

BYOS 2[™] SLIDE SYSTEM (BUILD YOUR OWN SLIDE)

ASSEMBLY & INSTALLATION INSTRUCTIONS





WARNING: IMPORTANT INSTALLATION INFORMATION

The installation of this product should be done only by a licensed and professional installer. Installation should be done strictly in conformance with all local building codes, electrical codes and other building and safety laws and regulations. Among other things, that your installer should carefully analyze the need to bond the product to prevent an electrical hazard. Failure to properly install this product could result in a dangerous condition, including but not limited to electrical and or structural hazards. S.R.Smith. disclaims all liability arising from the installation and the user assumes all risk associated with the installation.

> For Technical Support or Assistance, Contact Customer Service at: Canby, Oregon | 800.824.4387 Tucson, Arizona | 800.737.5386 srsmith.com

> > For warranty information: srsmith.com/warranty

To obtain complete copies of the ANSI/APSP/ICC-5 2011 Standard for Residential In-ground Pools or to obtain copies of the "Plan Your Dive, Steer Up" or "The Sensible Way to Enjoy Your In-ground Swimming Pool" contact:

> The Association of Pool & Spa Professionals (APSP) 2111 Eisenhower Ave. Alexandria, VA 22314 (703) 838-0083 www.theapsp.org

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IMPORTANT NOTICES

LIABILITY DISCLAIMER: This BYOS product provides the customer the opportunity to design a one-of-a-kind slide, unique to the customer's preferences. When purchasing this BYOS product, the customer acknowledges and agrees that he or she has designed and created the specifications for this product. S.R.Smith makes no claims, representations or warranties, whether expressed or implied, regarding this design of this product, or this product's safety, relability, durability, or performance. In no event shall S.R.Smith be liable for any direct, indirect, punitive, incidental, special, or consequential damages arizing out of or connected with the use or misuse of this product.

S.R.Smith recommends that you read the BYOS 2 Installation Manual in its entirety before attempting an installation.

- It is highly recommended that provision be made for future maintenance and/or removal of the slide from the substrate, if necessary. Do not fully encase the slide in concrete or pernanently fixed structure/material.
- Do not construct objects or formations along or over the slide pathyway that obstruct the pathway for sliders or cause potential harm to the head, arms or legs.
- Minimum recommended head clearance above the slide pathway is 7 feet.
- Minimum BYOS 2 water envelope is 7' wide (centered on slide) \times 13.5' long \times 4.5' deep.
- The exit section must be installed with the correct alighnmenet to the pool edge with a minimum overhang of 3" and should be supported at the fiberglass landing plate.
- Zoom Flume[™] water delivery system requires a 1" PVC flex hose. For best performance, the recommended water flow at the slide is 20-40 GPM, connecting a ball valve in line is recommended for water flow adjustment. NOTE: Connect the Zoom Flume[™] water delivery system to water source and test for leaks or defects prior to final assembly/ installation.
- See page 16 of installation manual for BYOS 2 Care and Maintenance.



- FAILURE TO INSTALL BYOS 2 PRODUCTS SO THAT THE ENTRY SECTION SUPPORT FRAME IS LEVEL, WILL CAUSE THE DESIGN TO EXCEED THE RECOMMENDED ANGLE OF DESCENT AND MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE. NO INSTALLED BYOS 2 SLIDE SHOULD EXCEED A 20 DEGREE SLOPE.
- FAILURE TO INSTALL THE BYOS 2 SLIDE ANCHOR SYSTEM TO THE MINIMUM DEPTH SPECIFIED IN THE INSTALLATION INSTRUCTIONS OR ALTERATION OF THE BYOS 2 SLIDE ANCHOR SYSTEM WILL CAUSE STRUCTURAL INSTABILITY AND MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE.
- DO NOT DRILL INTO ORTHROUGH ANY BYOS SLIDE SECTION OR ANCHOR OR OTHERWISE MODIFY. IT WILL WEAKEN THE PART AND VOID THE WARRANTY.



