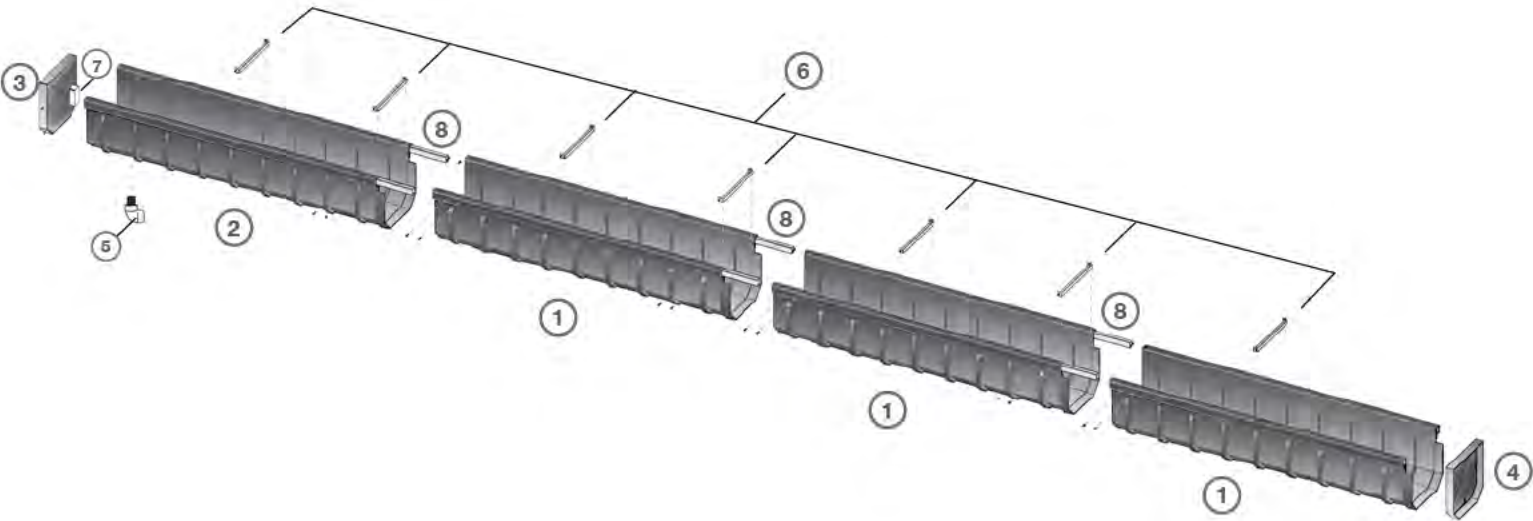


311 Polymer Housing Installation Guide



Contents

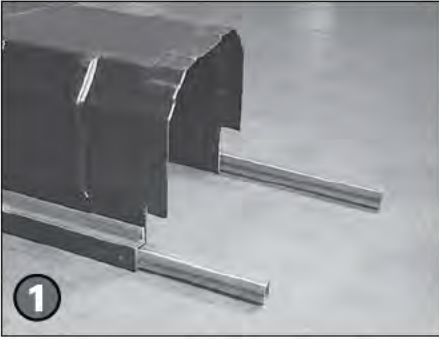
<i>Polymer Housing kit parts.....</i>	<i>2</i>
Assembling the Polymer Housing.....	3
<i>Mounting kit parts for vinyl liner pools.....</i>	<i>4</i>
Mounting to Vinyl Liner Pools	5
<i>Mounting kit parts for Gunite Pools.....</i>	<i>6</i>
Mounting to Gunite Pools.....	7
<i>Mounting kit parts for Recessed Topguide.....</i>	<i>8</i>
Mounting for Recessed Topguide	9
<i>Mounting kit parts for Pool-in-Pool Applications.....</i>	<i>10</i>
Mounting For Pool-in-Pool Applications.....	11



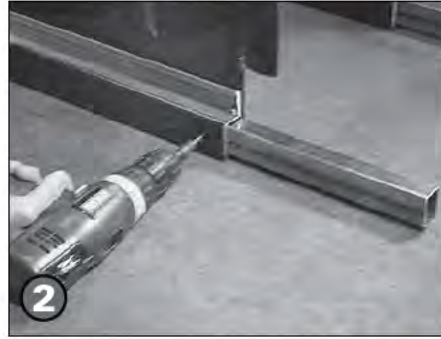
Polymer Housing Kit

	1		2		3		4		5		6
	7		8		9						

Assembly	Part#	QTY	Description
A2400 Polymer Housing Assembly 311 - For Pools Up To 24 ft			
1.	A1296	3	Polymer Housing 311 6 ft Section with rails
2.	A1297	1	Polymer Housing 311 6 ft section with rails and drain hole
3.	A2401	1	Box End for polymer housing 311 with junction box
4.	M9344	1	Box End for polymer housing 311
5.	A1177	1	Polymer housing drain assembly
6.	A2462	1	Hardware kit for polymer housing 311 (see below)
A2462 Hardware Kit For Polymer Housing 311			
1.	A1700	1	60 pk - Screw HHW tek #10 x 1 inch zinc (H9614)
2.	E1071	1	Cover plate single gang
3.	L9913	1	311 Polymer Housing Installation Guide (12 page B&W)
4.	M9340	6	Splice for polymr housing 311 Rectangular tube 1.5 in x 1 in x 17 3/4 in
5.	M9785	7	Polymer Housing Cross Brace 14 in steel



1 Slide rail splices (8, M9340) into first section of housing with drain hole (2, M9343). Splices should extend out from the housing 10-12 inches. Offset the splices at least 2 inches from each other.



2 Fasten both splices into place with two 1" tek screws (9, A1701) per splice.



3 Slide polymer housing sections together and join ends tightly.



4 Use a rubber mallet to tap the sections together if necessary.



5 Fasten both splices into place with two 1" tek screws (9, A1701) per splice. Repeat this process to complete the assembly of the polymer housing.



6 Fasten the sections together from the inside of the housing to the outside with six 1" tek screws. Repeat this process to assemble the full length of the polymer housing.



7 Cut off excess box with metal cutting blade. Housing should be 4 feet longer than the guide space. Fit the polymer end piece with junction box (3, A2401) into the motor end of the housing.



