

# TWO DRAINS IN ONE

## **SUPERFLOW 360**

WITH SLOTTED DRAIN COVER ATTACHED



## **OPENFLOW 360**

OPEN DEBRIS REMOVE DRAIN WITHOUT SLOTTED DRAIN COVER ATTACHED

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

SUBMERGED SUCTION OUTLET FOR SINGLE OR MULTIPLE DRAIN USE - FLOOR ONLY - 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 50-2015 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.



MANDATORY DIFFUSER PLATE - THE INCLUDED DIFFUSER PLATE MUST REMAIN 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.

**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**

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 is properly in place and secured.
- Suction outlet components have a finite life. The drain cover 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 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 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.

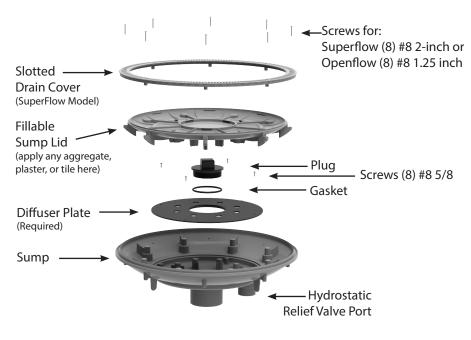
- Do not allow limbs to contact or be inserted into a drain pipe with a damaged, loose, or missing drain cover. This could result in swelling of the limb and/or trapping a swimmer underwater.
- Avoid mechanical entrapment of jewelry, swimsuit, hair, hair decorations, finger, toe, or knuckle in a drain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

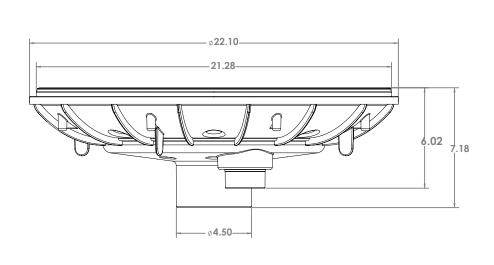
**DEATH OR SERIOUS INJURY** can result from pool or spa drain covers that are clogged by debris.

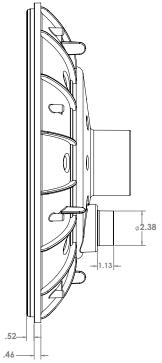
- All pool and spa drain covers may become obstructed by debris and should be cleaned periodically due to clogging from debris, such as pieces of plastic, hair, fabric, twigs, leaves, seeds, etc. The frequency of periodic cleaning will vary depending on the amount and type of debris introduced into the 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.

## SUPERFLOW/OPENFLOW 360 PEBBLE TOP DRAIN DESIGN

# INDIVIDUAL PARTS INCLUDED:







# NOTICE

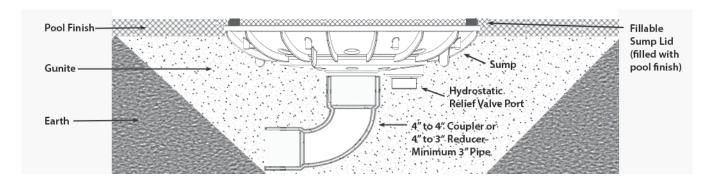
## **Maximum Pump Size**

SuperFlow 360 (WITH slotted drain cover attached) is rated for a maximum flow of 360 GPM.

OpenFlow 360 (WITHOUT the slotted drain cover attached) is rated for a maximum flow rate of 240 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

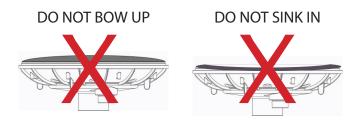


- 1. Install sump in pool/spa floor. See detailed instruction on pages 6 & 7.
- Apply the same pool/spa finish to the Fillable Sump Lid so that it's completely level with cover.
   It is important that finish is completely level and does NOT bow up or sink in.
- 3. Remove vinyl construction cover label in the center of sump and the eight vinyl dots covering the eight screw holes.
- 4. For SuperFlow 360 WITH SLOTTED DRAIN COVER: attach Slotted Drain Cover and Fillable Sump Lid to Sump with the (8) 2-inch screws supplied. For OpenFlow 360 WITHOUT SLOTTED DRAIN COVER: attach Fillable Sump Lid to Sump with the (8) 1.25-inch screws supplied.



OR TILE BEING APPLIED TO THE POOL

TO THE FILLABLE SUMP LID



## **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 applying pool finish to the fillable sump lid, make sure it is completely level and does not bow up or sink in.
- Drains 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.
- Open area for SuperFlow 19.712 Square Inches
- Open area for OpenFlow 59.45 Square Inches

#### SUPERFLOW/OPENFLOW 360 PLUMBING

With the SuperFlow/OpenFlow 360 Drain (a submerged fitting) it is necessary to run **only** 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 slotted drain cover attached) is 360 GPM for single suction. The maximum flow rate certified by IAPMO for the OpenFlow 360 (WITHOUT the top slotted drain cover attached) is 240 GPM.

