

Specifications

Bradford Gutter System - BGS

Anatomy

Bradford Gutter Systems are flat cut by numerically controlled CNC punching & precision lasers, with exacting tolerances to within 0.015" for a precise fit in the field. In order to eliminate hot welds used in "fill" for field fittings, the corners are shop-fabricated. If the gutter system is a retrofit for an existing pool, Bradford can precisely fit "out-of-square" corners with the same skill and craftsmanship in the shop that is utilized in new construction. The precision fit of a BGS stainless steel gutter will enhance the function, versatility and appeal of any pool.

General

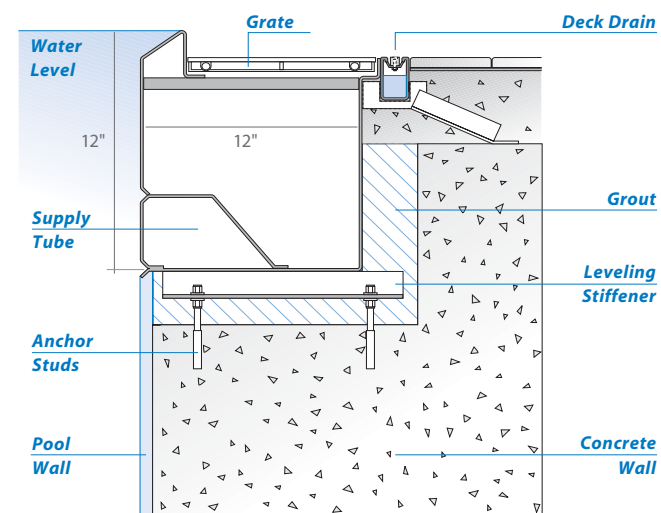
A continuous-flow gutter system shall be installed around the entire perimeter of the swimming pool. This gutter will be either a trough style or a combination style gutter. The style and profile of the gutter shall be decided by the Owner of the project or his/her agent. Bradford Products, LLC will work in close coordination with the project architect and/or engineer in detailing the appropriate gutter system.

Manufacture

The manufacturer of record shall be Bradford Products, LLC. There will not be any outsourcing or "job" shopping allowed in the design or manufacturing of the gutter system. The gutter system on this project shall be a Bradford Products - "BGS" Model _____.

Materials

The perimeter gutter system, any collector boxes, and all weldments will be fabricated from type 316L stainless steel in a 0.105" (12 ga.) thickness with a #3 polished finish. Lesser grades of material will not be accepted. A protective film coating will be in place during all applicable manufacturing processes.



Bradford's signature BGS-1 gutter section and installation for concrete, shotcrete or Gunite® pools.

Finish

All exposed stainless steel surfaces will be cleaned and polished as needed after installation in order to present a substantial uniform finish. The welds will not be ground down. Any blending of surfaces will be done by using "Scotch-Brite" pads or discs. There will be no contact with ferrous materials on the finished surface. The general contractor and/or pool contractor will be responsible for the protection of the gutter system from damage and contamination during subsequent construction.

Anchoring

The gutter system shall be anchored to the pool structure in its entirety with 3/8" dia. plated steel drill-in stud anchors. The anchors will be placed in pairs around the perimeter with a 4'0" on center maximum setting. Each anchor will be set with two (2) nuts to secure the stainless steel angle support to within 1/8" level around the gutter perimeter. The continuous gutter will be welded to these angle supports to form the gutter system as shown on the approved plans. Before the gutter is grounded (by a licensed electrician, which is not part of the gutter contract) it will be rechecked for level and adjusted as needed to maintain the allowed 1/8" perimeter tolerance.

Return Inlets

If it is required that the gutter system have a pressure supply tube, the tube will be pressure tested prior to relieving the tube for the supply inlets. Any leaks that may have occurred during field fabrication will be corrected at this time. The return inlets will be equally spaced around the perimeter, except in the areas of steps, ladders, or between lane line anchors. The inlets shall be between 3/16" and 3/8" in dia. and centered no further apart than 48". The inlets will be set in a 45° angle directed to the pool bottom.

Gutter Grating

In gutter systems requiring gutter grate, the gutter will be furnished with a grate that allows for a maximum amount of water to pass into the gutter. Standard gutter grating will be light weight PVC with a maximum open area of 35% held in place with tamper-resistant stainless steel fasteners. The fasteners will be easily removed by trained aquatic staff members for inspection and cleaning of the gutter as needed.

Continuous Perimeter Overflow

The gutter system shall be designed, manufactured and installed to allow for a continuous and even overflow transmission of surface water into the gutter.

