Fort Collins BS + Beer

Alternative Building Systems

These are math problems, not fads. Where labor substitution and schedule compression pay off, what repeatability they demand, and which barriers can erase them.

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The math problem

It’s a math problem, not a movement.

- Every alternative system swaps field labor for factory labor and site schedule for logistics schedule. The savings are only as real as that swap holds up.

- Two places savings show up: **labor substitution** (factory crews replace field framing crews) and **schedule compression** (enclosure happens faster, trades stack sooner).

- Both depend on repeatability. The same wall type, the same panel, the same detail, unit after unit. Custom design can reduce the success of alternative systems.

- Three systems being used in Colorado today: EcoCocon, B.Public Prefab, and TimberAge Systems.

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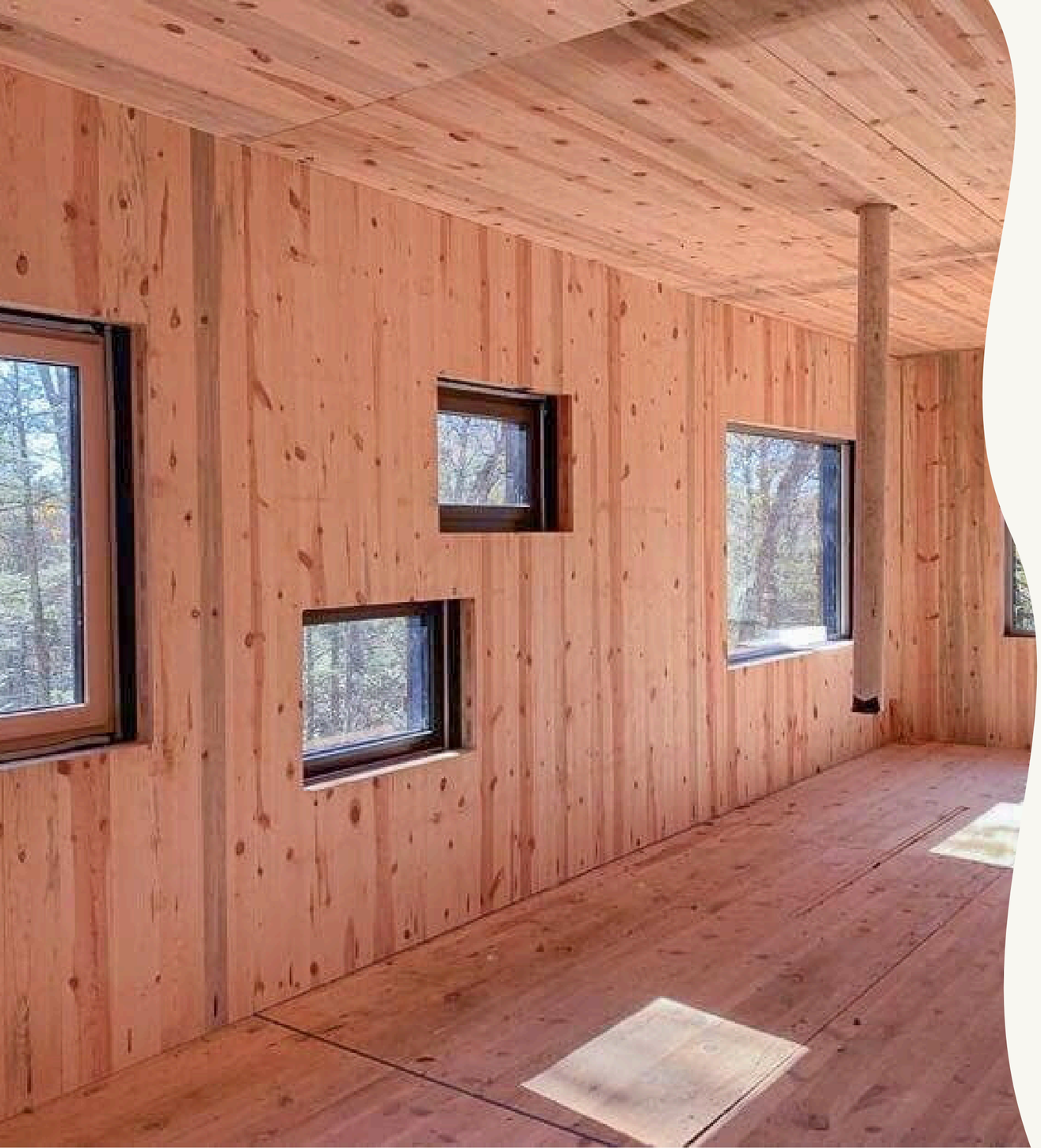
Three alternative systems being built in Colorado



