

## Detail 9

### TWF Masonry Veneer Wall to Roof Intersections

**NOTES:** Polyguard Drip Step Counters are made in one length, handed left and right facing the wall, and are hemmed to receive a Drip Counter. Application lengths longer than the standard length can be made by sliding a piece of Drip Counter, cut to fit the requirement, into the Drip Step Counter and then crimping the hem of the Step Counter to hold the pieces together.

If there is a fastened air barrier of any kind covering the backing wall, cut and fold it in an upward position to expose the area that will receive the flashing.

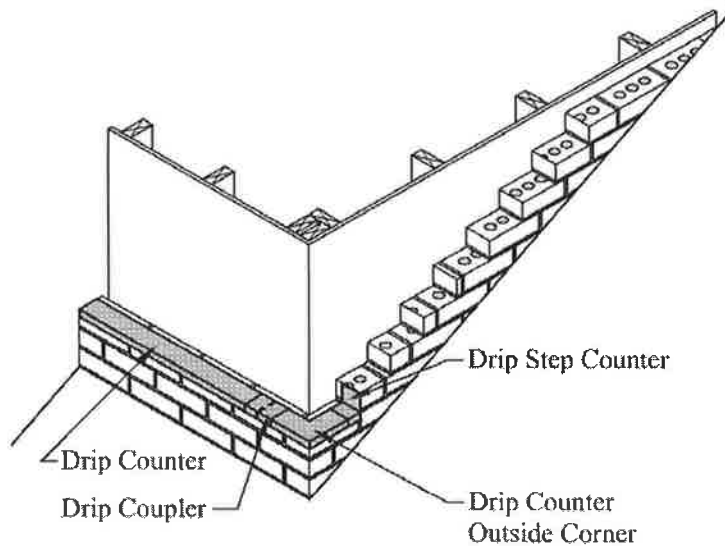
After the TWF is installed, drape the folded air barrier section over the TWF and trim the bottom edge even with the lower edge of the Termination Strip. Apply air barrier tape along the bottom edge of the air barrier and onto the face of the TWF with the skip-tape method.

If there is an adhered or spray applied air barrier on the backing wall, apply the TWF parts over that material.

The elevation for draining the TWF must be above the anticipated snow and rain loads.

The term masonry veneer in these instructions includes Clay, CMU, Cast Stone, and Natural Stone with a nominal bed depth of 4-inches or more.

Prepare the surfaces that will receive flashing as directed in Section One in this Handbook.



**Step 1** Build unit masonry steps and risers above the roof deck as follows:

Determine the height of waterproofing needed to protect the wall above the roofline from anticipated snow and rain loads. The height of this protection will vary regionally. If the information is not available in the construction documents, refer to the governing building code for guidance.

The determined height of the waterproofing will translate to be the vertical distance between the inside corner point of a step and the roof deck.

Chalk a line along the backing wall, parallel with the roof deck and equal to the determined height of the waterproofing.

Determine where each masonry course will intersect the chalk line and mark the intersecting points on the backing wall.

Determine how many courses will make up a riser. Coordinating this information with the marks on the wall will determine the inside corner position for each step in the build.

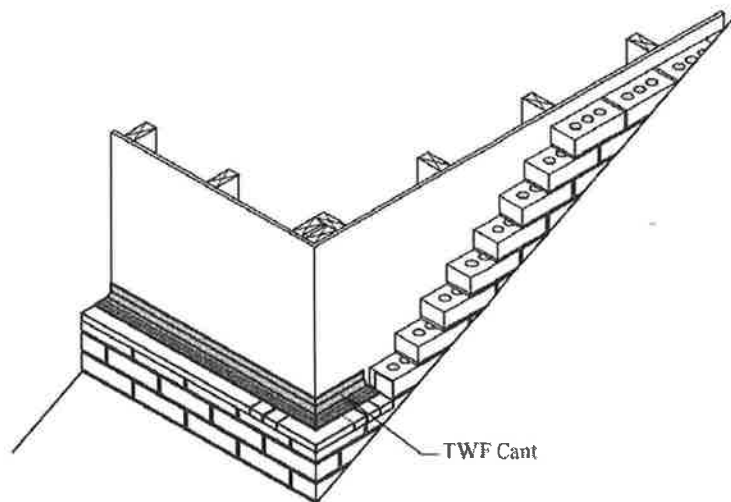
Build the inside corner steps to the determined positions.

**Step 2** Install Drip Counters, Drip Counter Steps and fittings along the lower masonry ledge as follows:

Remove the release paper from the Drip and adhere it with the bend in the Drip along the forward edge of the masonry. Allow a 3/16-inch space between sections.

Join Drip sections together by:

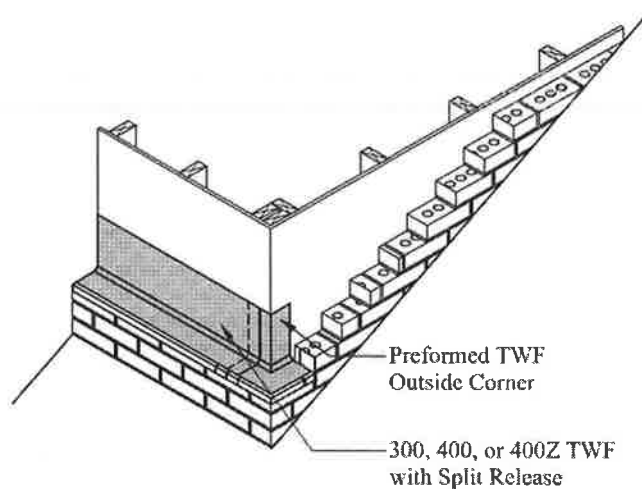
- Removing the release paper from the Coupler;
- Centering the Coupler over the joint;
- Hooking the open hem of the Coupler onto the hem of the installed sections and;
- Rotating the Coupler onto the top of the installed sections.
- Use hand pressure to seal the Coupler to the installed sections.