INTENDED USE

- I. Everyone who uses this slide must know, understand and follow these instructions
- 2. The ANSI/APSP/ICC-5 2011 standard for above ground pools prohibits the use of slides or diving boards on above ground pools.
- 3. This slide should never be installed on above ground pools, ponds, floating docks or platforms, boat docks or houseboats or any natural body of water.
- 4. Be familiar with the shape and depth of the pool before you slide. This slide should only be used with the proper water safety envelope, as described in Diagrams A, B & C on page 3 and in accordance with the slide positioning diagrams on pages 4.
- 5. Because the slide may only be used in water 4.5' deep or greater, all slide users must be able to swim in deep water.
- 6. Weight limit for this slide is 350 pounds, no slider weighing more than 350 pounds may use this slide.
- 7. The surface of the slide is very slippery when wet; USE CAUTION when entering the slide and when transitioning from standing to sitting.
- 8. Slide in a feet first sitting position ONLY.
- 9. IMPORTANT: sliding headfirst is prohibited: serious spinal injury resulting in paralysis or death can result.
- 10. Maintain adult supervision at all times.
- II. Only one person at a time is allowed on the slide.
- 12. Be sure the water delivery system is on and lubricating the slide prior to use.
- 13. Collision with another swimmer or a diver can result in serious injury or death for one or both persons: Before sliding, always make sure that the path in front of the slide is free from any (including submerged) obstructions including other people or objects in the pool such as rafts, inner tubes etc. When a diving board is also present, make sure you do not use the slide while someone is on or using a diving board. Take turns.
- 14. No roughhousing or horseplay should be allowed on the slide at any time.
- 15. Do not stand, jump or dive from any part of the slide.
- 16. Do not slide on objects such as rafts or inner tubes, doing so greatly increases your risk of injury.
- 17. Do not slide through or at objects such as rafts or inner tubes, doing so greatly increases your risk of injury.
- 18. Do not use this slide if physically impaired or handicapped without your doctor's permission.
- 19. Do not use this slide with a history of heart conditions, seizures, back problems, fainting or fear of heights.
- 20. Do not use this slide if you are pregnant.
- 21. Do not drink alcohol and use this slide.
- 22. Don't take chances, inspect the slide at least once a year (see the slide inspection list on page 16, do not use the slide if any part becomes loose, damaged, weakened or broken. If necessary, before using the slide again, have it inspected and repaired by a competent professional familiar with pool slides.

WARNING: SERIOUS INJURY OR DEATH CAN RESULT FROM THE IMPROPER INSTALLATION OR USE OF THIS SLIDE.



WATER SAFETY ENVELOPE

A minimum water depth of three feet (3') under the exit of the slide which increases to a depth of four feet six inches (4'6") **DIAGRAM A**

(NOT TO SCALE)



SLIDE PLACEMENT

If the slide meets the pool edge at an angle, then the outside curve "Pivot A" has to be at the pool edge. Refer to Diagram D & E below.



If the slide meets the pool edge straight on, then the end of the exit section should be parallel with the pool edge. Refer to the Diagram F below.



NOTE: The exit point of the flume can be no higher than 20" above the water.



GETTING STARTED

S.R.Smith has provided you with a slide system which matches the pathway and spatial requirements you provided to us as closely as possible. It is important to note however, that S.R.Smith does not approve or accept liability for BYOS 2 designs. All designs should be checked by a licensed Civil or Structural Engineer in your state, and when necessary, inspected/approved by the applicable local governing agency.

S.R.Smith recommends that you read these instructions and helpful hints in their entirety before attempting an installation.

IMPORTANT NOTICES:

- It is highly recommended that provision be made for future removal of the slide from the substrate, if necessary.
- The sizes of the concrete piers for the anchor supports specified herein are minimum measurements required for the BYOS 2, and may need to be increased due to local weather, soil conditions, frost line and/or local building codes.
- For best performance, the recommended water flow at the slide is 80 GPM total, 40 GPM per side.
- Zoom Flume water delivery system requires a 1" PVC hose. NOTE: a ball valve in line on each side is recommended for water flow adjustment.
- Do not construct objects or formations along or over the slide pathway that obstruct the pathway for sliders or cause potential harm to the head, arms or legs. Minimum recommended head clearance above the slide pathway is 7 feet.
- Minimum BYOS water envelope is 7' wide (centered on slide) \times 13.5' long \times 4.5' deep.
- The exit section must be installed with the correct alignment to the pool edge and should be supported at the fiberglass landing plate.
- The surface of the slide is very slippery when wet, use caution when entering the slide. Utilization of the provided seating assist rails is recommended for the transition from standing to sitting.

BYOS 2 SLIDE

LIST OF REQUIRED TOOLS

Tools required for assembly and installation of BYOS 2 slide:

- I. 3/8" Drive Ratchet
- 2. 3/8" × 6" Socket Extension
- 3. 9/16'' Socket
- 4. 9/16" Box End Ratchet Wrench
- 5. Torque Wrench
- 6. Angle Finder
- 7. Tape Measure
- 8. 48" Level

ASSEMBLY AND INSTALLATION INSTRUCTIONS

STEP I: PREPARING SITE AREA FOR BYOS 2 SLIDE SYSTEM

First, Level the hill substrate to the approximate final grade.

