PINKOODO SPECIFIER GUIDE DKIOIST DY

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I-JOISTS Made Bette even

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PINKWOOD I-JOISTS PKI10, PKI15, PKI20, PKI23, PKI35 Plus, PKI40, PKI50 - CANADA

Joist by

wood

PKIjoist[™]

PinkWood manufactures premium I-joists, under the trade name "PKjoists", for residential and commercial projects. Our Standard and Fire Rated (SAFEjoists) joists are available in six series ranging in depths of 9 1/2" to 24", and up to 58' in lengths. Our PKjoists are built to precise tolerances and will resist warping, crowning, and shrinkage.

PKI SERIES

PKI joists are manufactured with either 2x3 (PKI10, 15, 20, 23) or 2x4 (PKI35Plus, 40, 50) proprietary-grade solid-sawn lumber. Having only two flange sizes results in simplified selection of hangers and fasteners, thereby reducing the number of component SKUs required by dealers.



Note: PKI 10, 20, 23, 35 Plus, 40 & 50 series are currently available uncoated. PKI 40 & 50 series are available up to 24" depths.

WEBSHIELD®

WHY ARE BUILDERS DEMANDING WEBSHIELD **PROTECTED I-JOISTS IN THEIR HOUSES?**

- 1. Meets 2012 IRC 501.3 exception 4 and 2015 IRC 302.13 Code Requirements.
- 2. Pinkwood offers WEBshield protection for 9-1/2" to 16" PKIjoists.
- 3. Framers prefer working with WEBshield protected i-joists for ease of handling, wide-flange nailing, and side nailing capabilities.
- 4. By utilizing standard PKIjoists, mechanical, electrical and plumbing penetrations are made with ease.
- 5. Home owners enjoy Pinkwood's WEBshield protected joists for the peace of mind offered.



PHYSICAL DESIGN PROPERTIES FOR PKI Joists

Design properties are in Limit States Design, and for standard term load duration.

					End Reacti		tion (lbs)	Interr	nediate	Reaction	(lbs)		
Joist	Joist Depth	Weight	Factored Moment	Factored Shear	1 1/2" o Beari	r 2 1/2" ng ⁽¹⁾	4" Bea	aring ⁽²⁾	3 1/2" I	Bearing	5 1/2" E	Bearing	Bending Stiffness EI	Shear Deflection
Series	(inches)	(рп)	(lbs-ft)	(lbs)	Web	Stiff.	Web	Stiff.	Web	Stiff.	Web	Stiff.	(x10 ⁶ lbs-in ²)	(x10 ⁶ lbs)
			(()	No	Yes	No	Yes	No	Yes	No	Yes	1	(
	9-1/2	2.3	4012	1531	1531	1531	1531	1531	3062	3062	3062	3062	145	4.94
PKI 15	11-7/8	2.5	5261	1689	1689	1689	1689	1689	3156	3156	3156	3156	265	6.18
	14	2.8	6453	1862	1689	1689	1689	1689	3377	3377	3377	3377	400	7.28
	9-1/2	2.4	4675	1990	1530	1800	1750	1990	3465	3750	3865	4160	193	4.94
DI(LOO	11-7/8	2.7	6250	2345	1530	2010	1830	2345	3680	3985	4095	4465	327	6.18
PKI 20	14	3.0	7325	2650	1530	2200	1895	2650	3875	4205	4300	4745	479	7.28
	16	3.2	8410	2950	1530	2385	1955	2950	4055	4410	4500	5010	652	8.32
	9-1/2	2.8	5350	1990	1530	1800	1750	1990	3465	3750	3865	4160	226	4.94
DICI 00	11-7/8	3.1	6940	2345	1530	2010	1830	2345	3680	3985	4095	4465	380	6.18
PKI 23	14	3.4	8355	2650	1530	2200	1895	2650	3875	4205	4300	4745	555	7.28
	16	3.6	9685	2950	1530	2385	1955	2950	4055	4410	4500	5010	752	8.32
	9-1/2	3.1	5580	1990	1420	1800	1750	1990	3465	3600	3865	3975	234	4.94
PKI 35	11-7/8	3.3	7225	2345	1420	2010	1830	2345	3465	3920	3985	4435	396	6.18
Plus	14	3.6	8665	2650	1420	2200	1895	2650	3465	4205	4080	4672	580	7.28
	16	3.8	9850	2950	1420	2385	1930	2945	3465	4545	4175	4900	787	8.32
	9-1/2	3.3	8960	2115	1870	2115	2060	2115	4575	4885	4640	5045	328	4.94
	11-7/8	3.6	11590	2565	1965	2385	2520	2565	4775	5270	4925	5550	553	6.18
	14	3.8	13960	2960	2020	2620	2520	2960	4865	5625	5175	6005	807	7.28
	16	4.0	16180	3340	2040	2840	2520	3340	4960	5960	5420	6440	1092	8.32
PKI 40	18	4.6	18300	4000	2065	3250	2650	4025	4495	6765	5420	7845	1421	9.36
	20	4.9	20250	4230	2065	3445	2650	4165	4495	6960	5420	7845	1799	10.4
	22	5.2	22175	4445	2065	3645	2650	4315	4495	7150	5420	7845	2224	11.44
	24	5.4	24080	4650	2065	3850	2650	4465	4495	7325	5420	7845	2698	12.48
	11 7/8	4.0	13230	3370	1965	2385	2520	2565	4775	5270	4925	5550	608	6.18
	14	4.3	15300	3600	2020	2620	2520	2960	4865	5625	5175	6005	879	7.28
	16	4.5	17720	3810	2040	2840	2520	3340	4960	5960	5420	6440	1182	8.32
PKI 50	18	4.8	21240	4000	2065	3250	2650	4025	4495	6765	5420	7845	1539	9.36
	20	5.1	23575	4230	2065	3445	2650	4165	4495	6960	5420	7845	1839	10.4
	22	5.4	24265	4445	2065	3645	2650	4315	4495	7150	5420	7845	2273	11.44
	24	5.6	26350	4650	2065	3850	2650	4465	4495	7325	5420	7845	2757	12.48

