



Builder's Specifications



951-279-6059



poolcoverspecialists@yahoo.com

8/2025

QUICK REFERENCE

- VAULT SIZE 14" X 14" POOLS UPTO 60 FT LONG
- MOTOR END 36 INCHES OPPOSITE SIDE 10 INCHES
- ELECTRICAL FOR STANDARD UNIT 120 VOLTS, 20 AMP GFCI
PROTECTED
- HYDRAULIC UNIT 220 VOLT 20 AMP GFCI
- OPEN AIR DRAINS 3" MIN
- ENCAP TRACK COPING MAX OVERHANG 1" PAST ENCAPSULATION.
 - SCREW UP TRACK 2 ¼ " OVERHANG MIN 2 ½
- SWITCHES ALL MOUNT IN SINGLE GANG J-BOX
- ELECTRICAL IN VAULT CONDUITS SHOULD COME INTO VAULT (IN
THE CORNERS)
- HYDRAULIC HOSE RUN IN A 2" CONDUIT WITH LARGE SWEEPS ONLY



Scheduling Steps for a Infinity 4000 Cover System

1. CALL FOR A CONTRACT - We need the following information to write a contract:

- a. Pool Size
- b. Coping Type
- c. Do you want track retainer? (track retainer is required with stone coping)
- d. Do you want a pin down spa cover?
- e. Do you want to upgrade to custom walk on lid trays?
- f. Do you want a water feature auto shut off for a spa or water feature that will flow into the pool?
- g. Is there a raised bond beam?
- h. Home owners name, address and telephone number
- i. Your company name, address, office phone number

We will email you a copy of the contract after it is written

2. SIGN THE CONTRACT AND EMAIL IT BACK ALONG WITH THE DEPOSIT FOR THE POOL COVER

1. See the bottom of the contract for the payment schedule.
2. A Card Authorization Form will be emailed with you contract to make the deposit for the pool cover.
 - a. Please Note: we do not order pool covers without a deposit

3. NOTIFY OUR OFFICE FOR TRACK RETAINER OR TRACK HANG

1. For Track Retainer you need to call our office and schedule an appointment as soon as you have a gunite date. We will take the measurements for the pool cover system and vault lids to be made at this time.
2. For Track Hang you need to call or email our office and schedule an appointment as soon as you know tile and coping will be completed. We will take the measurements for the pool cover system and vault lids to be made at this time.

GIVING OUR OFFICE AS MUCH NOTICE AS POSSIBLE WILL ALLOW US TO GIVE YOU PROMPT SERVICE.

After track or track retainer has been installed the progress payment will be due. Remember, once the cover is made we can't change the color; so make sure your customer is sure of their color choice. Also, it is very important that you understand that we can't make a pool cover system without the progress payment. Not sending in your progress payment in a timely manner can hold up the installation of the pool cover.

Call or email and schedule installation as soon as you have a plaster date. Two weeks advanced notice is appreciated. Remember, pool covers can't be installed without water in the pool. In the late Spring and Summer months it is a good idea to call and get a prospective installation date when you have an idea you will be ready for track hang, track retainer or unit installation. It is easier to change an appointment than to fit an appointment into a full schedule.



Before we show up at the job site to do the installation, the following must be done to insure completion of the installation in 1 day: *(walk on lid trays are generally installed on a seperate day after the pool cover system is installed)*

1. A conduit must be run from the GFCI to the motor side of the unit, with wires pulled to hook up the motor. A J-box must be mounted in the vault to house the wiring. Please refer to the Spec. Sheet provided for details.
2. A conduit must be run from the Touch Pad or key switch location to the motor side of the unit, with wires pulled to hook up the Touch Pad or key switch to the motor. Please refer to the Spec. Sheet provided for details.
3. An open air drain must be present in the bottom of the vault. It is very important that the drain work properly, to help insure many years of trouble free usage of the pool cover system for your customer.

Please Note: If you are doing a hydraulic system, the conduits are different. Call the office for details.

VERY IMPORTANT....ALL SCHEDULING IS DONE THROUGH THE OFFICE CALL (951) 279-6059 FOR ALL APPOINTMENTS



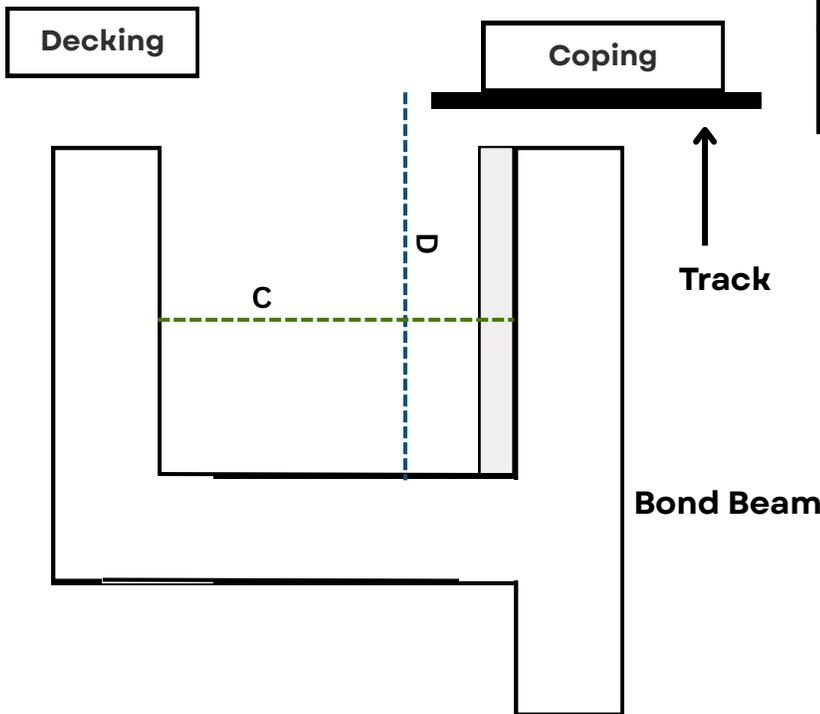


J-boxes mounted as high on the front and/or back walls of the motor side as possible.

- B. Motor End (electric) - 36" min. past tile face
- B. Motor end (hydraulic unit) - 25" min. past tile face
- A. Opposite End (electric) - 10" min. past tile face
- A. Opposite End of vault for hydraulic unit - 10" min. past tile face

C&D = Minimum width and depth for various pool lengths (not to exceed 16" in width) Box depth can be increased 3" to 4" for drainage slope.

PLAN VIEW



Pool Length	Min. C X D
up to 50 ft.	14" x 14"
50 ft. to 60 ft.	14" x 14"
65 ft. to 70 ft.	15" x 15"
over 70 ft.	call office

Shaded area indicates area used for anchoring. Please notify us if any plumbing, electrical or other obstructions are located in any of these areas.

SECTION VIEW

Coping/VAULT

POOL COVER SPECIALISTS/CA
501 N. Smith Avenue Ste. 107
Corona, CA 92880
Lic #720419
ph (800) 996-1990



Concrete Cover Housing Standard Walk on Lid installation

Concrete cover housing may be shaped and formed free hand or shot around a form. Walls must be straight and plumb, make housing square to pool. Steel cover housing walls same as pool. Do not allow rebound to be used for housing walls.

