

## **INTRODUCTION**

The Latham Pool Products Open Top Vinyl over Steel Steps and Benches are designed to be used in a new pool application. The open top design allows for the steps/benches to be built using steel riser panels attached to a wall and support brace system. Once constructed, the interior of the step/bench is filled with a small stone for the interior foundation of the steps. They are filled leaving approximately a 3-4" area to the top of the treads which is filled with concrete to form a solid tread system. This combination of steel, stone and concrete provides the strongest combination of materials for truly functional vinyl over steps and benches.

## **CONSIDERATIONS BEFORE INSTALLATION BEGINS**

- Have you read the instruction guide on the step installation?
- Are all components of the step/bench on site?
- Do you have the step/bench drawings for review and direction?
- Have you identified the height of the first riser from tread to coping liner track.
- Have you ordered stone and concrete for the installation?
- Have you ordered the liner? If so, make sure the dimensions agree with the step/bench
- Do you have at least two people for the installation?
- Do you have any questions? Call Latham Pool Products technical service department at 1-800-833-3800.

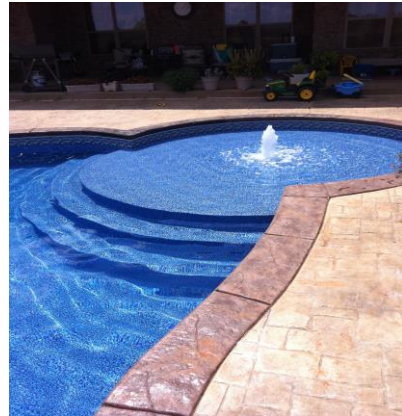
## **RECOMMENDED TOOLS REQUIRED**

- 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
- Utility knife, water-pump pliers, needle-nose pliers, screwdrivers
- 3/8" rebar
- Hammer or small hand sledge
- Concrete trowels
- Pliers: needle nose and 2 large crescents
- Optional: Wall foam and spray glue if covering step/bench before liner is installed



# GENERAL INSTALLATION GUIDE

Latham US Open Top  
Vinyl over Steel  
Step and Bench Systems

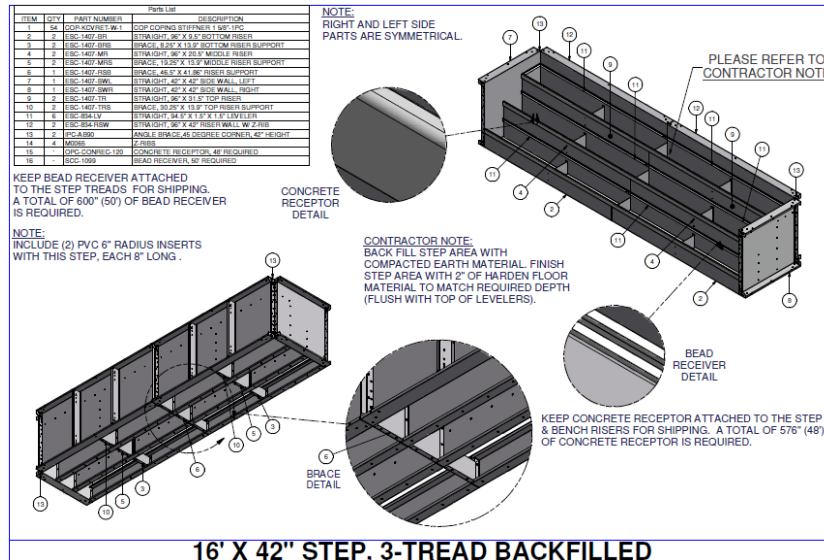


## PREPERATION

To insure the step/bench will fit correctly, it is important to make sure the pool walls are level, and plumb. Check your measurements to be sure the pool is square and that your pool base is flush with the bottom of the panels as the braces are designed to be flush with the bottom of the panels. The grade where they are being installed should be even with the bottom of the panel to insure stability. This will allow for a 2" finished pool based to be added once they are completely installed. 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 system 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 plastic envelope. Remove the parts of the unit and place in the area you are going to install them. Make sure all parts shown on the drawing are on site. *It is recommended to use gloves when handling the steel components as they can be sharp and cause cuts if not handled carefully.*



