



Open Top Vinyl Over Polymer Step and Bench Systems

GENERAL INSTALLATION GUIDE









INTRODUCTION

The Latham Pool Products Open Top Vinyl over Polymer Steps and Benches are designed to be used primarily in a new pool application, but can be used in older pools with some dimensional considerations regarding the top/first riser.

These steps and benches utilize the perimeter walls of the pool as the backside of the units and attach to the walls for support and definition. The open top design allows for the steps/benches to be built using polymer riser panels attached to a support brace system. Once constructed, the interior of the step/bench is filled with pea stone, preferably, or a non-expansive type soil compacted for the interior foundation of the steps. They are filled leaving a 4" area to the top of the treads which is filled with concrete to form a solid tread system.

This combination of polymer, stone and concrete provides the strongest combination of non-corrosive materials for truly functional vinyl over steps and benches.

CONSIDERATIONS		
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☐ Have you read the instruction guide on the step installation?
\square Are all components of the step/bench on site?
\square Do you have the step/bench drawings for review aßnd direction?
\square Have you identified the height of the first riser from tread to coping liner track.
\Box If this is going in an older pool, is the shallow end flat or sloped? Have you taken that into consideration?
\square Have you ordered stone and concrete for the installation?
$\hfill\square$ Have you ordered the liner? If so make sure the dimensions agree with the step/bench
\square Do you have at least two people for the installation?
☐ Do you have any questions? Call Latham Pool Products technical service department a I-800-833-3800.
RECOMMENDED TOOLS REQUIRED
☐ Gloves and Eye Protection
☐ Tape Measure
☐ Permanent Marker
☐ Shovels, Rake and Tamp
☐ Variable Speed Drill or Impact Driver
☐ Socket Set and Open-End Wrenches
☐ Duct Tape or Cloth Tape
☐ Level
☐ Drill Bits, Screw Bits and Nut Drivers for Drill
\square Utility Knife, Water-Pump Pliers, Needle-Nose Pliers, Screwdrivers
□ 3/8" Rebar
☐ Hammer or Small Hand Sledge
☐ Concrete Trowels
\square Pliers: Needle Nose and Two Large Crescents
Optional: Wall foam and spray glue if covering step/hench before liner is installed



PREPARATION

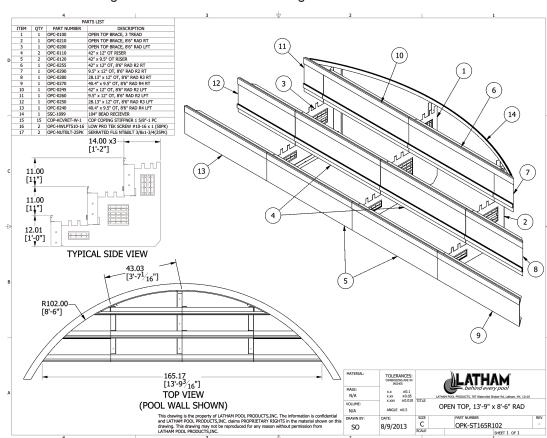
To insure the step/bench will fit correctly, it is important to make sure the pool walls are level, plumb, and staked before beginning the installation. Check your measurements to be sure the pool is square and that your pool base is flush with the bottom of the panels. If the step/bench is being installed in a new pool, then the grade where they are being installed should be even with the bottom of the panel. This will allow for a 2" finished pool based to be added once they are completely installed.

If the step/bench is being installed in an existing pool, make certain that the finished bottom is flat and keep in mind that the final step riser may be higher than in a new pool installation. This needs to be taken into consideration when meeting code regulations and also for your finished liner dimensions. Make sure the pool bottom is compacted where the step/bench will be installed so there won't be any settlement after the step/bench is installed.

LAYOUT

The step/bench will come with a drawing attached in a clear sealed plastic envelope. Remove the parts of the unit and place them in the area of installation. Check and be sure all parts shown on the drawing are on site. Depending on the size and model of the unit, you will have specific steel braces that will be the supporting structure of the step/bench and will be the starting point of the installation. It is recommended to use gloves when handling the steel braces and components, as they can be sharp and cause cuts if not handled carefully.

Each brace will be identified and the amount of braces and orientation will depend on the specific model you are building. Study the drawing and note the position of each brace as identified. Position the brace and mark on the panel the location of the three holes on the 3" back flange of the brace. Use a variable speed drill with a 1/2" drill bit and drill a hole at each of the marked areas. Position the brace and use three I" x 3/8" steel flanged bolts and nuts to secure the brace to the wall panel. Tighten using a 9/16 socket and open end wrench or an impact drill for a quicker installation. Position, mark, and drill the remaining braces as located on the drawing and secure the braces to the wall as noted.



