



Certified VGB Compliant Safety Drain Grates and Sumps

This is a dangerous environment...

Improper main drains can cause serious injury or death!

In December 2007 the United States Congress passed the Virginia Graeme Baker (VGB) Pool and Spa Safety Act, which requires that each swimming pool or spa drain cover manufactured, distributed or entered into commerce in the United States conform to the entrapment protection standards of the ASME/ANSI A112.19.8 performance standard, or any successor standard regulating such swimming pool or spa drain covers. As noted in the Pool and Spa Safety Act, the ASME/ANSI A112.19.8-2007 standard establishes minimum standards for construction, configuration, and testing to ensure that a pool or spa main drain does not pose a suction entrapment hazard.

As of December 19, 2008, Public pools and spas that are not in compliance with the Act may not open for use.

Natare's Certified VGB Drain Sump Grates comply with the requirements of the VGB Pool and Spa Safety Act when used in conjunction with the appropriate certification of a Registered Design Professional as stipulated in the ASME Standard. These drain sump covers are unblockable and are qualified "Field Fabricated Outlets", which can be used with existing pool outlets (drains). However, these covers are not intended for pools with single main drains except in special cases when certified for such usage by a Registered Design Professional.

Certified VGB Drain Sump Grates are available in standard sizes for 18-in. x 18-in. or smaller drain openings, and 24-in. x 24-in. or smaller drain openings. These sump grates are available in stainless steel or our special GPM polymer. Custom sizes can be supplied to accommodate virtually any existing drain sump or outlet.



Natare also provides Certified Stainless Steel Drain Sumps and Grates as a complete unit in standard 18-in. x 18-in. and 24-in. x 24-in. sizes that accommodate flow rates over 1,100 gallons. Custom Certified sizes can be supplied to accommodate virtually any design flow rate.

Given the wide range of shapes, sizes and piping configuration for public pools, spas and aquatic recreation environments, the selection of an appropriate drain sump cover requires a review and analysis of drain sump sizes, system flow rates, and other aspects of the existing design. Natare or your Design Professional can assist in the proper selection of a drain.



How to select VGB Certified Drain Sump Grates and complete Certified Drain Sumps.

- 1) **Seek professional advice.** A swimming pool, spa or aquatic recreation environment can be a dangerous environment. Natare can provide your Design Professional extensive engineering support and documentation that will assist in the selection of the correct Certified Grate or complete Certified Drain Sump solution.
- 2) **Retain Natare's Professional Services Team** to review, evaluate and propose a complete solution for your particular pool, spa or aquatic environment. For a nominal fee, Natare will provide a Certified Solution and complete documentation for a solution that complies fully with all requirements of Virginia Graeme Baker (VGB) Pool and Spa Safety Act.
- 3) Based upon the recommendation of your Design Professional, order the correct Certified Drain Grate or Certified Drain Grate and Sump.

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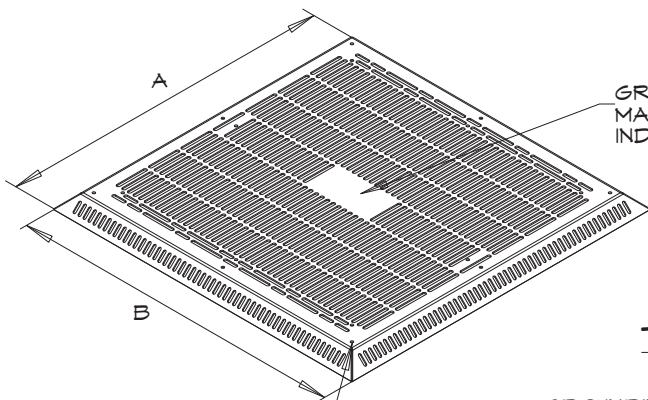
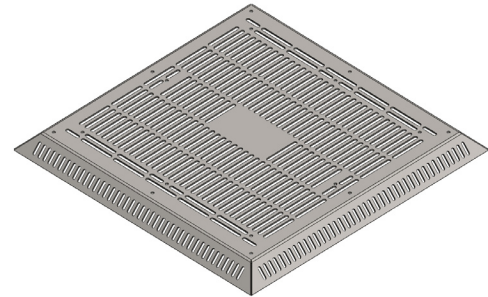




