

# Code Compliance Research Report

**CCRR-0123**Subject to Renewal: 03/05/2012  
Visit [www.archtest.com](http://www.archtest.com) for current statusIssued: 03/05/2010  
Page 1 of 11**LiteSteel Technologies America LLC**  
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**Troutville, VA 24175-0577**  
**(877) 285-2607**[www.litesteelbeam.com](http://www.litesteelbeam.com)

## 1.0 Subject

LiteSteel™ beam ("LSB®")

## 2.0 Research Scope

### 2.1 Building Codes:

- 2006 International Building Code (IBC)
- 2006 International Residential Code (IRC)
- 2009 International Building Code (IBC)
- 2009 International Residential Code (IRC)
- 2007 Florida Building Code (FBC)

### 2.2 Properties:

- Structural
- Corrosion protection

## 3.0 Description

3.1 General – The LiteSteel™ beam ("LSB®") is a cold formed steel structural member that is used in horizontal load-bearing applications such as floor beams, roof beams and headers. The LSB sizes that are recognized in this report are listed in Table 1. See Figure 1 for Section Profile.

3.2 The web and flange are fabricated from steel grades listed below.

- A653/A653M HSLAS (Type-B Grade-50 and 60), SS (Grades 50 and 60)
- ASTM A792 SS Grade 50
- ASTM A875 SS Grade 50, HSLAS type B Grade 50
- ASTM A1011/A1011M SS (Grades 50 and 60), HSLAS (Grades 50 and 60), HSLAS-F Grade 50

3.3 Corrosion protection - All LSB sections are protected with a G-60 equivalent coating. The coating is either provided by hot dipped zinc galvanizing, or is galvanized with Zincolume®.

3.4 The framing members are available in twelve types of LiteSteel™ beams ("LSB®") as designated in Tables 1 through 4.

## 4.0 Installation

Installation shall be in accordance with the applicable code, manufacturer's installation instructions and this report. Where differences occur between this report and the manufacturer's installation instructions, this report shall govern.

## 5.0 Supporting Evidence

5.1 Manufacturer's drawings and installation instructions.

5.2 Engineering calculations in accordance with North American Specification for the Design of Cold-Formed Steel Structural Members, (AISI S100-2007). Reports of testing and engineering analysis in accordance with ICC-ES Acceptance Criteria for Cold-Formed Steel Framing Members (AC46)

5.3 Quality control manual in accordance with ICC-ES Acceptance Criteria for Quality Documentation, (AC10.)

5.4 Documented study on Zincolume® protection equivalence to G60 coating.

## 6.0 Conditions of Use

The LiteSteel™ beam ("LSB®") identified in this report is deemed to comply with the referenced building codes subject to the following conditions.

6.1 LSB® structural elements shall be designed to safely support applicable loads and load combinations in accordance with Chapter 16 of the IBC or Chapter 16 of the FBC.

6.2 Design strengths are derived from values in Tables 1 through 4.

6.2.1 Design Strengths are applicable to AISI Load and Resistance Factor Design Specification for Cold-Formed Steel Structural Members (LRFD) method and shall not be used in AISI Specification for Design of Cold-Formed Structural Steel Members (ASD).

6.2.2 Span/load tables are provided for use as a prescriptive design method for building with LSB, where the loads and spans are covered by the aforementioned tables. For loads and spans not covered in the tables, all designs and calculations shall be prepared by a licensed design professional according to the requirements in the jurisdiction where the project is located.

6.3 Span/load tables are derived using LRFD methods and, the properties and design strengths provided in Tables 1 through 4.

6.4 Jobsite manufacturing of LiteSteel™ beam ("LSB®") are outside the scope of this report.

6.5 Installation outside of the building envelope or ground contact is outside the scope of this report.

6.6 The LiteSteel™ beam ("LSB®") identified in this report is manufactured in accordance with the manufacturer's approved quality control system with inspections by Architectural Testing, Inc. (AA-676) at the following locations: Troutville, Virginia.