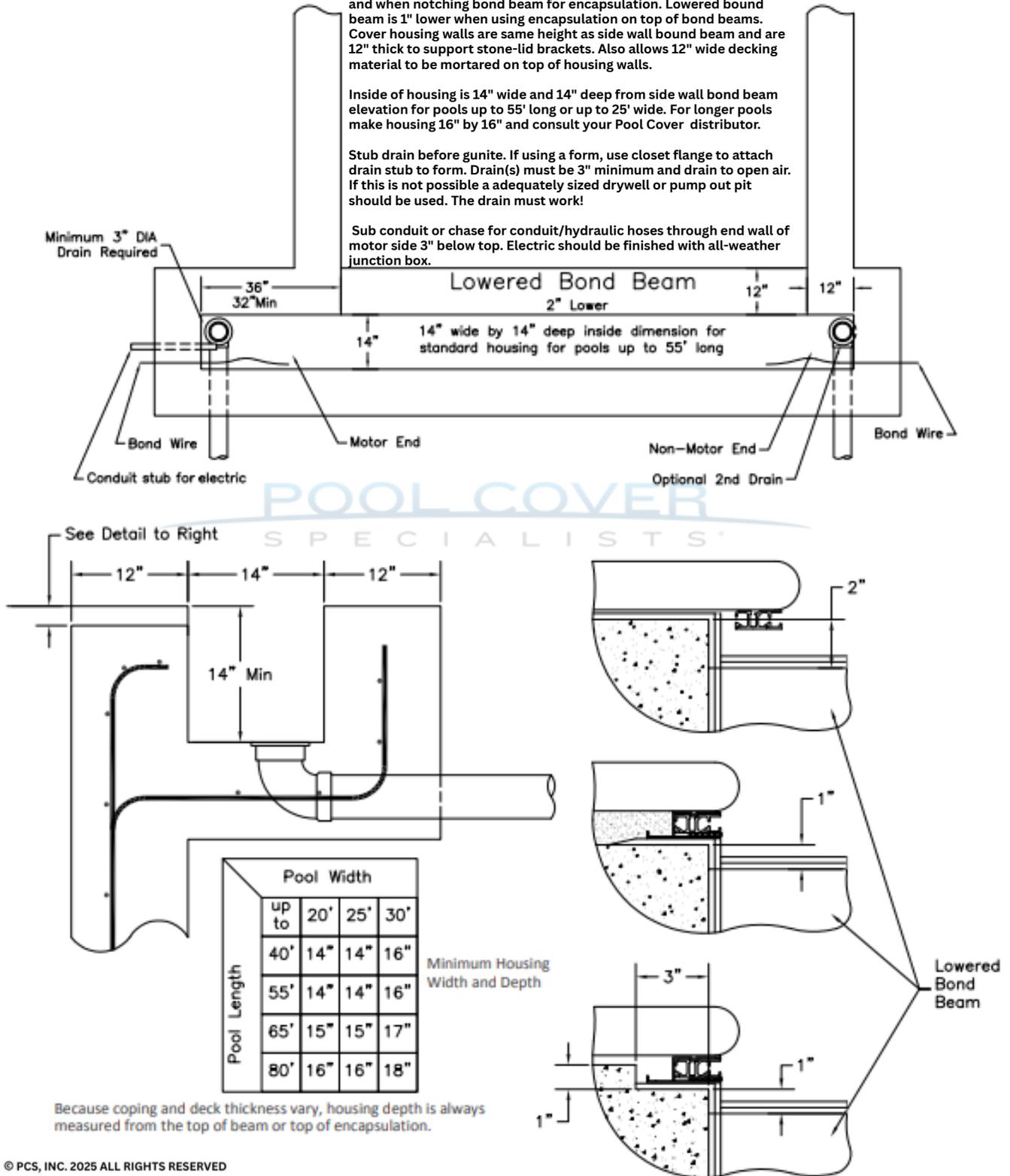
This cover housing show a motor-left, but motor can be on either side. The motor-end offset is 36" (32" minimum) from the inside edge of the pool wall.

The lowered bond beam is 2" lower for screw-on guide applications and when notching bond beam for encapsulation. Lowered bond beam is 1" lower when using encapsulation on top of bond beams. Cover housing walls are same height as side wall bond beam and are 12" thick to support stone-lid brackets. Also allows 12" wide decking material to be mortared on top of housing walls.

Inside of housing is 14" wide and 14" deep from side wall bond beam elevation for pools up to 55' long or up to 25' wide. For longer pools make housing 16" by 16" and consult your Pool Cover distributor.

Stub drain before gunite. If using a form, use closet flange to attach drain stub to form. Drain(s) must be 3" minimum and drain to open air. If this is not possible a adequately sized drywell or pump out pit should be used. The drain must work!

Sub conduit or chase for conduit/hydraulic hoses through end wall of motor side 3" below top. Electric should be finished with all-weather junction box.

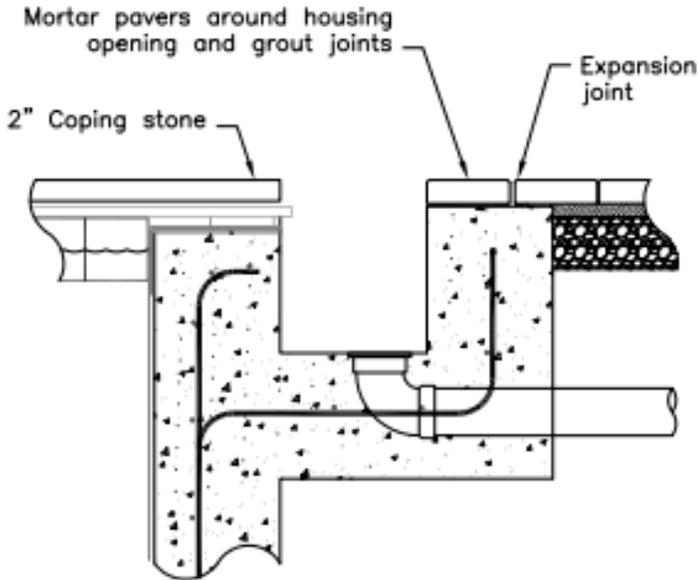


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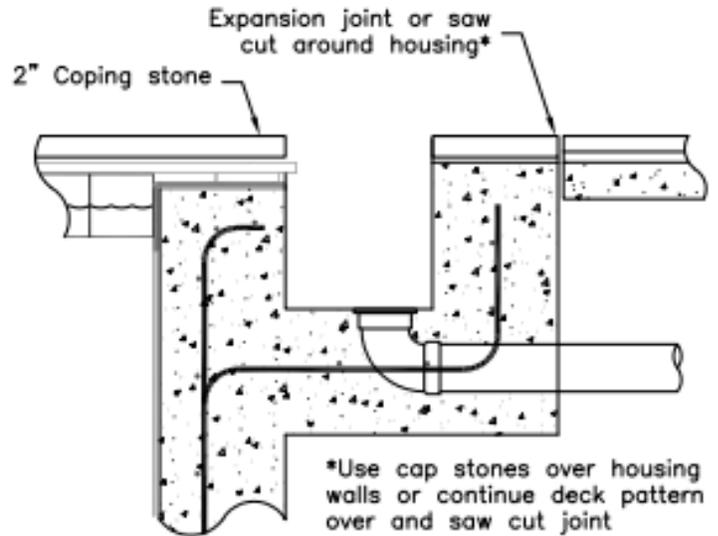