TimberAge insulated CLT panels

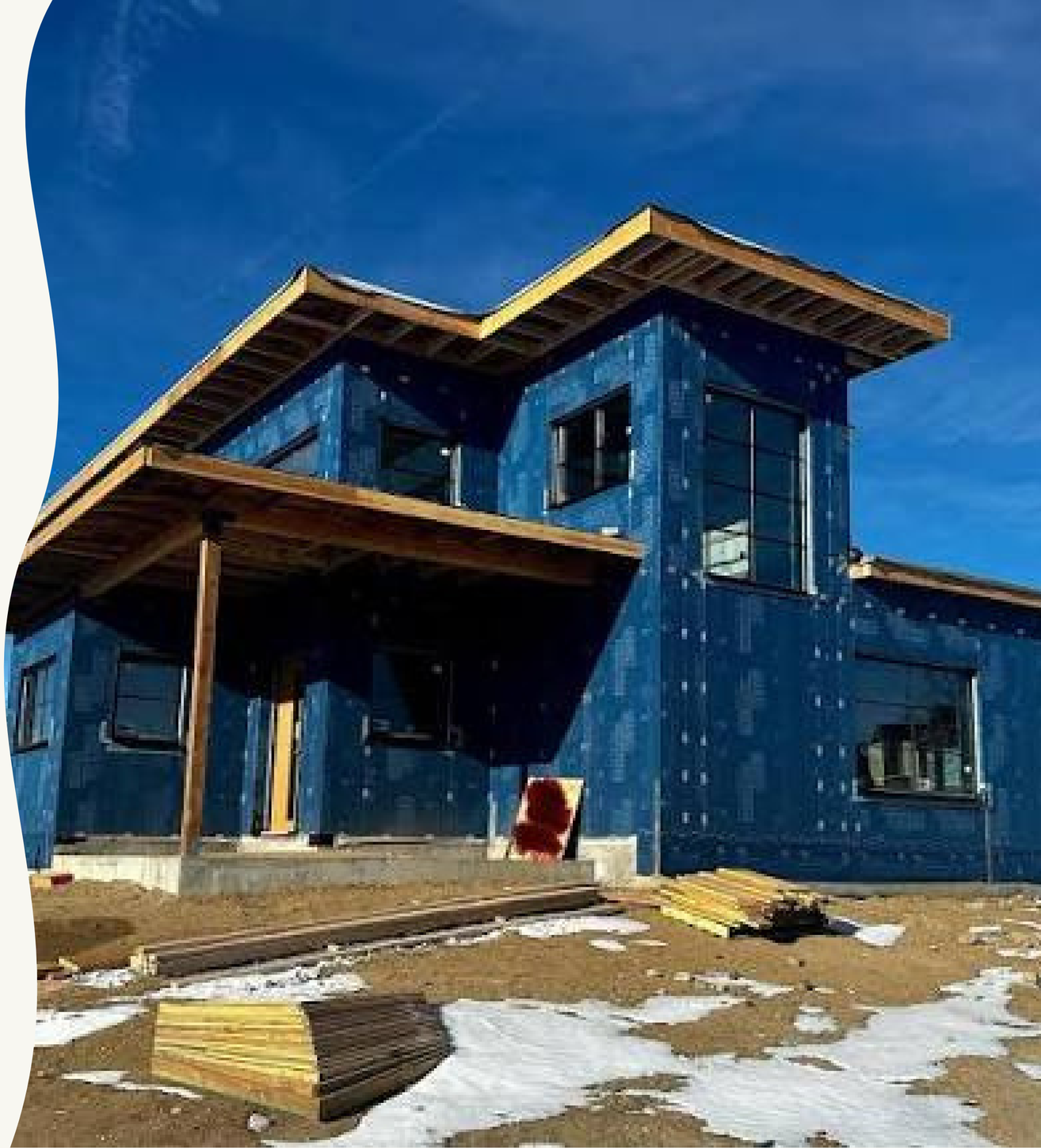
- A cross laminated timber structural approach: exposed structure and durability, sourced from wildfire-mitigated pine pulled out of Colorado forests instead of standing healthy timber.
- Trade-off: a smaller, specialized installer pool.