Converter Boxes

Gutter dropout collector boxes and supply return boxes will be supplied by Bradford Products, LLC and manufactured along the same guidelines as the gutter system. The material shall be 12 ga. type 316L stainless steel. The interconnection of the converter boxes shall be as shown on the drawings.

Installation

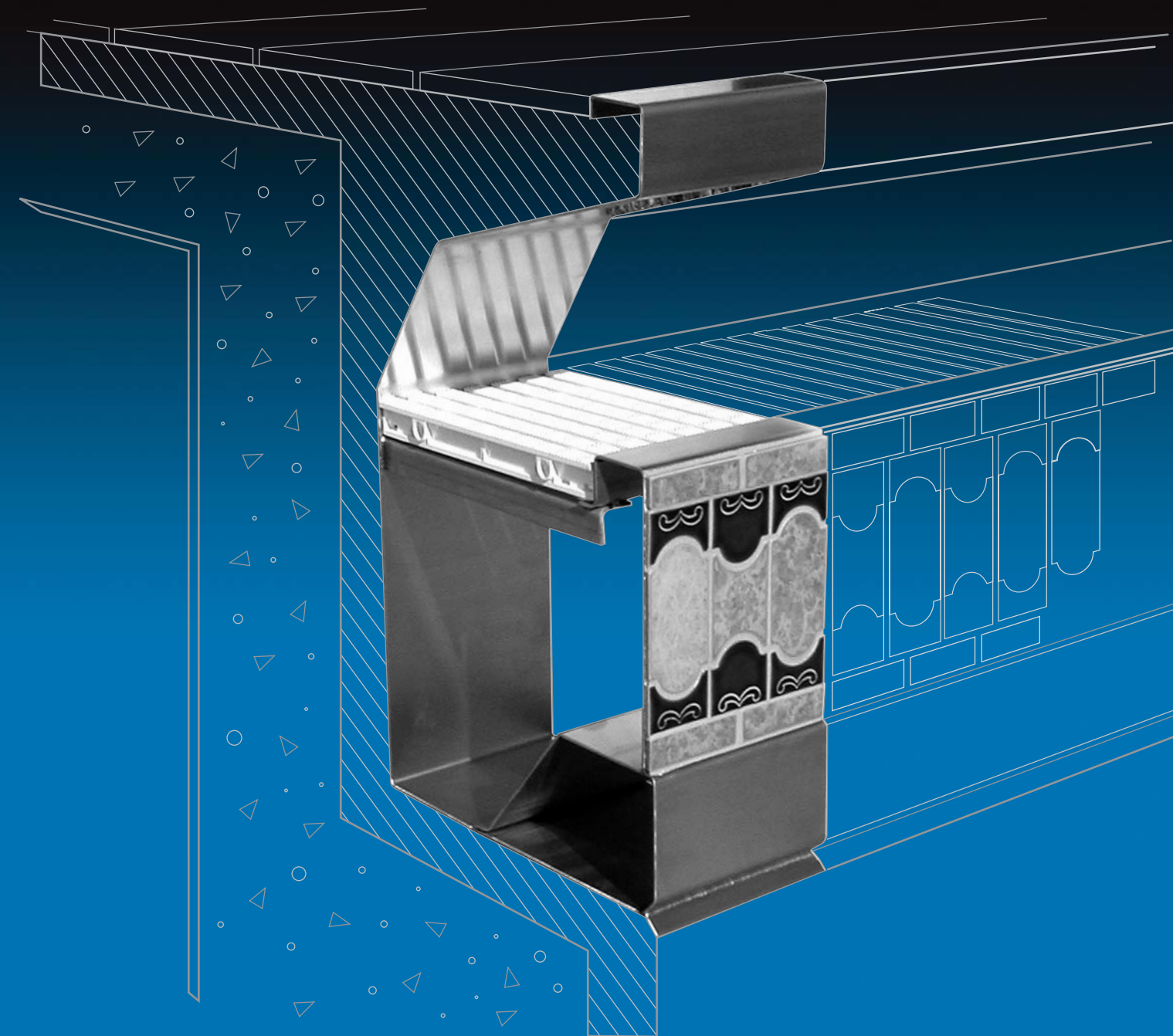
The installation shall be done in accordance with the guidelines and standards as set forth by AWS for welding type 316L stainless steel. The welding will be done by Bradford Products, LLC, a duly authorized and accredited subcontractor, or by certified welders under the direct supervision of Bradford staff. The installation shall be completed under the guidelines as set forth in the above specifications without exceptions.



