

Live wire

Nautical but nice

Sculptor, lighting designer, electrician... Eleanor Bell's unique blend of skills have come together in **perfect harmony** at two **unique projects** at Jubilee Wharf in the Cornish town of **Penryn**

By Andrew Brister

Electrical contractors come in all shapes and sizes, but not too many can have the same set of skills as Eleanor Bell. She achieved a first class arts degree from Falmouth University, where her work included kinetic sculptures that made use of light and electronics. Yet, with a recession looming after she completed her degree back in 2007, she had the vision to train to become a NICEIC Approved Contractor and then gain the Advanced Lighting Design Certificate awarded by the Lighting Industry Association.

"It meant I could be self-employed and hopefully not be short of work, as well as develop the electrical skills needed for the sort of artwork I wanted to make," she says. "My work combines sculpture, lighting design and electrical installation. I provide a one-stop shop, from design right through to installation."

Bell's work varies widely, from domestic rewires and commercial electrical installations through to lighting design and sculptures, both to commissions and for exhibitions. Nowhere is her unique blend of skills more apparent than in two recent lighting design projects in Penryn in Cornwall: Jubilee Wharf office barge and the adjacent Jubilee Warehouse.

Barging in

The Jubilee Wharf office barge sums up the ethos. A rescued World War Two concrete barge has been brought back to life by adding an office space on deck to create unique commercial premises. The build includes a heavily insulated lightweight structure, made from resin and hemp weave, aluminium windows, biomass underfloor heating and

a compost toilet. The interior comprises an open-plan reception and work area, a meeting room, kitchenette and eating area, while below deck there is a large workshop.

Bell's lighting design scheme aims to deliver attractive and functional lighting for the office, but also to provide feature lighting at night, so the barge would be a landmark in what is a prominent area of Penryn. "The lighting had to look good and be in keeping with the rest of the build, even down to the emergency lighting," she explains. LED panels, wall lights and pendants were specified for the daytime task lighting. A trio of floating cloud pendants add interest to the reception area, which differentiates it from the office space nearby.

Working in such surroundings brought a number of challenges. "We couldn't recess any of the fittings," says Bell. "I've used LED panels that would normally just drop into a suspended ceiling. Here, we've only got around a 30mm void, so there was no space and the panels had to come in specially made frames."

A colour temperature of 4,000K was chosen for the daytime lighting from the LED panels, while a softer, warmer 3,000K provides the right effect in the evening. The latter is provided by bespoke LED strip cove lighting where Bell has worked closely with the shipwrights to ensure that the lighting is completely integrated with the build.

"As well as providing warm, ambient light within the barge, it is used to highlight the unusual structure when viewed from the outside," she says. "The slanted lines of light create the impression that the sloping roofs are floating above the main building. This effect is amplified by the reflections in the water. It is best seen on a still day, although that's a rare occasion in Cornwall!"

The barge has a feature light called the Crane Light that has been made from galvanised conduit rescued from the adjacent Jubilee



> LED panels light the WW2 barge (above), which features cloud pendants and the Crane Light (right), while the Ring Light illuminates the Warehouse (far right)

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13: The number of workspaces made out of old storage units that make up Jubilee Warehouse

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charging points. Jubilee Warehouse has achieved the BREEAM rating Excellent, and also won the title of best built environment retrofit at the Cornwall Sustainability Awards 2015.

"The brief was to create a warm and friendly lit environment with light fittings that were not only in keeping with the warehouse aesthetic, but also met the stringent requirements of BREEAM," says Bell. This was particularly important in the 5m high atrium, which was flooded with light in the daytime, but had the potential to become an austere, cavernous space in the evening.

In order to lower the eye away from the glass ceiling and to give the central area a more intimate feel at night, she designed and made (in collaboration with Mark Harris Furniture) the feature Ring Light. The 2.5m diameter light is constructed from eco-resin, plywood, rolled aluminium and lit using 40m of side-emitting 3,000K LED strip.

"The curved shape and the warm colours of the Ring Light soften the angular lines and raw materials used throughout the rest of the building," says Bell. Its position over the table lowers the eye away from the glass ceiling, and the overall result is an inviting and intimate space for evening events. Throughout the rest of the public areas, LED high-bay fixtures and LED panels were used to provide the main lighting, while accents were provided by LED strip, for example at a low level along the ramp as you enter the building.

Elsewhere, Bell has recently completed the design and installation of the exterior lighting at Tremeneheere Sculpture Garden, near Penzance, for light artist James Turrell's SkySpace, as well as the lighting design for Penny Saunders' The Restless Temple. Her wide-ranging portfolio also includes three large residential projects in Cornwall, Bristol and London.

"My desire is that my designs transform their surrounding environment so that they have a positive impact on the community of people using the space; for example, by being contemplative, thought-provoking or playful," she says. 

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Warehouse. "The client really liked this piece of conduit, as it had some interesting bends in it, and asked if we could make a light from it," says Bell. "It just takes a bit of working out to do it in a way that looks beautiful and purposeful. It's nice to have a piece of the old warehouse on the barge and it provides a link between the two projects."

Green Jubilee

Jubilee Warehouse is the conversion of the old storage units next to Jubilee Wharf into 13 high-quality workspaces of various sizes, coupled with a stunning glazed central atrium with an over-sized table at the heart of the building for tenants and their visitors to use as a meeting and eating space.

Like the neighbouring barge, sustainability is paramount, with a 19kW array of photovoltaic panels to generate renewable electricity, rainwater-flushed toilets, high levels of insulation and underfloor heating throughout. The development includes electric vehicle