Finishing the Deck Around the Concrete Housing

Dry Laid Pavers

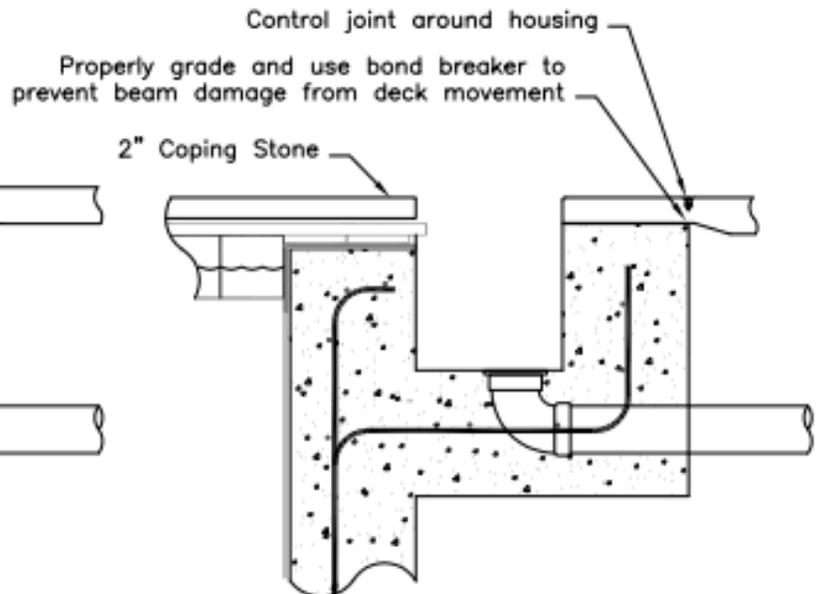
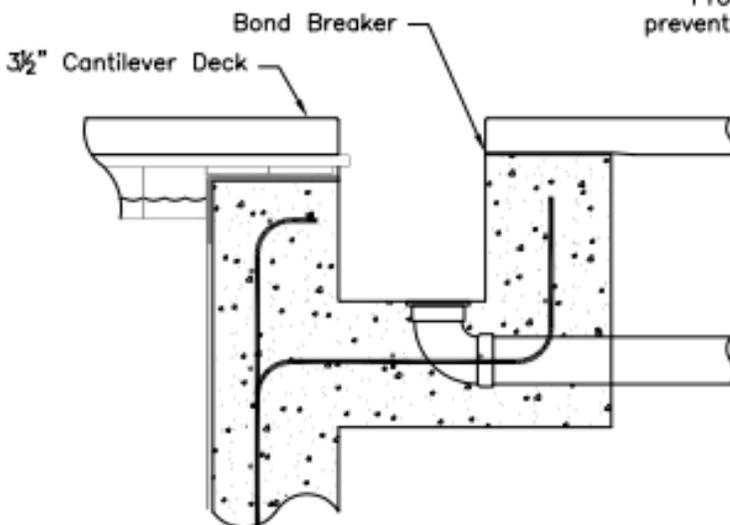


Sub-deck with Wet Laid Stone/Pavers



Coping Stones and Concrete Deck

Cantilever Deck

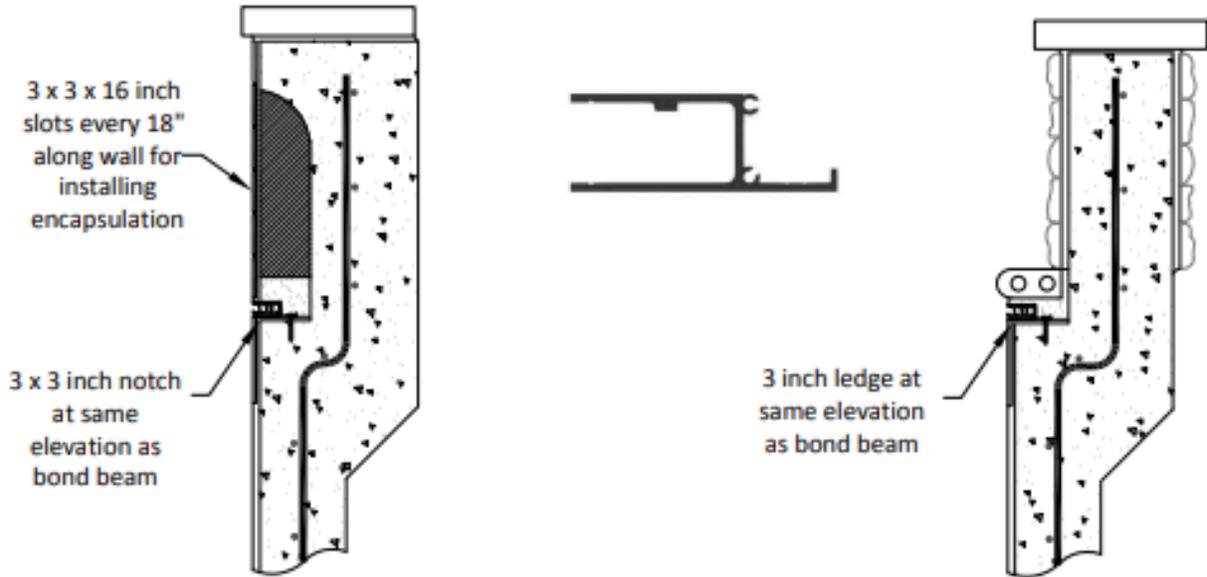


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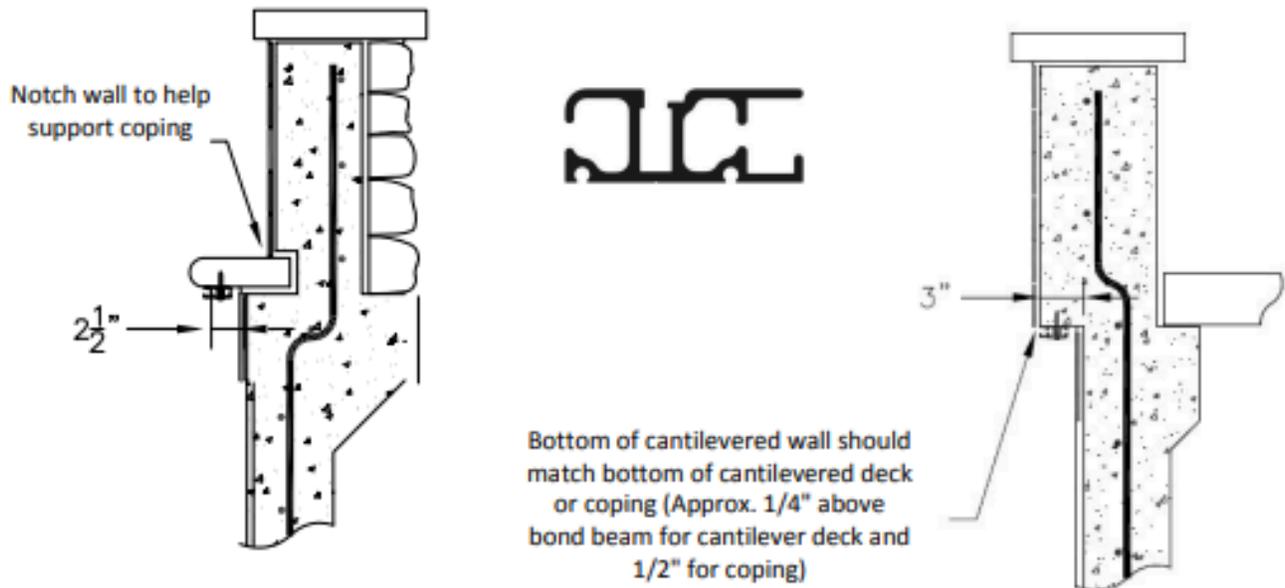
Raised Walls Flush to Pool Interior

