



NEW MILLENNIUM
BUILDING SYSTEMS

Flexible to the Finish



Steel joist and deck design, manufacturing and delivery

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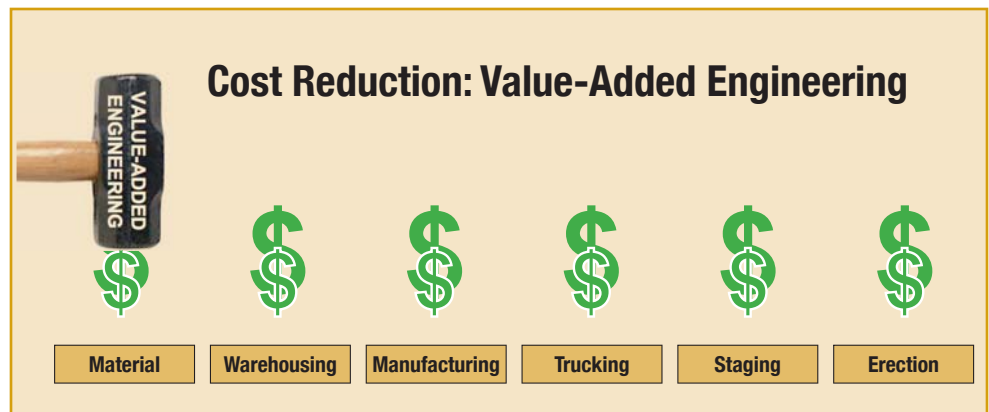
It's time for a New Millennium.

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?



When New Millennium is involved during the steel package design and planning phase, unnecessary costs associated with joists and deck are prevented.

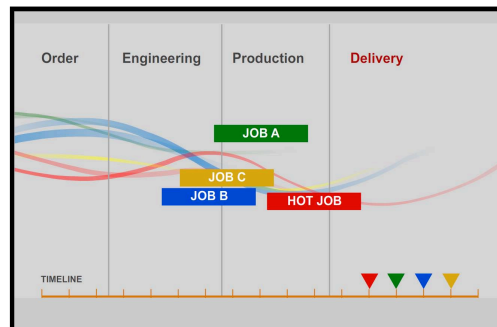
Increase your competitive advantage.

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.

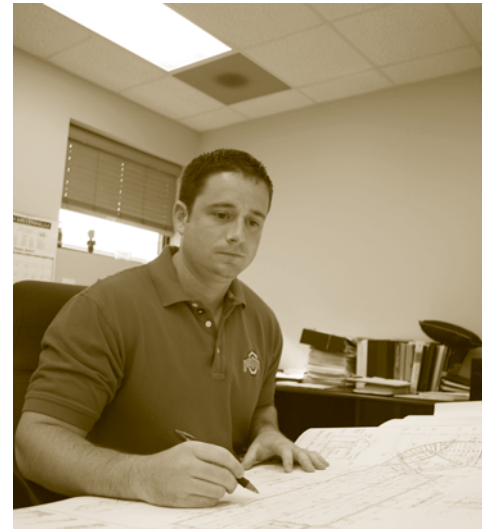


One of our manufacturing advantages is the ability to use hot-rolled steel angles or cold-formed steel shapes – whichever is the most economical for you. Both flat-rolled steel which we cold-form ourselves and hot-rolled angles are readily available from our parent company, Steel Dynamics, Inc.

Flexible to the Finish



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.



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.

