

MAXIMUM ALLOWABLE RESIDENTIAL UNFACTORED LIVE LOAD CHARTS

Glued & Nailed Subfloor with Continuous Strongbacks without ceiling

 $\Delta_L \leq L/360$

Publication Date : February 2014

9.5"			Unfactored Dead loads: 15 psf				Unfactored Dead loads: 30 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)			
8'-0"	OJ314	3x2	266	197	162	127	254	184	149	114
10'-0"			183	134	110	85	171	122	97	73
12'-0"			121	89	72	55	110	76	59	42
14'-0"			80	60	49	-----	74	49	-----	-----
16'-0"			55	41	-----	-----	50	-----	-----	-----
18'-0"	OJ418	4x2	68	51	43	-----	68	51	-----	-----

11.875"			Unfactored Dead loads: 15 psf				Unfactored Dead loads: 30 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)			
8'-0"	OJ314	3x2	281	207	171	134	268	195	158	121
10'-0"			222	163	134	105	210	151	121	92
12'-0"			163	119	97	75	150	106	84	62
14'-0"			116	84	67	51	103	71	55	-----
16'-0"			85	61	48	-----	73	48	-----	-----
18'-0"	OJ315	3x2	69	52	43	-----	69	46	-----	-----
	OJ418 (S)	4x2	95	84	69	52	105	72	56	40
20'-0"	OJ415	4x2	71	53	44	-----	71	53	42	-----
	OJ418 (S)	4x2	84	63	52	42	84	63	48	-----
22'-0"	OJ418	4x2	64	48	40	-----	64	48	-----	-----

14"			Unfactored Dead loads: 15 psf				Unfactored Dead loads: 30 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)			
8'-0"	OJ314	3x2	302	223	184	144	289	211	171	132
10'-0"			239	176	144	113	226	163	132	101
12'-0"			197	144	118	92	184	132	106	79
14'-0"			141	103	83	64	129	90	71	52
16'-0"			105	75	61	46	92	63	48	-----
18'-0"	OJ315	3x2	98	73	58	44	89	60	46	-----
20'-0"	OJ315	3x2	73	55	45	-----	67	44	-----	-----
	OJ418 (S)	4x2	113	82	66	50	89	69	53	-----
22'-0"	OJ415	4x2	78	58	48	-----	78	55	41	-----
24'-0"	OJ418	4x2	72	54	45	-----	72	53	40	-----
26'-0"			57	43	-----	-----	57	41	-----	-----

16"			Unfactored Dead loads: 15 psf				Unfactored Dead loads: 30 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)			
8'-0"	OJ314	3x2	342	254	209	165	330	241	197	152
10'-0"			271	200	165	129	259	188	152	117
12'-0"			224	165	135	105	211	152	123	93
14'-0"			162	118	97	75	150	106	84	62
16'-0"			OJ314	3x2	121	87	71	54	108	75
18'-0"	OJ318 (S)	3x2	165	120	98	76	152	108	86	63
	OJ315	3x2	119	86	70	53	107	74	57	41
20'-0"	OJ318 (S)	3x2	145	106	86	66	133	93	73	54
	OJ315	3x2	94	67	54	40	81	55	41	-----
22'-0"	OJ418 (S)	4x2	129	94	76	58	117	81	63	46
			116	84	68	52	104	71	55	-----
24'-0"	OJ418	4x2	95	71	59	46	93	63	49	-----
26'-0"			76	57	47	-----	76	57	43	-----
28'-0"			68	51	42	-----	68	51	-----	-----
30'-0"	OJ420	4x2	56	42	-----	-----	56	-----	-----	

Notes :

- 1) Uniform loads shown are on centerline to centerline and considering a minimum end bearing length of 1 1/2", higher loads could be applied using longer end l
- 2) Minimum end bearing length is 1 1/2", **except for bold spans, minimum 1 1/2" with web stiffeners at the OSB section.**
- 3) Dead load deflection is limited to L/360 and Total load deflection is limited to L/240.
- 4) Live load deflection is limited to L/360.
- 5) The loads shown are in accordance with NBCC , part 9 and CAN/CSA O86 and take into consideration the performance criterion as per NBCC section 9.23.4.2(2) with continuous strongback installed at mid span.
- 6) Refer to appropriate sections of the Specifier Guide for installation guidelines and construction details.
- 7) The nailing specifications are to be in accordance with the National Building Code of Canada (NBCC) and the adhesives used should comply with CGSB standard CAN-CGSB 71.26-M88.
- 8) (S) = Special grade, verify availability