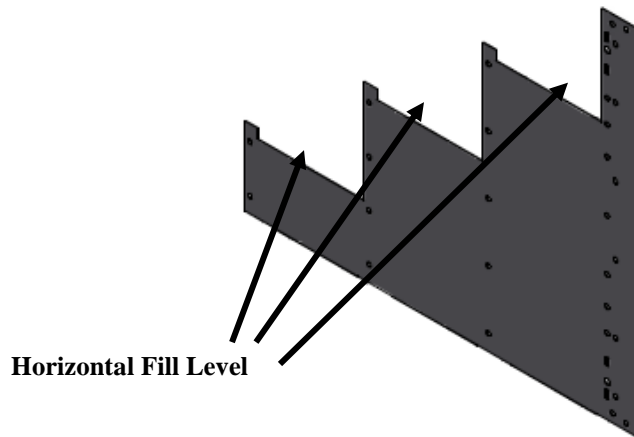
## INSTALLATION

Beginning at the side of the step arrange the wall panels that are included with the step system so they match up to the pool walls. As noted on the diagram, there are specific braces that are located at the panel joints. The back of the brace will contain bolt holes that will match the panel holes. Insert the brace between the two panel flanges and bolt together using the nuts and bolts provided. Continue around the perimeter of the step until the unit is completely bolted to the pool. There will be additional braces provided that will now be attached to the back wall of the steps. These braces are shorter in length and will attach directly to the wall as indicated on the drawing. The holes are already punched in the panel so match up the brace to the holes and bolt to the wall using the 1/4" nuts and bolts provided.

With the braces all in place, it is time to begin installing the risers that will form the front of the steps when completed. Each riser will come with the concrete receptor on the top and the step liner bead below it. Begin at one side and using the taller of the risers, begin placing them between the braces. The brace should line up between the risers so when the risers are bolted together, the brace will be sandwiched between the panel flanges. Insert the bolts provided and hand tighten. Do not tighten until the unit is completely assembled. Once the top risers are completely installed begin on the next level down and follow the same procedure. Continue until all risers are installed. Align the risers and make sure all dimensions are correct. At this time you can tighten all nuts and bolts. Add additional nuts and bolts where need on the liner track and tighten, making sure not to crimp or deform the PVC track. Follow the same procedure for all benches and additional design features. Make sure all risers and walls are square and plumb.

## STONE

You are now ready to fill the interior of the step. We recommend using a small stone to reduce any settling. The braces are designed to provide a height to bring your fill up to which will insure a final 3-4" to be finished with concrete. This height indicator is the horizontal steel at the top of each riser. Once the interior of the step is filled to the correct height, you can now measure, cut and install 3/8 rebar. It should be positioned in the middle of the concrete for best results. You may use wire mesh instead of rebar if you prefer.



## CONCRETE

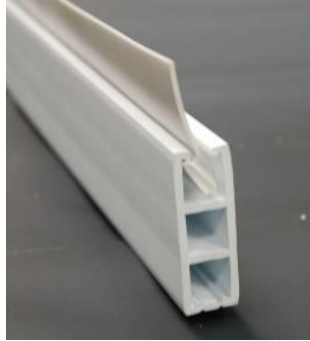
You are now ready to pour the top 3-4" of each step tread with concrete. Make sure the tear strips have not been removed from the top of the PVC liner tracks. Concrete 2500# footing mix is the minimum strength concrete to be used to pour the finished treads. Most builders will pour the steps at the same 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.

## LINER INSTALLATION

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 (highlighted in black) 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.