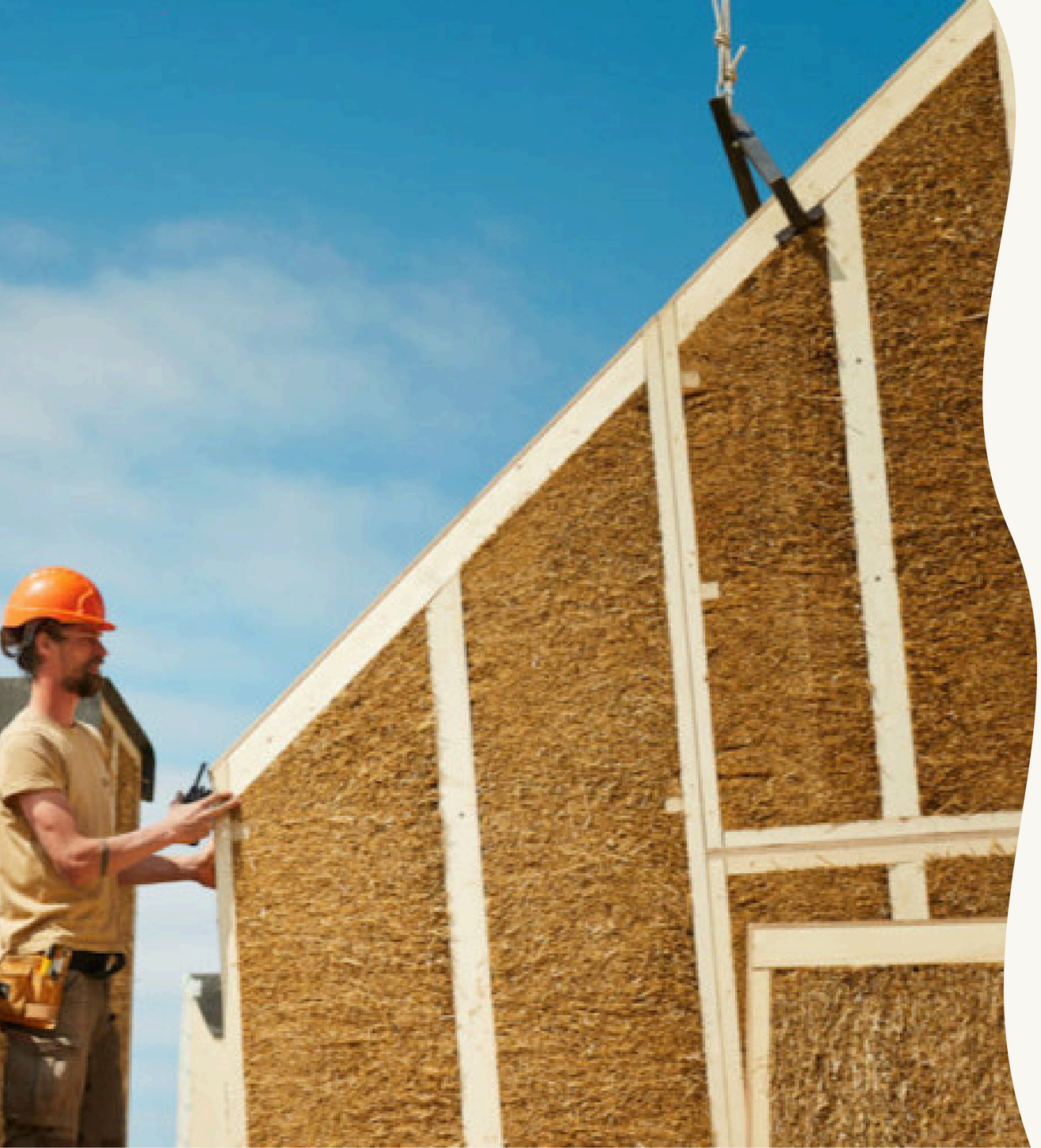
TIMBER AGE SYSTEMS

B.Public Prefab structural panels

- Factory made wall, floor and roof panels arrive onsite framed, insulated, sheathed and inspected. Panels are set and dried-in in days, not weeks, saving time and labor costs.

- The piece to plan around carefully is logistics: trucking, permitting and the crane day.





