Introduction:

Our standard lid for any recess mechanism is our structural composite polymer lid. They are available in 6 decorator colors, and if installed properly will be fairly strong and rigid. These lids are designed to support the weight of the average adult under normal walking conditions. One should never run or jump on the composite lid. Under no circumstances should these lids be used as a diving platform. Excessive dynamic force from jumping can permanently deform these lids. It is normal to feel some deflection when waking on this lid. Also over time you may notice some expansion and/or contraction of the panels with temperature changes.

It is very important that these instructions be carefully followed. For the lids to have their full strength, all of the components must be securely fastened as per the instructions.

The materials that make up the lids are as follows:

Plastic polymer (composite) panels that are either 1"x12"x24" (for vaults up to 14" wide) and 1"x15"x24" (for vaults up to 16" wide). Enough panels to cover the length of the vault will be sent.

**Please note, if the pit is wider than 16", an alternative will need to be discussed.**

Extruded aluminum for the framework consists of “BL2”, “B2”, & “L2”.

These extrusions are required to span the length of the pit across the front and back for under track units. On top track / recess units enough “BL2” extrusions only, will be included to span the length of the pit across the front and back.

The above mentioned extrusions only come in 22’’ sections, so you may have to splice in another piece to span the entire length of the vault.

Stainless Steel brackets for the under track units are 12” long by 2” wide (for standard pits) and have a support gusset. Enough brackets to span the length of the vault placed 4’’ on center, will be included. For the Top / Recess lids, the brackets are 5 1/2” long by 2” wide. The same amount as above applies.
Installation Manual For Composite Lid

UnderTrack
Installation Preparation

The drive unit must be at least 1 1/8" in. below the top of the deck to allow for the 1" in. thickness of the panels.

Lay out the lid pieces behind the pit. The first piece closest to the pool will be the “L2” extrusion. This piece is shaped like a “t” when viewed from the end. The next piece will be the “B2” extrusion. This piece is shaped like a “J” when viewed from the end. Next will be the composite panels. Lastly the “BL2” extrusion which looks like a “h” when viewed from the end.

See pictures below.

Laying the pieces out as described above will allow you to check that there are the correct amount and lengths of pieces needed for the job. If the pit is longer than 22’ ft. in length, then you will have to splice in an additional piece of extrusion. Always stagger your splices by placing one at one end of the pit and the other at the opposite end of the pit. This makes for a stronger lid.

If the extrusions are longer than the pit, then they will need to be cut down to the correct length to span the pit from end to end. Be sure to file down any sharp edges.

Next you will want to install the lid brackets.

The stainless steel brackets should be placed every 4’ ft. down the length of the pit. You can start from either end, or start from the center and work your way out towards the ends, what ever your preference. These brackets are mounted using the 1 3/4” in. stainless steel screws and plastic anchors, the same ones used for the track and unit. Use four screws per bracket for support. These brackets should be set down 1 1/8” in. and level. One can use a composite panel or a piece of “BL2” extrusion to use as a guide for the height. To level the bracket use some shim (not supplied) and apply it to the back of the bracket either near the top or bottom as needed.

The brackets have support gussets which may push against the ropes. If this is the case, now is the time to rerun them through the gussets. Make sure that the ropes do not rub hard against the brackets. Some rubbing may be unavoidable. Repositioning the height of the compensator pulley can also help with some rubbing issues. Refer to the Hydramatic Undertrack installation Manual for proper string up of the ropes.
"L2" Extrusion Installation

The "L2" extrusion should be placed along the front of the pit (the side closest to the pool) in the position so that the "J" portion of the extrusion is down. Butt up the end of the extrusion to the non-motor side of the pit. Using some vice grips or clamp, temporarily secure the extrusion to the brackets nearest the ends of the pit. Keep the vertical face of the extrusion flush with the pit wall.

