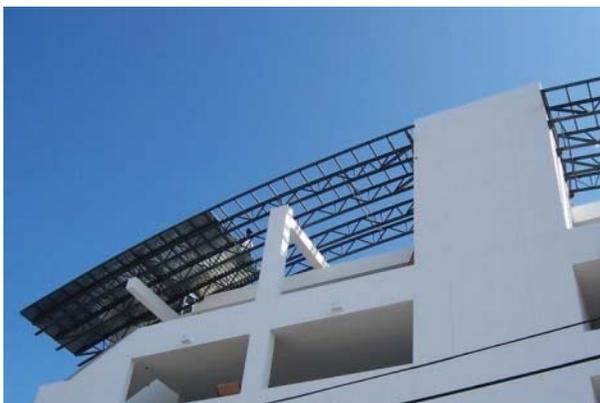




NEW MILLENNIUM
BUILDING SYSTEMS

Flexible to the Finish



Steel joist and deck design, manufacturing and delivery

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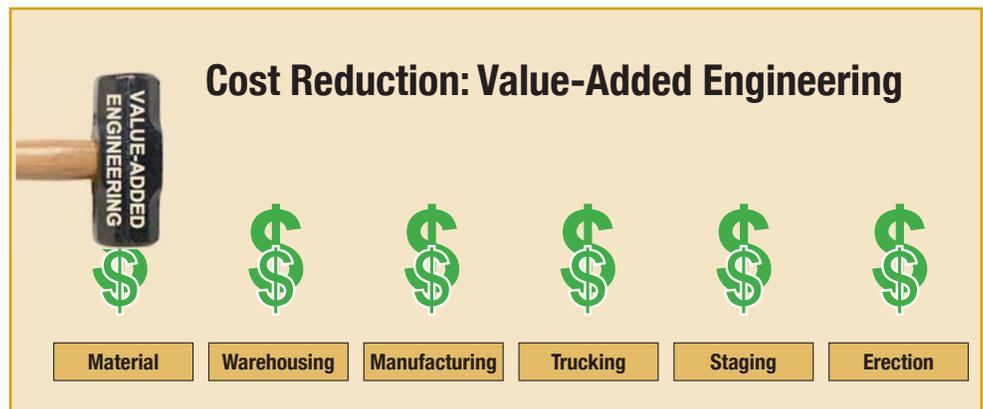
It's time for a New Millennium.

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.

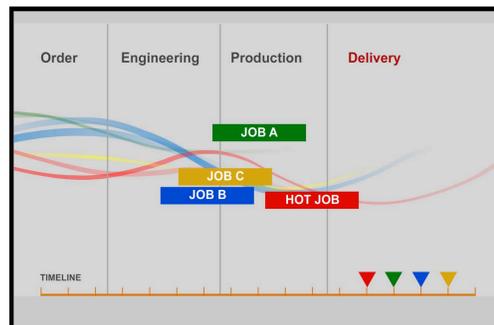
Increase your competitive advantage.

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.



