

Retail Environment examines a new wave of retail buildings that put sensitivity to surroundings, original features, community and sustainability at the heart of the design brief

> Despite many retailers narrowing the number of bricks and mortar shops, looking to spend more on innovating online than on the high street, some 28% of non-residential buildings still comprise retailers and wholesalers, according to a report by the Buildings Performance Institute Europe (BPIE). While many of these retail buildings remain a bold design statement, deliberately (or not) incongruous to their environment, more are being built or inhabited to embrace their surroundings. From old villages to decadent arcades, retailers are adapting to their environments.

Long gone are the days of brutalism architecture which saw buildings being dumped like soulless slabs of concrete onto cityscapes. Love them or hate them, they remain part of the landscape in many cities, echoing back to a style of 50s-70s architecture that defined a new era of design. Many supermarkets and shopping malls seemed to pursue the same design brief - consequently

dotting many a landscape with little thought to the environment or acknowledgement of the space around the building.

But a new wave of architecture has emerged which - energy saving considerations, sustainable materials aside - has become a key element of retail design and is highly attuned to the space it is working in.

Peter Coleman, director of architecture and head of retail at international design firm BDP says: "Each solution has to be unique and respond to the individual brief and location to be a successful retail destination. You cannot design formulaic shopping centres, the architecture must respond intelligently to its environment whilst trying to meet the requirements for larger, more efficient shop units and grander shop fronts."

BDP's projects range from urban solutions in open streets, partially protected and covered streets and arcades, to stand alone destinations which are fully enclosed. One of its latest projects, the Liverpool One shopping centre (featured in May's Retail Environment), was commissioned as a means to revitalise the city centre, as opposed to blend in, proving that design – if required - can break away from the surroundings to unleash new vitality to an area.

## Thinking big

Nowhere is this more evident than among the big supermarkets and shopping malls which are arguably leading the way with green building design. A Marks & Spencer's store in Sheffield was built from reclaimed bricks and forest stewardship certified (FSC) certified timber and includes rainwater harvesting, a green roof and bird boxes to increase biodiversity and has a number of energy saving measures. It is one of several M&S stores which are test-beds for new ideas, which if successful will be rolled out across the rest of the company's properties.

In August 2012 Sainsbury's opened their most sustainable supermarket to date. UK architects CHQ designed the 26,000 sq ft store built on former agricultural land in Dawlish, Devon. The building won the Sustain Magazine retail design of the year award in 2012.

According to CHQ: "The store was conceived with sustainable design at its heart" and used recyclable Programme for the Endorsement of Forest Certification (PEFC) certified timber frame. The client asked for preformed timber cassette wall and roof panels were specified, supported on a gluelam timber frame over the sales area and a steel frame for the larger roof loads required back of house. The external exposed timber cladding used Larchwood from renewable sources and the internally exposed timber panels in the walls and roof are made from spruce.

"The use of timber cassettes for both wall and roof construction has meant that airtightness and building insulation levels are significantly better than current UK standards with U Values of 0.2kw/m2 and airtightness of just 1.8 m3/m2/hr," says CHQ. The features were designed to help the building become carbon neutral during construction and achieve a net zero carbon footprint over its operational lifetime.

The new supermarket was also the first supermarket designed to meet the Passivhaus Standard, or 'Passive House', the fastest growing energy performance standard. It includes in its design the following features:

- Double glazed skylights over the sales area and double glazed windows in the sidewalls bringing natural light into the store;
- Internal lighting linked by sensors to natural daylight levels to dim or even switch off lights in bays as natural light levels increase;
- LED lighting in the cold stores and throughout the car park where bat friendly lighting is used;
- Movement detectors in the delivery area to automatically dim lights;
- Biomass boiler powered by locally sourced wood pellets providing renewable hot water and heating;
- A purpose build eco pond has been created on adjacent land providing a natural environment for wildlife and is used as a balancing pond for run off from the car park;
- Rainwater harvesting to supply water for flushing toilets;
- Two charge points in the car park for electric cars; and,



 Two "Bee Hotels" provided in the car park area to support the local population of solitary rather than hive bees

## In keeping

CHQ was also commissioned to design a new B&Q building in Bexley, London. The £8 million project now comprises 106,000 sq ft of retail warehousing including a 20,000 sq ft garden centre, 30,000 sq ft Builder's Yard and 600 customer parking spaces. Built on a former football ground adjacent to Belvedere Station, CHQ was asked to provide a bold landmark building. Conceived as a bold design with undulating roof and canopies to reflect movement in the nearby River Thames it incorporates a series of glazed pods under the canopies which act as beacons for entrance and exit points from the store.

Another retail building to consider the space around but also its original function is the new London-based Barker and Stonehouse outlet. The Battersea showroom occupies 25,000 sq ft across two floors in one of the most historic buildings south of the Thames – the old Price's Candle factory.

The new Battersea store will sell furniture from the Trees 4Trees sustainable forestry foundation. The store will also feature low energy heating and an eco-lighting system specially designed by the company.

With a shrinking high street presence perhaps comes greater responsibility to care for the space the retailer is inhabiting. At the end of the day, in spite of a surge in online sales, customers still want an experience when they go shopping. Retailers, all too aware of this, are making it all the more important for shopping away from the computer screen to be made that little bit more special.

The shape of the roof at this B&Q store was designed with the ebb and flow of the River Thames in mind

"But a new wave of architecture has emerged which – energy saving considerations, sustainable materials aside – has become a key element of retail design and is highly attuned to the space it is working in"