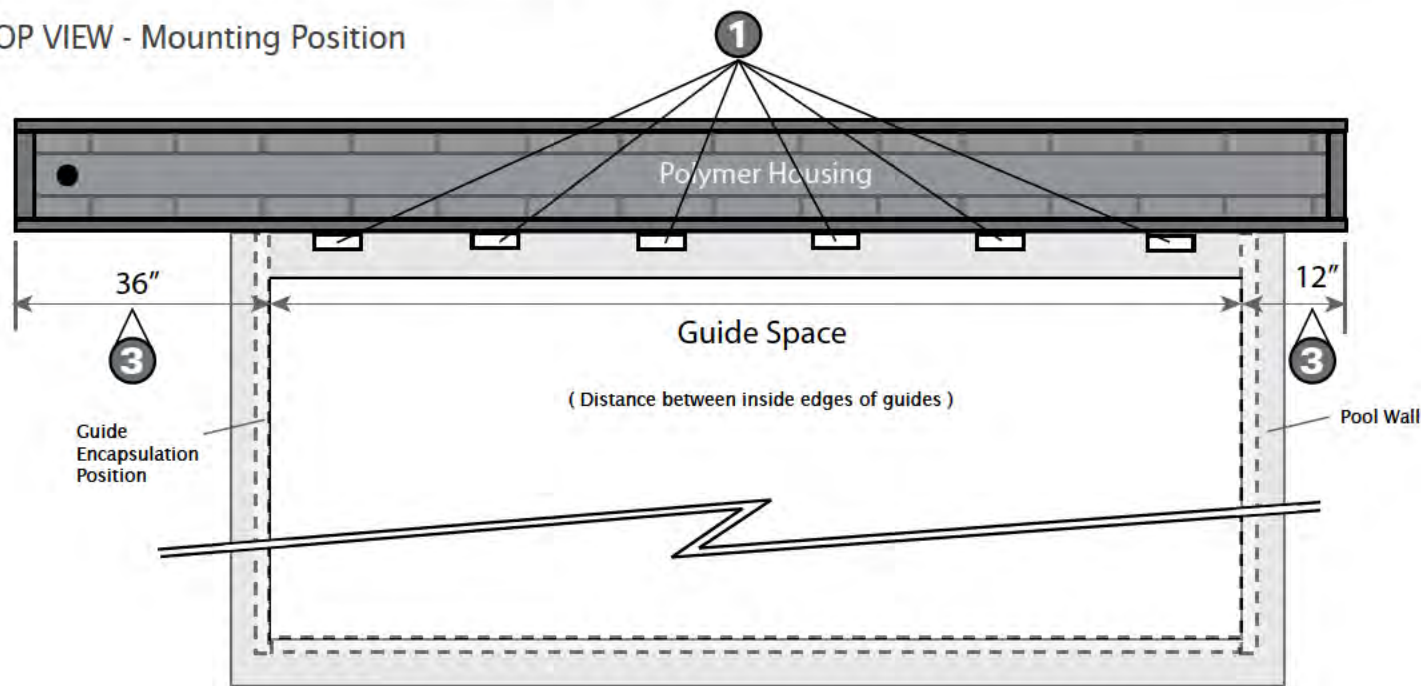
8 Now fasten end piece into place using eight 1" tek screws. To do this, position the end piece flush with the side wall of the housing and fasten one tek screw into each top rail as shown. All other screws should be fastened from the outside of the housing pointing in. Fasten the other box end (4, M9344) into place in the same manner on the opposite side of the housing.



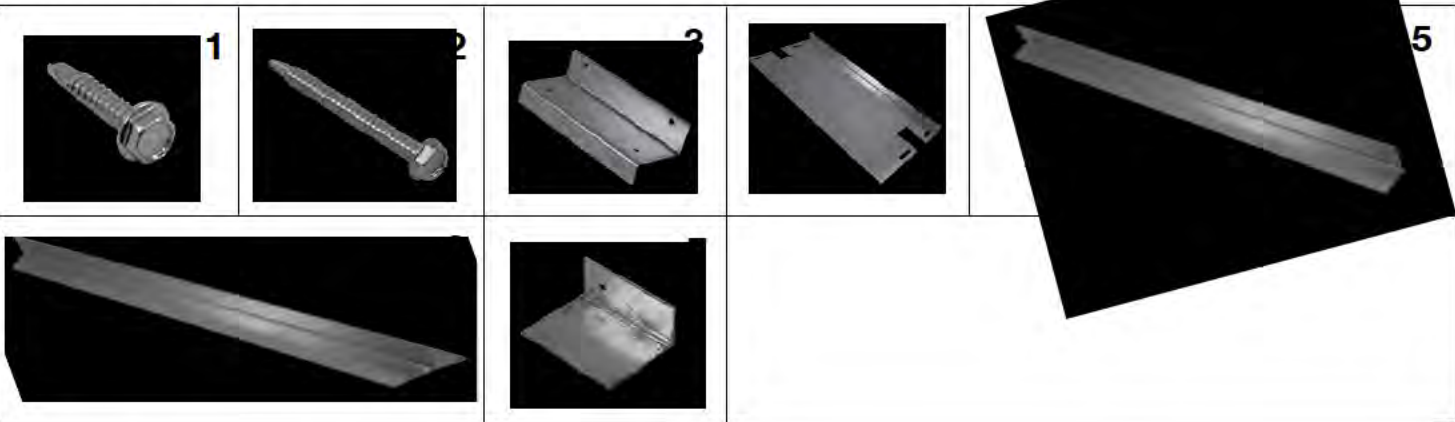
9 Install cross braces (6, M9785) 4 inches below the top of the housing every 4 feet.

Note: This is a very important step in order to prevent the housing from being deformed during the deck pour. Cut pieces of 2 x 4's can also be inserted into the ribs for added support if needed.