⁽¹⁾ For 9 1/2" to 16" I-joists, the minimum end reaction is based on 1 1/2" bearing length. For 18" to 24" joist, the minimum end reaction is based on 2 1/2" bearing length. ⁽²⁾ For all I-joists, the maximum end reaction is based on 4" bearing length.

CCMC 14001-R **UES ER-431**

SIMPLE SPANS: 40 Live Load / 15 Dead Load (L/480)

19/32" Sheathing Glued & Screwed

23/32" Sheathing Glued & Screwed

	IOIST	W/O CE	ILING DIF	RECTLY	WITH CE	EILING DI APPLIED	RECTLY			W/O CE	ILING DIF	RECTLY A	PPLIED	WITH CEILING DIRECTLY APPLIED			
DEPTH	TYPE	0/	C SPACIN	١G	0/	C SPACI	NG	DEPTH	TYPE		O/C SF	PACING			O/C SF	PACING	
		12"	16"	19.2"	12"	16"	19.2"			12"	16"	19.2"	24"	12"	16"	19.2"	24"
	PKI10	15'-4"	14'-6"	14'-0"	15'-10"	14'-11"	14'-6"		PKI10	16'-2"	15'-4"	14'-9"	13'-9"	16'-8"	15'-8"	14'-10"	13'-9"
	PKI15	15'-0"	14'-3"	13'-9"	15'-6"	14'-8"	14'-2"		PKI15	15'-11"	15'-0"	14'-4"	13'-4"	16'-4"	15'-1"	14'-4"	13'-4"
0.4/0"	PKI20	15'-8"	14'-10"	14'-4"	16'-2"	15'-3"	14'-9"	0.4/0"	PKI20	16'-7"	15'-8"	15'-1"	14'-4"	17'-0"	16'-1"	15'-5"	14'-4"
9 1/2	PKI23	16'-1"	15'-2"	14'-8"	16'-6"	15'-7"	15'-1"	9 1/2	PKI23	17'-0"	16'-0"	15'-5"	14'-10"	17'-5"	16'-5"	15'-10"	15'-0"
	PKI35Plus	16'-2"	15'-3"	14'-9"	16'-8"	15'-8"	15'-2"		PKI35Plus	17'-1"	16'-1"	15'-7"	14'-11"	17'-6"	16'-6"	15'-11"	15'-2"
	PKI40	17'-2"	16'-2"	15'-7"	17'-7"	16'-6"	16'-0"		PKI40	18'-1"	17'-0"	16'-5"	15'-9"	18'-7"	17'-5"	16'-9"	16'-1"
	PKI10	17'-2"	16'-3"	15'-8"	17'-9"	16'-9"	16'-3"		PKI10	18'-2"	17'-1"	16'-6"	15'-0"	18'-10"	17'-7"	16'-9"	15'-0"
	PKI15	17'-0"	16'-1"	15'-7"	17'-6"	16'-7"	16'-1"		PKI15	17'-11"	16'-11"	16'-4"	15'-9"	18'-7"	17'-6"	16'-10"	16'-2"
	PKI20	17'-7"	16'-7"	16'-1"	18'-1"	17'-1"	16'-6"		PKI20	18'-8"	17'-6"	16'-10"	16'-2"	19'-3"	18'-0"	17'-4"	16'-8"
11 7/8"	PKI23	18'-0"	17'-0"	16'-5"	18'-8"	17'-6"	16'-11"	11 7/8"	PKI23	19'-3"	17'-11"	17'-3"	16'-7"	19'-10"	18'-5"	17'-8"	17'-0"
	PKI35Plus	18'-2"	17'-1"	16'-7"	18'-9"	17'-7"	17'-0"		PKI35Plus	19'-5"	18'-0"	17'-4"	16'-8"	20'-0"	18'-7"	17'-10"	17'-1"
	PKI40	19'-7"	18'-1"	17'-6"	20'-2"	18'-8"	17'-11"		PKI40	20'-11"	19'-4"	18'-5"	17'-7"	21'-5"	19'-10"	18'-11"	18'-0"
	PKI50	19'-11"	18'-5"	17'-9"	20'-6"	19'-0"	18'-2"		PKI50	21'-4"	19'-8"	18'-9"	17'-10"	21'-10"	20'-3"	19'-3"	18'-3"
	PKI10	18'-10"	17'-7"	17'-1"	19'-7"	18'-3"	17'-8"		PKI10	20'-2"	18'-9"	17'-11"	17'-3"	20'-11"	19'-5"	18'-7"	17'-8"