Technical Details - VGB Stainless Steel - Drain Grates

VGB Certified Stainless Steel Drain Grates - Standard sizes

Natare's Certified VGB Stainless Steel Drain Grates are fabricated from stainless steel 304L panels to meet the requirements for the 2007 VGB Pool and Spa Safety Act. Our system meets and exceeds the allowable velocity through the open area of each grate to further enhance safety measures. We offer standard sizes and custom certified sizes to meet most any project need.



GRATE TO BE MARKED AS INDICATED

S/S Unblockable Anti-Entrapment Grate:
(Marked as Follows)

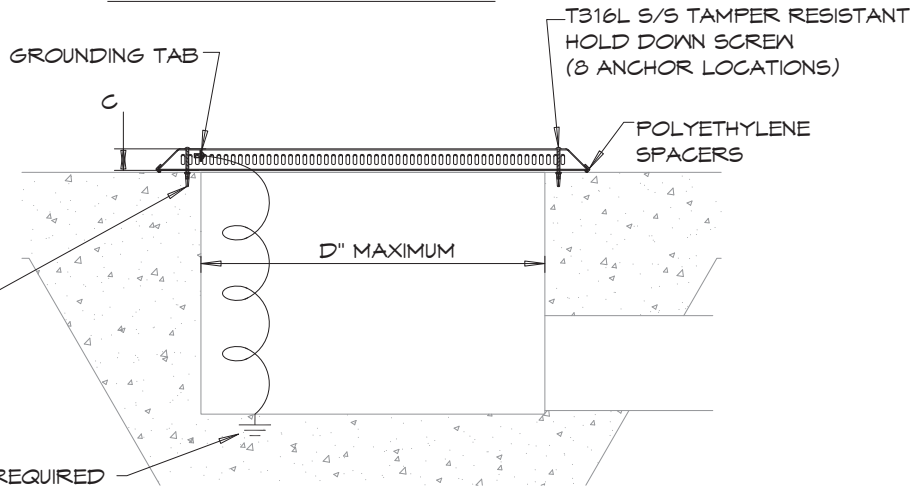
- For Single or Multiple drain use
- (Flow Rate) GPM main drain grate**
- Life: 10 years
- Wall or floor
- MFG. by Natare Corporation
- Model #: VGB-SS-(size)x(size).G
VGB 2008

TYPICAL INSTALLATION

T316L S/S TAMPER RESISTANT HOLD DOWN SCREW (8 ANCHOR LOCATIONS)

CONCRETE ANCHORS (WHERE APPLICABLE)

GRATE TO BE GROUNDED AS REQUIRED



Part Number	Ref. Size (D) *	Actual Width (A)	Actual Length (B)	Actual Height (C)	Total Open Area	Design Flow Rate **	Flow Velocity (F.P.S.)	Percent Open Area
VGB-SS-18x18.G	18 x 18	24.00 in.	24.00 in.	1-1/2 in.	215.4 sq. in.	671 GPM	1.0	34.3%
VGB-SS-24x24.G	24 x 24	30.00 in.	30.00 in.	1-1/2 in.	366.7 sq. in.	1,141 GPM	1.0	37.9%

* Reference sizes represent the size of drain the grate will fit over, not actual dimensions.

** Main Drain Grate flow rate is calculated using the total open area of the grate at a velocity of 1.0 fps. Rather than the maximum flow rating of the grate as determined by the entrapping force calculation of ASME 112.19.8a - 2008 section 2.3.1.2, which allows 1,466 GPM for the 18 x 18 grate or 3,660 GPM for the 24 x 24 grate.

