



## In This Issue...HVAC Units and “Roof Leaks” – Part 2

In the first part of this two part discussion on HVAC units and roof leaks we focused on the proper handling of condensate. That is because, more often than not, a “leak” at an HVAC unit is more likely to be due to improper condensate handling than all other problems combined. There are other ways in which HVAC units create “roof leaks” that are not roof problems at all. For instance, see the next photo.



This unit leaks on occasion. Why? The curb was not insulated! At the top edge of the curb one can see a “thicker” portion of the flashing. This is the wood nailer that normally is attached to curbs. The space below the nailer should be filled with insulation and here it has not. As a result, in conditions of high humidity when the temperature and dew point come together, condensation forms on the inside of the steel curb and runs down into the building and “leaks”. The condensation on this unit typically only forms when it is raining, because that is when the humidity goes up and the dew point and temperature are most likely to collide. However, such a unit can “leak” even when it is not raining outside. This is a sure fire clue that a problem is condensation related. One would think a roofer would know better than to flash a curb without insulation. They do not.

The first photo in the next column shows another typical problem. Any time you see tape and or caulking on a unit it can be assumed that unit has been found to be leaking. It may well be, but in the second photo in the next column the condensate drain is disconnected and the P-Trap is no longer level. It may be this unit leaks both because of improper condensate drainage and because the physical unit is taking on water.

So, how do you properly address these types of leaks? First, assume any leak near an HVAC unit which the

roofer can't find after one trip is the unit and send your HVAC contractor out with instructions to check the condensate drain for proper drainage (sometimes they also get plugged, even if properly piped) and to water test the actual unit to see if it leaks.

Secondly, ask your roofer after that first trip if he is “sure” he got the problem or if he thinks it might be the unit. His technicians run into this problem all the time and they will know if the unit is suspect or if the problem is most likely to be the roof.

Finally, this all might seem really simple, but the problem occurs and stumps building/property managers all the time, usually because they are not doing an adequate job of documenting their problems as they occur.