	PKI15	18'-8"	17'-6"	17'-0"	19'-5"	18'-1"	17'-6"		PKI15	20'-0"	18'-7"	17'-10"	17'-2"	20'-9"	19'-4"	18'-6"	17'-8"
	PKI20	19'-4"	18'-0"	17'-5"	20'-1"	18'-8"	18'-0"		PKI20	20'-9"	19'-3"	18'-4"	17'-7"	21'-5"	19'-11"	19'-0"	18'-1"
14"	PKI23	20'-0"	18'-6"	17'-10"	20'-8"	19'-3"	18'-5"	14"	PKI23	21'-4"	19'-9"	18'-11"	17'-11"	22'-0"	20'-6"	19'-7"	18'-7"
	PKI35Plus	20'-2"	18'-9"	18'-0"	20'-11"	19'-5"	18'-7"		PKI35Plus	21'-7"	20'-0"	19'-1"	18'-1"	22'-3"	20'-8"	19'-9"	18'-9"
	PKI40	21'-8"	20'-1"	19'-2"	22'-4"	20'-9"	19'-10"		PKI40	23'-2"	21'-5"	20'-5"	19'-4"	23'-9"	22'-0"	21'-0"	19'-11"
	PKI50	22'-1"	20'-5"	19'-6"	22'-9"	21'-1"	20'-2"		PKI50	23'-8"	21'-10"	20'-9"	19'-8"	24'-3"	22'-5"	21'-4"	20'-3"
	PKI20	21'-1"	19'-7"	18'-9"	21'-11"	20'-5"	19'-6"		PKI20	22'-7"	20'-11"	19'-11"	18'-11"	23'-4"	21'-8"	20'-9"	19'-8"
	PKI23	21'-9"	20'-2"	19'-4"	22'-6"	20'-11"	20'-1"		PKI23	23'-3"	21'-6"	20'-6"	19'-6"	24'-0"	22'-3"	21'-3"	20'-2"
16"	PKI35Plus	21'-11"	20'-4"	19'-6"	22'-9"	21'-1"	20'-3"	16"	PKI35Plus	23'-6"	21'-9"	20'-9"	19'-8"	24'-2"	22'-6"	21'-6"	20'-4"
	PKI40	23'-7"	21'-10"	20'-10"	24'-4"	22'-7"	21'-7"		PKI40	25'-3"	23'-4"	22'-2"	21'-0"	25'-11"	24'-0"	22'-10"	21'-8"
	PKI50	24'-0"	22'-2"	21'-3"	24'-9"	22'-11"	21'-11"		PKI50	25'-8"	23'-8"	22'-7"	21'-4"	26'-4"	24'-4"	23'-2"	22'-0"
10"	PKI40	25'-5"	23'-6"	22'-5"	26'-3"	24'-3"	23'-3"	10"	PKI40	27'-2"	25'-1"	23'-10"	22'-7"	27'-10"	25'-10"	24'-7"	23'-4"
10	PKI50	25'-7"	23'-7"	22'-7"	26'-4"	24'-5"	23'-4"	10	PKI50	27'-4"	25'-2"	24'-0"	22'-8"	28'-0"	25'-11"	24'-8"	23'-5"
20"	PKI40	27'-2"	25'-1"	24'-0"	28'-0"	25'-11"	24'-10"	20"	PKI40	29'-0"	26'-9"	25'-6"	24'-1"	29'-9"	27'-7"	26'-3"	24'-11"
20	PKI50	27'-4"	25'-2"	24'-1"	28'-2"	26'-1"	24'-11"	20	PKI50	29'-2"	26'-11"	25'-7"	24'-3"	29'-11"	27'-8"	26'-5"	25'-0"
22"	PKI40	28'-10"	26'-7"	25'-5"	29'-9"	27'-7"	26'-4"	22"	PKI40	30'-9"	28'-5"	27'-0"	25'-7"	31'-7"	29'-3"	27'-11"	26'-5"
22	PKI50	29'-0"	26'-9"	25'-6"	29'-11"	27'-8"	26'-5"	22	PKI50	30'-11"	28'-7"	27'-2"	25'-8"	31'-9"	29'-5"	28'-0"	26'-6"
24"	PKI40	30'-5"	28'-1"	26'-10"	31'-5"	29'-1"	27'-10"	24"	PKI40	32'-8"	30'-0"	28'-6"	27'-0"	33'-10"	30'-11"	29'-5"	27'-11"
24	PKI50	30'-7"	28'-3"	26'-11"	31'-7"	29'-3"	27'-11"	24	PKI50	32'-10"	30'-2"	28'-8"	27'-1"	34'-0"	31'-1"	29'-7"	28'-0"

