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\*\*\* See Sprinkler, Duct and Mechanical Installation Guide for further information regarding these topics

**General Description:**  
**SSW Open Web Truss**



Standard Structure's SSW Open Web Truss is a structural wood chord, metal web, pin connected, open web truss used as a joist in light commercial applications for both floor and roof construction. Its simple top chord bearing connection is designed specifically to handle an eccentric load and eliminate the need of increased building height and notched plates. The bearing connection promotes ease of installation requiring only two nails driven through pre-drilled holes.

**FEATURES**

- Longer span capability yields greater design flexibility.
- Top or bottom chord bearing is available.
- Cambered as required by design.
- Framing width of 3 1/2" reduces the span of the sheathing and allows for more nailing and gluing area.
- Parallel chord, tapered or pitched profiles available.
- Light weight and dimensionally stable.
- Open-web design allows for easy installation of mechanical, electrical and other trades.
- Moisture content of all chords is limited to 15% for maximum product stability.
- Split resistance 'r' chord allowing for tight diaphragm nailing is available.
- SSW Open Web Trusses provide diaphragm nailing values equal to those noted in the applicable codes for wood members with a specific gravity of 0.50.
- Architectural grade flanges and upgraded web and hardware are available upon request for an additional charge.

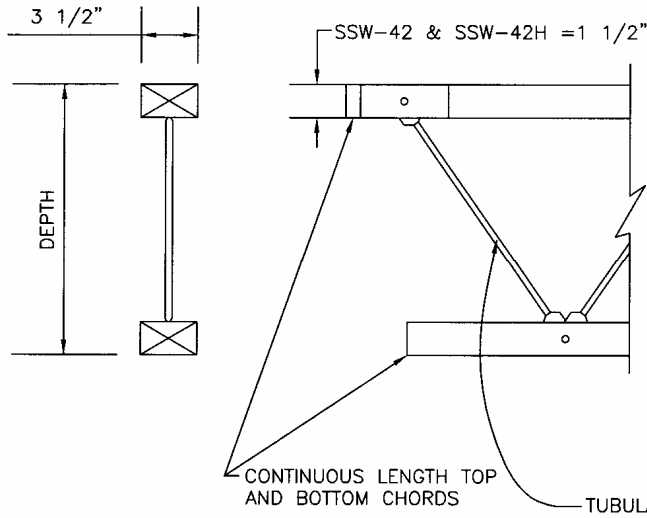
**Table 1: Recommended Specification (spec section 06 17 36)**

1.0 GENERAL		SSW Open-Web Truss
1.1	<b>Scope</b>	This work includes the complete design and components for installation of all SSW open web trusses as fabricated by Standard Structures, Inc.
1.2	<b>Code Approvals</b>	These products are designed and fabricated to the standards set forth in ICC-ES PFC-5803.
1.3	<b>Related Work Specified Elsewhere</b>	<ul style="list-style-type: none"> <li>A. <b>Carpentry and Millwork</b></li> <li>B. <b>Glued Laminated Members</b></li> <li>C. <b>Composite Wood I-Joists</b></li> </ul>
1.4	<b>Design</b>	<ul style="list-style-type: none"> <li>A. <b>Products</b> Standard Structures, Inc. SSW products are custom designed to fit the dimensions and loads indicated on the plans.</li> <li>B. <b>Design Calculations</b> When requested, a complete set of design calculations shall be prepared by Standard Structures, Inc. under the supervision of a registered professional engineer.</li> <li>C. <b>Special performance features</b> Where the SSW truss description is followed by an 'r' it is intended that the top chord be reinforced to insure greater resistance to splitting. The reinforcement is factory laminated to the top chord as part of the fabricating process.</li> </ul>
1.5	<b>Submittals</b>	<ul style="list-style-type: none"> <li>A. <b>Shop Drawings</b> When requested, shop drawings showing building layout and details necessary for proper product placement in the building may be provided by Standard Structures, Inc.</li> <li>B. <b>Production</b> Will not proceed with fabrication and/or cutting until shop drawings and design calculations (when required) have been reviewed by the Architect and or Engineer of Record.</li> </ul>
<b>2.0 PRODUCT</b>		
2.1	<b>Description</b>	The trusses shall consist of structural wood top and bottom chords and tubular steel web members. The webs shall have machined ends, inserted into the chords, secured with steel pins. The end connections shall bear directly on the support.
2.2	<b>Materials</b>	Top and bottom chords shall be kiln dried, machine stress rated lumber. Continuous chords shall be developed with glued finger joints that have been tension tested. The galvanized tubular steel webs shall have a minimum yield stress of 45,000 psi. The steel pins shall be in accordance with applicable ASTM standards. The bearing hardware shall be 13 gauge steel.
2.3	<b>Fabrication</b>	The trusses shall be manufactured by Standard Structures, Inc. with quality audits performed by a third-party inspection agency.
2.4	<b>Hardware</b>	Top chord flush hanger is an available option.
<b>3.0 EXECUTION</b>		
3.1	<b>Erection and Installation</b>	<ul style="list-style-type: none"> <li>A. Standard Structures, Inc. SSW open-web trusses, if stored prior to erection shall be stored in a vertical position and protected from the weather. They shall be handled with care to avoid damage. Trusses shall be erected and installed in accordance with the plans and any shop drawing and installation suggestions that may be provided. Temporary construction loads that cause stresses beyond design limits are not permitted. Erection bracing is to be provided to keep the trusses straight and plumb as required and to assure adequate lateral support for the individual trusses and the entire system until the sheathing material has been applied.</li> <li>B. Apparent damage to trusses, if any, shall be reported to Standard Structures, Inc. prior to installation.</li> <li>C. Cutting or altering the trusses is not permitted.</li> <li>D. Trusses should be erected and installed as outlined in the erection bracing recommendations.</li> </ul>
4.0	<b>Warranty</b>	
4.1		Standard Structures, Inc. warrants that its products, materials and workmanship will be free from fabricating defects for the normal and expected life of the building provided the product is correctly installed, maintained and used.

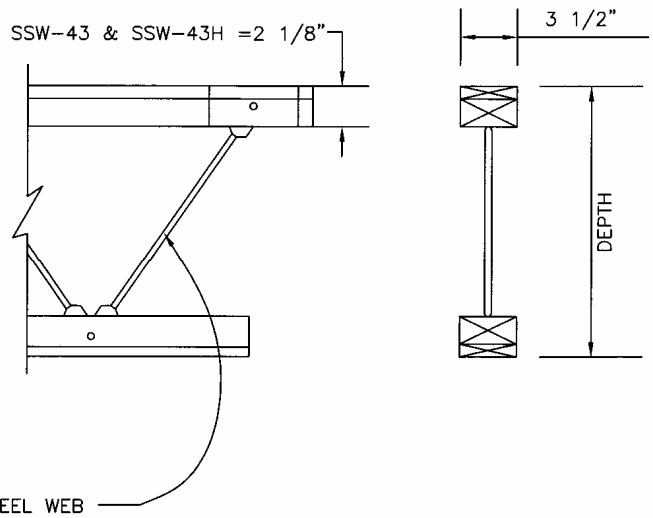
## Product Profiles SSW Open Web Truss

SSW Open Web Truss is available in the following depths:

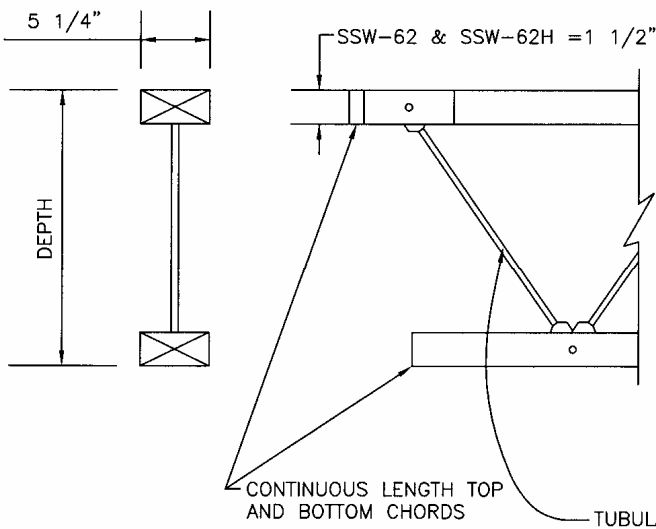
### SSW-42 and SSW-42H series – 14” to 50”



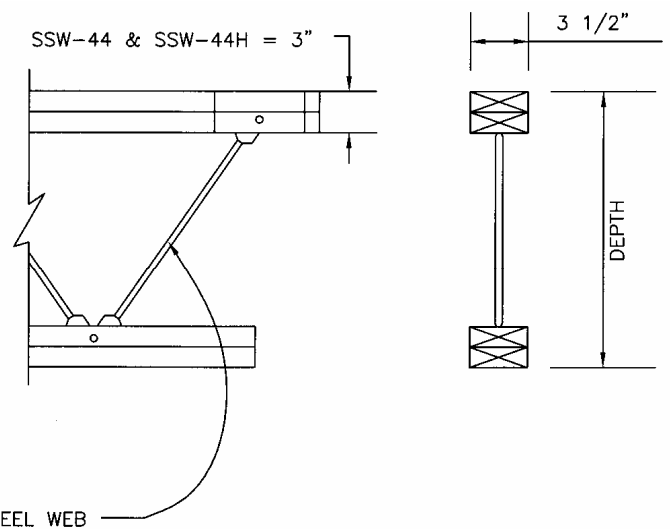
### SSW-43 and SSW-43H series – 16” to 64”



### SSW-62 and SSW-62H series – 14” to 50”



### SSW-44 and SSW-44H series – 16” to 64”



**Available SSW Profiles**

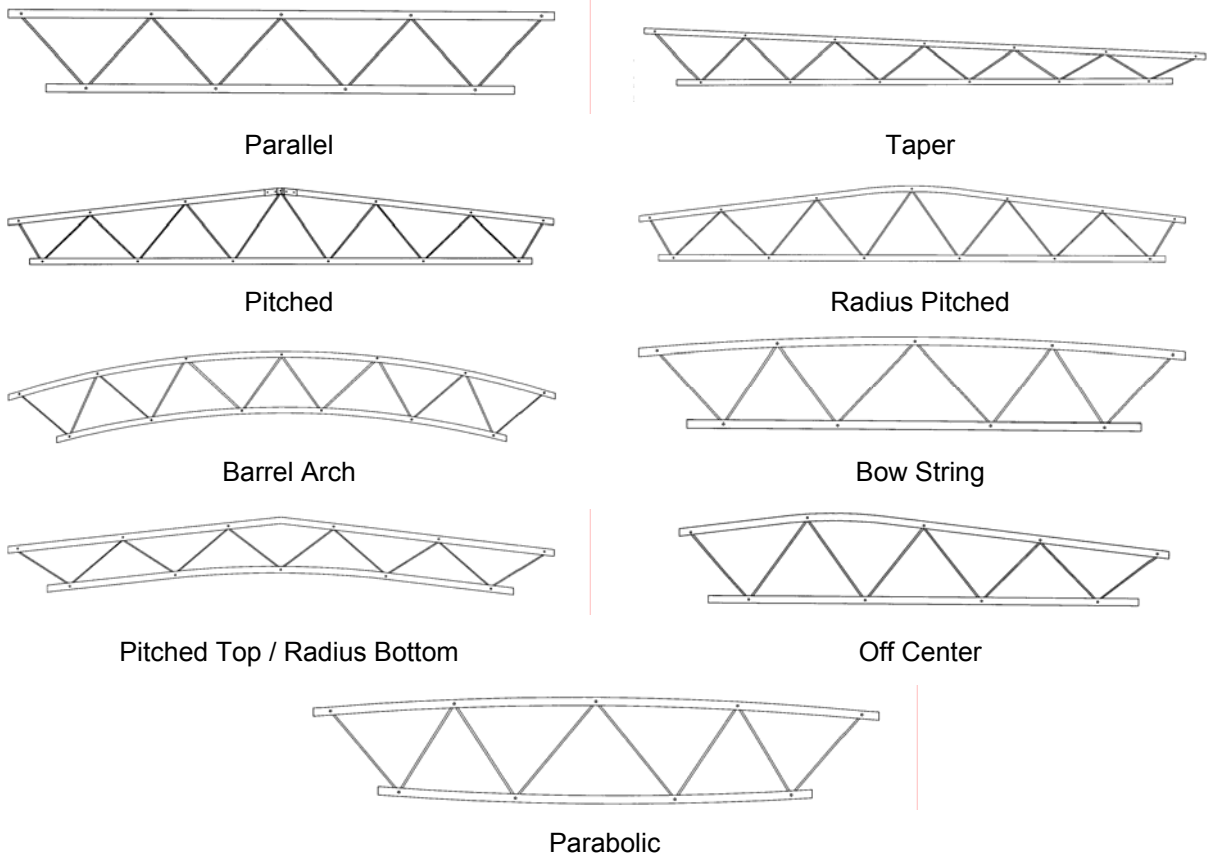


Table 2: Tightest Curvature Available	
SSW 42	50' Radius
SSW 62	50' Radius
SSW 43	75' Radius
SSW 44	100' Radius

Table 3: Depths	
SSW 42 & 42H	14-50"
SSW 62 & 62H	14-50"
SSW 43 & 43H	16-64"
SSW 44 & 44H	16-64"

**Camber Criteria**

The fabrication of Standard Structures, Inc. Open Web Trusses includes the capability of providing a specified camber for appearance and to help resist the possibility of deflection under load. Camber should be considered on an individual job basis. Although excessive camber in any product may cause problems in framing, it is our recommendation that the camber criteria listed below be followed when designing long span capable products like open web trusses. Inadequate camber can cause significant problems in the case of flat roofs, for example, where other considerations like improper drainage could create ponding of water and result in overloads (refer to building code for special considerations for flat roof designs). Camber selection in structural members should include consideration for matching requirements of adjacent components of different lengths.

Table 4: Camber Criteria				
Location		Application	Recommended Camber	Minimum Recommended Camber
Roof	Snow Load Locations	Sloped Roofs (1/4" per foot min.)	DLΔ + 1/2 LLA	DLΔ + 1/4 LLA
	All Non-Snow Load Locations		1 1/2 DLA	1 1/4 DLA
Floor	All Floors	All floors > 24 feet	1 1/2 DLA	1 DLA
DLΔ	Dead Load Deflection		Note: Movable partition loads are not to be considered in this policy.	
LLΔ	Live Load Deflection			

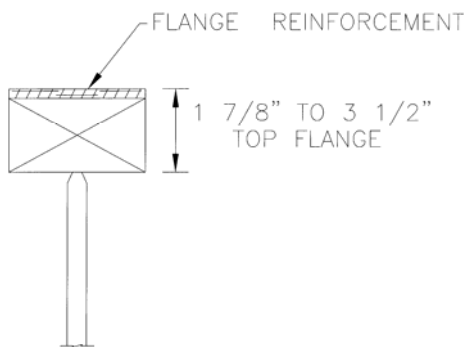
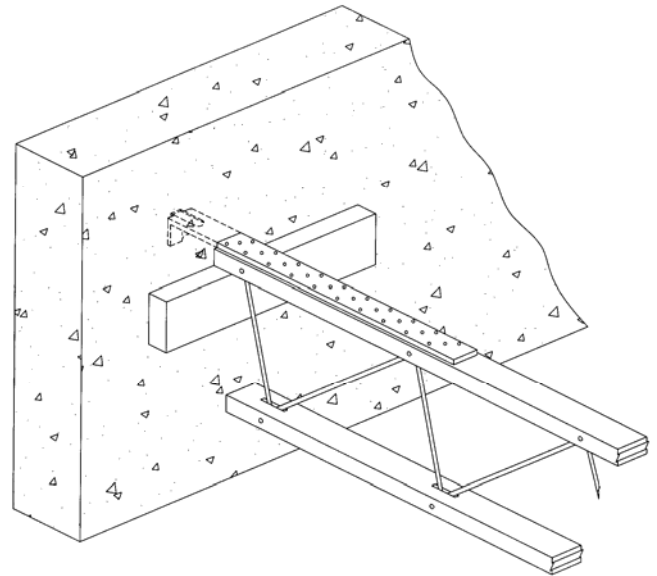
SSI recommends camber for floors with spans =< 24 feet to be zero, spans > 24 feet to be 3000' radius. See Local Code Authorities for other requirements.

## Split Resistant 'r' Chord

In order to meet specific engineering requirements, calculations may require a nail schedule for floor and roof diaphragms or seismic straps to be at 1 1/2, 2 and 2 1/2 inches on center.

Currently, truss fabricators recommend nail spacing of no closer than 3 inches on center in a row for 10d common nails.

Standard Structures, Inc. recognizes this problem and concluded a testing program witnessed by Timber Products Inspection (TPI). Our testing revealed that all 2 inch nominal members, regardless of composition, including Laminated Veneer Lumber (LVL), linearly oriented composite material and MSR dimensional lumber do in fact SPLIT in the same manner when the fabricators closest recommended nail spacing of 3 inches on center is exceeded. **This problem exists with all fabricators regardless of composition of the individual truss chord material.**



Standard Structures, Inc. developed the SSI-'r' as the solution to chord splitting due to tight nailing requirements.

To ensure a quality product we prepared multiple test groups, witnessed by TPI. Our testing included SSI-'r' truss with 10d nails spaced at 1 inch and 2 inches on center in a row. These truss were first nailed and then loaded to ultimate capacity in our load test simulator. After loading the truss they were inspected and in all cases each resisted any splitting.

Upon comparative testing, SSI-'r' truss revealed an excellent resistance to splitting and did not split with nail spacing even as close as 1 inch on center.

The ICBO approved SSI-'r' is similar to other Standard Structures, Inc. products but includes the added feature of a factory bonded reinforced chord.



The benefits of the 'Reinforcement' are two fold:

- The reinforcement discourages the displacement of the top chord fibers by the nail.
- The reinforcement contributes to increase the chord member depth which prohibits the nail from piercing entirely through the chord.