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) units: lbs

Joist Size	Span	Load	Weight	Weight	Weight
400	100	80	80	2000	7.0
400	110	88	88	2200	8.0
400	120	96	96	2400	9.0
400	130	104	104	2600	10.0
400	140	112	112	2800	11.0
400	150	120	120	3000	12.0
400	160	128	128	3200	13.0
400	170	136	136	3400	14.0
400	180	144	144	3600	15.0
400	190	152	152	3800	16.0
400	200	160	160	4000	17.0
400	210	168	168	4200	18.0
400	220	176	176	4400	19.0
400	230	184	184	4600	20.0
400	240	192	192	4800	21.0
400	250	200	200	5000	22.0
400	260	208	208	5200	23.0
400	270	216	216	5400	24.0
400	280	224	224	5600	25.0
400	290	232	232	5800	26.0
400	300	240	240	6000	27.0
400	310	248	248	6200	28.0
400	320	256	256	6400	29.0
400	330	264	264	6600	30.0
400	340	272	272	6800	31.0
400	350	280	280	7000	32.0
400	360	288	288	7200	33.0
400	370	296	296	7400	34.0
400	380	304	304	7600	35.0
400	390	312	312	7800	36.0
400	400	320	320	8000	37.0
400	410	328	328	8200	38.0
400	420	336	336	8400	39.0
400	430	344	344	8600	40.0
400	440	352	352	8800	41.0
400	450	360	360	9000	42.0
400	460	368	368	9200	43.0
400	470	376	376	9400	44.0
400	480	384	384	9600	45.0
400	490	392	392	9800	46.0
400	500	400	400	10000	47.0
400	510	408	408	10200	48.0
400	520	416	416	10400	49.0
400	530	424	424	10600	50.0
400	540	432	432	10800	51.0
400	550	440	440	11000	52.0
400	560	448	448	11200	53.0
400	570	456	456	11400	54.0
400	580	464	464	11600	55.0
400	590	472	472	11800	56.0
400	600	480	480	12000	57.0
400	610	488	488	12200	58.0
400	620	496	496	12400	59.0
400	630	504	504	12600	60.0
400	640	512	512	12800	61.0
400	650	520	520	13000	62.0
400	660	528	528	13200	63.0
400	670	536	536	13400	64.0
400	680	544	544	13600	65.0
400	690	552	552	13800	66.0
400	700	560	560	14000	67.0
400	710	568	568	14200	68.0
400	720	576	576	14400	69.0
400	730	584	584	14600	70.0
400	740	592	592	14800	71.0
400	750	600	600	15000	72.0
400	760	608	608	15200	73.0
400	770	616	616	15400	74.0
400	780	624	624	15600	75.0
400	790	632	632	15800	76.0
400	800	640	640	16000	77.0
400	810	648	648	16200	78.0
400	820	656	656	16400	79.0
400	830	664	664	16600	80.0
400	840	672	672	16800	81.0
400	850	680	680	17000	82.0
400	860	688	688	17200	83.0
400	870	696	696	17400	84.0
400	880	704	704	17600	85.0
400	890	712	712	17800	86.0
400	900	720	720	18000	87.0
400	910	728	728	18200	88.0
400	920	736	736	18400	89.0
400	930	744	744	18600	90.0
400	940	752	752	18800	91.0
400	950	760	760	19000	92.0
400	960	768	768	19200	93.0
400	970	776	776	19400	94.0
400	980	784	784	19600	95.0
400	990	792	792	19800	96.0
400	1000	800	800	20000	97.0
400	1010	808	808	20200	98.0
400	1020	816	816	20400	99.0
400	1030	824	824	20600	100.0
400	1040	832	832	20800	101.0
400	1050	840	840	21000	102.0
400	1060	848	848	21200	103.0
400	1070	856	856	21400	104.0
400	1080	864	864	21600	105.0
400	1090	872	872	21800	106.0
400	1100	880	880	22000	107.0
400	1110	888	888	22200	108.0
400	1120	896	896	22400	109.0
400	1130	904	904	22600	110.0
400	1140	912	912	22800	111.0
400	1150	920	920	23000	112.0
400	1160	928	928	23200	113.0
400	1170	936	936	23400	114.0