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EACH BRACE IS DESIGNED FOR MULTIPLE FUNCTIONS

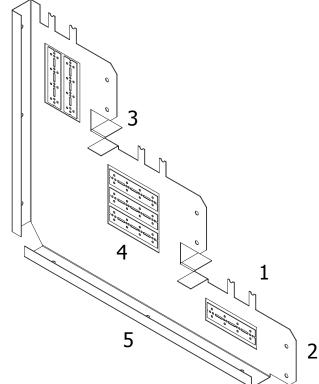
- There are three sets of fingers that extend vertically with a half moon notch on top of each.
 These are designed to cradle a length of 3/8" rebar so it will be centrally positioned for when you pour the finished concrete treads. These will be used just prior to pouring the treads.
- 2. There are three horizontal flanges with two ½" holes in each. These will be used to bolt the polymer risers to each other and the brace.
- 3. Below each of these horizontal flanges are two vertical tabs with a series of small holes along the bottom of each. This is designed to fold over and be used as a resting support for the polymer panels so they can be easily positioned and bolted together.
- 4. Each brace has a group of "knockouts" on the brace and are identified by a rectangular open border with just the corners connected to the brace. These are to be knocked out and used to secure the end of the panels to the pool wall.
- 5. There are holes in the bottom flange of the brace that sits on the ground. Should you so desire, these holes can be used for driving rebar into, which will hold the brace in place.

While wearing gloves, bend all of the panel support tabs (#3 in picture above) down 90° in opposite directions on all braces. This will provide a shelf to support the panels while bolting it in place.

NOTE: It is best to start at the middle brace and work out towards the side braces or side walls for radius steps; and work from left to right on straight steps.

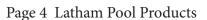
Starting at the top of the brace, begin placing the polymer panels as identified on the step drawing with the face of the panel facing in towards the pool. There will be two $\frac{1}{2}$ " holes on the side flange of each of the panels. Line the panels up with the brace bolting the flange between the two panels and insert two $\frac{3}{8}$ " x 1" steel flanged bolts through the holes; hand tighten only for now. Continue adding panels to the left and right of the braces until the top row of the step is complete. If you are installing a straight wall step, the last panels will butt up to the pool walls at a 90° angle. If you are installing a radius step or a step into a radius pool, make sure you identify the panels with the correct length and precut angle as noted on the drawing. Make sure that the top of the step panels are flush and that they are vertically plumb. Tighten all bolt using a $\frac{9}{16}$ socket ratchet/wrench or variable speed or impact drill with a $\frac{9}{16}$ socket. The ends of the step panels where they meet the pool wall will be secured once all step panels have been installed.

Move down to the next tread level and repeat the above process until all tread levels of the step have been completed. At this point you will need to use a hammer and knock out all of the attachment brackets located on the face of the brace (#4 on the above picture; this step can be done before you install the step braces if you prefer). These are the brackets you will use to attach the end panels to the pool wall at the end of each tread span. These brackets are designed so you can bend them to the angle you need by using two sets of pliers or a vise. If you are installing in a 90° application then bend the bracket into a 90° angle. If installing into a radius step, you will need to bend the bracket to the appropriate angle so each side of the brace sits flush on the pool wall and the step panel face. Using the I" self-tapping screws, install the brackets, making sure the step panel butts up to the pool wall and is level and plumb before attaching. Attach all brackets at this time.











All step panels should now be installed, tightened and aligned. At this time you can install rebar in the bottom of the step braces (#5 in the picture) to secure in place. It is recommended you place 2x4's across the face of the bottom step and stake with rebar to support during the filling and pouring of the stone and concrete.



Each step panel will come with the liner track and concrete receptor attached to make the installation quick and trouble free. As the riser of the top step is the pool perimeter wall itself, it is necessary for you to install the liner track to allow for the insertion of the top step liner bead. Using the top of each steel step brace as a guide, set the PVC liner track evenly along the top of the braces and screw into the pool wall using the $1-\frac{1}{2}$ flat head screws provided. Screws should be placed every 12".

NOTE: Make sure when installing the track to place the screws in the center of the liner track so they won't interfere with the liner bead when you install the liner. Do not remove the tear strip from the top of the track until after the concrete is poured. Using either duct tape or cloth, cover all brackets and wall seams with tape to protect the liner from any possible irritations.

