# **St Sidwell's Point, Exeter**



## The World's first multizonal Passivhaus Certified Leisure Centre

Gale & Snowden were commissioned by Exeter City Council for the design and construction of a new state-of-the-art Leisure Centre in Exeter. Gale & Snowden partnered with S&P Architects and Arup Group to form an Integrated Design Team to deliver the project with Kier. The prominent site required a landmark design where a strong architectural presence was required alongside a Passivhaus & Healthy Building approach. The brief for this facility includes:

- 3 swimming pools including 2 main pools (25m and 20m) with moveable floors, confidence pool and changing village
- 100-spectator seating area
- 150 station fitness gym and changing rooms
- 2 fitness studios
- Health suite and health spa with hydropool
- · Café, soft play, creche area and admin offices

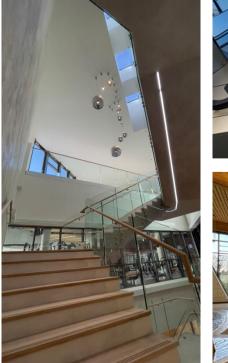
#### Sustainability Outcomes:

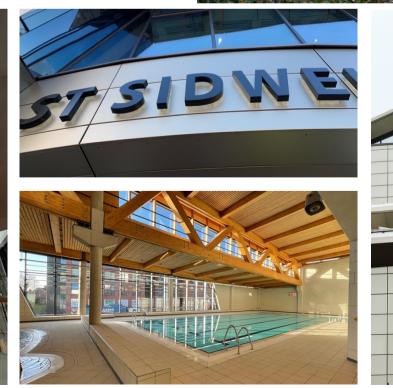
- World's first Passivhaus Certified multi-zoned Leisure Centre
- Building Biology IBN best practice in healthy building design
- Best practice guidance developed under the TSB's Design for Future Climate programme

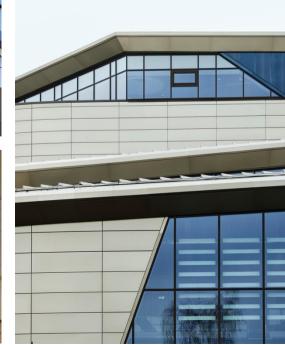
#### Key Benefits of Achieving Sustainability Outcomes:

- 50-70% saving on energy costs compared to good practice
- 50% reduction in water use
- Outstanding internal water quality and air quality
- Excellent daylighting levels
- Healthy, uplifting, and comfortable indoor environment
- Low maintenance costs from high quality building fabric & mechanical systems
- Resilience against predicted future climate change into 2080









#### Architecture, Passivhaus & Building Biology Consultancy

In redeveloping the site, the facility has become the arrival point to conclude a series of interconnected spaces across Exeter's new Princesshay area, an aspiration of Exeter to improve permeability across the city and redevelop St Sidwell. The facility is a regional destination for health and wellbeing where the community can enjoy a safe and clean environment for interaction, exercise, and recovery in an exemplar community Leisure Centre

The site's spatial constraints have been an opportunity to maximise the use of a brownfield site whilst minimising form factor and expanding Exeter's urban character over a redundant site. The building is split into two interlinking forms, each accommodating 'wet' and 'dry' zones where adjacent internal temperature zones are arranged to reduce inter-zonal energy losses. This is one of many passive design principles applied to reduce annual heating demand without increasing capital expenditure

Gale & Snowden were involved from inception in 2011 and provided design and consultancy services over 10 years for RIBA Stages 0 to 6. The practice obtained funding from the Technology Strategy Board to assess the impact of future climate on a Leisure Centre in locations in Exeter. Gale & Snowden were appointed as part of a multi-disciplinary Design Team to lead on low energy Passivhaus design incorporating healthy design principles (Building Biology), dynamic thermal & daylight modelling and design for climate change adaptation as well as the Architects for the envelope of the building including airtightness, superinsulation and thermal bridge free design. The practice also provided Passivhaus Consultancy for the Certification process for the Contractor, Kier



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