

CONCRETE PAD

PRO: LOOKS CLEANER IN WINTER NOT TO SEE BLACK CORES



CON:-COST MORE

FOUNTAIN SLAB - INSTALLATION GUIDE:

SUBMERSIBLE PUMP OPTION

- MORE MAINTENANCE - BLOW OUT LINES
- HARDER TO REPLACE LIGHTS
- Remove all topsoil from the fountain site.



- Locate and mark the center point of the fountain as all measurements will be based off the center point.

NOTE: If the fountain shape is not circular, it may be necessary to create perpendicular guide lines with string to layout the shape correctly. The guide lines will also make it easier to locate the other components.

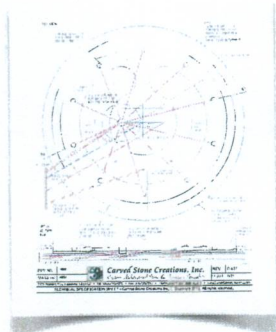


- A well-compacted base is required for the fountain slab. Depending on soil-type, or if fill is needed to compensate for uneven terrain, crushed stone is a good choice for base. Crushed stone will also aid in drainage.



FOUNTAIN SLAB - INSTALLATION GUIDE: SUBMERSIBLE PUMP OPTION

- At this point, determine where the autofill will be located. It will be visible above the waterline and should be placed in the least conspicuous location. Change the orientation on the **Slab Layout Diagram** to account for any adjustment.



Slab Layout Diagram

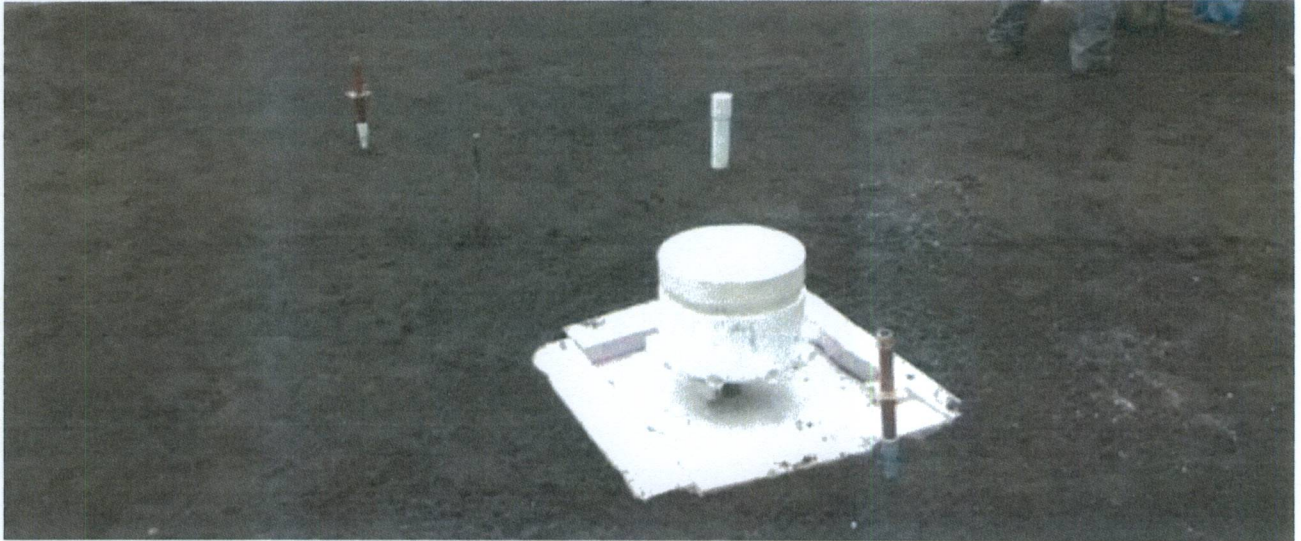
NOTE: The **Slab Layout Diagram** is a dimensioned CAD drawing unique to each fountain setup. It is critical that you are using the correct drawing supplied to you by Carved Stone Creations.

- Run all PVC lines from their marked locations on the **Slab Layout Diagram** to the corresponding utilities outside of the slab area. Be sure to maintain the minimum 1" in 10' pitch on all water lines.
- Typical fountain slab installations will include the following:
 - ✓ Line voltage electrical for pump(s) - 3/4" brass penetration
 - ✓ Water autofill line from water source - 3/4" brass penetration
 - ✓ Low-voltage electrical for UW LED lighting - 3/4" brass penetration
 - ✓ Residential Drain - 2" PVC with coupler for removable stand-pipe to drain
 - (or) Municipal/Commercial Drain - 2" NPT brass penetration with threaded stand pipe





