

Kick Out Flashings

As someone who is extremely familiar with what may happen to a home as it ages, identification of water penetration issues is paramount during the inspection. Among these, the lack of a kickout flashing is probably the most frequent flashing defect I see, whether new construction or old. Since “code” always seems to come up in conversations about good building practices, take a look at the language related to flashing details from the 2003 IRC:

903.2 Flashing.

Flashings shall be installed in such a manner so as to prevent moisture entering the wall and roof through joints in copings, through moisture permeable materials, and at intersections with parapet walls and other penetrations through the roof plane.

903.2.1 Locations.

Flashings shall be installed at wall and roof intersections; wherever there is a change in roof slope or direction; and around roof openings. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019 inch (No. 26 galvanized sheet).

905.2.8.4 Sidewall flashing.

Flashing against a vertical sidewall shall be by the step-flashing method.

(There are numerous references to flashing being installed according to manufacturer’s specifications)

I have heard arguments that since the word “kickout” is not specifically mentioned in the above language, it is therefore not a code requirement and thus many contractors are unwilling to repair this most critical flashing defect. If we were to employ similar thinking, then why use roof to wall flashings or cap flashings since the code does not specify them by name? The fatal flaw in that kind of thinking is obvious. This is not new technology and with the vast amount of information available about kickout flashings and the severity of damage which often occurs when they are not installed, I am at a loss to understand anyone in their right mind being resistant to the concept.

Here’s a great article from a colleague of mine in Utah, Michael Leavitt, which sums things up nicely:

Missing or poorly installed kickout flashings are a major oversight in modern construction. As the roofs get more complex and multi-leveled, kickout flashings are needed at the lower roof terminations that abut a vertical wall.

- **What is a kickout flashing?**
- **Can missing kickout flashings really cause damage?**
- **What are the kickout flashing installation requirements?**

- Who should you call for retrofit kickout flashing installations?
- What should you do for new construction?

WHAT IS A KICKOUT FLASHING?

A kickout flashing is a piece of metal that is used where a lower roof line terminates against a vertical wall. The kickout flashing is installed above the rain gutter and/or drip edge flashing where the roof meets a vertical wall. This specialty flashing “kicks out” rain water and diverts it away from the lower wall. Missing, or incorrectly installed kick-out flashings, are often the source of major structural, mold, and rot damage.

CAN A MISSING KICKOUT FLASHING REALLY CAUSE DAMAGE?

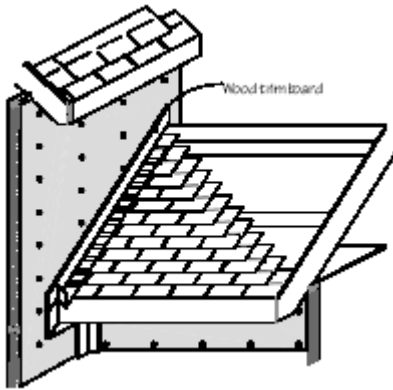
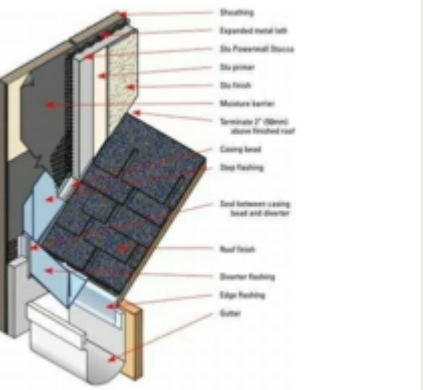


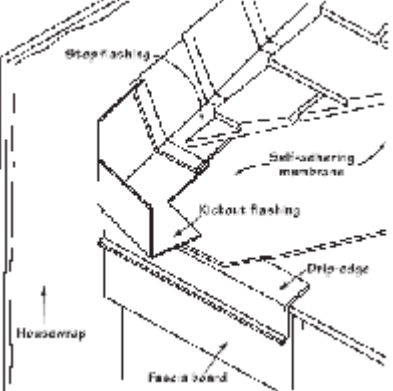
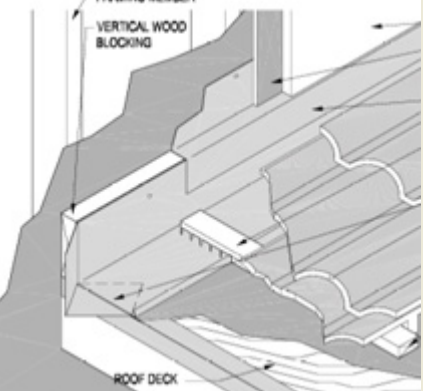


When there is no kickout flashing installed major damage can result. Without the needed flashing water can easily enter in behind the exterior wall cladding. Sometimes this damage is concealed until the cladding is opened up, and other times, the damage is obvious, even from across the street. Here are four photos of different wall systems where the lack of kickout flashings allowed water entry and major damage.



WHAT ARE THE KICKOUT FLASHING REQUIREMENTS?

Modern kickout flashing requirements are found in part in the International Residential Code (IRC) and then further clarified by the exterior cladding manufacturers and roofing material manufacturers.

I researched several different trade associations' and manufacturers' websites and found numerous details that clarify the installation of the roof to wall flashings, including the kickout flashing. The International Residential Code specifically leaves it to the discretion of the exterior cladding manufacturers to provide the needed flashing detail drawings and specs. Please click on the following images to view four major industry kickout flashing details.

	
<p align="center">  IBACOS Integrated Building and Construction Solutions CLICK ON IMAGE FOR DETAIL </p>	<p align="center">  sto Sto Corp. Stucco CLICK ON IMAGE FOR DETAIL </p>
	
<p align="center">  Vinyl Siding Institute CLICK ON IMAGE FOR DETAIL </p>	<p align="center">  Roofing Tile Institute CLICK ON IMAGE FOR DETAIL </p>

WHO SHOULD YOU CALL FOR RETROFIT KICKOUT FLASHINGS?

The best person to call for retrofitting kickout flashing is the professional specializing in the exterior cladding on your home. If you have brick exterior where the kickout flashing is needed, then call the brick mason. If you have vinyl siding, then call the vinyl siding professional. The same is true for stucco, EIFS, composite siding, or any of the other exterior claddings. You can also call a licensed roofer.

WHAT SHOULD YOU DO FOR NEW CONSTRUCTION?

If you are building a new home that has a multi-level roof then discuss the kickout flashing installation with your general contractor, roofing subcontractor, and exterior cladding contractor. This should be a team effort on their part to ensure that water does not enter into the walls of the home.