NOTES ON SPAN TABLES

1. The spans listed have been determined in accordance with, NBCC, CSA O86-19 "Engineering Design in Wood", and the vibration criteria developed by the Canadian Construction Materials Centre (CCMC).

- 2. The maximum tabulated spans are design spans measured from the centerline of the minimum bearing lengths. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span.
- 3. Spans are based on composite action for sheathing glued and nailed to the I-joists. The spans are not applicable when the sheathing is nailed only to the joists.
- 4. Deflection due to total load is limited to 1/240 of the span.
- 5. Minimum end bearing length is 1 1/2" and the minimum interior bearing length is 3 1/2".

6. Pink shaded spans require 2 ½" end bearing for 9 1/2" to 16" deep I-joists and 4" end bearing for 18" to 24" deep I-joists.

SIMPLE SPANS: 40 Live Load / 30 Dead Load (L/480)

19/32" Sheathing Glued & Screwed

		W/O CE	ILING DI	RECTLY	WITH CEILING DIRECTLY APPLIED				
DEPTH	TYPE	0/	C SPACIN	١G	0/	C SPACI	١G		
		12"	16"	19.2"	12"	16"	19.2"		
	PKI10	15'-4"	14'-6"	13'-10"	15'-10"	14'-11"	13'-10"		
	PKI15	15'-0"	14'-3"	13'-9"	15'-6"	14'-8"	14'-2"		
0.4/0"	PKI20	15'-8"	14'-10"	14'-4"	16'-2"	15'-3"	14'-9"		
9 1/2"	PKI23	16'-1"	15'-2"	14'-8"	16'-6"	15'-7"	15'-1"		
	PKI35Plus	16'-2"	15'-3"	14'-9"	16'-8"	15'-8"	15'-2"		
	PKI40	17'-2"	16'-2"	15'-7"	17'-7"	16'-6"	16'-0"		
	PKI10	17'-2"	16'-3"	15'-1"	17'-9"	16'-6"	15'-1"		
	PKI15	17'-0"	16'-1"	15'-7"	17'-6"	16'-7"	16'-1"		
	PKI20	17'-7"	16'-7"	16'-1"	18'-1"	17'-1"	16'-6"		
11 7/8"	PKI23	18'-0"	17'-0"	16'-5"	18'-8"	17'-6"	16'-11"		
	PKI35Plus	18'-2"	17'-1"	16'-7"	18'-9"	17'-7"	17'-0"		
	PKI40	19'-7"	18'-1"	17'-6"	20'-2"	18'-8"	17'-11"		
	PKI50	19'-11"	18'-5"	17'-9"	20'-6"	19'-0"	18'-2"		
	PKI10	18'-10"	17'-7"	17'-1"	19'-7"	18'-3"	17'-8"		
	PKI15	18'-8"	17'-6"	17'-0"	19'-5"	18'-1"	17'-6"		
	PKI20	19'-4"	18'-0"	17'-5"	20'-1"	18'-8"	18'-0"		
14"	PKI23	20'-0"	18'-6"	17'-10"	20'-8"	19'-3"	18'-5"		
	PKI35Plus	20'-2"	18'-9"	18'-0"	20'-11"	19'-5"	18'-7"		
	PKI40	21'-8"	20'-1"	19'-2"	22'-4"	20'-9"	19'-10"		
	PKI50	22'-1"	20'-5"	19'-6"	22'-9"	21'-1"	20'-2"		
	PKI20	21'-1"	19'-7"	18'-9"	21'-11"	20'-5"	19'-6"		
	PKI23	21'-9"	20'-2"	19'-4"	22'-6"	20'-11"	20'-1"		
16"	PKI35Plus	21'-11"	20'-4"	19'-6"	22'-9"	21'-1"	20'-3"		
	PKI40	23'-7"	21'-10"	20'-10"	24'-4"	22'-7"	21'-7"		
	PKI50	24'-0"	22'-2"	21'-3"	24'-9"	22'-11"	21'-11"		
	PKI40	25'-5"	23'-6"	22'-5"	26'-3"	24'-3"	23'-3"		
18"	PKI50	25'-7"	23'-7"	22'-7"	26'-4"	24'-5"	23'-4"		
	PKI40	27'-2"	25'-1"	24'-0"	28'-0"	25'-11"	24'-10"		
20"	PKI50	27'-4"	25'-2"	24'-1"	28'-2"	26'-1"	24'-11"		
0.5"	PKI40	28'-10"	26'-7"	25'-5"	29'-9"	27'-7"	26'-4"		
22"	PKI50	29'-0"	26'-9"	25'-6"	29'-11"	27'-8"	26'-5"		
	PKI40	30'-5"	28'-1"	26'-10"	31'-5"	29'-1"	27'-10"		
24"	PKI50	30'-7"	28'-3"	26'-11"	31'-7"	29'-3"	27'-11"		