Raised Wall for Gunite Retainer



POOL COVER
SPECIALISTS

Raised Wall for Drill-up Track



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Note: Tile, veneer stone and ledges for concrete deck or thick veneer are not specific to examples shown.



ELECTRICAL INSTRUCTIONS

Electric Under Track and Recessed Top Track

BONDING - All Coverstar pool cover systems require bonding. The electrician should provide a #8 AWG solid copper ground from the pool equipment pad to a ground clamp on the electrical conduit inside the housing, with a 3-foot tail that will be attached to the mechanism ground bar. Be sure to follow local codes in all instances. **Note: Place bonding wires at each end of the housing.**

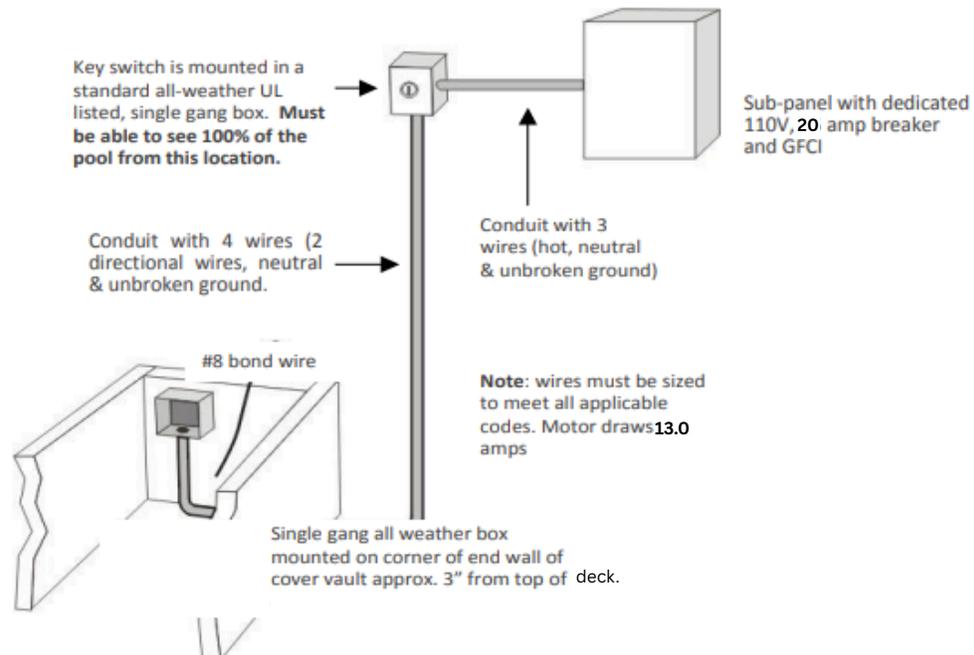
GROUND FAULT CIRCUIT INTERRUPTER - A GFCI must be used in the electrical supply line for the motor. This should be on a separate dedicated circuit only for the pool cover.

RUNNING WIRES - Bring 110V to the key switch insert minimum wire size 12 gauge. From the panel to the key switch, run 3 wires (hot, neutral and an unbroken ground). From the key switch to the motor end of the housing run 4 wires (two directional's, a neutral and an unbroken ground). Terminate the wires in a weather tight "J" box. The motor is 110V, 3/4 HP with full load amperage of 13.0 amps. Follow all applicable codes regarding wire size, grounding, connections, etc.

KEY SWITCHES - Mount a standard, single gang, all weather junction box for the key switch at a point where **100% of the pool is visible**. **This is a mandatory requirement to meet ASTM safety standards.** The key switch should **not** be placed in the mechanism box. This does not meet UL standards or code.

OPTIONS - PCS has several different wiring options that includes limit switches, wireless remote control, water feature shutoffs etc. Contact your PCS distributor for details.

Note: Builder is responsible to bring proper electric lines, conduit and bonding to the mechanism.



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Lid Options Compatibility and Considerations

