

Art of stone

Panter Hudspith's new bar on Newcastle's Quayside has a solid wall of stone curving protectively around a glass enclosure

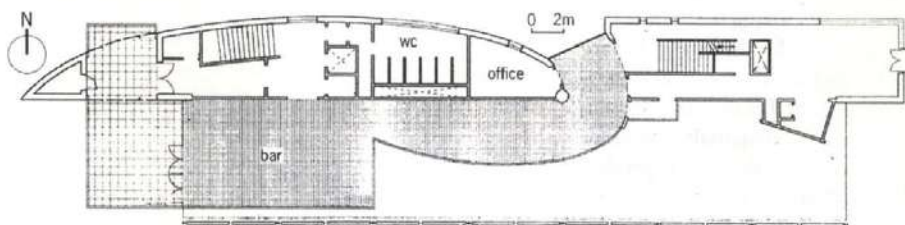
BY SUSAN DAWSON. PHOTOGRAPHS BY CHRIS HENDERSON



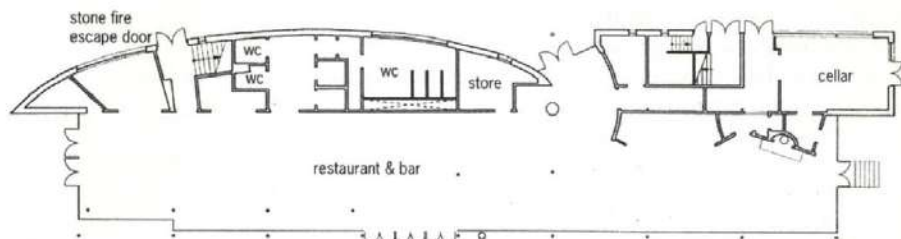
The Pitcher and Piano is a new bar and restaurant on Newcastle upon Tyne's historic Quayside, now being restored and developed. The bar, made of glass and stone, looks out to panoramic views of the the River Tyne and its famous bridge through glazed walls and terraces. It was designed by Panter Hudspith, a London practice with links to the city – Simon Hudspith is local and a graduate of the university school of architecture. The practice was commissioned by competitive interview by Tyne and Wear Development Corporation and Amec (Newcastle Quayside Developments).

The three-storey building, on a bend in the river, has a south-facing elevation with a terrace at first floor looking out over the river, formed of a light and transparent curtainwall. The solid rear wall of stone curves protectively round the delicate glazed enclosure. Stone was chosen for its solidity and to fulfil the requirements of the Quayside Development Plan.

The building has a steel-frame structure with metal-deck floors. The riverside elevations are clad with a curtainwall system in polyester powder-coated steel and glass. The north elevation comprises a blockwork inner leaf resting on the steel frame and the first-floor slab, and a self-supporting outer leaf of 100mm ashlar stone inset with small windows.



FIRST FLOOR PLAN



GROUND FLOOR PLAN

The ashlar stone is Blaxter sandstone, a local Newcastle stone from High Nick quarry. The sandstone forms a recessed band at plinth level and is topped with a projecting trim of matching reconstructed stone at cornice level. Each piece of stone is tied back to the blockwork with four stainless-steel ties bolted to the blockwork, and restrained by a split tang fitted into a routed channel at top and bottom.

The positions of the floor slab, large win-

dow sills and lintels, and the top and bottom of other openings are defined by 75mm and 45mm horizontal bands of Whitworth blue stone inset within the ashlar wall. (Whitworth stone, from the Whitworth quarries in Lancashire, is a denser sandstone than Blaxter stone.) The ashlar blocks are 670mm long and 450mm high, and are coursed to fit within the bands.

Above large windows and door openings the stone wall is supported by specially



designed grade-316 stainless-steel lintels, an inverted T-shape in section, and radius-cut to the curve of the wall with a water jet. For economy the lintels are propped at intervals with circular stainless-steel posts. The stone façade is punctuated with a series of small windows which match the sizes of the Blaxter coursed ashlar blocks; the block above the window acts as a lintel.

Movement joints are defined by stainless-steel bars with welded knuckles which are screwed to the stone. The bars are jointed each side with mastic.

An opening for a pair of fire-escape doors was required in the stone wall. It is used as an escape route from the main staircase and has a push-panic bar designed to open during a fire – the mechanism is the reverse of the more usual door-closing mechanism.