TOP VIEW - Mounting Position



Vinyl Pool Mounting Kit



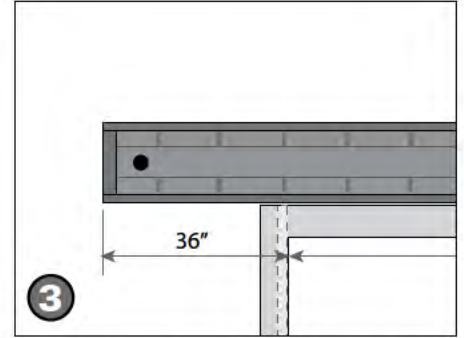
Assembly	Part#	QTY	Description
A2404	Polymer housing 311 mounting kit for UG (for VL pools)		
1.	A1700	1	60 pk - Screw HHW tek #10 x 1 in zinc (H9614)
2.	A1746	1	30 pk - Screw HHW tek #10 x 2 in zinc (H9659)
3.	M9345	6	Polymer housing 309 Z mounting bracket
4.	M9787	4	Polymer housing support bracket on V.L. pool walls (universal)
5.	M9788	10	Polymer housing mounting support brace (mounts vertically)
6.	M9793	8	Polymer housing mounting steel stake 30 in. long
7.	M9235	8	Polymer housing stake attachment bracket



Install the "z" mounting brackets (3, M9345) on the lip of the polymer housing every 24-26". Fasten each section in place with 1" tek screws (1, A1700).



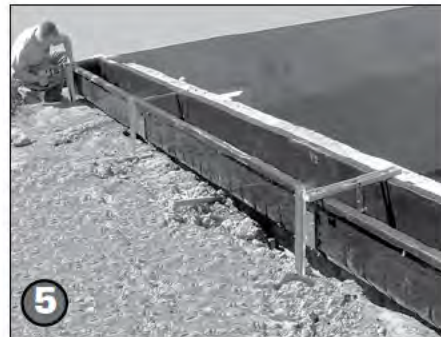
Place polymer housing support brackets (4, M9787) 14 1/4 inches below top of pool wall (See Side View, bottom of page), cutting braces as necessary. Bolt into place using wall joining hardware supplied by the pool wall manufacturer.



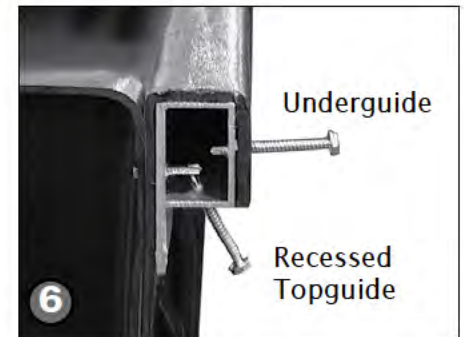
Place polymer housing on the large support brackets (4, M9787) with "Z" brackets (3, M9345) resting on the pool wall. Align the mark on the motor end housing (2, page 3, M9343) with the water side edge of the cover guide position.



Fasten the "z" channel bracket (3, M9345) to the top of the pool wall using 1" tek screws.

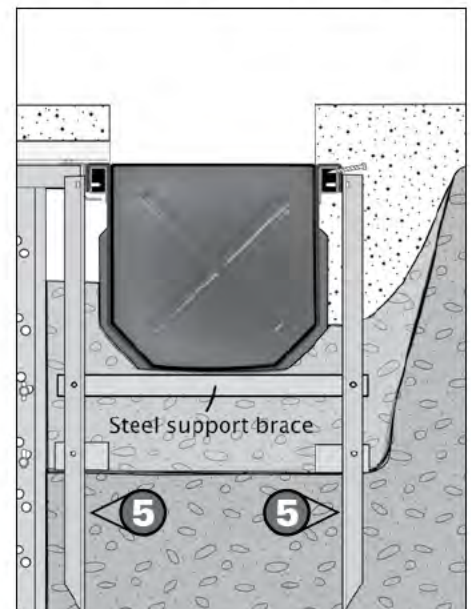
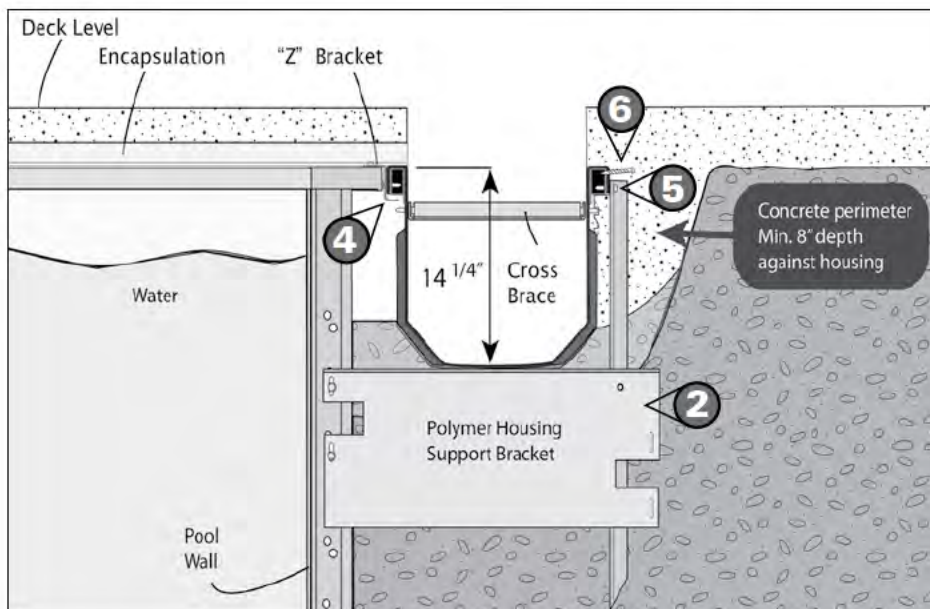


Drive the steel stakes into the ground next to the housing. Level the housing from front to back and fasten the stakes to the housing. The motor and non-motor end are supported with additional stakes, support braces (5, M9788) and feet attachments (7, M9235) see SIDE VIEW - Housing End Support, below, right.



Drive 2" tek screws (2, A1746) into the steel rail every 16-18 inches at a slight angle. The screws should stick out about 1 1/2 inches, creating a hold between the housing and the concrete deck.

