

Back to school

Additional funding for school refurbishments linked to the government's Build Back Better commitments should make for a busy summer in the school refurbishment market, with window system replacements likely to be high on the agenda, writes Schüco's Mark Briggs

The government's own figures suggest that around 60 per cent of the UK's schools were built before 1976. Many feature large single-glazed, steel-framed windows that are thermally inefficient.

School rebuilding programme

Recognising the issue, in 2020 the government launched the 10-year School Rebuilding Programme, with construction on the first sites expected to start from autumn this year. In addition, the annual allocation to schools in 2021 has been increased by 20% and now stands at £1.8 billion.

Energy efficiency and ventilation

Increasing energy efficiency will be one of the objectives of any refurbishment, yet there is also likely to be a very close focus on ventilation, given the established link between poor ventilation and the spread of coronavirus in school classrooms.

Many schools rely on natural ventilation – using the 'stack effect' where warm air rises and is vented through windows or rooflights at the top of the building and by default, air is drawn in through windows at lower levels. This is very effective when windows are open but the tendency to close windows when the temperature falls or when there is a lot of outside noise will hugely reduce the ventilation flow.

Ventotherm Twist

A more predictable supply of outside air will be achieved if the window systems include ventilation provision in the outer frame profile. The Schüco Ventotherm Twist, created in collaboration with Renson, is an example of this solution. It is almost completely concealed in the profile and allows for controlled air exchange even with closed windows. Energy efficient heat recovery of up to 80 per cent means fresh air is pre-heated as it comes in from outside.



Air quality sensors ensure demand-driven regulation for an optimum, user-oriented indoor climate. At the same time, Schüco Ventotherm Twist protects against draughts and keeps insects and pollen out.

Refurbishment

In a refurbishment project, a standard system (such as the Schüco AWS 70 SC) can be customised, allowing opening windows to be pivoted to match existing windows and additional opening units can be added if required. Large-scale refurbishment projects will benefit from a seamless integration of window, door and façade systems.

Skinner's School

The refurbishment of Skinner's School is a good example of this type of integration, providing a consistent appearance throughout the glazed areas and delivering very good thermal performance. In this instance, the Schüco AWS 70 SC and FWS 50 were combined, with the school bursar choosing the systems for both their aesthetics and performance.

Skinner's is an ambassador school for green initiatives. It was felt that using the Schüco products would give the right impression and provide a combination of performance in use and demonstrable sustainable principles.

Build, build, build

If the government lives up to its promise to Build, Build, Build in order to restore the UK's economy, then education buildings, with their very specific design needs, will be an important and growing market. ▣