J. C. HUMPHREYS
PROVINCE OF ONTARIO



MAXIMUM ALLOWABLE RESIDENTIAL FLOOR SPANS
Glued & Nailed Subfloor with Continuous Strongbacks
without ceiling

 $\Delta_L \leq L/360$

Publication Date : February 2014

9.5"			LL=40 psf DL=15 psf				LL=40 psf DL=30 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Floor span c/c				Maximum Floor span c/c			
8'-0"	OJ314	3x2	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
10'-0"			10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	
12'-0"			12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	
14'-0"			14'-0"	14'-0"	13'-6"	14'-0"	14'-0"	13'-6"	12'-1"	
16'-0"			16'-0"	15'-0"	-----	16'-0"	14'-10"	-----	-----	
18'-0"	OJ418	4x2	18'-0"	18'-0"	18'-0"	16'-10"	18'-0"	18'-0"	17'-10"	-----

11.875"			LL=40 psf DL=15 psf				LL=40 psf DL=30 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Floor span c/c				Maximum Floor span c/c			
8'-0"	OJ314	3x2	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
10'-0"			10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	
12'-0"			12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	
14'-0"			14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	13'-10"	
16'-0"			16'-0"	16'-0"	15'-4"	16'-0"	16'-0"	15'-5"	-----	
18'-0"	OJ315	3x2	18'-0"	18'-0"	18'-0"	16'-11"	18'-0"	18'-0"	17'-0"	-----
	OJ418 (S)	4x2	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	17'-11"
20'-0"	OJ415	4x2	20'-0"	20'-0"	20'-0"	19'-1"	20'-0"	20'-0"	20'-0"	-----
	OJ418 (S)	4x2	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	-----
22'-0"	OJ418	4x2	22'-0"	22'-0"	22'-0"	20'-2"	22'-0"	22'-0"	21'-7"	-----

14"			LL=40 psf DL=15 psf				LL=40 psf DL=30 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Floor span c/c				Maximum Floor span c/c			
8'-0"	OJ314	3x2	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
10'-0"			10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	
12'-0"			12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	
14'-0"			14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	
16'-0"			16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	15'-1"	
18'-0"	OJ315	3x2	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	16'-8"	
20'-0"	OJ315	3x2	20'-0"	20'-0"	20'-0"	18'-7"	20'-0"	20'-0"	18'-8"	-----
	OJ418 (S)	4x2	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	19'-2"
22'-0"	OJ415	4x2	22'-0"	22'-0"	22'-0"	21'-8"	22'-0"	22'-0"	22'-0"	-----
24'-0"	OJ418	4x2	24'-0"	24'-0"	24'-0"	22'-11"	24'-0"	24'-0"	24'-0"	-----
			26'-0"	26'-0"	24'-10"	-----	26'-0"	26'-0"	24'-0"	-----

16"			LL=40 psf DL=15 psf				LL=40 psf DL=30 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Floor span c/c				Maximum Floor span c/c			
8'-0"	OJ314	3x2	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
10'-0"			10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	
12'-0"			12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	
14'-0"			14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	
16'-0"			16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	
18'-0"	OJ315	3x2	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"
	OJ318 (S)	3x2	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"
20'-0"	OJ315	3x2	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	18'-0"
	OJ418 (S)	4x2	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"
22'-0"	OJ418	4x2	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	21'-9"
24'-0"			24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	24'-0"	-----	
26'-0"			26'-0"	26'-0"	25'-5"	26'-0"	26'-0"	26'-0"	-----	
28'-0"	OJ420	4x2	28'-0"	28'-0"	28'-0"	26'-3"	28'-0"	28'-0"	27'-2"	-----
30'-0"			30'-0"	30'-0"	28'-6"	-----	30'-0"	29'-8"	-----	