Note: Underguide - Install screws horizontal to housing. Recessed Topguide - Install screws vertical to housing



Standard End Walls

- 1

Run a string line or snap a level chalk line 2" down from the top of the side walls across the back side of the end wall bond beam. Secure housing support bracket to the bond beam so that the top of the bracket is aligned to the chalk line (see below).
- 2

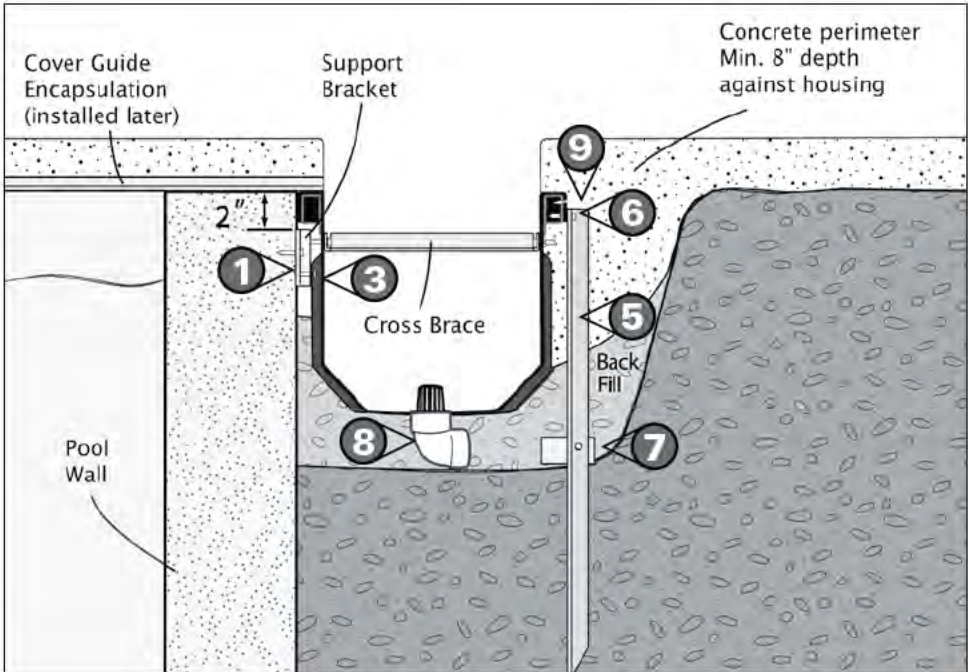
Place the end of the housing so the motor end is 36" from the water side of the track. (See TOPVIEW - Housing Position, below, opposite page).
- 3

Screw through the polymer housing at the interior of the appropriate rib where the support brackets are mounted. (see 3, opposite page)
- 4

Put level on top of housing and level front to back. (see 4, opposite page)
- 5

Pound stakes (4, M9793) into ground next to housing. Stakes should be level with the top of the housing or cut off excess above housing.
- 6

Use a 1" tek screw (1, A1701) to attach steel stakes (4, M9793) to the top rail of the housing.



SIDE VIEW - End Wall

- 7

Fasten the stake attachment foot (5, M9235) to the stake at the ground Standard End Walls using a 1" tek screw.
- 9

Fasten 2" tek screw (2, A1746) to the top rail every 3-4'. This helps tie the housing to the decking.
- 8

Install housing drain assembly and back fill under housing.

Gunite Pool Mounting Kit

				
Assembly	Part#	QTY	Description	
A2405 Polymer housing 311 mounting kit UG (for gunite pools)				
1.	A1701	2	10 pk - Screw HHW tek #10 x 1 in zinc (H9614)	
2.	A1746	1	30 pk - Screw HHW tek #10 x 2 in zinc (H9659)	
3.	M9378	4	Polymer housng 309 to gunite wall mounting bracket	
4.	M9793	6	Polymer housing mounting steel stake 30 in. long	
5.	M9235	6	Polymer housing stake attachment bracket	

Lowered End Walls

1 Run a string line or snap a level chalk line 2" down from the top of the side walls across the back side of the end wall bond beam. Secure housing support bracket (3, M9378) to the bond beam so that the top of the bracket is aligned to the chalk line (see ISO View - Lowered End Wall, below). Position each bracket so that they line up with the ribs on the housing.

2 Place the end of the housing at the motor end 36" from the water side of the track. (See TOPVIEW - Housing Position, below, right).

3 Screw through the polymer housing at the interior of the appropriate rib where the support brackets are mounted.

4 Put level on top of housing and level it.

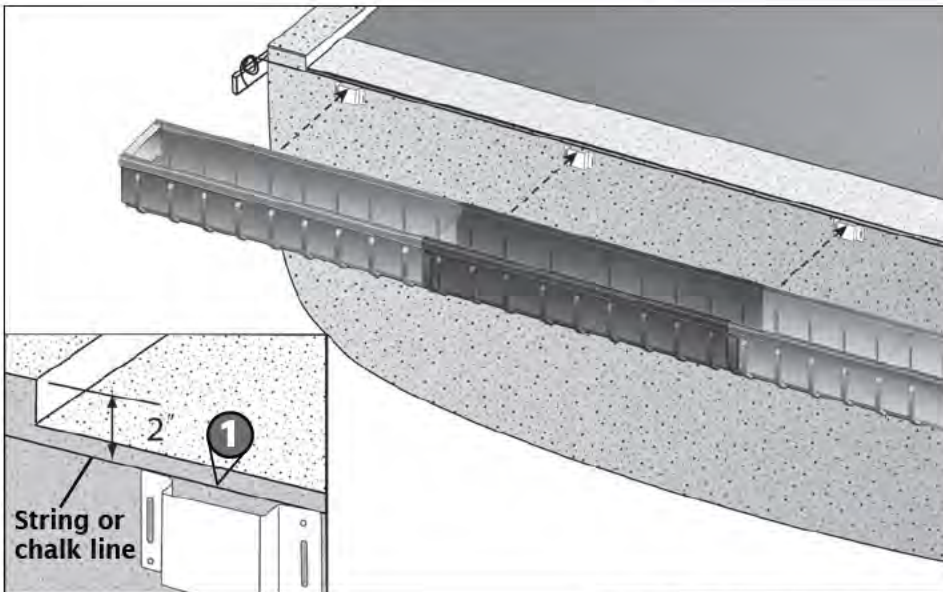
5 Pound steel stakes (4, A9793) into ground next to housing. Stakes should be level with the top of the housing or cut off excess above housing.

