

**SUBMERGED, MULTIPLE SUCTION OUTLETS
IMPORTANT SAFETY INSTRUCTIONS**

**FOR ABF 64XXXX AND ABF 64AXXXX
XXXX (COLOR SUFFIX)-BLOCKABLE**

**READ, UNDERSTAND, AND FOLLOW ALL WARNINGS AND
INSTRUCTIONS**

SAVE THESE INSTRUCTIONS

Replace cover and screws within 6 years from date of installation

▲ WARNING! Improper installation or use of this product may present a risk of hair or body entrapment and drowning. Install this equipment in accordance with latest local code and applicable national codes. Follow the instruction provided. Use only with the components and mounting hardware provided. Failure to follow these instructions and/or use with components not provided by Afras Industries, Inc. and intended to be used with this product may result in improper positioning or functioning of suction outlet and may cause severe personal injury or death.

▲ WARNING! – SUCTION ENTRAPMENT HAZARDS

Increasing pump size will increase flow, when in doubt, consult your pool & spa professional.

Never use a pool or spa that has a missing or broken suction outlet cover. Using a pool or spa with a missing or broken suction outlet cover can result in hair or body entrapment which can cause severe bodily injury or death. The vacuum in suction outlets and/or suction outlet covers which are damaged, broken, cracked, missing, or unsecured can cause severe injury and/or death due to the following entrapment hazards:

HAIR ENTRAPMENT- Hair can become entangled in suction outlet cover.

LIMB ENTRAPMENT- A limb inserted into an opening of a suction outlet sump or suction outlet cover that is damaged, broken, cracked, missing, or not securely attached can result in a mechanical bind or swelling of the limb.

BODY SUCTION ENTRAPMENT- A negative pressure applied to a large portion of the body or limbs can result in an entrapment.

EVISCEATION/DISEMBOWELMENT ENTRAPMENT- A negative pressure applied directly to the intestines through an unprotected suction outlet sump or suction outlet cover which is, damaged, broken, cracked, missing, or unsecured can result in evisceration/disebowelment entrapment.

MECHANICAL ENTRAPMENT- There is a potential for jewelry, swimsuit, hair decorations, finger, toe or knuckle to be caught in an opening of a suction outlet cover resulting in mechanical entrapment.

▲ WARNING! – TO REDUCE THE RISK OF ENTRAPMENT HAZARDS

- A minimum of two functioning suction outlets per pump must be installed. Suction outlets in the same plan (i.e. floor or wall), must be installed a minimum of three feet (3') (1 meter) apart, as measured from near point to near point.
- Dual suction fittings shall not be located on seating areas or on the backrest for such seating areas.
- If any suction outlets are located closer, they shall be located on two different planes (i.e. one on the bottom and one on the vertical wall, or one each on two separate vertical walls)
- The maximum system flow rate shall not exceed the flow rating of any listed (per ASME/ANSI A112.19.8-2017) suction outlet cover installed. Do not install suction covers in sitting areas.
- Never use Pool or Spa if any suction outlet component is damaged, broken, cracked, missing, or not securely attached.
- In addition to two or more suction outlets per pump installed in accordance with latest APSP, IAF Standards and CPSC guidelines, follow all National, State, and Local codes applicable.
- Inspect the SOFA each operation day for damage. Replace damaged, broken, cracked, missing, or not securely attached suction outlet components immediately.

▲ WARNING! – Failure to remove pressure test plugs and/or plugs used in winterization of the pool/spa from the suction outlets can result in an increase potential for suction entrapment as described above.

▲ WARNING! – Failure to keep suction outlet components clear of debris, such as leaves, dirt, hair, paper and other material can result in an increase potential for suction entrapment as described above.

▲ WARNING! – Suction outlet components have a finite life, the cover/grate should be inspected before each use of facility and replaced at least every six (6) years or if found to be damaged, broken, cracked, missing, not securely attached, or missing screws. **DO NOT** use facility until corrected!

▲ WARNING! This is a BLOCKABLE VGBA Suction Outlet that must ONLY be installed in a multiple VGBA Suction Outlet system

▲ WARNING! This is a BLOCKABLE VGBA Suction Outlet that must ONLY be installed in a suction system that also includes one or more of the following devices (*) or systems designed to prevent suction entrapment.

The Afras SOFA's have been certified to the Virginia Graeme Baker Pool and Spa Safety Act, the consumer product safety rule that is applicable to ANSI/APSP/ICC-16-2017 entitled, "Suction Outlet Assemblies (SOFA) for use in Pools, Spas, and Hot Tubs." **Contact: info@afрасinc.com , (805)499-1144** customer service for the test result.

