

Cover-Pools Vanishing Lid design is an adjustable, tray-support system for any kind or style of deck material you prefer to use for covering the mechanism housing. The finished tray and deck materials provide a strong walk-on lid area that can blend with the surrounding deck. The Vanishing Lid assembly provides stainless steel trays that are used as a support base for your deck material. Stainless steel brackets mounted to the inside back of the housing support the trays.

# LAYOUT CONSIDERATIONS

**You Decide:** The look of the Vanishing Lid is up to you! Cover-Pools does not make a standard tray size; we can make the trays any size and can hold tolerances to 1/8th of an inch.

**Tray Size**: Start by matching your tray size to your deck material. For example, if you plan to use brick as the deck material, you may want the trays sized so that the brick is in uniform sections; you will need to plan for an equal number of bricks in each tray. For concrete, it may be as simple as dividing the length of the housing into even increments and making your tray sizes accordingly.

**Maximum 24" x 24" tray size**: We recommend keeping the tray size at or below 24" wide and 24" long because a filled tray can be very heavy.

**Gap Sizes between Trays**: It is impossible to have the trays fit tight against each other. Plan for small gaps at each joint. The smallest gap should be 1/16 of an inch. It is safer to plan for 1/8 of an inch/gaps. (This will affect the overall length of the vanishing lid system.)

**Tray and Material Thickness**: There must be a minimum 2" opening from the bottom of the trays to the top of the beam for the track and the cover. Plan so that the tray with material will be flush with the deck. Trays come with expanded metal welded to the bottom surface providing a surface for the mortar to bond. (Bottom of tray to top of expanded metal = 3/8".)

**Finished Appearance**: Cantilever the fill material in the tray about  $\frac{1}{2}$ " for a finished look. The trays will need to be ordered  $\frac{1}{2}$ " narrower than the width of the housing.

**Bracket Location**: The trays will have a stainless bracket at each joint between the tracks. These brackets cannot be mounted any closer than 8" on center from the track or else they will interfere with the rollup of the cover. Corner brackets can be used if the tray joints are close to the track. Aluminum angles are provided to support trays outside the tracks.

Adjustable Support Brackets: Brackets are manufactured in 12 and 18 inch lengths. Trays can cantilever off the front of the bracket up to 6". Support brackets mount to the back of the housing using three 3/8" x 3½" concrete lags. The back of the housing must be a minimum 6" thick reinforced concrete/gunite (gunite must be 4,000 psi) and as plumb as possible.

**Installation Instructions**: For instructions on using the Vanishing Lid trays to form the lids, see **Installation Instructions Vanishing Lid Trays Construction Methods with Tile or Masonry** (600862). For instructions on how to install the brackets and Vanishing Lids to the recessed housing, see **Installation Instructions Vanishing Lid Brackets** (601779).





# <sup>®</sup> Installation Instructions ■ Vanishing Lid<sup>™</sup> Trays Construction Methods w/ Tile or Masonry

# **Table of Contents**

1. 2.	Tools and Equipment			1
	Valli		•	J
	2.1	Materials for Finished Surface with Substrate	3	
	2.2	Materials for Finished Surface without Substrate and with Mesh Trays	3	
	2.3	Materials for Finished Surface without Substrate and without Mesh Trays	3	
	2.4	Typical Construction Method	4	
	2.5	Construction for Trays with Hat Section on Bottom	5	
	2.6	Constructing On Brackets	5	
3.	No Tray Mounting Method			6
	3.1	Materials	6	
	3.2	Construction Method	6	

## 1. Tools and Equipment

- Measuring Tape
- Tile Cutter
- Rubber Float
- Caulking Gun
- Level
- 1/4" or 3/8" Notched Trowel

1 of 6



fig. 1

fig. 2

fig. 3

Tray with Mesh Supports

#### 2. Vanishing Lid<sup>™</sup> Trays

- **Note:** It is good installation practice to plan the Vanishing Lid tray size around the size of the tiles to minimize tile cutting and provide the deck with a more uniform appearance. Maximum recommended tray size is 24" x 24" for ease of handling.
- Note: Plan accordingly if the final position of the finish surface is to line up with the deck surface.
- Note: Material limitations make it difficult for the trays to fit tightly against each other at the joints. Plan for small gaps at each joint (1/16" gaps minimum). This will affect the overall length of the Vanishing Lid system.
- Note: Use (170060) adjustable lid brackets 12" for tray widths 12"-18".

 Use (170061) adjustable lid brackets 18" for tray widths 18"-24".

#### 2.1 Materials for Finished Surface with Substrate

- 2.1.1 Vanishing Lid tray with mesh supports (fig. 1) or hat sections (fig. 2).
- 2.1.2 Mortar mix substrate. (Concrete mixture may be used as a substitute for mortar mix providing the size of the aggregate is small enough to fit through and under the mesh.)