6 Use a 1" tek screw (1, A1701) to attach stake to the top rail of the housing.

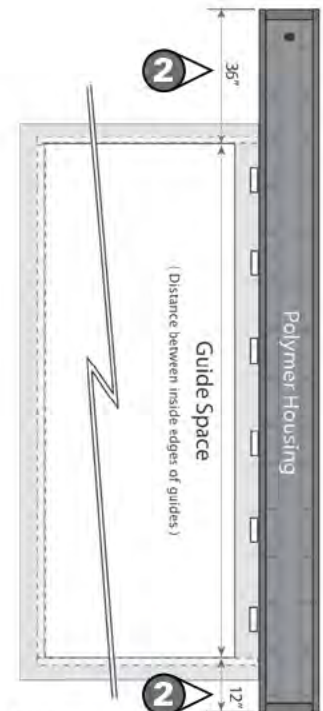
7 Fasten the stake attachment foot to the stake at the ground using a 1" tek screw.

8 Install housing drain assembly and back fill under the housing.

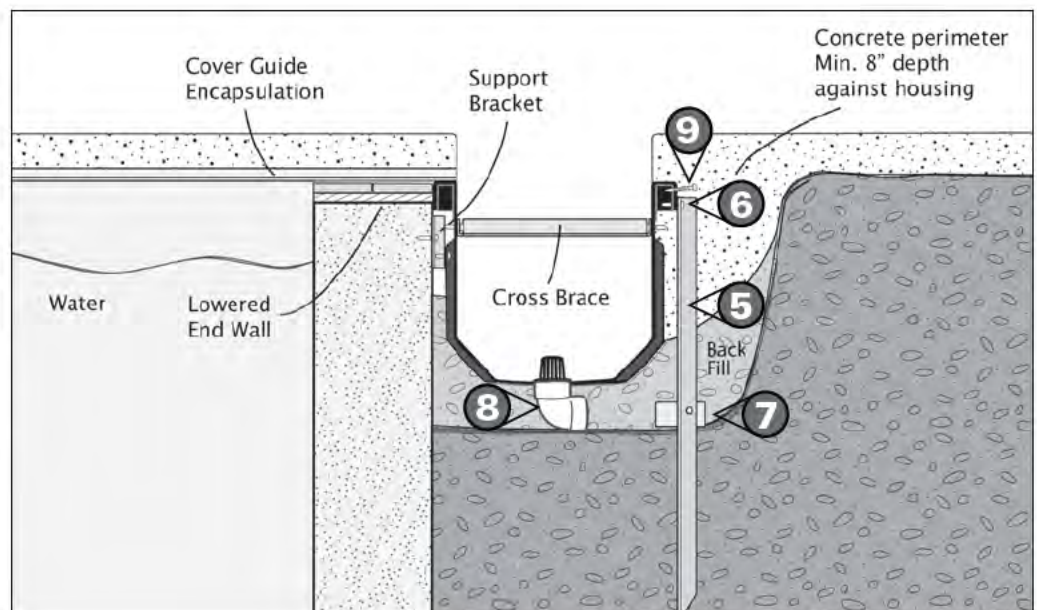
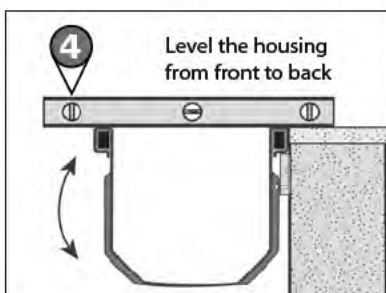
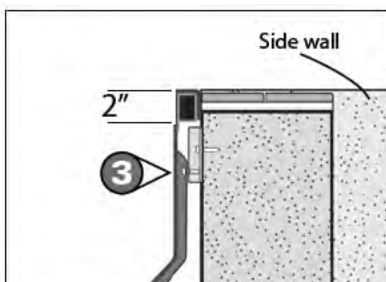
9 Fasten 2" tek screw (2, A1746) to the top rail every 3-4'. This helps tie the housing to the decking.



