# **Custom Spa Vault Installation Guide**

For 6 and 7 series Bullfrog Spas





Bullfrog Spas Of Northern Utah | 380 e 2000 N North Ogden Utah | (801) 737-4515 V-1.0 | Last Revision 1/16/18

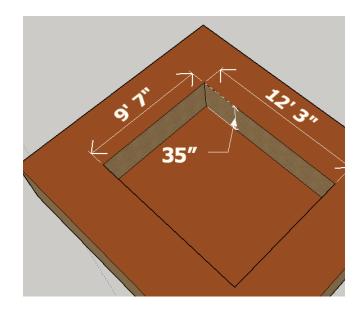
#### **STEP 1: EXCAVATION**

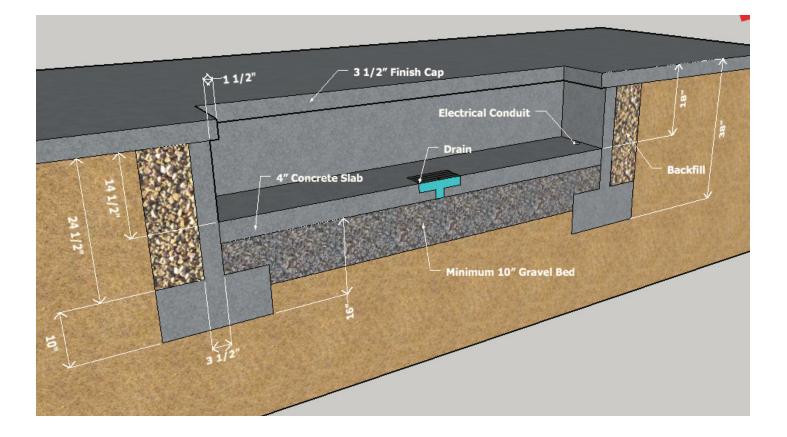
• Important: Prior to excavation, schedule with local utility companies to mark any buried utility lines.

A. Select spa site, determine finished elevation, and the direction the spa equipment will be facing. Ensure that surrounding surfaces slope away from the Spa.

## B. Minimum excavation to be 9'-7" x 12'-3" x 35" deep.

(if a 10" bed of gravel is determined NOT to be a sufficient drain sump, excavation depth may need to be deeper depending on the soils ability to drain.)



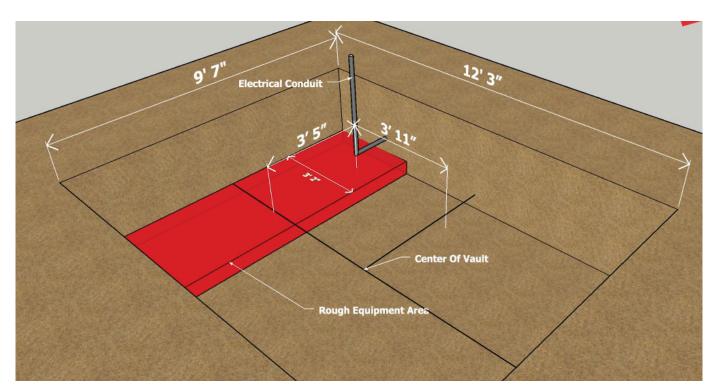


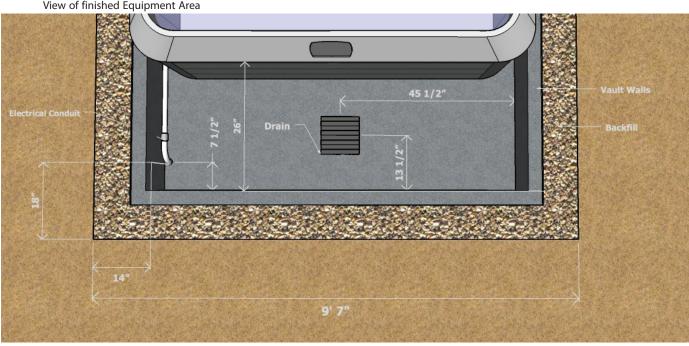
### **STEP 2: ROUGH ELECTRICAL**

\* After you have finished excavation and have determined the front of the spa, you may rough in the electrical conduit.

A: The conduit must be contained in the equipment access area which should be the front 26" of the vault, (see step four). The area is approximately 3' 2" from the front of the excavation area.

B: Rough the counduit in approximately 3' 5" x 3' 11" from the center of the vault.