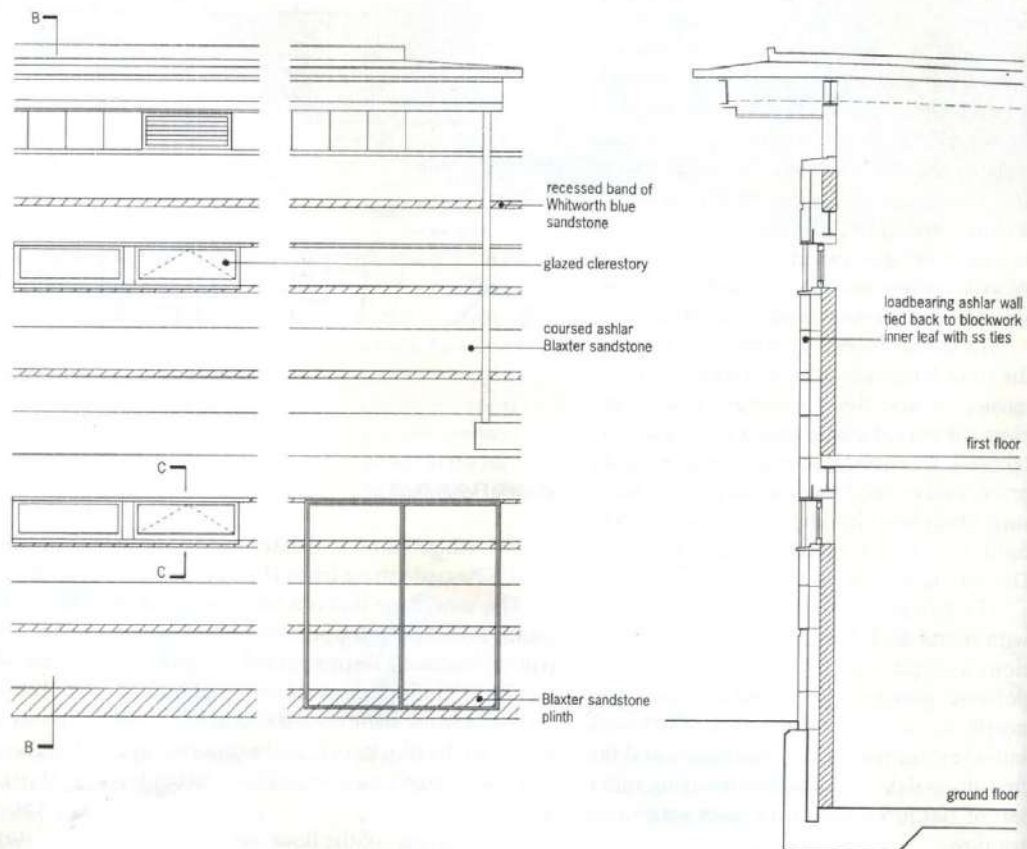
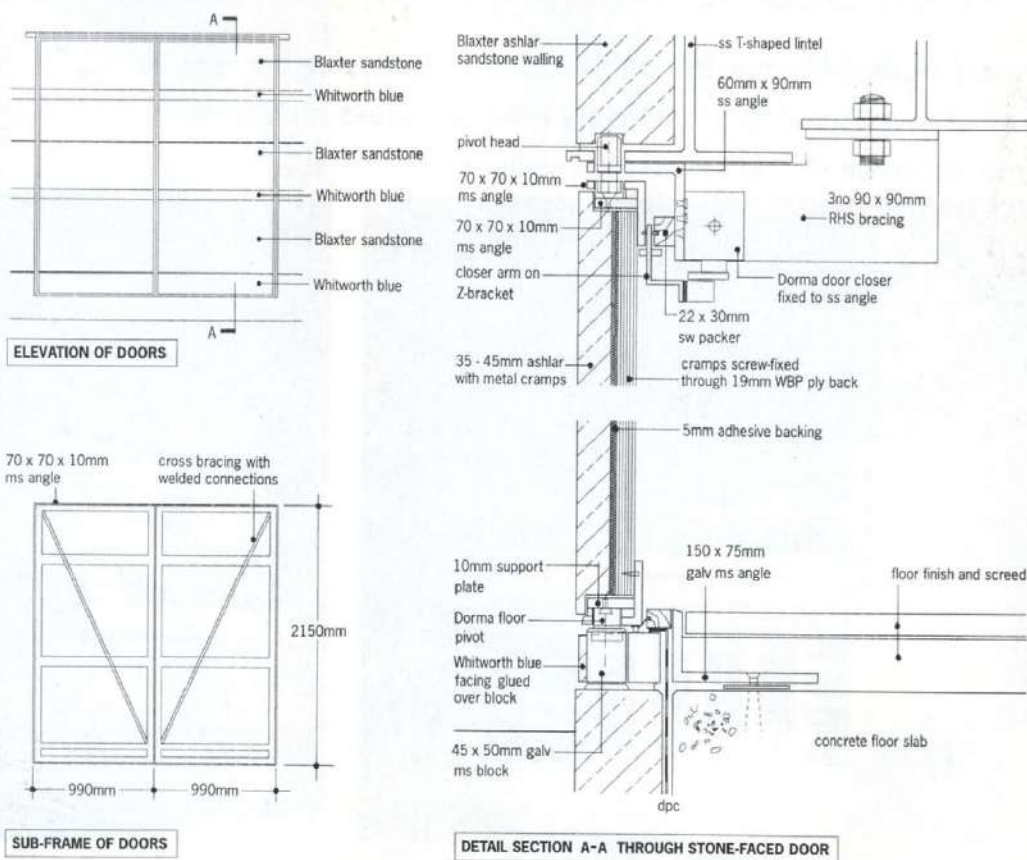
To maintain the sweep of the stone elevation, the two doors are faced in Blaxter sandstone. They have diagonally braced frames of galvanised steel angles on which the stone slabs sit. The frames are bolted back to the structural steelwork. The stone slabs have a curved front profile which follows the curve of the wall, and are glued and screwed to an insulated ply backing.

