



Vinyl Liner Pool—Molded Auto-Cover Housing Installation Instructions

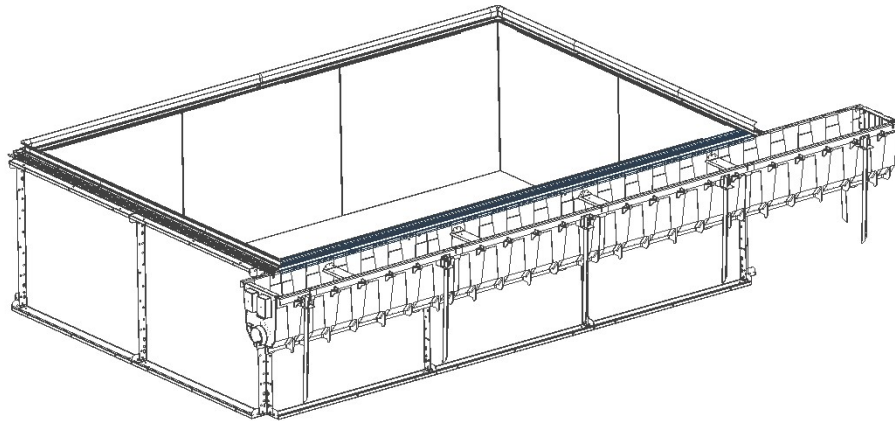


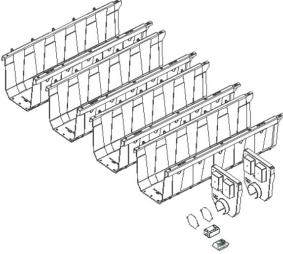




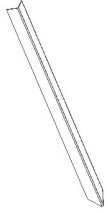

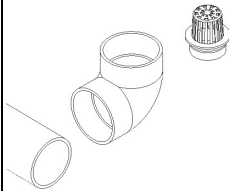
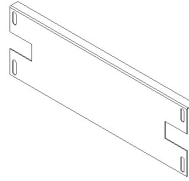
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 WARNING! IMPORTANT SAFETY INSTRUCTIONS:

- READ AND FOLLOW ALL INSTRUCTIONS
- Installation shall only be performed by an pool installation technician. Improper installation could lead to bodily harm and failure of the components. Electrical conduit and lines shall be installed by a certified electrician.
- Proper protective equipment should always be worn for installation.
- Follow all tool manufacture safety guidelines and use safe tool practices.
- These instructions are specific to the housing brace & housing installation. All other installation instructions should be followed.
- File away any exposed sharp edges. Failure to do so could lead to injury.
- Every housing must be installed with a drain. Failure to have a drain may void warranties

Parts Description

1 	2 	3 	4 	5 
6 	7 	8 	9 Electrical Conduit, Fittings & Wires	10 

Parts List Part Quantities May Vary Based on Pool Width

1. A4000-A4005—Molded Housing Kit. Includes M3995 Molded Housings, M3996 End Caps, H3991 Screw Kit, M3954 Drain Caps, E1079 Electrical Plate, E1069 Single Gang Junction Box, Backfill stickers - QTY: 1
2. X1225—Vinyl Liner Pool Housing Mounting Extrusion Bottom—QTY: 1
3. X1226—Vinyl Liner Pool Housing Mounting Extrusion Top—QTY: 1
4. X1227—Snap-In Top Cap Filler Extrusion—QTY: 2
5. A3999—H3991 #12 x 1in. Pancake Head Self Tapping Screw Kit—QTY: 1
6. M9793—Molded Housing Support Stake—QTY: 8
7. L3992—VL Steel Wall Molded Housing Installation Instructions - QTY: 1
8. NOT PROVIDED—4" Schedule 40 Drain Pipe, Fittings, Cleaner, Glue, Drain Grate.
9. NOT PROVIDED— Conduit, Fitting & Wires for Electrical Lines
10. M9787—Polymer Housing Support Bracket—QTY: 4 (Not all kits get this bracket, depends on kit selection)

Tools Required

- Cordless drill
- Square Bit—Size #2 SQ2
- Flat File
- Tape measure
- Marker
- Sawzall or Handsaw
- Hand Brush or Compressed Air
- Chop Saw with Aluminum Blade or Hack Saw
- 18" Bubble Level