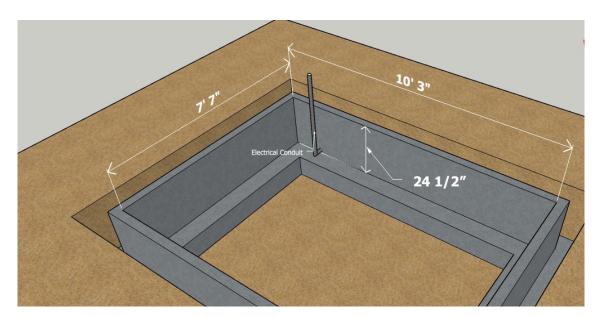
View of finished Equipment Area

#### **STEP 3: VAULT WALLS**

\* The overall dimensions of the spa is 7'4" x 7' 4", \*note" only the concrete cap needs to be these dimensions. The vault pad should be 3" bigger allowing room for installation.

A: After determining and pouring appropriate footings, the walls of the vault should be poured with interior demensions of 7'7" x 10'3".

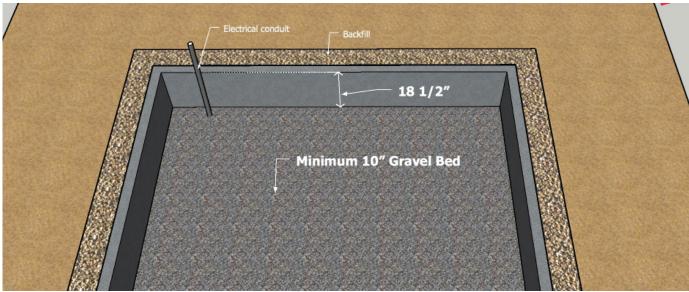
B: The depth of the walls is determined by the depth of gravel needed. In this scenario the walls are 24 1/2" from the tops of the footings to the top of the excavation area.



**STEP 4: GRAVEL BED** 

A: After the vault walls have cured, backfill and provide a minimum of 10" of gravel for drainage.

B: From the top of the vault walls to the top of the gravel bed should be 18 1/2", allowing room for a 4" concrete pad.



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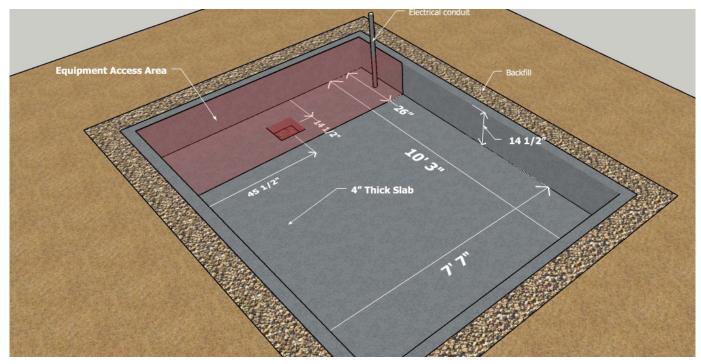
#### **STEP 5: SPA SLAB**

A: A 4" concrete pad should be poured inside of the vault walls at a depth of 14 1/2".

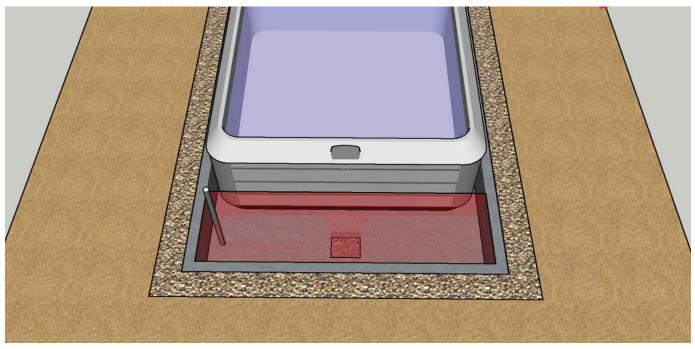
B: The pad should be 7' - 7" x 10' - 3" x 4" thick.

C: The equipment access area is the front 26" of the vault, (shown in red) This area should contain the electrical conduit, a drain that is centered in the space, and a sump pump, (if necessary).

D: This pad needs to evenly support the spa and must be both flat and level.



View of Spa in vault. Equipment access area is shown in red. Everything needs to be contained in this area.



