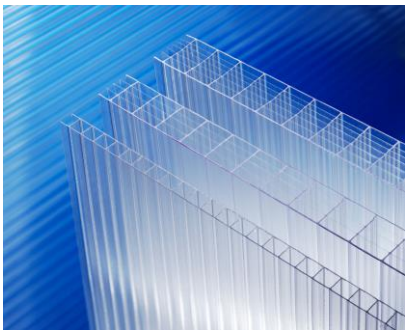
marlon st
LONGLIFE

Condensation



The most common form of unwanted dampness in buildings is water from the air that forms as condensation.
When water laden air comes into contact with cold surfaces such as glazing in the roof and walls, it can condense, causing water to be deposited. The point at which the water held in the air changes from vapour to liquid is known as the dew point.
Condensation is often due to poor heating and ventilation in buildings. The usual sequence of events is as follows:

- Cold air enters the building
- The air is warmed
- The warm air takes up moisture.
- The warm, moist air comes into contact with cold surfaces, walls, windows, etc. and is cooled below its Dew Point.

Condensation occurs as the excess moisture is released.

Intermittent heating and cooling of the property can aggravate condensation problems, since it allows warm damp air to cool, reducing its capacity to hold water. Dew points are reduced allowing condensation to occur. When the air is reheated water is taken back into the air only to be deposited again when the air temperature drops again.

Overcoming Condensation

Improved heating and ventilation coupled with specific action in relation to cold spots will usually result in a significant improvement in conditions, although there may be circumstances in which alternative methods are required. A modest but constant background heat is preferable to intermittent heating since this will help to maintain a higher ambient temperature in the fabric of the building.

The installation of an extractor fan will carry away moisture-laden air from the area most responsible for condensation with minimal running costs. Extractor fans are now available which incorporate a humidistat which will control the operation of the fan within certain humidity limits. It is also possible to install fans that have an integrated heat exchanger. These have the advantage of providing effective ventilation while reducing heat loss from the property. The use of vents/trickle vents and louvres can also aid in changing the air volume.
An alternative to heating and ventilation for the control of moisture in the air is a dehumidifier. This is a device which draws in air, cools it to remove moisture which is collected in a reservoir and reheats it to an acceptable temperature before re-circulating it.

For greenhouse, practices include watering just enough to prevent excess water on the floor, and watering early enough in the day to allow plant surfaces to dry before evening. The highest relative humidity in a greenhouse is generally found inside plant canopies, where moisture is generated from transpiration and trapped due to insufficient air movement. Adequate plant spacing and mesh benches will help to improve air circulation at the plant level.

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