

Good Ventilation Saves Energy And Improves Health

Fitting energy efficient windows insulates and keeps homes warm while ventilation lets in drafts – this would be the general view of homeowners...but actually you can get better efficiency with proper ventilation, writes Glazpart's Dean Bradley.

Many homeowners can be forgiven for thinking that natural ventilation and energy efficiency work against each other, writes Glazpart's Dean Bradley.

It appears to be a logical conclusion – the fitting of energy efficient windows is supposed to help with insulating and keeping homes warm, while ventilation lets in drafts.

However, there is more to how ventilation works to make a home more habitable and occupants healthier.

Best of both

Trickle ventilation installed in windows and doors can not only help the air quality in a home but also help energy efficiency. Firstly, ventilation can cool a house and prevent overheating. Heat stress exacerbates underlying conditions such as asthma, heart disease and mental illness. Heatwaves caused an additional 2,000 deaths in 2020, according to the UK Health Security Agency. According to The Climate Change Committee, almost half

a million new homes built since 2012 are at risk of overheating.

Secondly it can keep humidity to an optimum, making the property easier to heat. Reducing humidity also reduces condensation and the build-up of pollutants in moist air can cause mould which can cause infections and respiratory diseases.

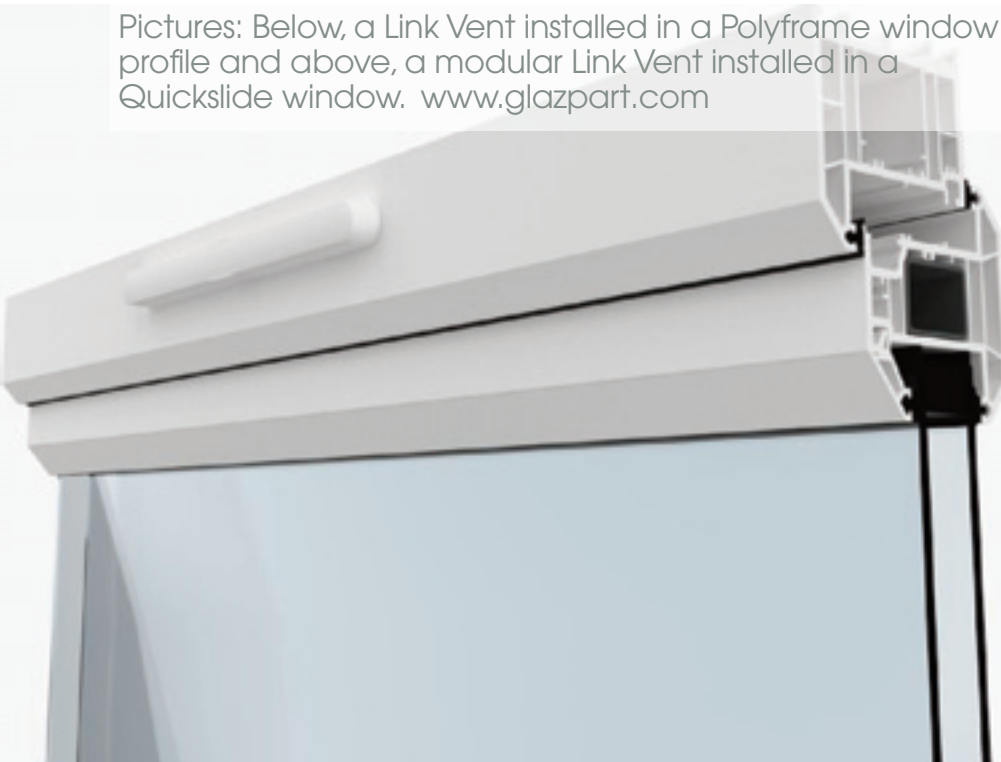
Good ventilation is essential to make homes habitable. It led to the government making changes in June 2022 to Approved Document F (means of ventilation) in the Building Regulations (England and Wales).

Need to comply

The changes to legislation have seen significant impact across the glazing supply chain as it now means that when replacing windows and doors, installation companies are legally required to ensure that within those replacements, means to ventilate to the new standard, are included.

To comply, fabricators and installers have found the most affordable, practical and quickest solution is to install trickle ventilators in the window and/or door profiles or in the

Pictures: Below, a Link Vent installed in a Polyframe window profile and above, a modular Link Vent installed in a Quickslide window. www.glazpart.com





frames as the ventilation measure has to be installed at the time of replacing the windows or doors.

The new legislation has brought two main challenges

Firstly, for installers, compliance with building regulations and meeting the minimum ventilation requirements to make the property habitable.

Secondly, the homeowner's general resistance to trickle vents such as them not being aesthetically pleasing, causing potential drafts and allowing more noise into their home.

Controllable

To help companies in the supply chain overcome the challenges, Glazpart, the glazing component manufacturer and supplier which I work for, has made steady and significant investment in state-of-the-art machinery, research and product development and is now helping the industry and homeowners

ventilate an estimated 1.2 million homes per year.

Glazpart's Link Vent more than addresses the homeowner's issues with trickle vents. With clever design providing greater control of the air flow, users can position the closure plate to reduce draughts (and noise) by directing air away from occupants.

Window match

The Link Vent also comes in a vast range of colours and finishes. For homeowners this means it can be the same colour/finish as the window and easily hidden (camouflaged) in the profile. The colours are also extremely stable in all weather conditions, so there is no noticeable fading.

More variety

Until the changes in 2022, the Link Vent was only available in two sizes, 2500 and 5000 Equivalent Area (EQA). Just before the changes to the legislation, Glazpart had added

the Link Vent 4000 to meet the ventilation requirement to cover an area of 8000sq.mm for habitable rooms (e.g. two Link Vent 4000s would be installed in the windows/doors to achieve this). The addition of the Link Vent 4000 provides great flexibility and can be installed in practically any window or door (wood, PVC-U, aluminium). The Link Vent 4000 is most commonly used for smaller rooms such as bathrooms, kitchens and utility rooms – quite often the rooms with poorest ventilation and air quality.

Industry standard

With easy installation in any type of window and door profile/frame and meeting the compliance requirements, companies in the glazing supply chain are now factoring the Link Vent into their manufacturing and installation processes. The Link Vent can also be fitted to sashes and over frame solutions where there the possible use of flat and recessed grills. [f](#)