

Casing the joint

With the PVC-U window market growing, consumers are becoming more conscious about their range of choices, and are choosing realistic PVC-U alternatives over timber. Clare Higgins, product manager at Rehau, discusses how the trade needs to give a wider appreciation of the use of mechanical joints in PVC-U and how it benefits both the fabricator and consumer

It is clear that PVC-U flush fit windows are becoming increasingly popular alternatives to their timber counterparts. With the ability to create a realistic timber-look frame, that can be matched with the style of the building, there is a higher demand for fabricators to provide high quality PVC-U windows as an alternative to timber.

Despite the increased demand for a cost-effective alternative, consumers still expect a high quality product, right down to the finer details. For example, they will even be assessing how the sash is jointed, to ensure they have the perfect window to match their property. Fabricators need to consider the best jointing methods for individual projects in order to both suit different property aesthetics and create a long-lasting window.

Small details, great impact

The method used to fabricate the joints in a window is important in regard to how well it will perform in the long run. Tightly sealed joints will provide adequate protection from the elements, such as wind and rain, ensuring good insulation for the property.

The manufacturing and installation methods of timber frames go hand in hand with traditional window joinery techniques. Because of this many older timber window systems, installed before PVC-U arrived in the window market, tend to have the traditional mechanical joints in place. This type of joint gives the window a distinctive look that is recognised as a traditional timber-frame window and fabricators who can replicate this look with PVC-U will reap the benefits with increased sales.

The evolution of PVC-U

It's easy to assume that a plastic frame is of a lower quality than other more traditional materials. However, with the evolution of durable, high-quality PVC-U, fabricators can assure their customers that this is no longer the case.

Reports have shown that the majority of fabricators choose to weld their flush sashes which is cost-effective in the short term, but creates a less authentic-looking timber alternative. As PVC-U gained more popularity in the

market, the traditional mechanical joints were considered a costly and time-consuming method, which resulted in fabricators opting for alternative ways of jointing, such as welding the mullions and transoms together. A welded joint is considered much easier to manufacture and it costs less to produce, but it will not exactly replicate its timber alternative.



While welding can save time and effort it does result in an overall less authentic looking window. And, as consumers become increasingly aware of what is available to them, this is a risk the trade can no longer afford to take.

Creating an authentic look

As well as creating a strong, durable window, the mechanical joint option fully enhances the window for ultimate authenticity.

The jointing option chosen for the window is crucial to the overall look of the finished product. Windows such as Rehau's Rio Flush Fit allow fabricators to offer a product to their customer that fits with any aesthetic. They require very little additional installation work, using either mechanical joint blocks or a MechWeld joint solution.

Many well established window companies offer products that work with both mechanical and welded joints. They give fabricators full flexibility over their choice of joints in order to meet the needs of the project. The MechWeld joint, for example, offers the appearance of mechanical-style timber joints on the outside with a fully welded detail inside. Modern PVC-U window systems such as the Rio Flush Fit allow fabricators to replicate the finer details of a traditional timber flush fit window through a range of jointing solutions to suit different styles of properties.

Improving the face of PVC-U

It goes without saying that to achieve a true likeness to timber frame windows, we must consider investing time into using a mechanical joint. PVC-U technology has evolved phenomenally and, through careful consideration of the finer details such as jointing options, can be a true leader as a cost-effective timber window alternative. □

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