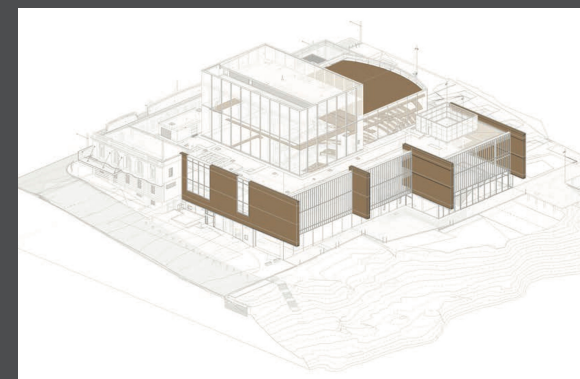
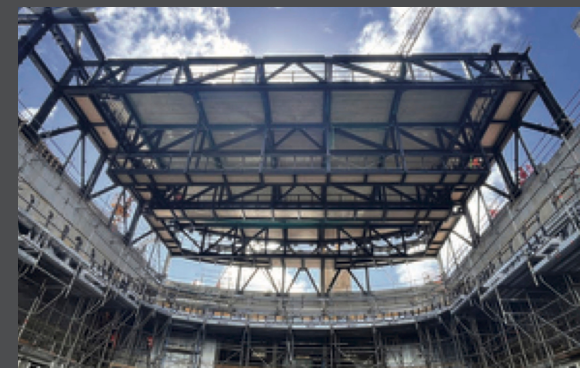
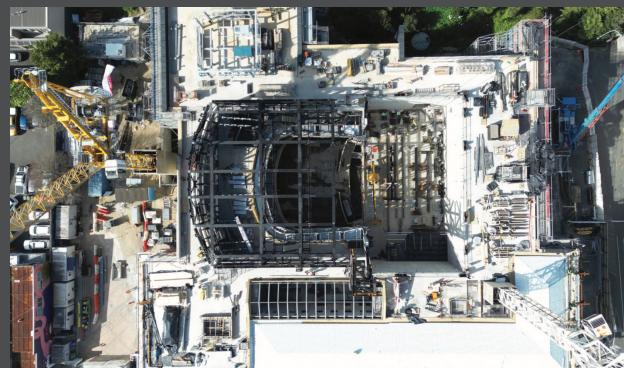




WAIKATO REGIONAL THEATRE

Snapshot Case Study

DESIGN

Jasmax
Charcoal Blue
Holmes Group

CONSTRUCTION

Fosters Construction

BACKGROUND

The Waikato Regional Theatre is a landmark cultural development in Hamilton, integrating new and heritage structures to create a world-class 1,300-seat lyric theatre. Changes due to Resource Consent requirements and cost escalations led to the introduction of Cross Laminated Timber (CLT) as a cost-effective and efficient structural material. CLT was used for blade walls, the auditorium roof, and seating bleachers, offering construction speed, cost savings, and sustainability benefits.

All imagery supplied.



Ministry for Primary Industries
Manatū Ahu Matua





EASY GAINS

- Labour hours were **reduced by 27%** due to the use of prefabricated CLT.
- Replacing precast concrete with CLT in blade walls led to a **13% cost saving**.
- CLT bleachers achieved a **35% cost saving** over precast concrete, as well as a **reduction in weight** loads which also led to an **optimised floor structure**.
- The CLT auditorium roof eliminated the need for additional bracing and suspended plasterboard, **streamlining installation**.

RESULTS SUMMARY

- Up to **35% cost savings** were achieved in key areas.
- Programme acceleration with prefabrication **reducing on-site labour time**.
- **Improved acoustic performance** with CLT enhancing sound insulation
- **3% reduction** in upfront **embodied carbon** through use of CLT.
- **Lighter construction weight** allowed for reduced crane time and faster weather-tightness.

HISTORY/PROJECT BRIEF

The Waikato Regional Theatre is part of a wider urban regeneration project led by Momentum Waikato. It replaces the ageing Founders Theatre and integrates heritage elements from the Hamilton Hotel.

CLT was incorporated as a key material after redesign challenges and budget constraints prompted a review of cost-saving opportunities. Despite initial learning curves, the project successfully demonstrated **cost efficiency, sustainability, and improved buildability**.

PROJECT LEARNINGS

- **Extensive planning** ensured moisture management and optimal timber performance on site.
- **BIM integration** facilitated coordination and prefabrication accuracy.
- CLT's flexibility allowed for **easier structural coordination** with other trades.
- Programme benefits were realised through prefabricated components **reducing construction complexity**.

BARRIERS TO OVERCOME

- Regulatory requirements meant CLT **needed alternative compliance pathways**.
- Traditional procurement models were **not optimised** for mass timber use.
- Moisture protection required **additional cost and management** strategies.
- Shop **drawing delays** impacted coordination, affecting project timelines.

"The versatility of CLT allowed us to apply it in many creative ways, delivering lower cost and reduced carbon outcomes."

Nathan Groth, Project Architect, Jasmax

"I would like to build a whole building in CLT now."

David Middlemiss, Site Manager, Fosters

"CLT has proven to be a great material to work with, offering the programme efficiency benefits we hoped for."

Tim Strawbridge, Commercial Director, Fosters