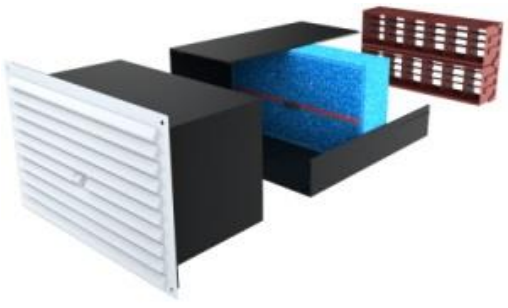
ultrovent®

Technical data sheet



Air Brick ventilator

125mm Core drill ventilator

100mm Ultrovent Pro

Ultrovent offer a range of passive ventilation units designed to allow water vapour to escape from a building in a controlled way. The innovative triple action filter promotes the escape of damp air with minimal heat loss. Cold draughts are restricted by a specially designed thermal core within the filter. The Ultrovent Air Brick telescopic cavity liner is constructed from High Impact Polystyrene (HIP) to reduce cold bridging and provide increased strength and resistance to distortion.

Condensation affects a large number of older properties due to the increase in water production brought about by modern lifestyles. At the same time, doors and windows are draught proofed and chimney flues sealed. The result can be unhealthy mould growth on cold surfaces and in poorly ventilated areas.

Ultrovent is designed to ventilate bedrooms and living rooms where the constant background ventilation it provides allows water vapour to escape. One air brick ventilator is usually sufficient for a single room of up to 20m^2 floor area. Each unit is supplied with full installation instructions and can be used to upgrade existing air bricks or for new installs. For kitchens and bathrooms where water production is likely to be more spontaneous, mechanical ventilation should be used.

At a typical inside temperature of 20^{0}C and relative humidity of 70% 1m^3 of air contains 0.0125kg of water, creating a vapour pressure of 1.7 kPa above which there is increased risk of mould growth. At an air velocity of 0.09 m/s the Ultrovent Air Brick diffuses up to 0.12kg of water per hour or 2.8 litres of water over a 24 hour period powered only by the vapour pressure differential that exists between inside a property and the external environment.

Water diffusion rates

Model	Velocity	Air diffusion /hour	Water diffusion /hour	Water dissipated over 24 hours
Air brick ventilator	0.09m/s	9.34m_3	0.12kg	2.8 litres
Core drill ventilator	0.09m/s	3.98 m_3	0.05kg	1.2 litres
Pro	0.12m/s	3.39 m_3	0.04kg	1.0 litre

Impact of changes in air velocity

	0.08m/s	0.09m/s	0.1m/s	0.11m/s	0.12m/s
Air brick ventilator	2.5 litres	2.8 litres	3.1 litres	3.4 litres	3.7 litres
Core drill ventilator	1.0 litre	1.2 litres	1.3 litres	1.4 litres	1.5 litres
Pro	0.7 litres	0.8 litre	0.85 litres	0.9 litres	1.0 litres

Dimensions and aperture sizes

	Cavity liner size	Aperture size	Length	Extension kits
Air brick ventilator	220mm x 145mm	240mm x 160mm	325mm	140mm each
Core drill ventilator	125mm diameter	127mm diameter	300mm	440mm each
Pro	105mm diameter	107mm diameter	400mm	440mm each

Internal and external grill styles and colours

	Internal grill colour	External grill colour and style
Air brick ventilator	White	Stadium plastic terracotta colour. Other colours and wind shield cowls available on request.
Core drill ventilator	White	Wind shield cowl plus alternative high rise grill supplied. Terracotta.
Pro	White	Moulded high rise cowl with sealing gasket plus alternative grill supplied. White or Brown.

Ultrovent performance figures quoted in marketing materials are typically based on 70% RH, an air velocity of 0.9m/s (Ultrovent Pro 0.12m/s).
Mechanical ventilation should be used in kitchens and bathrooms.
Ultrovent has been independently tested at the Wolfson M.T.I.A Unit at Southampton University**.**
Ultrovent is intended for use in condensation control and should not be used to provide ventilation to heating appliances.
Guarantee subject to the filter being cleaned or replaced as necessary (maximum filter life is 5 years).
Ultrovents are intended for use in condensation control and should not be used to provide ventilation to heating appliances.

Damp Expert Ltd. Birdsgrove SK17 0DH
Tel: 0800 169 1106