

*Installation Instructions for AV20X20 New Construction  
General Purpose Suction Outlet for use with a Eureka Sump*

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

PART # AV20X20 - MANUFACTURED BY EUREKA MANUFACTURING - SOFA IS CONSIDERED BLOCKABLE  
CERTIFIED FOR FLOOR = 400 GPM @ VELOCITY 1.46 F.P.S. - WALL = 348 GPM @ VELOCITY OF 1.27 F.P.S.  
SERVICE LIFE OF THE COVER ITSELF IS 20 YEARS - SERVICE LIFE OF THE HARDWARE IS 10 YEARS  
SERVICE LIFE OF MFG'S S/S SUMP IS LIFETIME

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 new construction with an approved Eureka built sump. Do not use these instructions for an existing sump or concrete sump. SOFA is blockable and must be used on a system with multiple sumps. A single suction point is not allowed.
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. When used with a Eureka s/s sump the grate will be electrically bonded thru the sumps bonding lug.
8. Service life of the AV20X20 is 20 years, Service life of the hardware is 10 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. Service life of the sump is lifetime.
9. The AV20X20 requires no special winterization or service procedures. If any corrosion is present, remove the grate 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. If a mounting hole in the s/s sump is damaged attempt to re-thread, if unsuccessful, a larger  $\frac{5}{16}$ " bolt may be installed. Drilling and re-tapping the hole would be necessary. Always use thread lubricant when installing a s/s bolt to prevent galling.
14. 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.
15. When the cover is installed it shall not protrude more than 2" (51mm) from the finished surface of the pool in which the SOFA is installed.
16. Cover is approved for all pool surface types provided the sump is suitable for that floor and has the correct fasteners.
17. SOFA's shall not be located on seats or the backrests for seats.



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**Title**

INSTALLATION INSTRUCTIONS  
AV20X20 NEW CONSTRUCTION  
FOR USE ON EUREKA MFG. SUMP

**Scale** NONE

**Drawing No.**

AV20X20-NI  
PAGE 1

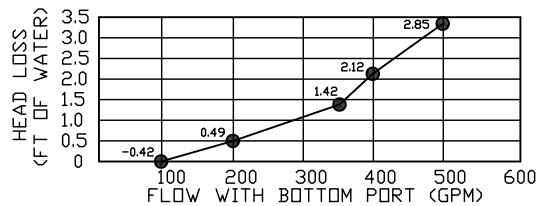
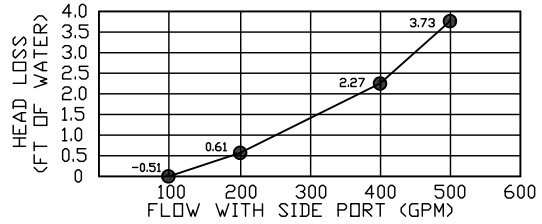
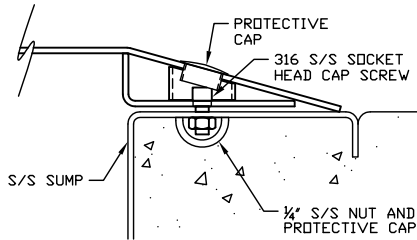
**Date** 08-18-21

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**Rev.** NONE

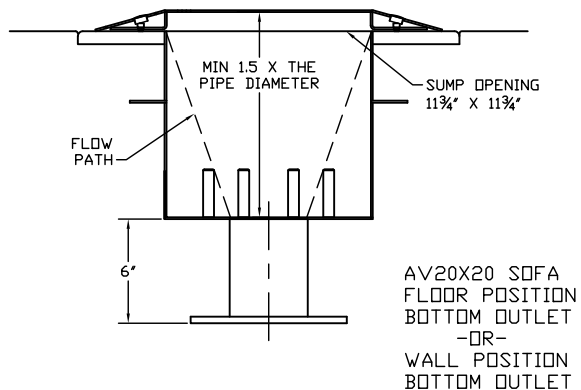
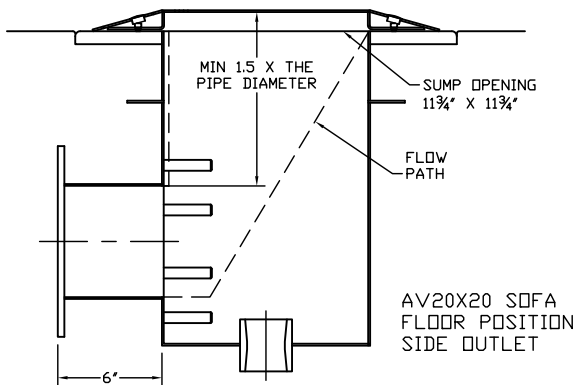
18. SOFA is certified to 400 gpm on floor installations and 348 gpm on wall installations, that shall NOT be exceeded anytime the pool is open to bathers. Compliance with this standard requires selecting and installing a combination of SOFA's such that the resulting individual suction system flow rating is greater than the pumping systems maximum system flow rate. With new construction a single blockable suction point is not allowed.
19. If one SOFA is disabled, add the flowrates of the the remaining SOFAS, that number must be greater than the pools required flowrate
20. The mfg. recommended sump has a 12" x 12" opening. Acceptable pipe sizes are 4", 6", 8", 10", and 12".
21. Tools required:  $\frac{3}{16}$ " 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

1. S/S sump to be concreted in place and electrically bonded.
2. Position the s/s cover place. Make sure all four mounting holes line up.
3. Apply anti-seize to the 4 socket head cap screws. Start the screws by hand
4. Torque the screws to 5 foot pounds.  
DO NOT USE POWER TOOLS TO TIGHTEN THE FASTENERS
5. Insert the protective caps into the outer holes and press flush with the cover.
6. Use rope caulking to fill any gaps between the sump and cover, if needed.
7. Hand check the cover for snugness to the sump after installation.
8. Installer to fill out the Product Info. Label and give all paperwork to the facility.

PARTS USED FOR S/S SUMP INSTALL		
DESCRIPTION	PART #	QUANTITY
STAINLESS STEEL SUMP	MARKED ON SUMP	1
STAINLESS STEEL COVER	AV20X20	1
$\frac{1}{4}$ -20 SDC. HEAD SCREW $\frac{3}{8}$ " LG.	SSSC252-0625L	4
PROTECTIVE CAP	FE50000-0750	4
ANTI-SEIZE LUBRICANT	SBANTI-SEIZE	1



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