

# ABCO Technical Bulletin

## Kickout Flashings

Missing or poorly installed flashings are a major problem in construction today. As roofs get more complex and multi-leveled, proper flashings become even more important. Properly installed metal kickout flashing where a lower roof line terminates against a vertical wall is required. When kickout flashing is missing or not properly installed, major damage can result. Water can easily enter behind the exterior wall cladding causing serious damage.

The kickout flashing is installed above the rain gutter or drip edge flashing where the roof meets a vertical wall. The flashing diverts water away from the lower wall. Missing, or incorrectly installed kick-out flashings, are often the source of major structural, mold, and rot damage.

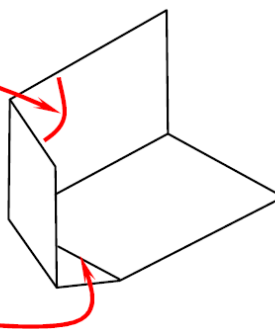
Flashing requirements can be found in the 2006 International Residential Code (IRC) and International Building Code (IBC).

- **703.8 Flashing.** Approved corrosion-resistant flashing shall be applied shingle-fashion in such a manner to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. The flashing shall extend to the surface of the exterior wall finish. Approved corrosion-resistant flashing shall be installed at all of the following locations:
  6. At wall and roof intersections.
  
- **903.2 Flashing.** Flashing shall be installed in a manner that prevents moisture from entering the wall and roof through joint in copings, through moisture permeable materials and at intersections with parapet wall and other penetrations through the roof plane. (also see 2006 IBC 1503.2)
  - **903.2.1 Locations.** Flashing shall be installed at wall and roof intersections, wherever there is a change in roof slope or direction and around roof openings. Wherever flashing is of metal, the metal shall be corrosion-resistant with a thickness of not less than 0.019 inch (No. 26 galvanized sheet). (also see 2006 IBC 1503.2.1)

The size of the kickout flashing is important. The size will vary depending on the application, siding, brick, stucco, stone, etc. The manufacturer should have requirements in their product documentation. In the absence of product specifications, ABCO Construction Services Corporation offers this suggestion.

1. Kick-out flashing must be angled a minimum of 100-degrees to allow for proper drainage.

2. Kick-out flashing seams must be soldered or sealed with an appropriate sealant.



Most siding and other wall covering manufacturers specify a minimum of 2 inch clearance between their product and the roof covering. To ensure proper integration of the kickout flashing, ABCO suggests the flashing be a minimum of 3 inches high and 8 inches long.