**Step 3** Install TWF Cants along the length of the backing wall, butting end sections together and miter cutting the ends at corners, as follows:

Shape the TWF Cant along the bending scores, remove the release paper and adhere the TWF Cant to the wall and ledge with the diagonal leg sloped at about a 45-degree angle.

Trim the forward edge of the TWF Cant to cover not more than 1-inch of the veneer / drip.



**Step 4** Install Preformed TWF Outside Corners on the outside corners of the wall in the following manner:

Open a Preformed Corner and place it over and onto the wall corner. Hold the piece in place, press it into uniform contact with the undersurfaces and mark an outline along the top and side of both of the corner legs. These lines will be used as a reference during the installation.

Peel about 4-inches of release paper down from the top and toward the open side of one of the corner legs and then lightly adhere the exposed area with the top and side edges of that section aligned along the outline. Double-check the alignment and fit of the rest of the preformed corner. Readjust the fit as needed and then continue peeling away the release paper and smoothing and adhering the flashing to the Drip.

Peel down about 4-inches of release paper from the top of the remaining corner and lightly adhere and smooth that section outwardly from along the corner and then downward to the Drip.

Trim the forward edges of the flashing to 5/8-inch behind the bend in the Drip.

Apply pressure to the surface of the flashing with a J-style rubber roller.

**Step 5** Install 300, 400, or 400Z TWF with Split Release as follows:

Chalk a line on the backing wall above the masonry ledge and use it as a guide for placement of the top edge of the flashing, Fig. 3. (The BIA Technical Notes commonly depict a minimum 8-inch vertical leg of flashing, select coverage accordingly.)

Select a width of flashing that will cover from the chalked line to the bend in the Drip.

Cut lengths of flashing and allow 2-inches for end laps.

Peel away about 12 inches of the 3-inch strip of release paper from the starting end of the flashing. (A factory cut has been made in the release paper 3-inches in from one edge of the flashing. This cut will allow removal of just that part of the release paper, making it easier to position and install the piece.)

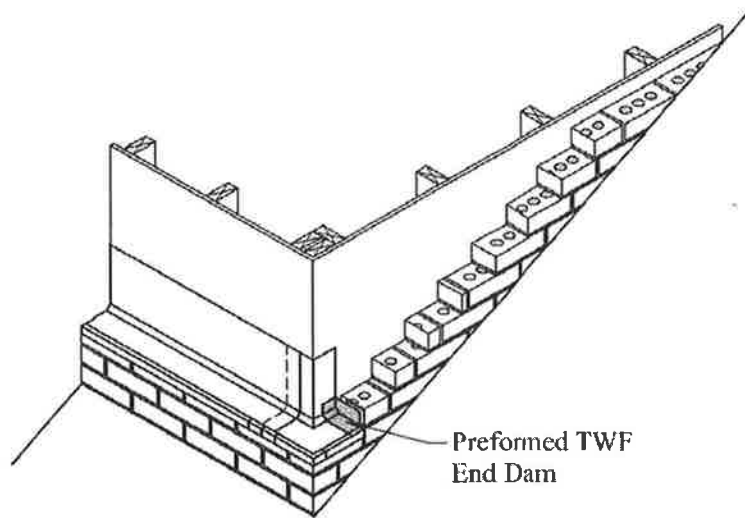
Adhere the top 3-inch section along the chalk line as the release paper is removed.

After the top 3-inch section of the flashing is adhered, check that the lower part of the flashing will lie flat against the lower substrates. Re-align as necessary.

Continue adhering the remaining part of the flashing as the release paper is peeled away in a downward direction

Trim the forward edge of the flashing to 5/8-inch from the bend in the Drip.

Apply pressure over the face of the installed flashing with a rubber roller.

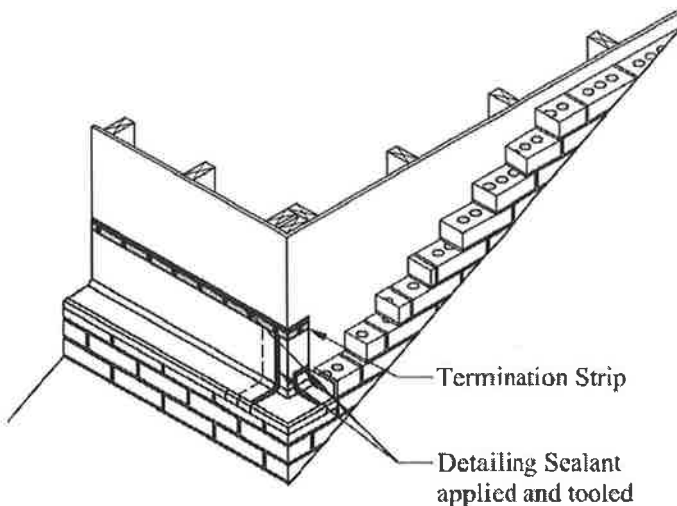


**Step 6** Install Preformed TWF End Dams as follows:  
(A standard size Polyguard Preformed TWF End Dam will form a 2" x 2" wall section, a 2" x 6" horizontal section and a 2" x 6" end dam section. )

Adhere a Preformed TWF End Dam so that: the 2" x 2" section will interface with the vertical leg of the flashing; a 2" x 6" section will interface with the horizontal leg of the flashing; and the remaining 2" x 6" section will interface with the Drip Counter Step formed riser.

