

Gary Worrell

From: Gary Worrell [gcw@igx.net]
Sent: 30 June, 2012 20:12
To: 'Gary Worrell'
Subject: Fault Isolation & Repair

Hello –



The first step in fault isolation is to identify the fault –

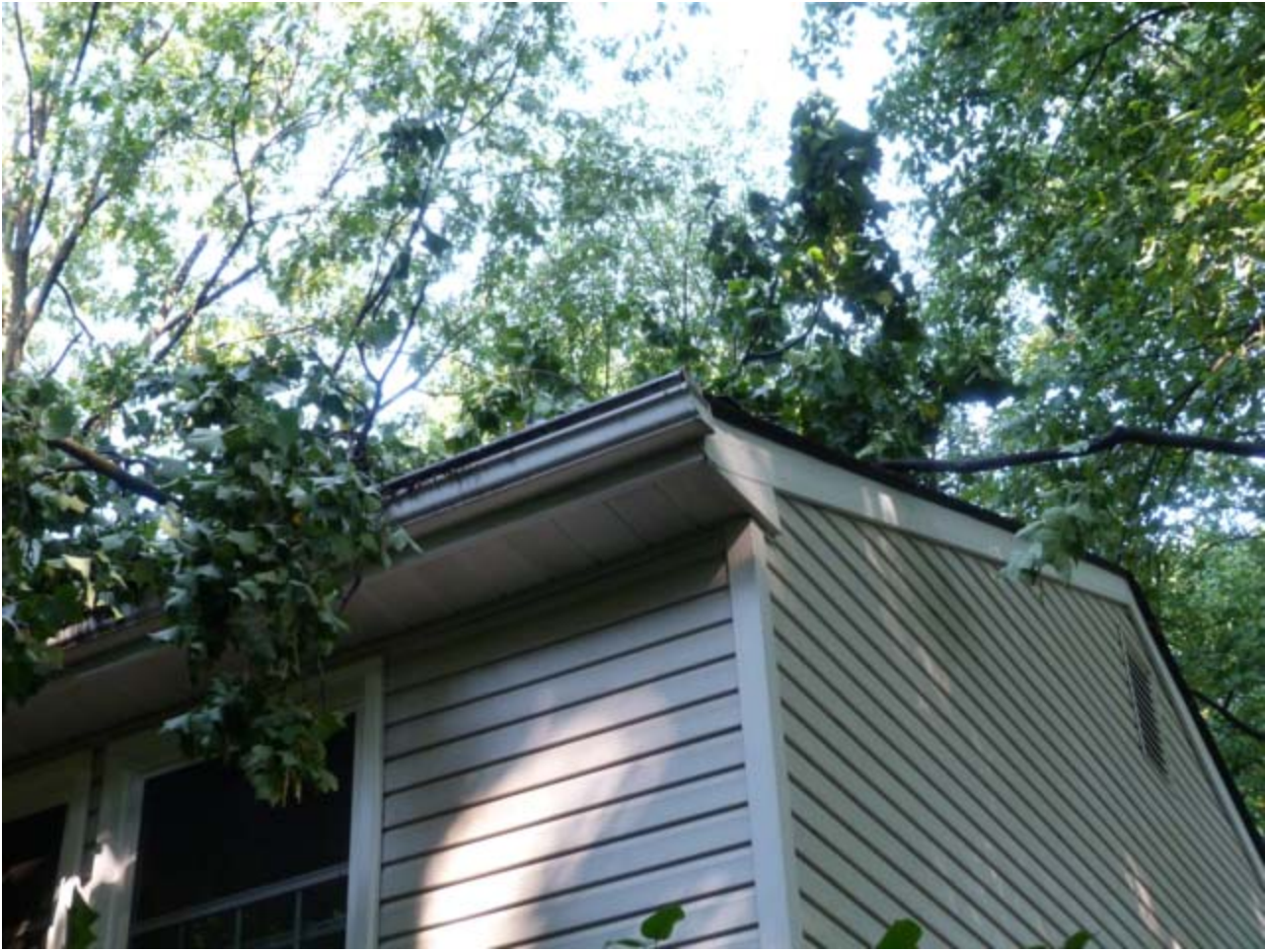


In this case, it's a steady stream of water pouring into your living room.

Since there is a raging storm outside, there is no power, and it's nearly midnight, the next step will have to wait until morning.

In the morning, locate the probable cause. Since there are no water pipes in the ceiling, the roof seems a likely place to look –





At first glance, the large limbs on the roof piled directly above the location of the leak seems like they might have played a role in the fault.

Closer inspection is required –





The pile of twisted branches still just looks like a pile of twisted branches. But is there more to this than meets the eye?

Slowly the limbs are peeled back and tossed over the side until something suspicious appears –





Looks like we have identified the source of the problem. Now to carefully extract the nasty splinter –



Bingo, a hole you can stick your fist through. Now to apply a temporary repair until the professionals can make a more permanent fix.

First, clean the wound –



Next, grab a section of $\frac{3}{4}$ " plywood from the pile of scraps in your garage, then pre-drill and fill several holes with deck screws left over from your back deck construction project in 2003 –



Next, apply a generous helping of tub caulking on the flip side, from a tube found buried on your workbench –



Then place the patch over the hole and screw down the deck screws securely –



NOTE you still have no electricity, so try not to waste any of the screwdriver battery power.

Next, locate that spray stuff that you saw on TV that you thought might come in handy someday –



Shake well and apply it around the edges to keep water from getting under your patch because you expect it to rain again later in the day –



Then apply the remainder of the can over the rest of the patch, followed by applying the entire second can (because the TV deal told you they'd send a second can for free, just pay shipping and handling), being extra generous on the deck screw heads –



Next, cross your fingers that it will hold.

Job complete, now it's time to test the only powered item in your house that will still work when there is no electricity –



Cheers,
G.