Notes :

- Spans apply to simple span application only.
- Minimum end bearing length is 1½", **except for bold spans minimum 1½" at the OSB section with web stiffeners.**
- Maximum spans are measured **centerline to centerline** of bearing and are based on uniformly loaded joists.
- Dead load deflection is limited to L/360 and Total load deflection is limited to L/240.
- Live Load is limited to L/360.
- The spans shown are in accordance with NBCC and CAN/CSA O86 and take into consideration the performance criterion with continuous strongback installed at mid span.
- Refer to appropriate sections of the Specifier Guide for installation guidelines and construction details.
- The nailing specifications are to be in accordance with the National Building Code of Canada (NBCC) and the adhesives used should comply with CGSB standard CAN-CGSB 71.26-M88.
- (S) = Special grade, verify availability





MAXIMUM ALLOWABLE UNFACTORED RESIDENTIAL LIVE LOAD CHART

Glued & Nailed Subfloor with Continuous Strongbacks without ceiling

 $\Delta_L \leq L/480$

Publication Date : February 2014

9.5"			Unfactored Dead loads: 15 psf				Unfactored Dead loads: 30 psf				Unfactored Dead loads: 36 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)			
8'-0"	OJ314	3x2	266	197	162	127	254	184	149	114	249	179	144	109
10'-0"			162	125	105	85	164	122	97	73	162	117	92	68
12'-0"			102	79	67	55	102	76	59	42	102	71	54	-----
14'-0"			68	52	44	-----	68	49	-----	-----	68	44	-----	-----
16'-0"			47	-----	-----	-----	47	-----	-----	-----	45	-----	-----	-----
18'-0"	OJ418	4x2	56	43	-----	-----	56	43	-----	-----	56	43	-----	-----

11.875"			Unfactored Dead loads: 15 psf				Unfactored Dead loads: 30 psf				Unfactored Dead loads: 36 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)			
8'-0"	OJ314	3x2	281	207	171	134	268	195	158	121	263	190	153	116
10'-0"			222	163	134	105	210	151	121	92	205	146	116	87
12'-0"			163	119	97	75	150	106	84	62	145	101	79	57
14'-0"			109	84	67	51	103	71	55	-----	98	66	50	-----
16'-0"			76	59	48	-----	73	48	-----	-----	68	43	-----	-----
18'-0"	OJ315	3x2	58	45	-----	-----	58	45	-----	-----	58	41	-----	-----
	OJ418 (S)	4x2	90	69	58	47	90	69	56	40	67	51	43	-----
20'-0"	OJ415	4x2	58	45	-----	-----	58	45	-----	-----	58	45	-----	-----
	OJ418 (S)	4x2	68	52	44	-----	68	52	44	-----	68	52	43	-----
22'-0"	OJ418	4x2	52	40	-----	-----	52	40	-----	-----	52	40	-----	-----

14"			Unfactored Dead loads: 15 psf				Unfactored Dead loads: 30 psf				Unfactored Dead loads: 36 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)			
8'-0"	OJ314	3x2	302	223	184	144	289	211	171	132	284	206	166	127
10'-0"			239	176	144	113	226	163	132	100	221	158	127	95
12'-0"			197	144	118	92	184	132	106	79	179	127	101	74
14'-0"			141	103	83	64	129	90	71	52	124	85	66	47
16'-0"			105	75	61	46	92	63	48	-----	87	58	43	-----
18'-0"	OJ315	3x2	82	63	53	44	82	60	46	-----	82	55	41	-----
20'-0"	OJ315	3x2	61	47	40	-----	61	44	-----	-----	62	-----	-----	-----
	OJ418 (S)	4x2	96	73	61	50	89	69	53	-----	96	64	48	-----
22'-0"	OJ415	4x2	63	49	41	-----	63	49	41	-----	63	49	-----	-----
24'-0"	OJ418	4x2	58	44	-----	-----	58	44	-----	-----	58	44	-----	-----
26'-0"			46	-----	-----	-----	46	-----	-----	-----	46	-----	-----	-----