#### **MAXIMUM FLOW RATE BY PIPE SIZE:**

SuperFlow 360: 2.5-inch pipe = 300 GPM, 3-inch or 4-inch pipe = 360 GPM OpenFlow 360: 2.5-inch pipe = 220 GPM, 3-inch or 4-inch pipe - 240 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 2.5-inch suction line. Certified flow rates are based on 2.5-inch, 3-inch, or 4-inch plumbing only. 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.
- 3. Use a 4-inch to 4-inch Schedule 40 Coupler or 4-inch to 3-inch/2.5-inch Schedule 40 Reducer. This can be an elbow, straight, or tee coupler or reducer, depending upon your needs. (See Fig. 3-5)
- 4. The SuperFlow/OpenFlow 360 Pebble Top Drain may now be glued to the PVC fitting/suction line using PVC to PVC glue. The sump of the SuperFlow/OpenFlow 360 Pebble Top Drain is molded from PVC resin. The 4-inch spigot fitting requires a 4-inch socket PVC fitting (Fig. 1) be glued over the 4-inch spigot (Fig. 2). Please use the appropriate steps and PVC to PVC glue to achieve a dependable glue joint. Failure to do so will cause failed pressure tests and or a leaking joint under the pool.
  - Primer the PVC fitting socket. (Fig. 1)
  - With a clean cloth wipe the spigot (Fig. 2) on the bottom of the drain so that is free of any dirt or residue. Do not primer the Spigot (Fig. 2).
  - Using the appropriate glue apply the glue to both the socket (Fig. 1) and the spigot (Fig. 2).
  - Give the socket (Fig. 1) a half turn as it is pressed onto the spigot (Fig. 2).
  - Hold pressure on the socket (Fig. 1) fitting to prevent it from pushing off the spigot (Fig. 2) for at least 1 minute.
  - Allow for at least a 24 hour cure time before putting the glue joint under pressure.





## **SUPERFLOW/OPENFLOW 360 PLUMBING** - continued

- 5. Make certain that there is sufficient space excavated below the drain for steel installation and that dirt is packed tightly around the suction line.
- 6. The SuperFlow/OpenFlow 360 Pebble Top Drain is now ready to pressurize prior to shotcrete or gunite. A test plug is already installed.
- 7. 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.

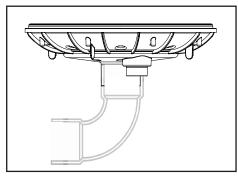
# NOTICE

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**

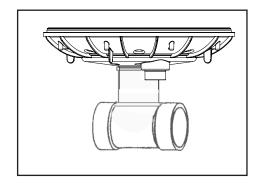
Use 4-inch to 4-inch Schedule 40 Coupler or 4-inch to 3-inch/2.5-inch Reducer





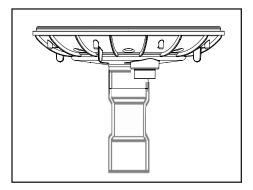
Elbow Coupler or Reducer





Tee Coupler or Reducer

Fig. 5



Straight Coupler or Reducer

#### **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 (#8 5/8 inch). 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 (#8 5/8 inch) 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" PVC plug from the bottom of the sump to seal the Hydrostatic relief valve port, using PVC to PVC 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.



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.

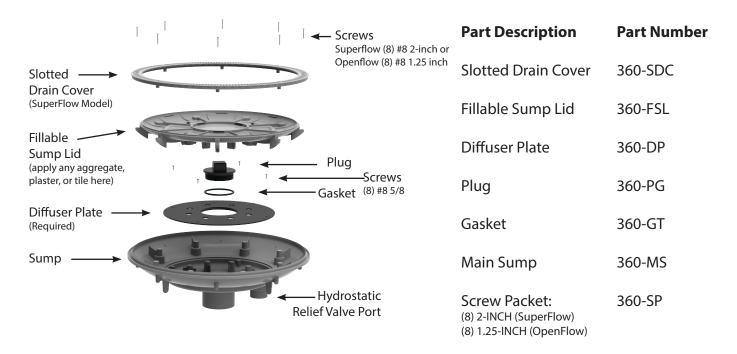
#### **Note to the Homeowner**

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 slotted drain cover within 5 installed years

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

<b>Part Number</b>	Part Description	Color
360-01	SuperFlow/OpenFlow 360 Drain	White
360-02	SuperFlow/OpenFlow 360 Drain	Black
360-03	SuperFlow/OpenFlow 360 Drain	Light Gray
360-05	SuperFlow/OpenFlow 360 Drain	Dark Gray
360-08	SuperFlow/OpenFlow 360 Drain	Tan
360-09	SuperFlow/OpenFlow 360 Drain	Light Blue
360-CLR	SuperFlow/OpenFlow 360 Drain	Clear



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, ANSI/APSP-16 2011 AND NSF/ANSI 50-2015 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