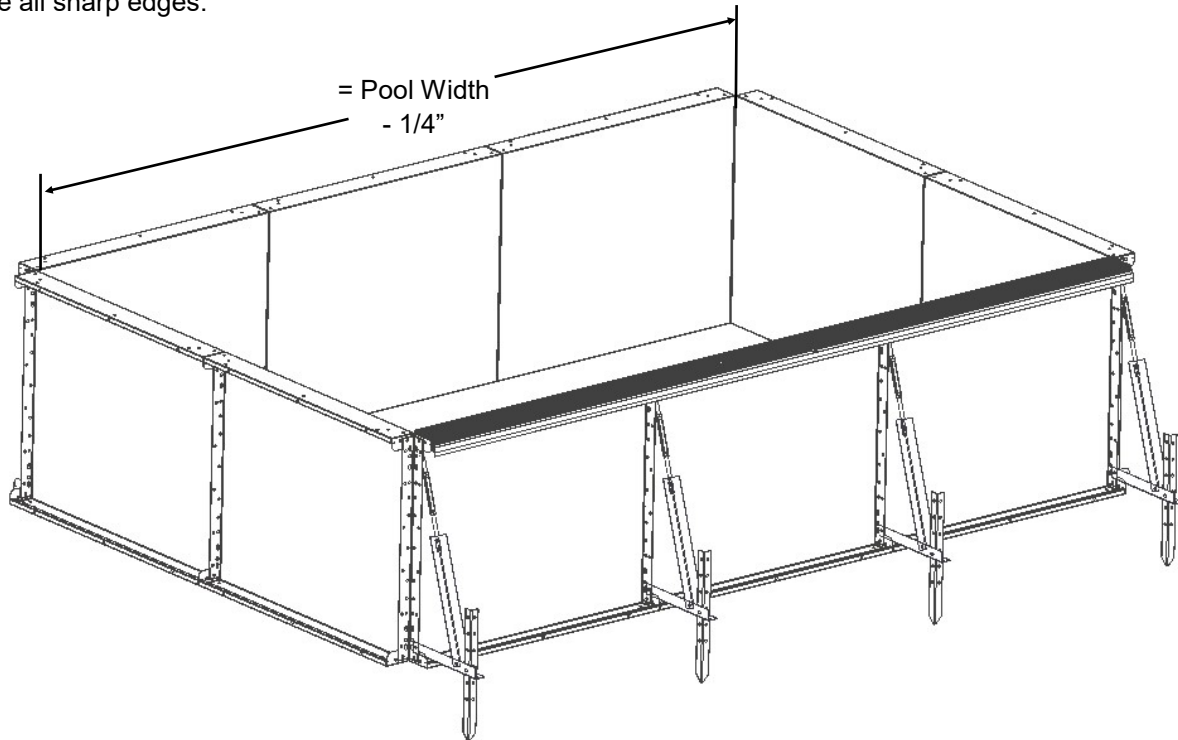
Tools Required

- Sledge Hammer
- Rubber Mallet
- Shovel
- Right Angle Square

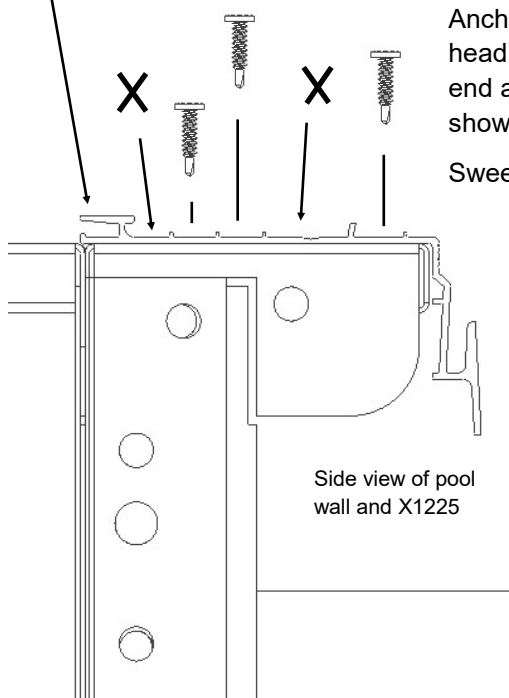
Installation Procedures

NOTE: Follow all *Latham Steel Pools Installation Guide* instructions! The pool wall excavation and setting in place of the pool walls & pool bracing will have taken place prior to step 1 of these instructions.

Step 1: Measure and cut part X1225—vinyl liner pool housing mounting extrusion bottom. Measure the width of the pool and subtract 1/4" (Pool Width - 1/4" = ____). Transfer this number to extrusion X1225. Cut using the chop saw. Depending on pool width it may take one full piece and part of a second piece of X1225. Using the file remove all sharp edges.



Front edge of X1225 must be tight against face of inside pool wall

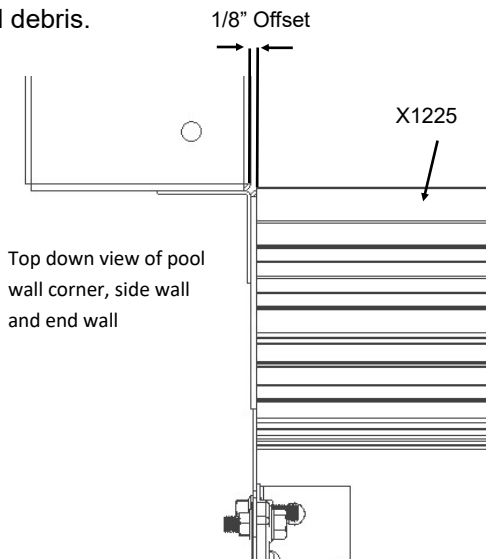


Side view of pool wall and X1225

Step 2: Set X1225 extrusion in place tight against inside front edge of pool and 1/8 in. from the pool edge to allow room for the encapsulation to be installed.

Anchor X1225 extrusion to pool wall using H3991 #12 self drilling pancake head screw. Use drill and SQ2 square drill bit. Place screws 2" from each end and evenly spaced or less full length of the extrusion, in the channels shown. **Note: It is critical the pancake head screws are used!**

Sweep or blow off all shavings, and debris.

