SINGLE-FAMILY A ONE-PAGE SUMMARY · JANUARY 2027

Build Smarter from Day One

Most of a project's cost gets set early, before anyone draws a wall. The order you make decisions in matters as much as the decisions themselves.

This summary is drawn from *Build Smarter from Day One: A Developer's Toolkit*, prepared by Wall-tech, a fabricator of prefabricated cold-formed steel (CFS) walls, from our experience working with developers, owners, engineers and general contractors throughout the country, and from the linked sources. Use it as a question list for your local team, whether or not prefabricated walls are on the table. Zoning, platting, tax and code rules differ by state and city. This is not legal or code advice.

1 Needs

- ☐ Write a short pitch package first, ahead of property control, capital partners and the construction loan. (Strong Towns)
- ☐ Homes for sale: price points and how fast lots will sell are the core questions.
- ☐ Write one page: units, target prices, schedule and budget. Check every later decision against it.

2 Site and local rules

- ☐ Look for sites already served by streets and utilities. (Strong Towns)
- ☐ Test zoning fit before you buy. In a California planner survey, projects consistent with zoning were approved in under six months in most jurisdictions; amendments took six months or more, and environmental review usually took over a year. Each step up costs time. Ask what is allowed by right, by waiver, and what has been approved before. (Terner Center)
- ☐ Parking is a construction cost. A University of California, Los Angeles (UCLA) study of 17 cities put underground parking at about $73,000 per space on average, and aboveground structures at about $52,000, not including land. Buffalo, Minneapolis, Raleigh and Austin have dropped parking minimums citywide, a growing trend in large cities. Fewer required spaces can mean less or no underground parking. (UCLA; Lincoln Institute; Yale Environment 360; Parking Reform Network)
- ☐ Our read: if parking is the only reason a project needs a concrete base, removing it can open up other framing on a slab. Test that with your architect.
- ☐ Subdivisions and infill: before you sketch lots, check minimum lot size, block length and dead-end street standards. Subdivision rules can quietly block small lots. (Strong Towns)

3 Construction type and the prefab decision

- ☐ Bring the fabricator in alongside the architect in schematic design, so they can help find a lower-cost design from the start, not as an afterthought. STRUCTURE magazine advises choosing the supplier early. BuildSteel says panelized jobs need 6 to 12 weeks of planning lead time, against 1 to 4 for stick-built. Check this order with your own architect, engineer and contractor.
- ☐ Single-family: detached one- and two-family homes, and townhouses of three or more attached units that are not more than three stories and have a separate means of egress, usually fall under the International Residential Code (IRC) (R101.2 and the townhouse definition in R202). Apartments that are not townhouses fall under the IBC.
- ☐ Load-bearing CFS works like wood framing, with structural steel studs. It is noncombustible and can go taller than wood. In our experience, wood is the lowest first cost at four to five stories. Above that, CFS sits between wood and concrete.
- ☐ Get insurance quotes for both options at the same time you get first construction pricing. In a Steel Framing Industry Association (SFIA) study of one mixed-use building, CFS cost 2.61 percent more than wood in Chicago hard costs; a New Jersey model that counted lower builder's-risk and liability premiums shrank the gap to 0.92 percent. (SFIA)
- ☐ A 2026 Terner Center paper says factory-built housing has the potential to reduce hard costs by an estimated 10 to 25 percent, and timelines by an estimated 20 to 50 percent, when the right conditions are met. That range comes from earlier Terner testimony, not a measurement in this study. The National Institute of Building Sciences (NIBS) toolkit says savings are not guaranteed or consistent. Prefabricated walls fit best with short schedules, repeated layouts, an experienced team and hard-to-reach sites. (Terner Center; NIBS toolkit)
- ☐ Inspection: Plant pre-approval is most common with modular builders. Plan for connections to be inspected in the field. (STRUCTURE)

> **FABRICATOR'S PUBLISHED PROJECT RESULTS**
> From the fabricator, not typical results: 316 Madison, Iowa City, seven stories of load-bearing CFS on a precast podium, enclosed in under four months. Ask for job-specific numbers, not these. (Wall-tech developers page)

4 Team

- ☐ If you chose panelized CFS, bring in a prefab fabricator as a design-assist partner. Your architect and engineer do not need prior prefab experience. The fabricator brings that experience and works alongside them. Ask how many CFS panelized projects they have delivered, whether they provide design-assist and system engineering, and how they handle mechanical, electrical and plumbing (MEP) penetrations.

5 Design

- ☐ If you are going panelized, select your prefab fabricator before construction documents start if you can, and settle the repeatable unit layout in schematic design. Layout, shop drawings and connections can then feed those documents instead of being redrawn after them.
- ☐ Early selection also lets you lock in a slot in the fabricator's production schedule, so the prefabricated walls are ready when the site is.
- ☐ For single-family homes or duplexes, ask whether the city offers pre-approved plans. These programs typically cover only those smaller building types, not larger buildings. Kalamazoo's were vetted by every department in advance. (Strong Towns, on Kalamazoo)

6 Cost savings, including MEP

- ☐ The biggest savings are decided before design: local rules, construction type and the prefab call. Read the figures as estimates.
- ☐ Repeat one unit layout, stack kitchens and baths so shafts line up, and run value engineering before the entitlement set and again at the end of design development. (Whole Building Design Guide) On a panelized job, coordinate MEP penetrations in a shared building information modeling (BIM) model before the walls are built. (BuildSteel)

7 Financing

- ☐ Single-family subdivisions: ask your state housing finance agency whether it has an infrastructure loan program.
- ☐ If prefabricated walls are in the mix, model manufacturer deposits and draw timing with your lender before you close.

8 Approval

- ☐ Start with a pre-application meeting. Pick the lightest path: permitted use, then conditional use or variance, then rezoning. Each step up adds time. Get any conditions in writing before final drawings.
- ☐ Subdivisions: platting usually runs sketch plan, preliminary plat, final plat, then public improvements with financial guarantees. In Texas, the plat authority must act within 30 days after filing, or the plat is approved, with some exceptions. (Tex. Loc. Gov't Code 212.009) Wisconsin gives 90 days on a preliminary plat. (Wis. Stat. ch. 236) Read your state's statute.

9 Permits

- ☐ Approval is only the first gate. Building permits, construction and a certificate of occupancy still follow. Ask the building official how alternate means and methods are handled (2021 IBC 104.11).
- ☐ Off-site work: confirm the inspection path early, including who inspects the connections.

Sources (clickable): Strong Towns (pitch package), Strong Towns (Housing-Ready City), Strong Towns (subdivision rules), Strong Towns (Kalamazoo pre-approved plans), Terner Center (land-use survey), UCLA parking study, Lincoln Institute, Yale Environment 360, Parking Reform Network, STRUCTURE, BuildSteel, NIBS / Fannie Mae toolkit, 2021 IBC 104.11, Terner Center (factory-built housing), SFIA, Wall-tech developers page, Whole Building Design Guide, Tex. Loc. Gov't Code 212.009, Wis. Stat. ch. 236

The full free toolkit, *Build Smarter from Day One: A Developer's Toolkit*, covers multifamily, hotel and single-family: www.walltechinc.com/build-smarter-from-day-one