- 7. The adhesive utilized to glue the sheathing to the joists shall comply with standard CAN/CGSB 71.26-M88.
- 8. The ceiling shall be a single layer of 1/2" thick gypsum board directly applied to the I-joists.
- considered to be a maximum unbraced length of 24".
- 10. Web stiffeners are required for I-Joists seated in hangers where the top flange is not laterally supported.
- 11. Spans are limited to the bearing resistance of an SPF wall plate.
- 12. Lateral support must be provided at all bearing locations to prevent lateral displacement and rotation.
- 15% or less on average over a year without exceeding 19%.

23/32" Sheathing Glued & Screwed

	IOIOT	W/O CE	ILING DIF	RECTLY A	PPLIED	WITH CI	EILING DI	RECTLY	APPLIED
DEPTH	TYPE		O/C SF	ACING			O/C SF	PACING	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	PKI10	16'-2"	15'-2"	13'-10"	12'-5"	16'-8"	15'-2"	13'-10"	12'-5"
	PKI15	15'-11"	15'-0"	14'-4"	12'-9"	16'-4"	15'-1"	14'-4"	12'-9"
0.4/0"	PKI20	16'-7"	15'-8"	15'-1"	13'-10"	17'-0"	16'-1"	15'-5"	13'-10"
9 1/2"	PKI23	17'-0"	16'-0"	15'-5"	14'-9"	17'-5"	16'-5"	15'-10"	14'-9"
	PKI35Plus	17'-1"	16'-1"	15'-7"	14'-11"	17'-6"	16'-6"	15'-11"	15'-1"
	PKI40	18'-1"	17'-0"	16'-5"	15'-9"	18'-7"	17'-5"	16'-9"	16'-1"
	PKI10	18'-2"	16'-6"	15'-1"	13'-6"	18'-10"	16'-6"	15'-1"	13'-6"
	PKI15	17'-11"	16'-11"	16'-4"	14'-8"	18'-7"	17'-6"	16'-5"	14'-8"
	PKI20	18'-8"	17'-6"	16'-10"	16'-0"	19'-3"	18'-0"	17'-4"	16'-0"
11 7/8"	PKI23	19'-3"	17'-11"	17'-3"	16'-7"	19'-10"	18'-5"	17'-8"	16'-10"
	PKI35Plus	19'-5"	18'-0"	17'-4"	16'-2"	20'-0"	18'-7"	17'-10"	16'-2"
	PKI40	20'-11"	19'-4"	18'-5"	17'-7"	21'-5"	19'-10"	18'-11"	18'-0"
	PKI50	21'-4"	19'-8"	18'-9"	17'-10"	21'-10"	20'-3"	19'-3"	18'-3"
	PKI10	20'-2"	18'-9"	17'-9"	15'-11"	20'-11"	19'-5"	17'-9"	15'-11"
	PKI15	20'-0"	18'-7"	17'-10"	16'-3"	20'-9"	19'-4"	18'-2"	16'-3"
	PKI20	20'-9"	19'-3"	18'-4"	17'-2"	21'-5"	19'-11"	19'-0"	17'-2"
14"	PKI23	21'-4"	19'-9"	18'-11"	17'-2"	22'-0"	20'-6"	19'-7"	17'-2"
	PKI35Plus	21'-7"	20'-0"	19'-1"	16'-6"	22'-3"	20'-8"	19'-9"	16'-6"
	PKI40	23'-2"	21'-5"	20'-5"	19'-4"	23'-9"	22'-0"	21'-0"	19'-11"
	PKI50	23'-8"	21'-10"	20'-9"	19'-8"	24'-3"	22'-5"	21'-4"	20'-3"
	PKI20	22'-7"	20'-11"	19'-11"	17'-5"	23'-4"	21'-8"	20'-9"	17'-5"
	PKI23	23'-3"	21'-6"	20'-6"	17'-5"	24'-0"	22'-3"	21'-3"	17'-5"
16"	PKI35Plus	23'-6"	21'-9"	20'-9"	16'-7"	24'-2"	22'-6"	20'-9"	16'-7"
	PKI40	25'-3"	23'-4"	22'-2"	21'-0"	25'-11"	24'-0"	22'-10"	21'-8"
	PKI50	25'-8"	23'-8"	22'-7"	21'-4"	26'-4"	24'-4"	23'-2"	22'-0"
10"	PKI40	27'-2"	25'-1"	23'-10"	22'-7"	27'-10"	25'-10"	24'-7"	23'-4"
10	PKI50	27'-4"	25'-2"	24'-0"	22'-8"	28'-0"	25'-11"	24'-8"	23'-5"
20"	PKI40	29'-0"	26'-9"	25'-6"	24'-1"	29'-9"	27'-7"	26'-3"	24'-11"
20	PKI50	29'-2"	26'-11"	25'-7"	24'-3"	29'-11"	27'-8"	26'-5"	25'-0"
 "	PKI40	30'-9"	28'-5"	27'-0"	25'-7"	31'-7"	29'-3"	27'-11"	26'-5"
22	PKI50	30'-11"	28'-7"	27'-2"	25'-8"	31'-9"	29'-5"	28'-0"	26'-6"
24"	PKI40	32'-8"	30'-0"	28'-6"	27'-0"	33'-10"	30'-11"	29'-5"	27'-2"
24	PKI50	32'-10"	30'-2"	28'-8"	27'-1"	34'-0"	31'-1"	29'-7"	27'-2"

