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The Department Store, Brixton, London

Introduction

In 2015, the architectural practice Squire and Partners purchased a dilapidated three storey department store in the centre of Brixton. Revived and restored, it is now the headquarters of the practice and houses more than 250 staff, as well as a series of creative and retail units at street level.

In addition, the building is also a showcase for some of the suppliers and craftspeople who work for the practice – and as a venue for events. Restoration has revealed the Edwardian structure and the many original artistic features, while at rooftop level a new floor has been added, topped by a series of dramatic oak-framed mansard lanterns. These act as pavilions which enclose a staff bar, café, restaurant and kitchen, and support large rooflights which flood the interior with natural light. The exposed oak structure imparts a warm, natural quality to these spaces.

The restoration of this Edwardian building was inspired by its long and varied history. It was the furnishings annexe of the Bon Marché department store, built in 1906 and one of the first steel-framed buildings in England. At that time, Brixton was a flourishing destination for retail and culture, and the new store was constructed with an extraordinary commitment to craft and detail. But its day passed; used as an air raid shelter during the Second World War, it went downhill and ceased trading in 1981. It then housed a variety of uses – high-end retail, government offices, the Refugee Council – until squatters moved in and graffitied another layer onto its colourful history.

By the time Squire and Partners purchased the building it was in a state of disrepair, its former grandeur buried under layers of partitions, carpets, linoleum and false ceilings, the residue of decades of piecemeal conversions. The architect's aim was to celebrate the history of the store, revealing the decayed decadence of its past as well as its more recent uses. Original mouldings, teak and mahogany floors, and decorative metalwork have all been preserved.

The practice has added its own contemporary layer to the building, working and collaborating with more than 50 artists, craftspeople and innovators to create a bespoke approach to a unique building. As the architect explains: 'In addition to the physical restoration of a Brixton landmark, we strived to restore its original purpose – a department store that showcases creativity, craft and the process of making, and acts as a showcase to promote collaboration and exploration. Every space tells a story and honours the past of this reinvigorated, buzzing building.'

The new fourth floor

The new fourth floor, built on the original roof, is set back from the external parapet walls to create generous terraces along the south and to the east, where they extend out to the original cupola which has been restored and rebuilt as a glazed dome.

The roof top structure is almost entirely of oak, and consists of a series of exposed oak-framed mansard lanterns, some with rooflights, creating a warm, domestic quality to the spaces below, the bar and restaurant, and the more formal dining/meeting room. Oak was chosen for the exposed structure for its qualities of sustainability, but also for its warmth and natural colour which, in the architect's view, complemented the age and character of the Department Store.

The oak structure was sourced, designed and installed by Carpenter Oak. The company sourced their oak from two timber yards in the Loire valley in central France. All the oak is used green, it is PEFC-certified and the yards plant more oak than is harvested.

Every Carpenter Oak project is bespoke, so the oak is cut to suit the project, using the natural shape of the tree where appropriate to match a specific design.

For this project, the design team at Squires and Partners set up a series of creative workshops with Carpenter Oak, including a visit to the yard in France to meet the woodland and timber team.

The timber structure

The roof is made up of nine exposed oak-framed mansard lanterns, of which six have glazed rooflights and are linked in pairs. These lanterns are set over the dining area and the informal bar/sitting areas. Each lantern rises to a rectangular steel framed roof light, laid to a gentle fall on an oak-framed upstand. The lantern frames are supported on a series of exposed 450mm diameter oak columns, set in 5.375 x 7.300 metre bays and resting on the original columns and structure of the department store. The columns are of solid oak, each from a single tree.

Each column was turned and cored at the centre along its entire length by a specialist ships' mast manufacturer in the Netherlands. The core removal had a two-fold purpose; by removing the heart of the timber the tension within it was reduced, lessening the possibility of shrinkage splits. The hollow core also allowed 75mm diameter stainless steel rods to be inserted, threaded to a Larsen barrel, with which the tension could be adjusted if required. At the base of each column the rod is welded to a stainless steel spreader plate. At the head of each column the rod is connected to a circular base plate and a complex steel flitch plate. The flitch plate connects the ends of the 350mm deep paired oak beams which form the base of the mansard lantern. The beams support a series of 100 x 75mm oak rafters at 600mm centres, jointed with dry oak spline joints and pegged.

The other three lanterns take a different form; the beams support joisted floors and the lanterns house plant rooms. One lantern runs the full width of the fourth floor above the kitchen. The adjacent pair of lanterns is set above the dining/meeting room, with a ceiling of exposed oak joists which support the plant room floor above.

Generally, the columns are circular in section when they are freestanding and 400mm square when they are incorporated into walls, as in the kitchen and dining/meeting room.

Like the other lanterns, the columns support 350mm deep paired oak beams – but instead of rising to a rooflight, a ceiling of oak joists runs across them, on which rests an insulated 100mm concrete slab. The space within the lantern above houses the plant room and mechanical and ventilation systems, all acoustically isolated by the slab.

The short perimeter gable walls at the west and east act as shear walls; they have 400mm square section columns which are structurally braced with Ancon steel tension rods, secured at head and foot, and all concealed behind the partition walls.

The mansard lantern frames are lined with 20mm birch ply, clad with rigid insulation and roofed with copper-green metal shingles.

The installation of the timber structure, on top of a three storey building in central London, presented logistical challenges which were carefully planned by the Carpenter Oak team. A crawler crane was dismantled, hoisted up to the roof and then reassembled. It was used to hoist 50 tonnes of timber components up onto the roof and into their correct positions.

Project Details

Completion Date:

July 2017

Building Type:

Office

Location:

Brixton, London

Architect:

Squire and Partners

Interior Design:

Squire and Partners

Structural Engineer:

[Davies Maguire](#)

Main Contractor:

Stoneforce

Timber Supplier and Installer:

[Carpenter Oak Ltd](#)

Timber Elements:

Lantern roof and column support structure

Timber Species:

PEFC-certified European oak

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