

Cathedral Grammar Junior School



Designed by Auckland-based Professor of Design Andrew Barrie, in collaboration with internationally renowned Japanese Architect Takaharu Tezuka, Cathedral Grammar Junior School is the first of its kind in New Zealand.

The structure is made from LVL timber (laminated veneer lumber). A traditional method requiring craftsmanship and absolute accuracy, layers of fully pre-cut interlocking LVL timber elements which remain exposed as the major architectural feature, were constructed on site. The timber frames were meticulously designed and manufactured to ensure structural performance and perfect fit, and arrived on site complete down to the smallest hole and rebate. The final design features innovative adaptation of traditional timber jointing techniques that allow ductility but minimise the quantity of steel required. Timber construction on this scale with this level of pre-fabrication is a first for New Zealand, and the building is a showcase for timber engineering, sustainability, carpentry, and craftmanship with the resulting structure showcasing elegant construction, tight joins, crisp edges and perfect alignment.

While the design is innovative giving the school a clean cut look, a high degree of pre-planning was required to overcome obstacles such as how to hide the mechanics of the building and maintaining a strong eye for detail while working to a tight timeframe.

Contract Construction undertook a full buildability review during the tender stage, along with the help of in house 3D modelling to co-ordinate the job and achieve architectural objectives. Incorporating a clean design with a strong indoor/outdoor flow, the classrooms are split by folding walls allowing for greater teacher collaboration if desired. The walls are also non-structural, allowing for the school to take them out and lay it out differently as the school changes.

The outcome is a beautiful building finished on budget and in time for the new school term of February 2016.

OVERVIEW

Address

Street: 38 Park Terrace

Suburb: Central

City: Christchurch

Consultants

Engineer: Ruamoko

Architect: Andrew Barrie Lab

& Tezuka Architects

Project Details

Value Band: \$1-5m

Size: 962 m2

Stories: One

Category: Commercial

Type: New Build

Education

Finish Date: Feb 2016

Build Time: 11 months