16"			Unfactored Dead loads: 15 psf				Unfactored Dead loads: 30 psf				Unfactored Dead loads: 36 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)				Maximum Unfactored Live Load (psf)			
8'-0"	OJ314	3x2	342	254	209	165	330	241	197	152	325	236	192	147
10'-0"			271	200	165	129	259	188	152	117	254	183	147	112
12'-0"			224	165	135	105	211	152	123	93	206	147	118	88
14'-0"			162	118	97	75	150	106	84	62	145	101	79	57
16'-0"			OJ314	3x2	121	87	71	54	108	75	58	41	103	70
	OJ318 (S)	3x2	165	120	98	76	152	108	86	63	147	103	81	-----
18'-0"	OJ315	3x2	108	83	70	53	107	74	57	41	102	69	52	-----
	OJ318 (S)	3x2	124	95	80	65	124	93	73	54	124	88	68	49
20'-0"	OJ315	3x2	81	62	53	40	81	55	41	-----	76	50	-----	-----
	OJ418 (S)	4x2	126	94	76	58	117	81	63	46	112	76	58	41
22'-0"	OJ418	4x2	97	74	62	51	97	71	55	-----	97	66	50	-----
24'-0"			76	58	49	40	76	58	49	-----	76	58	44	-----
26'-0"			61	47	-----	-----	61	47	-----	-----	61	47	-----	-----
28'-0"	OJ420	4x2	54	41	-----	-----	54	41	-----	-----	54	41	-----	-----
30'-0"			45	-----	-----	-----	45	-----	-----	-----	45	-----	-----	-----

Notes :

- Uniform loads shown are on centerline to centerline and considering a minimum end bearing length of 1 1/2", higher loads could be applied using longer end bearing length.
- Minimum end bearing length is 1 1/2", **except for bold spans, minimum 1 1/2" with web stiffeners at the OSB section.**
- Dead load deflection is limited to L/360 and Total load deflection is limited to L/240.
- Live load deflection is limited to L/480.
- The loads shown are in accordance with NBCC, part 9 and CAN/CSA O86 and take into consideration the performance criterion as per NBCC section 9.23.4.2(2) with continuous strongback installed at mid span.
- Refer to appropriate sections of the Specifier Guide for installation guidelines and construction details.
- The nailing specifications are to be in accordance with the National Building Code of Canada (NBCC) and the adhesives used should comply with CGSB standard CAN-CGSB 71.26-M88.
- (S) = Special grade, verify availability





CONTINUOUS STRONGBACKS FOR MAXIMUM SPAN CHARTS

Glued & Nailed Subfloor with Continuous Strongbacks without ceiling

 $\Delta_L \leq L/480$

Publication Date : February 2014

9.5"			LL=40 psf DL=15 psf				LL=40 psf DL=30 psf				LL=40 psf DL=36 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Strongbacks				Strongbacks				Strongbacks			
8'-0"	OJ314	3x2	None	None	None	None	None	None	None	None	None	None	None	None
10'-0"			None	None	None	None	None	None	None	None	None	None	None	None
12'-0"			None	None	None	None	None	None	None	None	None	None	None	None
14'-0"			None	None	1-2x4	1-2x4	None	None	None	None	None	None	None	-----
16'-0"			1-2x4	1-2x6	1-2x6	-----	1-2x4	1-2x6	-----	-----	1-2x4	1-2x4	-----	-----
18'-0"	OJ418	4x2	1-2x4	1-2x6	1-2x6	1-2x6	1-2x4	1-2x6	2-2x6	-----	1-2x4	1-2x6	2-2x6	-----