9. Continuous lateral support must be provided for the top and bottom flanges on the compression edge. Continuous lateral support is

13. I-Joists shall be used in dry-service condition — a climatic condition in which the average equilibrium moisture content of wood is

CONTINUOUS SPANS: 40 Live Load / 15 Dead Load (Live Load Deflection L/480)

19/32" Sheathing Glued & Screwed

23/32" Sheathing Glued & Screwed

IOIST		W/O CEILING DIRECTLY APPLIED			WITH CEILING DIRECTLY APPLIED		JOIST			W/O CE	ILING DIF	RECTLY A	PPLIED	WITH CEILING DIRECTLY APPLIED				
DEPTH	TYPE	0/	C SPACIN	١G	0/	C SPACI	NG		DEPTH	TYPE		O/C SP	ACING			O/C SF	PACING	
		12"	16"	19.2"	12"	16"	19.2"				12"	16"	19.2"	24"	12"	16"	19.2"	24"
	PKI10	16'-0"	15'-2"	14'-8"	16'-6"	15'-7"	15'-1"			PKI10	16'-11"	16'-0"	15'-5"	13'-9"	17'-4"	16'-5"	15'-5"	13'-9"
	PKI15	15'-8"	14'-10"	14'-5"	16'-2"	15'-4"	14'-10"			PKI15	16'-7"	15'-8"	15'-2"	14'-3"	17'-1"	16'-2"	15'-7"	14'-3"
0.4/0"	PKI20	16'-4"	15'-6"	15'-0"	16'-10"	15'-11"	15'-5"		0.4/01	PKI20	17'-3"	16'-4"	15'-9"	15'-1"	17'-9"	16'-9"	16'-2"	15'-4"
9 1/2	PKI23	16'-10"	15'-10"	15'-4"	17'-3"	16'-4"	15'-9"		9 1/2	PKI23	17'-9"	16'-9"	16'-1"	15'-6"	18'-2"	17'-2"	16'-6"	15'-11"
	PKI35Plus	16'-11"	16'-0"	15'-5"	17'-4"	16'-5"	15'-10"			PKI35Plus	17'-10"	16'-10"	16'-3"	15'-7"	18'-4"	17'-3"	16'-8"	16'-0"
	PKI40	17'-11"	16'-11"	16'-4"	18'-5"	17'-3"	16'-8"			PKI40	19'-2"	17'-9"	17'-2"	16'-5"	19'-7"	18'-2"	17'-6"	16'-9"
	PKI10	17'-11"	16'-11"	16'-5"	18'-7"	17'-6"	16'-9"			PKI10	19'-2"	17'-10"	16'-9"	15'-0"	19'-10"	18'-4"	16'-9"	15'-0"
	PKI15	17'-9"	16'-9"	16'-3"	18'-5"	17'-4"	16'-10"			PKI15	18'-11"	17'-8"	17'-1"	16'-0"	19'-7"	18'-3"	17'-7"	16'-0"
	PKI20	18'-5"	17'-4"	16'-9"	19'-1"	17'-10"	17'-3"			PKI20	19'-8"	18'-4"	17'-7"	16'-11"	20'-4"	19'-0"	18'-1"	17'-5"
11 7/8"	PKI23	19'-0"	17'-9"	17'-2"	19'-8"	18'-4"	17'-8"		11 7/8"	PKI23	20'-4"	18'-10"	18'-0"	17'-3"	21'-0"	19'-6"	18'-7"	17'-9"
	PKI35Plus	19'-2"	17'-10"	17'-3"	19'-10"	18'-6"	17'-9"			PKI35Plus	20'-6"	19'-0"	18'-2"	17'-5"	21'-2"	19'-8"	18'-9"	17'-7"
	PKI40	20'-8"	19'-2"	18'-4"	21'-4"	19'-9"	18'-11"			PKI40	22'-1"	20'-5"	19'-6"	18'-6"	22'-8"	21'-0"	20'-0"	19'-0"
	PKI50	21'-1"	19'-6"	18'-8"	21'-9"	20'-1"	19'-3"			PKI50	22'-7"	20'-10"	19'-10"	18'-10"	23'-1"	21'-5"	20'-5"	19'-4"
	PKI10	19'-11"	18'-6"	17'-10"	20'-8"	19'-4"	18'-6"			PKI10	21'-3"	19'-9"	18'-10"	17'-7"	22'-1"	20'-7"	19'-8"	17'-7"
