

RETROFIT Improvements

Flash & Seal Roof Penetrations

Making
Homes
Safer in
Disasters

Retrofit Opportunity

- When replacing roof covering
- Pipe collars and step flashing can be installed as repairs without a complete roofing replacement

Purpose

- To prevent moisture from entering into the home through poorly maintained roof penetrations and flashing
- To maintain the integrity of the interior against undetected leaks

Benefits

- Keeping moisture out of the house will keep it dry and free of mold

Hazards

Wind



Rain



Flood



Seismic



Fire



Snow



Summary

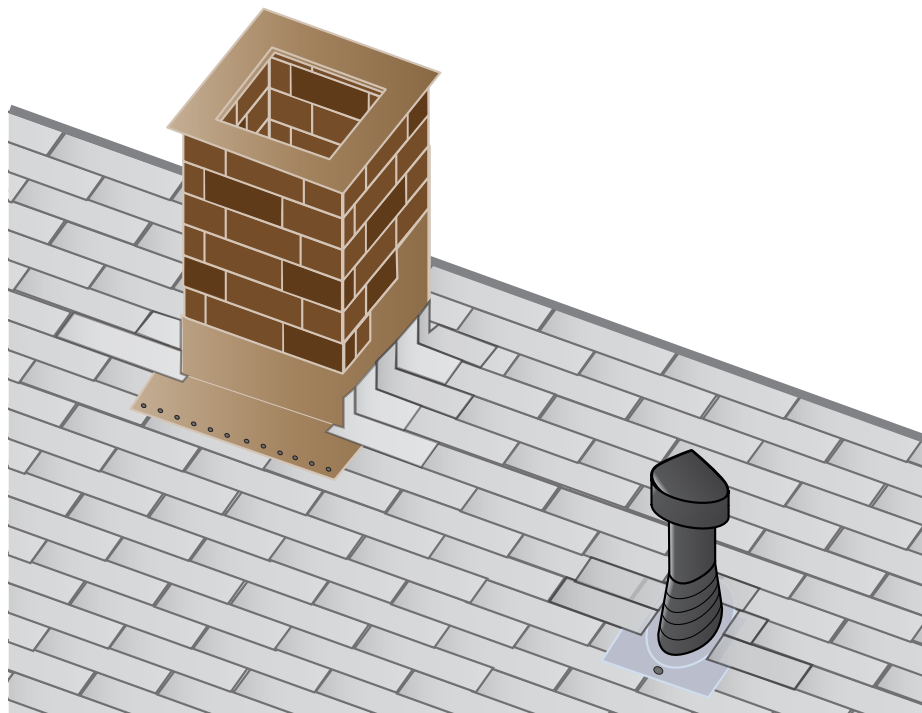
When it is raining, inspect your roof from outside and from within the attic. From the attic, look to see if you can see daylight through holes cut into the sheathing, water stains, or water droplets. From the exterior, look up from the ground to see how water runs down off the roof. No pooling of water should be evident and gutters should be moving water flow away from the roof and foundation. Also, look for shingle deterioration or other roofing damage. Inspect the soffit, louver, and ridge vents closely for signs of infiltration in high winds. Gable end wall louvers should be permanently closed off if your home is in a hurricane area, or temporarily boarded up before each storm.

Evidence of water stains is usually the first indication that water is coming into the house from the roof. The stain could be on the roof sheathing, the insulation, or even the drywall of the ceiling below. Water will travel a path of least resistance, often leaving a stain far from where it first penetrated. It usually takes several inspections to pinpoint the source of a leak seen from within the home.

Repairing roof flashing can be as simple as replacing a pipe collar rotted by the sun to a whole house shingle tear-off and reroof due to extensive infiltration at step flashing that has not been inspected and maintained. Be sure to inspect the roof periodically, and tape joints while performing the repair.

Illustrations

Retrofit



Potential Damage



Photo: www.epa.gov

Key Steps

- This retrofit requires an experienced roofer.
- Inspect the roof inside and outside during and after rain events.
- If you notice daylight from the attic or evidence of water stains inside, have the roof professionally inspected.
- Regularly inspect and maintain the roof and gutters.
- Repairs most often take place from the roof's exterior. Safety equipment and special knowledge of roofing techniques is required.
- Your contractor may have additional ideas on how to improve the safety of your home.
- For more details about this retrofit improvement, please refer to the list of Resources in the section below.

Resources

Federal Alliance for Safe Homes, *Flood Protection*

<http://www.flash.org/video.php?id>

Institute for Business & Home Safety, *Is Your Home Protected from Hurricane Disaster? A Homeowner's Guide to Hurricane Retrofit*

http://www.nhc.noaa.gov/HAW2/pdf/hurricane_retrofit.pdf