Notes:

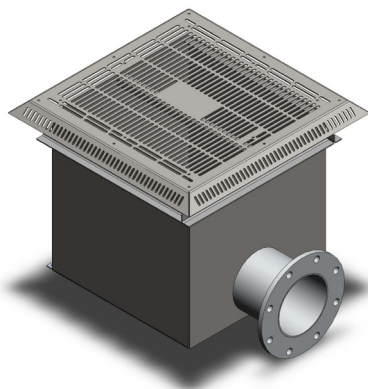
- Unblockable grate complies with the requirements of ASME A112.19.8a - 2008 for field fabrication suction outlets
- VGB-SS-18x18.G - Grate intended for use over 18" or smaller drain openings.
- VGB-SS-24x24.G - Grate intended for use over 24" or smaller drain openings.



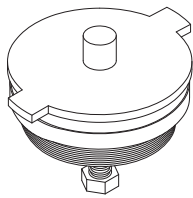
Technical Details- VGB Stainless Steel Grates and Sump Units

VGB Certified Stainless Steel Drain Grates and Sump Units

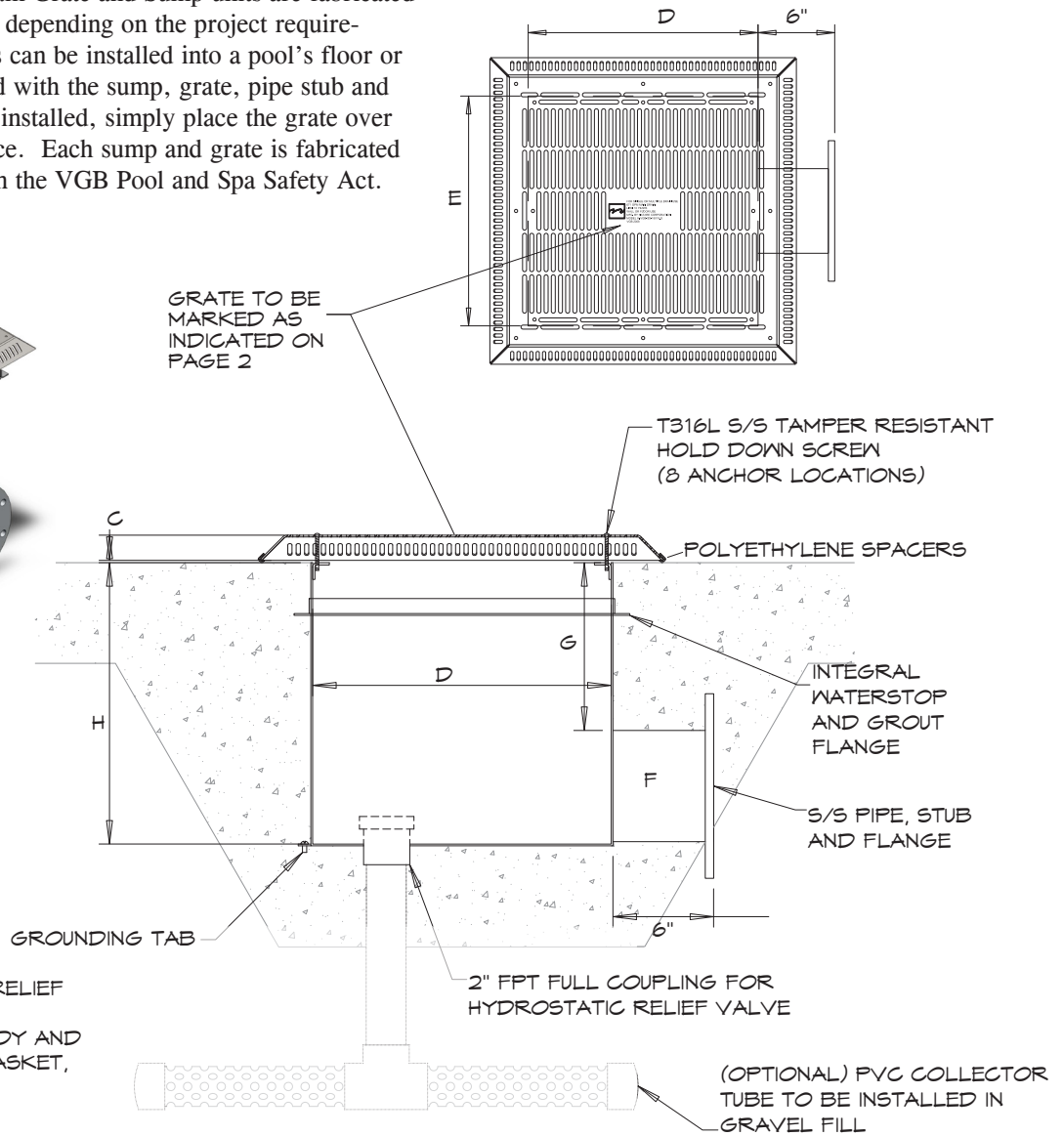
Natare's VGB Stainless Steel Drain Grate and Sump units are fabricated from 304L or 316 stainless steel, depending on the project requirements. Our grate and sump units can be installed into a pool's floor or wall. Each unit comes assembled with the sump, grate, pipe stub and flange. Once the sump has been installed, simply place the grate over the opening and screw it into place. Each sump and grate is fabricated to specification and complies with the VGB Pool and Spa Safety Act.