ISO VIEW - Lowered End Wall

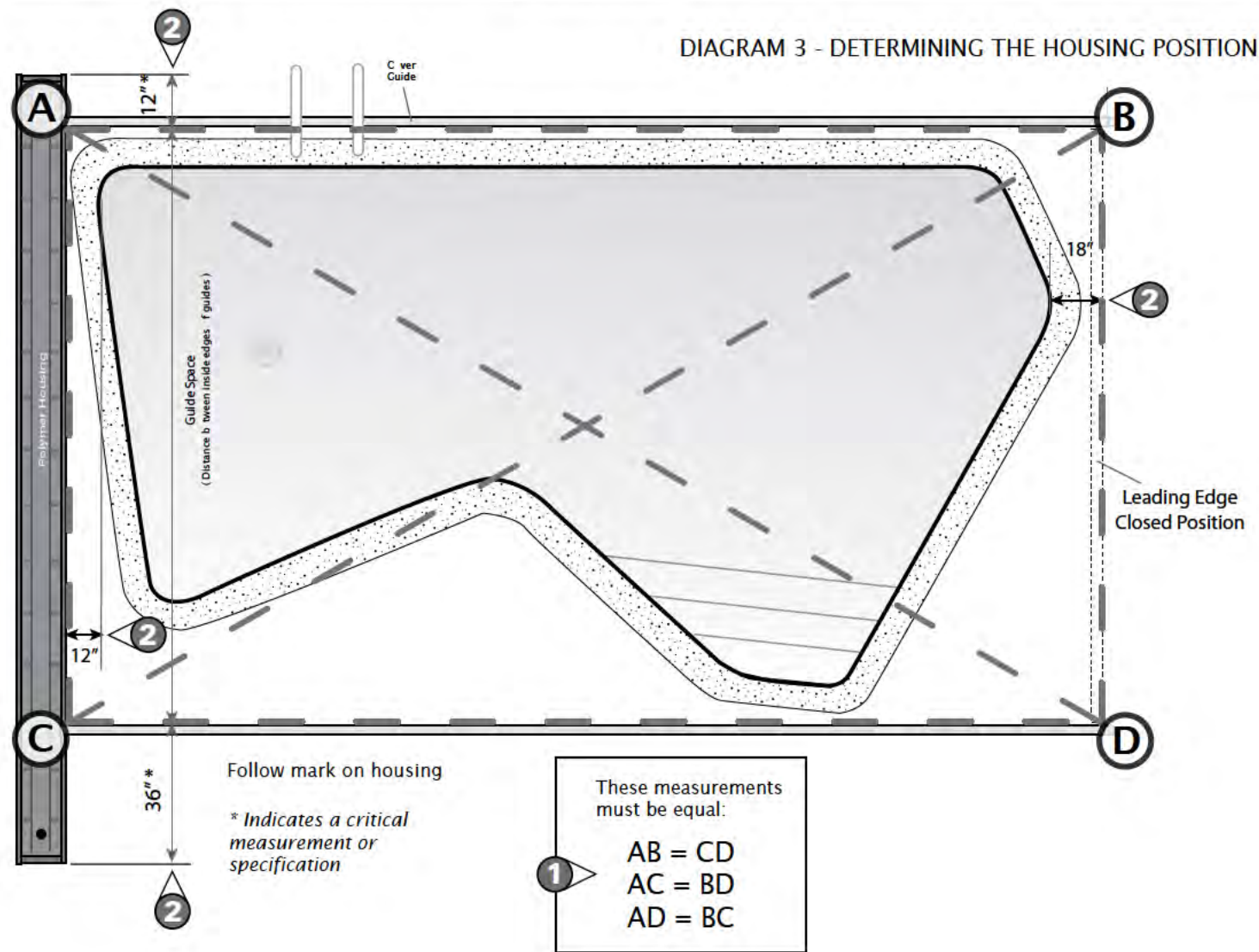


TOP VIEW - Using Position

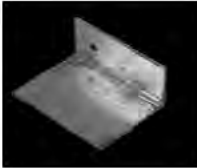


SIDE VIEW - End Wall

DIAGRAM 3 - DETERMINING THE HOUSING POSITION



Recessed Topguide Mounting Kit

			
1			4
Assembly	Part#	QTY	Description
A2403			Polymer housing 311 mounting kit RT (for Gunite or VL pools)
1.	A1701	2	10 pk - Screw HHW tek #10 x 1 in zinc (H9614)
2.	A1746	1	30 pk - Screw HHW tek #10 x 2 in zinc (H9659)
3.	M9793	8	Polymer housing mounting steel stake 30 in. long
4.	M9235	8	Polymer housing stake attachment bracket

Standard Recessed Topguide Mounting Option

- 1** To determine cover size and housing position use string or measuring tapes to create a pure rectangle around the pool (See DIAGRAM 3 - Housing Position, opposite page).
- 2** Position the housing at the end of the pool with a 36" offset for the motor end and a 12" or the non-motor end. Set the polymer housing back a minimum of 12" from the nearest water side of the pool wall. (DIAGRAM 3, Housing Position)
- 3** Drive the steel stakes (3, M9793) against the front and back of the housing and set elevation of the housing at deck level by fastening the stake to the housing with a 1" tek screw (Diagram 1, SIDE VIEW - Standard Recessed Topguide mounting).
- 4** Fasten an attachment bracket foot to the base of each steel stake to prevent the stake from sinking further into the ground and causing the housing to become unlevel.

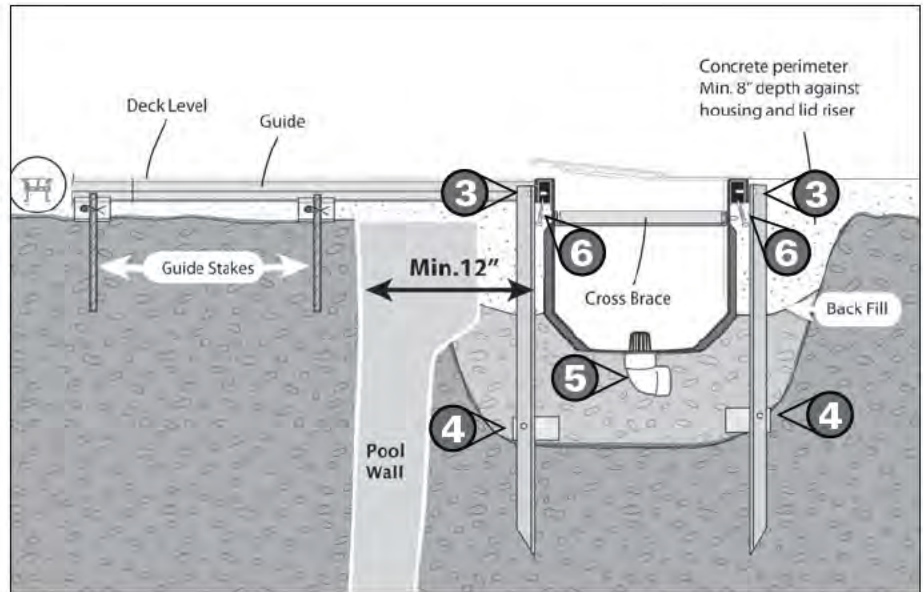


DIAGRAM 1, SIDE VIEW - Standard Recessed Topguide Mounting Option

- 5** Attach drain kit to the polymer housing and back fill under the housing.
- 6** Fasten 2" tek screw (2, A1746) to the top rail every 3-4'. This helps tie the housing to the decking.

Standard Recessed Topguide Mounting Option with Curved Guide

Follow the steps for the recessed topguide option above except mount the housing at 4 inches below deck level and 18 inches from the nearest water side of the pool wall (see DIAGRAM 2, SIDE VIEW - Standard recessed Topguide mounting option with curved guide, at right).