Economical Load Table (span = 56) <small>units: lbs/ft</small>					
Feasible Load	Spanned	Clear span	WFPS	WPS	WPS
LB/FT	SPAN	SPAN	REQUIREMENT	REQUIREMENT	REQUIREMENT
200	120	84	84	104	7.2
205	121	84	84	104	7.2
210	122	84	84	104	7.2
215	123	84	84	104	7.2
220	124	84	84	104	7.2
225	125	84	84	104	7.2
230	126	84	84	104	7.2
235	127	84	84	104	7.2
240	128	84	84	104	7.2
245	129	84	84	104	7.2
250	130	84	84	104	7.2
255	131	84	84	104	7.2
260	132	84	84	104	7.2
265	133	84	84	104	7.2
270	134	84	84	104	7.2
275	135	84	84	104	7.2
280	136	84	84	104	7.2
285	137	84	84	104	7.2
290	138	84	84	104	7.2
295	139	84	84	104	7.2
300	140	84	84	104	7.2
305	141	84	84	104	7.2
310	142	84	84	104	7.2
315	143	84	84	104	7.2
320	144	84	84	104	7.2
325	145	84	84	104	7.2
330	146	84	84	104	7.2
335	147	84	84	104	7.2
340	148	84	84	104	7.2
345	149	84	84	104	7.2
350	150	84	84	104	7.2
355	151	84	84	104	7.2
360	152	84	84	104	7.2
365	153	84	84	104	7.2
370	154	84	84	104	7.2
375	155	84	84	104	7.2
380	156	84	84	104	7.2
385	157	84	84	104	7.2
390	158	84	84	104	7.2
395	159	84	84	104	7.2
400	160	84	84	104	7.2
405	161	84	84	104	7.2
410	162	84	84	104	7.2
415	163	84	84	104	7.2
420	164	84	84	104	7.2
425	165	84	84	104	7.2
430	166	84	84	104	7.2
435	167	84	84	104	7.2
440	168	84	84	104	7.2
445	169	84	84	104	7.2
450	170	84	84	104	7.2
455	171	84	84	104	7.2
460	172	84	84	104	7.2
465	173	84	84	104	7.2
470	174	84	84	104	7.2
475	175	84	84	104	7.2
480	176	84	84	104	7.2
485	177	84	84	104	7.2
490	178	84	84	104	7.2
495	179	84	84	104	7.2
500	180	84	84	104	7.2
505	181	84	84	104	7.2
510	182	84	84	104	7.2
515	183	84	84	104	7.2
520	184	84	84	104	7.2
525	185	84	84	104	7.2
530	186	84	84	104	7.2
535	187	84	84	104	7.2
540	188	84	84	104	7.2
545	189	84	84	104	7.2
550	190	84	84	104	7.2
555	191	84	84	104	7.2
560	192	84	84	104	7.2
565	193	84	84	104	7.2
570	194	84	84	104	7.2
575	195	84	84	104	7.2
580	196	84	84	104	7.2
585	197	84	84	104	7.2
590	198	84	84	104	7.2
595	199	84	84	104	7.2
600	200	84	84	104	7.2
605	201	84	84	104	7.2
610	202	84	84	104	7.2
615	203	84	84	104	7.2
620	204	84	84	104	7.2
625	205	84	84	104	7.2
630	206	84	84	104	7.2
635	207	84	84	104	7.2
640	208	84	84	104	7.2
645	209	84	84	104	7.2
650	210	84	84	104	7.2
655	211	84	84	104	7.2
660	212	84	84	104	7.2
665	213	84	84	104	7.2
670	214	84	84	104	7.2
675	215	84	84	104	7.2
680	216	84	84	104	7.2
685	217	84	84	104	7.2
690	218	84	84	104	7.2
695	219	84	84	104	7.2
700	220	84	84	104	7.2
705	221	84	84	104	7.2
710	222	84	84	104	7.2
715	223	84	84	104	7.2
720	224	84	84	104	7.2
725	225	84	84	104	7.2
730	226	84	84	104	7.2
735	227	84	84	104	7.2
740	228	84	84	104	7.2
745	229	84	84	104	7.2
750	230	84	84	104	7.2
755	231	84	84	104	7.2
760	232	84	84	104	7.2
765	233	84	84	104	7.2
770	234	84	84	104	7.2
775	235	84	84	104	7.2
780	236	84	84	104	7.2
785	237	84	84	104	7.2
790	238	84	84	104	7.2
795	239	84	84	104	7.2
800	240	84	84	104	7.2
805	241	84	84	104	7.2
810	242	84	84	104	7.2
815	243	84	84	104	7.2
820	244	84	84	104	7.2
825	245	84	84	104	7.2
830	246	84	84	104	7.2
835	247	84	84	104	7.2
840	248	84	84	104	7.2
845	249	84	84	104	7.2
850	250	84	84	104	7.2
855	251	84	84	104	7.2
860	252	84	84	104	7.2
865	253	84	84	104	7.2
870	254	84	84	104	7.2
875	255	84	84	104	7.2
880	256	84	84	104	7.2
885	257	84	84	104	7.2
890	258	84	84	104	7.2
895	259	84	84	104	7.2
900	260	84	84	104	7.2
905	261	84	84	104	7.2
910	262	84	84	104	7.2
915	263	84	84	104	7.2
920	264	84	84	104	7.2
925	265	84	84	104	7.2
930	266	84	84	104	7.2
935	267	84	84	104	7.2
940	268	84	84	104	7.2
945	269	84	84	104	7.2
950	270	84	84	104	7.2
955	271	84	84	104	7.2
960	272	84	84	104	7.2
965	273	84	84	104	7.2
970	274	84	84	104	7.2
975	275	84	84	104	7.2
980	276	84	84	104	7.2
985	277	84	84	104	7.2
990	278	84	84	104	7.2
995	279	84	84	104	7.2
1000	280	84	84	104	7.2