### 7.0 Identification

LiteSteel™ beam ("LSB®") produced in accordance with this report shall be identified with labeling located on the web of the beam every 48 inches that includes the following information:

7.1 The manufacturer's name and/or logo

7.2 The LSB Product Code

7.3 Web size (nominal)

7.4 Material Thickness

7.5 Material Grade (i.e. 50 ksi)

7.6 Coating Designation

7.7 The mark of the independent inspection agency, Architectural Testing, Inc. (AA-676)

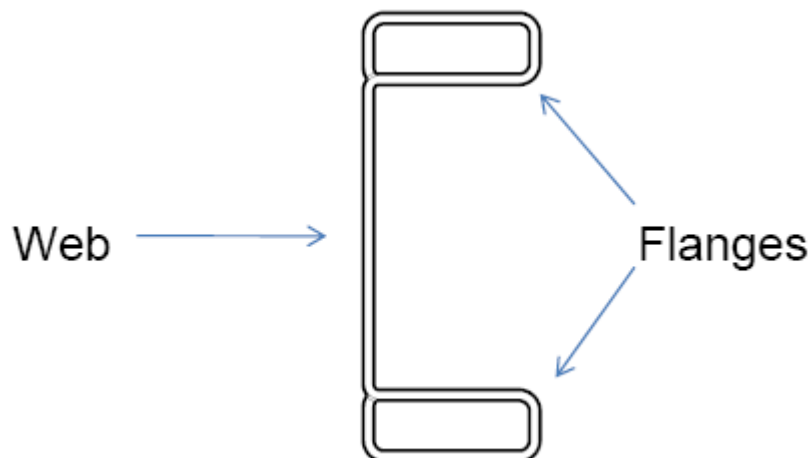
7.8 The ATI Code Compliance Research Report Number (CCRR-0123)

### 8.0 Code Compliance Research Report Use

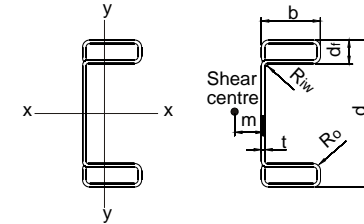
8.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

8.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product or manufacturer by ATI.

8.3 Reference to the Architectural Testing internet web site address at [www.archtest.com](http://www.archtest.com) is recommended to ascertain the current version and status of this report.