Trim the forward edge of the End Dam to 5/8-inch from the bend in the Drip.

Apply pressure over the face of the vertical and horizontal legs of the End Dam with a rubber roller.

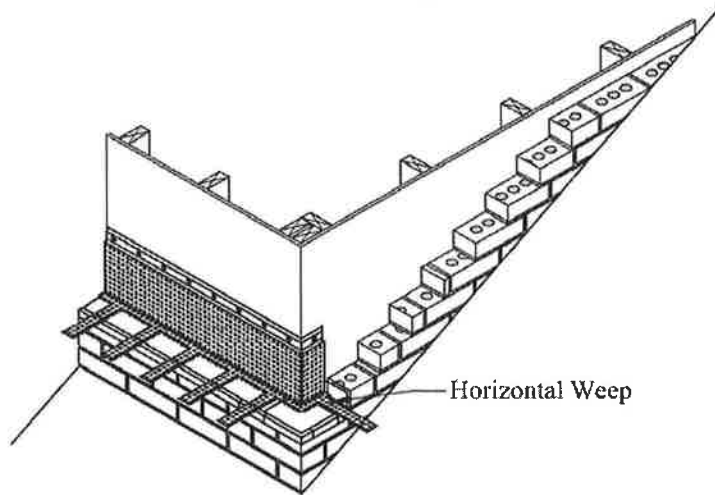


**Step 7** Terminate the top edge of the flashing as follows:

In cavity wall applications, fasten a Termination Strip along the top edge of the flashing, except in conditions where the flashing will later be covered by either, a liquid or sheet, air or water barrier.

In non-cavity wall applications, center and adhere Termination Tape along the top edge of the flashing, except in conditions where the flashing will later be covered by either, a liquid or sheet, air or water barrier. Apply pressure over the face of the tape with a rubber roller.

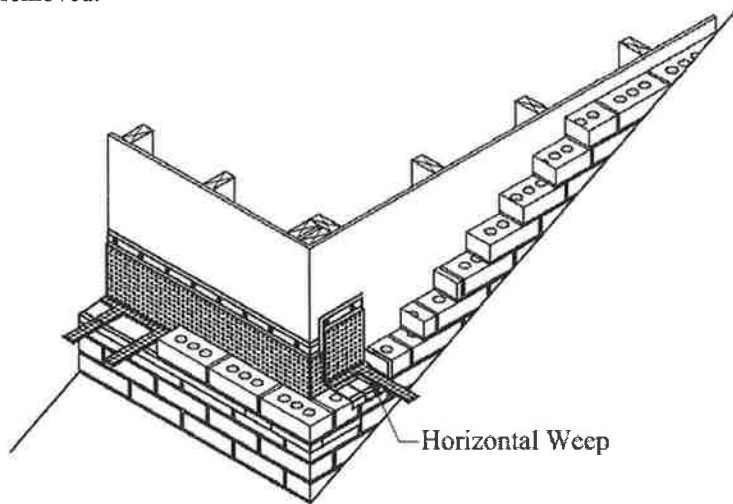
- Step 8 Apply a bead of Detailing Sealant along the top edge of any Termination Strip and along the edges of all end laps that will not later be covered by either a liquid or sheet, air or water barrier. Tool the beads to a uniform and even coverage.



- Step 9 Install Horizontal Weeps across the flashed area as follows:

Locate a weep at and along the side of each End Dam. If cutting and repositioning a weep is necessary, cut a weep extension flush with the lower body edge. Nest the separated weep into cups along the lower body and in the desired location. Shape and crease the lower body of a Horizontal Weep so that, its' forward edge will be positioned along and behind the back of where the masonry veneer will be.

Adhere the shaped Horizontal Weep flat against the underlying surfaces as the release paper is removed.



- Step 10 Install the masonry over the flashed ledge and to the first riser.

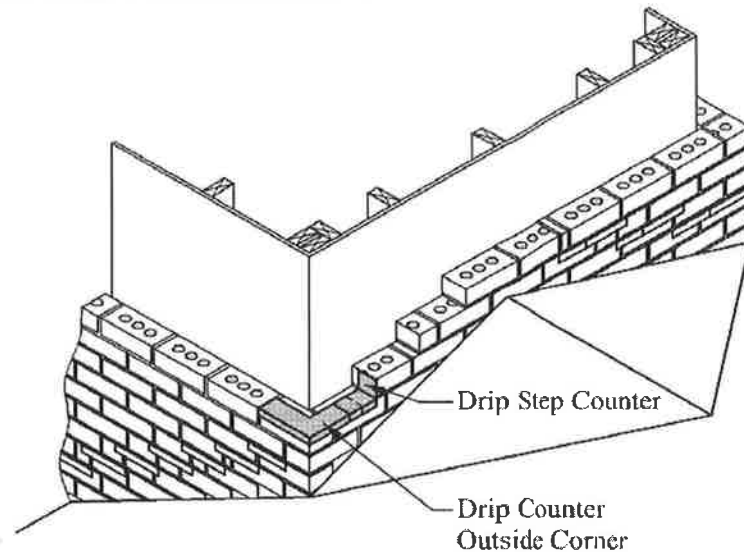
- Step 11 Trim the weep extension flush with the face of the mortar joint after the joint has been tooled.

Step 12 Install a Drip Step Counter with the open end extending 2-inches beyond the plane of the masonry head immediately below. When the length of the Drip Step Counter is not long enough to cover the described area, cut a piece of Drip Counter to a length equal to the coverage needed plus 2-inches. Slide the end of a Drip Counter 2-inches into the end of a Drip Step Counter and crimp the hem closed.