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



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.

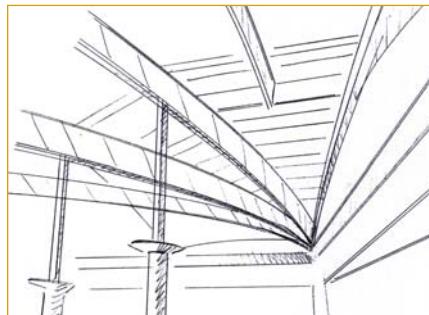
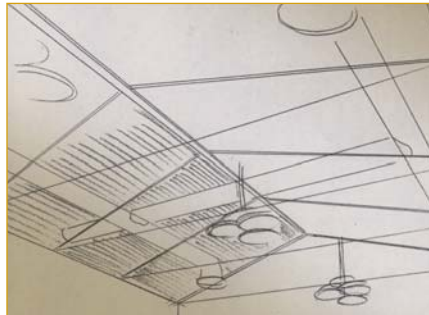
Together, let's change the shape of roof-line design.

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*



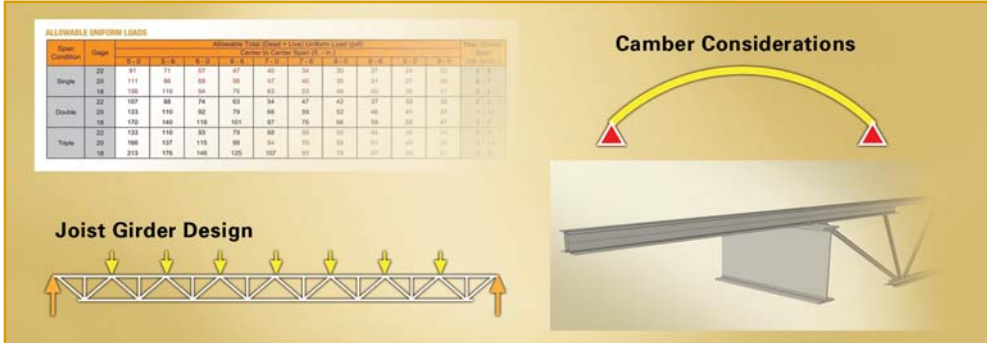
By involving us early in the design process, you can quickly evaluate a range of cost effective engineering options to achieve your most distinctive architectural ideas.

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.



ALLOWABLE UNIFORM LOADS

Member	Depth	Allowable Total Load + Top Chord Load only											
		Span 10'-0"						Span 12'-0"					
		10'	12'	14'	16'	18'	10'	12'	14'	16'	18'	20'	
Single	22	81	71	67	67	66	70	67	64	62	61	60	
	20	111	96	90	88	87	90	87	84	82	81	80	
	18	150	130	124	121	120	123	120	116	114	113	112	
Double	22	107	94	74	63	54	47	43	37	32	28	25	
	20	133	116	97	79	66	58	52	46	41	37	34	
	18	172	149	126	103	87	75	66	59	53	48	44	
Triple	22	133	119	93	79	68	60	53	47	42	38	35	
	20	166	147	116	98	84	74	66	59	53	48	44	
	18	213	186	148	125	107	93	82	73	66	60	55	

Joist Girder Design

Camber Considerations

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.

