

SPECIALTY ENGINEERING

Aligning Design, Performance, and Constructability

WoodCore's Specialty Structural Engineering services support high-performance mass timber and hybrid structures from early concept through construction. We bring deep experience with CLT, glulam, and advanced wood systems to help project teams unlock the architectural potential of timber while meeting stringent code, performance, and budget targets.

WHAT WE DO

We provide targeted structural engineering for mass timber and timber-forward projects, working alongside architects, engineers of record, and contractors. Our team develops complete, build-ready timber systems: spanning strategies, panel and member sizing, connections, and detailing that respects both design intent and on-site realities. From fire and vibration to lateral behavior and long-term deflection, we help teams navigate the complexities unique to timber so the structure performs as expected over the life of the building and meet design intent.



CORE SERVICE AREAS

Mass Timber Expertise

Delegated design and full engineering for CLT, glulam, and hybrid systems. We size members and panels, design connections, and coordinate with other structural materials (steel, concrete, light-frame, masonry) to create cohesive systems that are efficient and cost-aware.

Design-Assist Partner

Early-phase collaboration with architects and GCs to align structure with the project's vision, budget, and schedule. We support concept studies, grid and span optimization, structural depth and vibration checks, and comparative options that help the team choose the right timber strategy before details are locked in.

Build-Ready Solutions

Detailed calculations, drawings, and specifications that support permitting, fabrication, and construction. We address code navigation, fire resistance strategies, lateral and gravity design, and material efficiency so that timber packages are not only beautiful on paper but also practical to fabricate, ship, and erect.

HOW WE FIT YOUR TEAM

Helping project teams keep timber viable—from concept through construction.

Explore & Align

- Review concept, program, and mass timber goals
- Clarify scope, delivery model, and decision timeline

Shape the Structure

- Test grids, spans, and structural depth options
- Compare mass timber / hybrid schemes for cost and performance
- Advise on fire, vibration, and lateral strategy early

Engineer the System

- Size members and panels, design connections and interfaces
- Resolve coordination with other materials and MEP
- Develop calculations, details, and build-ready drawings

Finalize & Support Delivery

- Assist with permit questions and peer/owner reviews
- Coordinate with fabricator and GC during shop drawing phase
- Remain available for RFIs and field-driven refinements

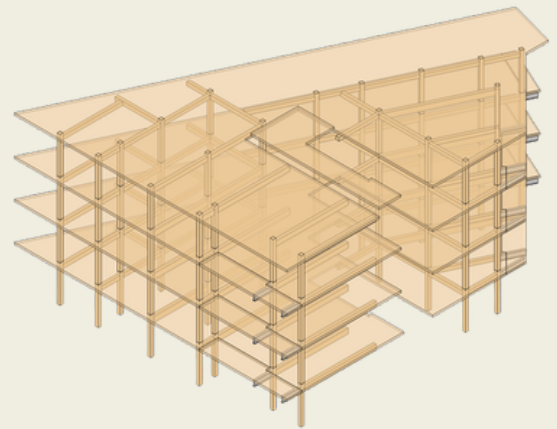
- A focused mass timber structural partner that complements the SEOR and architect.
- One point of contact for both design-assist and delegated timber design.
- Clear deliverables that help fabricators, contractors, GCs, and installers move smoothly from design to shop drawings and construction.



PROJECT HIGHLIGHT

Bella Vita | Traverse City, MI

Bella Vita is a five-story structure that was designed with mass timber in mind. WoodCore provided Design Assist services to help the project team evaluate structural options, maintain the mass timber vision, and align cost, constructability, and performance requirements before design decisions were finalized.



ENGINEERING THE EXCEPTIONAL, BUILT FROM OUR CORE



Early Integration | Digital Precision | Build-Ready Certainty