

### 20-INCH VGB UNBLOCKABLE CONVERTIBLE DRAIN

TWO DRAINS IN ONE: **SUPERFLOW 360** INCLUDES REMOVABLE GRATE TO COVERT TO AN **OPENFLOW 360** DEBRIS DRAIN

## **OWNER'S MANUAL AND INSTALLATION GUIDE**

SUBMERGED SUCTION OUTLET FOR SINGLE OR MULTIPLE DRAIN USE ON FLOOR
- ONLY ONE DRAIN NEEDED APPLICABLE MODELS: SF360-XX & OF360-XX (XX DESIGNATES COLOR OPTION)



Safety compliant according to the Virginia Graeme Baker Pool and Spa Safety Act. Meet or exceed ANSI/APSP-16 2011 and NSF/ANSI 50-2009a standards

## NOTICE

Installers: Read and follow these instructions. Give these instructions to the facility owner to keep for future reference. Follow all codes and regulations that apply to the design, installation and use of suction outlet fittings.



SUPERFLOW/OPENFLOW 360 must be installed in accordance with Color Match Pool Fittings' written installation manual, and in conformity with applicable Federal, State, Local and swimming pool industry building and safety codes.

PLEASE REVIEW THIS OWNER'S MANUEL AND INSTALLATION GUIDE IN ITS ENTIRETY AND HEED ALL SAFETY INFORMATION. Failure to follow these instructions and warnings can result in DEATH OR SERIOUS INJURY.

#### **SUCTION ENTRAPMENT HAZARD**



DEATH or SERIOUS INJURY can result if a drain cover or grate is not installed and used correctly. DEATH or SERIOUS INJURY can result from pool or spa drain covers or grates that are improperly installed, missing, clogged, or broken.

Improper installation or use of this product may present a risk of hair or body entrapment and drowning. Install this equipment in accordance with these instructions. Use only with the components and mounting hardware provided. Failure to follow these instructions and/or use with components not provided by Color Match Pool Fittings and intended to be used with the product may result in improper positioning or functioning of suction outlet and may cause severe personal injury or death.

## **WARNING**

MANDATORY DIFFUSER PLATE - THE INCLUDED DIFFUSER PLATE
MUST BE INSTALLED PROPERLY with the eight supplied screws to the
SUPERFLOW/OPENFLOW 360 PEBBLE TOP DRAINS to meet VGB safety
standards. NEVER INSTALL OR OPERATE THIS PRODUCT WITHOUT THE
DIFFUSER PLATE PROPERLY MOUNTED. Failure to install the diffuser plate
may result in SEVERE PERSONAL INJURY OR DEATH.

**SUCTION ENTRAPMENT HAZARD** - Increasing pump size will increase flow. When in doubt, consult your pool and 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.

**EVISCERATION/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/disembowelment 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.

#### **MAINTENANCE INSTRUCTIONS & WARNINGS**

# WARNING

DEATH or SERIOUS INJURY can result from pool or spa drain covers or grates that are improperly installed, missing, clogged, or broken.

- Inspect pool and spa regularly to insure that the drain cover/grate is properly in place and secured.
- Suction outlet components have a finite life. The cover/grate should be inspected before each use of facility and replaced at least every five (5) years or if found to be damaged, broken, cracked, missing, not securely attached, or missing screws. DO NOT use facility until corrected!
- Ensure that drain cover/grate is not damaged, cracked, broken, loose, clogged, not properly secured, or missing because these conditions increase the chance of death or serious injury from entrapment.
- If a drain cover/grate is discovered damaged, cracked, broken, loose, clogged, not properly secured, or missing you should:
  - Close the pool or spa immediately; and,
  - Post a closure notice and keep the pool and spa closed until an appropriate VGB certified drain cover is properly installed.

**DEATH OR SERIOUS INJURY** can result from contact with a damaged, loose, or missing drain cover.

- Do not allow limbs to contact or be inserted into a drain pipe with a damaged, loose, or missing drain cover. This could result in swelling of the limb and/or trapping a swimmer underwater.
- Avoid mechanical entrapment of jewelry, swimsuit, hair, hair decorations, finger, toe, or knuckle in a drain pipe with damaged, loose, or missing drain cover. This may result in trapping a swimmer underwater.
- Do not allow body to come in contact with a drain pipe that has a damaged, loose, or missing drain cover. This may result in trapping a swimmer underwater.