TIP:

 The exit section should be supported at the fiberglass landing plate. (Fig. I) The exit plate can simply rest upon the substrate or be drilled from the side and bolted to a bracket (not supplied).

NOTE: Build the support for the exit landing in the correct orientation and at the correct height prior to setting the fully assembled slide in place.



FIG. I

STEP 2: FLUME ASSEMBLY

Starting with the exit section, assemble the slide on the ground, right side up along actual pathway where the slide will reside. (Be careful not to scratch the slide) Attach the exit section anchor support, followed by the next flume section in the correct order of the slide pathway. To help identify the flume sections for the correct order of assembly, there are stickers attached at each flange end of each flume section. For example, attach the letter A end of the exit section to the letter A end of the next flume section of your custom BYOS slide. (Fig. 2 - sample only) Attach the anchor supports in the specified locations as you build uphill and away from the pool. Stickers are attached to the side of the flange connection that the anchor support will connect to.



NOTE: Anchor support locations are noted on a separate sheet (included) that is specific to your exact slide design. There are stickers attached to the correct flume piece to indicate which side of the flange you need to connect the anchor support to.

STEP 2: FLUME ASSEMBLY - Continued

TIPS:

- Make sure to use Anti-Seize on all bolts.
- Be careful not to allow dirt to get into the water delivery system on the entry section.
- Gasket end of each flume section goes downhill.
- The Entry Frame Support bolts to the inside of the Entry Section. There are three 3/8" bolts, one on each side, and one in the center.
- Anchor supports attach to the down slope side of the flange. (Fig. 3)
- Each flange has 7 bolts (Kit BYOS2-102-SS). All bolts are 3/8'' × 1-3/4''. Use Anti-Seize (in BYOS2-101-SS) on all bolts.
- Insert bolts in this order: bolt, flat washer, flanges, flat washer, lock washer, nut. On flanges that require anchor supports insert bolts in this order: bolt, flat washer, flanges, anchor support, flat washer, lock washer, and nut.
- Insert and hand tighten all seven flange bolts. Then, utilizing a torque wrench, tighten each nut to approximately half of the maximum 25 ft. lbs. Tighten the blots in an alternating fashion working from left to right starting with the center bolt, working your way up the flange (Fig. 3). Repeat this same tightening process until the specified 25 ft lbs is reached on each bolt. Do not over tighten. Using greater force may fracture the fiberglass. Tightening the bolts in this sequence is necessary to compress the gasket evenly.



FIG. 3

STEP 3: ENTRY SECTION ANCHOR ASSEMBLY

Attach handrails first, Handrails are directional; the side with the 2 bends faces away from the pool. (Fig. 4)

The BYOS 2 Frame Support consists of 1 entry frame support, 1 right support arm and 1 left support arm. The assembly is attached to the BYOS 2 Entry Section with the hardware kit BYOS2-101-SS. (Fig. 5)

Carefully turn the BYOS 2 Entry Section upside down (on cardboard) and sit the anchor upright into position as shown. (Fig. 6 & 7)

Using 4 each 3/8"×1" bolts, attach the anchor to the entry section. Use a flat washer on each side of the part and anchor. Pass the bolt through from the outside of part toward the underside and add a lock washer and a nut to each bolt. Hand tighten only. Attach next flume section after entry and 20° anchor on the downhill side of assembly.

Attach right and left arms as shown. The arms are attached at this point only to the entry frame support using 2 each 3/8"x1" bolts with flat washers, lock washers and nuts. Hand tighten only, NOTE: The other end of the right and left arms attach to the 20° anchor as shown in Fig. 8 & 9. Hand tighten only.



FIG.8

FIG.9

STEP 3: ENTRY SECTION ANCHOR ASSEMBLY - Continued

The 20° support must have a minimum concrete embedment depth of 24'' from bottom of anchor as shown in Fig. 10. Anchor may be mounted in ground or with minimum 18'' diameter tube.

When oriented correctly, the bottom of the entry frame support will be level as shown in Fig. 11.

The vertical portions of the support frame should be plumb (level in both axis). See Fig. 12 & 13 below.

NOTE: When slide is assembled and leveled as per instructions, the bolts on the entry support frame and anchors may be tightened.

TIP: Once all the flume sections are assembled and the flange bolts are correctly tightened, do a water test with a garden hose to ensure there are no flume to flume leaks.