	PKI15	19'-8"	18'-4"	17'-9"	20'-6"	19'-2"	18'-5"			PKI15	21'-1"	19'-7"	18'-9"	17'-1"	21'-11"	20'-5"	19'-6"	17'-1"
	PKI20	20'-5"	19'-0"	18'-3"	21'-3"	19'-9"	19'-0"			PKI20	21'-10"	20'-4"	19'-4"	18'-5"	22'-7"	21'-1"	20'-2"	19'-2"
14"	PKI23	21'-1"	19'-7"	18'-9"	21'-10"	20'-4"	19'-6"		14"	PKI23	22'-7"	20'-11"	19'-11"	18'-11"	23'-3"	21'-8"	20'-8"	19'-8"
	PKI35Plus	21'-4"	19'-9"	18'-11"	22'-1"	20'-6"	19'-8"			PKI35Plus	22'-9"	21'-1"	20'-2"	17'-7"	23'-6"	21'-10"	20'-10"	17'-7"
	PKI40	22'-11"	21'-3"	20'-4"	23'-8"	21'-11"	21'-0"			PKI40	24'-6"	22'-8"	21'-7"	20'-5"	25'-2"	23'-4"	22'-3"	21'-1"
	PKI50	23'-5"	21'-7"	20'-8"	24'-1"	22'-4"	21'-4"			PKI50	25'-0"	23'-1"	22'-0"	20'-10"	25'-7"	23'-9"	22'-7"	21'-5"
	PKI20	22'-3"	20'-8"	19'-10"	23'-2"	21'-7"	20'-8"			PKI20	23'-10"	22'-1"	21'-1"	20'-0"	24'-8"	22'-11"	21'-11"	20'-7"
	PKI23	22'-11"	21'-3"	20'-5"	23'-10"	22'-2"	21'-3"			PKI23	24'-6"	22'-9"	21'-8"	20'-7"	25'-4"	23'-7"	22'-6"	20'-7"
16"	PKI35Plus	23'-2"	21'-6"	20'-7"	24'-0"	22'-4"	21'-5"		16"	PKI35Plus	24'-9"	23'-0"	21'-11"	17'-7"	25'-7"	23'-9"	22'-0"	17'-7"
	PKI40	25'-0"	23'-1"	22'-1"	25'-9"	23'-10"	22'-10"			PKI40	26'-8"	24'-8"	23'-5"	22'-3"	27'-4"	25'-4"	24'-2"	22'-11"
	PKI50	25'-5"	23'-6"	22'-5"	26'-2"	24'-3"	23'-2"			PKI50	27'-2"	25'-1"	23'-10"	22'-7"	27'-10"	25'-9"	24'-7"	23'-3"
10"	PKI40	26'-11"	24'-10"	23'-9"	27'-9"	25'-8"	24'-7"		10"	PKI40	28'-8"	26'-6"	25'-3"	22'-9"	29'-5"	27'-4"	26'-0"	22'-9"
10	PKI50	27'-0"	25'-0"	23'-10"	27'-10"	25'-10"	24'-8"		10	PKI50	28'-10"	26'-8"	25'-4"	22'-9"	29'-7"	27'-5"	26'-2"	22'-9"
20"	PKI40	28'-9"	26'-6"	25'-4"	29'-8"	27'-5"	26'-3"		20"	PKI40	30'-8"	28'-4"	26'-11"	22'-9"	31'-5"	29'-2"	27'-10"	22'-9"
20	PKI50	28'-10"	26'-8"	25'-6"	29'-9"	27'-7"	26'-4"		20	PKI50	30'-10"	28'-5"	27'-1"	22'-9"	31'-7"	29'-4"	27'-11"	22'-9"
<u></u>	PKI40	30'-6"	28'-2"	26'-11"	31'-5"	29'-2"	27'-10"		00"	PKI40	32'-8"	30'-0"	28'-6"	22'-9"	33'-10"	30'-11"	28'-6"	22'-9"
22	PKI50	30'-8"	28'-3"	27'-0"	31'-7"	29'-3"	28'-0"		22	PKI50	32'-11"	30'-2"	28'-6"	22'-9"	34'-1"	31'-1"	28'-6"	22'-9"
0.4"	PKI40	32'-3"	29'-9"	28'-4"	33'-7"	30'-9"	28'-6"		0.4"	PKI40	35'-2"	31'-8"	28'-6"	22'-9"	36'-5"	32'-11"	28'-6"	22'-9"
24	PKI50	32'-5"	29'-10"	28'-6"	33'-10"	30'-11"	28'-6"		24	PKI50	35'-5"	31'-10"	28'-6"	22'-9"	36'-7"	33'-1"	28'-6"	22'-9"