The opening mechanism is a Dorma floor pivot set in a steel levelling block. A steel angle stops the weight of the door from damaging the building fabric. The ashlar jambs are routed out to allow the doors to swing.

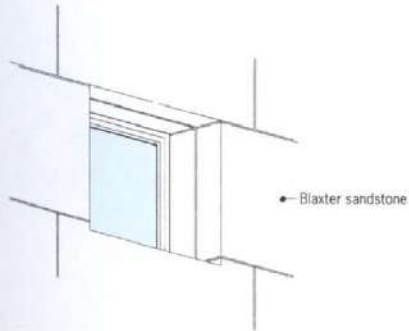
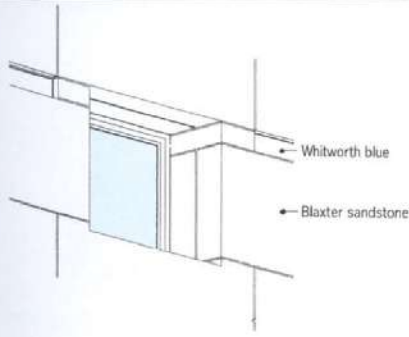
CREDITS

ARCHITECT Panter Hudspith Architects
ENGINEER Ove Arup Newcastle
QS Summers & Partners
MAIN CONTRACTOR AMEC Construction, (Northern)
MASONRY SUBCONTRACTOR Classic Masonry
SUPPLIERS stone Natural Stone Products, stainless-steel lintels Clifford Chapman Metalworks, door-opening mechanism Dorma Door Controls, reconstructed copings Brand Precast, stainless-steel ties Harris & Edgar

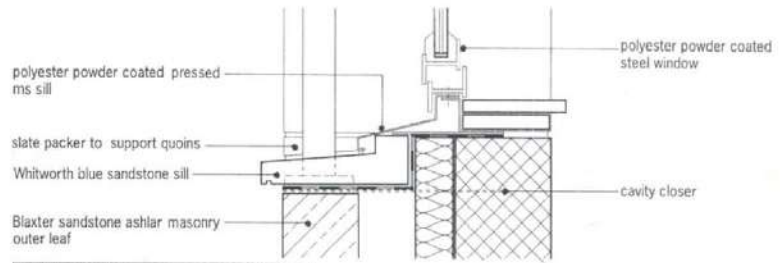
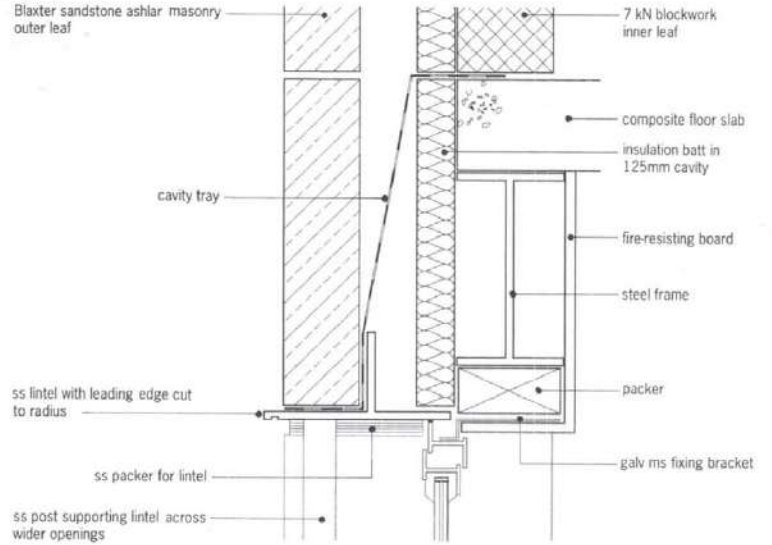
KEY ELEVATION AND SECTION OF WALL, DETAILS OF STONE-FACED DOORS



