

Using VEKA Plc products in high exposure areas.



Additional measures to further improve performance.

All VEKA / HALO / Imagine products are tested fully to all parts of BS6375. The standard allows the products to be classified and therefore specified, against performance characteristics for air permeability, watertightness and windload. However, there are times in highly exposed areas, when additional action needs to be taken to add further improvement to the performance. For example, if the window products are to be used in a highly exposed area such as coastal locations on islands.

Weather conditions are unpredictable. A product can be tested to a high exposure category such as 2000+ Pa and will perform without issue for many years. But sometimes the local conditions, both geographical and architectural, create extreme situations that force water into places it should never go!

There are many causes for water ingress in such situations, the glazing maybe at a minimum tolerance on width and reduce the pressure from the gaskets, there may be hard spots on the gaskets from the welding of the profile or the product may not be reinforced to the correct standard.



So what can be done?

Windows are not 'submarine' tight! Water can pass beyond the gaskets and this happens more often than you think it would, but as a homeowner you do not see it. This is because window designs include drainage routes allowing any water that has breached the gaskets to run safely back to the outside of the building before it can reach the internal areas. Sometimes though, in the extreme conditions described, the drainage does not have an opportunity to work fully before the water shows on the inner face of a building.

Any hard spots in the corners of the gasket must be removed as part of any remedial work, it is also important to ensure there are pressure equalization holes in the frame to allow the drainage to work properly. Imagine filling a straw with water and keeping your thumb over the top, the water can't escape. Remove your thumb and the water flows, pressure equalization works in a similar way

Ideally a window positioned in such a location would be externally glazed. The glazing beads are clipped into place on the profile so when water is able to breach the gaskets an internally glazed bead has less chance to stop that water passing through to the inside, it simply builds up and seeps through the bead leg showing as a fine line of water.

If the bead is on the outside then internally the glazing gasket would be some 20mm above the profile and therefore water would have to rise by a similar dimension before it can seep through. So externally glazed will allow the drainage to do what it is designed to do.

But what about security? If this is an issue on a double glazed unit then security clips can be provided for the glass stopping the opportunistic burglar from removing it. With triple glazing either the beads can be bonded or the glass can be bonded.

An alternative method when glazing with an internal bead would be to use a good grade silicone and apply a continuous goalpost around the base and up the sides of the internal face of the bead groove to a height of 100mm. Be careful not to get the silicone on the glass as it may affect coatings. Once the silicone is run replace the beads as normal. This has a similar effect to externally beaded as it has increased the height the water has to travel before it can seep through and therefore allows the drainage routes to work fully.