**The 'r' chord test was done on I-Joist. The 'r' chord split resistance, to nailing less than 3" o.c., is applicable to all SSW products.**

**Approximate Weight and Nail Spacing**

<b>Table 5: SSW Open Web Truss Weight</b>				
<b>Approximate Pounds per Linear Foot (PLF)</b>				
<b>Overall Depth (Inches)</b>	<b>SSW 42</b>	<b>SSW 62</b>	<b>SSW 43</b>	<b>SSW 44</b>
14	3.5	4.9	4.5	6.0
16	3.5	4.9	4.5	6.0
18	3.5	5.0	4.6	6.1
20	3.5	5.0	4.6	6.1
22	3.5	5.0	4.6	6.1
24	3.5	5.0	4.6	6.1
26	3.6	5.0	4.6	6.1
28	3.6	5.0	4.6	6.1
30	3.6	5.1	4.7	6.2
32	3.6	5.1	4.7	6.2
34	3.6	5.1	4.7	6.2
36	3.7	5.1	4.7	6.2
38	3.7	5.2	4.8	6.3
40	3.7	5.2	4.8	6.3
42	3.8	5.2	4.8	6.3
44	3.8	5.3	4.9	6.4
46	3.8	5.3	4.9	6.4
48	3.9	5.3	4.9	6.4
50	3.9	5.4	5.0	6.5
52	3.9	5.4	5.0	6.5
54	4.0	5.5	5.1	6.6
56	4.0	5.5	5.1	6.6
58	4.1	5.6	5.2	6.7
60	4.2	5.6	5.2	6.7

<b>Table 6: Minimum Nailing Spacing</b>									
<b>Nail Type</b>	<b>Nail Size</b>	<b>MSR</b>		<b>"r" Chord</b>		<b>LVL</b>		<b>Glulam</b>	
		<b>Face</b>	<b>Edge</b>	<b>Face</b>	<b>Edge</b>	<b>Face</b>	<b>Edge</b>	<b>Face</b>	<b>Edge</b>
<b>8d</b> <sup>1</sup>	Box 0.113" x 2 1/2"	2"	2"	1"	2"	2"	4"	1"	2"
	Common 0.131" x 2 1/2"	2"	2"	1"	2"	2"	6"	1"	2"
<b>10d</b>	Box 0.128" x 3"	2"	2"	1"	2"	2"	6"	1"	2"
	Common 0.148" x 3"	2"	2"	1"	2"	3"	6"	1"	2"
<b>12d</b>	Box 0.128" x 3 1/4"	3"	2"	1"	2"	2"	6"	1"	2"
	Common 0.148" x 3 1/4"	3"	2"	1"	2"	3"	6"	1"	2"
<b>16d</b>	Box 0.135" x 3 1/2"	3"	2"	1"	2"	3"	6"	1"	2"
	Sinker 0.148" x 3 1/4"	3"	2"	1"	2"	3"	6"	1"	2"
	Common 0.162" x 3 1/2"	4"	2"	1"	2"	4"	8"	1"	2"

<sup>1</sup> 14 gauge staples may be a direct substitute for 8d nails if a minimum penetration of 1" into the flange is maintained.

**Table 7A: SSW-42** (Rep. increase of 7% allowed @ shaded areas for joist at 24" o.c. or less)

Note: This pif table represents "joist only" E.I. Increases for composite E.I. May misrepresent actual in-place product performance.

Depth	14		16		18		20		22		24		26		28		30		32		34		36	
	100 XTL	15 XTL	100 XTL	15 XTL	100 XTL	15 XTL	100 XTL	15 XTL	100 XTL	15 XTL	100 XTL	15 XTL	100 XTL	15 XTL	100 XTL	15 XTL	100 XTL	15 XTL	100 XTL	15 XTL	100 XTL	15 XTL	100 XTL	15 XTL
SPAN (FT.)	100 XTL	125 XTL	100 XTL	125 XTL	100 XTL	125 XTL	100 XTL	125 XTL	100 XTL	125 XTL	100 XTL	125 XTL	100 XTL	125 XTL	100 XTL	125 XTL	100 XTL	125 XTL	100 XTL	125 XTL	100 XTL	125 XTL	100 XTL	125 XTL
12	385	442	446	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487
14	283	325	328	377	373	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417
16	266	363	328	410	373	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417
18	216	249	251	289	286	329	320	365	355	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365
20	178	271	240	314	286	357	320	365	355	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365
22	171	197	198	228	226	260	253	291	280	323	308	324	324	324	324	324	324	324	324	324	324	324	324	324
24	125	214	168	248	218	282	253	316	280	324	308	324	324	324	324	324	324	324	324	324	324	324	324	324
26	139	159	161	185	183	210	205	236	227	261	249	287	271	292	292	292	292	292	292	292	292	292	292	292
28	91	173	123	201	159	229	200	256	227	284	249	292	271	292	292	292	292	292	292	292	292	292	292	292
30	114	132	133	153	151	174	169	196	188	216	206	237	224	258	243	265	261	265	265	265	265	265	265	265
32	68	143	92	166	119	189	150	212	184	235	206	258	224	265	243	265	261	265	265	265	265	265	265	265
34	96	111	112	128	127	146	142	164	158	181	173	199	189	217	204	235	219	243	235	243	243	243	243	243
36	53	120	71	139	92	159	116	178	142	197	171	216	189	236	204	243	219	243	235	243	243	243	243	243
38	82	94	95	109	108	124	121	139	134	155	148	170	161	185	174	200	187	215	200	225	213	225	225	225
40	41	102	56	119	72	135	91	152	112	168	134	184	159	201	174	217	187	225	200	225	213	225	225	225
42	71	81	82	94	93	107	105	120	116	133	127	146	139	159	150	172	161	185	172	198	184	209	195	209
44	33	88	45	102	58	117	73	131	89	145	108	159	128	173	149	187	161	201	172	209	184	209	195	209
46	71	71	82	81	98	91	106	116	111	127	121	139	131	150	140	161	140	175	150	188	160	195	170	195
48	77	36	89	47	102	59	114	73	126	88	139	104	151	121	163	140	175	150	188	160	195	170	195	195
50	62	63	72	71	82	80	92	89	102	97	112	106	122	115	132	123	142	132	152	141	162	149	172	172
52	68	30	78	39	89	49	100	60	111	72	122	85	133	100	143	116	154	132	165	141	176	149	183	183
54	55			64	63	73	71	82	79	90	86	99	94	108	102	117	109	126	117	134	125	143	132	152
56	60			69	32	79	41	89	50	98	60	108	71	117	83	127	96	137	110	146	125	156	132	165
58	49			56	66	63	73	70	81	77	88	84	96	91	104	97	112	104	120	111	128	118	136	136
60	52			62	27	71	34	79	42	88	51	96	60	105	70	113	81	122	93	130	106	139	118	147
62	44			51		58	57	65	63	72	69	79	75	86	81	94	87	101	94	108	100	115	106	122
64	44			56		63	29	71	36	79	43	86	51	94	60	102	69	109	79	117	90	125	101	132
66				46		53	51	59	57	65	62	72	68	78	73	84	79	91	84	97	90	104	96	110
68				50		57	25	64	31	71	37	78	44	85	51	92	59	96	68	106	77	113	87	119
70				42		48		53	52	59	57	66	62	71	67	77	72	82	77	88	82	94	87	100
72				44		52		58	26	64	32	71	38	77	44	83	51	90	59	96	67	102	75	108
74						43		49	47	54	52	59	56	65	61	70	65	75	70	80	74	86	79	91
76						47		53	23	59	28	64	33	70	38	76	44	82	51	87	58	93	65	99
Depth	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60

For more information, contact the Standard Structures, Inc. Design Assistance Department toll free at 1-877-980-7732 (SPEC) or visit our website at <http://www.ssispec.com>

For Usage and General Notes see Page 16



**Table 7B: SSW-42H** (Rep. increase of 7% allowed @ shaded areas for joist at 24" o.c. or less)  
 Note: This pif table represents "joist only" E.I. Increases for composite E.I. May misrepresent actual in-place product performance.

Depth	14		16		18		20		22		24		26		28		30		32		34		36	
	100 YTL	115 YTL	100 YTL	115 YTL	100 YTL	115 YTL	100 YTL	115 YTL	100 YTL	115 YTL	100 YTL	115 YTL	100 YTL	115 YTL	100 YTL	115 YTL	100 YTL	115 YTL	100 YTL	115 YTL	100 YTL	115 YTL	100 YTL	115 YTL
12	460	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487	487
14	460	487	487	487	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417
16	259	297	300	345	341	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365
18	204	235	237	273	270	310	302	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324
20	165	190	192	221	218	251	245	282	271	292	292	292	292	292	292	292	292	292	292	292	292	292	292	292
22	137	157	159	182	181	208	202	233	224	258	246	265	265	265	265	265	265	265	265	265	265	265	265	265
24	115	132	133	153	152	174	170	196	188	217	207	238	243	243	243	243	243	243	243	243	243	243	243	243
26	84	97	98	113	111	128	125	144	138	159	152	175	180	180	180	180	180	180	180	180	180	180	180	180
28	85	85	85	98	97	112	109	125	121	139	132	152	144	166	156	179	168	193	179	195	191	195	195	195
30	74	75	75	86	85	98	96	110	106	122	116	134	127	146	137	158	147	170	158	181	168	183	178	183
32	66	66	66	76	76	87	86	97	94	108	103	119	112	129	121	140	131	150	140	161	149	171	158	172
34	71	71	71	83	83	94	94	106	106	117	117	129	129	140	140	152	140	161	140	161	144	172	158	172
36	59	59	59	68	68	78	76	87	84	96	92	106	100	115	108	125	116	134	125	143	133	153	141	162
38	51	51	51	59	59	68	68	78	75	86	83	95	89	103	97	112	105	120	112	129	119	137	127	146
40	44	44	44	55	55	63	61	70	68	78	74	86	81	93	88	101	94	108	101	116	108	124	114	131
42	44	44	44	59	59	68	68	78	77	85	85	93	85	95	88	101	94	108	101	116	108	124	114	131
44	51	51	51	59	59	68	68	78	77	85	85	93	85	95	88	101	94	108	101	116	108	124	114	131
Depth	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36

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**Table 7C: SSW-62** (Rep. increase of 7% allowed @ shaded areas for joist at 24" o.c. or less)  
 Note: This pif table represents "joist only" E.I. Increases for composite E.I. may misrepresent actual in-place product performance.

Depth	14		16		18		20		22		24		26		28		30		32		34		36	
	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL
SPAN (FT.)	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL
14	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420
16	399	420	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368
	340	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368
18	267	368	359	368	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327
	268	309	311	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327
20	188	327	252	327	287	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294
	217	250	252	290	287	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294
22	137	272	184	294	238	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294
	180	207	208	240	237	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267
24	103	225	138	261	179	267	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225
	151	174	175	201	199	229	224	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245
26	79	189	106	219	138	245	173	245	213	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245
	129	148	149	172	170	196	190	219	211	226	226	226	226	226	226	226	226	226	226	226	226	226	226	226
28	62	161	84	187	108	212	136	226	167	226	202	226	226	226	226	226	226	226	226	226	226	226	226	226
	111	128	129	148	146	168	164	189	182	209	200	210	210	210	210	210	210	210	210	210	210	210	210	210
30	50	139	67	161	87	183	109	205	134	210	161	210	191	210	210	210	210	210	210	210	210	210	210	210
	111	112	129	128	147	143	165	159	182	174	196	189	196	196	196	196	196	196	196	196	196	196	196	196
32	121	55	140	71	159	89	179	109	196	131	196	156	196	182	196	182	196	196	196	196	196	196	196	196
	98	99	113	112	129	126	145	139	160	153	176	166	184	180	184	184	184	184	184	184	184	184	184	184
34	106	45	123	58	140	73	157	90	174	108	184	128	184	150	184	174	184	184	184	184	184	184	184	184
	87	100	99	114	111	128	123	142	135	156	147	170	160	173	172	173	173	173	173	173	173	173	173	173
36	93	109	48	124	61	139	75	154	90	169	107	173	125	173	145	173	166	173	166	173	173	173	173	173
	77	90	89	102	99	114	110	127	121	139	132	151	142	163	153	163	163	163	163	163	163	163	163	163
38	78	97	41	111	51	124	63	138	76	151	90	163	105	163	122	163	140	163	140	163	163	163	163	163
	86	80	80	99	91	103	99	114	108	125	118	136	128	147	137	155	147	155	147	155	155	155	155	155
40	66	87	99	44	111	54	123	65	136	77	148	90	155	104	155	119	155	119	155	136	155	155	155	155
	57	73	83	80	93	89	103	98	113	107	123	115	133	124	143	133	147	133	147	141	147	147	147	147
42	57	77	90	37	101	46	111	55	122	66	138	77	144	89	147	102	147	116	147	116	147	147	147	147
	49	66	66	75	84	81	93	89	102	97	111	105	120	112	129	120	138	128	140	136	140	140	140	140
44	49	66	66	81	91	40	101	48	111	57	121	66	131	77	140	88	140	100	140	100	140	112	140	140
	43	58	58	74	76	74	85	81	93	88	101	95	110	102	118	110	126	117	134	124	124	124	134	134
46	43	58	58	74	83	36	92	42	101	49	110	58	119	67	128	76	134	87	134	98	134	98	134	134
	50	50	50	62	70	70	85	81	93	87	100	87	100	94	108	100	115	107	123	113	128	128	128	128
48	50	50	50	65	76	76	84	36	92	43	101	51	109	58	117	67	125	76	128	86	128	86	128	128
	44	44	44	57	64	64	71	68	78	74	85	80	92	86	99	92	106	98	113	104	120	120	120	120
50	44	44	44	57	64	64	71	68	78	74	85	80	92	86	99	92	106	98	113	104	120	120	120	120
	51	51	51	59	66	66	72	68	78	74	85	80	92	86	99	92	106	98	113	104	120	120	120	120
Depth	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60

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**Table 7D: SSW-62H** (Req. increase of 7% allowed @ shaded areas for joist at 24" o.c. or less)  
 Note: This table represents "joist only" E.I. Increases for composite E.I. may misrepresent actual in-place product performance.

Depth	14		16		18		20		22		24		26		28		30		32		34		36	
	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL
14	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420
16	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368
18	321	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327
20	260	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294
22	215	247	249	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267
24	180	208	209	241	238	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245
26	154	177	178	205	203	226	226	226	226	226	226	226	226	226	226	226	226	226	226	226	226	226	226	226
28	133	152	154	177	175	201	196	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210
30	57	166	77	192	100	210	126	210	154	210	186	210	210	210	210	210	210	210	210	210	210	210	210	210
32	117	118	135	154	154	173	150	173	166	184	183	184	184	184	184	184	184	184	184	184	184	184	184	184
34	103	107	120	136	148	167	147	167	147	170	162	173	173	173	173	173	173	173	173	173	173	173	173	173
36	90	90	107	116	116	147	119	136	132	151	144	163	157	163	163	163	163	163	163	163	163	163	163	163
38	76	76	96	109	109	123	118	133	118	136	130	149	141	155	155	155	155	155	155	155	155	155	155	155
40	66	66	87	103	103	119	103	133	107	148	74	155	88	155	103	155	119	155	136	155	155	155	155	155
42	57	57	76	96	96	107	97	120	97	133	64	146	76	147	88	147	102	147	117	147	147	147	147	147
44	49	49	66	86	86	101	88	111	88	122	55	133	65	140	76	140	88	140	101	140	140	140	140	140
46	43	43	58	75	75	91	84	102	93	110	48	121	57	132	66	134	77	134	88	134	100	134	112	134
48	31	31	51	66	66	81	77	91	77	101	42	111	50	120	58	128	67	128	77	128	87	128	98	128
50	21	21	45	66	66	83	71	86	66	81	93	88	102	96	110	103	118	110	123	117	123	123	123	123
52	14	14	40	52	52	72	58	73	58	78	86	81	94	88	101	95	109	101	117	108	118	115	118	118
Depth	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60

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**Table 7E: SSW-43** (Rep. increase of 7% allowed @ shaded areas for joist at 24" o.c. or less)  
 Note: This pf table represents "joist only" E.I. increases for composite E.I. may misrepresent actual in-place product performance.

Depth	22		24		26		28		30		32		34		36		38		40		42		44	
	100% %LL	15% %TL	100% %LL	15% %TL	100% %LL	15% %TL	100% %LL	15% %TL	100% %LL	15% %TL	100% %LL	15% %TL	100% %LL	15% %TL	100% %LL	15% %TL	100% %LL	15% %TL	100% %LL	15% %TL	100% %LL	15% %TL	100% %LL	15% %TL
20	345	397	380	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405
22	285	328	314	361	343	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368
24	240	276	264	304	288	331	312	338	338	338	338	338	338	338	338	338	338	338	338	338	338	338	338	338
26	204	235	225	259	245	282	266	306	287	312	307	312	312	312	312	312	312	312	312	312	312	312	312	312
28	176	203	194	223	212	243	229	264	247	284	265	289	289	289	289	289	289	289	289	289	289	289	289	289
30	153	177	169	194	184	212	200	230	215	248	231	265	246	270	262	270	270	270	270	270	270	270	270	270
32	135	155	148	171	162	186	176	202	189	218	203	233	216	249	230	253	243	253	253	253	253	253	253	253
34	119	137	132	151	144	165	156	179	168	193	180	207	192	220	204	234	216	238	228	238	238	238	238	238
36	107	123	117	135	128	147	139	160	149	172	160	184	171	197	182	209	192	221	203	225	214	225	225	225
38	96	110	105	121	115	132	125	143	134	154	144	165	153	176	163	187	173	199	182	210	192	213	202	213
40	86	99	95	109	104	119	112	129	121	139	130	149	138	159	147	169	156	179	165	189	173	199	182	203
42	78	90	86	99	94	108	102	117	110	126	118	135	126	144	133	153	141	163	149	172	157	181	165	190
44	71	82	79	90	86	99	93	107	100	115	107	123	114	132	122	140	129	148	136	156	143	165	150	173
46	64	75	72	83	78	90	85	98	82	105	98	113	105	120	111	128	118	136	124	143	131	151	138	158
48	59	66	66	76	72	83	78	90	84	97	90	104	96	111	102	118	108	124	114	131	120	138	126	145
50	54	64	64	70	66	76	72	83	77	89	83	96	89	102	94	108	100	115	105	121	111	127	116	134
Depth	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68

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**Table 7F: SSW-43H** (Rep. increase of 7% allowed @ shaded areas for joist at 24" o.c. or less)  
 Note: This table represents "joist only" EI. Increases for composite EI. may misrepresent actual in-place product performance.

Depth	22		24		26		28		30		32		34		36		38		40		42		44	
	100%TL 100%LL	16%TL 12%LL	100%TL 100%LL	16%TL 12%LL	100%TL 100%LL	16%TL 12%LL	100%TL 100%LL	16%TL 12%LL	100%TL 100%LL	16%TL 12%LL	100%TL 100%LL	16%TL 12%LL	100%TL 100%LL	16%TL 12%LL	100%TL 100%LL	16%TL 12%LL	100%TL 100%LL	16%TL 12%LL	100%TL 100%LL	16%TL 12%LL	100%TL 100%LL	16%TL 12%LL	100%TL 100%LL	16%TL 12%LL
20	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405
22	341	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368
24	287	330	315	338	338	338	338	338	338	338	338	338	338	338	338	338	338	338	338	338	338	338	338	338
26	211	244	281	309	309	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312
28	166	201	232	266	253	289	274	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289
30	133	161	189	226	212	269	226	269	261	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269
32	108	131	156	192	178	220	183	220	212	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
34	89	108	122	151	142	186	151	186	175	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186
36	74	90	107	128	122	166	128	166	151	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166
38	62	76	90	106	102	137	106	137	123	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137
40	53	64	77	90	86	118	90	118	105	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118
42	46	55	66	77	72	102	77	102	90	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102
44	39	48	57	67	62	94	67	94	81	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94
46	34	41	49	58	53	86	58	86	77	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86
48	29	36	43	51	47	79	51	79	71	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79
50	24	30	37	44	40	71	44	71	64	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
52	20	26	32	39	35	61	39	61	55	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61
54	16	21	27	34	30	51	34	51	47	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
Depth	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68

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**Table 7G: SSW-44** (Rep. increase of 7% allowed @ shaded areas for joist at 24" o.c. or less)

Note: This plf table represents "joist only" E.I. Increases for composite E.I. may misrepresent actual in-place product performance.