OPTIONAL



COMMERCIAL HYDROSTATIC RELIEF VALVE 2" 34-605
 HEAVY DUTY CAST BRONZE BODY AND VALVE PLATE, VALVE SEAT GASKET, BRASS COVER PLATE



Part Number	Drain Size	Total Open Area	Design Flow Rate	D	E	C
VGB-SS-18x18.U	18 x 18	215.4 sq. in.	671 GPM	18"	18"	1-1/2"
VGB-SS-24x24.U	24 x 24	366.7 sq. in.	1,141 GPM	24"	24"	1-1/2"

Stub Size - F (NPS)	G	H
3"	7"	11"
4"	8"	13"
6"	11"	18"
8"	14"	23"
10"	18"	29"
12"	21"	34"

• "D" AND "E" are the measurements of the sump box. The grate size is larger than the box. For specific grate size please refer to size chart on page 2.

Notes:

- Unblockable grate complies with the requirements of ASME A112.19.8a - 2008 for field fabrication suction outlets
- VGB-SS-18x18.G - Grate intended for use over 18" or smaller drain openings.
- VGB-SS-24x24.G - Grate intended for use over 24" or smaller drain openings.

“Virginia Graeme Baker Pool and Safety Act”



TITLE XIV—POOL AND SPA SAFETY SEC. 1401. SHORT TITLE.

This title may be cited as the “Virginia Graeme Baker Pool and Spa Safety Act”.

SEC. 1402. FINDINGS.

Congress finds the following:

- (1) Of injury-related deaths, drowning is the second leading cause of death in children aged 1 to 14 in the United States.
- (2) In 2004, 761 children aged 14 and under died as a result of unintentional drowning.
- (3) Adult supervision at all aquatic venues is a critical safety factor in preventing children from drowning.
- (4) Research studies show that the installation and proper use of barriers or fencing, as well as additional layers of protection, could substantially reduce the number of childhood residential swimming pool drownings and near drownings

SEC. 1404. FEDERAL SWIMMING POOL AND SPA DRAIN COVER STANDARD.

- (a) CONSUMER PRODUCT SAFETY RULE.—The requirements described in subsection (b) shall be treated as a consumer product safety rule issued by the Consumer Product Safety Commission under the Consumer Product Safety Act (15 U.S.C. 2051 et seq.).
- (b) DRAIN COVER STANDARD.—Effective 1 year after the date of enactment of this title, each swimming pool or spa drain cover manufactured, distributed, or entered into commerce in the United States shall conform to the entrapment protection standards of the ASME/ANSI A112.19.8 performance standard, or any successor standard regulating such swimming pool or drain cover.
- (c) PUBLIC POOLS.—
 - (1) REQUIRED EQUIPMENT.—
 - (A) IN GENERAL.—Beginning 1 year after the date of enactment of this title—
 - (i) each public pool and spa in the United States shall be equipped with anti-entrapment devices or systems that comply with the ASME/ANSI A112.19.8 performance standard, or any successor standard; and
 - (ii) each public pool and spa in the United States with a single main drain other than an unblockable drain shall be equipped, at a minimum, with 1 or more of the following devices or systems designed to prevent entrapment by pool or spa drains that meets the requirements of subparagraph (B):
 - (I) SAFETY VACUUM RELEASE SYSTEM.—A safety vacuum release system which ceases operation of the pump, reverses the circulation flow, or otherwise provides a vacuum release at a suction outlet when a blockage is detected, that has been tested by an independent third party and found to conform to ASME/ANSI standard A112.19.17 or ASTM standard F2387.