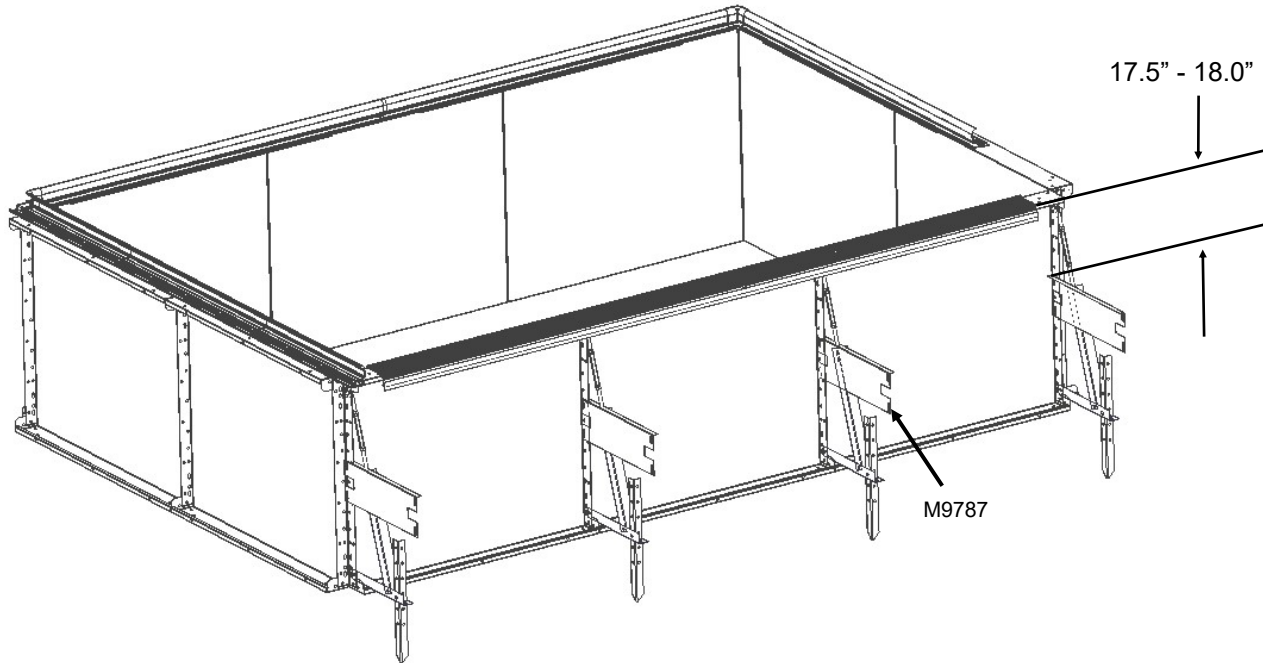


Top down view of pool wall corner, side wall and end wall

Installation Procedures

NOTE: Step 3 is only necessary if pool has not been backfilled. M9787 support braces will be necessary to support housing elevation.

Step 3: Attach M9787 VL housing support brackets to the pool wall 17-3/4" from top of pool wall using pool wall fasteners or self tapping screws.



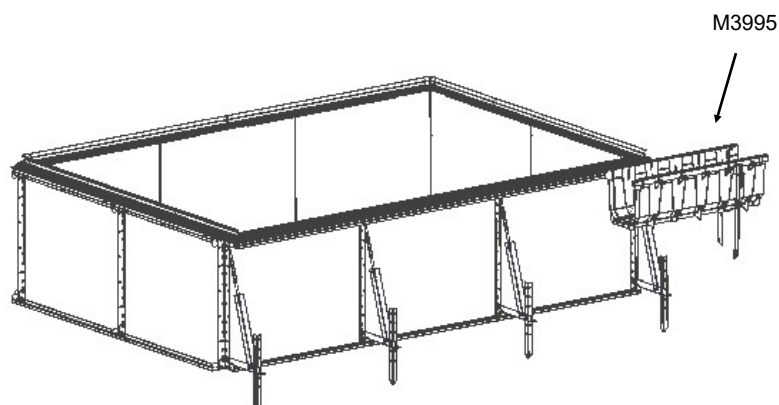
Step 4: Attach M3995 molded housing pieces to pool wall. **Note: Always start on the right side of the pool and work to the left.** RTV silicone can be used at housing joints if water resistant joints are desired.

Drop-in M3995 housing sections one piece at a time into X1225 extrusion. The housing fits into a mating channel in the extrusion. Once first piece is set into place proceed to set in place the remaining housing pieces.

- ME—Motor end side will have a 36" offset.
- NME—Non motor end will have a 12" offset.

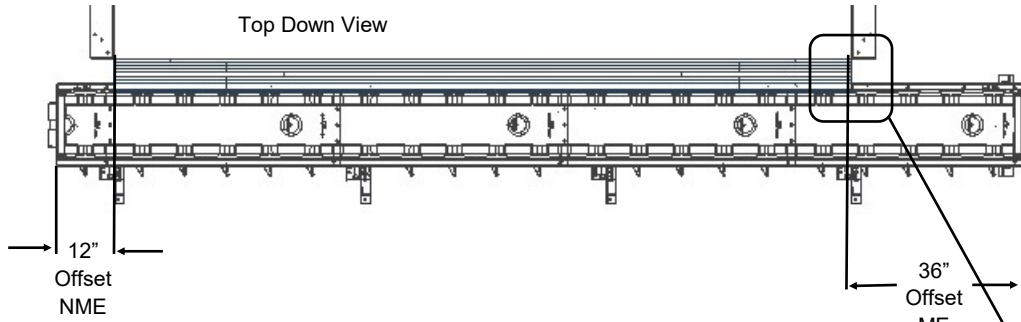
Note: M3995 Housing with the 36" offset will use two M9397 stakes to support the cantilevered housing end.

M3995 molded housings interlock into one another. See diagram 1



Installation Procedures

Step 4: Continued

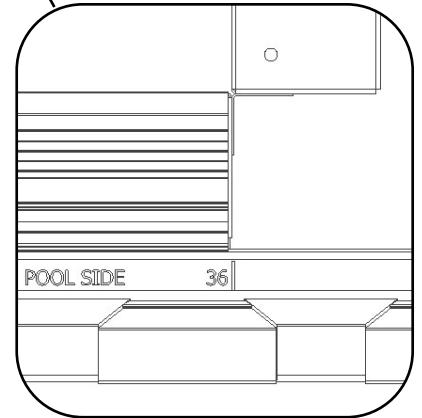
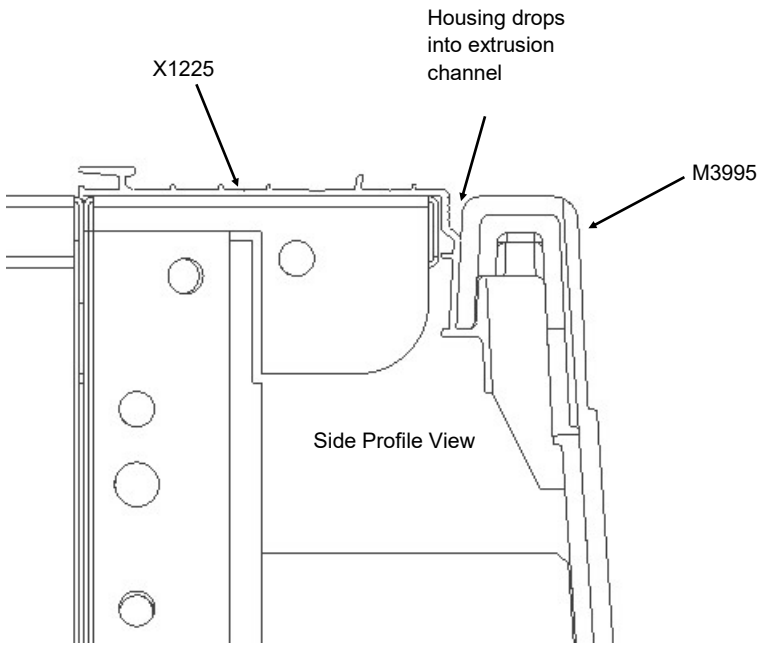


Showing a motor end right with 36" offset, with first M3995 housing set in place.