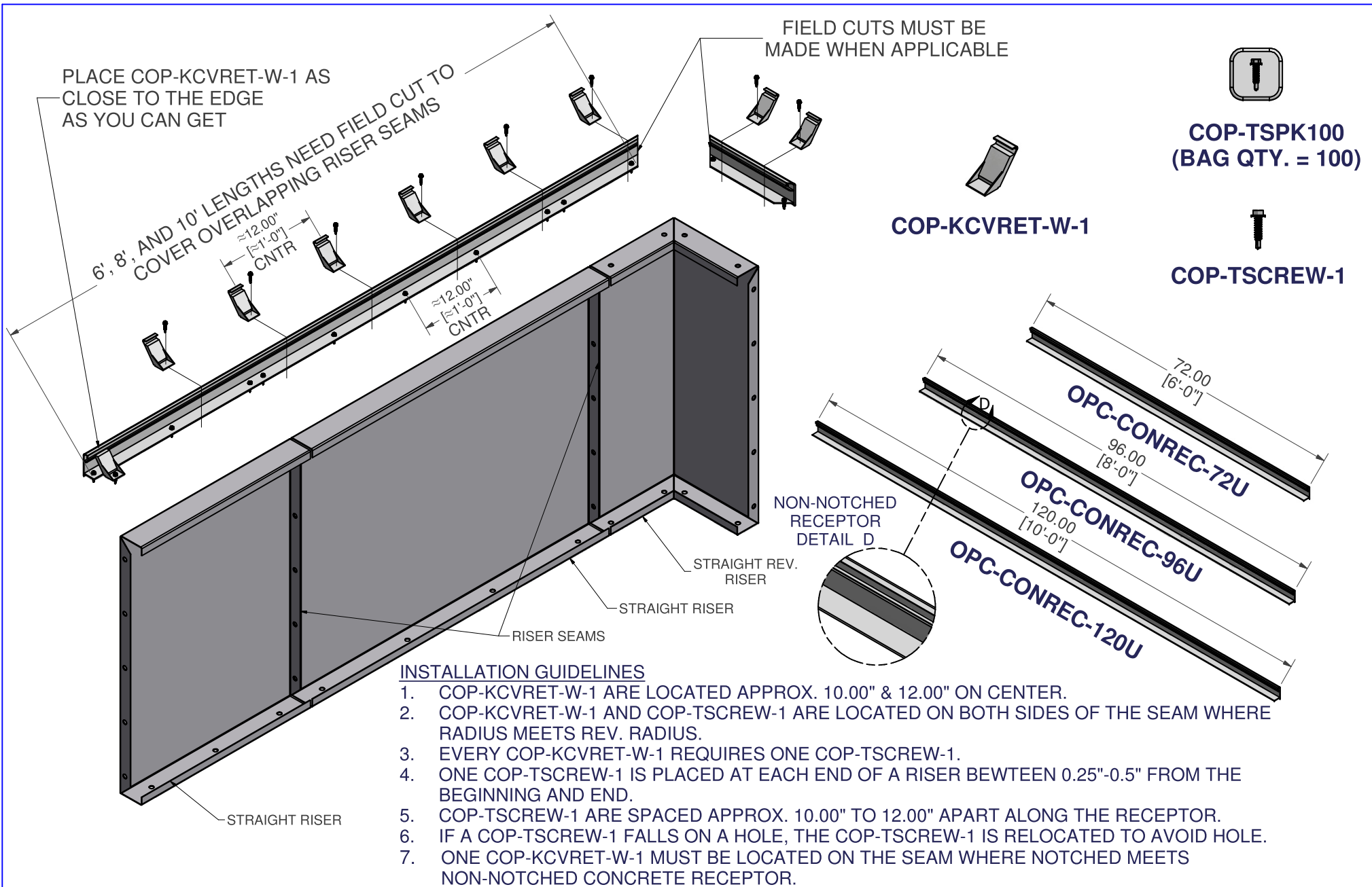
Tear Strip Removal




Step Liner Bead Inserted



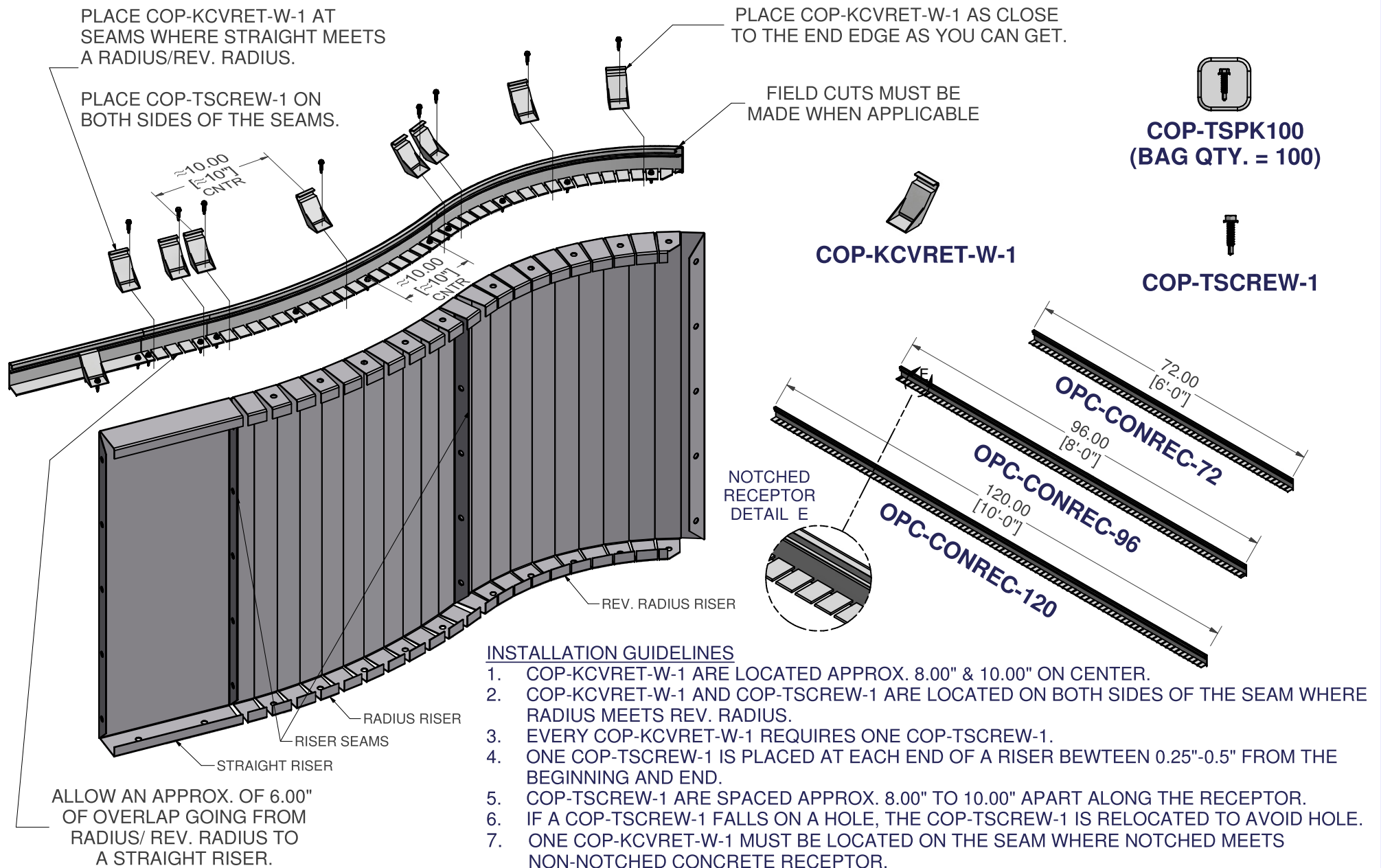
Locking Strip Added



# NON-NOTCHED CONCRETE RECEPTOR FIELD INSTALLATION

<b>PARTS #</b> <b>STRAIGHT CONCRETE RECEPTOR</b> 	<b>WEIGHT:</b> 77.51 lbmass <b>TOLERANCES EXCEPT AS NOTED</b> 0/0 0.0 0.00 0.000 0' ±1/8 ±0.25 ±0.0625 ±0.03125 ±1/2"	<b>MACHINE TIME:</b> N/A <b>MATERIAL:</b> <b>DRAWN BY:</b> JP	<b>FILE/DIRECTORY:</b> I:\PRODUCT_CATALOG\2018 SS\ESC-5929.idw <b>DATE :</b> 5/30/2018 <b>SHEET :</b> 9 OF 10 <b>NOTES:</b>
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# NOTCHED CONCRETE RECEPTOR FIELD INSTALLATION

**REV. RADIUS CONCRETE RECEPTOR**

**WEIGHT:**  
52.49 lbmass

**MACHINE TIME:**  
N/A

**FILE/DIRECTORY:**

I:\PRODUCT\_CATALOG\2018 SS\ESC-5929.idw



**TOLERANCES EXCEPT AS NOTED**

0/0	0.0	0.00	0.000	0"
±1/8	±0.25	±0.0625	±0.03125	±1/2"

**MATERIAL:**

**DRAWN BY:**

JP

**DATE :**

5/30/2018

**SHEET :**

10 **OF** 10

**NOTES:**