

CASE STUDY

MODUS FOR SELF-BUILD



CLIENT: THE PATTERSON FAMILY

PROJECT: MODUS DELIVERS DOUBLE PERFORMANCE IN STYLE

Etienne Patterson had four principles when he set about building a dream home for himself and a matching home for his parents in rural Hampshire: everything had to be cost effective to install, run and maintain as well as complementing the pastoral setting.

So he chose the innovative Modus system of doors and windows from Eurocell – the UK's leading manufacturer, distributor and recycler of window, door, conservatory and roofline products – for both houses.

The decision was an important one for the Pattersons, since both two-storey homes are equipped with 49 triple-glazed Modus Casement windows and nine French doors, residential doors and stable doors, all finished in agate grey externally and white woodgrain internally. It is important to Etienne that every element looks as if it is timber but with the unrestricted sightlines of metal and the best-in-class technical performance of PVC-U.

“Given that we wanted to achieve efficiency both in energy and cost, Modus offered us both.”

Mrs Patterson

Self-builder

The two houses are on the site of what was a 1950s bungalow set in an acre of land – a prime spot that set Etienne and his family in competition with local developers when he bid for it, paying a premium over the guide price to secure what he saw as the ideal site.

“Everything had to be cost effective to run and maintain – I don’t want to be climbing ladders to paint windows in 10 years’ time – and clearly energy costs have to be low,” Etienne says. He looked at many different door and window systems before selecting the Modus range, commenting: “This type of house is not intended to have PVC-U, but is meant to be fitted with external doors and windows made of more expensive materials, either all timber, composite or metal.” He added: “Given that we wanted to achieve efficiency both in energy and cost, Modus offered us both, particularly important was the fact Modus doesn’t have the clumsy welds that many PVC-U systems have and has the elegance and simplicity to fit in and enhance the design of the houses.”

The houses – a four-bedroom home for himself and a three-bedroom home for the Patterson parents – are a hybrid of two building methods, oak frame with timber frame encapsulation, with externally a combination of render, brick slips and weatherboarding. The impressive insulation overlaying a skeleton of oak offers a contemporary take on a traditional design.

The slim framed design of Modus casement windows matched the overall aesthetic of the two houses and the opening windows are indistinguishable from the non-opening ones, so the appearance is uniform.

“The casement design means the window can have a floating mullion, so the first floor windows work like a patio door, all four bedrooms have units in a line arranged so that the left-hand or right-hand pair can be opened together to provide a massive escape route,” For Etienne, an Incident Commander in the Fire & Rescue Service, this was an important point because, he says: “It means the bedroom windows provide excellent means of escape but they don’t look any different to the rest of the house.”

Colour was another important consideration as Eurocell could supply all the doors and windows with an agate grey finish on the outside to complement the general ‘heritage’ look made fashionable by paint manufacturers such as Farrow & Ball – and back it with the company’s unique colour match guarantee – while the internal finish is white ash.

The Modus range is not just attractive – it is also tough, durable and thermally efficient, as its recent BBA certification documents. The BBA concluded that the PVC-U extruded profiles would continue to function satisfactorily for more than 35 years and that the thermal transmittance value or U-value of the three ranges was 1.2 W/m² using 4/20/4 mm sealed double-glazed units.

This effective thermal performance is due to the 75mm six-chamber profile system that enables the range to achieve a U-value as low as 0.7 by installing triple-glazed units like the Pattersons have. This led to Modus becoming one of the very first systems to achieve the BRFC Window Energy Rating (WER) of A++. This is only awarded to windows with an energy index value equal to or greater than +20; and Modus A++ designs include casement, reversible and tilt and turn.

Consisting of 50% post-consumer recycled PVC-U as standard, Modus achieves this by employing dual material extrusion technology (DMET) that layers post-consumer recycled and ‘virgin’ material simultaneously, so the recycled material is concentrated in the central core of the profiles where it cannot be seen once the door or window is installed.

Coming with a 12-year guarantee, the Modus system is available in nine solid and woodgrain-effect colours, all of which are available with white internal finishes to create a light and airy living environment. A further range of more than 25 solid and woodgrain effect finishes is available, including colour both sides.