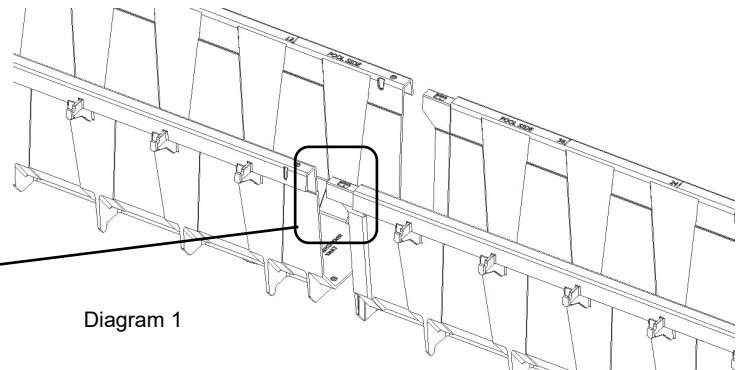
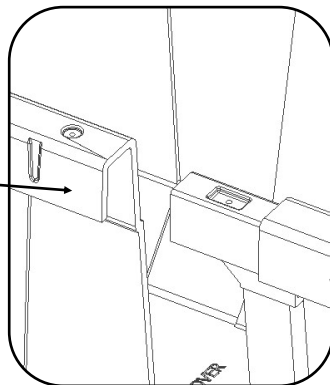
Note: May require digging out excess earth to make room for housing offsets.

Note: Wall support braces may vary by pool type.

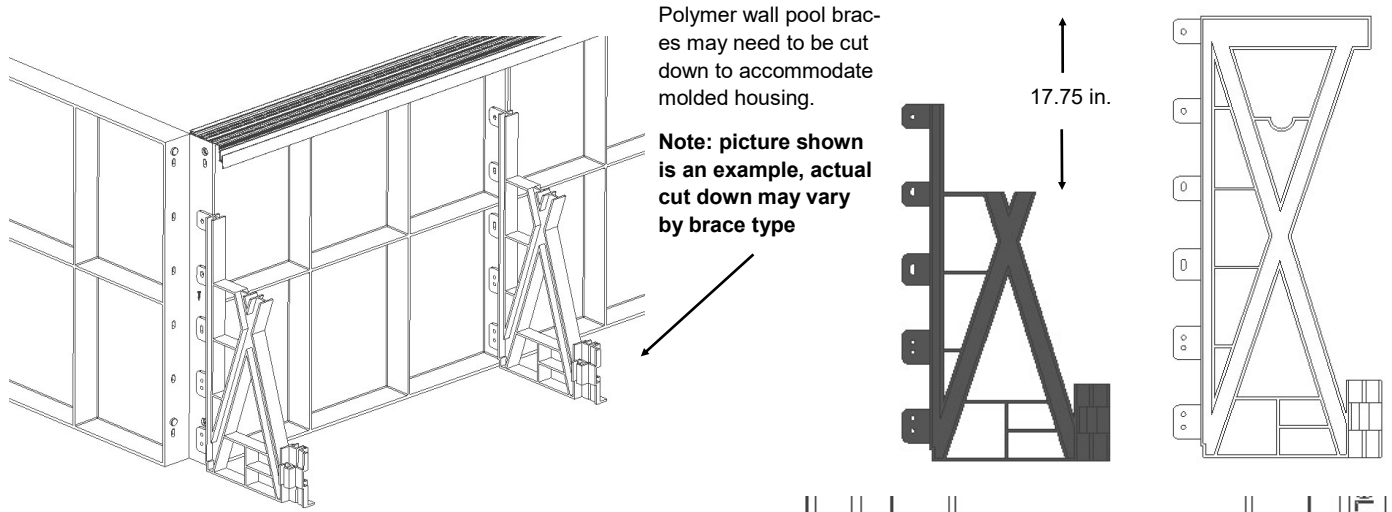
Housing has molded in indicator marks "POOL SIDE" & offset marks "12", "24" & "36". Offset mark aligns with the inside edge of the pool wall.



Housings interlock with one another and are fastened in place with H3991 screws.



Installation Procedures

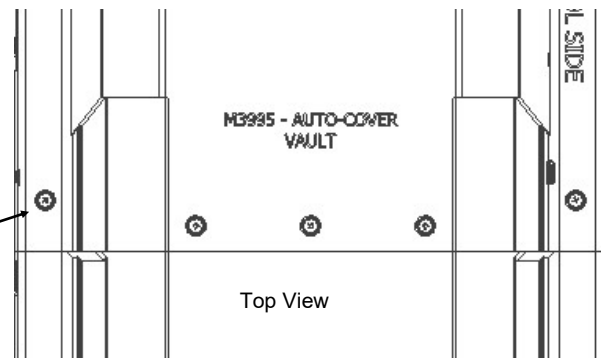


Polymer wall pool braces may need to be cut down to accommodate molded housing.