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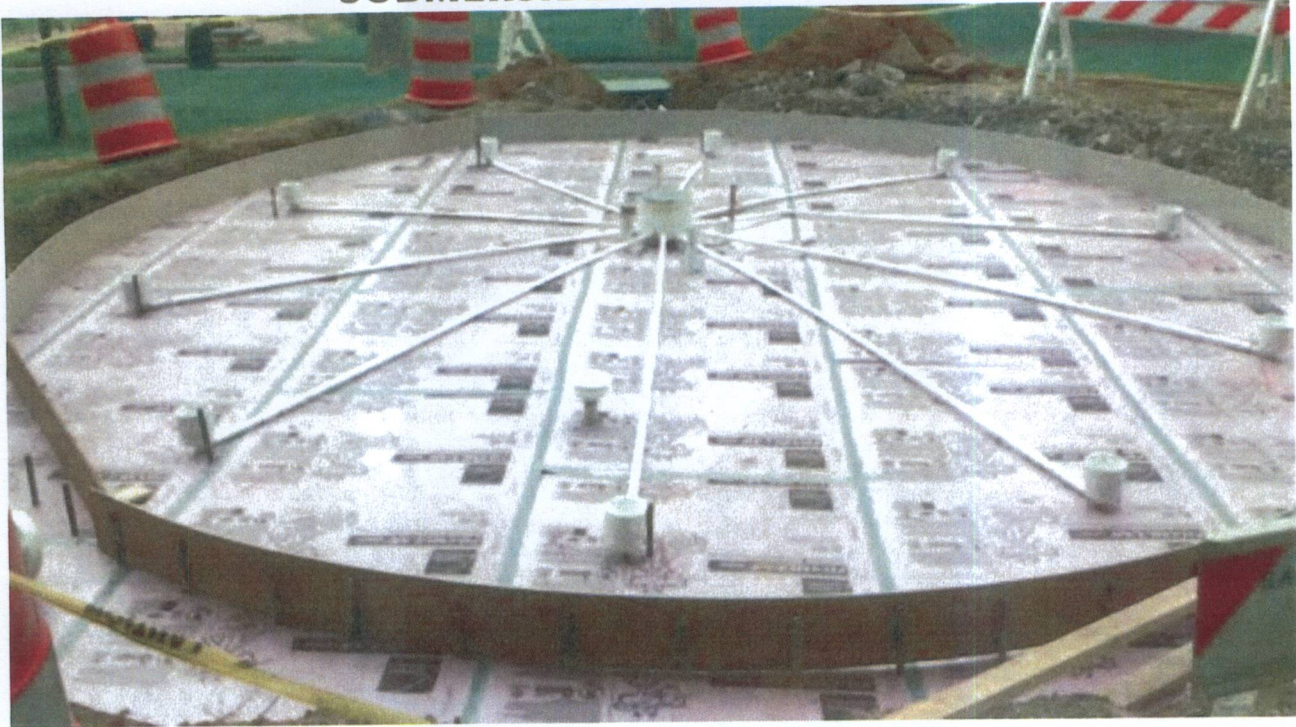


- For the slab flush-mount light system, the *UW Light Wiring & Drain Vault* will be set at the same elevation as the outside form.
- Remove material to place 2" foam while maintaining at least 4" space for concrete under the vault.
- Set the 3/4" brass penetrations 2" above finished concrete.
- Before covering lines, double-check the **Slab Layout Diagram** for correct locations of all inlets and outlets and that there is at least a 1" in 10' pitch on all lines.
- Compact the soil/gravel around the pipes where trenches were made.





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- Lay down **250 R-10 2" thick rigid foam insulation** to extend 12" beyond the concrete slab. Hold in place by taping the seams. This is critical to prevent frost-heave in freezing climates.
- Connect the **PVC Flush-Mount UW Light Housings** to the central light vault. The vault has a drain so all lighting pipes should maintain a drainage pitch of at least 1" in 10'. Depending on light location, they may not all be set at the same elevation.

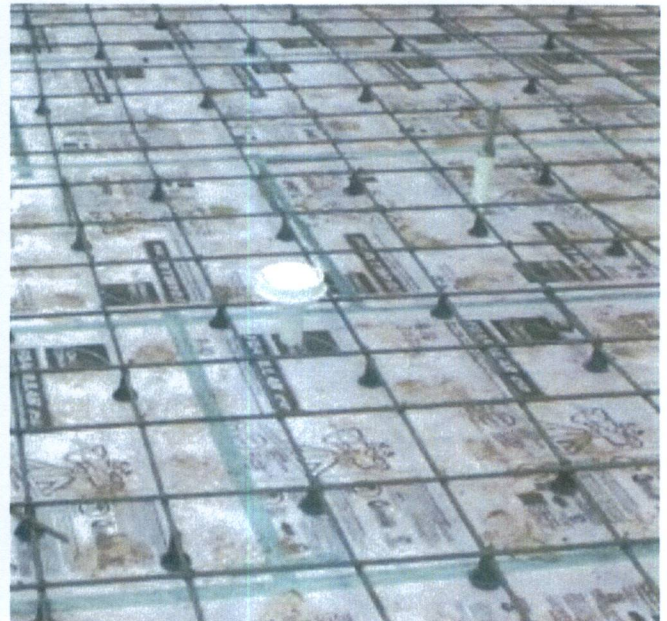




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- In some configurations, the lights will be located in an area sloped to the drain and will be set slightly lower than lights around the perimeter. Check with your **Slab Layout Diagram** to see if this applies.
- Mark out the shape of the fountain slab on the rigid foam.
- Following your marks, pound in metal stakes to hold the forms in place.
- Create a 12" grid on-center with 1/2" (#4) rebar laying perpendicular.

NOTE: Small pieces of foam can be placed under the light pipes to maintain a constant pitch to the central light vault. Stakes and tape are used to temporarily set the light housing depth until adequate concrete is beneath the housing for support.



- Ground all brass penetrations to the rebar grid.
- Place supports under the rebar to hold it in the center of the slab.
- Cover all penetrations and PVC openings with tape to prevent filling with concrete.
- It may be necessary to add weight to the light housings to prevent them from "floating up" in the concrete.
- Strike the slab flat first, then remove concrete from the sloped drainage area to create a slight pitch in a "U" shape with the drain located at the bottom of the "U".
- Keep the outside edges and center flat at the set grade as specified in the **Slab Layout Diagram**.





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- Concrete should have a steel finish (the same as the concrete finish on a garage floor)
- Wait at least 10 days before setting the granite surround on the fountain slab.
- Concrete will cure and gain nearly full strength in 21 days.
- The concrete mix should be at least 4,000-5,000 PSI with fiber mesh.



For technical assistance, please call 866-759-1920 from 8AM-5PM Mon-Fri or email info@CarvedStoneCreations.com