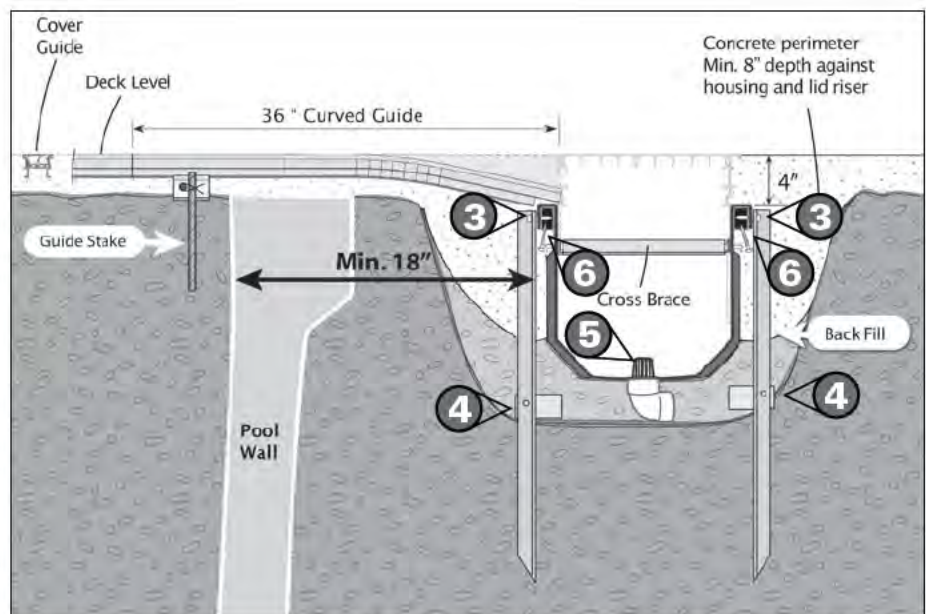
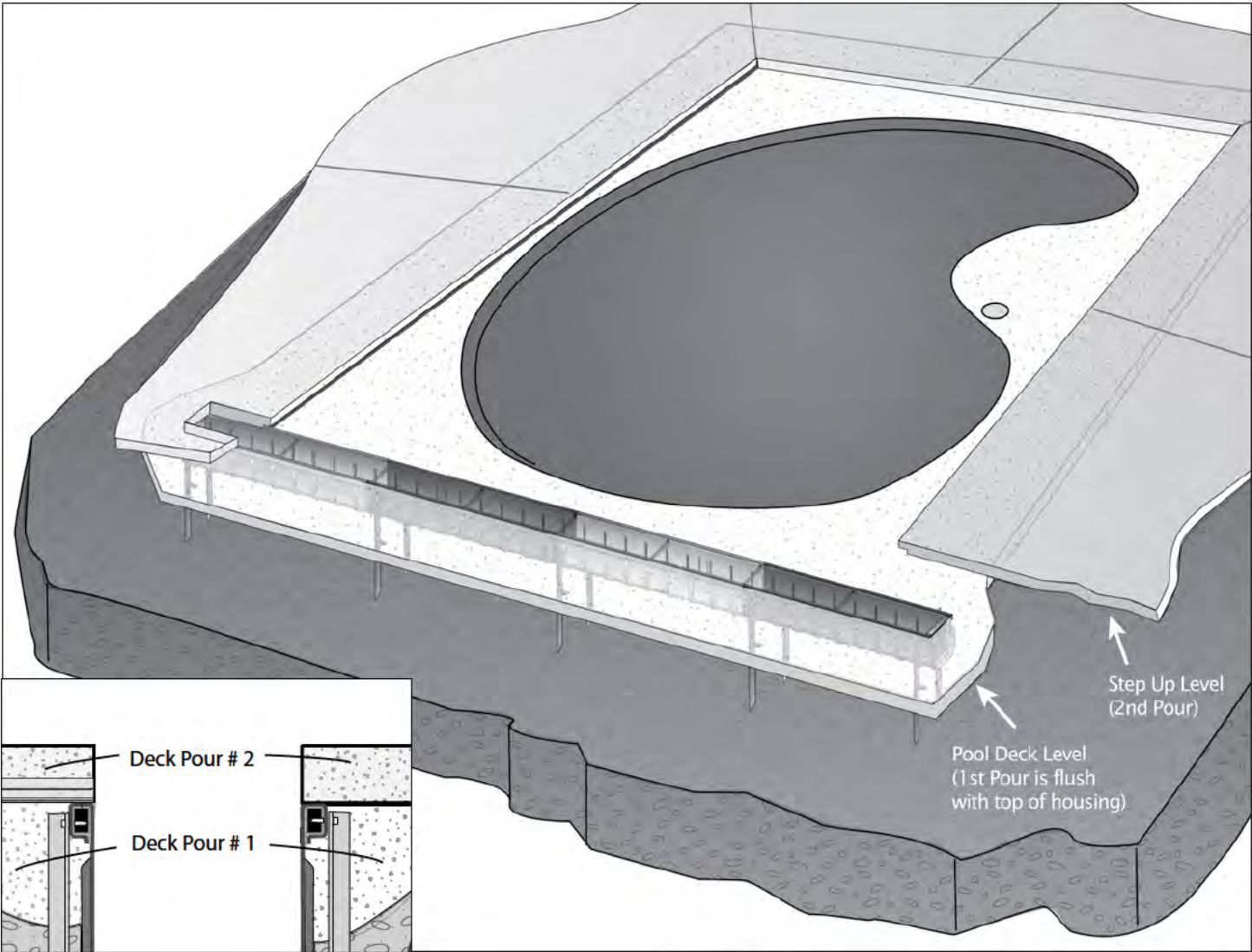


DIAGRAM 2, SIDE VIEW - Standard Recessed Topguide mounting option with curved guide



POOL-IN-POOL - Housing Position and Deck Pouring

Recessed Topguide Mounting Kit

 1		 3	
Assembly	Part#	QTY	Description
A2403			Polymer housing 311 mounting kit RT (for Gunite or VL pools)
1.	A1701	2	10 pk - Screw HHW tek #10 x 1 in zinc (H9614)
2.	A1746	1	30 pk - Screw HHW tek #10 x 2 in zinc (H9659)
3.	M9793	8	Polymer housing mounting steel stake 30 in. long
4.	M9235	8	Polymer housing stake attachment bracket

1 To determine cover size and housing position use string or measuring tapes to create a pure rectangle around the pool (see Topview - Housing Position, right).

