

Perimeter sealing of doors and windows

In this article we look at the perimeter sealing of windows, doors, other openings and interfaces. The three key factors that will ensure maximum performance and durability of the installation are weathertightness, airtightness and insulation. All of these must be fully considered at design stage.

How is a good quality airtight seal achieved?

By using a membrane capable of accommodating movement (i.e. it has to be flexible) after installation. Proprietary products are available with inbuilt flexible folds for movements and pre-applied adhesive strips to bond the membrane to the window and structure.

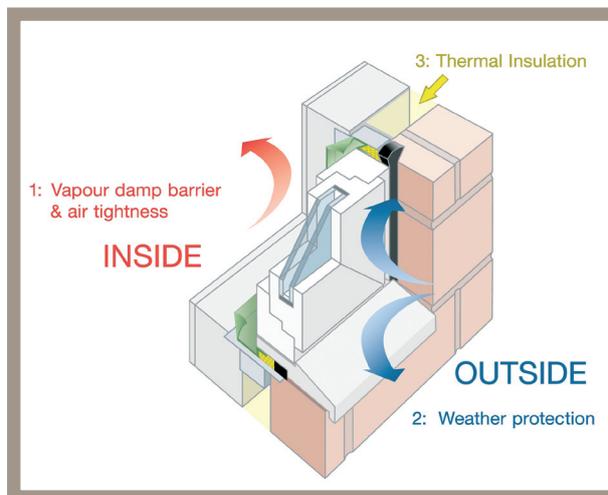
How is an external weathertight seal achieved?

Whilst good quality silicone and other wet sealants may provide adequate performance, the use of impregnated foam tapes also provide (at a minimum of 600 Pascals) good long term life expectancy as well as the ability to cope with significant movement and wide joint size tolerance. Impregnated foam also offers breathability allowing any moisture behind the seal to dissipate to the exterior of the building. A range of quality sealants are available and installation should be carried out in

accordance with the BASA (British Adhesive and Sealants Association) Industry Guide to Professional Application of Construction Sealants on Site.

How can the thermal performance of the window frame/structure connection be enhanced?

Gun applied air tight PU foams are available with high levels of movement accommodation. However, enhanced impregnated foams have been developed that provide the three required levels of sealing (airtightness, weathertightness and insulation) in one application.



Microgeneration Certification Scheme (MCS) publishes guide for installers

Towards the end of April MCS published a guide entitled 'Low and zero carbon technologies: opportunities and the MCS'.

The guide is for installers of renewable energy systems on the MCS quality assurance scheme. The guide is available as a free download from http://www.microgenerationcertification.org/docs/Opportunities-and-the-MCS_web.pdf.

BBA issues certificates for renewable energy systems

Earlier in the year the British Board of Agrément issued its first two MCS Certificates. These were the result of a certification process set out in the Microgeneration Certification Scheme (MCS). The two products are:

- Clearline Solar Collector from Viridian Solar (Certificate 0001)
- TopSola TSM-160M Solar Photovoltaic Modules from MAP Environmental (Certificate 0002)

ACTION

NHBC will soon be looking for renewable energy system products and their installation to be covered by the MCS scheme. If your house designs are incorporating renewable energy systems or you have an installer who is not currently covered by MCS and would like to know more then please pass this information on.

ACTION

Ensure that appropriate seals and sealants are correctly specified and installed to achieve maximum in-service performance.