

*Installation Instructions for DSF24X24  
General Purpose Suction Outlet for use with an Existing,  
Field fabricated, or Concrete Sump*

**IMPORTANT SAFETY INSTRUCTIONS  
READ, UNDERSTAND, AND FOLLOW ALL  
WARNINGS AND INSTRUCTIONS  
SAVE THESE INSTRUCTIONS**

PART # DSF24X24 - MANUFACTURED BY EUREKA MANUFACTURING - SOFA IS CONSIDERED UNBLOCKABLE  
CERTIFIED FOR FLOOR = 880 GPM @ VELOCITY 1.59 F.P.S. - WALL = 816 GPM @ VELOCITY OF 1.47 F.P.S.  
SERVICE LIFE OF THE GRATE ASSEMBLY ITSELF IS 8 YEARS

1. When installing and using this equipment basic safety precautions shall always be followed, including the following IMPORTANT SAFETY INSTRUCTIONS. READ, FOLLOW, AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS
2. Any modification that increases the flowrate of the circulation system shall require re-evaluation of the cover/grate and sump to ensure that the flow rating of the Suction Outlet Fitting Assembly (SOFA) is not exceeded.
3. Missing, broken, or cracked cover/grates, sumps, mud-frames, or any other SOFA component shall be replaced before bathers are allowed to use the pool. Loose cover/grates shall be reattached before bathers are allowed to use the pool. SAVE THESE INSTRUCTIONS
4. All SOFA's shall be installed in accordance with the manufacturer's installation instructions. Installers to fill out the Spec Sheet. These instructions are for use on an Existing, Field Fabricated, or Concrete Sump. Do not use these instructions new construction with a Eureka Mfg. sump. SOFA is unblockable and can be used on a system with multiple suction outlets or a single suction outlet
5. Any field modification made to the SOFA not authorized by the manufacturer's installation instructions shall void the SOFA certification.
6. No modification shall be made to a SOFA structure or flow path unless the new configuration has been certified as a new SOFA.
7. Frame must be electrically bonded. See the additional Electrical Bonding Instructions sheet for the procedure.
8. Service life of the DSF24X24 is 8 years. All components must be replaced at or before the end of their service life. Service life begins the month and year in which the grate is installed with or without water.
9. The DSF24X24 requires no special winterization or service procedures. If any corrosion is present, remove the frame and clean with stainless steel tools and stainless steel cleaner.
10. The SOFA should be checked for damage and tampering each day before operation of the facility.
11. All SOFA components and fasteners receptacles shall be clean and free of debris or obstructions during installation and operation.
12. If any part of the SOFA is damaged or lost call the manufacturer for a replacement part.
13. Mounting surface around sump be flat and void of any protrusions. Drop-in anchors need a minimum of 1" of concrete between the center of the anchor to the edge of the sump.
14. If anchor threads become unusable a new anchor will need to be installed in the concrete. Always use a thread lubricant when installing a s/s bolt to prevent galling.
15. The use of adhesives or other attachment methods that prevent access to suction piping or SOFA components requiring periodic servicing is prohibited. Only use the manufactures supplied components and hardware. All fasteners to be type 316 stainless steel.
16. When the frame is installed it shall not protrude more than 2" (51mm) from the finished surface of the pool in which the SOFA is installed.
17. SOFA is approved for concrete pools with the use of the supplied anchors and stainless steel pools providing a stainless steel nut can be welded on the backside of the pool floor. Tapped holes are not allowed.
18. SOFA's shall not be located on seats or the backrests for seats.



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**Title**  
INSTALLATION INSTRUCTIONS  
DSF24X24 FOR EXISTING, FIELD  
FABRICATED, OR CONCRETE SUMP

**Scale** NONE

**Drawing No.**

DSF24X24-EI  
PAGE 1

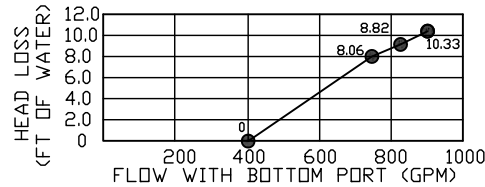
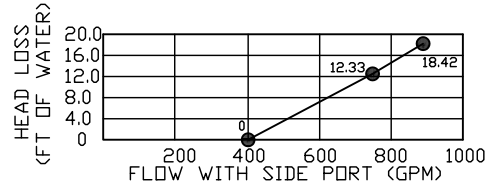
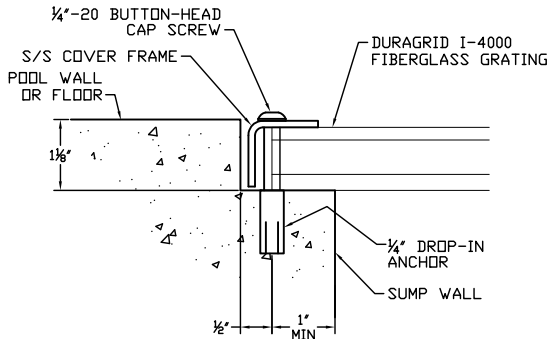
**Date** 10-19-21