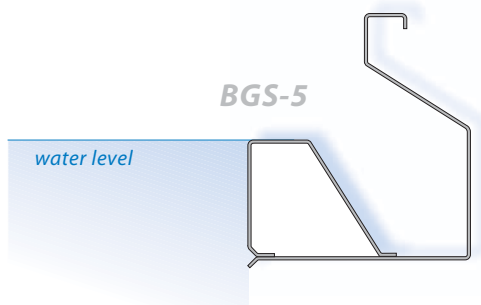
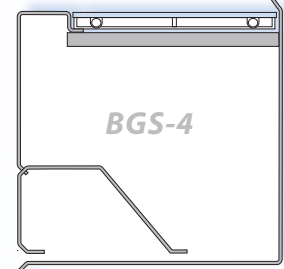
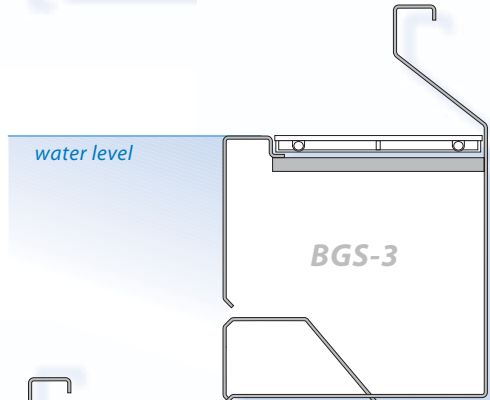
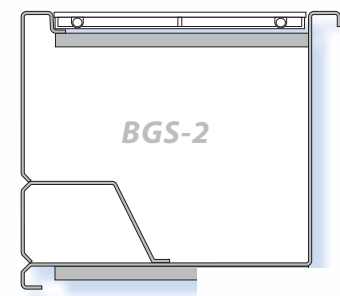
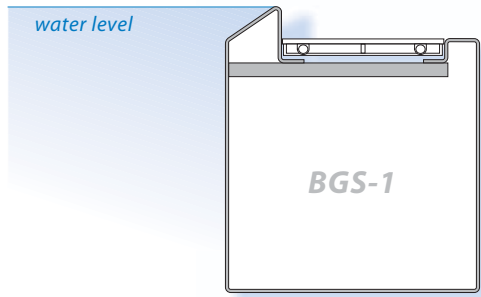
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Stainless Steel Gutter Systems by BRADFORD PRODUCTS, LLC.



Gutter Dimensions

Since Bradford does all of the design and fabrication in house, we have the ability to custom-size virtually any of our gutter systems. The standard size is 12" from the waterline to the bottom of the gutter and 12" from the front face to the back of the gutter. Normally, Bradford Gutters will be manufactured in 10'0" sections.

BGS-1 Shur-Grip Gutter System

The Shur-Grip Gutter System, with its exclusive beveled hand-hold, is the flagship of Bradford Gutters and is held as our signature model. The unique design of the hand-hold not only provides an ergonomically correct grip, but it also gives your pool a full perimeter vanishing edge appearance. This gutter can be furnished with an internal supply tube, or as a simple trough where the filtered water is returned through a floor or wall manifold system. A slip-resistant gutter grate is standard and an integral deck drain is easily added to this gutter.

BGS-2 Swim-Out Gutter System

Bradford's standard Swim-Out Gutter System is a popular choice for designs that don't demand the high profile "mirror pool" look. For park departments, recreational facilities, and instructional use installations, the Swim-Out Gutter, with its unobstructed seating and ease of access, is ideal for their needs. The easily removed nonslip grate makes routine inspections and maintenance a breeze. This system is available with or without a supply tube.

BGS-3 Semi-Recessed Gutter System

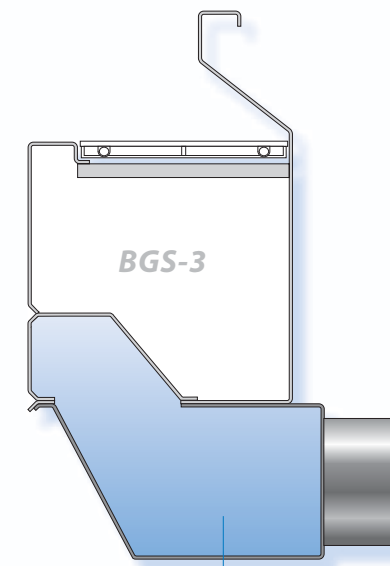
The Semi-Recessed Gutter System has been the choice of multiuse pools—competition and recreation—for years. This gutter design combines the benefits of Swim-Out & Fully-Recessed Gutter Systems, giving the pool a large capacity trough and a backsplash that also helps the swimmer keep an eye on the wall. Recessed steps, integral deck drain and a gutter wash system are options available for the Semi-Recessed Gutter and most of Bradford's gutter systems.

