

JULY 2022



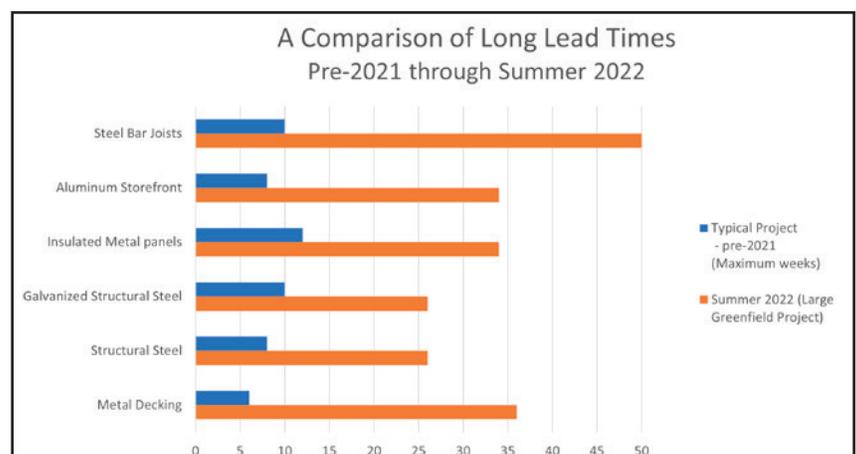
Not So Fast: Strategies to Address Long-Lead Structural Materials

These days, materials used in the construction of new or renovated facilities are taking significantly longer to be delivered than in years past. This is true not only for items such as electrical components, roofing, and doors, but also for structural components like precast walls, bar joists, structural steel, and roof/floor decking. In fact, in some cases, structural construction materials may be taking two to three times as long as they have in the past...and sometimes even longer. If your projects have typically been completed in 18 months or less, such timelines in today's environment are not generally going to be feasible or may come with a significant cost increase.

Fortunately, there are some ways to try to ease the timeline pressure:

- **Get a head start.** Early procurement packages are one way to help keep projects on track and meet project deadlines. Early procurement of steel (i.e., pre-ordering basic framing members at the steel mill) may reduce lead times by months. However, putting packages together before multi-discipline design is completed means that the structural engineers specifying the steel must coordinate even more tightly, earlier in the project, with other disciplines...particularly Mechanical, Electrical, and Plumbing. Structural engineers may even need to apply a little bit of experienced-based judgement to determine the correct amount and sizing of steel that will be required.

Choosing speed over design optimization (e.g., lower member weights and cost) can have its disadvantages. Clients may have to use members that have been pre-ordered even if they are later determined to not be the optimal



member size. In addition, some fabricators choose not to work on early procurement projects. Having a limited number of bidders reduces competition and can drive up costs.

- **Change the material.** When time is of the essence, it may be possible to specify other materials that will arrive faster and perform at the same level as the preferred option. Consider steel joists: These are often selected for roof construction because they are light weight and cost-effective. However, rolled steel shapes, while heavier and more costly, offer a similar level of effectiveness and may be available faster than steel joists.

Your project might also be streamlined by working with contractors who are bulk-ordering steel from the mill (or by ordering it yourself and storing at a warehouse). Steel received this way is generally purchased at stock lengths and later cut to project-specific lengths when those parameters are known. Steel waste (excess length) is more common with this approach, but this is often seen as an acceptable trade-off for the time it saves a project.

EXPERIENCE IN BRIEF

One more way to improve the project timeline? Make earlier decisions. It is important to make (and keep) decisions on time, particularly if issuing an early procurement package. In normal times, making changes weeks into project development can have repercussions to both time and budget. In today's era, such changes can have an even bigger ripple effect.

Finally, Hixson recommends that clients stay well-informed about the current state of project material lead times. (See graphic.) Our in-house Cost Estimating team and project leads do just that...staying in constant communication with industry sources throughout North America to understand the current status of both lead times and costs for materials, and we are happy to share this information with our clients!

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