

Vanishing Edge Pool Overview

Automatic pool cover systems work well on vanishing edge (negative edge) pools. Since each pool is unique, specific modifications to the pool and pool cover system is needed during the initial construction. It is necessary to consult with your PCS distributor/dealer in the planning stages to make sure that the design is feasible and to eliminate costly mistakes.

Location of Vanishing Edge

The vanishing edge can be located in any of the following locations:

- **A. End of pool** opposite mechanism end of pool. This type of Installation does not require any special system modifications and is the preferred method.
- **B. Side of pool** opposite the motor end. This requires a vanishing edge upgrade package. Note: vanishing edge on motor side is more difficult and must be approved by the factory in the design stage.
- **C. Side and end of pool** Requires same modifications as B above.
- **D. Both sides and end of pool** This is a custom application and must be closely coordinated with your PCS distributor/dealer.

Types of Vanishing Edge

SI oped Negative Edge. The vertical edge is inside of the pool and the bond beam slopes away from the pool. In our experience this is the most common and the easiest to install and maintain. This type of installation uses standard top track with a wheel assembly that has been modified to run at a 45 degree angle on the non-motor side. The motor side uses standard under track (with or without encapsulation), or it can be done with top track on the deck, or recessed horizontal or vertical in the deck.

Vertical Negative Edge. The vertical edge is on the outside wall of the pool and the bond beam slopes in towards the pool. This can be done either using standard under track mounted vertically to the wall using spacers to allow the water to flow between the track and the wall. The thickness of the spacers depend on the water flow over the side of the pool. It can also be done using standard top track mounted to the bond beam using stainless steel brackets. This allows for a standard installation and does not require any special modifications to the system other than specifying which type of track to use on each side. As noted above, the motor side uses standard under track, or it can be with top track on the deck, recessed horizontal or vertical installed in the deck.

Vanishing edge at end of pool



Vertical top track on side of pool



Horizontal top track on side of pool



Vanishing edge at end of pool using standard under track



Vanishing Edge Pool Application Using Top Track on the VE Side

Automatic systems work well on vanishing edge pools. Since each pool is custom, specific modifications to the pool and pool cover system are needed during the initial construction.

These modifications are as follows:

- 1. The pool cover motor should always be opposite the pool's vanishing edge (Call your distributor if that is not possible).
- 2. Recessed housing length remains the same with the motor side extended 36" and opposite end extended 12". Both measurements need to start where track is mounted.
- 3. Housing depth should be 14" 16" lower than the motor end side lowered bond beam.
- 4. Drain for housing should be on the side wall of housing on vanishing edge side.
- 5. Track on the vanishing edge wall must not be more than 3" below motor end track. Note: Track will be raised 3/8" 1/2" off of tile.
- 6. A plastic shim (3/8" 1/2") will be used under the top track mounted to the vanishing edge with stainless steel screws allowing for proper water flow. Height depends on water flow, 3/8" is normal for most applications.
- 7. Standard under track application will be used on motor side.
- 8. All corners and edges of pool or box which cover slides over should be rounded to a minimum of 1/2" radius. When finished, there must be no rough edges.
- 9. Lowered bond beam in front of pool cover housing should be 1" higher than water line. Note: the end bond beam must continue the 45 degree vanishing edge into the cover box. In order to prevent pool water from flowing into pool cover housing this must also be raised 1/2" to 1" higher than the side bond beam.
- 10. The back corner of the bond beam is a point of stress on the fabric. To insure smooth operation of the cover, as well as fabric longevity, remove the corner of the bond beam as shown below. It should be cut 4" in all three directions.



Vanishing Edge Pool Application

Using Top Track for Vanishing Edge



Place top track on tile between 2-3 inches from the top on the 45 degree slope of the outside edge of the vanishing edge.



Note spacer under track. Turn so that corner is pointing away from track. This allows water to flow around and under the track.



Note: Bond Beam is slanted same as side bond beam. Slant area is 1/2" to 1" higher than side of bond beam.



If end of pool has a raised bond beam, it must be notched for the end pulley.