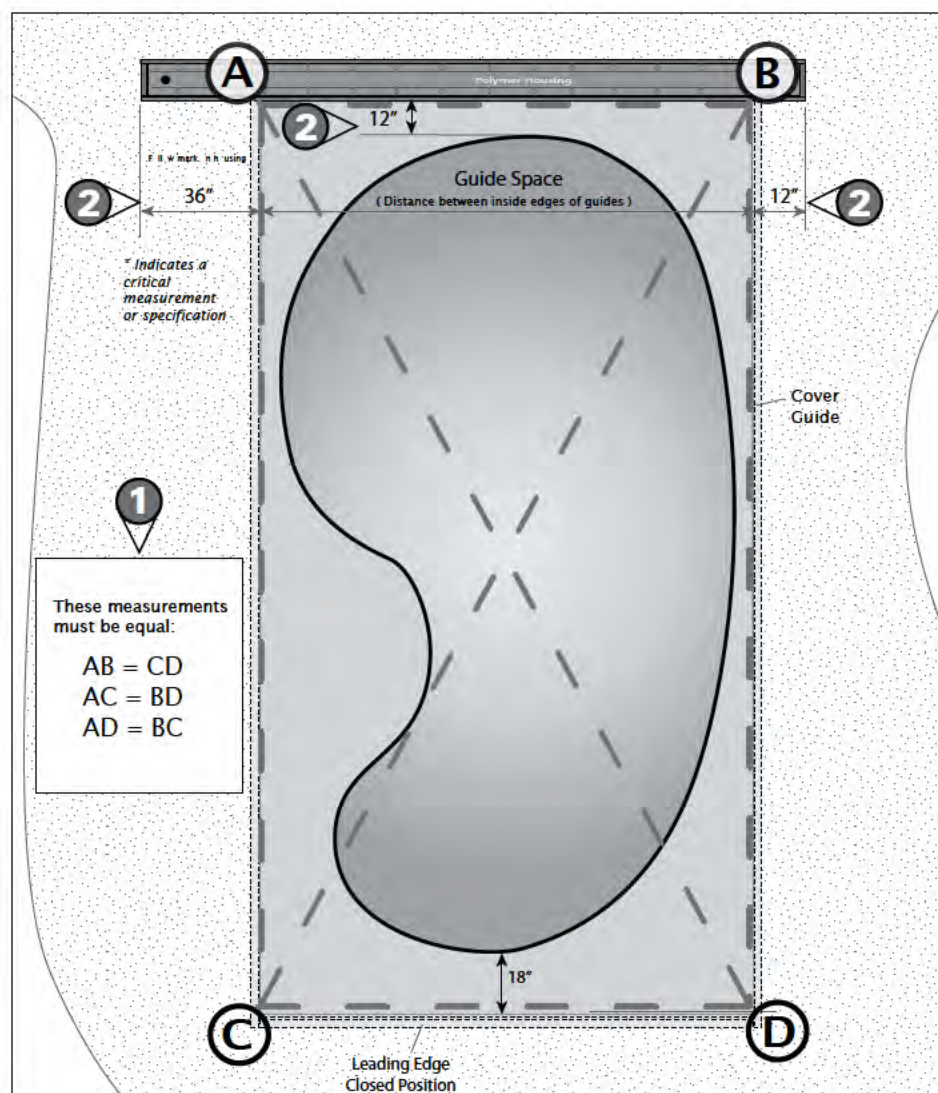
2 Position the housing at the end of the pool (AB) with a 36" offset for the motor end and a 12" or the non-motor end. Set the polymer housing back a minimum of 12" from the nearest water side of the pool wall.

3 Drive the steel stakes (3, M9793) against the front and back of the housing and set elevation of the housing at lower deck level by fastening the stake to the housing with a 1" tek screw (1, A1701). (See SIDE VIEW - Housing Position, below).

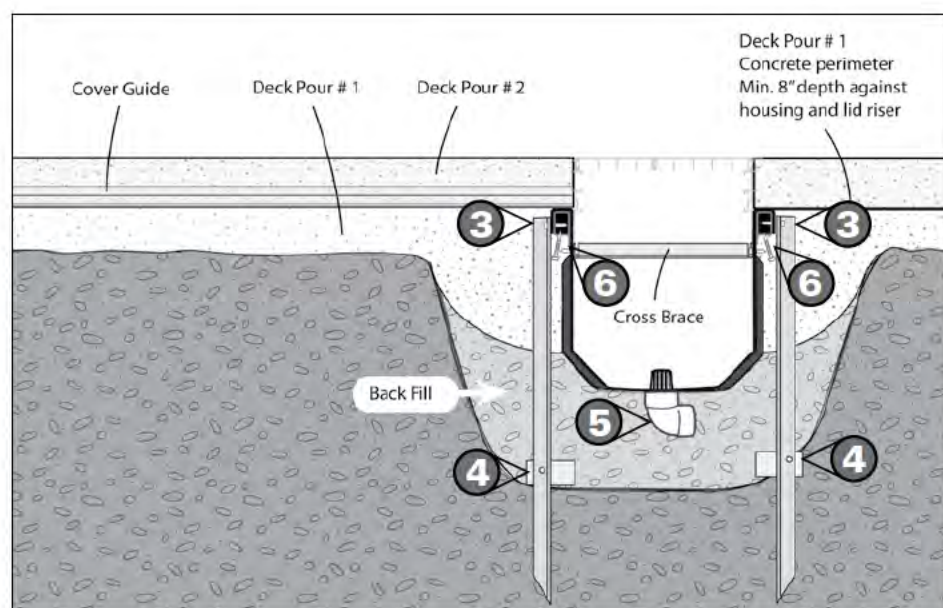
4 Fasten a stake attachment foot (4, M9235) to the base of each steel stake to prevent the stake from sinking further into the ground and causing the housing to become unlevel. (See SIDE VIEW - Housing Position, below).

5 Attach drain kit (5, A1177, page 2) to the polymer housing and back fill under the housing.

6 Fasten 2" tek screw (2, A1746) to the top rail every 3-4'. This helps tie the housing to the decking.



TOPVIEW - Housing Position



SIDE VIEW - Housing Position

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