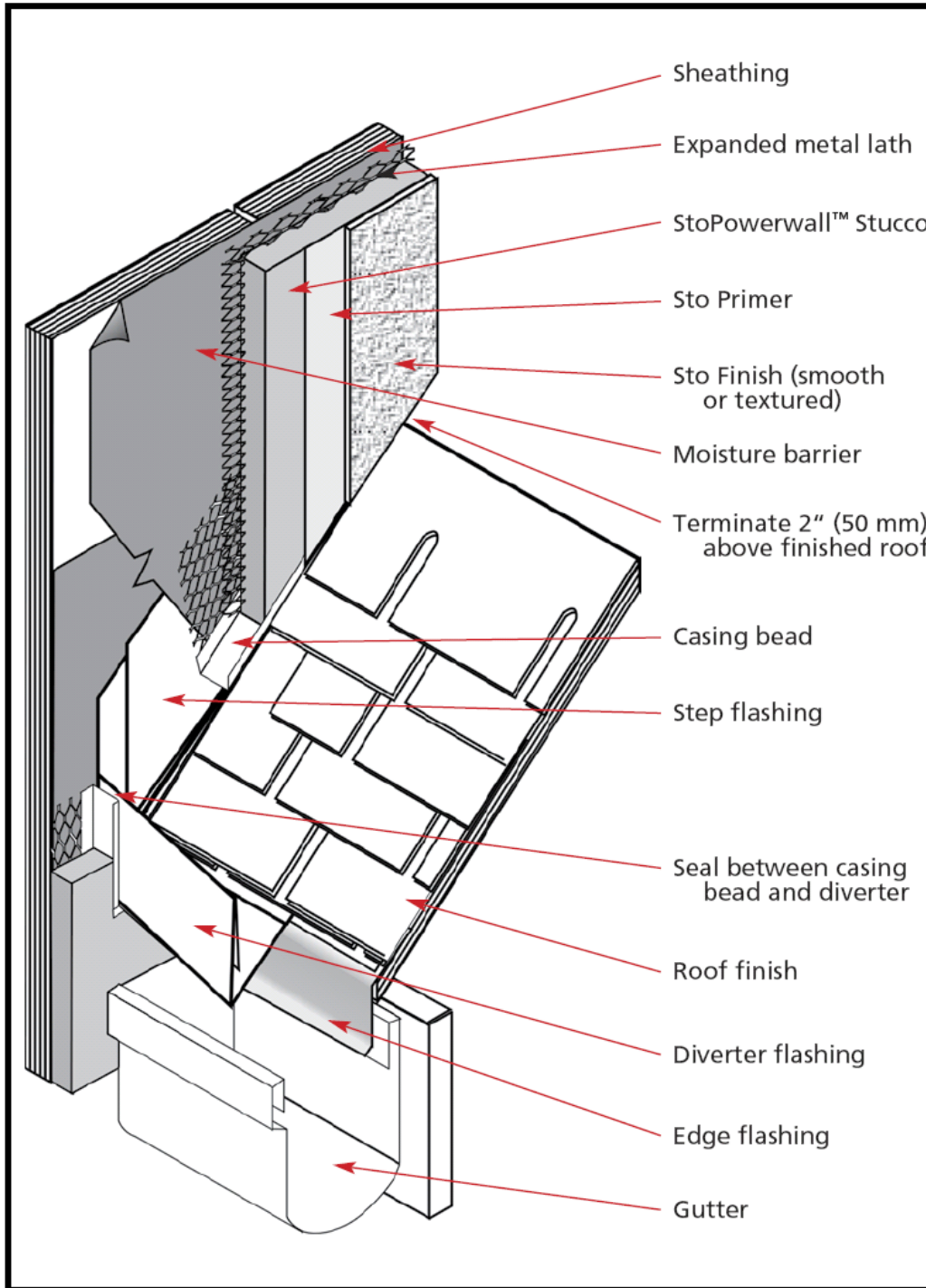
Wall covering manufacturers have details for their products that clarify the installation of the roof to wall flashings. You should check with the product manufacturer for their requirements for kickout flashing.

Example of a kickout flashing with stucco.

# StoPowerwall™ Roof/Wall Diverter Flashing

Detail No.: 5.62

Date: October 2007



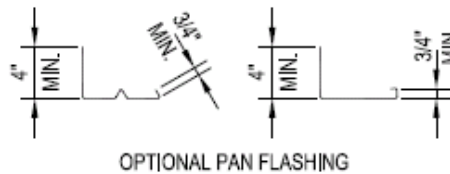
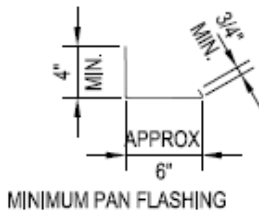
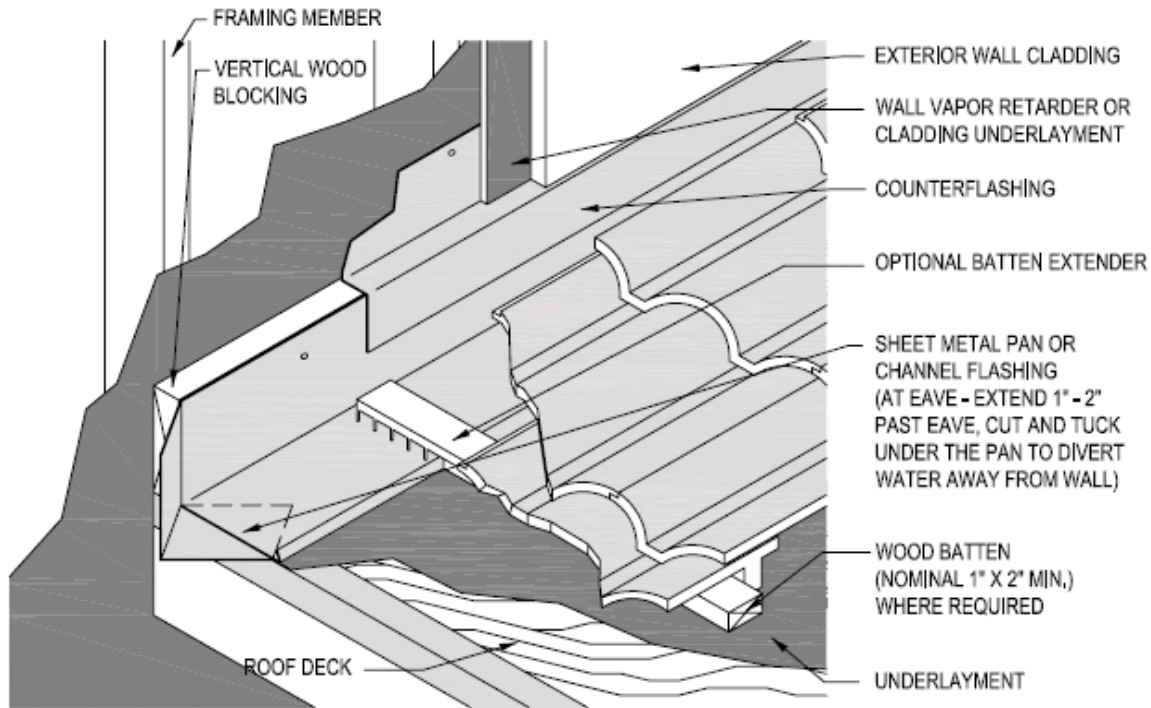
## Notes:

1. Provide step flashing minimum 4" (100 mm) extending up the wall.
2. Provide stucco overlap of the step flashing 2" (50 mm) and terminate stucco minimum 2" (50 mm) above the finished roof. The space permits re-roofing at a future date and helps prevent debris from accumulating between roof and stucco.
3. Terminate the step flashing with a watertight diverter (kick-out) flashing to direct water into the gutter. Refer to Sto Detail 2.62B on fabrication of a diverter flashing.
4. Provide 3/8" (10 mm) joint around the diverter flashing and seal.

The Tile Roofing Institute has the following detail for kickout flashing on tile roofs.

# PAN FLASHING AT ROOF-TO-SIDEWALL Where Wall Extends Past Eave

MC-12



**Notes:**

1. Provide one layer of No. 30 asphalt-saturated felt complying with ASTM D-226 Type II (ASTM D4869 Type IV) as minimum underlayment on all tile roof applications. Other underlayments as approved by local building officials will be allowed.
2. Underlayment shall extend a minimum of 4" up vertical wood blocking or wall.
3. Sheet metal pan flashing shall extend a minimum of 4" up the vertical wall approximately 6" out over the deck and have a minimum 3/4" return upward.
4. Solid wood blocking is required behind pan flashing and Z-metal counterflashing.
5. At terminating tile, cut head lugs. Use a roof tile adhesive approved by the local building officials or use wire ties or batten extender to secure tile.
6. Dimensions shown are minimums and are intended to be approximate to allow for reasonable tolerances due to field conditions.
7. Consideration shall be given to tributary area of roof for pan flashing design.
8. All roof flashing shall be a minimum of No. 26 ga. G-90 galvanized.

Drawing shown depicts the application of all tile profiles. Unless otherwise noted it would apply to either concrete or clay tiles.

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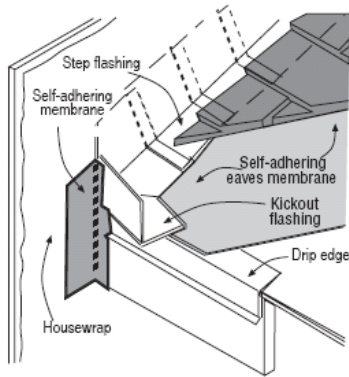
TILE ROOFING INSTITUTE\WSRCA

ICC-ES ESR-2015

01/2002, Revised 07/2006

James Hardie Building Products® specifies the following for their Hardiplank® Lap Siding

Figure 7



### KICKOUT FLASHING

Because of the volume of water that can pour down a sloped roof, one of the most critical flashing details occurs where a roof intersects a sidewall. The roof must be flashed with step flashing. Where the roof terminates, install a kickout to deflect water away from the siding (figure 7).

It is best to install a full rubberized asphalt flashing on the wall before the subfascia and trim boards are nailed in place, and then come back to install the kickout.

**Figure 7, Kickout Flashing<sup>†</sup>** To prevent water from dumping behind the siding and the end of the roof intersection, bend a small "kickout" from metal flashing to divert water running down the roof away from the siding.

This information is presented for the use of ABCO clients only after consultation. ABCO's analysis is based in part on standardized codes, manufacturer's product information and general industry practices. The analysis and opinions presented are general in nature and should not be relied upon without an in-depth analysis and specific recommendation as to any particular application or use. As with any building practice or method, local jurisdictions may have adopted specific regulations and you are encouraged to consult with your local jurisdiction prior to implementing any new products. Contact ABCO for additional information or comments.