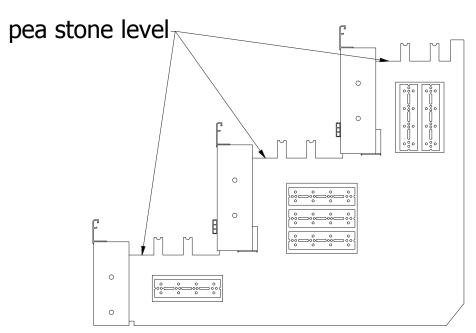
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You are now ready to fill the interior of the step with a non-expansive type material. We recommend using a round pea stone to reduce any settling later, but if necessary, a sandy loam can be used, and it should be compacted to avoid settling. The braces are designed to provide a height to bring your fill up to which will insure a final 4" to be finished with concrete. This height indicator is the horizontal steel where the rebar fingers meet the step brace. Once the interior of the step is filled to the correct height, you can now measure, cut, and install 3/8 rebar

(not included) onto the rebar fingers which will hold it in place during the pouring of the concrete and insure it is positioned in the middle of the concrete for best results. You may use wire mesh instead of rebar if you prefer.





Where the concrete receptor of each step panel meets, insert a support clip to mate each section together. Insert the top of the clip into the top lip of the receptor and snap down into place. Insert a 1-1/4" flat head screw into the top lip of the step panel to secure it in place.

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You are now ready to pour the top 4" (plus or minus) of each step tread with concrete. Make sure the tear strips have not been removed from the top of the PVC liner tracks. Concrete 2500# footing mix is the minimum strength concrete to be used to pour the finished treads. Most builders will pour the steps at the same time as they pour the bond-beam/footing around the base perimeter of the pool. The concrete on each tread should be finished at a level height using the PVC track at the back of the tread and the top of the concrete receptor in front as finish marks. The concrete should be finished with a smooth to light brushed finish depending on whether you will be applying wall foam over the concrete before the liner, or if the liner will sit directly on the concrete. A non-slip texture/finish is preferred. Once finished, allow the concrete to set and harden before walking on. Any concrete residue left on the top of the PVC track or the face of the receptor should be removed with a damp cloth once set.



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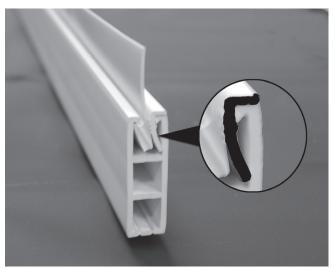
When ready to install the liner, carefully remove the tear strip located in the center on top of the liner track. Needle nose pliers work well for this. The PVC tear strip is designed to be removed to accept the liner step bead to secure the liner into the back of each step tread. If using wall foam to cover the steps, be sure to keep the foam off the liner track so it doesn't interfere with the liner installation.

When installing the liner begin with the step area. Starting with the bottom step, insert the step bead into the track on each step tread and then secure with the locking strip behind the bead once the liner is positioned properly.

Continue with each tread and finish by inserting the perimeter liner bead into the perimeter track of the pool.







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NOTES









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LATHAM POOL PRODUCTS, INC. LIFETIME LIMITED TRANSFERABLE OPEN TOP POLYMER STEP WARRANTY

Latham Pool Products, Inc. warrants to the original retail consumer purchaser and a one time subsequent purchaser to whom this warranty Is transferred, for as long as either shall own the same, that if a Latham Pool Products, Inc. open top polymer swimming pool step product shall fail due to a manufacturing defect and the Step has been installed in accordance with Latham Pool Products, Inc. instructions, Latham Pool Products, Inc. at its option will repair any such defect, or supply a new step, freight F.O.B. Latham, New York. Latham Pool Products, Inc. is not responsible for any additional materials and or labor/installation costs associated with replacing the step. Latham reserves the right to substitute similar or like replacement steps/parts as required.

This warranty is subject to the following additional terms and conditions:

Latham Pool Products, Inc. inground open top polymer swimming pool steps are intended for use in residential swimming pools only. If this product should become unusable and/or ineffective because of a problem covered by this warranty, the purchaser must make any claims for warranty coverage as instructed on the reverse side of this warranty. Upon review of such claim, Latham Pool Products, Inc. may instruct the purchaser to return the steps or the defective portion of the steps, or to send photographs of the defective steps to Latham Pool Products, Inc., 787 Watervliet-Shaker Rd., Latham, NY 12110. Purchaser will pay all appropriate shipping charges for the return of the product or portions thereof in accordance with its instructions. Upon inspection of the return/photographs, the purchaser will be informed as soon as possible as to the disposition of the claim.