**Figure 1-** Profile Picture of LiteSteel™ beam ("LSB®")

**Table 1(a)**
**Gross Section Properties**
**LiteSteel beam**


LSB ID	Dimensions								Properties of Full Section										
	d	b	d <sub>f</sub>	t	R <sub>O</sub>	R <sub>iw</sub>	Area	wt/ft	Axis x-x			Axis y-y				m	G J <sub>F</sub>	J	C <sub>w</sub>
									I <sub>x</sub>	S <sub>x</sub>	r <sub>x</sub>	I <sub>y</sub>	S <sub>yL</sub>	S <sub>yR</sub>	r <sub>y</sub>				
in	in	in	in	in	in	in	in <sup>2</sup>	lb	in <sup>4</sup>	in <sup>3</sup>	in	in <sup>4</sup>	in <sup>3</sup>	in <sup>3</sup>	in	in	k in <sup>2</sup>	in <sup>4</sup>	in <sup>6</sup>
1400LSB350-134	13.8	3.50	1.18	0.134	0.201	0.118	3.84	13.07	108.8	15.79	5.32	5.74	5.33	2.37	1.22	1.35	8673	1.544	168.1
1400LSB350-118	13.8	3.50	1.18	0.118	0.177	0.118	3.41	11.59	96.8	14.05	5.33	5.17	4.79	2.13	1.23	1.36	7892	1.403	151.3
1400LSB350-98	13.8	3.50	1.18	0.098	0.148	0.118	2.86	9.73	81.5	11.83	5.34	4.41	4.08	1.82	1.24	1.37	6831	1.213	129.2
1200LSB350-134	11.8	3.50	1.18	0.134	0.201	0.118	3.58	12.17	75.2	12.73	4.59	5.45	4.73	2.32	1.24	1.38	8673	1.543	116.9
1200LSB350-118	11.8	3.50	1.18	0.118	0.177	0.118	3.18	10.80	66.9	11.33	4.59	4.91	4.25	2.09	1.24	1.39	7892	1.402	105.2
1200LSB350-98	11.8	3.50	1.18	0.098	0.148	0.118	2.67	9.07	56.4	9.55	4.60	4.19	3.62	1.79	1.25	1.39	6831	1.212	89.9
1000LSB300-118	9.8	2.95	0.98	0.118	0.177	0.118	2.64	8.97	38.5	7.83	3.82	2.84	2.91	1.43	1.04	1.16	4421	0.787	42.2
1000LSB300-98	9.8	2.95	0.98	0.098	0.148	0.118	2.22	7.54	32.5	6.61	3.83	2.43	2.49	1.23	1.05	1.17	3861	0.686	36.2
1000LSB300-79	9.8	2.95	0.98	0.079	0.118	0.118	1.79	6.09	26.3	5.35	3.84	2.00	2.05	1.02	1.06	1.18	3231	0.573	29.9
800LSB250-98	7.9	2.36	0.79	0.098	0.148	0.118	1.75	5.96	16.4	4.16	3.06	1.20	1.54	0.76	0.83	0.93	1865	0.332	11.4
800LSB250-79	7.9	2.36	0.79	0.079	0.118	0.118	1.42	4.82	13.3	3.38	3.06	1.00	1.27	0.63	0.84	0.94	1582	0.281	9.5
800LSB250-59	7.9	2.36	0.79	0.059	0.089	0.118	1.08	3.67	10.2	2.58	3.07	0.78	0.99	0.49	0.85	0.94	1257	0.223	7.4

Notes:

1. Reference AISI North American Specification for the Design of Cold-Formed Steel Structural Members

**Table 1(b)**

**Effective Section Properties**

**LiteSteel beam**

LSB ID	wt/ft lb	Yield Stress		Axial Compression		about x-axis		about y-axis			
		Flange $F_y$	Web $F_{yw}$	Effective Area $A_e$	Coord. of Centroid $x_c$	$I_{ex}$	$S_{ex}$	$I_{eyL}$	$S_{eyL}$	$I_{eyR}$	$S_{eyR}$
		ksi	ksi	$in^2$	in	$in^4$	$in^3$	$in^4$	$in^3$	$in^4$	$in^3$
1400LSB350-134	13.07	60.0	50.0	3.07	1.36	107.7	15.49	4.63	3.53	5.74	2.37
1400LSB350-118	11.59	60.0	50.0	2.66	1.40	94.5	13.37	4.31	3.19	5.17	2.13
1400LSB350-98	9.73	60.0	50.0	2.17	1.44	76.8	10.56	3.87	2.75	4.41	1.82
1200LSB350-134	12.17	60.0	50.0	3.05	1.37	75.2	12.73	4.27	3.23	5.45	2.32
1200LSB350-118	10.80	60.0	50.0	2.65	1.40	66.9	11.33	3.96	2.92	4.91	2.09
1200LSB350-98	9.07	60.0	50.0	2.16	1.44	54.6	9.00	3.53	2.51	4.19	1.79
1000LSB300-118	8.97	60.0	50.0	2.28	1.14	38.5	7.83	2.19	1.99	2.84	1.43
1000LSB300-98	7.54	60.0	50.0	1.85	1.18	32.5	6.61	1.96	1.71	2.43	1.23
1000LSB300-79	6.09	60.0	50.0	1.44	1.22	25.3	4.96	1.71	1.43	2.00	1.02
800LSB250-98	5.96	60.0	50.0	1.53	0.91	16.4	4.16	0.92	1.05	1.20	0.76
800LSB250-79	4.82	60.0	50.0	1.19	0.94	13.3	3.38	0.80	0.88	1.00	0.63
800LSB250-59	3.67	60.0	50.0	0.86	0.98	9.6	2.34	0.67	0.69	0.78	0.49