**DEATH OR SERIOUS INJURY** can result from pool or spa drain covers that are clogged by debris.

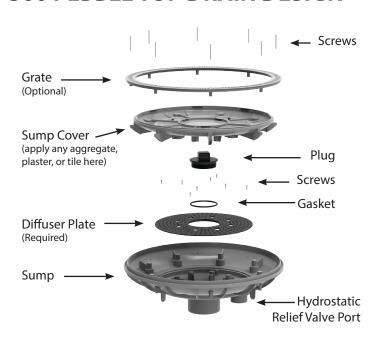
- All pool and spa drain covers may become obstructed by debris and should be cleaned periodically due to clogging from debris, such as pieces of plastic, hair, fabric, twigs, leaves, seeds, etc.
- The frequency of periodic cleaning will vary depending on the amount and type of debris introduced into the pool or spa.
- Clogging of the drain cover will increase the suction effect and increase the likelihood of death or serious injury form those hazards listed above.
- A clogged drain can negatively affect the safety of the drain.
- It is advisable to have a qualified pool or spa professional perform this inspection and debris removal from the pool and spa drain covers.

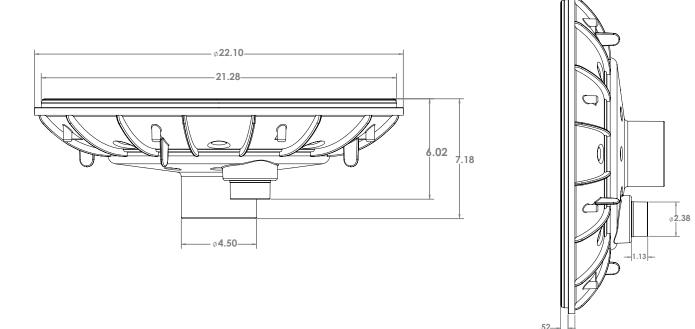


Failure to remove pressure test plugs and/or plugs used in winterization of the pool/spa from the suction outlets can result in an increased potential for suction entrapment as described.

#### **SUPERFLOW/OPENFLOW 360 PEBBLE TOP DRAIN DESIGN**

# INDIVIDUAL PARTS INCLUDED:





# NOTICE

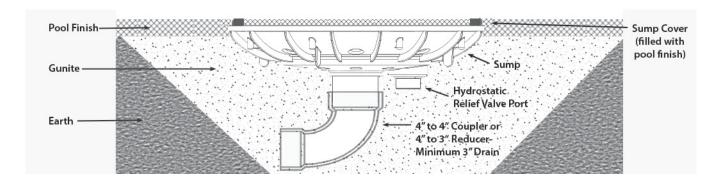
#### **Maximum Pump Size**

SuperFlow 360 (WITH grate attached) is rated for a maximum flow of 384 GPM.

OpenFlow 360 (WITHOUT the grate attached) is rated for a maximum flow rate of 324 GPM.

While system flow rates will vary with pump size and the Total Head Loss for a given system, virtually any modern pump is capable of exceeding this limit, therefore it is the responsibility of the system designer to make sure it is not possible to exceed the maximum flow rates listed above.

#### INSTALLATION INSTRUCTIONS



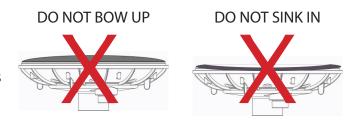
- 1. Install sump in pool/spa floor. See detailed instruction on pages 6 & 7.
- Fill Sump Cover with the same pool/spa finish so that it's completely level with cover. It is important that finish is completely level and does NOT bow up or sink in.
- 3. Remove vinyl construction cover label in the center of sump and the eight vinyl dots covering the eight screw holes.
- For SuperFlow 360 WITH GRATE: attach Grate & Sump Cover to Sump with the (8) 2-inch screws supplied.

For OpenFlow 360 WITHOUT GRATE: attach Sump Cover to Sump with the (8) 1.5-inch screws supplied.



OR TILE BEING APPLIED TO THE POOL

TO THE TOP OF THE DRAIN COVER



## **NOTICE**

- For Single or Multiple drain use. When two or more suction fittings are used on a common suction line, they must be separated by a minimum of three feet.
- Pool finish should never exceed top of sump.
- When filling sump cover, make sure it is completely level and does not bow or sink.
- Drain covers are not to be placed on seating areas or backrests. This product can be used on floor only.
- Replace covers and screws within five installed years.
- Please use appropriate tools for installation (Phillips screwdriver).
- Please consult your standard head-loss curve to assist with installation.
   The head loss is dependent upon pipe length, pipe size, pump, distance from equipment, etc. that we cannot determine.