Standard Aluminum Lid: Any housing, any deck

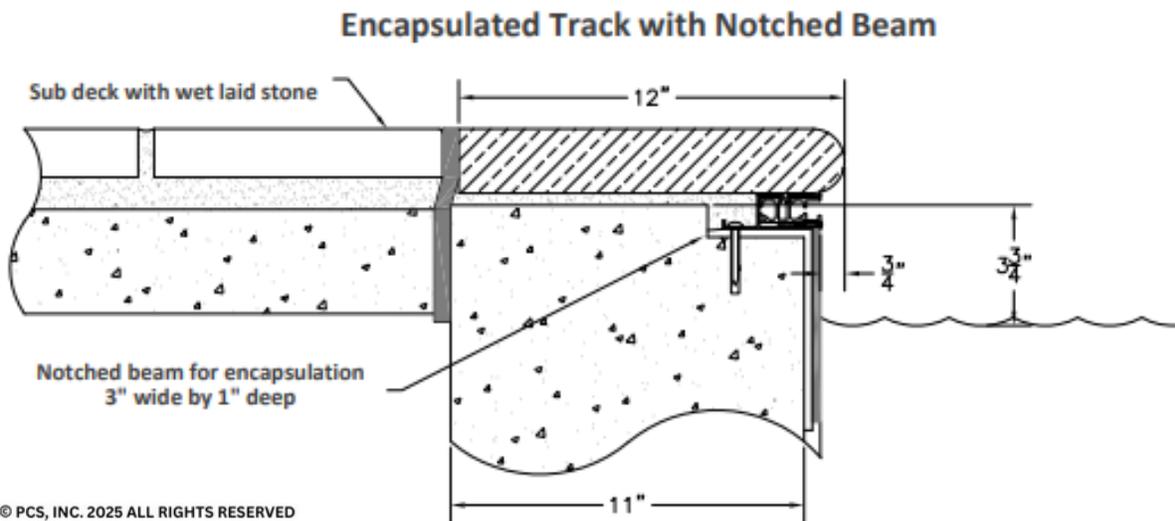
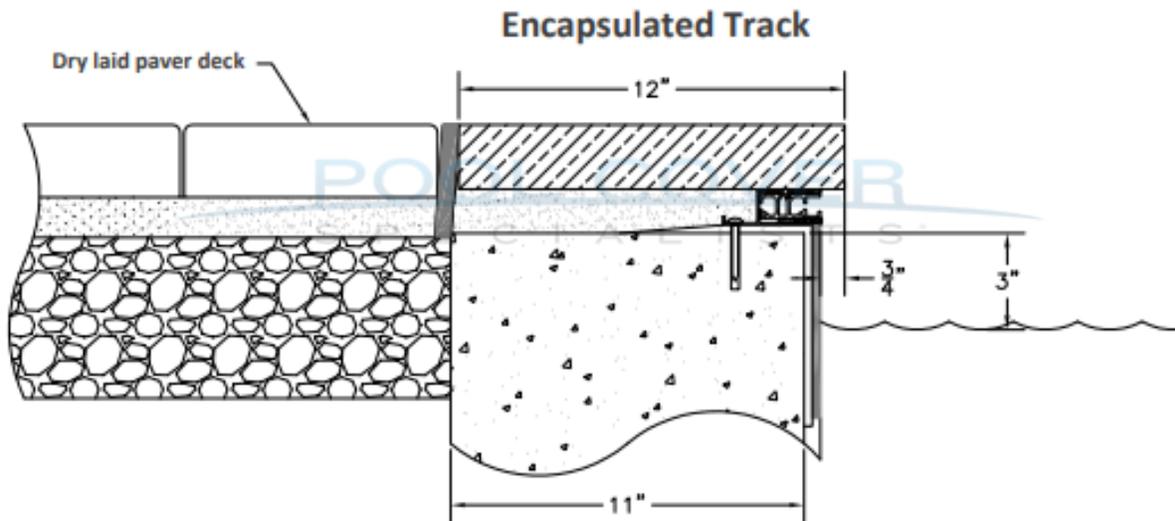
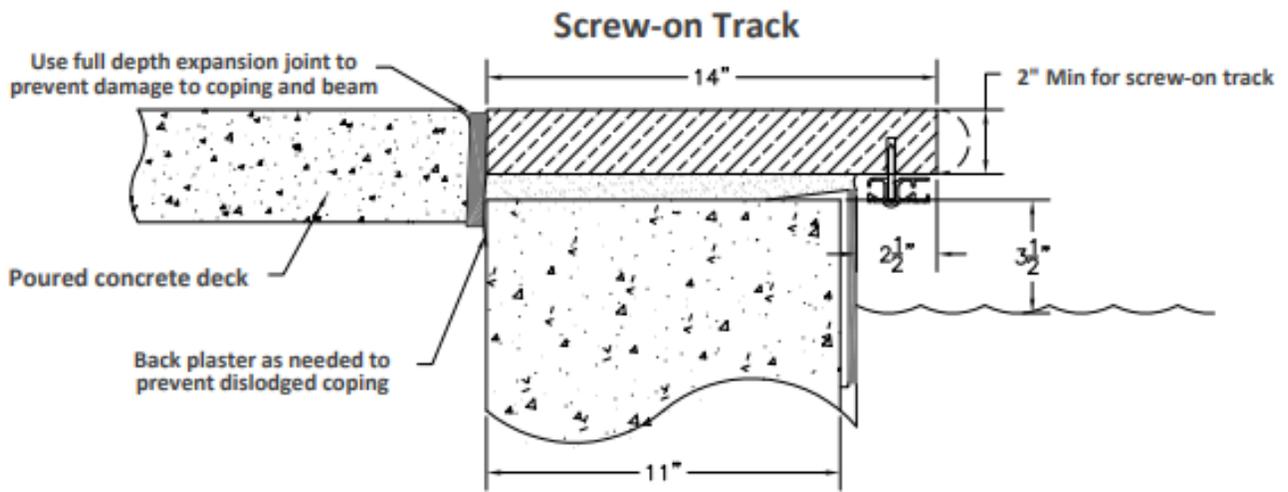
- Cannot be walked on.
- Clear anodized aluminum.
- Limited hinge range.
- End edges not beveled.
- Economical.

Walk-on Lid & XL Walk-on Lid: Requires concrete housing

- Walk on lid material cannot be thicker than coping material. (coping and mortar above encapsulation)
- Lid material must have sufficient flexural strength to span brackets and support a person's weight. 2" thick material is recommended and 24" bracket spacing. Strength of material responsibility of builder.
- Housing perimeter forming for concrete decks only.
- Pavers/stone over housing walls must be mortared to the concrete housing/poly housing concrete collar and open joints must be grouted.
- If lid material (brick/paver) does not span brackets. Additional support system will be needed. Metal trays are available for mortaring bricks to, 1" slate also may be used. Using a thicker mortar joint between coping and encapsulation will allow for room for a thicker support for bricks. Builder is responsible for strength of assembly.
- Lid stones must be at least as wide as housing opening, 14" typical.
- Joints in lid stones cannot be located within 6" of guides.
- See special application section for hidden leading edge bar lid requirements.



Under Track Coping & Deck Detail



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Slack in Automatic Pool Covers

From time to time the question arises about the need for slack in automatic pool covers and how much is enough. Regardless of manufacturer, all automatic pool cover fabrics are made wider than the width of the track. There are several reasons for this:

1. A cover that is too tight will pull against the tracks and will not operate properly. A cover that is made too small reduces the life of the cover and mechanism, causing premature failure of both the fabric and the mechanism due to the added stress.

1. All fabric shrinks over a period of time. The amount of the shrinkage varies widely according to the weather conditions, particularly the amount of time the cover is exposed to the sun. Slack is always added to the fabric to compensate for potential fabric shrinkage.

1. In order to meet the ASTM safety standards, the cover must lie on the water, most of the supporting strength of the cover comes from the support of the water directly under it.

POOL COVER

Each cover we manufacture is made with the slack calculated on the basis of the type of fabric, application, and unit. Any other variables that may be brought to our attention are also included. Initially, a properly sized cover will drop almost directly down from the track or deck to the water, with some folds & wrinkles as it crosses the pool. Because each cover is subject to many variables, it is impossible to calculate the exact amount of shrinkage each individual cover will have, so an approximation is made based on our past experience. Our slack formula is designed to give the cover and mechanism maximum life, as well as making the cover look as attractive as possible.

In some cases, a portion of the slack may be taken up by lowering the water level. However, you should consult with your pool builder or service man before doing so. They can advise you exactly where the water level should be to keep the pool equipment operating properly.