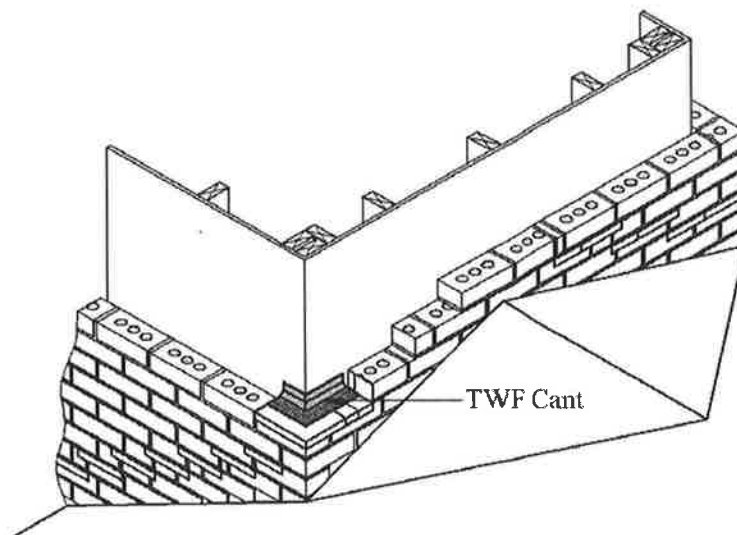
Step 13 Repeat in sequential order Steps 12, and 5 through 11 for each masonry step.

This next set of illustrations depicts the use of a saddle with protection on the high side of the wall. Where a saddle will not be used, determine the height of waterproofing needed and proceed across the wall with Drip Counters, Corners, and Couplers as needed following the sequencing and material usage as taught.

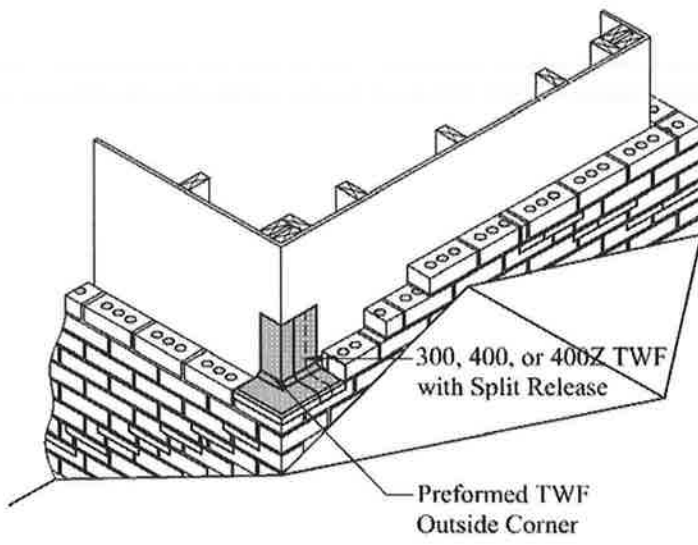
Descriptive captions are used in this next series of illustrations for brevity. If the captions aren't clear enough adapt the text in Steps 1-13 for more detail.



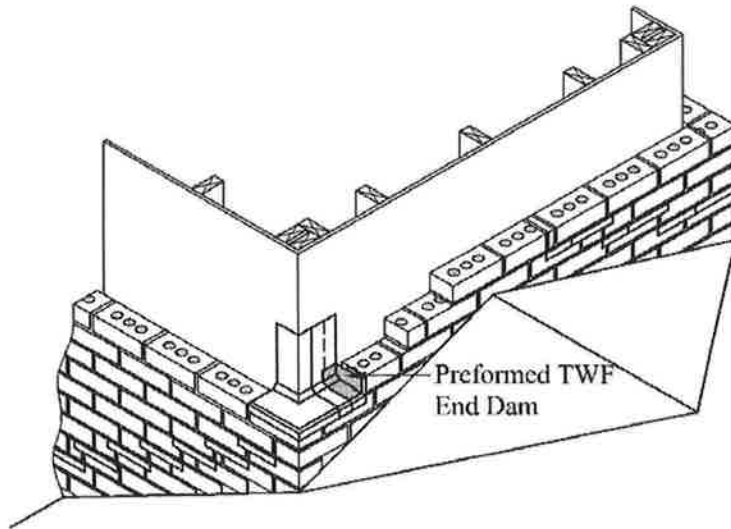
### **Couple and Install a Drip Counter Corner with a Drip Step Counter**



