Steel joist and deck design, manufacturing and delivery

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Flexible to the Finish

Flexible to the Finish

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It’s time for a New Millennium.  

_The time has come to elevate your design ideas and to lower the costs of your steel projects._

At a time when project cost, efficiency and ease of doing business are critical to your success, New Millennium offers your firm a unique level of design, manufacturing and delivery flexibility.

When we are consulted early in the design process, we can elevate your design ideas and remove a range of related costs from most any project. As your trusted steel joist and deck resource, we can identify and resolve problems before they impact the project cost.

Our dynamic design, manufacturing and delivery business model saves time, money and project hassles. That’s why we always start a project by asking you: What do you need, and when do you need it?

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**Cost Reduction: Value-Added Engineering**

_When New Millennium is involved during the steel package design and planning phase, unnecessary costs associated with joists and deck are prevented._
Increase your competitive advantage.

*Now is the time for flexible design, manufacturing and delivery.*

During the steel fabrication phase of a project, necessary changes can cause a chain reaction of cost escalation, unless they are immediately resolved. We understand this, so we don’t see changes to projects as problems. We see them as opportunities to help all involved, by doing whatever it takes to meet the project’s goals.

Our dynamic design, manufacturing and delivery process enables us to keep your project and your reputation moving forward. We can accommodate just-in-time project needs and shifting timelines.

Another cost-saving advantage may be that the project can be completed ahead of schedule, enabling the owner or developer to achieve occupancy or retail income that can be significant.

Our dynamic design, manufacturing and delivery process meets the project’s timetable, even when that timetable changes.

One of our manufacturing advantages is the ability to use hot-rolled steel angles or cold-formed steel shapes – whichever is the most economical for you. Both flat-rolled steel which we cold-form ourselves and hot-rolled angles are readily available from our parent company, Steel Dynamics, Inc.
Our people work as flexible teams, bringing their skills together in synergistic ways to do whatever it takes to meet the project’s needs and to earn your trust.

Our new online economical joist design tool enables you to quickly reduce project costs through weight reduction.

Save potentially thousands of dollars on a project by involving us at the joist-and-deck design stage. We can anticipate and prevent costly problems before they happen.

Our investments in new chord rolling and rigging systems can help you achieve distinctive roof-lines more cost-effectively, including special accents and other structural treatments.
Elevate your design ideas.

Together, let’s change the shape of roof-line design.

Designing and building joists requires more than a run-of-the-mill approach, and we are built for joist design innovation. Our design engineers are not only exploring the possibilities of steel joist design, they continue to expand the range of architectural joist specification based on standards established by the Steel Joist Institute (SJI).

After nearly two years in development, our new special profile joist catalog represents a vast expansion of the design engineering specifications necessary to achieve unique new roof-line concepts.

- Vast expansion of standard joist engineering specifications to incorporate special profile joists
- New specifications support an infinite number of joist design possibilities
- New catalog includes illustrations, charts and detailed guidelines
- New tables support over 39,000 joist designs
- Design considerations include shipping, handling and erection

By involving us early in the design process, you can quickly evaluate a range of cost effective engineering options to achieve your most distinctive architectural ideas.
Lower your costs.

*Great design is cost-effectively engineered.*

When you involve us early in the design process, you can quickly evaluate a range of cost-effective options compatible with the project’s aesthetic goals.

Here are some of the engineering considerations we examine when we are brought in early on a project to collaborate on project cost reduction through better design, clash prevention and overall project efficiency.

**Actual Loading**

We often suggest designing basic joists as load-per-foot instead of using a specific catalog joist size. This can often increase savings by designing only for exact loads (dead + live).

**Joist Depth**

We evaluate reducing the number of structural components through longer spans, deeper joists and special profile joists. This can reduce project costs.

**Deck Span**

We may determine that by spacing joists to maximize deck span, we can increase the loading on joists while reducing the number of pieces – thus lowering overall erection costs.

**Camber**

We recognize joist camber affects adjacent framing and deck supports. The longer the joist, the more camber to be accounted for. Making adjustments before the joists arrive on the job saves time and money.

**Extended Ends**

An R12 extension on a 10K1 joist requires that the joist top chord be sized accordingly, which increases joist cost. To avoid this, we collaborate with structural engineers on specifying actual loads. Also, if the extension exceeds 5’-0’, we may recommend a 5” deep extension.

**Moment Connections**

We consult on the transference of axial loads through the joist/girder ends. Using proper connection details can eliminate unnecessary costs.

**Sloping Joists**

We make sure joist seats are specified at the proper depth. This eliminates coordination and manufacturing problems, saving time and money.

**Weld Sizes**

We minimize field weld sizes for joist seat anchorage and bottom chord attachments. The size of the field weld can increase the material thickness, increasing the project’s costs.
Let’s simplify your process.

*So we can increase your success.*

The time has come to simplify the overly costly and complicated process of building design and construction.

On a steel project, the steel package comes early in the project and its design considerations must account for all subsequent construction including electrical, HVAC, plumbing, fire systems, lighting, building automation and voice-data-video routing. Cost prevention here is a matter of clash prevention by way of early joist and deck design collaboration.

**Comprehensive Cost Saving Implications Through Collaborative Joist/Deck Design**

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<th>Reinstall</th>
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Let’s make the RFI process work.

We believe the core purpose of the RFI is to clarify and communicate project issues. During the clarification and communication phase of a project, critical issues are identified and resolved. The intention of this process is to prevent costly errors — before they happen. Moreover, we strive to improve this communication process through a new era of highly collaborative and proactive project participation.
Let’s get going on BIM.

Our stand is that Building Information Modeling (BIM) is a necessity. Unlike email, BIM is not just a computerized way to reactively communicate. BIM is a technological response to a people problem, a proactive tool that streamlines the communication process. Soon, BIM will be a tool used by everyone in the construction business. We’re committed to helping you realize the tangible benefits of BIM.

Let’s take the owner’s point of view.

Eventually, all informed owners and developers will recognize inflated contingency fees for what they are, and they will reward those of us who show them a better way. Get us involved on the ground floor of joist and deck design, and we’ll help you anticipate and remedy a wide range of potential “clashes” and other owner costs, before they can erode contingency fees and the relationship between your firm and the owner/developer.

As owners more carefully evaluate project inefficiency, they are seeing a cascading cost effect that must be eliminated.

In the future, project collaboration will be enabled by BIM, but project cost reduction will require having a proactive partner like New Millennium on the project team.
Contact us for business growth.

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