#### 2.1.3 Thinset mortar

Selection Recommendations:

- Avoid using organic mastics adhesives to install ceramic tiles.
- Use a gray thinset mortar if you plan to use a dark colored grout. Use a white thinset mortar if you plan to use a light colored grout.

Tray with

Hat Sections

- Most thinset mortar (Multipurpose and polymer modified thinsets) is adequate for installing the majority of fired clay ceramic tiles on a cement substrate.
- Fully vitrified porcelain tiles should be installed using a latex modified thinset or basic (non-modified) thinset mixed with an acrylic latex additive.
- Use a sanded thinset mortar.
- Acrylic latex admixture can be used to increase the mechanical bond of the thinset. Check the manufacturers specifications before using.
- 2.1.4 Typical materials with substrate include tiles, slate, thin stone, brick veneer, or other finish surface material.

#### 2.2 Materials for Finished Surface without Substrate and with Mesh Trays

- 2.2.1 Vanishing Lid tray with mesh supports (fig. 1) or hat sections (fig. 2).
- 2.2.2 Typical materials that do not use a substrate in trays with mesh include concrete, gunite, or similar material with aggregate material small enough to fit through and under the mesh.

### 2.3 Materials for Finished Surface without Substrate and without Mesh Trays

- 2.3.1 Vanishing Lid tray with hat sections on bottom (fig. 3).
- 2.3.2 Typical materials that do not use a substrate in trays without mesh include materials that have sufficient strength and rigidity to meet the Uniform Building Code requirements for cantilevered flooring and/or local codes. Avoid porous, sedimentary, conglomerate, and similar materials. These types of materials do not bond well.
- 2.3.3 Consult your material supplier for adhesive recommendation.

# Tray with Hat Sections on Bottom \*(special order, call Cover-Pools)

#### 2.4 Typical Construction Method

- 2.4.1 Create a forming wall for the front face of Vanishing Lid<sup>™</sup> tray. (fig 3)
- **Note:** This front face will be visible from inside the pool. If you plan to use a finish surface or material on this face, plan accordingly. (fig 4)





product. These instructions should always be

carefully followed.

#### 2.5 Construction for Trays with Hat Sections on Bottom (special order, call Cover-Pools)

- 2.5.1 Cut or form material into slabs the size of the tray.
- 2.5.2 Mark and drill two 1/2" x 1/4" (minimum) holes in the bottom of the slab to accommodate for the two mounting bolts. (fig. 6)
- 2.5.3 Cover the surface area of the tray with a moderate (at least 1/16" thick) amount of adhesive. (fig. 7)
- 2.5.4 Place slabs onto the tray as soon as possible after applying the adhesive.
- 2.5.5 Allow a minimum of 24 hours for the adhesive to set before walking on trays.



#### 2.6 Constructing on Brackets

2.6.1 When constructing Vanishing Lid<sup>™</sup> trays attached to brackets, add support under the trays until the materials are set to prevent sagging. (fig 9)



### 3. No-tray Mounting Method

#### 3.1 Materials

- 3.1.1 The no-tray method is intended for use in applications Bracket Lid Clip where the material has sufficient strength and rigidity to meet the Uniform Building Code requirements for cantilevered flooring and/or local codes. Consult your material supplier for further guidance. Avoid porous, sedimentary, conglomerate, and similar materials (sandstone, slate, etc.). These types of materials do not bond well.
- 3.1.2 Consult your material supplier for adhesive recommendation.

#### 3.2 Construction Method

- 3.2.1 Cut material into slabs of desired size. Maximum permissible Bracket spacing is 24".
- 3.2.2 Replace the (170058) adjustable bracket lid clip with the (170092) adjustable bracket adhesive plate. Make sure the adjustable bracket plates are level. (fig. 10)
- 3.2.3 Cover the surface area of the (170092) adjustable bracket adhesive plate with a moderate (not less than 1/16" thick) amount of adhesive. (fig. 11) DO NOT use adhesive within 1⁄2" of the inner edge of the adhesive plate to avoid overspill.



- 3.2.4 Place slabs onto the adjustable bracket adhesive plate as soon as possible after applying the adhesive. **Important:** Make sure that excess adhesive does not drip into the mechanism box or onto the pool cover.
- 3.2.5 Allow a minimum of 24 hours for the adhesive to set before walking on it.

**A WARNING** This bracket system allows a maximum cantilever of 6" with a tray. Cantilevering without a tray is done at the builder's discretion and is intended for use in applications where the lids have sufficient strength and rigidity to meet Uniform Building Bode requirements for cantilevered flooring and/or local building codes. Cantilevered lids must be held securely to the lid brackets using lid clips, studs, adhesive plates, etc. to prevent tipping.

Cover-Pools technical service can only make recommendations based on previous experience. Final designs must pass all applicable codes and inspections.