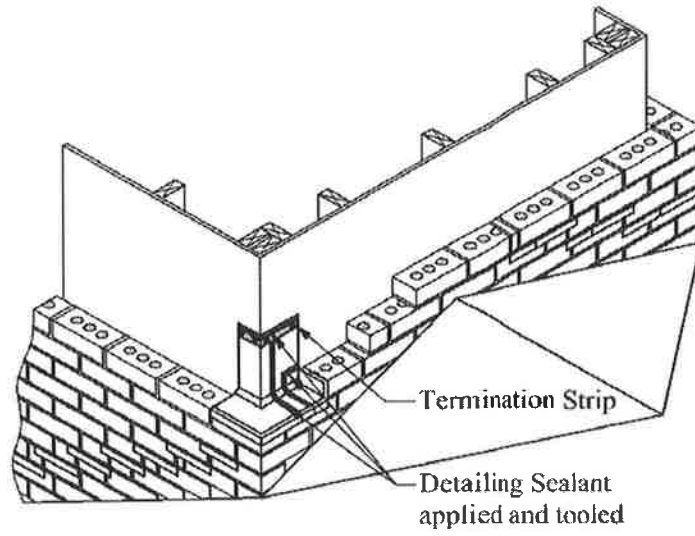
### **Miter and Install a TWF Cant**



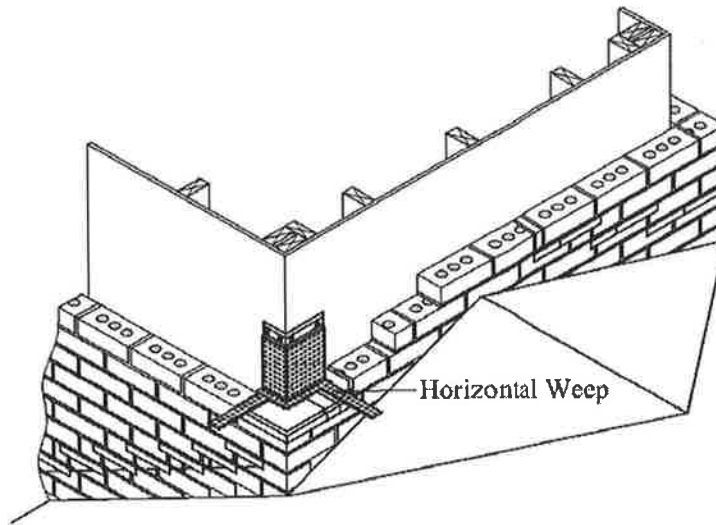
**Install a Preformed TWF Corner and Flashing**



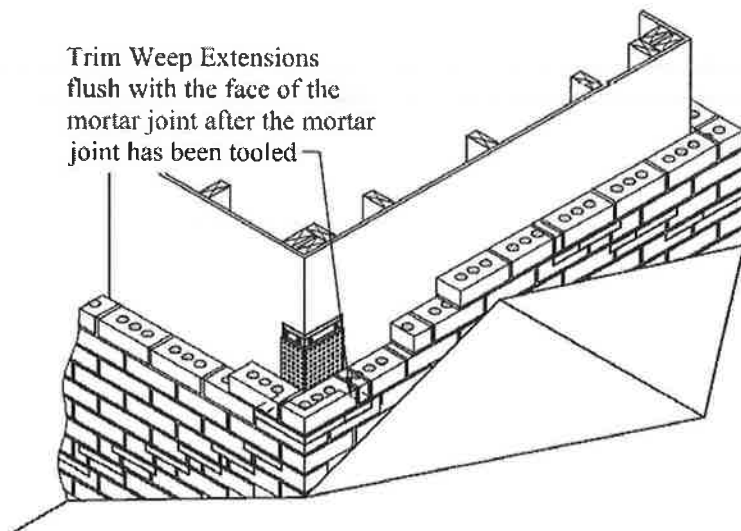
**Install a Preformed TWF End Dam**



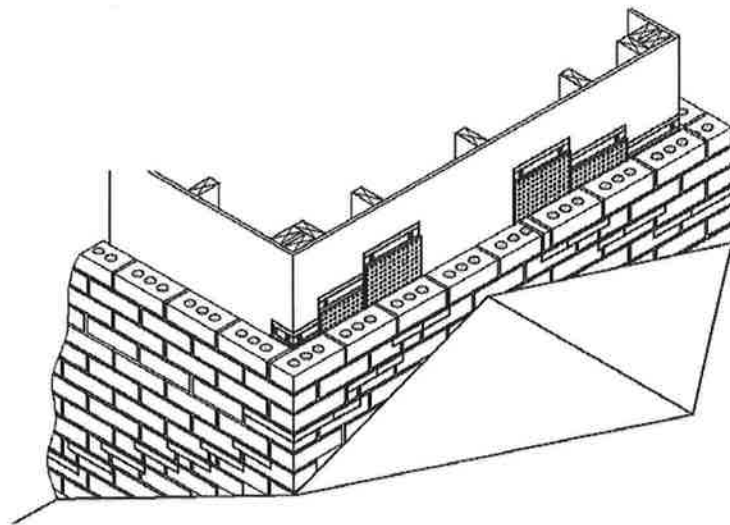
**Terminate the Flashing Top Edge and Apply Detailing Sealant Along the Termination and End Laps**