Depth	24		26		28		30		32		34		36		38		40		42		44		46	
	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL	100 %TL	15 %TL
SPAN (FT.)	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL	100 %LL	125 %TL
24	377	432	413	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432
26	298	432	367	432	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398
28	234	398	281	398	332	398	387	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398
30	277	319	303	349	380	370	356	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370
32	188	346	225	370	266	370	310	370	358	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370
34	241	278	264	304	287	330	310	345	333	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
36	152	302	183	330	216	345	252	345	291	345	332	345	345	345	345	345	345	345	345	345	345	345	345	345
38	212	244	232	267	252	290	273	314	293	324	313	324	324	324	324	324	324	324	324	324	324	324	324	324
40	126	265	151	290	178	316	208	324	240	324	274	324	310	324	324	324	324	324	324	324	324	324	324	324
42	188	216	206	237	224	257	242	278	259	298	277	305	295	305	305	305	305	305	305	305	305	305	305	305
44	105	235	126	257	148	280	173	302	200	305	228	305	259	305	305	305	305	305	305	305	305	305	305	305
46	168	193	184	211	199	229	215	248	231	266	247	284	263	288	279	288	288	288	288	288	288	288	288	288
48	88	209	106	229	125	249	146	269	168	288	192	288	218	288	245	288	274	288	288	288	288	288	288	288
50	150	173	165	189	179	206	193	222	208	239	222	255	236	272	251	273	265	273	273	273	273	273	273	273
52	75	188	90	206	106	224	124	242	143	260	163	273	185	273	208	273	233	273	259	259	259	259	259	259
54	136	156	149	171	162	188	175	201	187	216	200	230	213	245	226	259	239	259	222	259	245	259	259	259
56	64	170	77	186	91	202	106	218	123	234	140	250	159	259	179	259	200	259	222	259	245	259	259	259
58	123	142	135	155	147	189	158	182	170	196	182	209	193	222	205	236	217	247	229	247	240	247	247	247
60	56	154	67	169	79	183	92	198	106	213	121	227	137	242	154	247	172	247	229	247	240	247	247	247
62	112	129	123	141	134	154	144	166	155	178	166	190	176	203	187	215	198	227	208	235	219	236	230	235
64	48	140	58	154	68	167	80	180	92	194	105	207	119	220	134	234	150	235	167	235	184	235	203	235
66	103	118	112	129	122	141	132	152	142	163	152	174	161	186	171	197	181	208	191	219	200	225	210	225
68	42	128	51	141	60	153	70	165	81	177	92	189	104	202	117	214	131	225	146	225	161	225	177	225
70	98	108	103	119	112	129	121	139	130	150	139	160	148	170	157	181	166	191	175	201	184	212	193	216
72	37	118	45	129	53	140	62	151	71	163	81	174	92	186	103	196	116	208	128	216	142	216	156	216
74	100	95	109	103	119	112	128	120	138	128	147	137	157	145	167	153	176	161	186	161	186	170	196	178
76	109	39	119	47	129	54	140	63	150	72	160	81	171	91	181	102	191	114	202	126	207	138	207	
78	92	88	101	96	110	103	119	111	128	119	136	126	145	134	154	142	163	149	172	157	180	164	189	
80	98	35	110	41	120	48	129	56	139	64	148	72	158	81	167	91	177	101	186	112	196	123	199	
82	86	78	94	89	102	96	110	103	118	110	126	117	136	124	143	131	151	138	159	145	167	153	175	
84	87	31	102	37	111	43	120	50	129	57	137	65	146	73	155	81	164	90	173	100	182	110	191	
86	78	87	82	95	89	102	96	110	102	118	109	125	115	133	122	140	129	148	135	156	142	163	142	163
88	78	94	33	103	39	111	45	120	51	128	58	136	65	144	73	153	81	161	89	169	98	177	98	177
90	70	81	81	75	88	83	95	88	103	95	110	101	117	108	124	114	131	120	138	126	145	132	152	
92	70	84	30	96	35	104	40	111	46	119	52	127	59	135	85	142	73	150	80	158	88	165	88	165

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**Table 7H: SSW-44H** (Rep. increase of 7% allowed @ shaded areas for joist at 24" o.c. or less)  
 Note: This pfl table represents "joist only" EI. Increases for composite EI. may misrepresent actual in-place product performance.

Depth	24		26		28		30		32		34		36		38		40		42		44		46	
	100%TL 100%LL	15%TL 12.5%TL	100%TL 100%LL	15%TL 12.5%TL	100%TL 100%LL	15%TL 12.5%TL	100%TL 100%LL	15%TL 12.5%TL	100%TL 100%LL	15%TL 12.5%TL	100%TL 100%LL	15%TL 12.5%TL	100%TL 100%LL	15%TL 12.5%TL	100%TL 100%LL	15%TL 12.5%TL	100%TL 100%LL	15%TL 12.5%TL	100%TL 100%LL	15%TL 12.5%TL	100%TL 100%LL	15%TL 12.5%TL	100%TL 100%LL	15%TL 12.5%TL
24	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432
26	384	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398
28	331	370	363	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370
30	288	332	316	345	343	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
32	175	345	210	345	248	345	290	345	334	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
34	253	291	278	319	302	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324
36	144	317	173	324	205	324	239	324	275	324	315	324	324	324	324	324	324	324	324	324	324	324	324	324
38	224	258	246	283	267	305	289	305	305	305	305	305	305	305	305	305	305	305	305	305	305	305	305	305
40	120	281	144	305	171	305	199	305	230	305	262	305	297	305	297	305	305	305	305	305	305	305	305	305
42	200	230	219	252	238	274	267	288	277	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
44	101	250	122	274	144	288	168	288	193	288	221	288	251	288	282	288	288	288	288	288	288	288	288	288
46	180	207	197	226	214	246	231	266	248	273	265	273	273	273	273	273	273	273	273	273	273	273	273	273
48	86	225	103	246	122	267	143	273	165	273	188	273	213	273	240	273	240	273	268	273	268	273	273	273
50	162	187	178	204	193	222	209	240	224	258	239	259	255	259	259	259	259	259	259	259	259	259	259	259
52	74	203	89	222	105	241	122	259	141	259	161	259	183	259	205	259	205	259	230	259	255	259	259	259
54	147	169	161	185	175	201	189	218	203	234	217	247	231	247	245	247	245	247	247	247	247	247	247	247
56	64	184	77	201	91	219	106	236	122	247	139	247	158	247	177	247	177	247	198	247	220	247	244	247
58	134	154	147	169	160	184	172	198	185	213	198	228	211	236	223	236	223	236	236	236	236	236	236	236
60	56	168	67	184	79	199	92	215	106	231	121	235	137	235	154	235	154	235	172	235	192	235	235	235
62	122	141	134	154	146	168	158	181	169	195	181	208	198	222	204	225	204	225	216	225	225	225	225	225
64	49	153	58	168	69	182	80	197	93	212	106	225	120	225	135	225	135	225	151	225	168	225	185	225
66	107	130	123	142	134	154	145	167	156	179	166	191	177	204	188	216	188	216	198	216	209	216	216	216
68	43	141	51	154	61	168	71	181	82	194	93	208	106	216	119	216	119	216	133	216	148	216	163	216
70	119	114	131	124	142	133	153	143	165	153	176	163	188	173	199	183	207	193	207	193	207	203	207	207
72	126	45	142	54	154	63	167	72	179	83	192	94	204	105	207	118	207	118	207	131	207	144	207	159
74	110	101	121	114	131	123	142	133	152	142	163	151	173	160	184	169	194	178	199	187	199	187	199	199
76	112	40	131	48	143	56	154	64	166	73	177	83	189	94	199	105	199	116	199	128	199	128	199	141
78	100	90	112	106	122	114	132	123	141	131	151	140	161	148	171	157	180	165	190	174	192	174	192	182
80	100	36	120	43	132	50	143	57	154	66	164	74	175	84	185	93	192	104	192	115	192	115	192	126
82	90	90	104	95	113	106	122	114	131	122	140	130	150	138	159	146	168	154	177	162	185	162	185	169
84	90	90	108	38	123	45	133	51	143	59	153	67	163	75	172	84	182	93	185	103	185	103	185	113
86	81	81	97	86	106	99	114	107	123	114	131	121	139	129	148	136	156	143	165	151	173	158	173	158
88	81	81	97	34	115	40	124	46	133	53	142	60	152	67	161	75	170	84	179	92	179	92	179	102

For more information, contact the Standard Structures, Inc. Design Assistance Department toll free at 1-877-980-7732 (SPEC) or visit our website at

<http://www.ssispec.com>

For Usage and General Notes see Page 16

## USAGE AND GENERAL NOTES FOR SSW TRUSS LOAD TABLES

- Straight line interpolations may be made between depths and spans.
- TL values shown are maximum allowable load capacities of the trusses in pound per lineal foot (PLF) based on:
  - Simple span, uniformly loaded conditions, and assume roof applications have provisions for positive drainage (1/4" per foot minimum).
  - Span is the horizontal Clear Span in feet plus two inches.
- SSW Joist will be custom designed to loads specified for the project.
- The table may be used for bottom chord bearing and/or for cantilevers at both or either ends which do not exceed 1/3 of the main span length.
- TL values for SSW Joists are based on minimum bearings of 2 inches, holding a maximum distance of 1/2 inch from the face of the support to the centerline of the pin.
- All TL values within this table that are shaded may be increased 7% for repetitive member usage if the criteria therein are met.
- Self weight of member is assumed to be included in the allowable uniform load.

**Sizing floor trusses:**

- Check both live load (100%) and total load (100%TL). When live load is not shown, total load will control. Total load values limit deflection to L/240. Live load values are based on a floor deflection limit of L/600 using solely the EI of the joist. For live load deflections of L/360, L/480 multiply 100% LL value by 1.33 or 1.25 respectively.
- Where both the 100% TL and the 100% LL values are not shown it is the position of Standard Structures, Inc that dynamic characteristics of the floor will control the design. Based on more than a half century of providing engineered wood products we feel that specifying floor joist members with a depth to span ratio beyond those noted may result in a floor with an unacceptable feel. Call the Design Assistance Department at toll free 1-877-980-SPEC for a subjective evaluation of floor dynamic characteristics prior to specifying floor joists beyond those depth to span ratios listed.

**Sizing roof trusses:**

- Check the appropriate snow load area (115%) or non-snow load area (125%) value to determine the maximum allowable total load. Total load (115% TL and 125% TL) values limit truss deflection to L/180.

**Sizing tapered and pitched trusses:**

- The minimum end depths for SSW 42, SSW 42H, SSW 62, and SSW 62H is 14" at low end and maximum depth of 50" at high end. The minimum end depths for SSW 43, SSW 43H, SSW 44, SSW 44H is 16" at low end and maximum depth of 64" at high end."
- FOR PITCHED---The minimum end depths for SSW 42, SSW 42H, SSW 62, SSW 62H is 14" and the maximum ridge depth is 50". The minimum end depth for SSW 43, SSW 43H, SSW 44, SSW 44H is 16" and the maximum ridge depth is 64".
- Using the Equivalent Depth Table, find the shallow end depth and the centerline depth desired. The box at the intersection of end and centerline depths contains the minimum depth (Equivalent Depth) of a parallel chord truss that would carry the same load as the pitched truss being checked.
- At the load table find the maximum load at the intersection of the truss Span and the Equivalent Depth (depth).

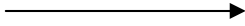
**For exact load capacity refer to the SSI Sizer program or the section properties in ICC-ES-ESR-5803.**

		Table 8: Equivalent Depth Table																		
		Centerline Depth (Inches)																		
		18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
End Depth (Inches)	14	17	19	21	22	24	26	27	29	30	32	33	34	36	37	39	40	42	43	44
	16	17	19	21	23	24	26	28	29	31	32	34	35	37	38	40	41	43	44	46
	18	18	19	21	23	25	27	28	30	31	33	35	36	38	39	41	42	44	45	46
	20		20	22	23	25	27	29	30	32	34	35	37	38	40	41	43	44	46	47
	22			22	24	25	27	29	31	32	34	36	37	39	40	42	44	45	47	48
	24				24	26	27	29	31	33	34	36	38	39	41	43	44	46	47	49
	26					26	28	29	31	33	35	37	38	40	42	43	45	47	48	50
	28						28	30	31	33	35	37	39	40	42	44	45	47	49	50
	30							30	32	33	35	37	39	41	42	44	46	47	49	51
	32								32	34	35	37	39	41	43	44	46	48	49	51
	34									34	36	37	39	41	43	45	46	48	50	52
	36										36	38	39	41	43	45	47	49	50	52
	38											38	40	41	43	45	47	49	51	52
40												40	41	43	45	47	49	51	53	



### Proof Loader

The Proof-Load machine tests every flange (chord) for fingerjoint and lumber quality on all 43 and 44 MSR material. Proof loading is per ANSI 190.1.



### Tension Tester

The tension tester is an inline proof-loading machine that tests every flange (chord) for fingerjoint and lumber quality on all 42 MSR material 68' in length or less.



**Typical Top Chord Bearing Detail  
A1 Bearing Clip**

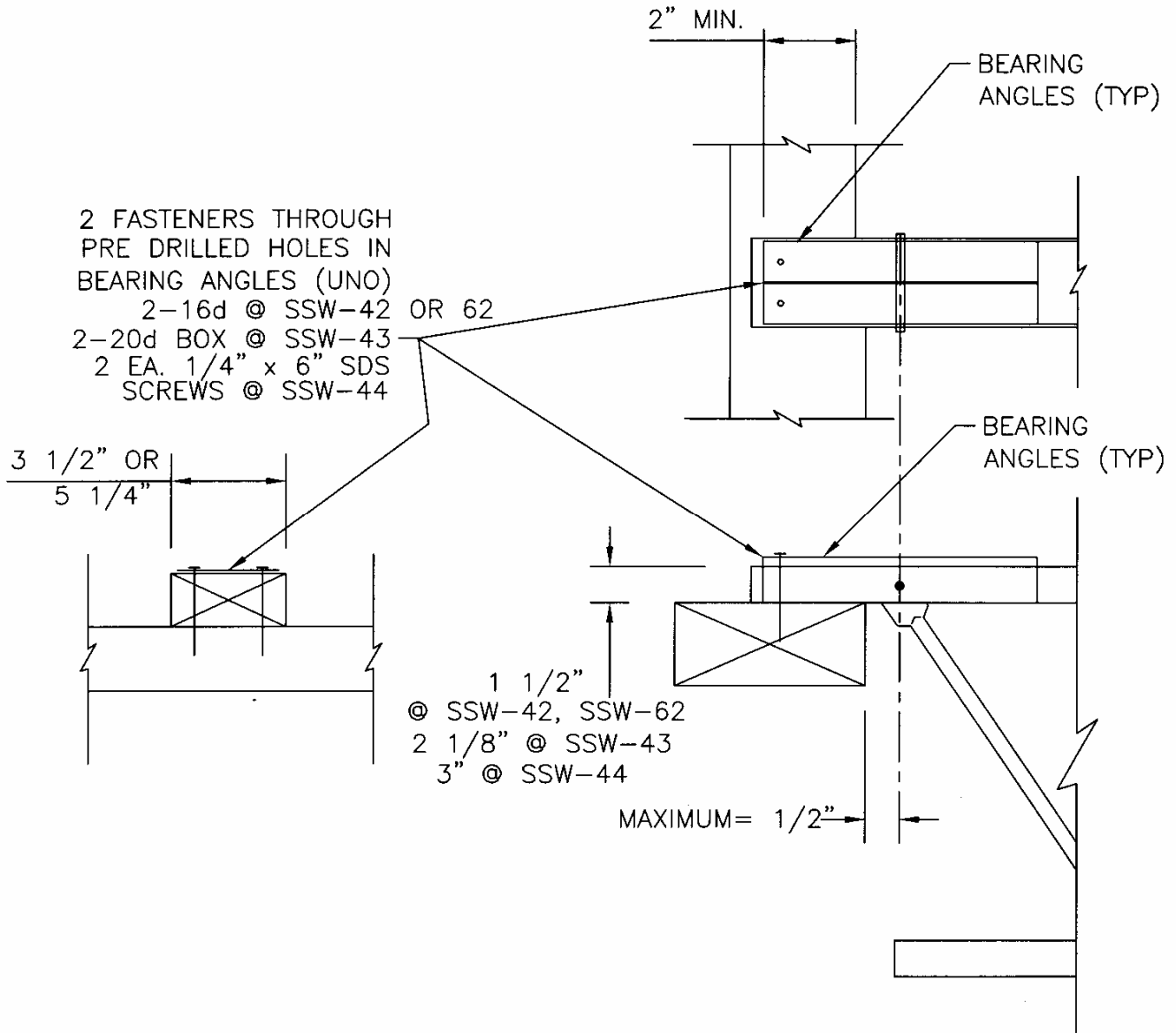


Table 9: Allowable End Reaction (lbs)				
Clip Style	SSW-42/42H	SSW-62/62H	SSW-43/43H	SSW-44/44H
Top Chord Bearing (A1)	2640	2940	3980	5180
Bottom Chord Bearing (A1)	3390	Pending	Pending	Pending