Note: picture shown is an example, actual cut down may vary by brace type

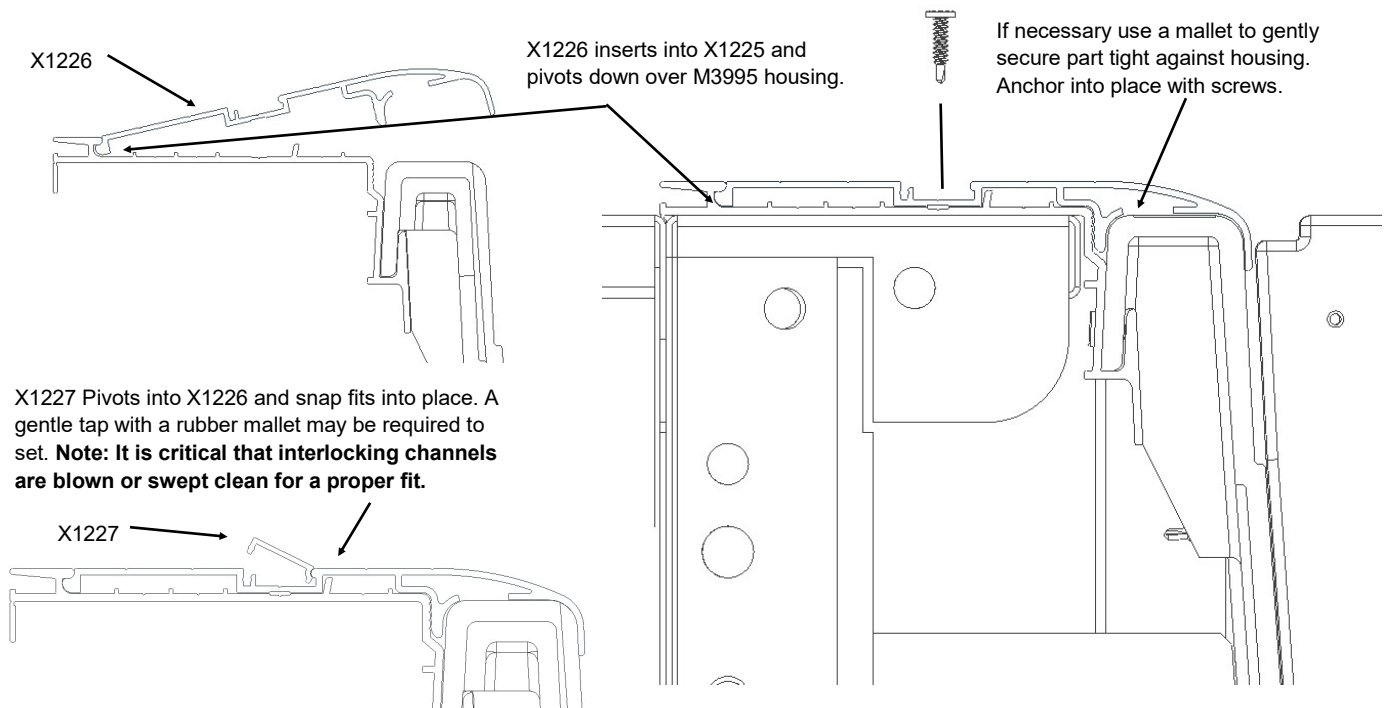
Step 5: Fasten all housing pieces together. Attach all A3991 stakes & braces. Using H3991 tek self drilling screws.

Screws are fastened into the molded in marks on the housing joints, locking the two pieces together.



Step 6: Attach X1226 VL housing mounting extrusion top. Attach X1227 Filler Cap Extrusion. **Note: It is important that extrusions are swept or blown clean to allow parts to interlock without interference.** Extrusion X1226 will pivot into X1225 and rotate down over the top of the molded housing. If part does not completely set use a rubber mallet to gently tap into place until it is fully seated against the housing and extrusion X1225.

Using drill and SQ2 square drill bit and using screw H3991, fasten down both ends 2" in from the both sides and every 18" or less, evenly spaced full length of extrusion.



Installation Procedures

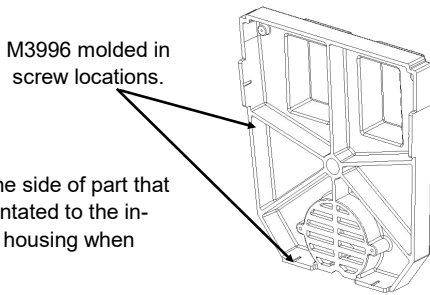
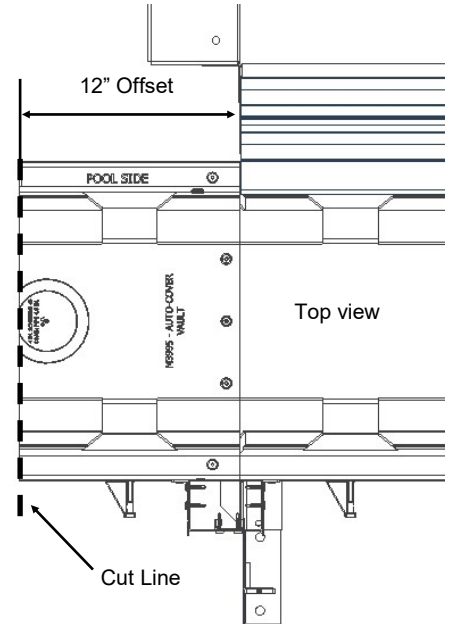
Step 7: Mark and cut housing to length. Attach both M3996 molded endcaps.

- ME—Motor end standard offset is 36"
- NME—Non motor end standard offset is 12"

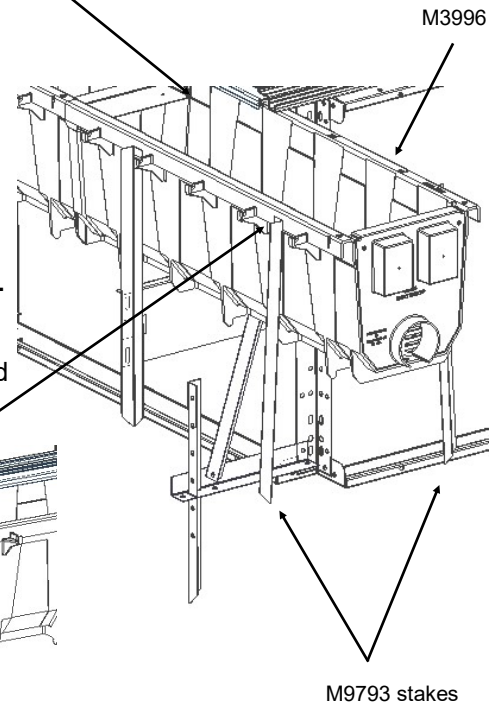
Note: Housing will be cut down on the left side offset. Measuring from inside pool wall measure out desired offset and make a mark onto the M3995 housing. Transfer these cut marks across housing using tape measure and square, creating a cut line. Using a Sawzall or handsaw cut off excess material.