400	1180	944	944	23600	115.0
400	1190	952	952	23800	116.0
400	1200	960	960	24000	117.0
400	1210	968	968	24200	118.0
400	1220	976	976	24400	119.0
400	1230	984	984	24600	120.0
400	1240	992	992	24800	121.0
400	1250	1000	1000	25000	122.0
400	1260	1008	1008	25200	123.0
400	1270	1016	1016	25400	124.0
400	1280	1024	1024	25600	125.0
400	1290	1032	1032	25800	126.0
400	1300	1040	1040	26000	127.0
400	1310	1048	1048	26200	128.0
400	1320	1056	1056	26400	129.0
400	1330	1064	1064	26600	130.0
400	1340	1072	1072	26800	131.0
400	1350	1080	1080	27000	132.0
400	1360	1088	1088	27200	133.0
400	1370	1096	1096	27400	134.0
400	1380	1104	1104	27600	135.0
400	1390	1112	1112	27800	136.0
400	1400	1120	1120	28000	137.0
400	1410	1128	1128	28200	138.0
400	1420	1136	1136	28400	139.0
400	1430	1144	1144	28600	140.0
400	1440	1152	1152	28800	141.0
400	1450	1160	1160	29000	142.0
400	1460	1168	1168	29200	143.0
400	1470	1176	1176	29400	144.0
400	1480	1184	1184	29600	145.0
400	1490	1192	1192	29800	146.0
400	1500	1200	1200	30000	147.0
400	1510	1208	1208	30200	148.0
400	1520	1216	1216	30400	149.0
400	1530	1224	1224	30600	150.0
400	1540	1232	1232	30800	151.0
400	1550	1240	1240	31000	152.0
400	1560	1248	1248	31200	153.0
400	1570	1256	1256	31400	154.0
400	1580	1264	1264	31600	155.0
400	1590	1272	1272	31800	156.0
400	1600	1280	1280	32000	157.0
400	1610	1288	1288	32200	158.0
400	1620	1296	1296	32400	159.0
400	1630	1304	1304	32600	160.0
400	1640	1312	1312	32800	161.0
400	1650	1320	1320	33000	162.0
400	1660	1328	1328	33200	163.0
400	1670	1336	1336	33400	164.0
400	1680	1344	1344	33600	165.0
400	1690	1352	1352	33800	166.0
400	1700	1360	1360	34000	167.0
400	1710	1368	1368	34200	168.0
400	1720	1376	1376	34400	169.0
400	1730	1384	1384	34600	170.0
400	1740	1392	1392	34800	171.0
400	1750	1400	1400	35000	172.0
400	1760	1408	1408	35200	173.0
400	1770	1416	1416	35400	174.0
400	1780	1424	1424	35600	175.0
400	1790	1432	1432	35800	176.0
400	1800	1440	1440	36000	177.0
400	1810	1448	1448	36200	178.0
400	1820	1456	1456	36400	179.0
400	1830	1464	1464	36600	180.0
400	1840	1472	1472	36800	181.0
400	1850	1480	1480	37000	182.0
400	1860	1488	1488	37200	183.0
400	1870	1496	1496	37400	184.0
400	1880	1504	1504	37600	185.0
400	1890	1512	1512	37800	186.0
400	1900	1520	1520	38000	187.0
400	1910	1528	1528	38200	188.0
400	1920	1536	1536	38400	189.0
400	1930	1544	1544	38600	190.0
400	1940	1552	1552	38800	191.0
400	1950	1560	1560	39000	192.0
400	1960	1568	1568	39200	193.0
400	1970	1576	1576	39400	194.0
400	1980	1584	1584	39600	195.0
400	1990	1592	1592	39800	196.0
400	2000	1600	1600	40000	197.0
400	2010	1608	1608	40200	198.0
400	2020	1616	1616	40400	199.0
400	2030	1624	1624	40600	200.0
400	2040	1632	1632	40800	201.0
400	2050	1640	1640	41000	202.0
400	2060	1648	1648	41200	203.0
400	2070	1656	1656	41400	204.0
400	2080	1664	1664	41600	205.0
400	2090	1672	1672	41800	206.0
400	2100	1680	1680	42000	207.0
400	2110	1688	1688	42200	208.0
400	2120	1696	1696	42400	209.0
400	2130	1704	1704	42600	210.0
400	2140	1712	1712	42800	211.0
400	2150	1720	1720	43000	212.0
400	2				