This warranty relates only to manufacturing defects and does not cover fading or discoloration, staining, damage or failure resulting from other causes, including, but not limited to, use of product other than as steps in a residential swimming pool, acts of God, misuse or abuse, chemical damage, damage resulting from improper use of Salt-Chlorine Generation Systems, improper maintenance, accident, consumer negligence, design alteration, fire damage, ice damage, exposure to excessive heat or cold, water loss, or improper installation

Latham Pool Products, Inc. shall not be responsible for labor charges or any additional costs from related damage that may occur. Under no circumstances shall Latham Pool Products, Inc. be responsible for the cost of removal or replacement of the product under warranty, or for any other expenses or damages that might be incurred as the result of such removal or replacement.

ANY IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

UNDER NO CIRCUMSTANCES SHALL LATHAM POOL PRODUCTS, INC., BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES FOR LOSS OF USE OF POOL, INJURY TO, OR DEATH OF, ANY PERSON, OR DAMAGE TO PROPERTY, AND ANY CLAIMS THEREFORE ARE HEREBY SPECIFICALLY DISCLAIMED AND EXCLUDED. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

No representative of Latham Pool Products, Inc. or any of its agents, distributors, or dealers has any authority to alter in any manner the terms of this warranty. Your dealer, builder, or contractor is an independent business owner and not an employee of Latham Pool Products, Inc. Latham Pool Products, Inc. is not responsible for any undertaking, representation or warranty by any other person beyond those expressly set forth in this warranty certificate. By registering this warranty, you confirm you have read and understand the conditions of this warranty.

The term of this warranty shall not create or extend any statute of limitations or other time limitation of any kind.

Latham Pool Products, Inc.

Register your warranty at www.yourpoolwarranty.com

787 Watervliet-Shaker Rd. Latham, NY 12110 888-MYPOOL2 (888-697-6652)

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Important!! Please Read And Sign

WARRANTY REGISTRATION LATHAM OPEN TOP POLYMER STEP

Warranty shall be void unless this card is completed, signed and returned within thirty (30) days.

PURCHASER'S NAME	POOL MODEL & SIZE	 I have received and reviewed the Owner's Operating and Safety information package which contains:
ADDRESS	STOCK NO.	Safety Letter NSPI Safety Tips and Information Swimming Safety Tips Sign
CITY, STATE & ZIP	LINER SERIAL NO.	4. Operating Manual 5. "No Diving" Signs and Instructions
PURCHASED FROM	DATE INSTALLED	Owner's Signature
ADDRESS	INSTALLED BY (check one): Dealer Consumer Private Installer	
	7 413.1433	Date



LATHAM POOL PRODUCTS, INC. INGROUND OPEN TOP POLYMER STEP WARRANTY HOW TO FILE A CLAIM

All necessary warranty and care information is enclosed with each step. It is the retailer's responsibility to present this information to the purchaser. It is very important to complete and return the *Latham Pool Products*, *Inc.* warranty card within the first 30 days following installation of a new step system. Our web site, www.yourpoolwarranty.com, may also be used to register a warranty. Doing so validates your acceptance of the product and its instructions for use and care. It also registers your ownership and simplifies claims processing in the unlikely event you may need that type of assistance. Please follow these easy steps when contacting us:

- 1) If you believe you have a warranty claim, please contact the retail seller of the Latham Pool Products, Inc. step system. The seller or their designee should assess the product and report their findings to Warranty Service at Latham Pool Products, Inc. If you have not received a response to your claim within three weeks of the date you first contacted your seller about your warranty claim, please call our Warranty Department toll-free at 888-MYPOOL2 (888-697-6652).
- 2) A Warranty Service representative will ask for a claimant's name, address, phone number, and the date the step system was installed, the business name of the product seller and a description of the claimed defect. A claim number will be assigned. Please record and save the claim number. The Warranty Service representative may require the original seller/installer to inspect the product to verify the cause of the failure. The representative may require the return of the steps or the defective portion of the steps and/or digital or paper photographs of the area suspected of being defective be sent to Latham Pool Products, Inc. In either case, the appropriate mailing address will be provided.
- 3) Upon review, the purchaser will be informed as soon as possible as to the disposition of the claim.
- 4) Latham Pool Products, Inc. reserves the right to change its warranty claim filing instructions and procedures from time to time. Please contact your authorized Latham Pool Products, Inc. retailer for the latest instructions that apply to your warranty claim.



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Place Stamp Here

Latham Pool Products, Inc. 787 Watervliet-Shaker Rd. Latham, NY 12110



