



COURT THEATRE CHRISTCHURCH

Snapshot Case Study

DESIGN

Howarth Tompkins &
Athfield Architects

CONSTRUCTION

Hawkins Construction

STRUCTURAL ENGINEER

Ruamoko Solutions

BACKGROUND

The Court Theatre project is a purpose-built performing arts venue in Christchurch, designed to be the cultural heart of the city.

The building integrates mass timber elements to enhance sustainability, provide structural efficiency, and create a warm, inviting atmosphere.



EASY GAINS

- Timber was chosen for its ability to provide both structural strength and aesthetic warmth.
- Prefabricated timber elements allowed for rapid on-site assembly, reducing construction timelines.
- The use of engineered timber reduced carbon emissions compared to conventional materials.
- Integration of mass timber elements enhanced the acoustic properties of performance spaces.

RESULTS SUMMARY

- Total timber volume used: 153 m³ of LVL, CLT and Glulam
- Timber sequestered CO₂: 101 tonnes
- Programme efficiency: Prefabrication contributed to faster installation with reduced site waste.
- Acoustic performance exceeded initial expectations, supporting optimal sound quality for performances.

HISTORY/PROJECT BRIEF

The Court Theatre was relocated after the 2011 Christchurch earthquake, with the new venue being designed as a permanent home for the performing arts. The project emphasises resilience, sustainability, and community engagement through thoughtful use of materials and space.

PROJECT LEARNINGS

- Detailed coordination between engineers and architects was required to optimise timber performance.
- Prefabrication contributed significantly to programme efficiencies and quality control.
- Acoustic treatments had to be carefully integrated with timber elements to achieve desired sound performance.
- Moisture protection during installation was crucial for maintaining timber quality and durability.

BARRIERS TO OVERCOME

- Regulatory approvals for mass timber in performance spaces required extensive planning.
- Ensuring structural stability while maximising open space required innovative engineering solutions.
- Integrating fire protection measures with mass timber elements required additional coordination.
- Managing long lead times for timber supply required early procurement planning.