Note: If excess housing material is minimal removing the excess may not be required. Excess can be backfilled and buried.

Attach the two M3996 molded endcaps. The caps are orientated flush to the end of the housing as shown in the model. There are molded in indicator locations where the H3991 Screws will be placed using a drill and SQ2 square drill bit. Additional screws can be added as necessary. Use right angle square to ensure M3996 end caps are square to the housing.



Attachment screws

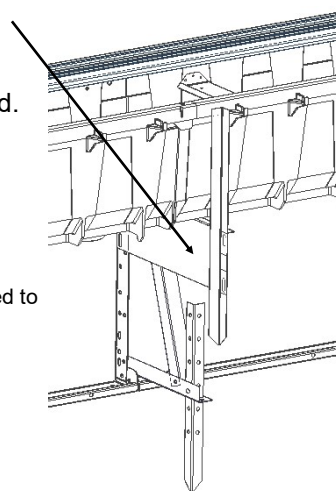


Step 8: On the 36" motor end cantilevered housing, use two M9793 stakes to support end. One on each side of the housing. **Note: This may require excavation to attach stakes.**

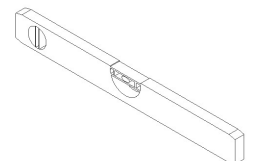
The stakes are driven into the earth using a sledge hammer and then fastened to the housing using a minimum of 2 screws in each brace.

If M9787 brace is used the stakes will be fastened to brace not hammered into earth.

With braces attached level and straighten housing end.



Step 9: Level and straighten the housing front to back side to side. While the housing should be level and straight at the point in the installation it is good to reaffirm everything is level and straight. Failure to do this at this step can lead to complications in the rest of the installation.



Installation Procedures

Step 10: Electrical, drain & optional re-bar (not provided) installation.

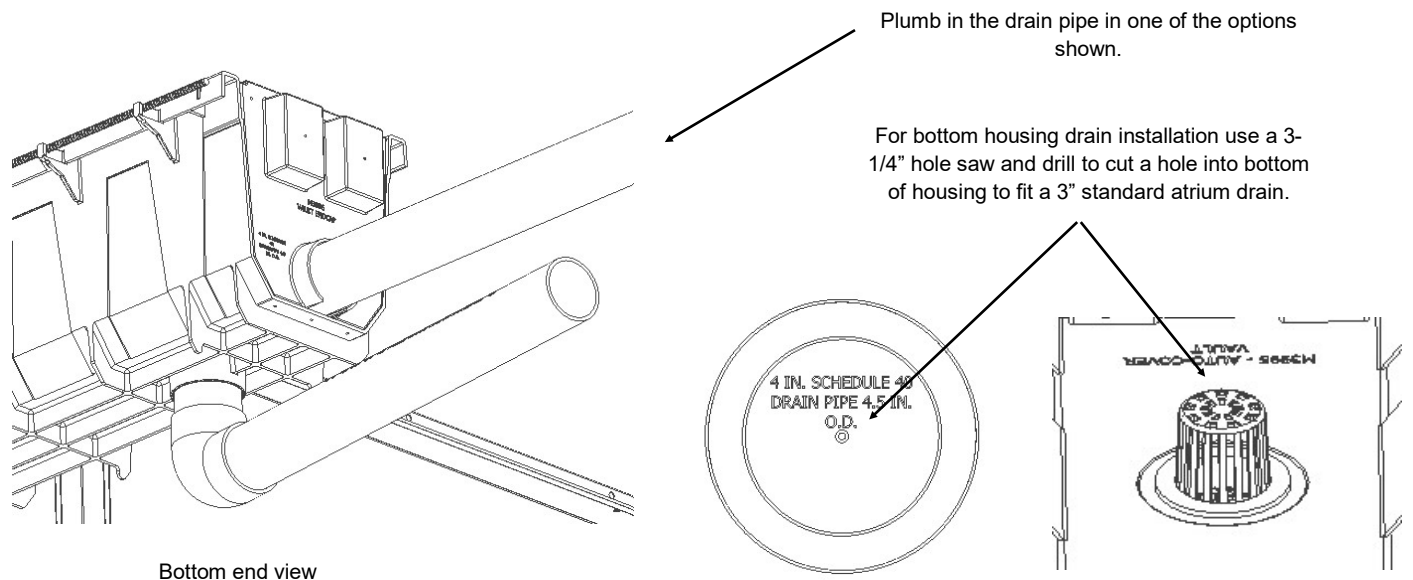
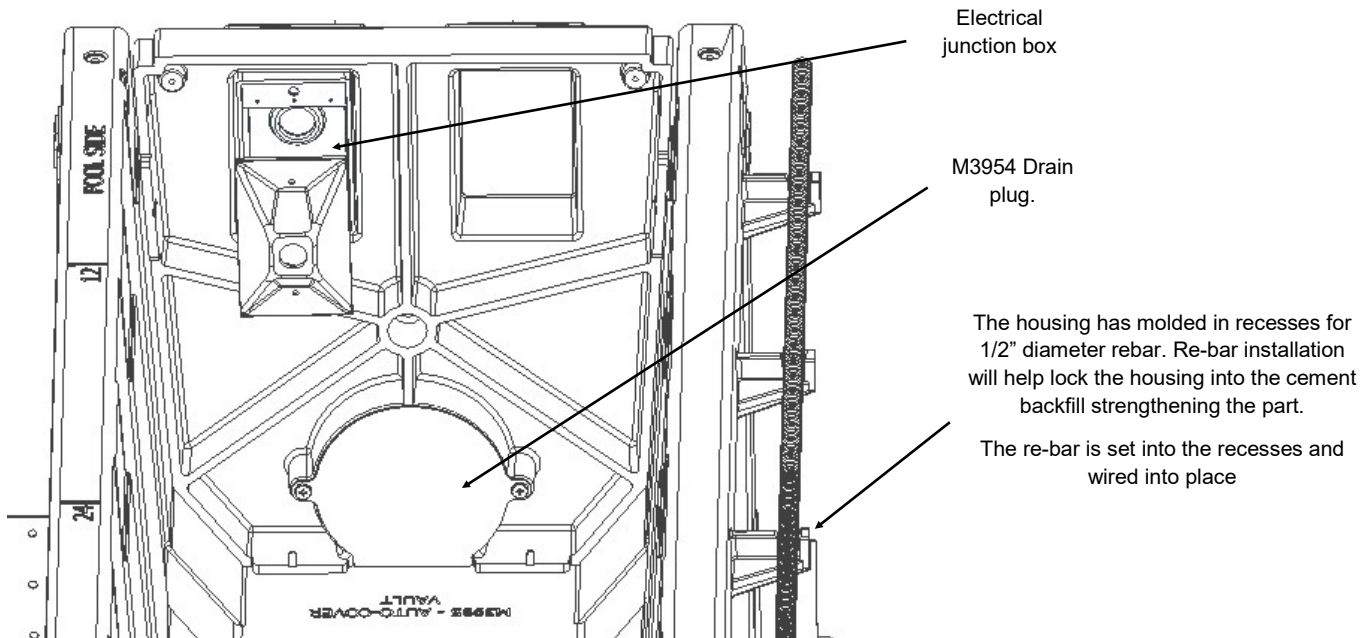
The M3996 molded endcap has a molded in recess specifically for a single gang junction box. The housing kit includes this junction box and lid. **Note: The box and lid are to be installed by a certified electrician in compliance with national and local codes.**