FIG. 10







FIG. 12



STEP 4: 20° ANCHOR INFORMATION

The following information is for the BYOS 2 20° anchor and should be reviewed before proceeding onto the next step. Our 20° anchor is designed to allow easier use with concrete tube forms.

The length of our BYOS 2 flume anchors allow room for concrete chutes when using concrete tube forms in a BYOS 2 installation. This anchor design will provide more flexibility in installation options and make your BYOS 2 installations even easier. (Fig. 14)



FIG. 14

STEP 5: MOVE THE SLIDE

Once the entire slide is assembled and resting on the anchor supports in its correct horizontal position on the pathway, use spray paint to carefully mark the location of the anchor supports. Next, with sufficient manpower, gently move the assembled slide (if possible) approximately 3 feet to one side.

STEP 6: EXCAVATE THE HOLES

Pier holes for the 20° flume anchor supports should be a minimum of 12" long, 24" wide and 24" deep, or minimum 18" diameter tube.



The above specified sizes for the concrete piers represent a minimum and should be increased due to local weather, soil conditions, frost line and/or local building codes. Anchor supports shall be bonded. Refer to your local building/electrical code requirements.

STEP 7: RESET THE BYOS 2 IN POSITION

Ensure sufficient blocking material is on hand, then utilizing sufficient manpower; lift the assembled slide back into its correct horizontal and vertical position and block in place.

At this point, the anchor supports should be directly over, centered and within the holes for the piers or tubes, adjust hole location as necessary at this time. The angle iron cross member will be approximately 4" below final concrete grade for correct anchor embedment depth. (See Fig. 14) NOTE: *It is essential that the vertical portions of the anchors are plumb.*

With the exception of the exit section landing plate (Fig. 1), make sure that a minimum 3 inch clearance is maintained between any portion of the underside of the slide (including the flanges) and the substrate. Based on the slider's weight and velocity the slide can move slightly both vertically and horizontally. If the slide rubs upon the substrate due to this motion a wear spot and/or leak can develop.



STEP 8: FINAL SLIDE POSITION

It is essential that the slide be in its correct horizontal and vertical position prior to pouring concrete; and since the pool cannot be moved, start checking position with the exit section first. Starting with and then ensuring that the exit section is installed correctly is absolutely necessary for a successful installation.

The exit section must meet the pool edge at the correct elevation, in the correct orientation and be level in both axes. (Fig. 16 & Fig. 17) When determining level position for the exit section please note that the exit section starts with a 20° up slope, which then makes a gradual transition to 7° the exit point. Check for level position only as illustrated below.



FIG. 16

FIG. 17

Utilize an angle finder along the centerline of the flume ensure the flume is at the correct angle. Check the angle along the centerline of the flume only. (Fig. 18) *(Continued on next page)*



FIG. 18

STEP 8: FINAL SLIDE POSITION - Continued

When checking for the correct flume angle keep the below in mind:

- Each slide section is identified on the underside.
- The exit section starts at 20° on the up slope end which then makes a gradual transition to 7° at the exit point.
- The entry section seating area is almost flat, however, for proper drainage it incorporates a slight downhill slope which transitions to a full 20°. To ensure correct placement of the entry section the entry frame support must be level to ensure correct orientation of the slide. (Fig. 19 & 20)





FIG. 20



FIG. 21

FIG. 22

The sides of the flumes should be checked for level as well. The only place along the flume where level positions can be determined is at the flange/gasket locations. Place level across the flume at the flume joint as illustrated. (Fig. 21 & 22) Check each flange location for level position, adjust as necessary.

TIPS FOR SETTING THE SLIDE IN FINAL POSITION:

- It may take a series of adjustments to get the slide in its correct position.
- At this point the entire slide should be assembled, anchor supports attached and all bolts correctly tighten. The slide should be blocked up in its approximate horizontal and vertical position. *(Continued on next page)*

STEP 8: FINAL SLIDE POSITION - Continued

TIPS FOR SETTING THE SLIDE IN FINAL POSITION - Continued

- Now, put exit section is in its correct horizontal and vertical position relative to the pool edge by adjusting the blocks.
- Then, start at the top of the slide and work down using an angle finder along the center of the flume, adjust the blocks to achieve the correct angle for the flume.
- Once the angle for the flume is set correctly, re-check the position of the exit section for alignment and height above water, adjust as necessary.
- Then, start at the top of the slide and work down, adjust the blocking materials to level the flume from side to side.
- Once the flume is level from side to side, re-check the position of exit section for alignment and height above water, adjust as necessary.
- Repeat this process until the entire slide is correctly positioned.