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Walk-on Lid

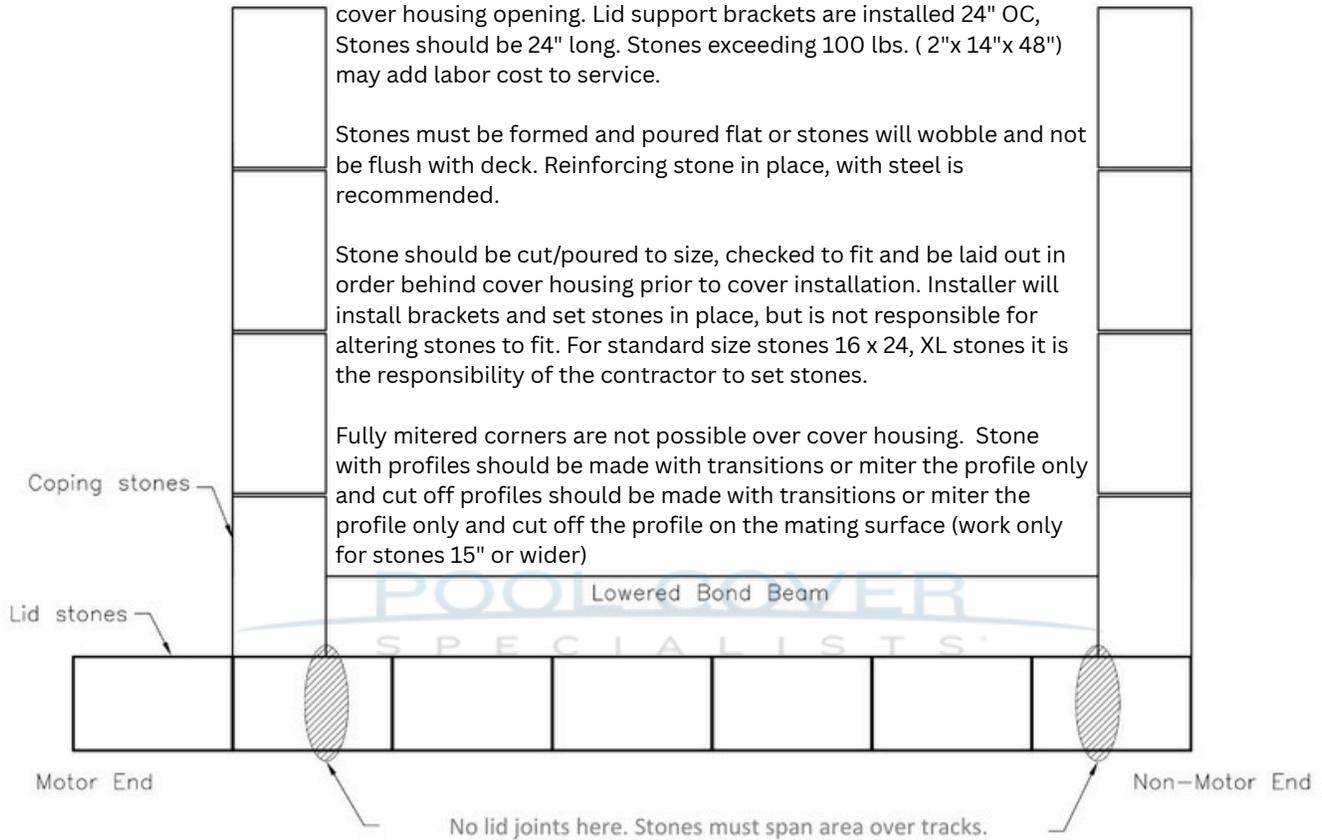
Deck must be level, straight and flat around the perimeter of the cover housing. Do not slope deck around motor end or lid stone will not sit flush.

Lid stones cannot be thicker than coping or deck over the guides. Stones should be at 2" thick. Stones should be 1/4" narrower than the cover housing opening. Lid support brackets are installed 24" OC, Stones should be 24" long. Stones exceeding 100 lbs. (2"x 14"x 48") may add labor cost to service.

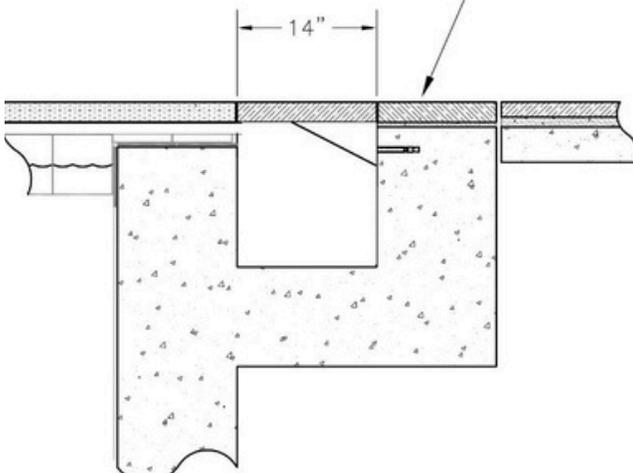
Stones must be formed and poured flat or stones will wobble and not be flush with deck. Reinforcing stone in place, with steel is recommended.

Stone should be cut/poured to size, checked to fit and be laid out in order behind cover housing prior to cover installation. Installer will install brackets and set stones in place, but is not responsible for altering stones to fit. For standard size stones 16 x 24, XL stones it is the responsibility of the contractor to set stones.

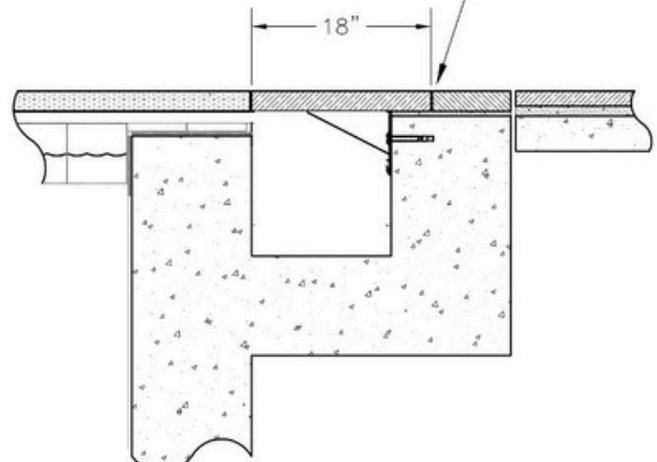
Fully mitered corners are not possible over cover housing. Stone with profiles should be made with transitions or miter the profile only and cut off profiles should be made with transitions or miter the profile only and cut off the profile on the mating surface (work only for stones 15" or wider)



