

DESIGN ASSIST

Prefab framing, Mass Timber, and hybrid structural systems succeed when design decisions are informed by how buildings are actually built.

Quality Buildings' Design Assist integrates constructability, prefabrication strategy, logistics planning, and installation expertise at the end of Schematic Design—before details are locked and costs escalate.

WHY DESIGN ASSIST?

Real-Time Cost + Constructability Feedback

Engineering and estimating collaborate to evaluate options, spans, grids, and system choices with cost clarity.

Early Digital Coordination (BIM/VDC)

QB-led BIM/VDC coordination aligns structure, MEP, envelope, and prefabrication early—reducing RFIs, field conflicts, and rework.

Supplier- & System-Aware Optimization

We understand how different timber and framing systems actually behave in procurement and installation—helping teams avoid assumptions that inflate cost or delay schedules.

Install-Informed Detailing

Connection concepts, sequencing logic, access planning, and lift strategy are considered early—so drawings reflect reality, not ideal conditions.

Reduced Project Risk

Early VE/VM keeps projects buildable, predictable, and aligned with budget—protecting mass timber and prefab scopes from late-stage value engineering.



THE QB ADVANTAGE

- Design | Supply | Install alignment
- Prefabrication-first thinking
- Installation-informed coordination
- BIM/VDC-led planning
- Field-proven sequencing and logistics expertise
- Controlled environment manufacturing



QB DESIGN ASSIST FRAMEWORK

1) ALIGN

- Confirm project goals + delivery approach
- Establish prefab / MT intent
- Budget and schedule alignment

2) MODEL

- BIM/VDC coordination kickoff
- Structure, MEP, envelope interfaces
- Clash detection before fabrication logic is set

3) OPTIMIZE

- Panelization + sequencing strategy
- Install efficiency analysis
- System comparisons (cost + schedule impact)

4) DETAIL

- Connection approach (build-led)
- Access, lift, and site constraints
- Fabrication-ready geometry inputs

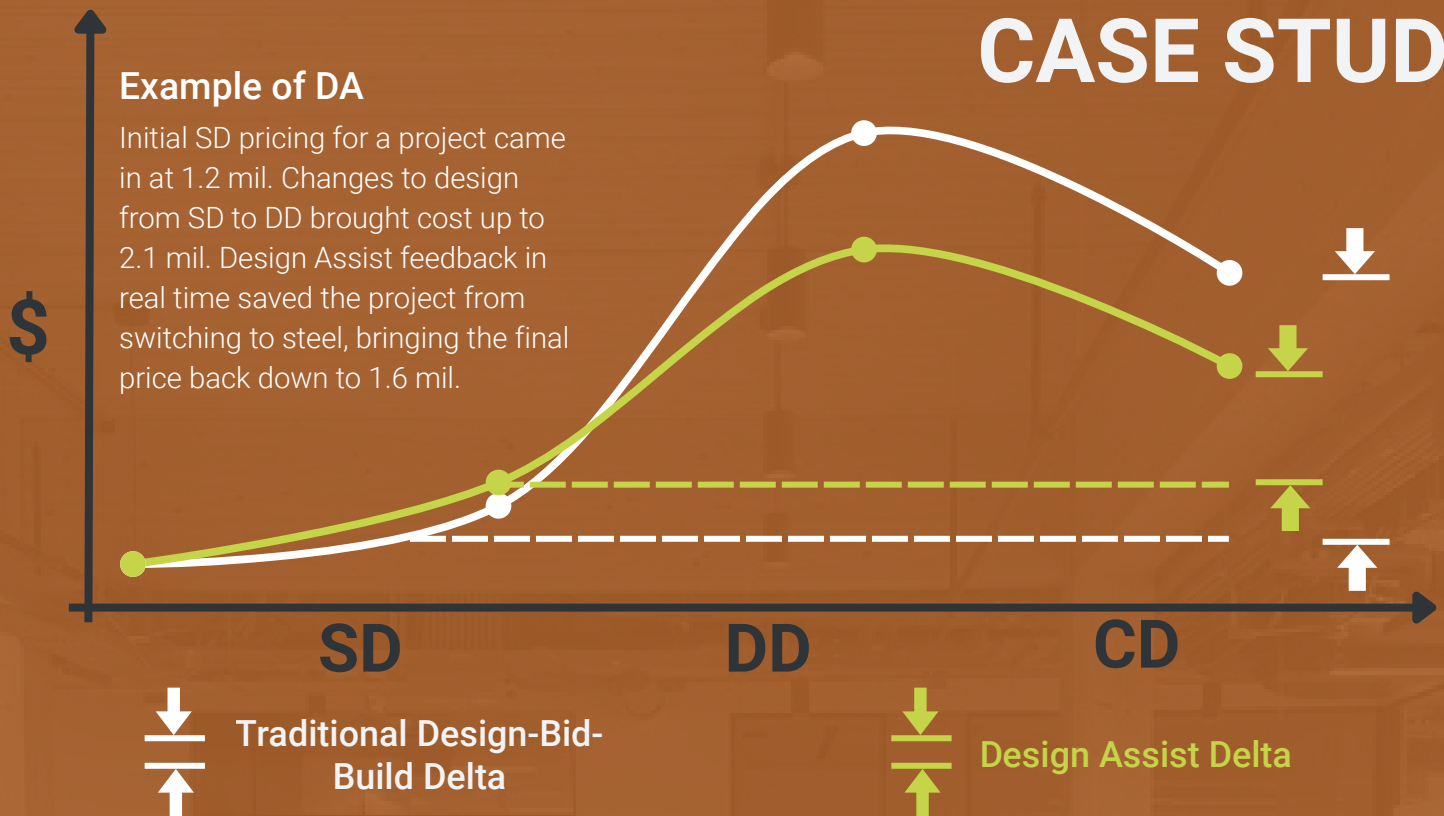
5) ENABLE

- Supply + install readiness
- Clear handoff into procurement
- Predictable transition to construction

CASE STUDY

Example of DA

Initial SD pricing for a project came in at 1.2 mil. Changes to design from SD to DD brought cost up to 2.1 mil. Design Assist feedback in real time saved the project from switching to steel, bringing the final price back down to 1.6 mil.



WHAT YOU RECEIVE

- Structural system + framing feasibility review (prefab, mass timber, hybrid)
- Prefab strategy (panel sizes, repetition, tolerances)
- Quantity take-offs + early material logic
- Coordinated BIM/VDC model inputs
- Logistics and material flow planning
- Sequencing + install methodology insights
- VE/VM recommendations grounded in buildability
- Risk review tied to scope gaps and handoffs
- Transition roadmap from design to supply and install
- More consistent code compliance and inspections
- Accelerated schedules through parallel workflows

WHO BENEFITS?

Architects

Preserve design intent while ensuring details are buildable and coordinated early.

Developers

Gain early cost certainty, schedule predictability, and reduced VE risk.

General Contractors

Clear sequencing, fewer RFIs, smoother installs, and reduced field surprises.

Owners / Project Teams

One integrated partner helping align design decisions with real-world execution.