With a pencil, mark the "J" side of the extrusion on the non-motor end about 6" in. from the end. Repeat on the opposite end. If the extrusion does not reach the other end of the pit, place the mark no closer than 2" in. to the tiled wall. Additional marks can be added on the motor side for more support. If a shorter piece of extrusion is needed to make up the length of the pit, then repeat the above process for this second piece.

Remove the extrusion from the pit. At each mark on the extrusion drill a 1/4" in. hole. After all the holes have been drilled, place the extrusion back onto the brackets with a clamp as before.

Make sure that the top of the extrusion is flush with the top of the deck and make a mark through the holes in the extrusion onto the pit wall. Repeat for all the holes, and then remove the extrusion from the brackets.

Drill a 1/4" in. hole into the pit wall at each mark, approximately 2" in. deep, insert a plastic ribbed anchor. Repeat at each mark. Reposition the extrusion back onto the brackets and secure with the clamps.

Insert a 1 3/4" in. stainless steel screw into the hole in the extrusion to the corresponding hole in the pit wall and secure. Repeat for each hole. Make sure that the top of the extrusion is flush with the top of the deck. The "L2" extrusion should now be attached along the front of the pit on both ends. Now it is time to attach the extrusion to the brackets.

Keeping the extrusion straight along the length of the pit, clamp it down to several brackets. With a 1/4" in. drill bit, drill through the aluminum into the predrilled holes at the end of each bracket. Follow this up with a counter sink bit.

Using the supplied stainless steel carriage bolts, secure the extrusion to the brackets.

*Be sure to secure to every bracket for optimal strength.*
"BL2" & "B2" Extrusion Installation

Your "BL2" & "B2" extrusions already come pre-attached to the composite panels from the factory.

You simply need to take measurements of the pit and transfer them to the pre-assembled panels and cut it down to size, if necessary. We find it easy to cut using a circular saw with a blade designed to cut aluminum or multipurpose blade. After any cuts are made, place the panel section onto the "L2" extrusion. Push the panel section as far forward as possible, this will allow the "B2" extrusion to match up with the "L2" extrusion. ***Note: There is a chance that the carriage bolts will cause the panels to be higher than the "L2" extrusion. If this is the case, you will have to cut a notch into the underside of the "B2" extrusion allowing it to sit flush.***

Starting from one side of the coping, drill a 3/16"in. hole into the face of the "L2" extrusion on the first line from the top. You will also have to continue into the face of the "B2" extrusion. Try to place the holes into the center of the first panel, and continue this on every other panel until you are across the pool to the other coping. Once you have all of your holes drilled, go back and insert and secure the 1/2"in. pan head screws provided. This will pull the two extrusions together eliminating any gaps.

You will also want to secure the corners down. Using an 11/64"in bit drill a hole through the top of the "B2" extrusion, 2"in. from the end and 1/2" from the front edge. The hole should go through the "B2" extrusion, panel and the horizontal edge of the "L2" extrusion. Follow up with a counter sink bit. Insert and secure a 1 3/4" stainless steel screw. Repeat for the other side.

The "BL2" extrusion needs to be secured to the deck as well. There should be a minimum of 1" of extrusion over hanging onto the deck. If this is not the case, either larger panels are required or the extrusion will have to be secured to the brackets instead.

Starting at one corner, drill a 1/4"in. hole through the "BL2" extrusion and continue towards the other corner, drilling a hole about every 4'ft. With the holes drilled through the extrusion, you can now go back and drill with a 1/4"in. masonry bit into the deck. Follow this up with a counter sink bit so that the screw heads can be as flush as possible with the extrusion. After these holes are drilled, lift up the "BL2" extrusion and insert the plastic ribbed anchors making sure they are flush with the deck. Using the stainless steel screws provided, secure the extrusion to the deck. Make sure that your bit does not create a bur on the screw head. If it does, you can either replace it with another screw or gently tap the screw heads with a hammer to flatten it out.

Your undertrack lid installation is now complete.

If you have any questions or concerns please contact Aquamatic Cover Systems at 1-800-262-4044