#### **SUPERFLOW/OPENFLOW 360 PLUMBING**

With the SuperFlow/OpenFlow 360 Drain (a submerged fitting) it is necessary to run <u>only</u> one suction riser, per suction line, up through the floor of the pool. Because the SuperFlow/OpenFlow 360 Drain is an unblockable fittings, no other fitting is necessary. The riser must be installed directly in the center of the pool, at its deepest point, and **instead** of installing a CAP on the top of the riser, for pressure testing, **the SuperFlow/OpenFlow 360 must be installed**. The maximum flow rate certified by IAPMO for the SuperFlow 360 (WITH the top grate attached) is 384 GPM for single suction. The maximum flow rate certified by IAPMO for the OpenFlow 360 (WITHOUT the top grate attached) is 324 GPM. **Maximum flow rate is not to be exceeded!** 

- 1. Since the SuperFlow/OpenFlow 360 Pebble Top Drain is to be installed at the plumbing stage, it is important that it is installed directly in the middle of the deepest point of the pool and that it is set at the proper height since it will determine the pool depth.
- 2. The SuperFlow/OpenFlow 360 Pebble Top Drain must be plumbed with a minimum 3-inch suction line. Certified flow rates are based on 3-inch or 4-inch plumbing only.
- 3. Use a 4-inch to 4-inch Coupler or 4-inch to 3-inch Reducer. This can be an elbow, straight, or tee coupler or reducer, depending upon your needs. (See diagram below)
- 4. Determine the suction line size that will be used on the current installation and select the method of determining the Height of the SuperFlow/OpenFlow 360 Pebble Top Drain.
- 5. The SuperFlow/OpenFlow 360 Pebble Top Drain may now be glued to the riser using ABS to PVC glue.
- 6. Make certain that there is sufficient space excavated below the drain for steel installation and that dirt is packed tightly around the suction line.
- 7. The SuperFlow/OpenFlow 360 Pebble Top Drain is now ready to pressurize prior to shotcrete or gunite. A test plug is already installed.
- 8. The steel re-bar must be bent so that the steel basket drops below the SuperFlow/OpenFlow 360 Pebble Top Drain and is formed so that it is half way between the bottom of the SuperFlow/OpenFlow 360 Pebble Top Drain and the bottom of the trench.

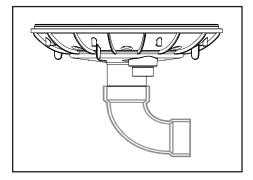


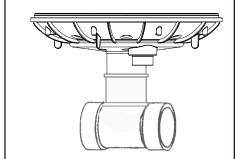
Make sure the Vinyl Construction Cover is secured on the SuperFlow/ OpenFlow 360 Pebble Top Drain to prevent concrete entering the drain sump.

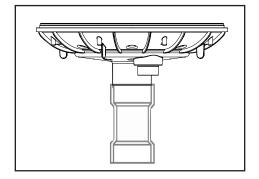
#### **PLUMBING OPTIONS**

Use 4-inch to 4-inch Couplers or 4-inch to 3-inch Reducers

Use ABS to PVC Glue







#### **Steel and Gunite**

When the gunite or shotcrete is applied, pack the concrete tightly under the SuperFlow/OpenFlow 360 Pebble Top Drain and finish the floor around the drain to 0.5-inch below the lip, then make a finger swipe under the water seal of the drain so that interior finish material can be applied under the lip of the water seal. Before the finish (plaster, aggregate or tile) is applied, make certain that the vinyl construction cover is still securely sealed and in place to prevent the finish material or slurry from entering the SuperFlow/OpenFlow 360 Pebble Top Drain sump. When applying the finish right up to the top lip of the SuperFlow/OpenFlow 360 Pebble Top Drain, push the material up under and around the water seal then finish right up to the top lip of the SuperFlow/OpenFlow 360 Pebble Top Drain.



Immediately before filling the pool with water, remove the vinyl Construction Cover from the SuperFlow/OpenFlow 360 Pebble Top Drain.

Remove the test plug from the bottom of the SuperFlow/OpenFlow 360 Pebble Top Drain. Remove the eight vinyl dots covering the screw holes. Install the top of the SuperFlow/OpenFlow 360 Pebble Top Drain with the included screws.

