Three New Pools Project Brisbane City Council

Glue Laminated Timber is ideal for corrosive environments such as indoor swimming facilities, where chlorine vapours can damage unprotected steel structures.

Timber has been helping the sunshine state make a splash since 1857, when Brisbane River was home to several purportedly shark-proof timber frame floating baths, that relied on the river's tidal flow for cleanliness. The past 160 years have seen many trends in the rich pick of bathing facilities around town and to mitigate Brisbane's (sub)tropical, hot and humid summers Brisbanites have evolved their bathing habits - moving out of the soupy Brisbane River to more comfortable indoor pools.

The Three New Pools project marked the delivery of the first new public pools to be built in Brisbane in over 18 years. Fulfilling an election promise made by the Lord Mayor of Brisbane, three new Brisbane City Council (BCC) Aquatic Centres were built in the Brisbane suburbs of Runcorn, Upper Mt Gravatt, and Colmslie.

A major component of the design brief was to embody a comprehensive range of environmentally sustainable design elements and materials, focussing on ease of maintenance and durability. Deep section glue laminated timber (GLT) beams and columns were specified - providing an efficient and low maintenance structural system.

Initially, BCC used the steel for structural elements of the Three New Pools Project - which meant that all connections needed to be welded - a time consuming process requiring specialist construction staff on site. However; an extended period of low rainfall and severe water restrictions added an additional layer of complexity for the design team to overcome. Switching to a prefabricated, epoxy embedded GLT system minimised the on-site time during construction and the team were able to meet deadlines despite the difficult weather conditions.

The final design methodology was the result of a close liaison between project architects, structural engineers, the BCC Sustainable Design team, and Hyne Timber. The first two projects undertaken at Runcorn and at Upper Mt Gravatt used internal steel plated connections, requiring deep mortices to be cut into the beams onsite prior to installation and bolting in place. Following ongoing consultation with the builders, the BCC Design team and Hyne Timber, a less labour intensive dowelled connection method was used in the Colmslie Pool project. This revised jointing method marked a progression and refinement of the fabrication and construction process and reduced the overall time of the construction phase.

The completion of the Three New Pools project by BCC in June 2010 has delivered a high quality and architecturally elegant addition to the public pool portfolio owned and managed by the BCC. The careful selection of materials including the use of Hyne Timber GLT beams and columns has resulted in a striking new aquatic centre which has been extremely well received by the people of Brisbane both now and for many years to come.

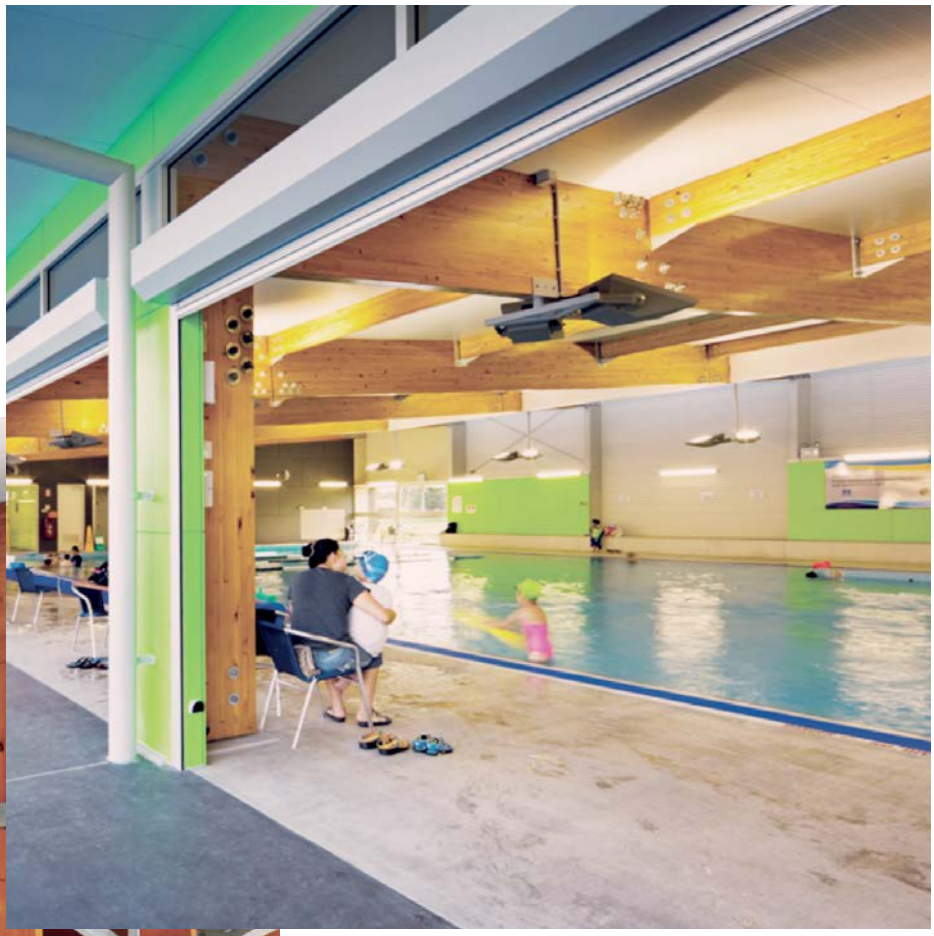
Awards & Recognition

National Award Winner
Sustainable Projects

Australian Institute of Project Management (AIPM)

Asia Pacific Award Winner
Achievement Award

Asia Pacific Federation of Project Management (APFPM)



Hyne Timber advised on the timber coating to ensure the durability of the timber members in a high humidity environment.

Project Team

Architect	BCC City Projects Office
Engineer	AURECON
Sustainability Consultant	BCC City Projects Office
Client	BCC Community Lifestyles

BEAM 17

Glue Laminated Timber (GLT) products used

Columns	600 x 115 Portal Column
Roof beams	900 x 115 – 21m span
Purlins	460 x 115 & 330 x 85 – 13m (max) span
Connections	900 x 12mm galv ms plate with M24 galv bolts