

CyberSteel Frequently Asked Questions

Who Is CyberSteel?

CyberSteel is a “full-service” framing sub-contractor that designs shop drawings, fabricates, and erects the light gauge steel framing (LGSF) for major commercial projects using common, off-the-shelf components. We specialize in multi-story, multi-family projects, and typically use non-union crews. CyberSteel can build anywhere in the western United States. CyberSteel is a recognized leader in LGSF technology and construction and brings unique ‘value-added’ services and extensive quality control to your building team.

Why is CyberSteel Special?

Unlike our competitors, CyberSteel has developed proprietary CAD software, logistics management systems, and specialized training methods that allow us to efficiently manage the complexity involved in the design, fabrication, and erection of light gauge steel. We combine ‘factory-built’ quality control methods with on-site operations to achieve labor and material savings.

Are CyberSteel's Prices Competitive?

CyberSteel's unique proprietary design and fabrication systems allow us to build LGSF at prices competitive with wood framing. In Portland we have found our prices to be within the normal price spread most expected by general contractors. Seattle prices are slightly higher. CyberSteel achieves competitive costs through labor saving information technology systems. Our costs are especially competitive with PT-slab construction and can save many dollars per square foot.

When Should CyberSteel Get Involved?

CyberSteel can save the design team time and money if we get involved early in the project design process—certainly before construction documents begin. We can help set realistic time schedules, budgets, and assist with value engineering and detailing that can eliminate backtracking and false starts.

Can We Re-engineer Existing Wood Plans?

CyberSteel has been involved in numerous projects where existing wood plans were reengineered into LGSF. Depending upon the engineer and his experience, fees can range from \$0.20 to \$0.40/SF of building area. This cost would be added to the basic contract cost of the LGSF provided by CyberSteel.

What Projects Has CyberSteel Completed?

CyberSteel has completed major projects in California, Oregon, Washington, Idaho, and South Dakota. Project sizes have ranged between 42,000 square feet and 250,000 square feet. Building heights have ranged from one to five stories (plus additional mezzanines).

What Does CyberSteel's Scope of Work Include?

Our work typically includes the following: all walls including bearing and non-bearing; floor framing including metal deck, C-joists, or light gauge steel trusses; LGSF roof trusses; floor and roof sheathing—either plywood or metal deck; shear wall installation and complete backing of walls and application of exterior gypsum board. In other words, a completed building frame ready for Sheetrock. (We typically don't include window installation).

Does LGSF Offer Cost Savings?

CyberSteel's LGSF products and services offer many life cycle cost advantages that need to be recognized by new customers. LGSF is non-combustible and reduces hard costs such as ‘course-of-construction’, ‘permanent’ insurance, and sprinkler costs. LGSF offers other many other savings that in some cases can amount to over \$2.00 per square foot of gross building floor area. LGSF virtually eliminates ‘stud-straightening.’

Is LGSF Green?

LGSF is considerably ‘greener’ than wood. Almost 66% of LGSF is recycled—we often say “four old Fords or 44 trees”. CyberSteel has prepared a detailed ‘white paper’ that addresses many of the frequently asked questions that architects and owners ask. Besides being greener, CyberSteel's LGSF has at least 77 other advantages over wood.

What About Heat Loss?

LGSF requires a thermal break at the exterior of the framing (or insulating studs). Just like your refrigerator at home, our LGSF buildings use light gauge steel combined with a continuous foam thermal break. LGSF buildings insulated in this manner can meet or exceed R-values found in traditional old-fashioned wood frame construction.

Are Building Inspectors Familiar with LGSF?

Building inspectors typically ask CyberSteel many questions during the course of a project. To date we haven't had a project slowed down by inspectors (remember that licensed engineers have designed the structure). To preempt any problems, CyberSteel has prepared special information packets and designed pre-construction work sessions that have greatly increased the cooperation between inspectors and the building team.

How High Can We Build?

In the Northwest LGSF has been built to 8-stories in height. Buildings over 5 stories in height require Type II Fire Resistive (FR) construction that normally increases the framing cost about 15%. CyberSteel has built projects ranging from one to five stories in height. Extra stories (above five) can be achieved with LGSF, but local conditions and specific project economics will determine the feasibility.

How Does Building Height Affect Costs?

Building height will affect LGSF costs because taller buildings require heavier stud gauges and tighter spacing. Generally speaking, a three or four story is less expensive than one and two-story buildings, because there is proportionately less roof and floor framing. Pitched roofs are typically more expensive than floor assemblies. LGSF buildings exceeding five stories cause an immediate price increase of about 15% because Type II construction will be required.

Is LGSF Economical For Type II Construction?

Our LGSF structures can achieve Type II construction which typically require some 2-hour rated walls and floor/ceiling assemblies. The building would include concrete floor slabs, non-combustible shear wall systems, and fire-retardant roof sheathing assemblies. We have found that Type II FR construction can be achieved with an increase of approximately 15% to 20% in first framing costs. Life cycle saving will reduce the *net* cost.

Will Subcontractors Charge More?

By and large we have found that most *commercial* subcontractors are already familiar with light gauge steel framing. Sheetrock subs may increase prices in taller buildings in those areas where heavier gauge bearing walls support multiple floor levels. CyberSteel is very aware of these issues and has developed systems to support subcontractors and to ease their transition into LGSF buildings. For example, we punch electrical holes in wall plates so electrical subs can start running wire immediately. We also offer additional support for plumbers and other subcontractors with information such as simplified plumbing layout drawings.

Can We Eliminate ‘Surprises’?

CyberSteel prides itself on being able to reduce most ‘surprises’ from projects—but there is always a learning curve for new design teams unfamiliar with LGSF. We intensively utilize proprietary pre-construction checklists that educate new customers and their design team. This quality control process eliminates most unknowns before the design and construction process begins.

Is Additional Structural Steel Required?

The short answer is—no more than wood. When heavy point-loads or especially long floor spans are required, some structural steel may be required to carry specific loading conditions. CyberSteel’s systems and CAD software allows us to pre-coordinate all structural steel in both the vertical and horizontal directions before the steel detailer gets involved—thus saving time. CyberSteel can erect *minor* structural steel, but we take on that work on a case by case basis.

Do LGSF Prices Fluctuate?

LGSF prices have been very stable (over the past ten years were almost flat) versus wood prices that can vary up to 50% in one year. There is currently a worldwide glut of steel, but the U.S. has imposed a 30% tariff on steel imports in early 2002. Steel is normally readily available in all areas of the country.

How Do Building Details Differ?

Building details for LGSF vary significantly from traditional wood framing. However, CyberSteel has a library of ‘standard’ details that we share with architects and engineers. A thorough review of required details should be undertaken prior to the beginning of the construction documents. In addition, CyberSteel can provide structural engineers with a copy of our proprietary ‘*Guidebook for Structural Engineers*’.

Are CyberSteel Products Approved?

CyberSteel can supply UL approvals and ICBO approvals for all the assemblies we build. CyberSteel is a licensed fabricator for both Alpine (TrusSteel) and Allied Studco (Amkey) floor and roof trusses.

How Is Schedule Affected?

CyberSteel can usually accomplish our shop drawings and fabrication within 30 to 45 days of notification to proceed. Our steel fabrication can start about the same time as groundwork. CyberSteel’s prefabricating methods allow us to quickly erect the building once slabs are available—in about the same time frame as wood, or less.

How Do I Get Started?

CyberSteel has prepared a “Getting Started” section in our Introductory Brochure that explains the basic decisions and steps required to start a light gauge steel framing project. Please read it before beginning your planning work.

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