Elevate your design ideas.

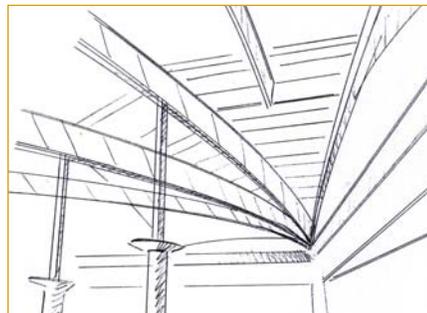
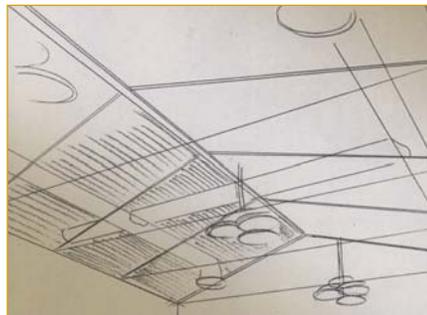
Together, let's change the shape of roof-line design.

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*



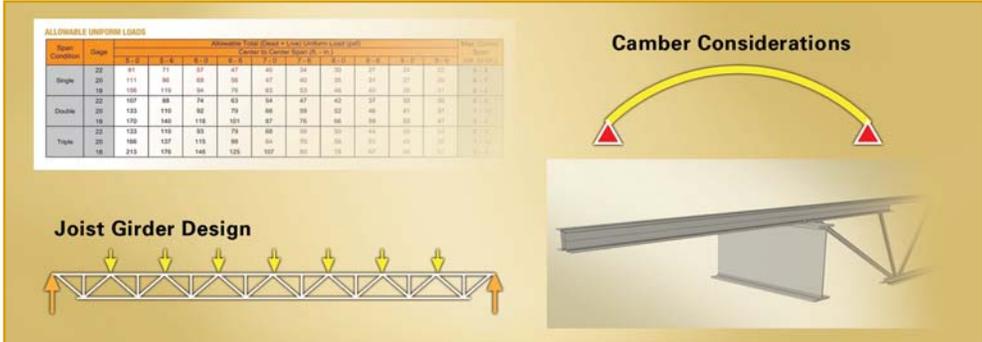
By involving us early in the design process, you can quickly evaluate a range of cost effective engineering options to achieve your most distinctive architectural ideas.

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

Span Condition	Depth	Allowable Total Load + Live Load (k/ft)												
		12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'	34'	
Single	22	81	71	67	67	66	64	62	60	57	54	52	50	48
	20	111	96	90	86	82	78	74	70	66	62	58	54	50
	18	150	130	124	118	112	105	98	91	84	77	70	63	56
Double	22	107	94	89	85	81	77	73	69	65	61	57	53	49
	20	133	116	110	105	100	95	90	85	80	75	70	65	60
	18	172	150	143	136	129	122	115	108	101	94	87	80	73
Triple	22	133	116	110	105	100	95	90	85	80	75	70	65	60
	20	166	145	138	131	124	117	110	103	96	89	82	75	68
	18	213	187	179	171	163	155	147	139	131	123	115	107	99

Camber Considerations

Joist Girder Design

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.

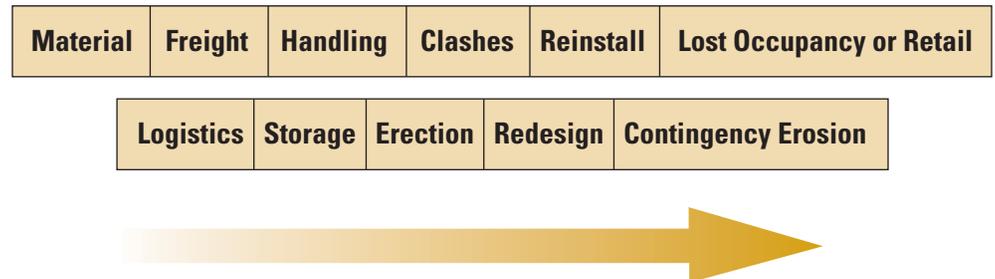
Let's simplify your process.

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.

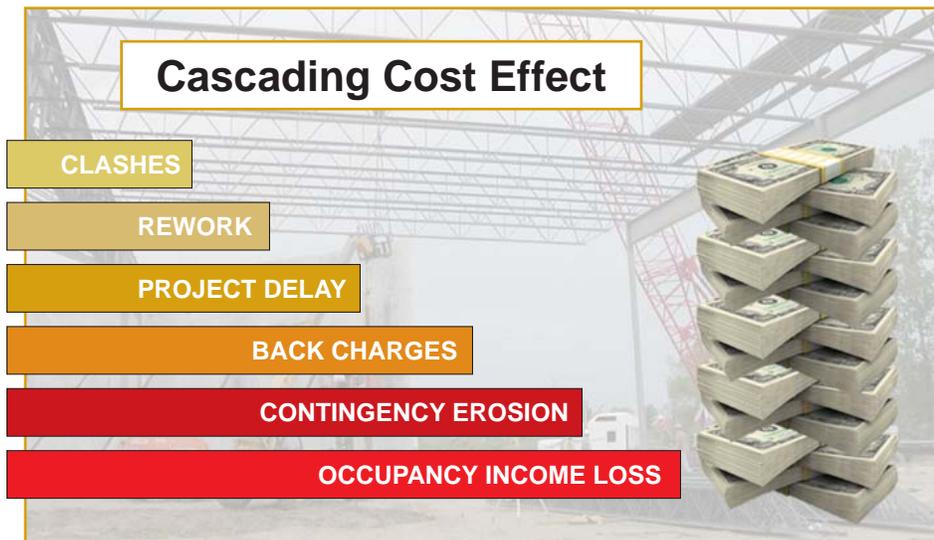
Our stand is that Building Information Modeling (BIM) is a necessity. Unlike email, BIM is not just a computerized way to reactively communicate. BIM is a technological response to a people problem, a proactive tool that streamlines the communication process. Soon, BIM will be a tool used by everyone 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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