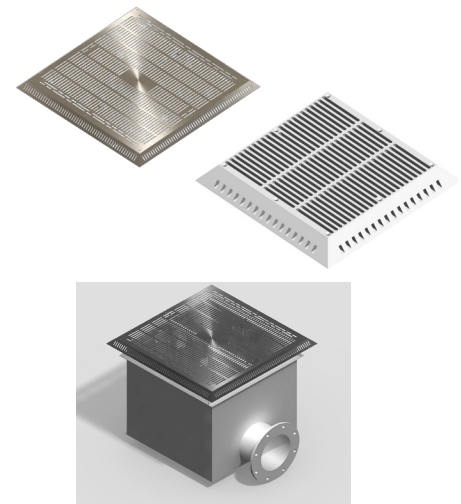
- (II) SUCTION-LIMITING VENT SYSTEM.—A suction-limiting vent system with a tamper-resistant atmospheric opening.
 - (III) GRAVITY DRAINAGE SYSTEM.—A gravity drainage system that utilizes a collector tank.
 - (IV) AUTOMATIC PUMP SHUT-OFF SYSTEM.—An automatic pump shut-off system.
 - (V) DRAIN DISABLEMENT.—A device or system that disables the drain.
 - (VI) OTHER SYSTEMS.—Any other system determined by the Commission to be equally effective as, or better than, the systems described in subclauses (I) through (V) of this clause at preventing or eliminating the risk of injury or death associated with pool drainage systems.
- (B) APPLICABLE STANDARDS.—Any device or system described in subparagraph (A)(ii) shall meet the requirements of any ASME/ANSI or ASTM performance standard if there is such a standard for such a device or system, or any applicable consumer product safety standard.
- (2) PUBLIC POOL AND SPA DEFINED.—In this subsection, the term “public pool and spa” means a swimming pool or spa that is—
 - (A) open to the public generally, whether for a fee or free of charge;
 - (B) open exclusively to—
 - (i) members of an organization and their guests;
 - (ii) residents of a multi-unit apartment building, apartment complex, residential real estate development, or other multi-family residential area (other than a municipality, township, or other local government jurisdiction); or
 - (iii) patrons of a hotel or other public accommodations facility; or
 - (C) operated by the Federal Government (or by a concessionaire on behalf of the Federal Government) for the benefit of members of the Armed Forces and their dependents or employees of any department or agency and their dependents.
 - (3) ENFORCEMENT.—Violation of paragraph (1) shall be considered to be a violation of section 19(a)(1) of the Consumer Product Safety Act (15 U.S.C. 2068(a)(1)) and may also be enforced under section 17 of that Act (15 U.S.C. 2066).

This material is available from www.cpsc.gov/businfo/poolspa.pdf. This information is a portion of the Act. For the complete Virginia Graeme Baker Act and related information, visit the web site listed above.

At Natare Corporation, we feel that it is important to provide all prospective and current customers with the most up to date safety information.

We believe it is better to err on the safe side when building and/or designing a swimming pool, aquatic facility or water feature. With this in mind, we will recommend that two main drains are provided, no matter what type of safety cover is used.

Certified VGB Stainless Steel and GPM Safety Drain Cover and Sumps



Natare has designed, manufactured and installed some of the world’s largest, most complex (and fastest) swimming pools and aquatic facilities. Natare equipment and systems are available through a worldwide network of builders, distributors and specialty contractors who are there to help carefully select and conscientiously install our products, equipment and systems to make your facility work for you.

Whether it is new construction, renovation or operation, talk to Natare.