For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N

**Typical Top Chord Bearing Detail**  
**A3 Bearing Clip**

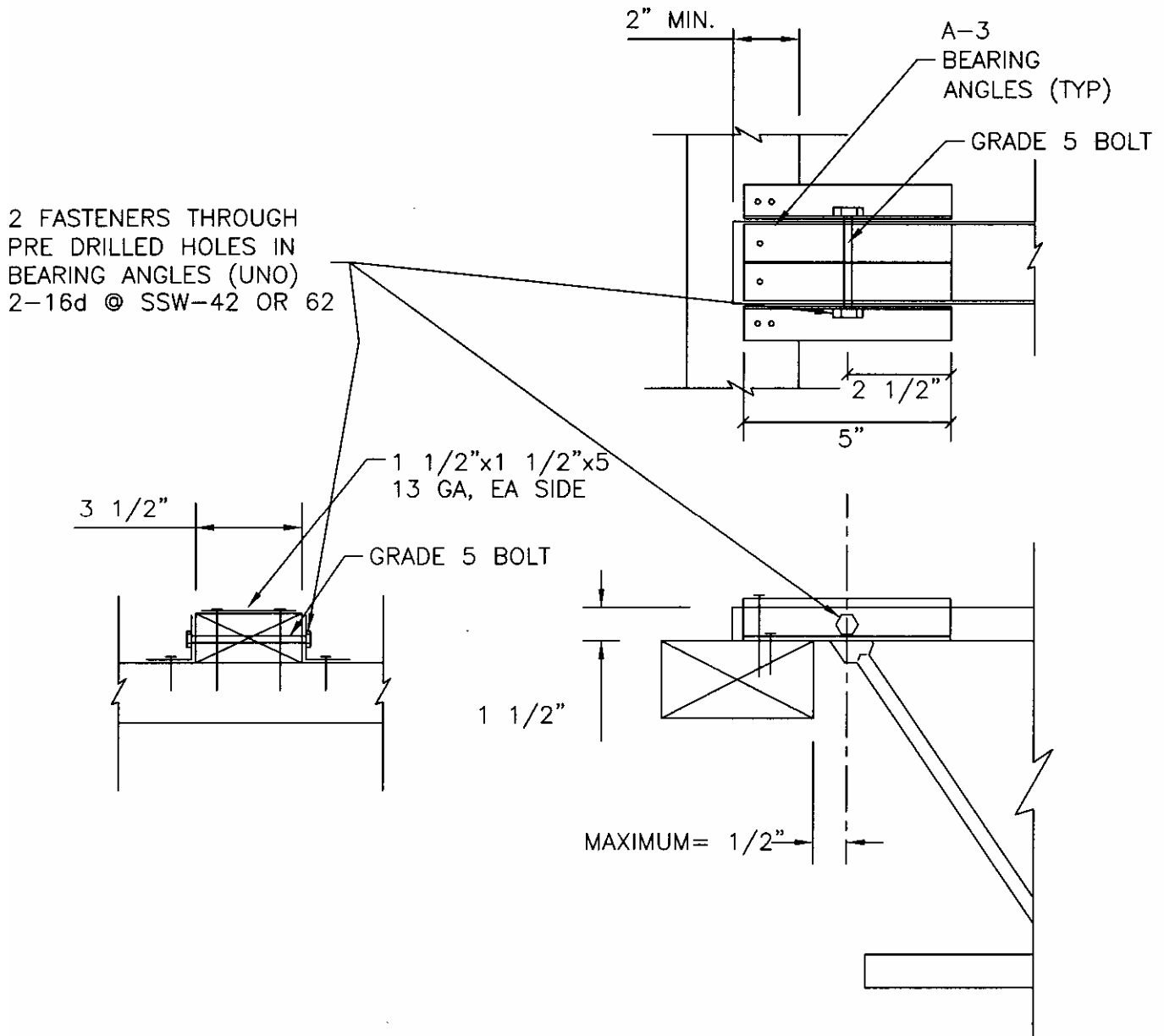
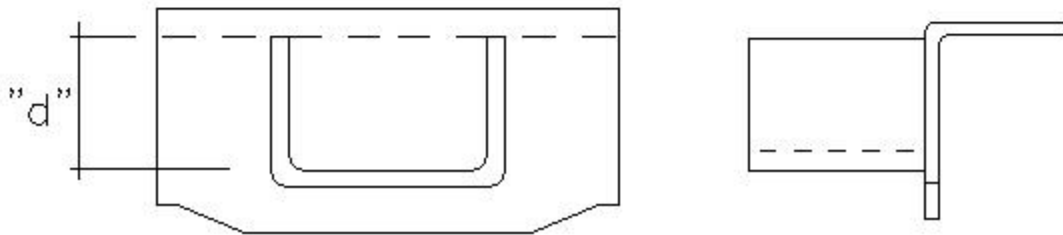
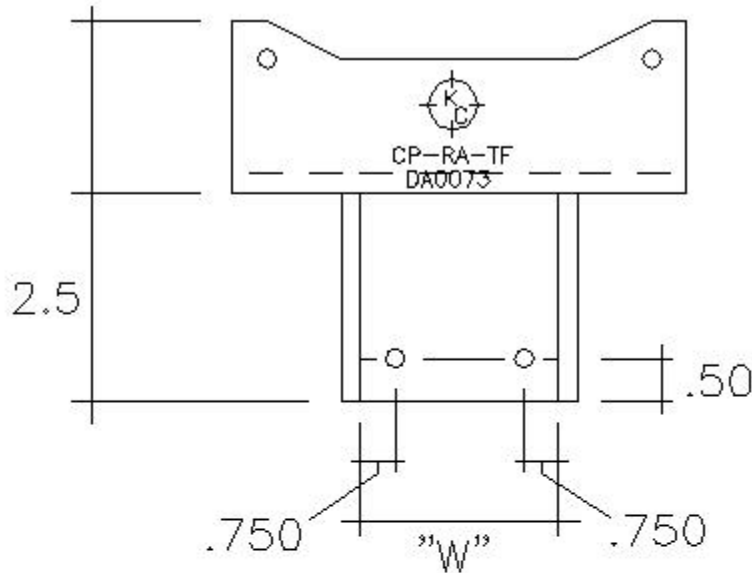


Table 10: Allowable End Reaction (lbs)				
Clip Style	SSW-42/42H	SSW-62/62H	SSW-43/43H	SSW-44/44H
Winged Clips (A3)	2920	Pending	Pending	Pending

For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N

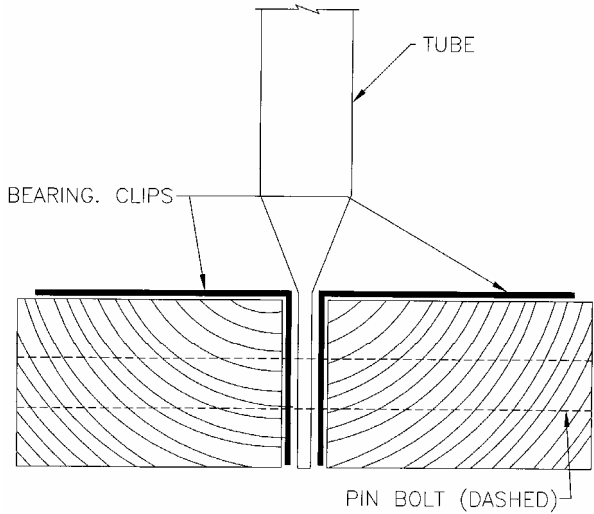
**Typical Top Chord Bearing Detail**  
**Flush Mount Hanger**



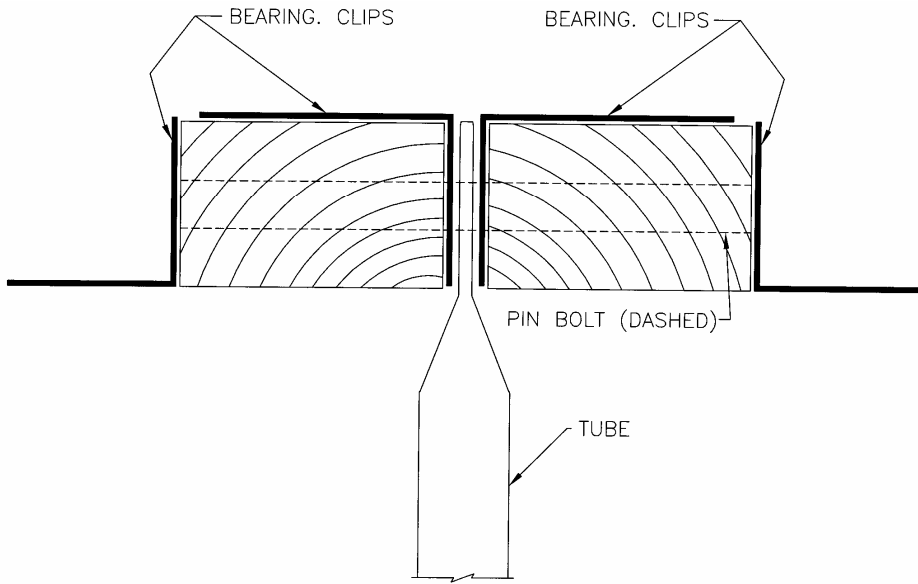
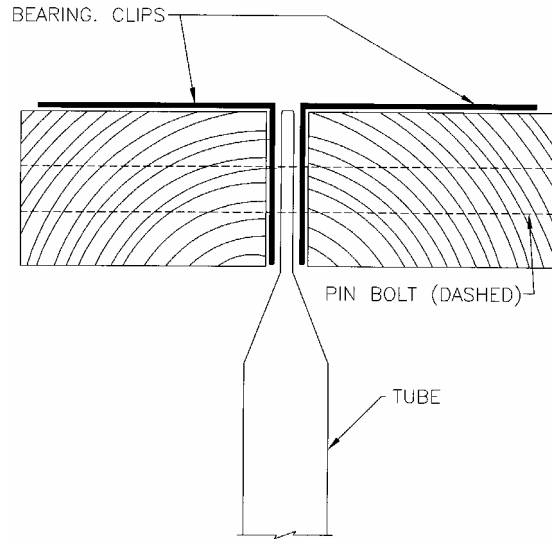
<b>Table 11:</b>			
<b>Hanger Dimensions</b>			
<b>Model</b>	<b>Depth</b>	<b>Width</b>	<b>Load</b>
42	1.5 in.	3.56 in.	2795 lbs
62	1.5 in.	5.35 in.	
43	2.125 in.	3.56 in.	3684 lbs
44	3 in.	3.56 in.	

**BEARING CLIP CONFIGURATION END VIEWS**  
 Drawings are not to scale SSW-42 shown

Clip Quantity=2



Clip Quantity=2



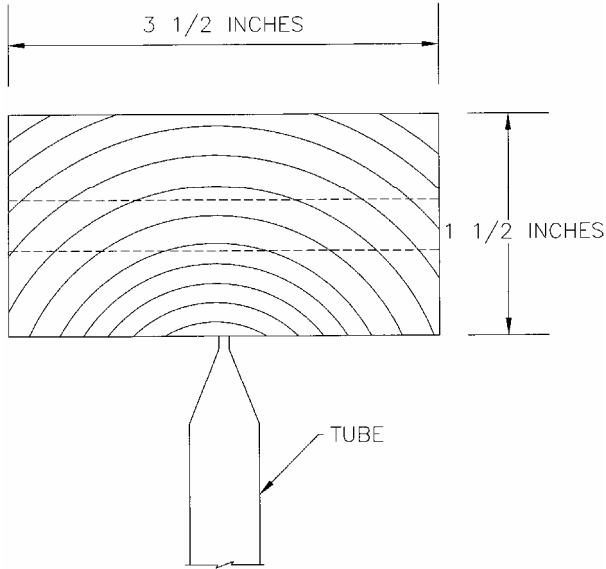
Clip Quantity=4

<b>Table 12:</b>	
<b>SSW WEB TUBES</b>	
1.000"-O.D.	19 Ga.
1.000"-O.D.	18 Ga.
1.000"-O.D.	16 Ga.
1.000"-O.D.	14 Ga.
1.125"-O.D.	13 Ga.
1.500"-O.D.	13 Ga.
2.000"-O.D.	13 Ga.

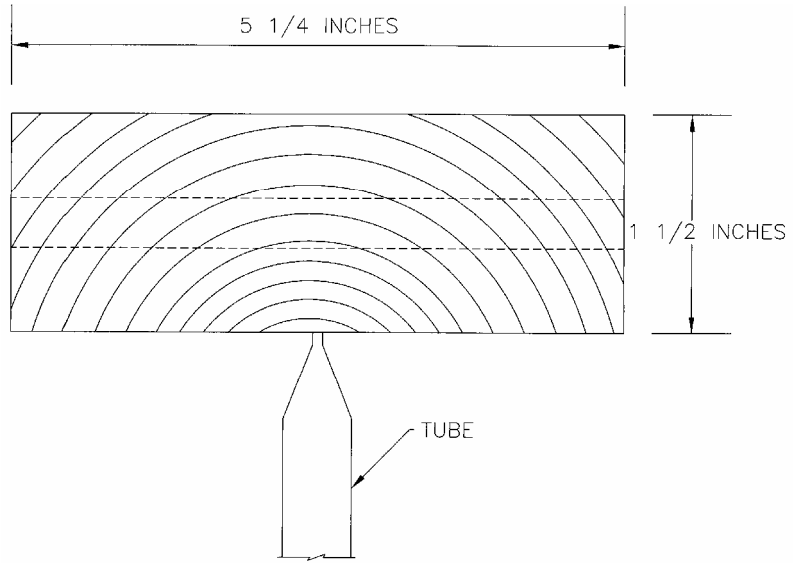
**FLANGE TYPES ( END VIEWS )**

Drawings are not to scale  
 Flanges are either MSR 2400 Spruce Pine Fir or MSR 2850 Douglas Fir

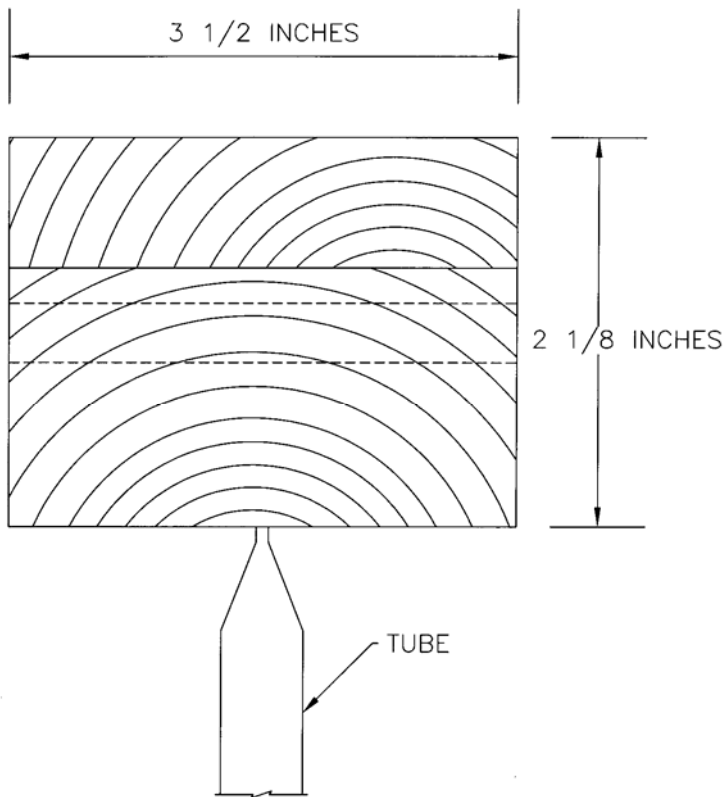
**SSW-42, SSW-42H**  
 Solid Sawn or Finger-jointed MSR Lumber



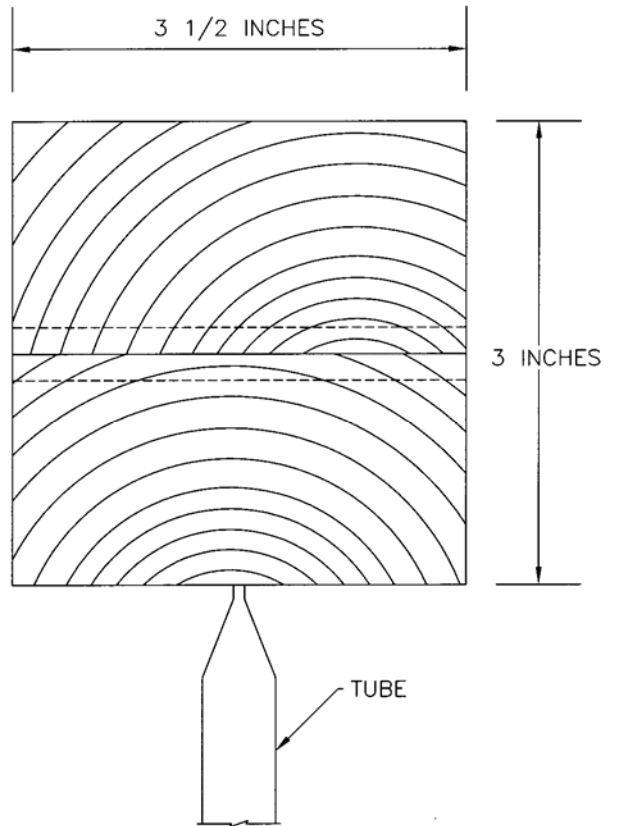
**SSW-62, SSW-62H**  
 Solid Sawn or Finger-jointed MSR Lumber



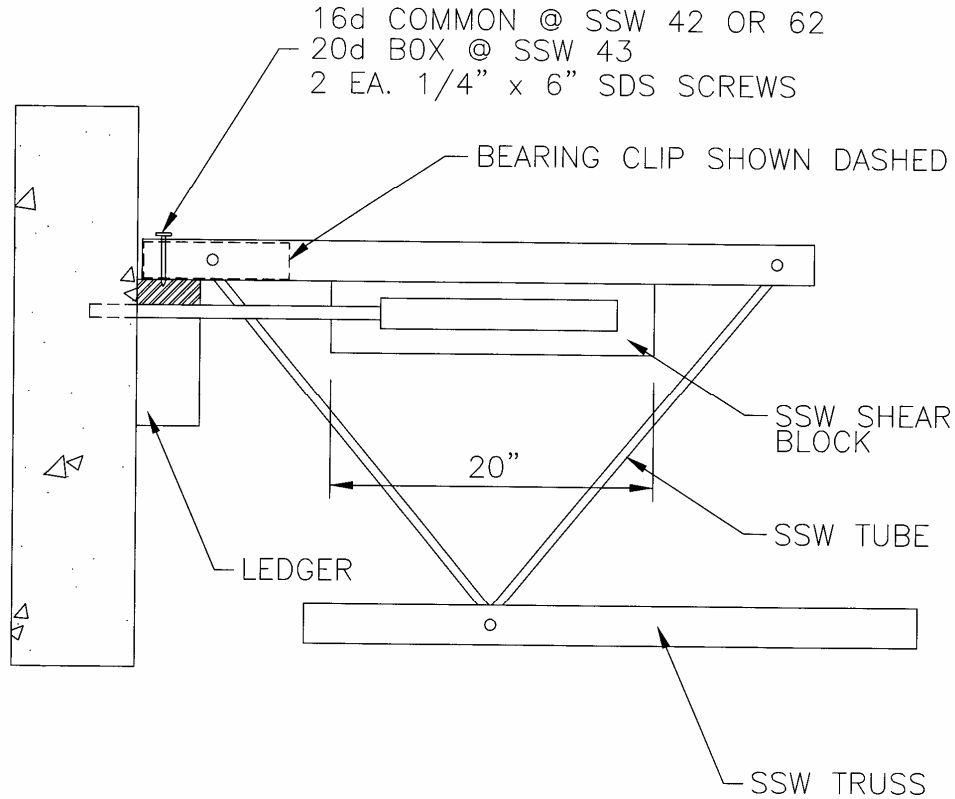
**SSW-43, SSW-43H & SSW-42B, SSW-42BH**  
 Finger-jointed & Laminated MSR Lumber