Stone width is typically the same as the housing width

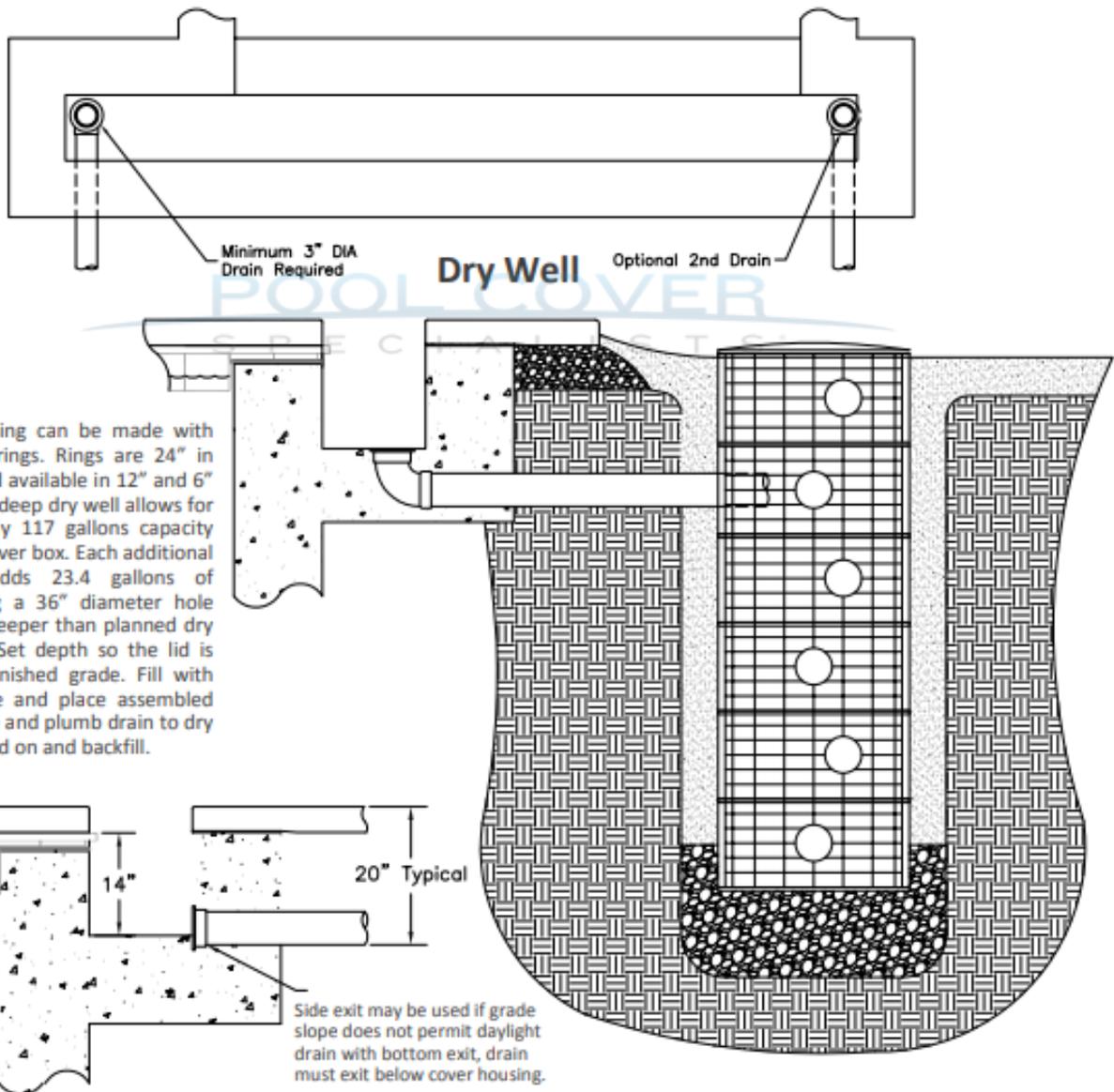


If using stones wider than housing, finish deck short and support back of stone with mortar



Cover Housing Drainage

Cover housing drainage should be considered in the planning stages of the pool project. Drains must be 3" diameter (3,000 GPH) minimum. The best drain is a 4" diameter (6,000 GPH) PVC schedule 40, bottom exit drain that runs to daylight (open air). If the site topography has no significant slope, the finished pool height should be elevated 24" above the surrounding grade. The size and number of drains should increase with the pool size. Drains should not be located in the center, but rather at the ends where they are more accessible to servicing. Stub drains before gunite. If using a form for the cover housing, use a closet flange to attach the drain stub to the form. The cover housing floor may be pitched towards drain for a total fall of 1-1/2". Never make the housing less than 14" deep. If it is not possible to drain to daylight, an adequately sized drywell or pump-out pit must be used. DO NOT use "French drains" where the drain is buried in a hole with gravel. These types of drains typically fail within a year. Soil may have poor drainage or become saturated in heavy rains. Even the largest gravel pit will not work when silt and debris clog the end of the drain. An open bottom 24" diameter dry well has 36 times the surface of a 4" pipe can be cleaned out and accommodate a sump pump. If the cover housing will be the overfill drain, it must be able to handle a forgotten hose (600-1500 GPH) or rainfall. If a 20 X 40 pool is left uncovered during a storm that has 2" rainfall per hour, the drain would have to handle 1,000 GPH. The drain must work!



Dry well casing can be made with septic riser rings. Rings are 24" in diameter and available in 12" and 6" heights. A 6' deep dry well allows for approximately 117 gallons capacity below the cover box. Each additional 12" ring adds 23.4 gallons of capacity. Dig a 36" diameter hole that is 12" deeper than planned dry well depth. Set depth so the lid is flush with finished grade. Fill with 12" of stone and place assembled rings in place and plumb drain to dry well. Screw lid on and backfill.

Pool Cover Specialists Hydraulic Unit Conduit and Electrical Requirements

- 1. Run a 2 inch conduit from the pump location to the drive end of the vault, using only sweeps for turns.**
- 2. Run a 1/2-3/4 inch conduit from the pump location to the power supply with 3 #12 gauge high voltage wires pulled and a 20 amp GFI breaker.**
- 3. Run a 1/2 inch conduit from the pump to the switch location. Pull 4 #18 to #22 gauge wires. Switch location must be a minimum of 5 feet off of the ground in full view of the swimming pool.**
- 4. Run a 1/2 inch conduit from the pump location to the drive end side of the vault. Pull 4 #18 to #22 gauge wires.**
- 5. Hydraulic unit use Auto Stops (Limits)**
- 6. Provide a 18" x 36" x 3" concrete pad at the pump location to mount the pump to.**

Note: All of our Hydraulic power units are 220v.

Any questions please feel free to call Scott Norris for technical support.

Scott Norris - 951- 733-2432

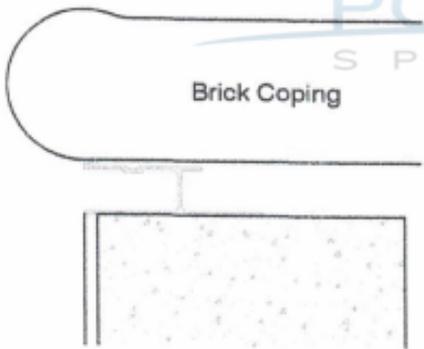
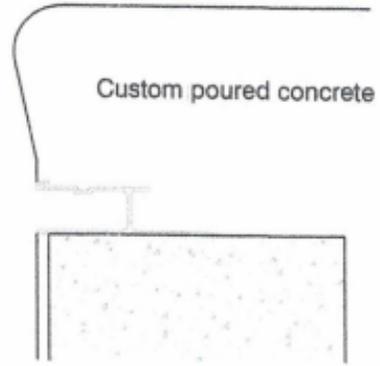
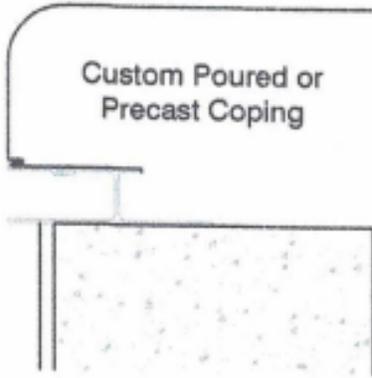
This is his cell phone number. If he doesn't answer please feel free to text him if it is urgent that you speak to him or give the office a call and they can assist you. Office-951-279-6059.



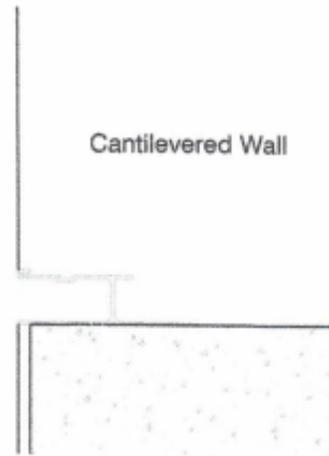
Flush Mount

POOL COVER SPECIALISTS NATIONAL INC.