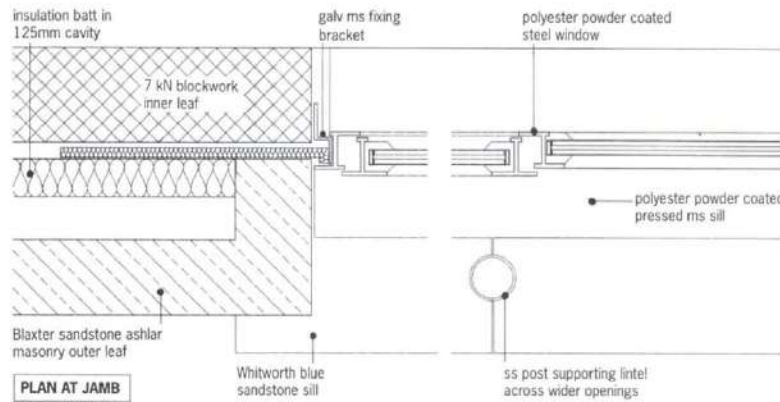
PLAN, SECTION AND ISOMETRIC OF WINDOWS IN STONE WALL



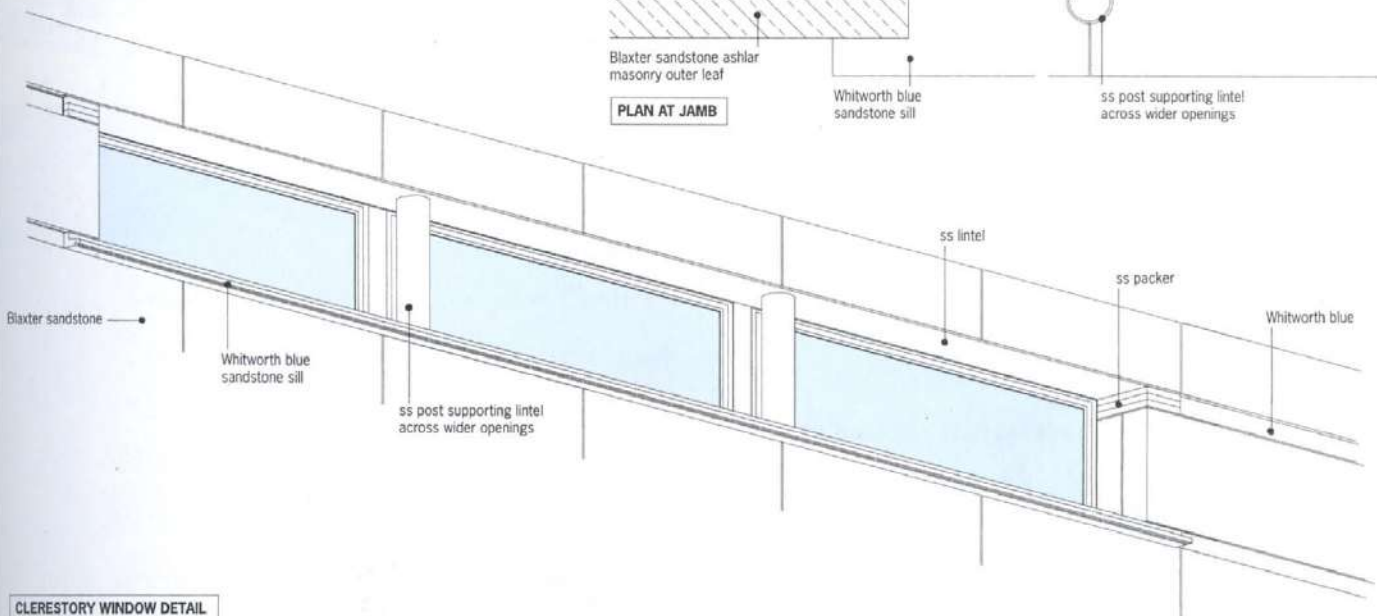
WINDOW DETAIL



DETAIL SECTION C-C THROUGH WINDOW



PLAN AT JAMB



CLERESTORY WINDOW DETAIL