**SSW-44, SSW-44H**  
 Finger-jointed & Laminated MSR Lumber



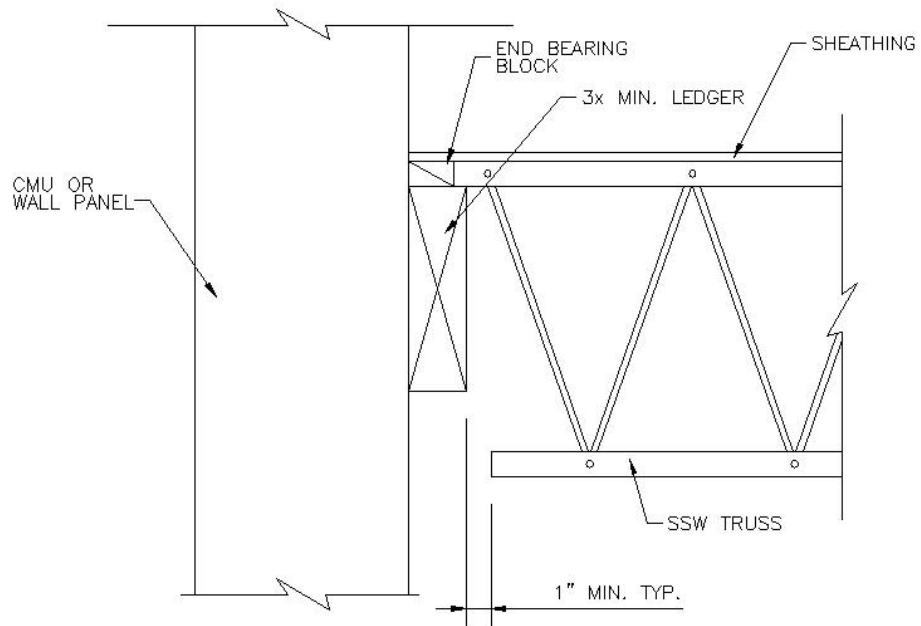
**Lateral Load Detail**



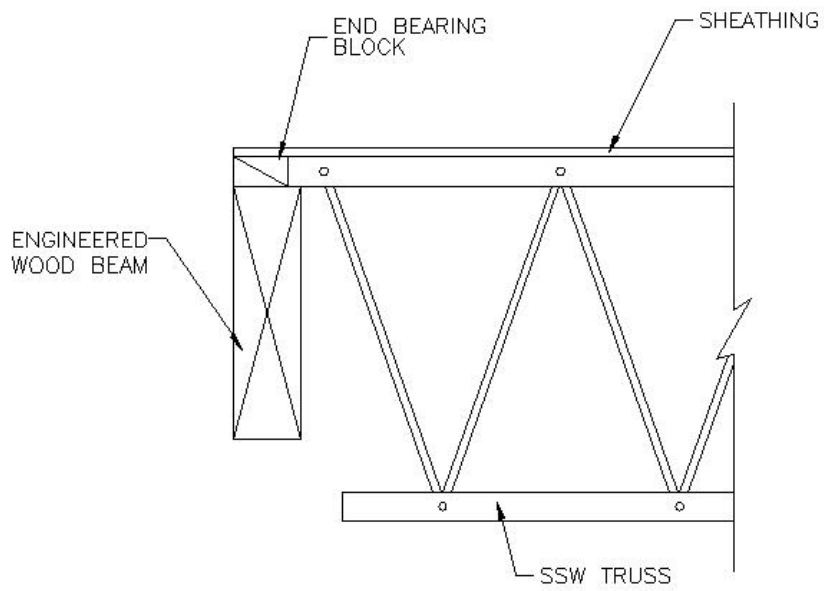
**Table 13: SSW Lateral Load Capacity <sup>(1)</sup>**

Truss	Connection	Load	Clip
42/62	2 ea. - 16d Common	282 lbs.	A1
42/62	4 ea. - 1/4" x 3 1/2" SDS Screws	1280 lbs.	A1 (4x Minimum Bearing)
42/62	2 ea. - 16d Common with Holddown <sup>(2)</sup>	2090 lbs.	A1 w/ Glued Holddown Block
42/62	6 ea. - 1/4" x 3 1/2" SDS Screws	1920 lbs.	A1 (4x Minimum Bearing)
43	2 ea. - 20d Common	340 lbs.	A1
43	4 ea. - 1/4" x 6" SDS Screws	1280 lbs.	A1 (4x Minimum Bearing)
43	2 ea. - 20d Common with Holddown	3890 lbs.	A1 w/ Glued Holddown Block
43	6 ea. - 1/4" x 6" SDS Screws	1920 lbs.	A1 (4x Minimum Bearing)
44	2 ea. - 1/4" x 6" SDS Screws	690 lbs.	A1
44	4 ea. - 1/4" x 6" SDS Screws	1275 lbs.	A1
44	2ea. - 1/4" x 6" SDS Screws w/ Holddown	6815 lbs.	A1 w/ Glued Holddown Block
42/43/44	4 ea. - 16d Common <sup>(3)</sup>	720 lbs.	A3
42/43/44	4 ea. - 1/4" x 2 1/2" SDS Screws	2500 lbs.	A3
42/43/44	6 ea. - 1/4" x 2 1/2" SDS Screws	3000 lbs.	A3

### SSW Truss at wall panel with Ledger

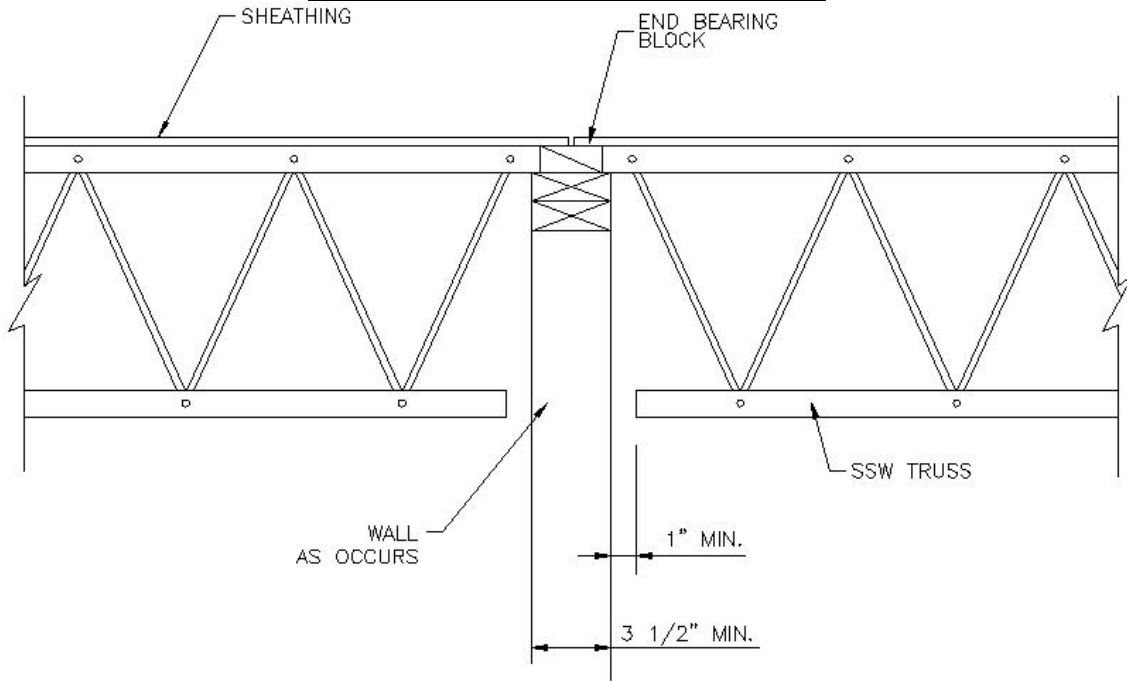


### SSW Truss on Engineered Wood Beam

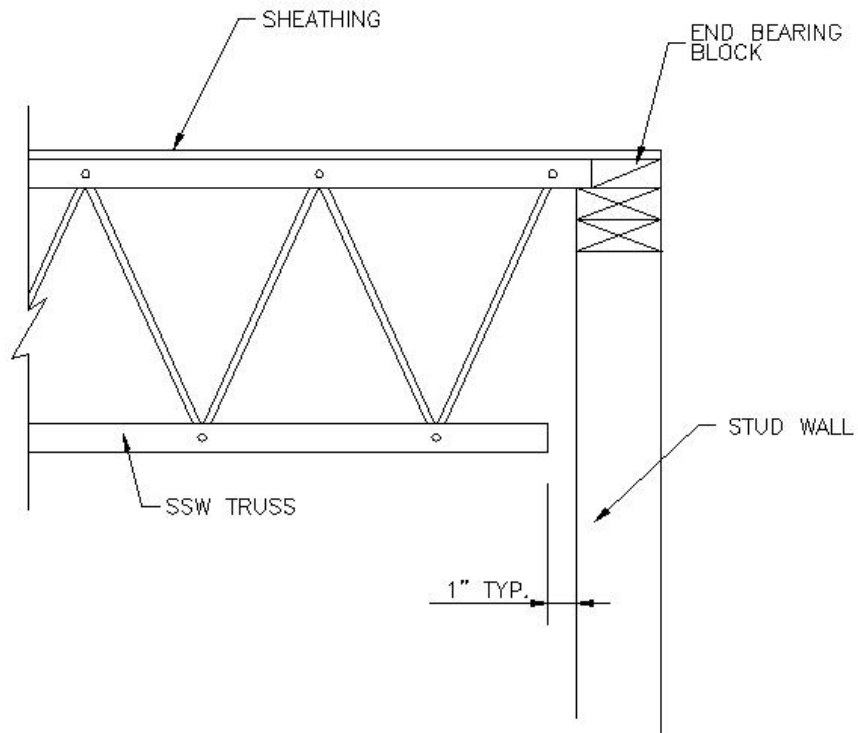




**SSW Truss each side of Stud Wall**

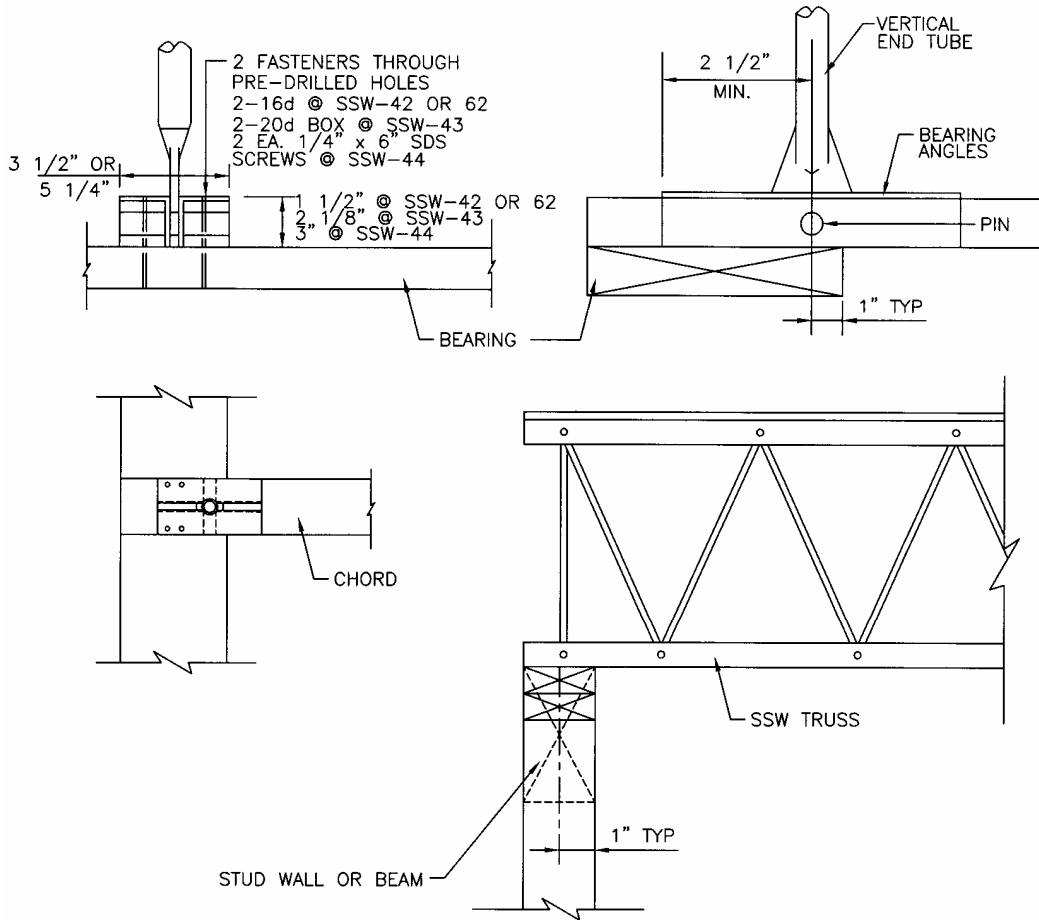


**SSW Truss at Stud Wall on top plate**

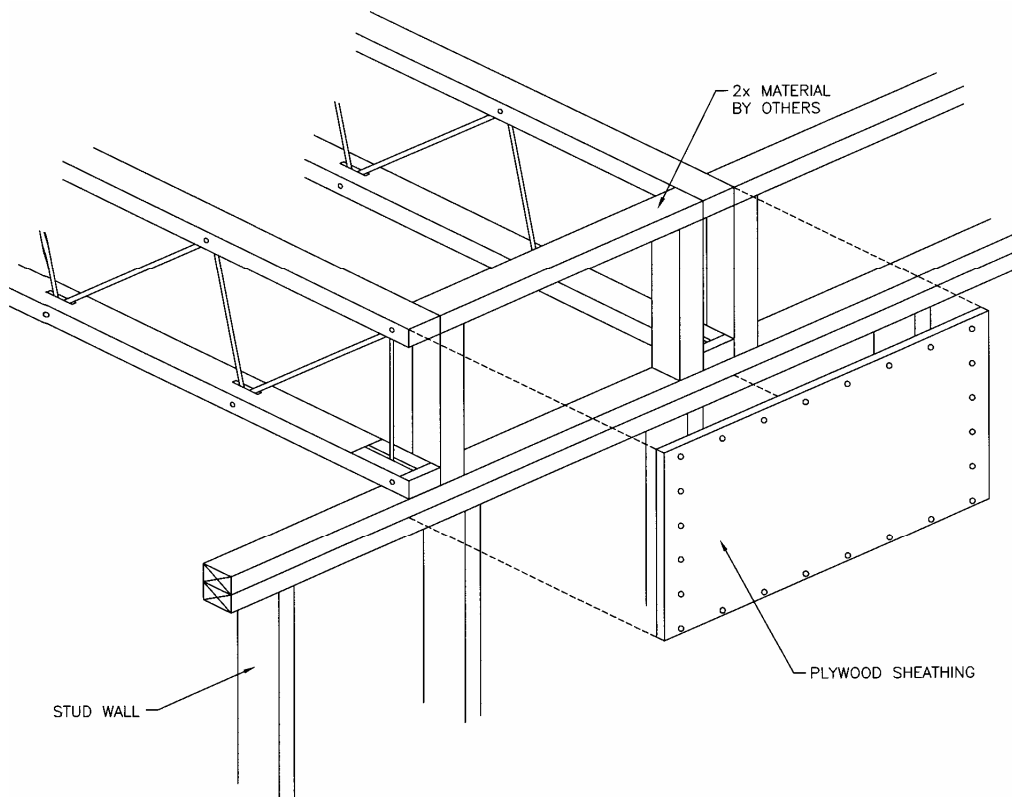


**Typical Bottom Chord Bearing**

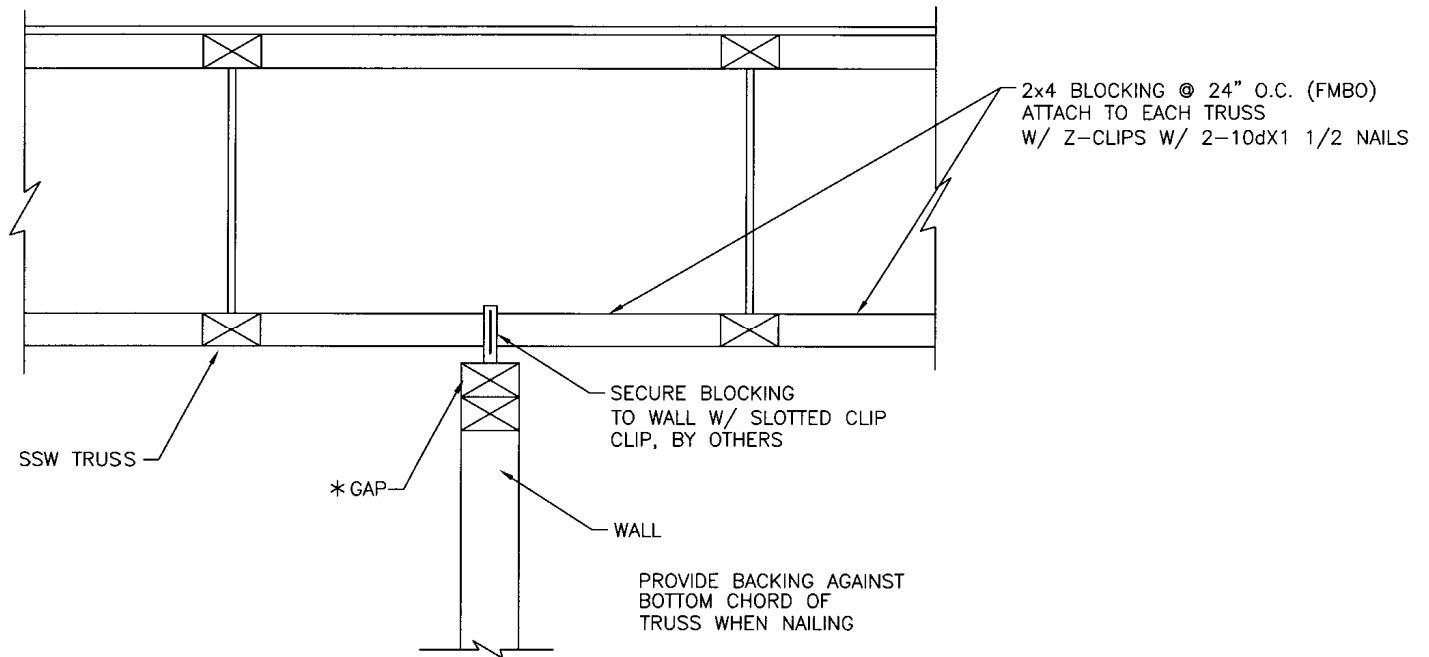
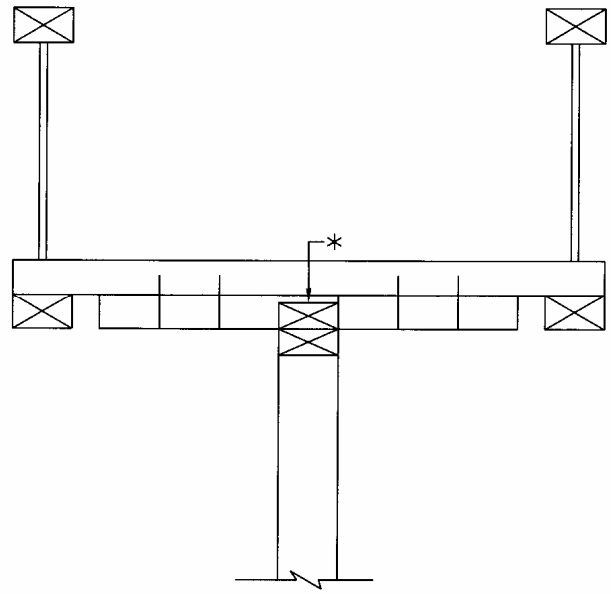
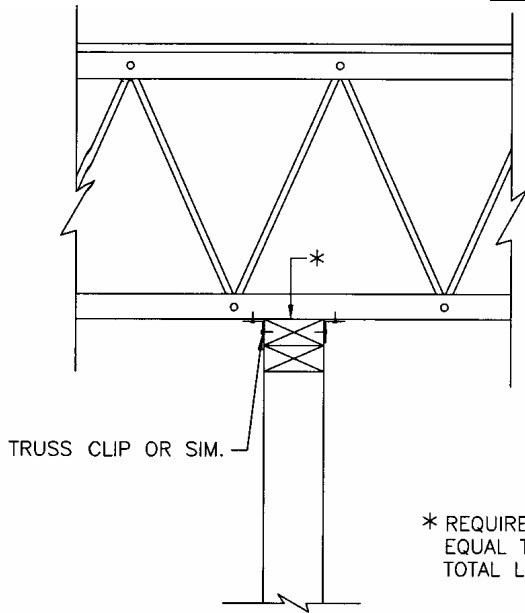
See Page 18 for End Reactions