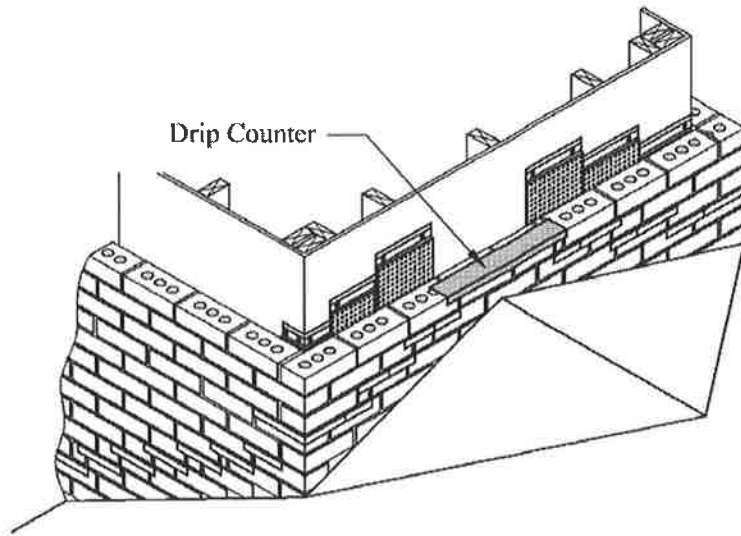
**Install a Horizontal Weep**



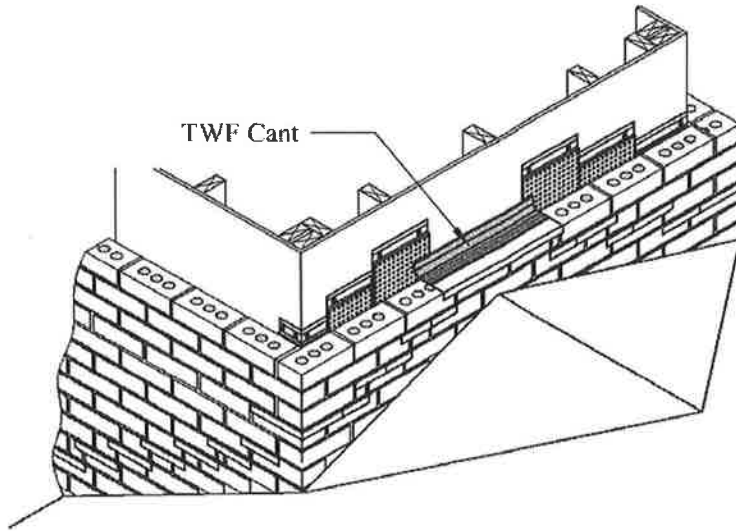
**Install the Next Coursing Step and Trim the Weep Extension**



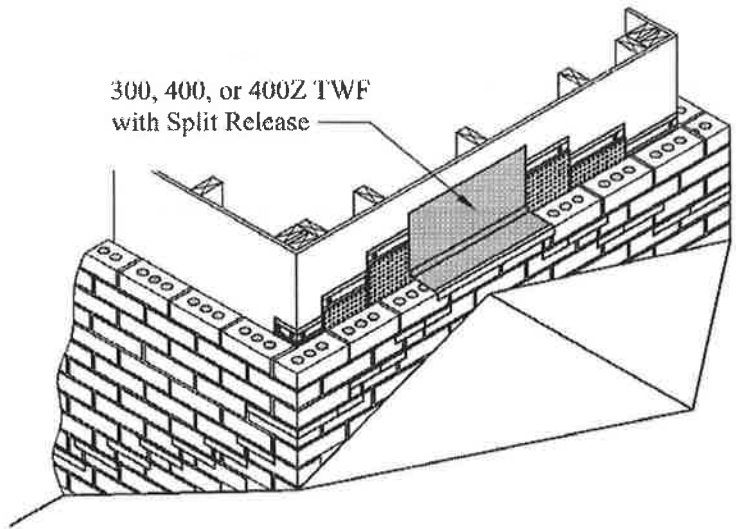
**Continue Constructing and Flashing Steps to a Common Course**



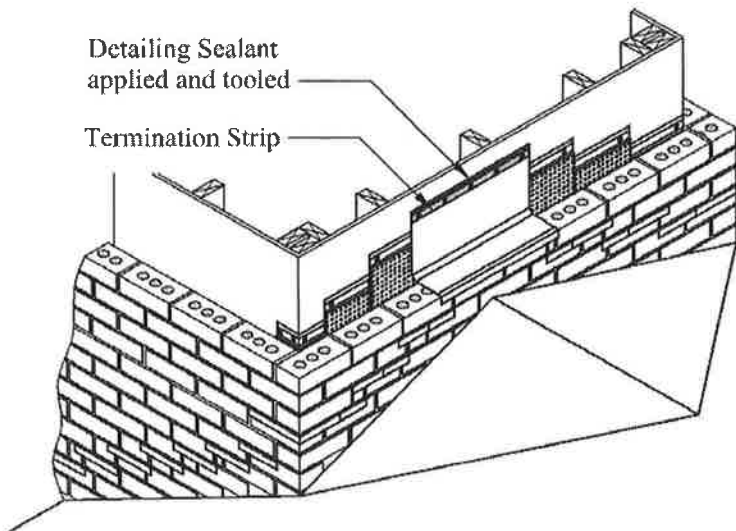
**Install a Drip Counter Across the Ends of the Steps**



