

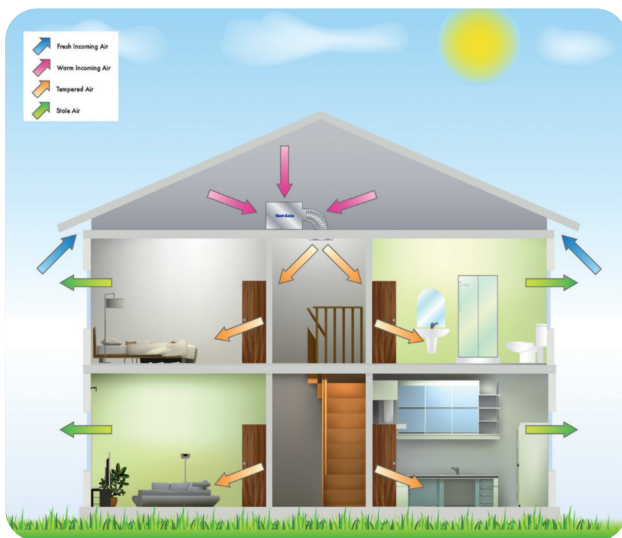
How to prevent condensation in buildings

The main factor of concern during the prevention of condensation is humidity. The three primary methods followed for decreasing humidity and preventing condensation are:

- control humidity;
- ventilation;
- insulation.

■ Control humidity

The use of extractor fans in kitchens and bathrooms helps to control the relative humidity. Doors and windows should be shut when the extractor fans are working to attain the best results. The use of a humidistat-controlled extractor fan • is the best choice to control high humidity levels; it is best suited for high-humidity-producing areas like kitchens and bathrooms. The areas where activities release steam or humidity into the atmosphere, like cooking, bathing, washing clothes, etc. should always be ventilated.



■ Ventilation

Condensation reduces tremendously if the interior rooms of a building are well ventilated. Here are some suggestions:

- allow moist air to move out of the room by opening the window or through the window **trickle vent**;
- open the windows across opposite sides of the room or house to promote effective cross-ventilation;
- you may use different ventilation systems like trickle vents, **heat-recovery ventilation units** and positive input ventilation (PIV);
- always maintain a gap between the walls of the room and nearby placed furniture to allow the circulation of air.

■ Insulation

The use of an insulated surface for a room helps reduce the heat lost from the space. It maintains the internal temperatures within the optimum so that no artificial heating is required: control of the temperature within the room helps to avoid condensation.

A sensor in the fan detects the level of humidity in the air and then switches ON or OFF the fan.

trickle vent: *fessura di ventilazione*
heat-recovery

ventilation unit: *unità di ventilazione con recupero di calore*

1 Answer the questions.

1. What are the three methods employed to decrease humidity and prevent condensation?
2. What device is best suited to control high humidity levels?
3. What are examples of activities that release lots of steam or humidity in the rooms?
4. Why is it important to well ventilate the interior rooms of a building?
5. What ventilation systems can you use to ventilate rooms?
6. Why does insulation prevent condensation?