Condensation on windows

Condensation on glass window panes is a natural phenomenon that cannot be completely avoided, no matter how well insulated your house or how efficient your double-glazing. This leaflet explains how and why condensation occurs, and what you can do to control it.

1. WHY IS THERE CONDENSATION ON MY WINDOWS?

Condensation occurs when warm, moisture-laden air meets a cool surface such as glass – the change in temperature causes the moisture to condense onto that surface in the form of water droplets. Colder external temperatures during winter months combined with heated internal temperatures will result in larger amounts of condensation.

1.1 Is condensation harmful?

Although the condensation itself is not harmful, it is unattractive and can damage windows. Condensation running down onto wooden window frames can encourage mould growth, and the continual build up of water will eventually rot the frame. Condensation is also evidence of a humid atmosphere which is, in itself, unhealthy and can exacerbate respiratory problems, allergies and other conditions.

2. HOW CAN I PREVENT CONDENSATION?

The key to preventing condensation is to control humidity and temperature. The ideal humidity level is between 40-50% when air temperature is 20°C. If condensation is starting to become a problem, try the following:

Increase ventilation: It is necessary to refresh warm moist air with dry air, so air rooms for five to 10 minutes, several times a day. Make sure to air the house evenly – don't just open kitchen or bathroom windows, as this will simply move the air with the highest humidity into (rather than out of) the house. Air your house even if it is raining - the warm internal air will still hold more moisture than the cold air outside.

Trickle ventilation: If your windows have trickle ventilators – narrow slits placed in the frame – then keep these open all day

Ventilate well when cooking and bathing: If you have an extractor hood in your kitchen, or fan in your bathroom, then turn these on as soon as you start cooking or bathing and keep them running for 10 to 15 minutes after you have stopped. If you don't have such extractor fans, then these rooms have to be aired more frequently.

Dry clothes outside: Whenever possible, avoid drying clothes inside the house. If you use a tumble drier, make sure the warm air is vented outside.