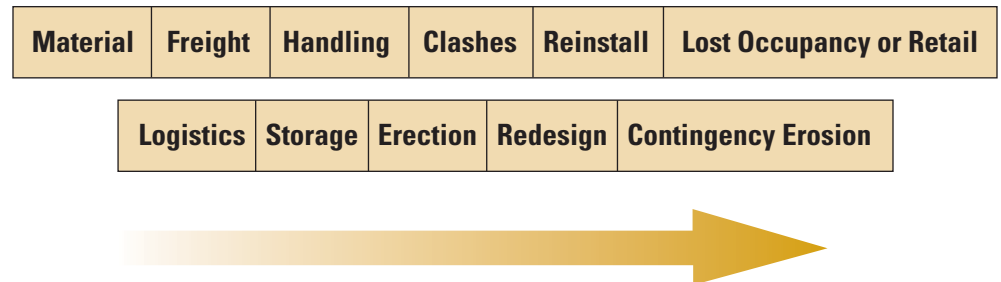
Let's simplify your process.

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

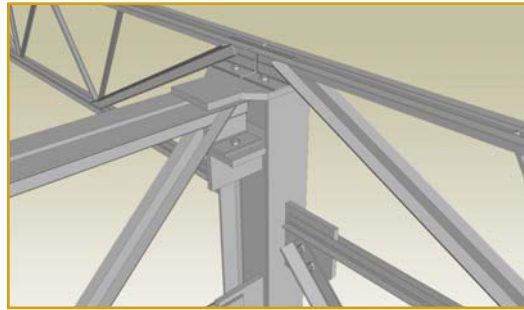


Let's make the RFI process work.

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.

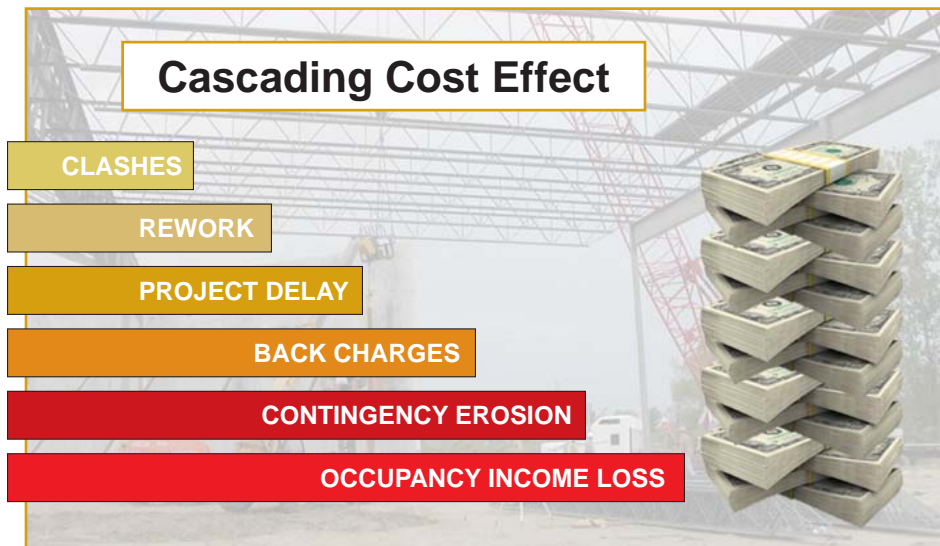
Our stand is that Building Information Modeling (BIM) is a necessity. Unlike email, BIM is not just a computerized way to reactively communicate. BIM is a technological response to a people problem, a proactive tool that streamlines the communication process. Soon, BIM will be a tool used by everyone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



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.

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.

Contact us for business growth.



Locations:

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