11.875"			LL=40 psf DL=15 psf				LL=40 psf DL=30 psf				LL=40 psf DL=36 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Strongbacks				Strongbacks				Strongbacks			
8'-0"	OJ314	3x2	None	None	None	None	None	None	None	None	None	None	None	None
10'-0"			None	None	None	None	None	None	None	None	None	None	None	None
12'-0"			None	None	None	None	None	None	None	None	None	None	None	None
14'-0"			None	None	None	None	None	None	None	None	None	None	None	None
16'-0"			None	1-2x4	1-2x4	1-2x4	None	1-2x4	1-2x4	-----	None	1-2x4	None	-----
18'-0"	OJ315	3x2	1-2x4	1-2x6	1-2x6	1-2x6	1-2x4	1-2x6	1-2x6	-----	1-2x4	1-2x6	1-2x4	-----
	OJ418 (S)	4x2	None	1-2x4	1-2x4	1-2x6	None	1-2x4	1-2x4	2-2x4	None	1-2x4	1-2x4	1-2x4
20'-0"	OJ415	4x2	2-2x4	1-2x6	2-2x6	2-2x6	2-2x4	1-2x6	2-2x6	-----	2-2x4	1-2x6	2-2x6	-----
	OJ418 (S)	4x2	1-2x4	1-2x6	1-2x6	2-2x6	1-2x4	1-2x6	1-2x6	-----	1-2x4	1-2x6	1-2x6	-----
22'-0"	OJ418	4x2	1-2x6	2-2x6	1-2x8	1-2x8	1-2x6	2-2x6	1-2x8	-----	1-2x6	2-2x6	1-2x8	-----

14"			LL=40 psf DL=15 psf				LL=40 psf DL=30 psf				LL=40 psf DL=36 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Strongbacks				Strongbacks				Strongbacks			
8'-0"	OJ314	3x2	None	None	None	None	None	None	None	None	None	None	None	None
10'-0"			None	None	None	None	None	None	None	None	None	None	None	None
12'-0"			None	None	None	None	None	None	None	None	None	None	None	None
14'-0"			None	None	None	None	None	None	None	None	None	None	None	None
16'-0"			None	None	None	None	None	None	None	None	None	None	None	None
18'-0"	OJ315	3x2	None	1-2x6	1-2x6	1-2x6	None	1-2x6	1-2x6	1-2x6	None	1-2x6	1-2x6	None
20'-0"	OJ315	3x2	1-2x6	1-2x6	2-2x6	1-2x6	1-2x6	1-2x6	1-2x6	-----	1-2x6	1-2x6	1-2x6	-----
	OJ418 (S)	4x2	None	1-2x6	1-2x6	1-2x6	None	1-2x6	1-2x6	1-2x6	None	1-2x6	1-2x6	-----
22'-0"	OJ415	4x2	1-2x6	1-2x6	2-2x6	1-2x8	1-2x6	1-2x6	2-2x6	-----	1-2x6	1-2x6	1-2x6	-----
24'-0"	OJ418	4x2	1-2x6	2-2x6	2-2x8	1-2x8	1-2x6	2-2x6	2-2x8	-----	1-2x6	2-2x6	2-2x6	-----
26'-0"			1-2x8	2-2x8	2-2x8	-----	1-2x8	2-2x8	2-2x8	-----	1-2x8	1-2x8	-----	-----

16"			LL=40 psf DL=15 psf				LL=40 psf DL=30 psf				LL=40 psf DL=36 psf			
Spacing o.c.			12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
Subfloor thickness - CSP			5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"
Length	Series		Strongbacks				Strongbacks				Strongbacks			
8'-0"	OJ314	3x2	None	None	None	None	None	None	None	None	None	None	None	None
10'-0"			None	None	None	None	None	None	None	None	None	None	None	None
12'-0"			None	None	None	None	None	None	None	None	None	None	None	None
14'-0"			None	None	None	None	None	None	None	None	None	None	None	None
16'-0"			OJ314	3x2	None	None	None	None	None	None	None	None	None	None
18'-0"	OJ318 (S)	3x2	None	None	None	None	None	None	None	None	None	None	None	None
	OJ315	3x2	None	None	1-2x6	1-2x6	None	None	1-2x6	1-2x6	None	None	1-2x6	1-2x6
20'-0"	OJ318 (S)	3x2	None	None	None	None	None	None	None	None	None	None	None	None
	OJ315	3x2	None	1-2x6	1-2x6	1-2x6	None	1-2x6	1-2x6	1-2x6	None	1-2x6	1-2x6	-----
22'-0"	OJ418 (S)	4x2	None	None	None	1-2x6	None	None	None	1-2x6	None	None	None	1-2x6
24'-0"	OJ418	4x2	None	1-2x6	1-2x6	1-2x6	None	1-2x6	1-2x6	1-2x6	None	1-2x6	1-2x6	1-2x6
			1-2x6	1-2x6	2-2x6	2-2x6	1-2x6	1-2x6	2-2x6	-----	1-2x6	1-2x6	2-2x6	-----
26'-0"	OJ420	4x2	1-2x6	2-2x6	1-2x8	2-2x8	1-2x6	2-2x6	1-2x8	-----	1-2x6	2-2x6	2-2x6	-----
28'-0"			2-2x6	2-2x8	1-2x10	2-2x8	2-2x6	2-2x8	2-2x8	-----	2-2x6	2-2x8	-----	-----
30'-0"			2-2x8	2-2x10	-----	-----	2-2x8	2-2x10	-----	-----	2-2x8	2-2x10	-----	-----