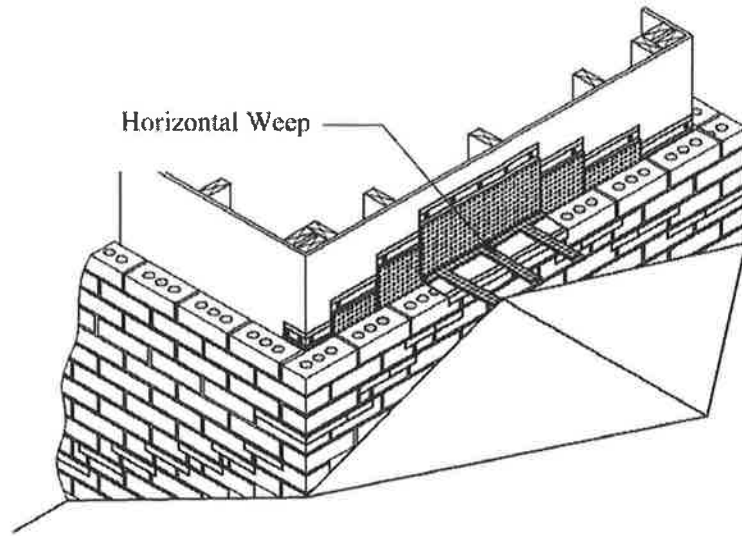
**Install TWF Cant**



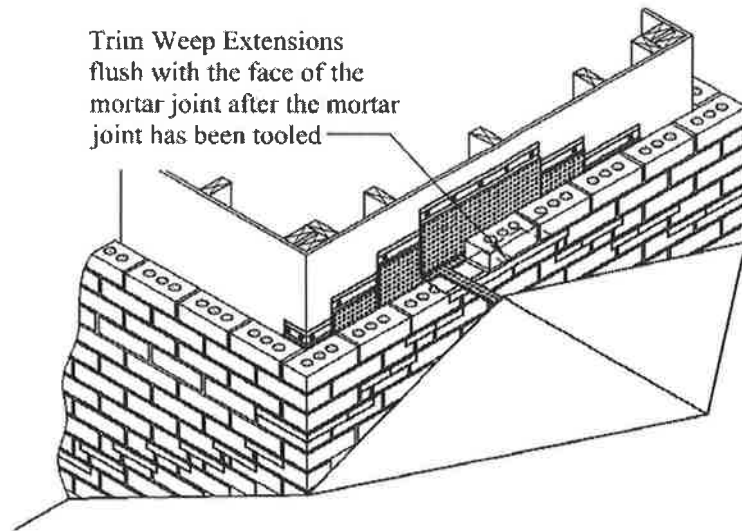
### **Install Flashing**



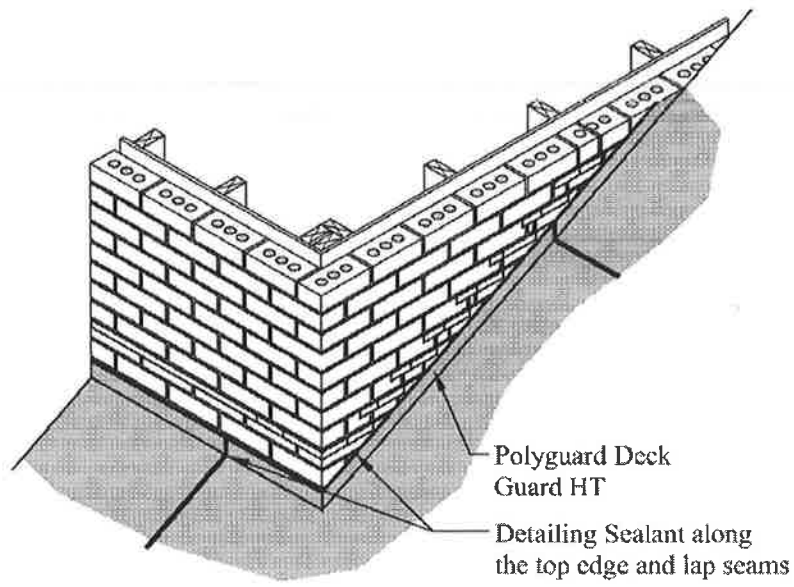
### **Terminate and Seal the Top Edge of the Flashing**



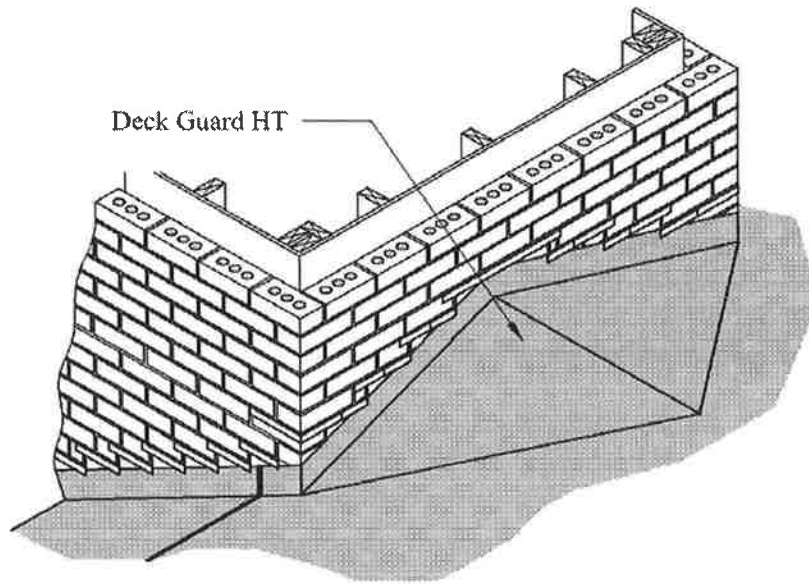
**Install Horizontal Weeps**



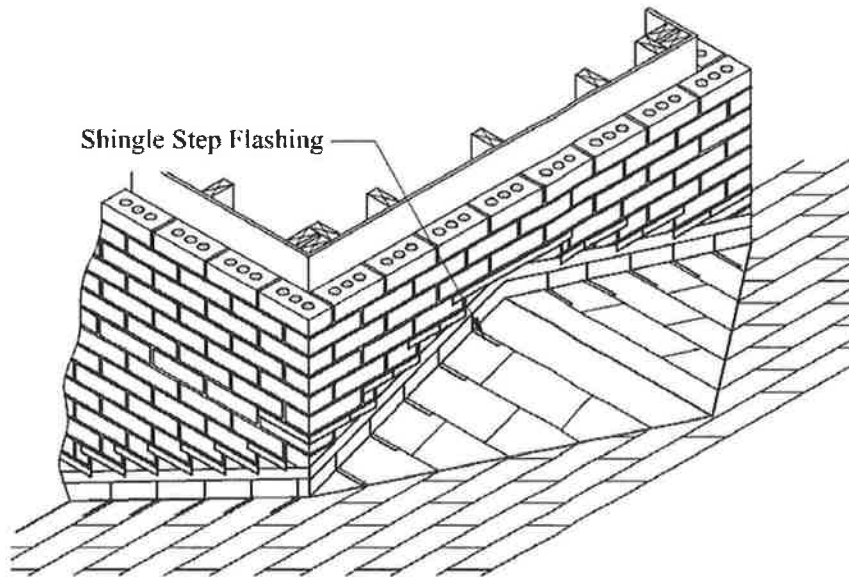
**Complete the Unit Masonry and Trim the Weep Extensions**



