



Western Michigan University Valley Oaks Residence Hall

Objective: To deliver an exceptional student experience while achieving rigorous budgetary targets and a significantly compressed construction schedule through innovative design-build strategies.

Solutions

- **Prefabricated Assemblies:** Cold-formed metal stud interior walls, CLT floor slabs, 4 story panelized exterior walls, prefab shower stalls
- **Mass Timber Layout for Pricing:** residential wings, 3 PLY CLT floor slabs over cold form metal studs, 7 PLY CLT exit stair walls
- **Central Core:** 5 PLY CLT, glulam columns & beams

Results

- The project was completed in 2 years which was 33% faster than originally expected
- Embodied carbon benefit: 3,824 Metric Tonnes CO2
- Biophilia - bringing the natural world inside for human comfort and well being

Financials

- \$110,000,000 Guaranteed Maximum Price
- \$89,000,000 total trade cost
- \$330 per square foot
- \$89,000 per bed

Project Highlights

- Mass Timber Hybrid Structure
- Prefabricated Materials
- 270,000 square feet
- 1,000 beds
- Biophilia

Project Partners

- Hanbury (Architect)
- Christman Company (Construction Manager)
- Britt, Peters and Associates (Structural Engineer & Mass Timber Engineer)
- MassTimber@MSU



“As we continued to talk to our contractor and architect, we found that we had a solution that would fit in the space and that would fit everything we needed as an owner. We were able to hit the price point, the natural comfort, and the tight schedule.”



BARRY A. OLSON, ED.D.
Associate Vice President for Campus Life,
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