Notes :

- 1) Specified continuous strongbacks installed at mid span shown, take into consideration the performance criterion of the NBCC
- 2) Refer to appropriate sections of the Specifier Guide for installation guidelines and construction details.
- 3) Live load deflection is limited to L/480
- 4) This table of continuous strongback for maximum spans can also be used for Maximum spans when live load deflection is limited to L/360.
except with 40-36 loading, strongbacks are limited to L/480.
- 5) (S) = Special grade, verify availability





MAXIMUM ALLOWABLE RESIDENTIAL FLOOR SPANS

Glued & Nailed Subfloor with Continuous Strongbacks

without ceiling

 $\Delta_L \leq L/480$

Publication Date : February 2014

9.5"		LL=40 psf DL=15 psf				LL=40 psf DL=30 psf				LL=40 psf DL=36 psf				
Spacing o.c.		12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	
Subfloor thickness - CSP		5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	
Length	Series	Maximum Floor span c/c				Maximum Floor span c/c				Maximum Floor span c/c				
8'-0"	OJ314	3x2	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
10'-0"			10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	
12'-0"			12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	11'-8"	
14'-0"			14'-0"	14'-0"	13'-5"	14'-0"	14'-0"	13'-6"	12'-1"	14'-0"	14'-0"	13'-0"	-----	
16'-0"			16'-0"	15'-4"	14'-5"	-----	16'-0"	14'-10"	-----	16'-0"	14'-3"	-----	-----	
18'-0"	OJ418	4x2	18'-0"	18'-0"	17'-3"	16'-0"	18'-0"	18'-0"	17'-3"	-----	18'-0"	18'-0"	17'-3"	-----

11.875"		LL=40 psf DL=15 psf				LL=40 psf DL=30 psf				LL=40 psf DL=36 psf					
Spacing o.c.		12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"		
Subfloor thickness - CSP		5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"		
Length	Series	Maximum Floor span c/c				Maximum Floor span c/c				Maximum Floor span c/c					
8'-0"	OJ314	3x2	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	
10'-0"			10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"		
12'-0"			12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"		
14'-0"			14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	13'-9"	14'-0"	14'-0"	14'-0"	13'-4"		
16'-0"			16'-0"	16'-0"	15'-4"	16'-0"	16'-0"	15'-5"	-----	16'-0"	16'-0"	14'-10"	-----		
18'-0"	OJ315	3x2	18'-0"	18'-0"	17'-7"	16'-4"	18'-0"	18'-0"	17'-0"	-----	18'-0"	18'-0"	16'-5"	-----	
	OJ418 (S)	4x2	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	17'-11"	18'-0"	18'-0"	18'-0"	16'-7"	
20'-0"	OJ415	4x2	20'-0"	20'-0"	19'-6"	18'-1"	20'-0"	20'-0"	20'-0"	19'-6"	-----	20'-0"	20'-0"	19'-5"	-----
	OJ418 (S)	4x2	20'-0"	20'-0"	20'-0"	19'-1"	20'-0"	20'-0"	20'-0"	20'-0"	-----	20'-0"	20'-0"	20'-0"	-----
22'-0"	OJ418	4x2	22'-0"	22'-0"	20'-7"	-----	22'-0"	22'-0"	22'-0"	20'-7"	-----	22'-0"	22'-0"	20'-7"	-----