Note: A drain is required with every housing installation! The housing has multiple molded in drain ports in the M3996 end caps and M3995 housings. The drain port on part M3995 housing are to be used as the standard option on all housings. The drain should only be installed into the endcap when the first option is unavailable.

Drain components are not provided with the housing installation kit and must be provided by the installer. **Note: Drain size: 4" schedule 40 drain pipe.**

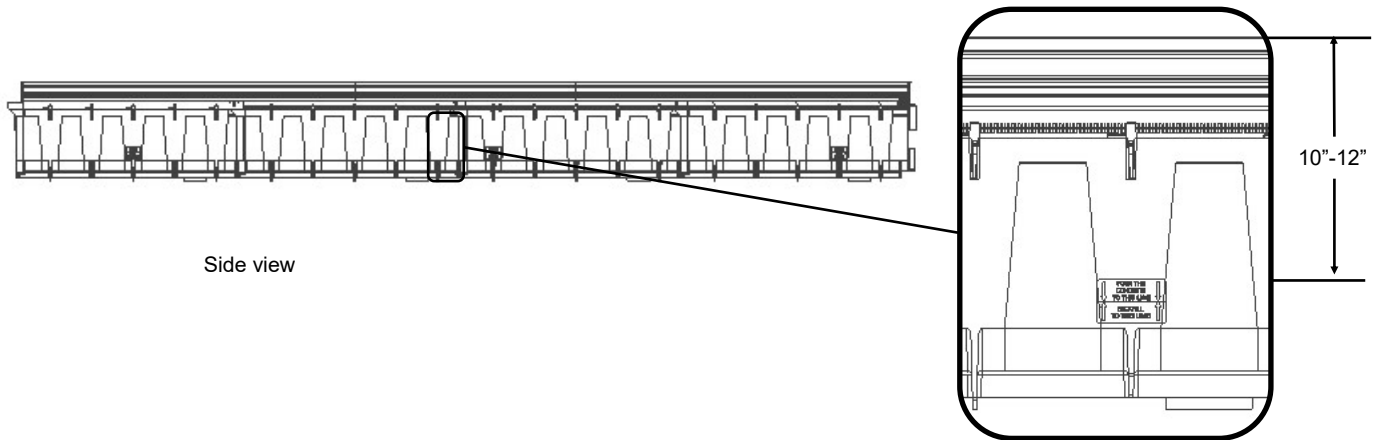
Attach drain pipe to housing using H3991 self drilling screws. Drain installation should follow pipe manufactures recommendations.

Install M3954 drain plug onto each end of the M3996 housing using two H3991 screws. RTV silicone can be used if a water resistant fitting is desired.