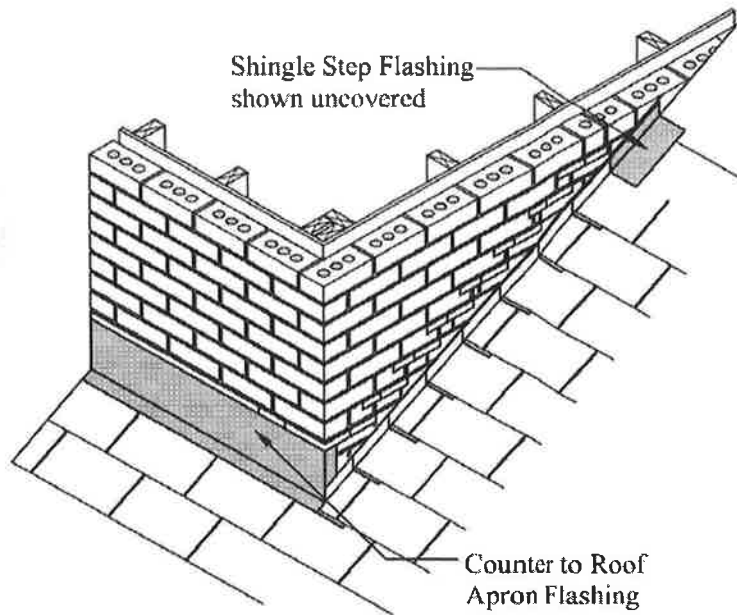
**Install Polyguard HT onto the Roof Deck along the Lower and Side Walls**



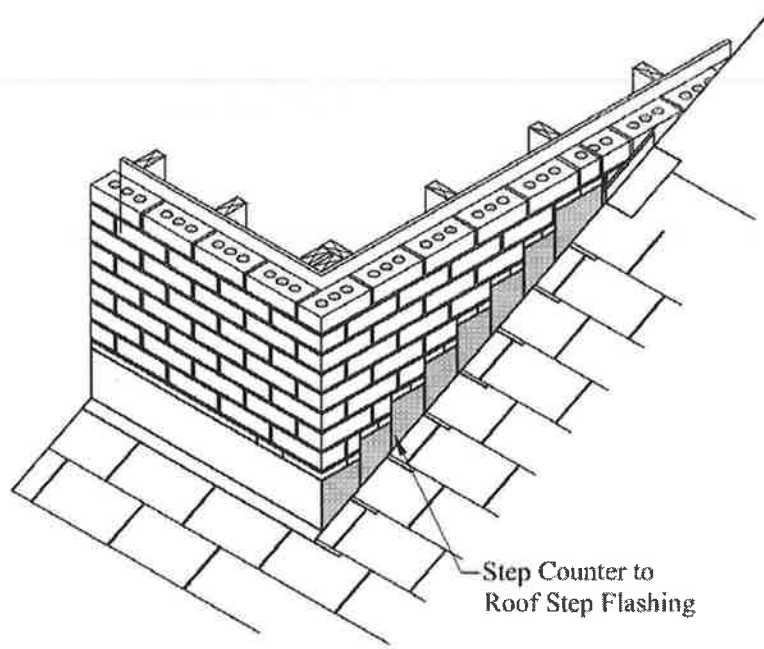
**Install Polyguard HT onto the Roof Deck and along the High Wall**



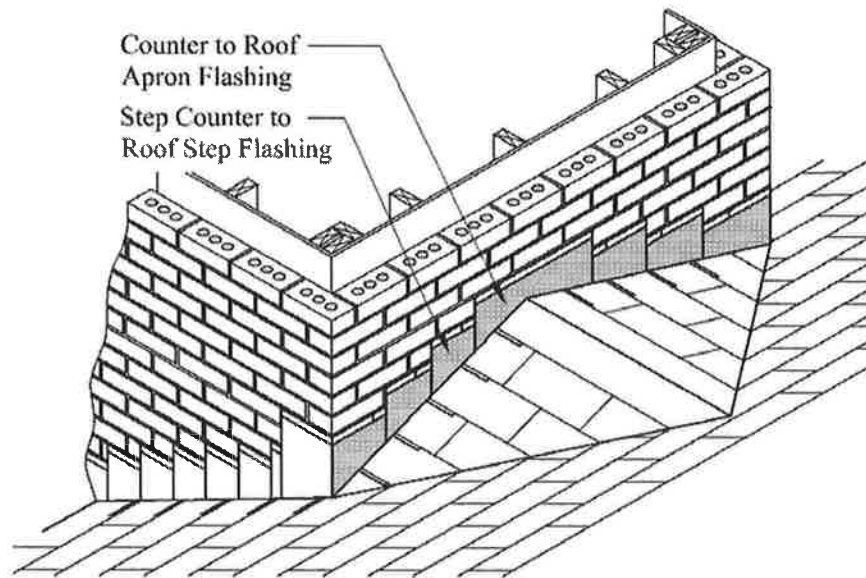
**Install Shingles and Shingle Step Flashing**



**Install Counter to Roof Apron Flashing on the Low Wall**



**Install Step Counter to Roof Step Flashing in a Shingled Manner on the Side Walls**



**Install Step Counter to Roof Step Flashings and Counter to Roof Apron Flashing in a Shingled Manner on the High Wall.**