"DO NOT USE POWER TOOLS TO INSTALL FASTENERS". Start installation of the screws by hand to ensure proper thread engagement to prevent cross trading.

- Check the cover for snugness to the sump frame after installation.
- Do not use adhesive to connect SOFA to the frame.
- All SOFA shall be installed in accordance with the manufacturer's installation instructions.
- The flow rating for pools with multiple, blockable SOFAs piped together in one body of water without isolation valves shall be determined by combining the flow rating of all SOFAs, minus the flow rating of one. If the flow ratings of all SOFAs are not equal, subtract the flow rating of the SOFA with the highest flow rating.
- The Afras SOFA's are suitable for concrete, vinyl lined, or composite pools.
- Blockable SOFAs shall be installed in a multiple SOFA system only.
- The flow rating for existing pools with a single, blockable SOFA is the flow rating of the SOFA, when also installed in conjunction with an additional device or system designed to prevent suction entrapment, where the additional device or systems is of a type listed (*):

- *SAFETY VACUUM RELEASE SYSTEM
- *SUCTION-LIMITING VENT SYSTEM
- *GRAVITY DRAINAGE SYSTEM
- *AUTOMATIC PUMP SHUT-OFF SYSTEM
- *DRAIN DISABLEMENT
- *OTHER SYSTEMS

- In the event of one suction outlet being completely blocked, the remaining suction outlets serving the system shall have a flow rating capable of the full flow of the pump(s) for the specific suction system. If in doubt about the rating and/or head loss curve of your system, consult a qualified pool or spa professional and/or your respective equipment manufacturer(s).
- Suction Outlet Fitting Assemblies (SOFA) covers must be replaced in case of service, field adjustment, configuration modification.
- 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.
- Cover/grates, when installed, shall not protrude more than 2 in. (51 mm) from the finished surface of the pool in which the SOFA is installed.
- Any modification that increases the flow rate of the circulation system shall require reevaluation of the cover/grate and sump to ensure that the flow rating of the Suction Outlet Fitting Assembly (SOFA) is not exceeded.
- Missing, broken, or cracked 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.
- Components and SOFA do not require any servicing, they need to be replaced.

Winterizing: Open the SOFA valve and blow air through the line until air comes out of SOFA, then close the SOFA valve.

- See SOFA top for identification of the cover.

MODEL ABF 64:

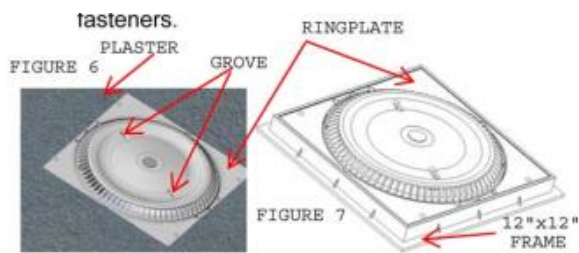
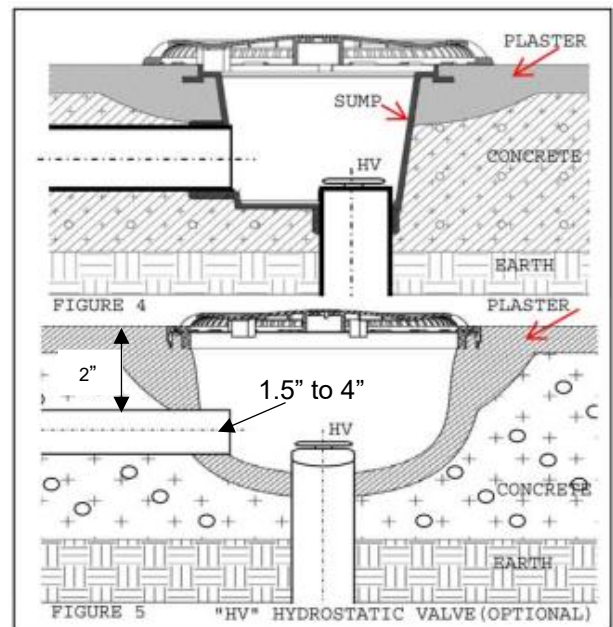
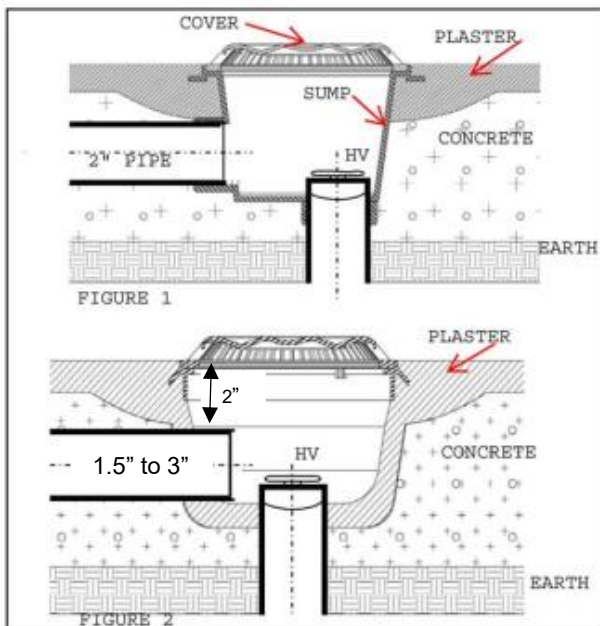
- A. Floor: MAX 86 GPM; Wall: MAX 68 GPM
- B. See figure 1 for installation layout with sump.
- C. See figure 2 (ABF 64) for installation layout for (Field-fabricated sump)
- D. Requires Phillips screwdriver to secure the (2) 10-24x.5" screws - Required torque 22 In-Lbs.