STEP 9: POUR CONCRETE PIERS

Once the correct horizontal and vertical position of the slide has been established and verified, pour the concrete around anchor supports and allow to cure.

STEP 10: CONNECT WATER SUPPLY SYSTEM

The BYOS 2 slide can be plumbed with rigid 1" PVC pipe or with 1" Flex PVC, you may find that Flex PVC works best.

Glue and slip pipe into the 1" female fittings on the underside of the Entry section. (Fig. 23 & 24) Use PVC primer and glue (not included) as required.

The BYOS 2 has two water delivery units. A ball is valve recommended on each side to evenly adjust the water flow.







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BYOS 2 FLUME & ANCHOR SUPPORT HARDWARE

The entry frame support anchor comes with a part specific hardware kit. Use hardware set BYOS2-101-SS.

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The 20° support anchors all attach to flume sections using the hardware kit BYOS2-102-SS.



| | FIG. 25 (BYOS | 2-101-SS) | FIG. 26 (BYOS2-102-SS) | |
|---|-------------------|--|------------------------------|--|
| Entry Section/Handrails SS Hardware Kit | | | ume to Flume SS Hardware Kit | |
| BYOS | 52-101-SS – ENTRY | SECTION/HANDRAILS SS HARDWARE KIT | | |
| QTY | PART NUMBER | COMPONENT DESCRIPTION | | |
| 12 | H-SS 3/8XI HB | 3/8''-16×1'' Hex Bolt Stainless Steel | | |
| 20 | H-SS 3/8 FLT WA | 3/8'' MS 815 Flat Washer Stainless Steel | | |
| 12 | H-SS 3/8 LOC WA | 3/8'' Lock Washer Stainless Steel | | |

3/8" Hex Nut Stainless Steel

Single Use Anti-Seize Packet

| BYOS2-102-SS – FLUME TO FLUME SS HARDWARE KIT | | | | | |
|---|-----------------|---|--|--|--|
| QTY | PART NUMBER | COMPONENT DESCRIPTION | | | |
| 7 | H-SS 3/8×1-34 | 3/8''-16X1-3/4'' Hex Bolt Stainless Steel | | | |
| 14 | H-SS 3/8 FLT WA | 3/8'' MS 815 Flat Washer Stainless Steel | | | |
| 7 | H-SS 3/8 LOC WA | 3/8" Lock Washer Stainless Steel | | | |
| 7 | H-SS 3/8 F NUT | 3/8''-16 Hex Nut Stainless Steel | | | |

HARDWARE NOTE:

Use a small dab of anti-seize lubricant (included) on all bolt threads.

ADDITIONAL ANTI-SEIZE NOTICE:

H-SS 3/8 F NUT

H-ANTI-SEIZE

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S.R.Smith adds additional anti-seize packets to BYOS1 & BYOS2 shipments, as follows:

I-5 sections: I packet, included in the BYOS-101-COMBO or BYOS2-101-SS kit.

- 6–10 sections: +1 packet, added to last section before exit*.
- 11–15 sections: +2 packets, added to last section before exit*.

16-20 sections: +3 packets, added to last section before exit*.

21+ sections: +4 packets, added to last section before exit*.

* BYOS2 exits do not have hardware.

BYOS 2 SLIDE CARE & MAINTENANCE

Your BYOS slide requires periodic maintenance to keep it looking like new and protected from the elements.

- Wash slide monthly or more frequently if needed using a mild soap and soft brush cloth. Keep cleaning materials from entering pool.
 - Do not use abrasive cleaners, bleaches, chlorines, high alkaline or strong acidic cleaners.
 - Do not use steel wool, wire brushes, metal scrapers, Scotchbrite or other abrasive sponge pads.
- Keeping your slide's gel coat finish coated with wax starting when the slide is new is the best way to prolong its life.
 - Choose a wax intended for use on gel coat surfaces. Preferably one designed for use in a Marine environment.
 - Test product on small inconspicuouse section of slide prior to full application.
 - While application instructions will vary between brands of wax, in general you apply the wax with a cloth or foam pad using circular motion. Once wax dries to a haze, buff the excess with a soft dry cloth.
 - Routine waxing (at least twice a year) will maintain the smooth reflective surface of your slide.



| INSTALLATION INSTRUCTIONS | | BYOS 2 SLIDE |
|---------------------------|---------|--------------|
| | NOTES: | |
| | INOTES. | |
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