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**Rev.** NONE

18. SOFA is certified to 880 gpm on floor installations and 816 gpm on wall installations, that shall NOT be exceeded anytime the pool is open to bathers. Compliance with this standard requires selecting and installing a combination of SOFA's such that the resulting individual suction system flow rating is greater than the pumping systems maximum system flow rate. This SOFA is approved for multiple suction outlet systems and single suction outlet systems.
19. The flow rating for pools with single, or multiple unblockable SOFAs shall be determined by combining the flow rating of all SOFAs piped together in one body of water.
20. The mfg. recommended sump has a 21" x 21" opening. Acceptable pipe sizes are 4", 6", 8", 10", and 12".
21. Tools required:  $\frac{5}{32}$ " hex head allen wrench. DO NOT USE POWER TOOLS FOR GRATE INSTALLATION.
22. A General Certificate of Conformity is available at [eurekamanufacturing.com](http://eurekamanufacturing.com)



### INSTALLATION PROCEDURE

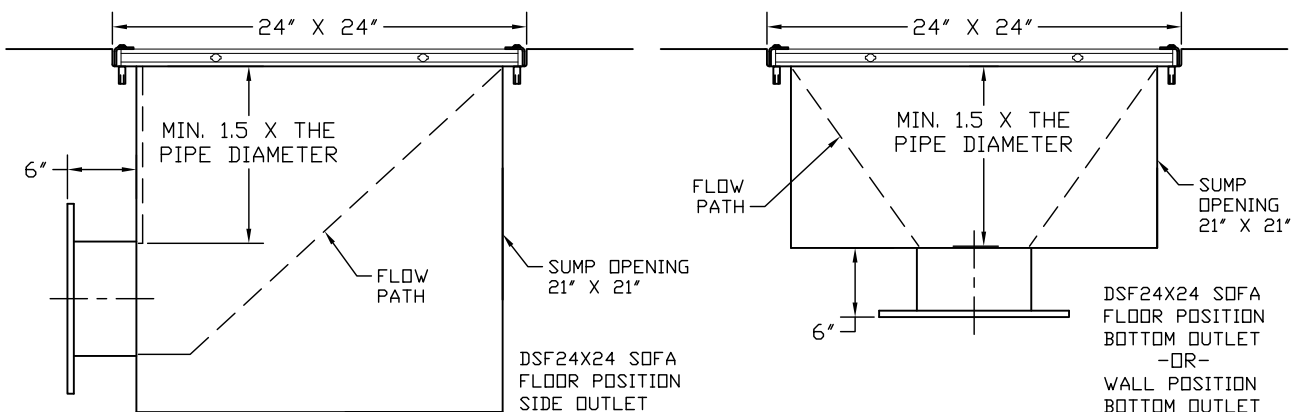
### TOOLS REQUIRED

1. Concrete Drill
2.  $\text{\O} \frac{3}{8}$ " Concrete Drill bit
3.  $\frac{5}{32}$ " Allen Wrench
4. Pencil or Marker and Hammer
5. Drop-in Anchor Setting Tool (provided)

1. The sump should have a 21" x 21" main opening with a  $\frac{1}{8}$ " deep ledge that measures 24" x 24". Sump depth varies with the pipe size.
2. A grounding lug needs to be incorporated into the concrete sump. S/S frame should be grounded thru rebar within the sump. See Bonding Instructions.
3. Position the fiberglass grate and s/s frame in place. Center grate under frame.
4. Mark anchor locations and drill a  $\text{\O} \frac{3}{8}$ " hole 1" deep at each location.
5. Insert a Drop-in Anchor into each hole flush or slightly below the concrete and strike the internal pin with the supplied setting tool.
6. Attach the grounding wire to a suitable ground.
4. Apply anti-seize to the 4 button head cap screws. Start the screws by hand
5. Torque the screws to 5 foot pounds.

DO NOT USE POWER TOOLS TO TIGHTEN THE FASTENERS

6. Hand check the frame for snugness to the sump after installation.
7. Installer to fill out the Specifications Sheet and give all paperwork to the facility.



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### Title

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 DSF24X24 FOR EXISTING, FIELD FABRICATED, OR CONCRETE SUMP

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