

Condensation Guide

Internal vs external condensation, edge condensation and how warm edge spacers help

Two Different Kinds of Condensation

Condensation on a sealed unit falls into two categories that mean very different things. Internal condensation — misting or beading between the two panes, inside the sealed cavity — indicates the unit's seal has failed and moisture has entered the gas-filled space. The unit should be replaced; it cannot be cleaned or repaired since the moisture is inside a hermetically sealed cavity. External condensation, on the outside face of the glass, is completely normal and is actually a sign the Low-E coating is doing its job — it reflects room heat so effectively that the external glass surface stays close to outdoor air temperature, so on a cold, humid morning it can dew up exactly like a car windscreen or a cold drink can.

Edge Condensation

The edge of the glass, right where it meets the spacer bar, is the coldest point on any window — usually the first place internal condensation would form, ahead of the centre of the pane. With an aluminium spacer that cold ring runs a few degrees below the rest of the glass, which on a humid morning or in a poorly ventilated room is often enough to drop below dew point, producing beading or misting in a band a few centimetres in from the frame. A warm edge spacer raises that edge temperature by 1-4°C, removing the damp micro-climate that black mould and sealant staining tend to establish over time.

Diagnosing Condensation

Location	Meaning	Action
Between the panes (internal)	Seal failure — moisture has entered the cavity	Replace the unit
Outside face, cold mornings	Normal — Low-E coating working effectively	No action needed
Inside face, room side	Normal indoor humidity meeting a cold surface	Improve ventilation
Narrow band near the frame edge	Edge effect — more likely with aluminium spacer	Consider warm edge on next order

How to Order

Contact our sales team: 020 8574 9342 | 07305 993794 | sales@csultd.co.uk | csultd.co.uk — quotes returned within 2 business hours (Mon-Fri, 8am-5pm).