDOOR USE

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

DalLUX-STS-03 with 10.5% OPEN AREA of unrestricted flow through grate openings
DalLUX-STS-04 with 13.1% OPEN AREA of unrestricted flow through grate openings

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: DalLUX-STS-03 and DalLUX-STS-04

Maximum Load:

• DalLUX-03 & 04 x 12" (304mm) wide – over 10 kN or 2,200 lbs

DalLUX-STS: Daldorado DalLUX-Stone-Tile-Support Grate

Grate is supplied in 12" (304mm) 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**

IMPORTANT: The horizontal ledge (or lip) must be level and even on both the vertical and horizontal directions. Minimum ledge (lip) is to be 1.25" wide and the required depth from deck surface finish to grate allowing for the stone or tile thickness. Always refer to the Architects/Designers project detail on the project construction drawings and verify the depth required.

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.

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.

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".

When installing the grate, 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. To access under the grate, lift out the section of grate. **Fig-2**

<u>Daldorado Fabricated 45-degree, 90-degree and Special Corners:</u>

Each corner is manufactured 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. **Fig-1**

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.

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

Tile Installation

Tile Requirements:

Tile must be approved for wet, barefoot areas, tested in terms of slip resistant properties per applicable Code Requirements. Minimum thickness to be 7mm (0.315" or 8mm preferred).

Tiles are to be supplied, cut, have edges beveled and adhered to the DalLUX-STS support grate by a specialist tile company. There are to be no sharp edges. Use only, Boss 801 Pool and Spa Silicone sealant as supplied by Daldorado, designed to adhere tile to PVC. No other sealant is acceptable.

Tile Cut Widths:

DalLUX-STS-03, three tiles, with four openings, the cut widths are 91mm or 3.58-inches. DalLUX-STS-04, four tiles, with five openings, the cut widths are 66mm or 2.60-inches.

Tile Adhesion:

using a spatula or wooden paddle where applicable.

Read and follow the Boss Products 801 Pool and Spa Silicone manufacturers technical application, safety and disposal information. Only the specialist tile company should complete this task.

Cut tip of cartridge and screw on nozzle. Cut nozzle at 45-deg angle. Insert sealant cartridge into a standard caulking gun. Apply sealant by puching sealant ahead of nozzle. Work the paste like sealant

Uncured sealant can be easily removed using a solvent such as alcohol or acetone. Once the sealant is cured it can only be removed mechanically by cutting and scraping.

Proceed with care. Fig-3

Form a bead of sealant 0.2-inches or 5mm wide and deep on each cross section of grate which is roughened for adhesion purposes. Place each pre-cut tile section in place between the spacer nubs and press firmly in place.

Cure the selant fully prior to filling the pool, minimum 4-days up to 21-days dependent on temperature, ambient humidity and thickness of sealant applied.

Stone Installation

Stone Requirements:

Stone must be approved for wet, barefoot areas, tested in terms of slip resistant properties per applicable Code Requirements. Cast stone to composition, color and strength per design specifications. Natural stone to type of stone (marble, grantie, etc.) per design specification. Thickness of stone to be 1.5-inches to 2 -inches (38 to 50.8mm) thick. Natural stone to suppliers thickness or strength. Stone to be supplied, cut, have edges beveled and adhered to the DalLUX-STS support grate by a specialist tile/stone company. There are to be no sharp edges. Use only, Boss 801 Pool and Spa Silicone sealant as supplied by Daldorado, designed to adhere tile/stone to PVC. No other sealant is acceptable.

Stone Cut Widths:

DalLUX-STS-03, three tiles, with four openings, the cut widths are 91mm or 3.58-inches. DalLUX-STS-04, four tiles, with five openings, the cut widths are 66mm or 2.60-inches.

Stone Adhesion:

Read and follow the Boss Products 801 Pool and Spa Silicone manufacturers technical application, safety and disposal information. Only the specialist tile/stone company should complete this task.

Cut tip of cartridge and screw on nozzle. Cut nozzle at 45-deg angle. Insert sealant cartridge into a standard caulking gun. Apply sealant by puching sealant ahead of nozzle. Work the paste like sealant using a spatula or wooden paddle where applicable.

Uncured sealant can be easily removed using a solvent such as alcohol or acetone. Once the sealant is cured it can only be removed mechanically by cutting and scraping.

Proceed with care. Refer to **Fig-3** for careful application of sealant.

Form a bead of sealant 0.2-inches or 5mm wide and deep on each cross section of grate which is roughened for adhesion purposes. Place each pre-cut stone section in place between the spacer nubs and press firmly in place.

Cure the selant fully prior to filling the pool, minimum 4-days up to 21-days dependent on temperature, smbient humidity and thickness of sealant applied.

Adhesive - Boss 801 Silicone Sealant Properties:

- Resistant to continuously wet conditions.
- Contains fungicide.
- Resistant to notches, tension, and tearing.

- Resistant to chlorine in the concentration required for swimming pool disinfectant.
- Excellent adhesion on many substrates including PVC, ceramic and cast stone.
- Excellent weathering, aging and is UV reistant.

Safety and Maintenance:

Periodic maintenance is required to ensure clean grate openings, between the tile or stone, at all times for optimum operation of the surface water skimming of the swimming pool.

In cold outdoor climatic conditions the tile/stone and grate openings will require regular broom clearance of snow and/or fall organic debri to maintain safety of bathers prior to opening the pool.

INSTALLATION: Begin installation at a corner.

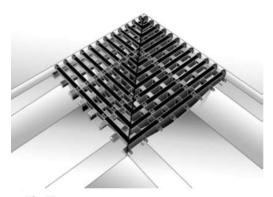


Fig-1

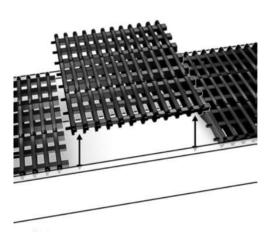
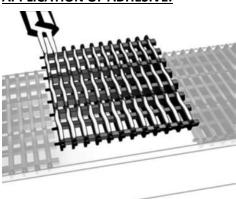


Fig-2

APPLICATION OF ADHESIVE:





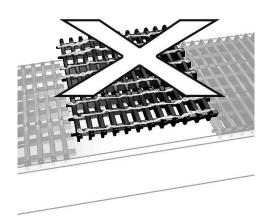


Fig-4 **DO NOT** apply adhesive this way!

DALDORADO, LLC., 4327 ARNOLD AVENUE, NAPLES, FL. 34104

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