



DESIGN: Hudson Architects LOCATION: Cambridge, England

This 1912 home, designed by the renowned Arts and Crafts movement member M. H. Baillie Scott, had been given an inelegant extension in the later years of the century, which took little advantage of its garden setting. In 2010, London-based firm Hudson Architects replaced it with a contemporary glass-walled pavilion that provides unimpeded views, affording year-round enjoyment of the garden.

Baillie Scott's original design included an open-air loggia off the back of the house, so architect Anthony Hudson created this new space in that spirit. Four round steel columns support a flat-topped metal-clad roof, while glass panels wrap around the structure, creating what Hudson describes as a "distinct transparent volume." In addition, the elongated proportions and simple classical style of the pavilion reference a Greek temple.

The four walls of the pavilion are made of argon-filled double-glazed panes that require no traditional framing or mullions; the panes, essentially butting together and wrapping around the structural columns, support themselves.

The extension connects to the house via a three-foot-long glassenclosed corridor that dovetails with the original threshold to the loggia and "reinforces the conceit that it is a completely separate structure," Hudson says. "When you leave the main house, you are very aware that you are entering another world."

Even the floor of the bridge is transparent - a 25-millimetre-thick piece of glass that floats about 18 inches off the ground and has stripes etched into it to create a non-slip surface.

The pavilion was designed for use in cold weather, and it was tested this past winter, "one of the coldest in England for ages," Hudson says. Contrary to the expectation that the space would experience a lot of heat loss through the glass walls, the high U-value of the glazing and hot-water underfloor heating combined to keep conditions comfortable. For backup, the architect also installed a hot-water radiator, but he notes the homeowners rarely used it.

In summer, the pavilion can get warm, but cross-ventilation is afforded by double doors to the garden on an axis with the glass-walled corridor and with windows on the opposite side of the main house. As well, the roof's deep overhang provides shading.

SMART DETAIL By setting the structure on a low platform of reclaimed bricks that match those of the house, the architect de-emphasized the base and reinforced the subtle impression that the pavilion floats above the ground. - Carolyn Kennedy

MATERIALS PALETTE

Glass (walls, corridor)

Steel (support columns) and metal (roof)

Brick (base)

Oak (door frame, floor)