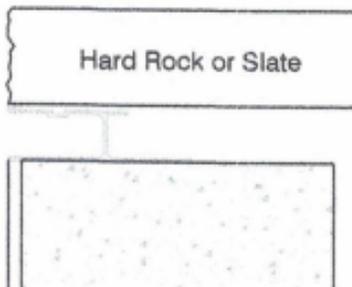
Outside Slider Gunite Track Retainer Cantilevered Coping Styles



Bull nose brick applications where it is difficult to hang track to the brick



Cantilevered wall applications for a water feature or planter

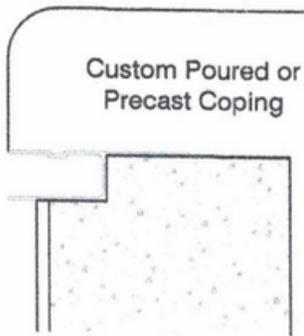


Hard rock or slate coping applications where it is hard to hang track to the rock or slate

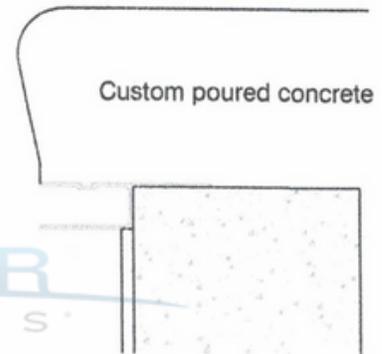
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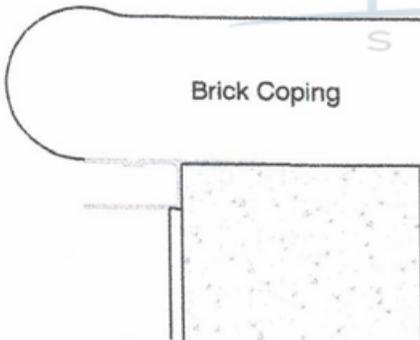
CANTILEVERED
POOL COVER SPECIALISTS NATIONAL INC.
Outside Slider Gunite Track Retainer Cantilevered Coping Styles



Use PCS form locks or Stegmeier forms

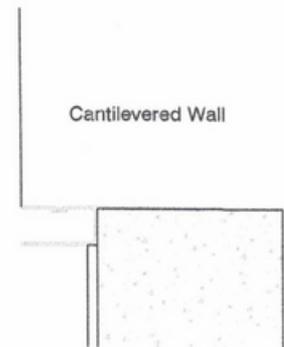


Custom poured concrete



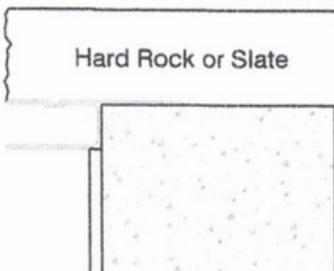
Brick Coping

Bull nose brick applications where it is difficult to hang track to the brick



Cantilevered Wall

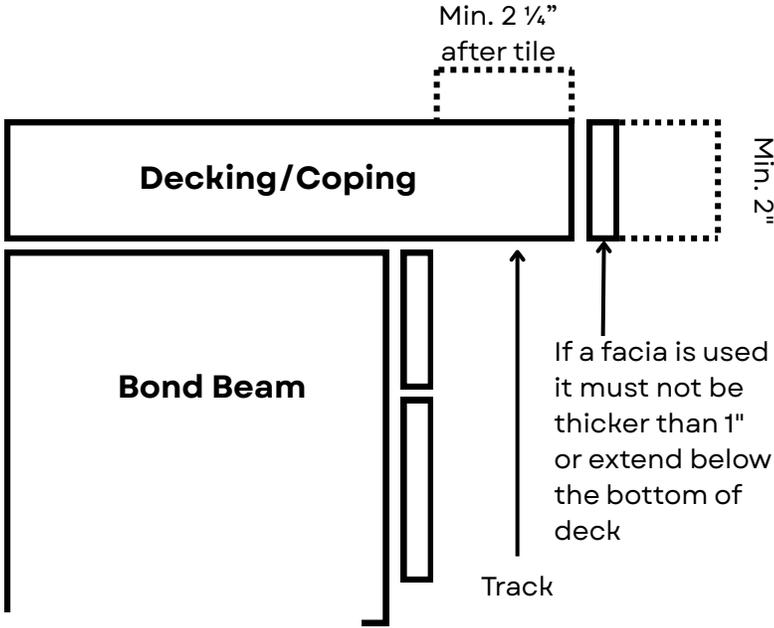
Cantilevered wall applications for a water feature or planter



Hard Rock or Slate

Hard rock or slate coping applications where it is hard to hang track to the rock or slate

DRILL UP TRACK

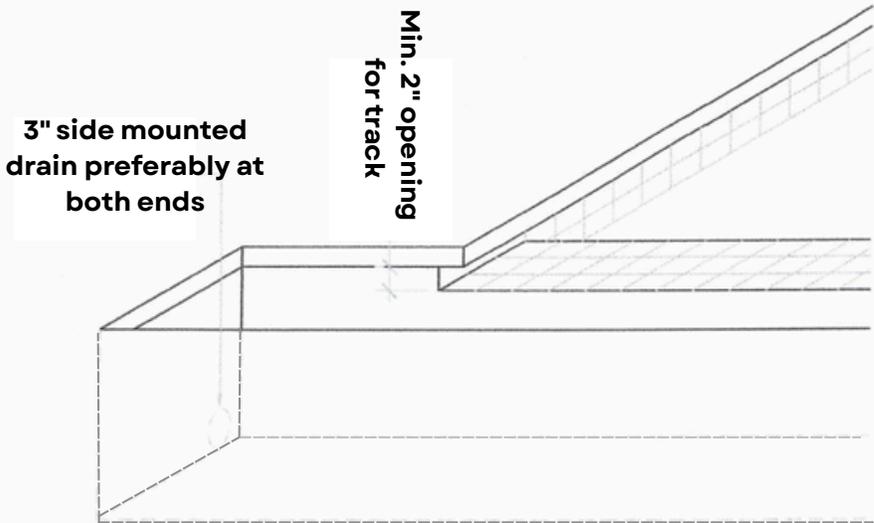


Description:

The pool cover track will be applied to the underside of the deck, The track will run continuously from 1" inside the cover housing to the far end, on both sides of the pool.

Provisions:

1. The deck must cantilever into the pool to create an overhang, after tile, of a minimum 2 1/4" on the long walls. See diagram. Suitable materials include poured concrete, and precast coping stones. Other materials may require track retainer installed prior to the decking material application.
2. The overhang must be continuous along both sides and the end opposite the cover housing (3 sides total). Also, please note: the cantilever at the end opposite the cover housing (generally the shallow end) must have a 2" overhang finished dimension, to allow the cover to completely close.
3. The overhang must be a minimum of 2" thick to facilitate the track mounting anchors.
4. The underside of the overhang must be clean, level, flat and suitable for the application of expansion type screw anchors. Damage to the decking as results from these requirements not being met are the responsibility of the builder. Otherwise the track retainer, mentioned above, may be required.



DECKING REQUIREMENTS

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