EcoCocon structural straw panel

- Panels show up on site already load-bearing and insulated, so enclosure happens in days, and the low-carbon data is real enough to hold up under a buyer's questions
- Extremely fire resistant due to the density of mechanically packed straw.

eco cocon
STRAW WALL SYSTEM

03

Three big questions

Q1: Where the savings survived, where it didn't

Survived

On a recent B.Public project in Crested Butte, the panels closed the building in well ahead of a stick-frame schedule, which meant trades stacked sooner and the home was weathertight well before the season turned. That schedule compression was the real, bankable win.

Disappeared

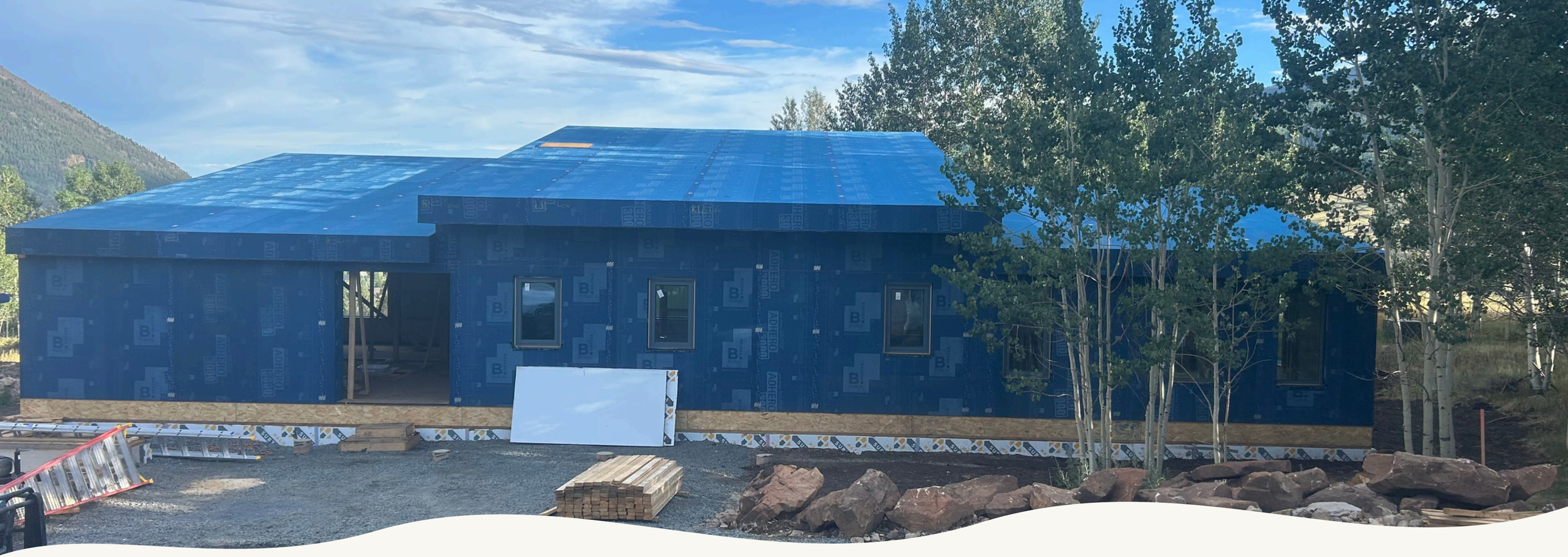
The logistics plan was made, then reality set in. The crane had a technical failure onsite, the homeowner was charged for extra days without notice. That coordination cost, not the labor math, is what narrowed the gap between the pro forma and the actual job.

Q2: The single biggest barrier: logistics

- For B.Public Prefab in Crested Butte, logistics is the one that hits the pro forma first. Not code acceptance, not buyer acceptance.
- Code acceptance, inspection protocol, financing, insurance and buyer acceptance are all catching up, not blocking. None of them stopped this job.
- Logistics is the variable the local team controls least: trucking, permitting, and a crane day booked weeks out. Miss it, and the labor savings go with it.

Q3: Build 50 identical units in Fort Collins today. Alternative System or Stick-framed?

- **Alternative all the way!** Panelized, one wall system, repeated fifty times. Repeatability turns the factory's fixed setup and tooling cost into a shrinking fraction of each unit.
- Stick-frame doesn't compress at this volume. The fiftieth unit takes the same field-framing sequence as the first. Panelized production runs in parallel with site work, which is where the schedule actually compresses.
- The whole case rests on "identical." The moment the units start varying, the advantage bleeds away and stick-frame closes the gap fast.



Real projects. Real cost benefits.

Alternative building systems are already changing how we build in Colorado. For the better.

Questions & Discussion