Notes:

1. Reference AISI North American Specification for the Design of Cold-Formed Steel Structural Members

**Table 2**

**Design Flexural and Shear Strengths**

**LiteSteel beam**

LSB ID	Wt. per ft.	Design Flexural Strengths			Design Shear Strengths	
		$\phi_b M_{nxO}$	$\phi_b M_{nyL}$	$\phi_b M_{nyR}$	$\phi_v V_{nx}$	$\phi_v V_{ny}$
	lb/ft	kip ft	kip ft	kip ft	kip	kip
1400LSB350-134	13.07	73.6	9.5	11.2	28.7	56.4
1400LSB350-118	11.59	63.5	9.0	10.1	19.9	50.4
1400LSB350-98	9.73	50.1	8.3	8.7	11.5	42.7
1200LSB350-134	12.17	60.5	8.8	11.0	28.7	56.4
1200LSB350-118	10.80	53.8	8.3	9.9	22.3	50.4
1200LSB350-98	9.07	42.7	7.6	8.5	14.0	42.7
1000LSB300-118	8.97	37.2	5.3	6.8	22.3	41.5
1000LSB300-98	7.54	31.4	4.9	5.8	15.5	35.3
1000LSB300-79	6.09	23.6	4.4	4.8	8.6	28.8
800LSB250-98	5.96	19.7	2.8	3.6	15.5	27.4
800LSB250-79	4.82	16.1	2.5	3.0	9.9	22.5
800LSB250-59	3.67	11.1	2.2	2.3	4.6	17.3

Notes:

- Reference AISI North American Specification for the Design of Cold-Formed Steel Structural Members

**Table 3**
**Web Crippling Strength**
**LiteSteel beam**
**Single Load or Reaction - End and Interior**

LSB ID	Wt. per ft.  lb/ft	1.5 h  in	Design Web Crippling Strength $\phi_w P_n$ (kips)												Design Flexural Strength  $\phi_b M_{rxo}$  kip ft
			End Load $c < 1.5 h$  Bearing Length N (in)						Interior Load $c \geq 1.5 h$  Bearing Length N (in)						
			1	2	3	4	6	8	1	2	3	4	6	8	
1400LSB350-134	13.07	16.8	7.2	8.0	8.5	9.0	9.8	10.6	14.2	15.5	16.0	16.5	17.3	18.1	73.6
1400LSB350-118	11.59	16.8	5.8	6.3	6.7	7.1	7.8	8.4	11.2	12.2	12.6	12.9	13.6	14.3	63.5
1400LSB350-98	9.73	16.8	4.2	4.5	4.8	5.1	5.6	6.1	8.0	8.5	8.8	9.1	9.6	10.1	50.1
1200LSB350-134	12.17	13.8	7.2	8.1	8.7	9.2	10.0	10.8	14.2	15.7	16.2	16.6	17.5	18.3	60.5
1200LSB350-118	10.80	13.8	5.8	6.5	6.9	7.3	8.0	8.6	11.2	12.3	12.7	13.1	13.8	14.4	53.8
1200LSB350-98	9.07	13.8	4.2	4.6	4.9	5.2	5.7	6.2	8.0	8.6	8.9	9.2	9.7	10.2	42.7
1000LSB300-118	8.97	11.5	5.8	6.3	6.8	7.2	8.0	8.6	11.3	12.0	12.4	12.8	13.6	14.2	37.2
1000LSB300-98	7.54	11.5	4.2	4.5	4.9	5.2	5.7	6.2	8.0	8.4	8.7	9.0	9.6	10.1	31.4
1000LSB300-79	6.09	11.5	2.7	3.0	3.2	3.4	3.8	4.2	5.2	5.4	5.6	5.8	6.2	6.6	23.6
800LSB250-98	5.96	9.1	4.0	4.5	4.8	5.2	5.7	6.3	7.8	8.2	8.5	8.8	9.4	9.9	19.7
800LSB250-79	4.82	9.1	2.7	2.9	3.2	3.4	3.8	4.2	5.0	5.3	5.5	5.7	6.1	6.5	16.1
800LSB250-59	3.67	9.1	1.6	1.7	1.9	2.0	2.3	2.5	2.8	3.0	3.1	3.3	3.5	3.7	11.1