Installation Procedures

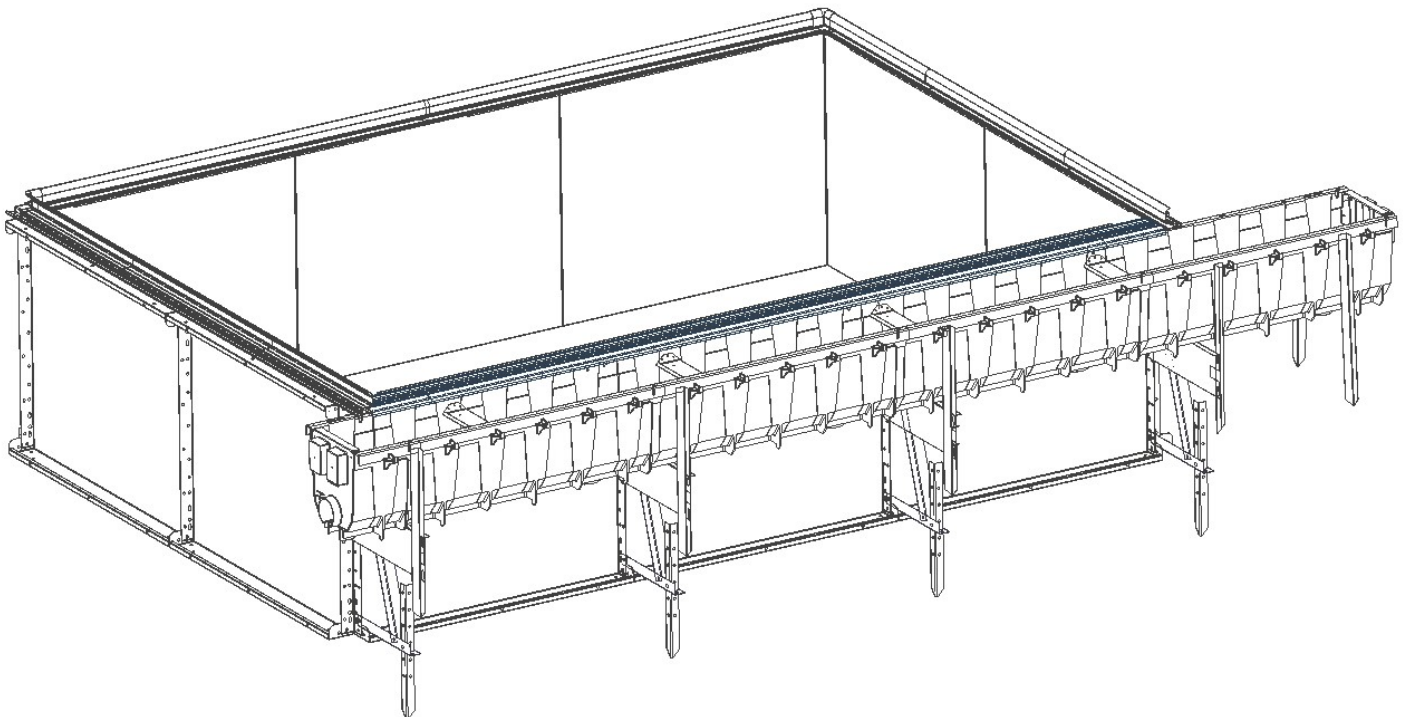
Step 11: Apply L0125 backfill stickers to housing. Measure down 10-12" from top of housing and apply stickers, evenly spaced, to housing shell. **Note: This step is important to ensure the housing is properly anchored and able to withstand mechanical loads.**



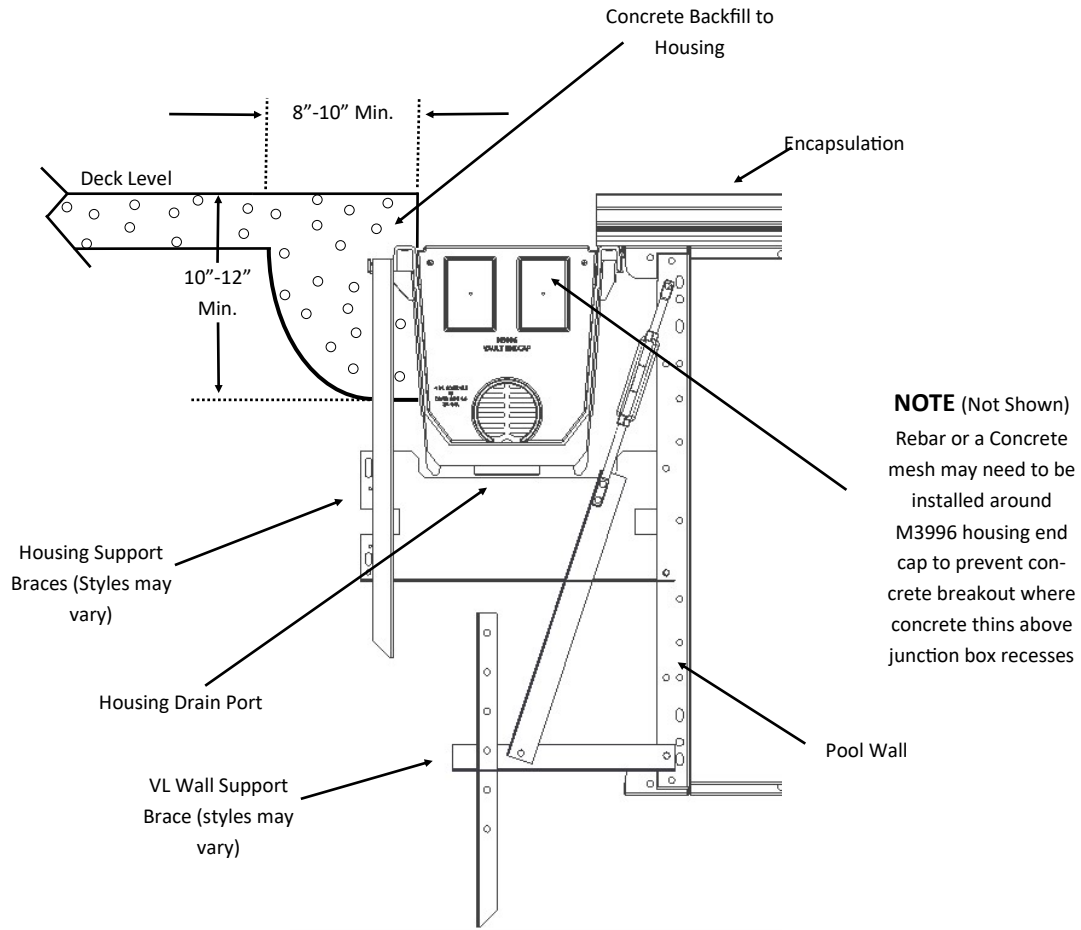
Note: It is recommended that X1226 and X1227 painted extrusions be covered to prevent damage thru the remainder of the pool installation!

The housing installation is now completed and ready for the concrete footing to be poured following the installation procedures found in the *Latham Steel Pools Installation Guide*.

The housing is now ready for the housing perimeter extrusions to be installed and the pool encapsulation extrusions installation. Those parts are found in separate kits and have separate installation instructions provided. **Note: Read and follow all other installation documents!**



Installation Procedures—Concrete Backfill



Note: The concrete backfill is critical to lock the housing into place and to properly support the lid & lid brackets when anchored into the housing. Failure to pour this concrete cap around housing may cause housing or lid brackets to pull loose from deck.

Note: M3996 end cap may need re-bar or a concrete mesh installed to prevent concrete breakout where the electrical junction boxes recess out and concrete may get thin.