14"		LL=40 psf DL=15 psf				LL=40 psf DL=30 psf				LL=40 psf DL=36 psf				
Spacing o.c.		12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	
Subfloor thickness - CSP		5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	
Length	Series	Maximum Floor span c/c				Maximum Floor span c/c				Maximum Floor span c/c				
8'-0"	OJ314	3x2	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
10'-0"			10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	
12'-0"			12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	
14'-0"			14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	
16'-0"			16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	15'-1"	16'-0"	16'-0"	16'-0"	14'-6"	
18'-0"	OJ315	3x2	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	16'-8"	18'-0"	18'-0"	18'-0"	16'-2"
20'-0"	OJ315	3x2	20'-0"	20'-0"	19'-11"	18'-6"	20'-0"	20'-0"	18'-8"	-----	20'-0"	19'-9"	18'-0"	-----
	OJ418 (S)	4x2	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	19'-2"	20'-0"	20'-0"	20'-0"	-----
22'-0"	OJ415	4x2	22'-0"	22'-0"	22'-0"	20'-7"	22'-0"	22'-0"	22'-0"	-----	22'-0"	22'-0"	21'-4"	-----
24'-0"	OJ418	4x2	24'-0"	24'-0"	23'-4"	-----	24'-0"	24'-0"	23'-4"	-----	24'-0"	24'-0"	22'-4"	-----
26'-0"			26'-0"	24'-9"	-----	-----	26'-0"	24'-9"	-----	-----	26'-0"	24'-9"	-----	-----

16"		LL=40 psf DL=15 psf				LL=40 psf DL=30 psf				LL=40 psf DL=36 psf				
Spacing o.c.		12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	
Subfloor thickness - CSP		5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"	5/8"	3/4"	
Length	Series	Maximum Floor span c/c				Maximum Floor span c/c				Maximum Floor span c/c				
8'-0"	OJ314	3x2	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
10'-0"			10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	
12'-0"			12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	
14'-0"			14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	
16'-0"			OJ314	3x2	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"
	OJ318 (S)	3x2	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"
18'-0"	OJ315	3x2	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"
	OJ318 (S)	3x2	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"
20'-0"	OJ315	3x2	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	18'-0"	20'-0"	20'-0"	19'-5"	-----
	OJ418 (S)	4x2	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"
22'-0"	OJ418	4x2	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	22'-0"	20'-0"
24'-0"			24'-0"	24'-0"	23'-11"	24'-0"	24'-0"	24'-0"	-----	24'-0"	24'-0"	24'-0"	-----	
26'-0"			26'-0"	26'-0"	-----	26'-0"	26'-0"	25'-9"	-----	26'-0"	26'-0"	25'-3"	-----	
28'-0"	OJ420	4x2	28'-0"	28'-0"	26'-7"	-----	28'-0"	28'-0"	26'-7"	-----	28'-0"	28'-0"	-----	-----
30'-0"			30'-0"	28'-3"	-----	-----	30'-0"	28'-3"	-----	-----	30'-0"	28'-3"	-----	-----

Notes :

- Spans apply to simple span application only.
- Minimum end bearing length is 1½", **except for bold spans minimum 1½" at the OSB section with web stiffeners.**
- Maximum spans are measured **centerline to centerline** of bearing and are based on uniformly loaded joists.
- Dead load deflection is limited to L/360 and Total load deflection is limited to L/240.
- Live Load is limited to L/480.
- The spans shown are in accordance with NBCC and CAN/CSA O86 and take into consideration the performance criterion with continuous strongback installed at mid span.
- Refer to appropriate sections of the Specifier Guide for installation guidelines and construction details.
- The nailing specifications are to be in accordance with the National Building Code of Canada (NBCC) and the adhesives used should comply with CGSB standard CAN-CGSB 71.26-M88.
- (S) = Special grade, verify availability