**Notes:**

1. Resistance Factor ( $\phi_w$ ) is 0.8 for End Load and 0.9 for Interior Load.
2. Values are based on a one-flange loading condition, unfastened at supports.
3.  $c$  = Distance from end of LSB member to edge of bearing.
4. Reference AISI North American Specification for the Design of Cold-Formed Steel Structural Members.

Table 4																	
Distortional Buckling Strength (bending about x-axis)																	
LiteSteel beam																	
Members <i>without</i> full lateral restraint																	
LSB ID	Wt. per ft.	Design Shear Strength $\phi_v V_{nx}$	Design Flexural Strength $\phi_b M_{nx}$	Distortional Buckling Strength $\phi_b M_{nx}$ (kip ft)													
				Unbraced length, $L_x$ (ft)													
				3	4	5	6	7	8	10	12	16	20	24	28	32	36
1400LSB350-134	13.07	28.7	73.6	73.6	73.6	69.6	61.0	54.5	50.0	44.5	41.1	36.8	33.8	31.4	29.4	27.8	26.3
1400LSB350-118	11.59	19.9	63.5	63.5	63.5	59.9	52.3	47.1	43.6	38.7	35.7	32.1	29.6	27.7	26.0	24.6	23.4
1400LSB350-98	9.73	11.5	50.1	50.1	50.1	47.3	41.5	37.5	34.4	30.6	28.4	25.9	24.3	22.8	21.6	20.5	19.6
1200LSB350-134	12.17	28.7	60.5	60.5	60.5	60.5	51.3	46.5	43.3	39.2	36.5	32.9	30.2	28.0	26.2	24.7	23.4
1200LSB350-118	10.80	22.3	53.8	53.8	53.8	53.8	45.1	40.7	37.7	34.0	31.8	28.8	26.5	24.8	23.2	21.9	20.9
1200LSB350-98	9.07	14.0	42.7	42.7	42.7	42.7	36.2	33.0	30.8	27.6	25.7	23.4	21.8	20.5	19.3	18.4	17.5
1000LSB300-118	8.97	22.3	37.2	37.2	37.2	32.0	28.6	26.4	24.9	22.8	21.3	19.0	17.3	16.0	14.9	14.0	13.3
1000LSB300-98	7.54	15.5	31.4	31.4	31.4	26.5	23.5	21.6	20.3	18.6	17.5	15.8	14.5	13.5	12.6	11.9	11.3
1000LSB300-79	6.09	8.6	23.6	23.6	23.6	20.1	18.0	16.7	15.7	14.4	13.5	12.4	11.5	10.8	10.1	9.6	9.1
800LSB250-98	5.96	15.5	19.7	19.7	17.1	15.0	13.7	12.9	12.2	11.2	10.4	9.2	8.4	7.7	7.1	6.7	6.2
800LSB250-79	4.82	9.9	16.1	16.1	13.6	11.7	10.7	10.0	9.5	8.8	8.3	7.4	6.8	6.3	5.8	5.5	5.1
800LSB250-59	3.67	4.6	11.1	11.1	9.4	8.2	7.6	7.1	6.8	6.4	6.0	5.5	5.1	4.7	4.4	4.2	3.9

Notes:

- Reference AISI North American Specification for the Design of Cold-Formed Steel Structural Members