**Shear Blocking**



**Non-Bearing Partitions**



### Skewed Wall

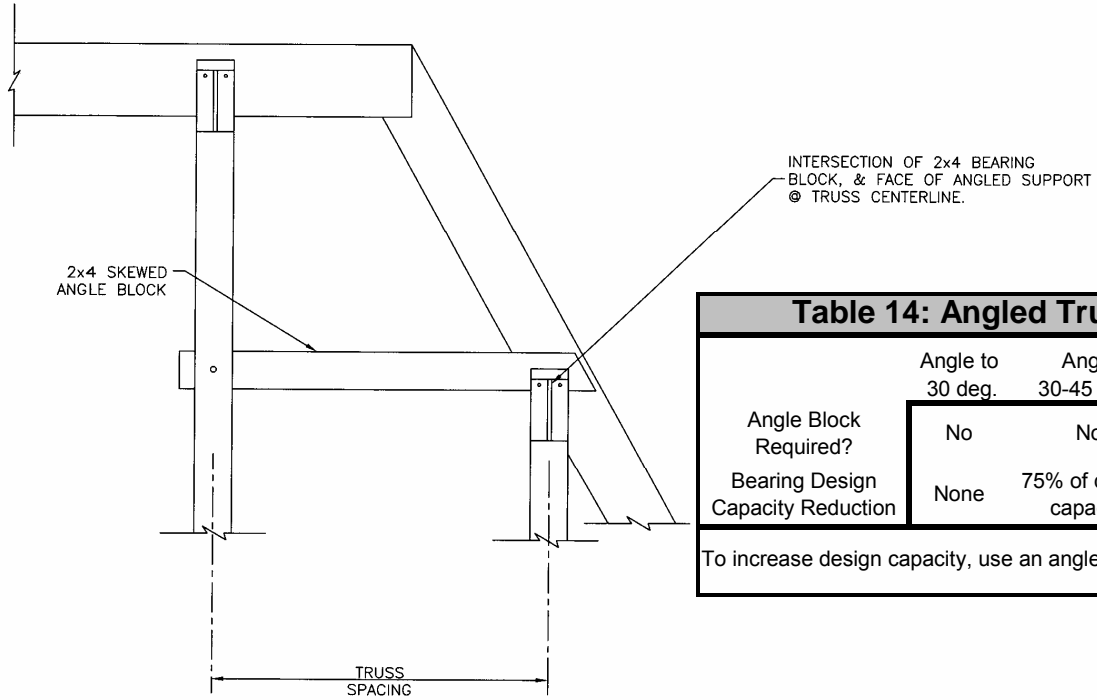
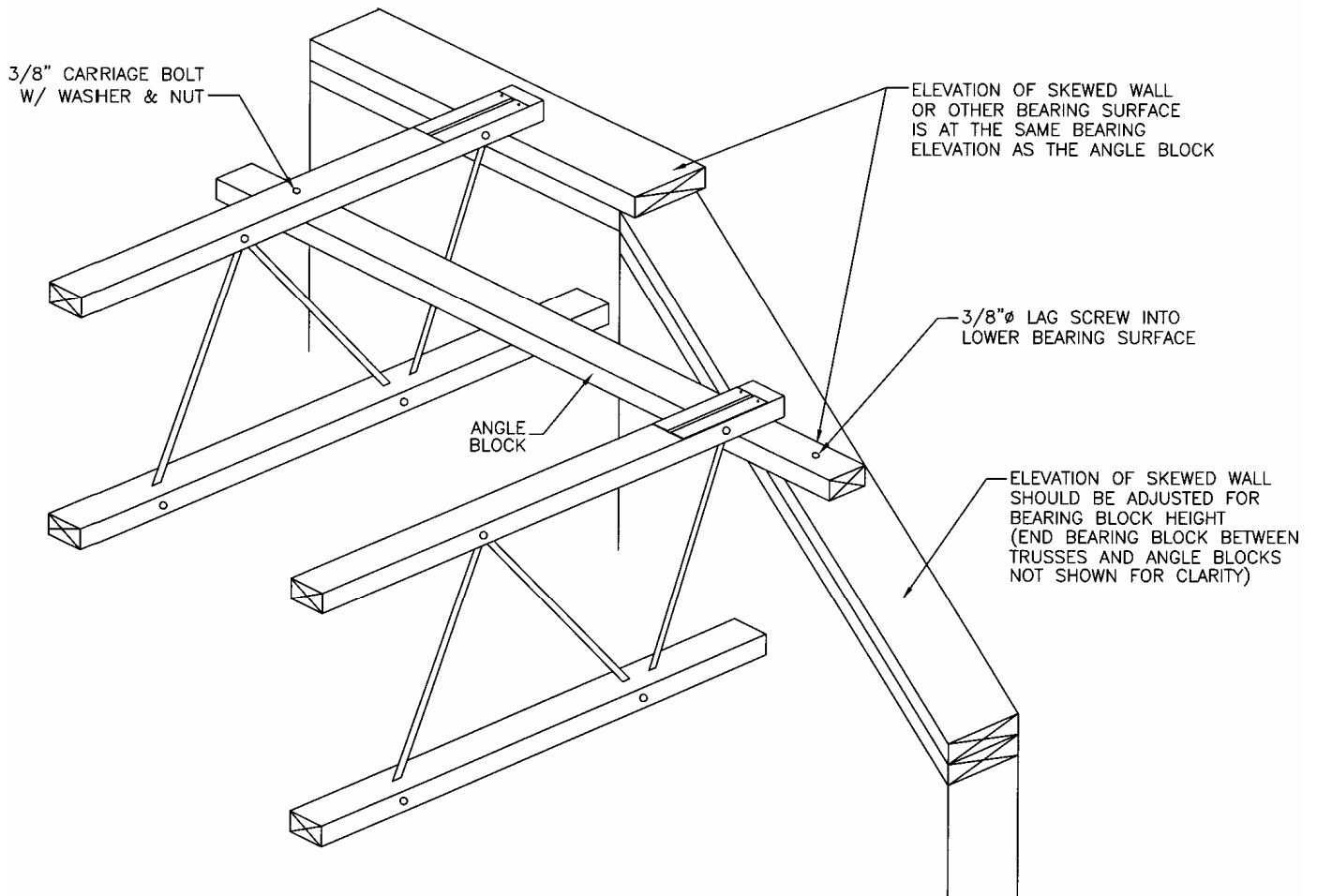


Table 14: Angled Truss Bearing			
	Angle to 30 deg.	Angle 30-45 deg.	Angle < 45 deg.
Angle Block Required?	No	No	Yes
Bearing Design Capacity Reduction	None	75% of design capacity	100% of design capacity

To increase design capacity, use an angle block at skewed bearing.

### Bearing at Skewed Wall or Beam



### BEVELED PLATE REQUIREMENTS FOR SSW SERIES OPEN WEB JOISTS

Table 15: Beveled Plate for Top Chord					
TOP CHORD		Slope at which plate must be beveled based on minimum end dimension "X"			
Bearing Conditions		X = 2 1/2"	X = 3 "	X = 3 1/2"	X = 4"
SSW-42, SSW-43	Low End	> 1/2	> 3/8	> 5/16	> 1/4
	High End	> 1/2	> 1/2	> 1/2	> 1/2

Beveled plate to suit slope is required at all cantilevered bearings.

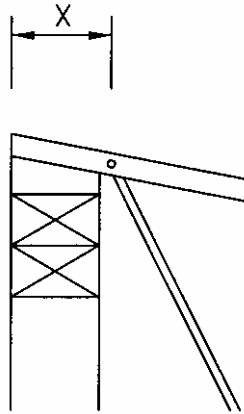
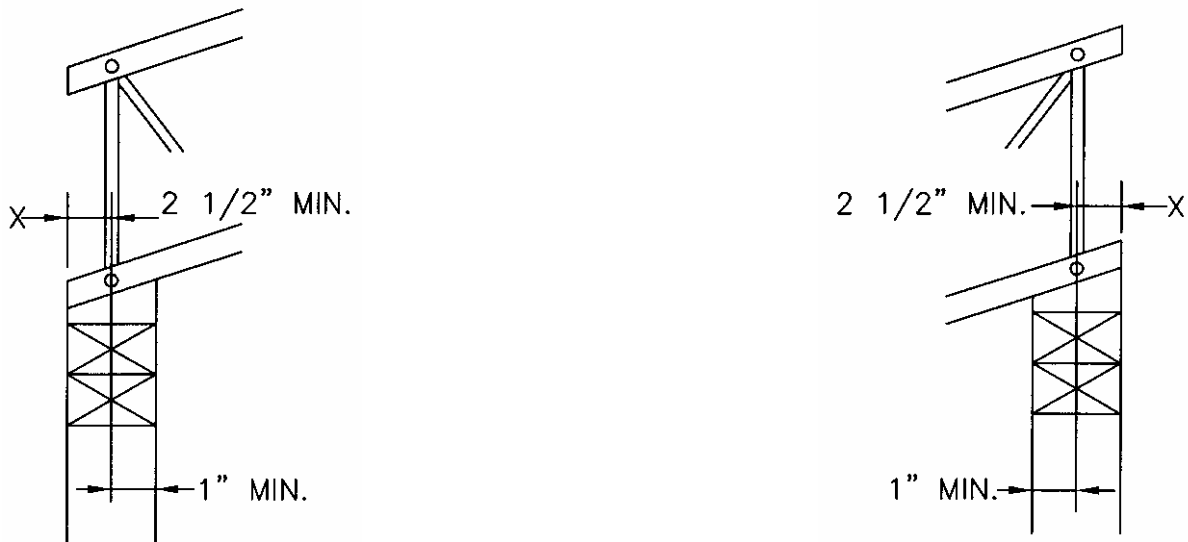
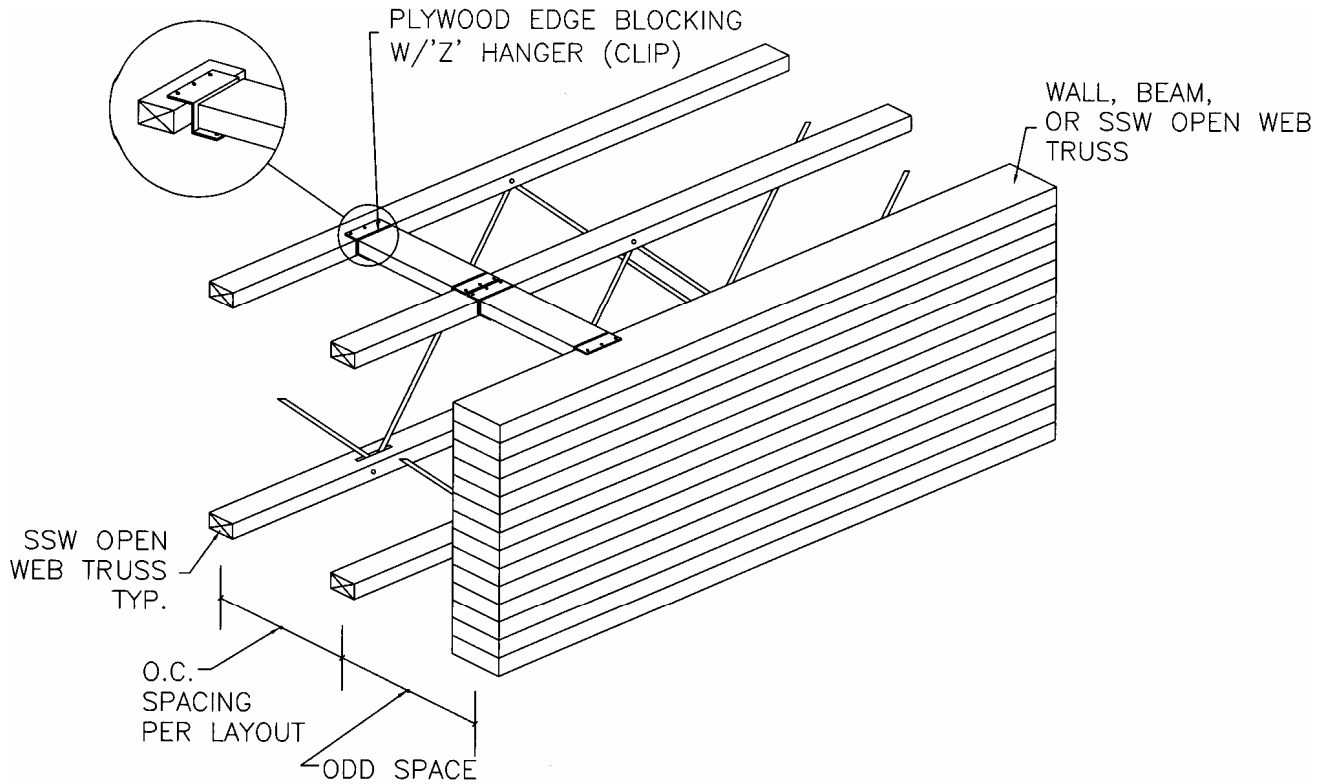


Table 16: Beveled Plate for Bottom Chord						
BOTTOM CHORD		Slope at which plate must be beveled based on minimum end dimension "X"				
Bearing Conditions		X = 1"	X = 2 "	X = 3 "	X = 4"	X = 5"
SSW-42, SSW-43	Low End	-	> 1/4	> 1/4	> 3/16	> 1/8
	High End	> 1/2	> 5/16	> 1/4	> 3/16	> 1/8

Beveled plate to suit slope is required at all cantilevered bearings.



**Edge Blocking**

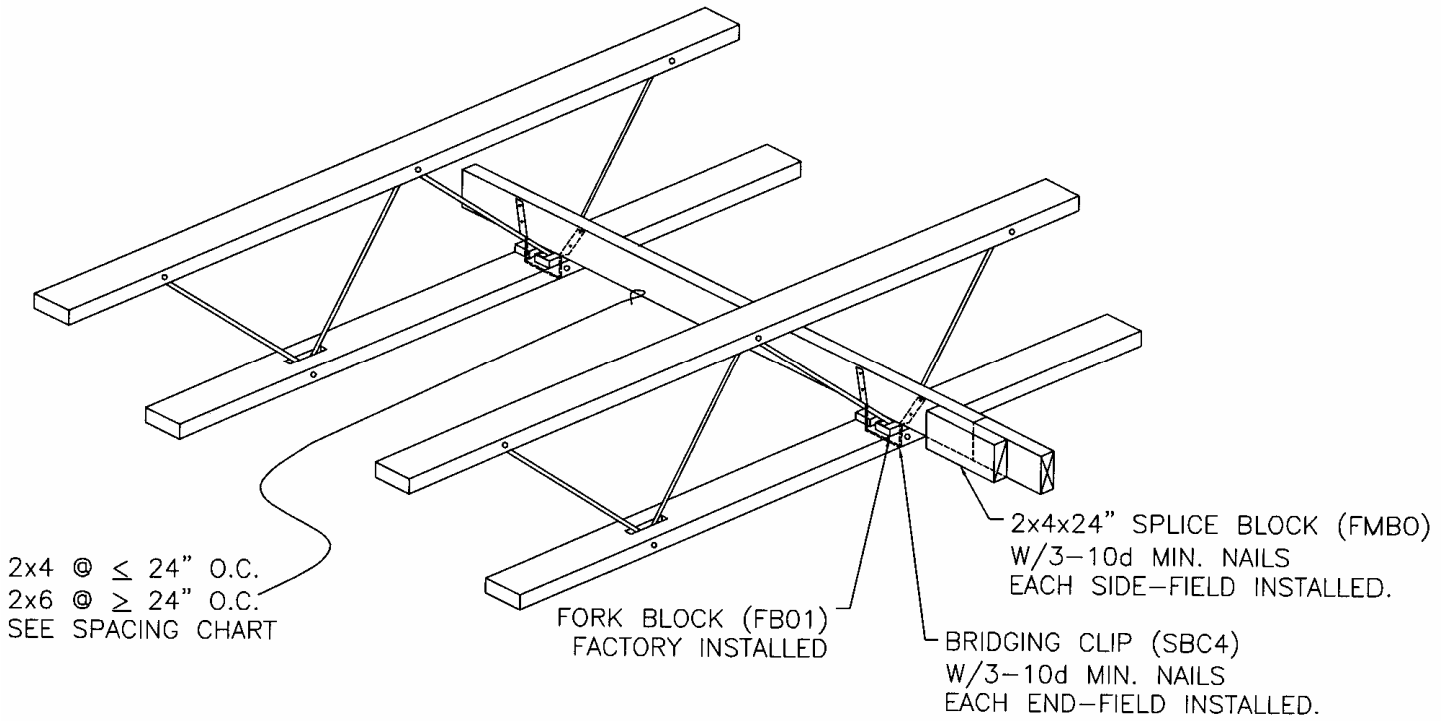


PLYWOOD EDGE BLOCKING WITH Z CLIPS IS AVAILABLE FROM THE MANUFACTURER

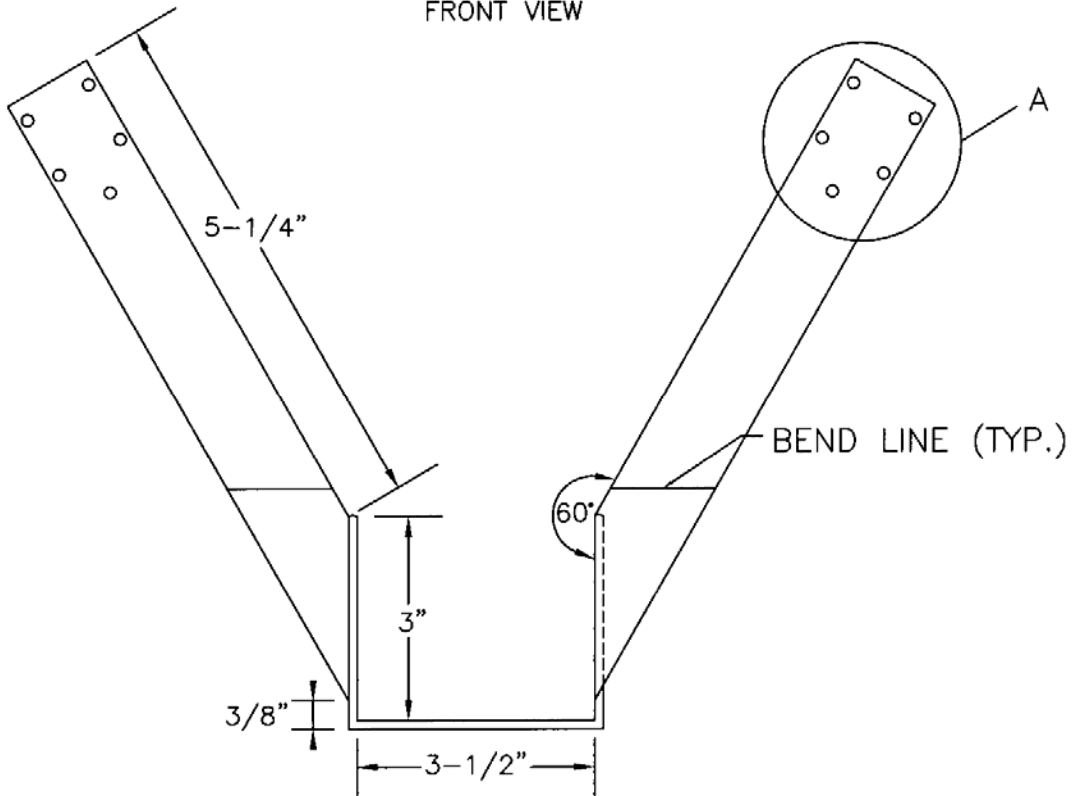
Table 17: "Z" Hangers (clips)										
KC STK No	Ref No	Material	Dimensions (inches)				Nail Schedule		Design Load	
			B	W	H	TF	Blocking	Joist		
ZH241	Z4	12 ga gal	2	1 1/2	3	7/16	1 3/8	1-16d	1-16d	545
ZH3428	Z38	28 ga gal	1 3/8	2 5/16	2	9/16	1 3/8	Staple	Staple	--
ZH44	Z44	12 ga gal	2	2 3/8	3	9/16	1 3/8	2-10d	2-10d	415

Plywood Edge Blocking with 'Z' hangers are available from SSI.

