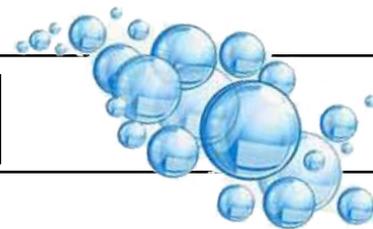


Defining: CONDENSATION



WHAT IS CONDENSATION:

Condensation, which appears as a light coating of water, droplets, frost, ice, or a combination of those elements forms on any surface whose temperature is less than the dew point temperature.

There are two forms of condensation with regards to glass skylights:

1. Condensation **BETWEEN** the glass panes (cannot wipe away).
2. Condensation **ON** the glass pane (can wipe away). Each of these items will be discussed.

INSIDE THE GLASS:

Condensation **between the glass** panes is an indication of insulated glass unit failure. This means that condensation has found a way in between the glass pane and has collected as moisture. A seal failure is usually the culprit which causes this issue to occur in the skylight.



This moisture is not reachable by hand and will appear very prevalent during very cold days. Most all skylight companies warranty the glass in their glass skylights against this defect. If you are experiencing this issue of condensation that is **BETWEEN** the glass, please contact Sun-Tek customer service.

CONDENSATION ON THE GLASS:

Condensation on the interior skylight glass, or glass that is inside the home can seem to be an instant indication that the glass and skylight are malfunctioning. As hard as it is to hear and understand, this is **NOT** the case. Actually, condensation on the **INTERIOR** of the skylight glass is caused by the home itself. This will be explained in much more detail to you give you a complete understanding of this issue.



In some instances, but not all, condensation will form on the inside of a home's skylights. This occurrence can be very frustrating to home owners who have spent valuable time and money in choosing a skylight company and product for their home.

WHY IT FORMS

Condensation forms due to two things:

1. Surface Temperature of the Glass
2. Relative Humidity of the Air

As most people are aware, glass is a poor insulator. Whenever you pick up a cold pitcher of water, or a cold glass of ice tea, you immediately feel the cold fluid through the glass. In some instances, when its warm enough outside, and the glass is cold enough, condensation will form. These basic principals apply to glass skylights as well.

Relative Humidity is the amount of moisture that air can hold. Warm air can hold much more moisture than cold air. This is usually apparent during the summer time when humidity and temperature are high and we get that "sticky" feeling.



The interior of a home is no different than any other environment. During the winter months, we have our heat on which creates an interior "warm" environment. This warm temperature on the inside of the home allows the home's air to hold more moisture.

Moisture in a home comes from numerous sources to include plants, animals, occupants, washers, dryers, dishwashers, ice machines, humidifiers, wood burning stoves, drywall, some paint products, sinks, showers, and bath water. The list goes on. If you think about it, there's a lot water in a home.

Some homes may have all of their skylights experience condensation or just some of them. There is no magic equation to determine what rooms are more vulnerable than others. It can be a function of simple air flow or the location of more water based products in a given area. For example, a bathroom and kitchen are much more prone to form condensation first on the glass skylights than any other room. Why?..because there's more water in the air from cooking and showering!

HOW CAN I REDUCE CONDENSATION IN MY HOME?

The key lies in the controlling of humidity inside your home. During the hot humid months your home's interior absorbs moisture. At the onset of winter condensation will become apparent as you heat your home. Opening the windows briefly may help compensate for some of the inside moisture.

Other Steps to Take Include:

- Opening a window or running exhaust fans longer in the kitchen, bathroom and laundry.
- Turning off humidifying devices in the home.
- Installing a dehumidifier.
- Reducing other forms of moisture in the living space such as live plants that require consistent watering.

Condensation on the interior skylight is caused by the homes humidity level. Believe it or not, your new glass skylights are doing their job! They are keeping the warm moist air in the home and not letting the cool dry air into the home. So, when it gets very cold outside, that warm air will condense on the glass because it has nowhere else to go! You can lower the amount of condensation on the glass by lowering your humidity level by using a dehumidifier or adjusting the amount of moisture in a particular area.

Condensation BETWEEN the glass is a warranty item that needs to be fixed promptly. If you are experiencing that issue, please call Sun-Tek customer service for support.

800-334-5854