Table 5 Total Load (lbs/ft) Most Restrictive Simple Beam or Continuous Span												
LSB ID	Total Load = 75%LL + 25%DL											
	Live Load Deflection $\leq$ Span/360						Total Load Deflection $\leq$ Span/240					
	Beam Span, Feet											
	4	6	8	10	12	14	16	18	20	24	28	32
1400LSB350-134	7649	5099	3824	3059	2550	2033	1549	1088	793	459	289	194
1400LSB350-118	5291	3527	2645	2116	1764	1512	1323	967	705	408	257	172
1400LSB350-98	3031	2020	1515	1212	1010	866	758	673	583	338	213	142
1200LSB350-134	7649	5099	3824	3059	2287	1627	1090	765	558	323	203	136
1200LSB350-118	5940	3960	2970	2376	1980	1421	952	668	487	282	178	119
1200LSB350-98	3689	2460	1845	1476	1230	1054	797	560	408	236	149	100
1000LSB300-118	5940	3960	2970	1958	1281	807	541	380	277	160	101	68
1000LSB300-98	4097	2731	2049	1632	1096	690	462	325	237	137	86	58
1000LSB300-79	2339	1559	1170	936	780	522	350	246	179	104	65	44
800LSB250-98	4097	2731	1647	956	553	348	233	164	119	69	44	
800LSB250-79	2662	1775	1331	775	449	282	189	133	97	56		
800LSB250-59	1218	812	609	487	334	210	141	99	72	42		

## Notes:

1. Yield strength shall be a minimum of 50 ksi.
2. Deflection Limit: L/360 for live loads and L/240 for total loads
3. Web stiffeners are required at each support; otherwise web crippling shall be checked.
4. Reference AISI North American Specification for the Design of Cold-Formed Steel Structural Members

Table 6 Total Load (lbs/ft) Most Restrictive Simple Beam or Continuous Span												
LSB ID	Total Load = 75%LL + 25%DL											
	Live Load Deflection $\leq$ Span/480						Total Load Deflection $\leq$ Span/240					
	Beam Span, Feet											
	4	6	8	10	12	14	16	18	20	24	28	32
1400LSB350-134	7649	5099	3824	3059	2550	1734	1162	816	595	344	217	145
1400LSB350-118	5291	3527	2645	2116	1764	1512	1033	725	529	306	193	129
1400LSB350-98	3031	2020	1515	1212	1010	866	758	600	438	253	159	107
1200LSB350-134	7649	5099	3824	3059	1937	1220	817	574	418	242	153	102
1200LSB350-118	5940	3960	2970	2376	1692	1066	714	501	365	212	133	89
1200LSB350-98	3689	2460	1845	1476	1230	892	598	420	306	177	111	75
1000LSB300-118	5940	3960	2970	1661	961	605	405	285	208	120	76	51
1000LSB300-98	4097	2731	2049	1420	822	518	347	244	178	103	65	43
1000LSB300-79	2339	1559	1170	936	622	392	262	184	134	78	49	
800LSB250-98	4097	2731	1400	717	415	261	175	123	90	52		
800LSB250-79	2662	1775	1135	581	336	212	142	100	73			
800LSB250-59	1218	812	609	433	250	158	106	74	54			

## Notes:

1. Yield strength shall be a minimum of 50 ksi.
2. Deflection Limit: L/480 for live loads and L/240 for total loads
3. Web stiffeners are required at each support; otherwise web crippling shall be checked..
4. Reference AISI North American Specification for the Design of Cold-Formed Steel Structural Members

<b>Table 7</b> <b>LSB Beam Span, Feet</b> <b>Continuous Beam With Equal Spans</b> <b>One Story Loading</b> <b>40 psf Live Load</b>									
<b>LSB ID</b>	<b>Center Beam Supporting One Floor</b> <b>Tributary Span, Feet</b>								
	<b>8</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>16</b>	<b>18</b>	<b>20</b>	<b>22</b>	<b>24</b>
1400LSB350-134	27.5	25.5	24.0	22.8	21.8	21.0	20.3	19.6	19.1
1400LSB350-118	26.3	24.4	23.0	21.9	20.9	20.1	19.4	17.8	16.3
1400LSB350-98	24.6	22.7	18.9	16.2	14.2	12.6	11.3	10.3	9.4
1200LSB350-134	24.4	22.7	21.3	20.3	19.4	18.6	18.0	17.4	16.9
1200LSB350-118	23.5	21.8	20.5	19.5	18.6	17.9	17.3	16.8	16.3
1200LSB350-98	21.9	20.4	19.2	18.2	17.2	15.3	13.8	12.5	11.5
1000LSB300-118	19.5	18.1	17.1	16.2	15.5	14.9	14.4	13.9	13.5
1000LSB300-98	18.5	17.1	16.1	15.3	14.6	14.1	13.6	13.2	12.7
1000LSB300-79	17.0	15.8	14.2	12.1	10.6	9.4	8.5	7.7	7.1
800LSB250-98	14.7	13.6	12.8	12.2	11.7	11.2	10.8	10.5	10.2
800LSB250-79	13.7	12.7	12.0	11.4	10.9	10.5	9.7	8.9	8.1
800LSB250-59	11.3	9.1	7.5	6.5	5.7	5.0	4.5	4.1	3.8