#### **Hydrostatic Valve**

If the SuperFlow/OpenFlow 360 Pebble Top Drain requires a hydrostatic relief valve, install it in the provided hydrostatic relief valve port located underneath the Diffuser Plate inside the sump. First remove the diffuser plate to install the threaded Hydrostatic Relief Valve into the 1.5-inch Hydrostatic Relief Valve Port. **YOU MUST REATTACH THE DIFFUSER PLATE WITH THE EIGHT PROVIDED SCREWS. NEVER OPERATE DRAIN WITHOUT THE DIFFUSER PLATE.** The hydrostatic port located at the outer bottom of the sump is equivalent to a 1.5-inch threaded female adapter inside or a 2-inch coupler fitting outside the port. It is recommended that the threaded hydrostatic relief valve collection tube be glued and/or threaded into the fitting. This port is for the purpose of a hydrostat only. Do not install any suction equipment (pump) to this port!



#### NEVER OPERATE DRAIN WITHOUT THE DIFFUSER PLATE ATTACHED.

THE INCLUDED DIFFUSER PLATE MUST BE INSTALLED PROPERLY WITH THE EIGHT SUPPLIED SCREWS TO THE SUPERFLOW/OPENFLOW 360 PEBBLE TOP DRAIN TO MEET VGB SAFETY STANDARDS. NEVER INSTALL OR OPERATE THIS PRODUCT WITHOUT THE DIFFUSER PLATE PROPERLY MOUNTED. FAILURE TO INSTALL THE DIFFUSER PLATE MAY RESULT IN SEVERE PERSONAL INJURY OR DEATH.

**IF NOT USING A HYDROSTATIC RELIEF VALVE,** attach the enclosed 1.5" ABS plug from the bottom of the sump to seal the Hydrostatic relief valve port, using ABS glue. The plug should first be glued and then threaded into the fitting to prevents leaks.

**NOTICE** 

WINTERIZATION: Save and use the enclosed plug and rubber o-ring for the winterization of pool.

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 increased potential for suction entrapment as described.

#### **Note to the Pool Builder**

This booklet of compliance instructions must be left with the homeowner for filing and future reference.

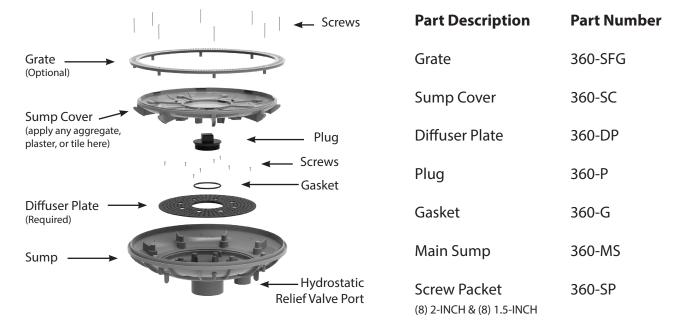
#### **Note to the Homeowner**

These instructions must be read and retained in a permanent file for future reference of installation requirements and part numbers for immediate replacement of damaged, worn, or aged parts.

## Replace cover within 5 installed years

The following are part descriptions and part numbers for the SuperFlow/OpenFlow 360 Pebble Top Drain.

Part Description	Color	Part Number	<b>Life Span</b>
SuperFlow 360 Drain	White	SF360-01	5 years
SuperFlow 360 Drain	Black	SF360-02	5 years
SuperFlow 360 Drain	Light Gray	SF360-03	5 years
SuperFlow 360 Drain	Dark Gray	SF360-05	5 years
SuperFlow 360 Drain	Bone	SF360-06	5 years
SuperFlow 360 Drain	Tan	SF360-08	5 years
SuperFlow 360 Drain	Light Blue	SF360-09	5 years
SuperFlow 360 Drain	Clear	SF360-CLR	5 years
OpenFlow 360 Drain	White	OF360-01	5 years
OpenFlow 360 Drain	Black	OF360-02	5 years
OpenFlow 360 Drain	Light Gray	OF360-03	5 years
OpenFlow 360 Drain	Dark Gray	OF360-05	5 years
OpenFlow 360 Drain	Bone	OF360-06	5 years
OpenFlow 360 Drain	Tan	OF360-08	5 years
OpenFlow 360 Drain	Light Blue	OF360-09	5 years
OpenFlow 360 Drain	Clear	OF360-CLR	5 years



Color Match Pool Fittings, Inc. certifies that their suction outlet and drain covers meet or exceed the requirements of the Virgina Graeme Baker Pool & Spa Safety Act, VGB 2008 and ANSI/APSP 16-2011 standards and safety regulations as set forth by the Consumer Products Safety Commission. A copy of this certificate of compliance is available on our website at www.poolfittings.com