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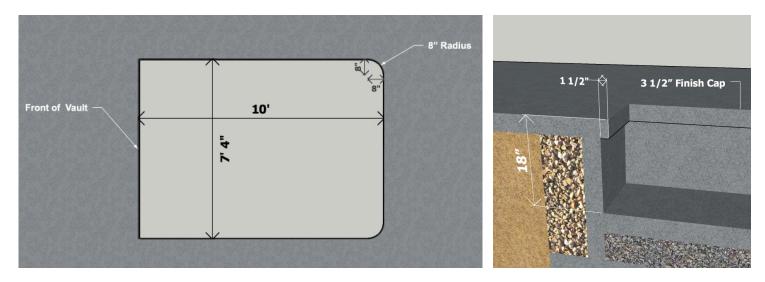


#### **STEP 6: VAULT CAP**

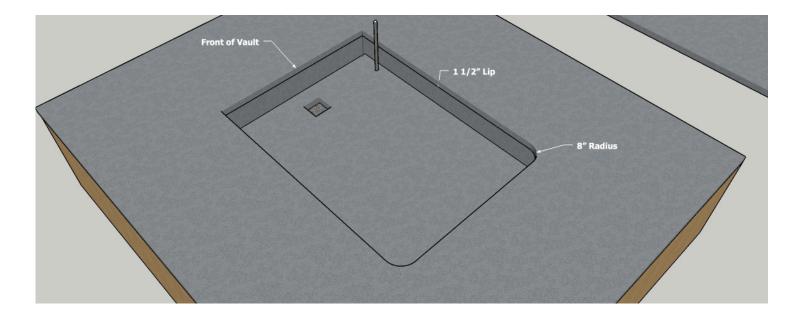
A: The finishing cap of the vault will overhang the spa vault walls by  $1 \frac{1}{2}$  making the finish interior dimensions 7' - 4" x 10'

B: On the back side of the vault (opposite the equipment access area), the cap needs an 8" radius to accomodate the curve of the spa.

C: The finished depth of the vault from the top of the slab to the top of the cap should be 18". This leaves between 14" - 18" of the spa above ground, (depending on the spa model).



Note that the 8" radius is opposite of the equipment access area.

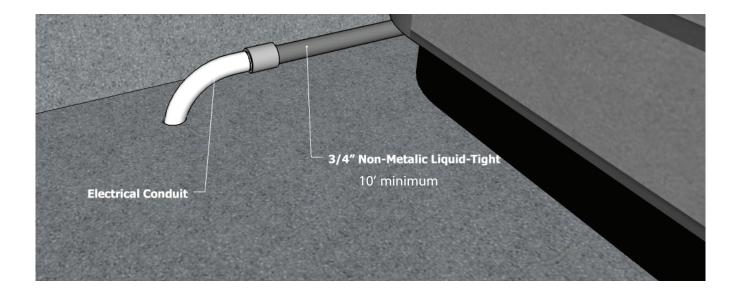


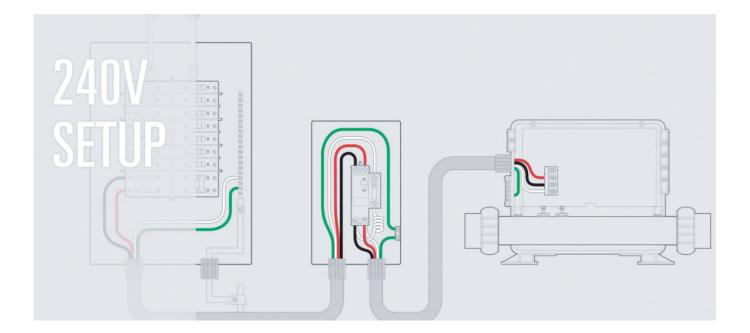
#### **STEP 7: ELECTRICAL TRIM-OUT**

A: The spa requires a 50amp 240V service.,(2 x hots, a neutral, and a ground.) This line must be protected by a 50amp GFCI.

B: Inside of the vault, the electrical conduit should transition from hard-pipe to 3/4" non-metallic liquid-tight or some other flexible conduit. We expect this whip to be a minimum of 10'.

C: The spa installers will make the final connection if these items are complete before delivery.







#### **STEP 8: DECKING**

A: After the installation of the spa, a removable deck must be built to cover the equipment access area.

B: The size of the deck depends on the spa model installed, but should be built to be removed by one person so that a technician can service the spa as needed.

C: Our recomendation is to make the entire deck romovable in one piece as shown below.