MODEL ABF 64A: Replacement of existing covers

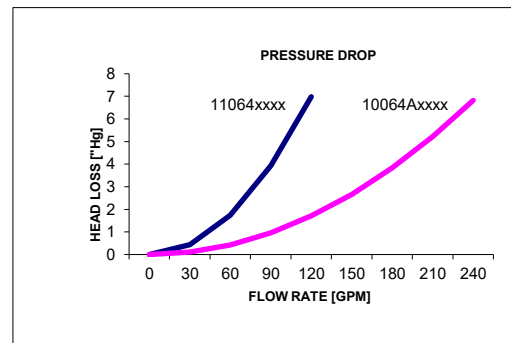
- A. Floor: MAX 188 GPM; Wall: MAX 160 GPM
- B. Line up two holes in groove with existing holes of ring or sump main drain
- C. Use provided screws and secured them with proper tool. If the provided are loose, do not use this cover replacement (ABF64A) contact the manufacturer of the installed ring or sump for advice. Figure 4
- D. See figure 4 & 5 (ABF 64A) for installation layout of sump and (Field-fabricated sump)
- E. Requires Phillips screwdriver to secure (2) Self-tap #8x.5" screws - required torque 3.5 In-Lbs.

MODEL ABF 64A: with RingPlate

- A. Floor: MAX 188 GPM; Wall: MAX 160 GPM
- B. See figure 5 for installation with 12"x12" frame.
- C. See figure 6 & 7 for installation layout with RingPlate in plaster
- D. Requires Phillips screwdriver to secure (2) Self-tap #8x.5" screws - required torque 3.5 In-Lbs.



Pressure drop curve 2" under entry to drain



For additional information on proper SOFA installation refer to ANSI/APSP/ICC-16-2017 entitled, "Suction Outlet Assemblies (SOFA) for use in Pools, Spas, and Hot Tubs and the US Consumer Product Safety Commission Guidelines for Entrapment Hazard.



ABF64 20-03 -REV0

GENERAL CERTIFICATE OF CONFORMITY (GCC)

ABF 64XXX and ABF 64AXXX

PART NUMBER: **ABF 64 and ABF 64A**

PART DESCRIPTION: **Blockable SOFA**

ABF 64 WITH 7 3/8" DIA.

VGB 2017 Compliance



OPEN AREA: 12.4 SQ-IN



FLOW RATE: FLOOR 86 GPM



FLOW RATE: WALL 68 GPM

ABF 64A WITH 11.125" DIA.

VGB 2017 Compliance



OPEN AREA: 25.3 SQ-IN



FLOW RATE: FLOOR 188 GPM



FLOW RATE: WALL 160 GPM

Above products have been tested to ANSI/APSP/ICC-16-2017 entitled, "Suction Outlet Assemblies (SOFA) for use in Pools, Spas, and Hot Tubs." tested by **IAPMO R&T Lab**. Test# 650-20007. These products have been manufactured by **Afras Industries, Inc.** 3641 Old Conejo Rd. Newbury Park, CA Contact tel: 805-499-1144 Customer Service or info@afрасinc.com



MFG. DATE: Molded on the part
Replace Cover and screws within 6 years of installation

Date of installation: _____

Location: _____

www.afrasinc.com