BGS-4 Fully-Recessed Gutter System

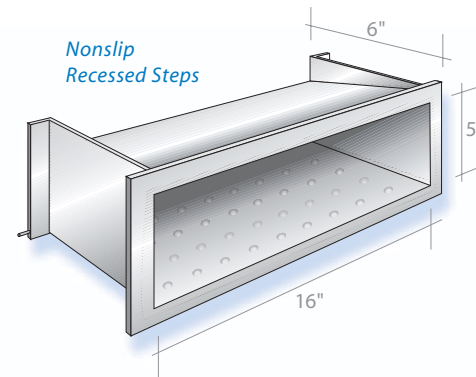
Bradford's Fully-Recessed Gutter System will allow the deck to terminate on the same plane as the pool wall. This clearly defined turning surface is a design preference of many competition swimmers. The nonslip grate offers a "natural" step for swimmers when they choose to "go over the side" instead of using the ladder. All of Bradford's system options are available in the Fully-Recessed Gutter System.

BGS-5 Open-Throat Gutter System

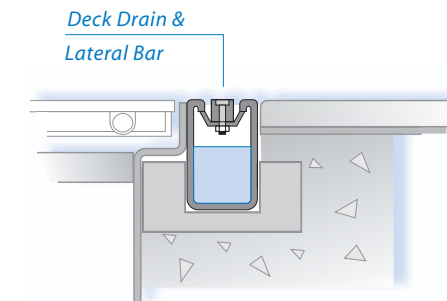
The "Open-Throat" style gutter is designed for small to medium sized swimming pools that are not used for competition, i.e. hotels, country clubs, H.O.A. pools, etc. This low profile gutter is designed only for a supply tube return and is available with recessed steps. Because there is no gutter grate, Bradford offers an option of mosaic tile for a nonslip surface for the pool-side leading edge.



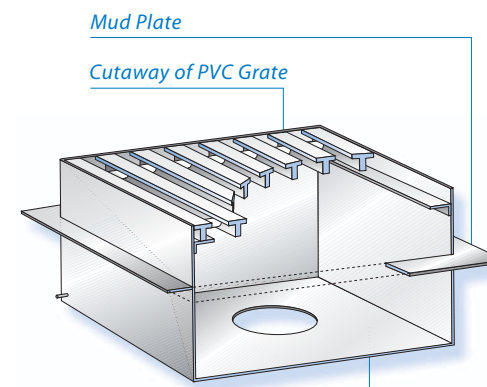
Converter Box



Nonslip Recessed Steps



Deck Drain & Lateral Bar



Mud Plate

Cutaway of PVC Grate

Main Drain Sump

Location of Suction Hole to Spec.

Options

Converter Boxes

Although a drop-out collector box is standard on all gutter systems, the converter box for the supply tube is an option that is included in all systems that utilize this type of filtered water return. All converter boxes will be constructed from 12 ga. type 316L stainless steel. All connecting pipe, flanges or couplings will be type 316L stainless steel. Dissimilar metals will not be allowed direct contact with the gutter system or converter boxes due to the adverse effects of galvanic reaction. The number, size, and placement of the converter boxes will be determined by the pool's dynamics.

Recessed Steps

When the situation requires a step in the gutter to promote safe egress for deck mounted grab rails, Bradford offers a full size recessed step that has a machined nonslip surface, or an optional ceramic tile clad tread area.

Deck Drain

Bradford's unique "bar-faced" integral deck drain offers one of the most appealing deck drains on the market. The lateral bar design allows the deck water to be baffled in a line that is parallel to the pool wall, thus promoting a more complete capturing of the deck water.

Trough Gutter

Many pool designers are utilizing the benefits of floor or low wall return systems in order to provide their client with the healthiest body of water possible. For these pool designs, Bradford offers the BGS-1 through BGS-4 series gutters as a "trough only" option. The "trough only" option also gives the gutter system a greater surge capacity.

Gutter Wash

To ensure that the gutter is wet at all times, some designers require the gutter to be equipped with a "wash" provision. Outlets are located in the supply tube to accomplish this goal.

Ceramic Tile

Using the proprietary method of cladding stainless steel with ceramic tile developed by Bradford Products for our stainless steel pools and spas, Bradford offers this option for the face or leading edges of the gutter systems.

Gutter Grate

Molded slip-resistant PVC grating is the standard grating used on models BGS-1 through BGS-4. FRP, stainless steel, or square tube PVC grating are available as options.

Main Drains

Bradford Products manufactures a 12" x 14" stainless steel main drain sump fitted with a PVC grate that has an open area of 58.8 sq. in. (35%). Custom sizes are available upon request. Hydrostatic relief valves are available as the situation dictates.