**Strong Back Bridging Detail**

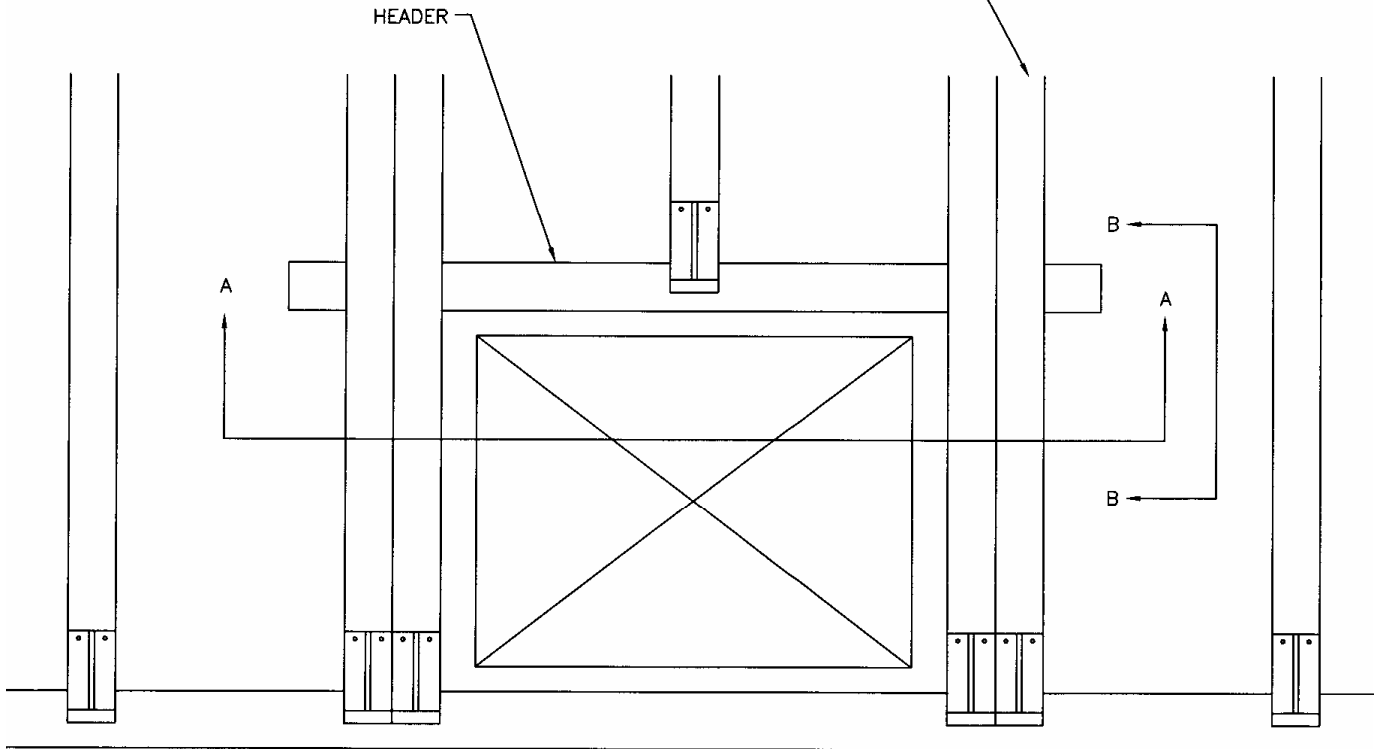


FRONT VIEW

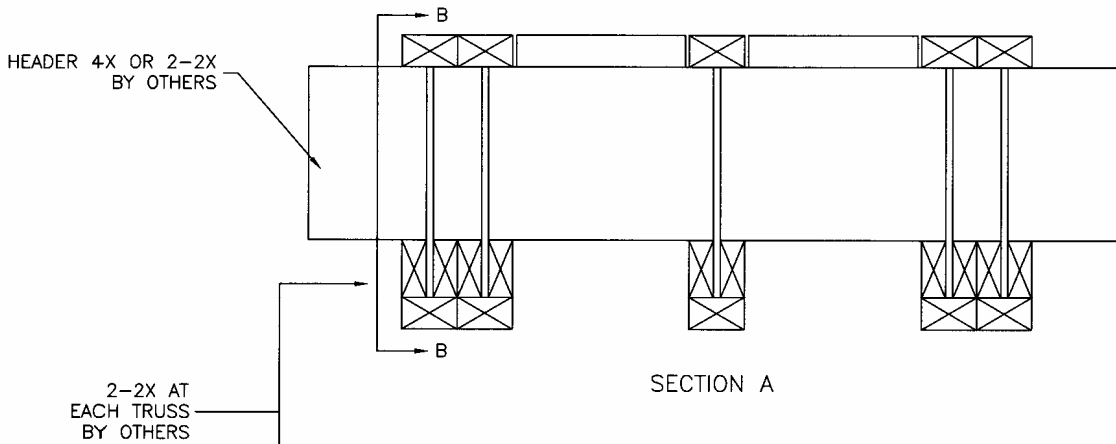


### Header Opening

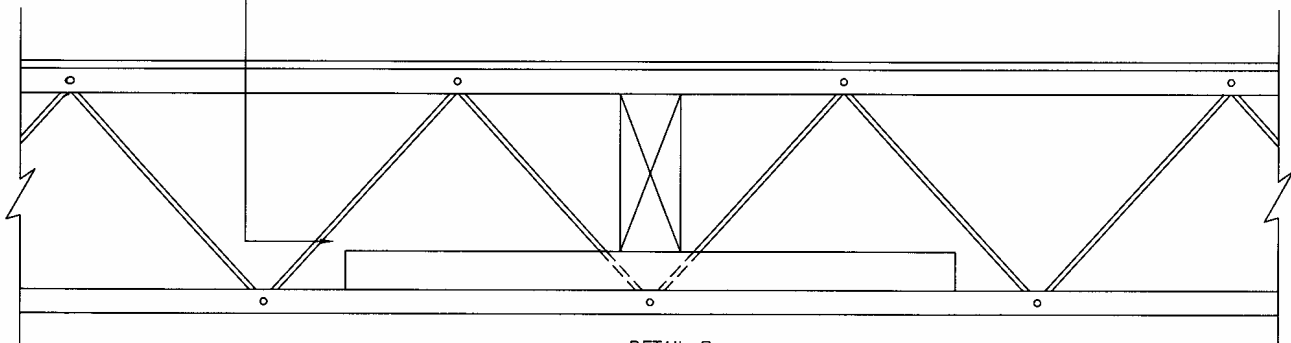
NUMBER OF TRUSSES DETERMINED BY  
TOTAL LOAD ON TRUSS.



PLAN VIEW AT OPENING



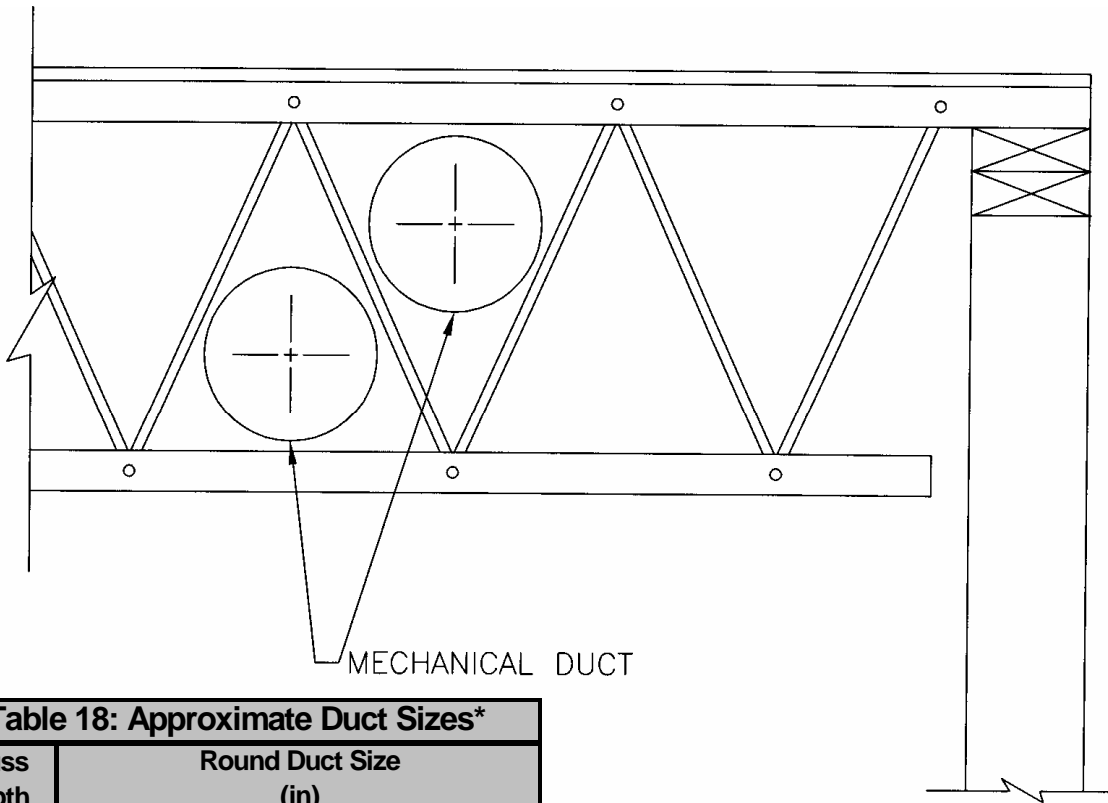
SECTION A



DETAIL B



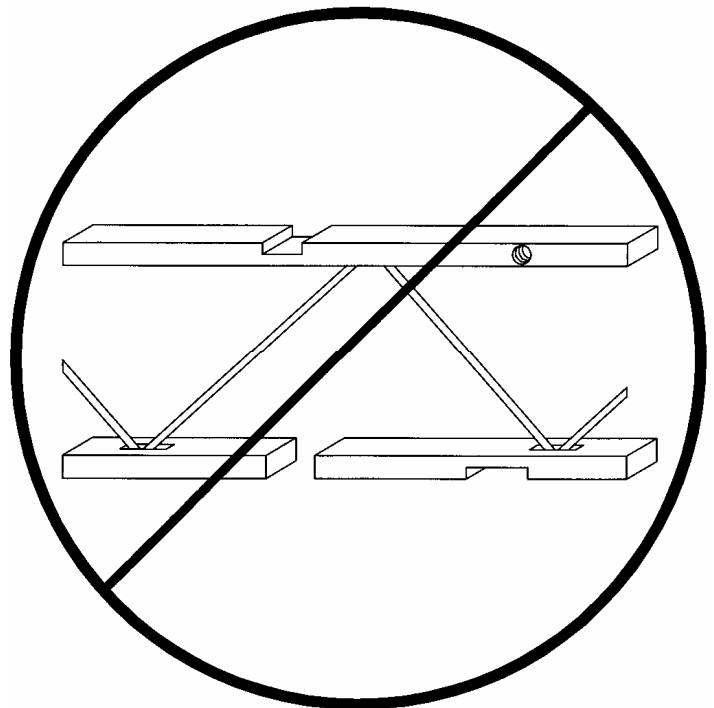
**Approximate Duct Sizes**



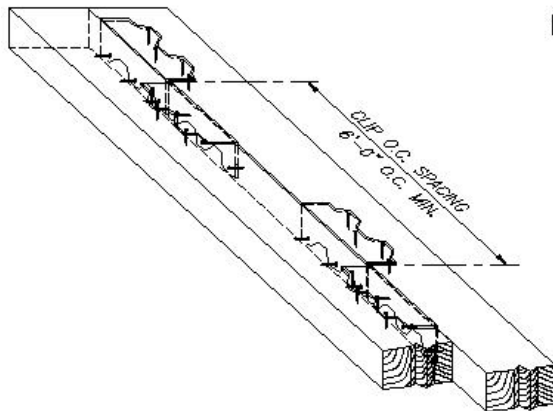
**Table 18: Approximate Duct Sizes\***

Truss Depth (in)	Round Duct Size (in)		
	SSW - 42 and 62	SSW-43	SSW-44
14	9	7	7
16	10	8	8
18	12	10	10
20	13	12	11
22	13	12	12
24	14	13	13
26	15	15	14
28	16	16	16
30	16	16	17
32	17	17	19
34	17	18	20
36	18	20	21
38	18	21	18
40	19	22	20
42	--	22	21
44	--	23	22
46	--	24	23
48	--	24	24
50	--	25	25

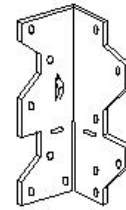
\* Allowable duct sizes may vary, based upon design loads.



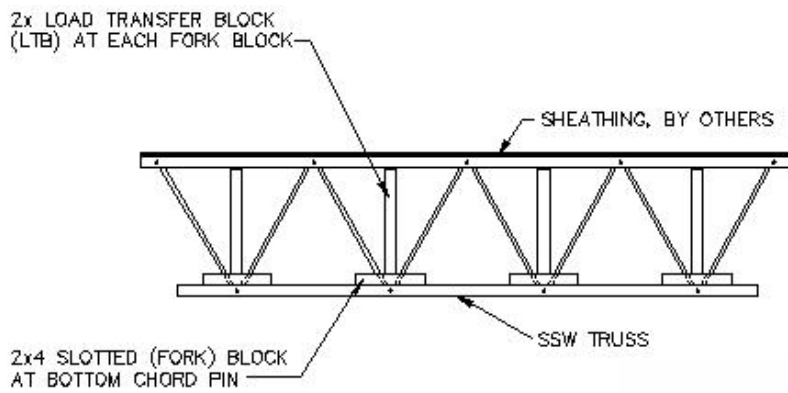
**Multiple Truss Top Chord Assembly**



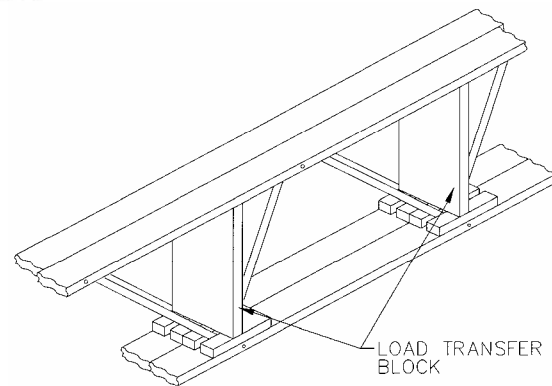
MATERIAL: 18 GAUGE.  
FINISH: GALVANIZED.  
AVAILABLE IN STAINLESS STEEL



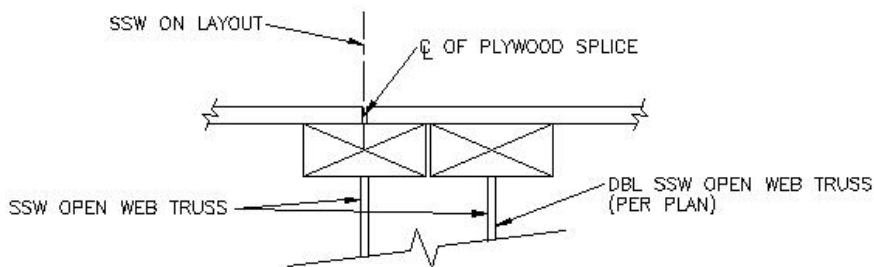
Framing Anchor  
FA-6 KC Metals®  
A35 Simpson StrongTie®  
Use 12-8d x 1 1/2 nails.



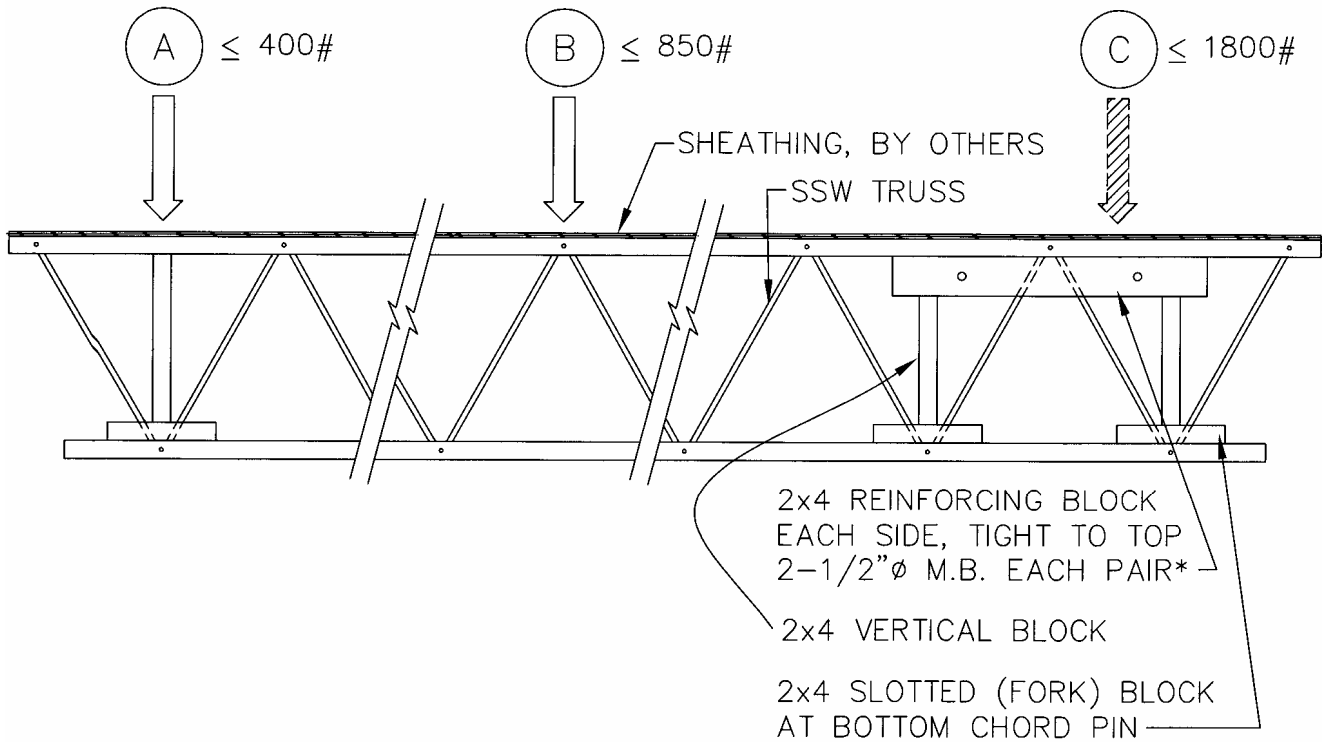
**Load Transfer Block**



**Recommended Sheathing Splice**



**SSW Open Web Truss**  
**Concentrated Load Options**



**CONDITION A**

Note: LOAD > 100 LBS & < 400 LBS  
 NOT AT PANEL POINT (i.e. PIN)  
 (MUST BE INCLUDED IN DESIGN)

**CONDITION B**

Note: LOAD > 100 LBS & < 850 LBS  
 AT PANEL POINT (i.e. PIN)  
 (MUST BE INCLUDED IN DESIGN)

**CONDITION C**

Note: LOAD > 100 LBS & < 1800 LBS  
 NOT AT PANEL POINT (i.e. PIN)  
 (MUST BE INCLUDED IN DESIGN)

(BOLTS AND FRAMING BY OTHERS)

CONNECTIONS:  
 2-16d TOE NAILS OR FACE NAILS  
 EACH: FOR SLOTTED BLOCK TO  
 BOTTOM CHORD AND EACH END  
 VERTICAL BLOCK.