**Notes:**

1. Yield strength shall be a minimum of 50 ksi.
2. Deflection Limit: L/360 for live loads and L/240 for total loads
3. Web stiffeners are required at each support; otherwise web crippling shall be checked.
4. Live Load is 40psf and Dead Load is 15psf
5. LSB is assumed to have full lateral support. If no lateral restraint, distortional buckling shall be checked.
6. Tributary Span represents the total area of floor load supported by the beam:  
The sum of the floor spans on both sides of the LSB support beam divided by two.
7. Web stiffeners shall be used at all supports unless web crippling is checked by a qualified engineer.
8. Reference AISI North American Specification for the Design of Cold-Formed Steel Structural Members

<b>Table 8</b> <b>LSB Beam Span, Feet</b> <b>Continuous Beam With Equal Spans</b> <b>Two Story Loading</b> <b>40 PSF Live Load</b>									
<b>LSB ID</b>	<b>Center Beam Supporting Two Floors</b> <b>Tributary Span Each Floor, Feet</b>								
	<b>8</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>16</b>	<b>18</b>	<b>20</b>	<b>22</b>	<b>24</b>
1400LSB350-134	21.8	20.3	19.1	18.1	17.1	15.7	14.1	12.8	11.8
1400LSB350-118	20.9	19.4	16.3	14.0	12.2	10.9	9.8	8.9	8.2
1400LSB350-98	14.2	11.3	9.4	8.1	7.1	6.3	5.7	5.2	4.7
1200LSB350-134	19.4	18.0	16.9	16.1	15.4	14.6	13.9	12.8	11.8
1200LSB350-118	18.6	17.3	16.3	15.5	13.7	12.2	11.0	10.0	9.1
1200LSB350-98	17.2	13.8	11.5	9.8	8.6	7.6	6.9	6.3	5.7
1000LSB300-118	15.5	14.4	13.5	12.9	12.2	11.5	10.9	10.0	9.1
1000LSB300-98	14.6	13.6	12.7	10.9	9.5	8.5	7.6	6.9	6.3
1000LSB300-79	10.6	8.5	7.1	6.1	5.3	4.7	4.2	3.9	3.5
800LSB250-98	11.7	10.8	10.2	9.5	8.9	8.4	7.6	6.9	6.3
800LSB250-79	10.9	9.7	8.1	7.0	6.1	5.4	4.9	4.4	4.1
800LSB250-59	5.7	4.5	3.8	3.2	2.8	2.5	2.3	2.1	1.9

**Notes:**

1. Yield strength shall be a minimum of 50 ksi.
2. Deflection Limit: L/360 for live loads and L/240 for total loads
3. Web stiffeners are required at each support; otherwise web crippling shall be checked.
4. Live Load is 40 psf and Dead Load is 15 psf on each floor
5. LSB is assumed to have full lateral support. If no lateral restraint, distortional buckling shall be checked.
6. Tributary Span represents the total area of floor load supported by the beam:  
The sum of the floor spans on both sides of the LSB support beam divided by two.
7. Web stiffeners shall be used at all supports unless web crippling is checked by a qualified engineer.
8. Reference AISI North American Specification for the Design of Cold-Formed Steel Structural Members