\*ALTERNATE 'C' CONNECTION:  
 IN LIEU OF 1/2" DIAMETER MACHINE  
 BOLT: 1/4" DIAMETER DECK SCREWS  
 OR 3/8" DIAMETER MACHINE BOLT OR  
 CARRIAGE BOLT.

## Erection Bracing

Erection bracing for Standard Structures Inc. SSW Trusses are required to prevent lateral buckling of the members until adequate stability is achieved. It is the responsibility of the installer (builder, building contractor, erector or erection contractor) to properly install and brace the SSW Trusses. The installer must exercise the same high degree of safety awareness as with any other structural material.

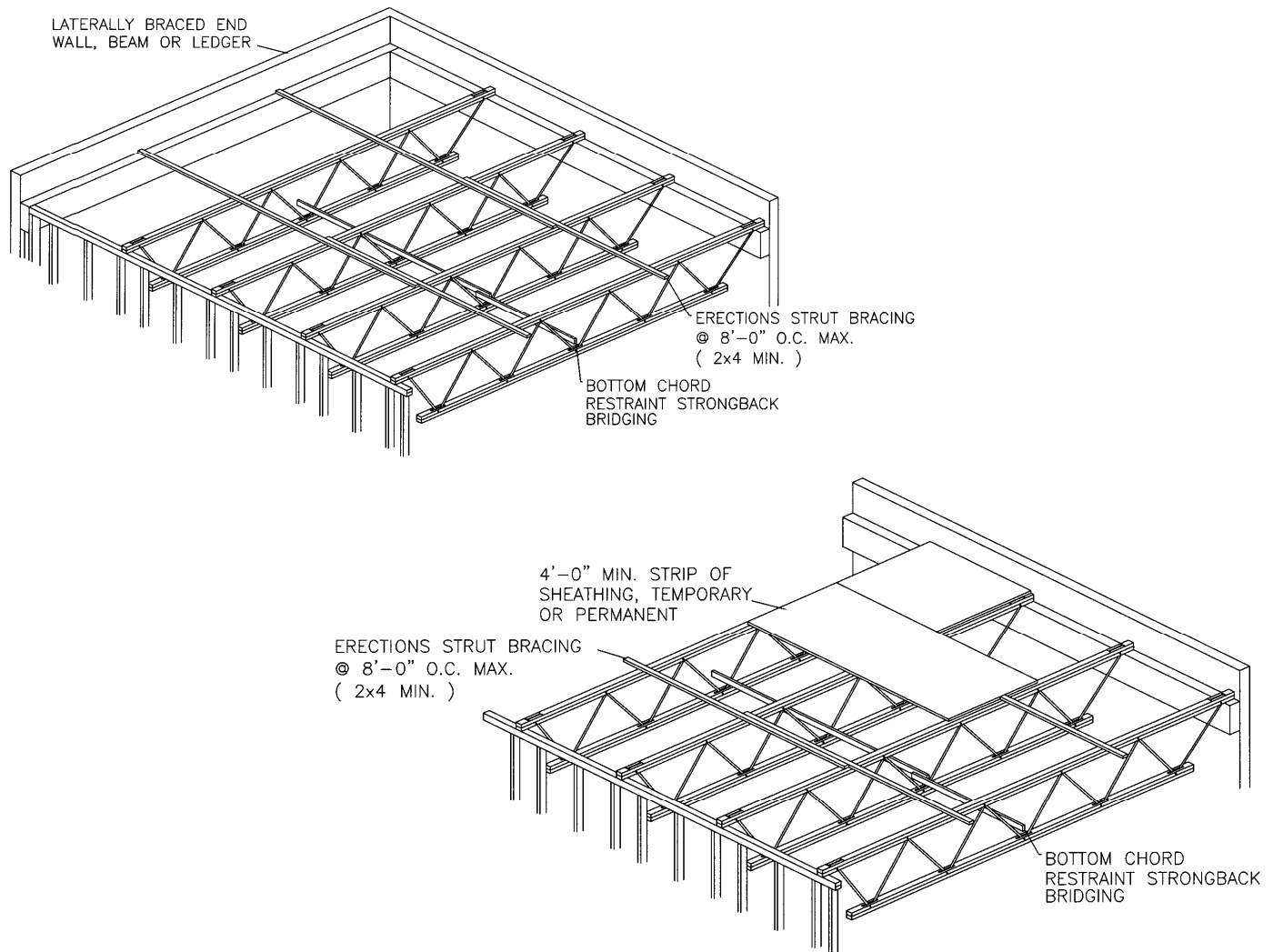
Standard Structures, Inc. does not intend that the recommendations made herein be interpreted as superior to the erection engineer's design specification for handling, installing and bracing SSW Trusses for a particular roof or floor.

All SSW Trusses are unstable laterally until properly braced. The longer the span, the more care that is required. Adequate restraint is necessary at all stages of construction. Complete stability is not achieved until the bracing and sheathing is completely installed and properly fastened.

The following guidelines are recommended:

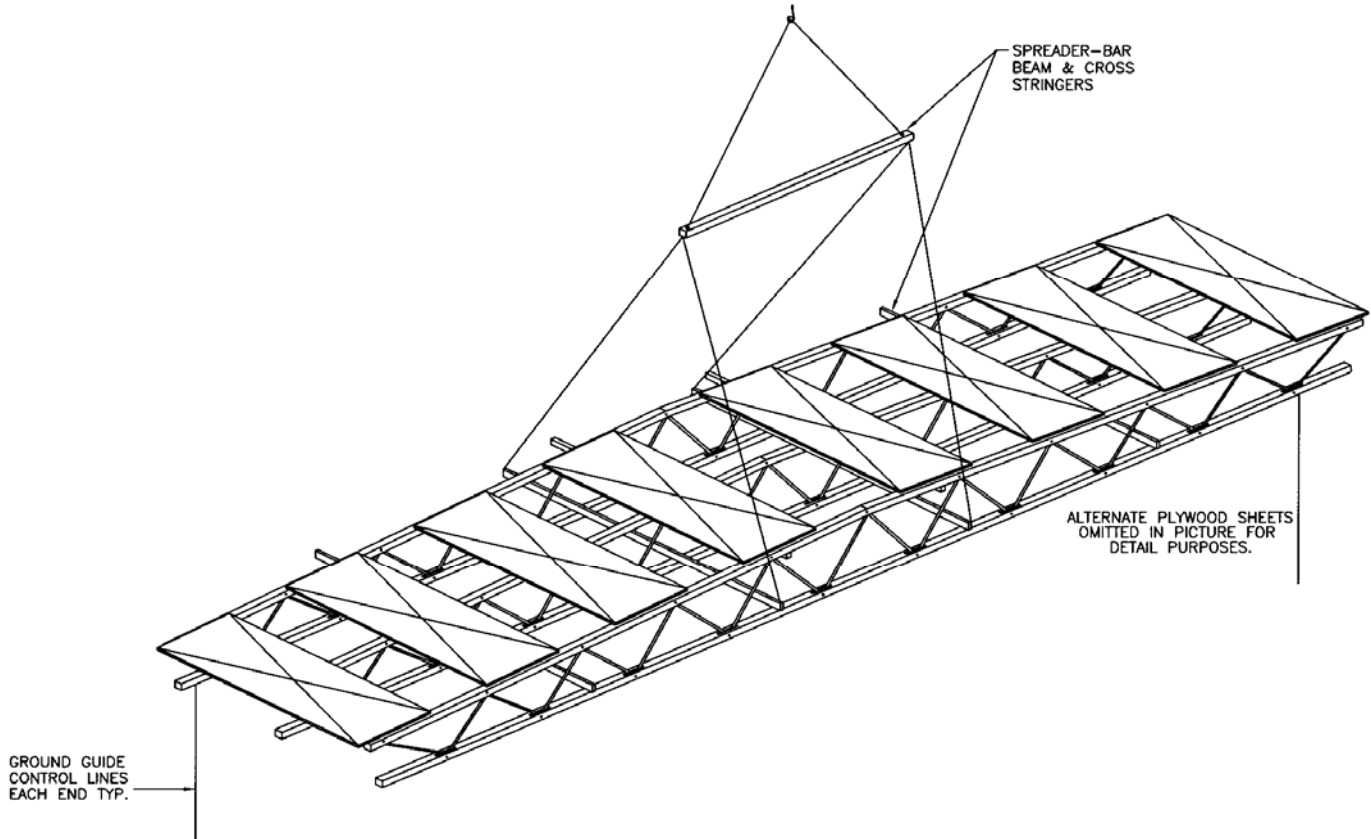
1. All blocking, hangers, rim board and rim joists at the end supports of the SSW Trusses must be completely installed and properly nailed.
2. Lateral strength must be established at the ends of the bay. This can be accomplished by utilizing an existing braced end wall or by temporary or permanent sheathing nailed to the first 4 feet of Truss at the end of the bay.
3. Temporary 2x4 (minimum) strut lines spaced at a maximum of 8'-0" on center, must be nailed to a braced end wall or the sheathed area mentioned in note 2 above and to each truss.
4. Sheathing must be completely nailed to each SSW Trusses before additional loads can be placed on the floor system.

**Erection bracing and procedures, as well as the safety of the workers, are the responsibility of the installer.**



## Long-Span Erection Bracing

1. Installation of long-span open web trusses requires special techniques, but does not require special crews to insure a safe installation.
2. Using modular installation procedures saves time and significantly reduces risk of breakage and / or injuries.
3. It is the responsibility of the installer to insure adequate bracing and bridging is utilized to prevent racking, and to use stringers under top chords as lateral lift points for the modules.



4. The trusses are lifted into place in semi-rigid modules with half the plywood and all bridging permanently attached to the trusses. Use of a spreader bar one third the length of the trusses (as shown), with guide ropes at each end, will prevent possible roll-over of trusses otherwise individually installed. One person is to be positioned at each guideline and at least two people at the insertion locations on the walls to accurately spot the correct layout points.
5. Alternate plywood sheets are left unattached (and in position) so they can be shifted to adjacent trusses / ledgers for staggered attachment per plans and fully nailed into place after being set on the walls. This job has bearing blocks on both ends so it will be difficult to position without wall clearance.
6. Safety of workmen and prevention of damage to the trusses or building is paramount and should be stressed continually during the erection process.
7. Manual jig built on the ground to construct the modules must be adequate to support the weight of the trusses, materials and bracing rigidly during construction. All five modules can be constructed and set aside until crane is positioned for the final installation, thus saving time and labor.
8. Do not allow workmen to ride module into the air or walk on modules until shear panels and wall bracing are fully installed. Placement and alignment of plywood panels is critical to a smooth installation. When done precisely, installation will proceed quickly.
9. Adjacent modules must have alternate sheets nailed to modules to allow shifting and meshing of plywood to next module. Plywood sheets must be staggered per structural plans.
10. Open-web trusses in lengths over fifty feet are unstable.

If you have questions, please contact Design Assistance at (877)980-SPEC (7732)

**Joist, Trusses, and Beams shall be erected and installed per the California Code of Regulations, Title 8, Section 1709.**

- a) No building, structure, or part thereof, or any temporary support or scaffolding in connection therewith shall be loaded in excess of its designated capacity.
- b) Bracing
  - 1) Trusses and Beams shall be braced laterally and progressively during construction to prevent buckling or overturning.
  - 2) The first member shall be plumbed, connected, braced and/or guyed against shifting before succeeding members are erected and secured to it.
  - 3) The total system shall be adequately braced and stabilized to the foundation, to suitable anchors buried in the ground, or by equivalent method(s).
  - 4) Beams, trusses and other material being lifted and placed by cranes or other hoisting apparatus shall not be released by the crane or hoisting apparatus until the person detaching the load has verified that the load has been secured or supported to prevent inadvertent movement.
- c) Wood Floor Construction
  - 1) In the erection of a building having double wood floor construction, the rough flooring shall be completed as the building progresses, including the tier below the one on which floor joists are being installed.
  - 2) For single wood floor or other flooring systems, the floor immediately the story where the floor joists are being installed shall be kept planked or decked over.
  - 3) Erection Guide for Trusses and Beams Over 25 Feet Long. The employer shall provide an erection plan and procedure prepared by a civil engineer currently registered in California which shall be followed and kept available on the job site for inspection by the Division.

NOTE - Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code

<http://www.dir.ca.gov/Title8/1709.html>

## Fire One-Hour Fire Resistance

**Assembly 1:** Plywood or APA-rated Structural-use Panels (Exposure1), as required by the code, are installed over SSW Open Web Trusses, spaced a maximum of 24 inches (610 mm) on center. A base layer of 5/8 inch thick (15.9 mm), type X gypsum wallboard is applied at right angles to SSW Open Web Trusses with 1 1/4 inch (31.7 mm), type S drywall screws, spaced at 24 inches (610 mm) on center. A face layer of 5/8 inch thick (15.9 mm), type X gypsum wallboard, or type X veneer base, is applied at right angles to SSW Open Web Trusses and attached with 1 7/8 inch (48 mm), type S drywall screws, spaced at 12 inches (305 mm) on center at joints and intermediate trusses. Face-layer joints are offset 24 inches (610 mm) from base-layer joints. One-and-one-half-inch-long (38 mm), type G drywall screws are spaced at 12 inches (305 mm) on center and installed 2 inches (51 mm) back from either side of face-layer end joints. Using the same spacing as the screw, alternate fasteners may be 1 7/8 inch long (48 mm), 6d cooler, box or wallboard nails for the base layer, and 2 3/8 inch long (60 mm), 8d cooler, box or wallboard nails for the face layer. Type G drywall screws, 1 1/2 inches (38 mm) long, are still required at the end joints of the face layer.

SSW Open Web Trusses may be spaced a maximum of 48 inches (1219 mm) on center if nominal 2x stripping or resilient channels are attached at 24 inches (610 mm) on center at right angles to the SSW Open Web Trusses, and the two layers of gypsum wallboard are applied perpendicularly to the stripping or channels. The two layers of gypsum wallboard must be attached with screws to the stripping or channels as described for installation of the wallboard directly to the joists. The stripping or resilient channel must be designed to carry the double-layer gypsum wallboard load.

**Assembly 2:** SSW Open Web Trusses may be used in lieu of the trusses in the one-hour and two hour –fire-resistive assemblies described in ER-1352 or ER-1632.

## Storage and Handling

### Storage

- While being stored at the job site, protect (cover) products from exposure to sun and water.
- Use stickers adequate to keep products above ground, out of mud and water. Place stickers approximately 10 feet on center maximum with 2 feet minimum cantilever.
- Bundles are to be stored on level ground.
- Handle SSW Truss in an upright position; never handle SSW Truss when in a flat orientation.
- Twisting of trusses or loads applied to the web members when horizontal will damage the SSW Trusses.
- Do not install damaged SSW Trusses.
- Do not open bundles until time of installation. Use care when handling individual SSW Trusses to prevent injury to handlers or damage by forklifts or cranes.
- Stacking of bundles is permitted if an adequate number of stickers are provided to prevent damage and normal safety precautions are followed.
- All glue used in SSW Trusses is waterproof; however, long exposure to water and sun will cause some deterioration and checking of wood.
- Do not use SSW Trusses as ramps or planks.

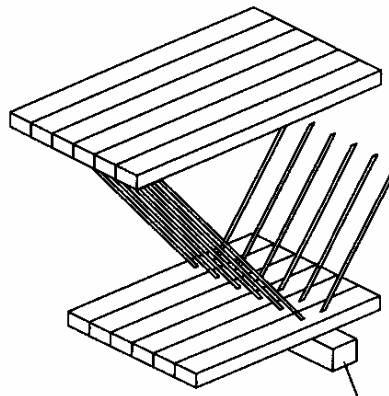
### Handling

It is the responsibility of the customer to unload the SSW Truss from the truck and for all handling thereafter; the SSW Truss warranty only applies so long as the product is not damaged or altered in any way at the job site, and is installed in a workman like manner. SSW Trusses will be delivered to the job site in a bundle, banded together, for handling ease. To avoid damage, they should be kept in these bundles until they are ready to be installed into the structure.



DO NOT allow workers to walk on trusses or joists until adequately braced.

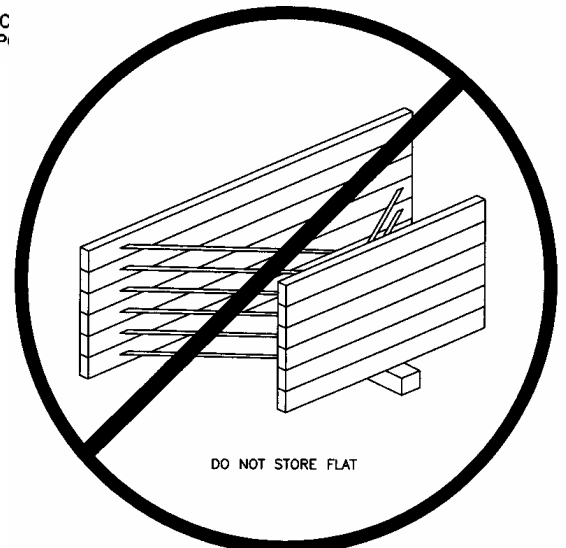
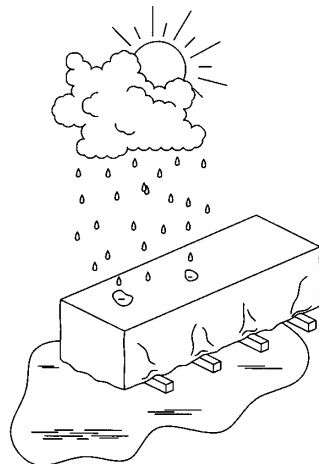
STORE JOIST IN A VERTICAL ORIENTATION



LOCATE STIC BELOW PANEL P

Protect (cover) products from extended exposure to sun and water.

Use stickers adequate to keep products above ground and out of mud and water. (Approximately 10' o.c. with a sticker at first bottom chord panel point at each end)



DO NOT STORE FLAT