NOTES ON SPAN TABLES

1. The spans listed have been determined in accordance with, NBCC, CSA O86-19 "Engineering Design in Wood", and the vibration criteria developed by the Canadian Construction Materials Centre (CCMC).

- 2. The maximum tabulated spans are design spans measured from the centerline of the minimum bearing lengths. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span.
- 3. Spans are based on composite action for sheathing glued and nailed to the I-joists. The spans are not applicable when the sheathing is nailed only to the joists.
- 4. Deflection due to total load is limited to 1/240 of the span.
- 5. Minimum end bearing length is 1 1/2" and the minimum interior bearing length is 3 1/2".

6. Pink shaded spans require 2 ½" end bearing for 9 1/2" to 16" deep I-joists and 4" end bearing for 18" to 24" deep I-joists.

CONTINUOUS SPANS: 40 Live Load / 30 Dead Load (Live Load Deflection L/480)

19/32" Sheathing Glued & Screwed

		0					
JOIST	JOIST	W/O CE	ILING DIF	RECTLY	WITH CI	EILING DI APPLIED	RECTLY
DEPTH	TYPE	0/	C SPACIN	١G	0/	C SPACI	١G
		12"	16"	19.2"	12"	16"	19.2"
	PKI10	16'-0"	15'-2"	13'-10"	16'-6"	15'-2"	13'-10"
	PKI15	15'-8"	14'-10"	14'-4"	16'-2"	15'-4"	14'-4"
0.4/0"	PKI20	16'-4"	15'-6"	15'-0"	16'-10"	15'-11"	15'-5"
9 1/2	PKI23	16'-10"	15'-10"	15'-4"	17'-3"	16'-4"	15'-9"
	PKI35Plus	16'-11"	16'-0"	15'-5"	17'-4"	16'-5"	15'-10"
	PKI40	17'-11"	16'-11"	16'-4"	18'-5"	17'-3"	16'-8"
	PKI10	17'-11"	16'-6"	15'-1"	18'-7"	16'-6"	15'-1"
	PKI15	17'-9"	16'-9"	16'-2"	18'-5"	17'-4"	16'-2"
	PKI20	18'-5"	17'-4"	16'-9"	19'-1"	17'-10"	17'-3"
11 7/8"	PKI23	19'-0"	17'-9"	17'-2"	19'-8"	18'-4"	17'-8"
	PKI35Plus	19'-2"	17'-10"	17'-3"	19'-10"	18'-6"	17'-9"
	PKI40	20'-8"	19'-2"	18'-4"	21'-4"	19'-9"	18'-11"
	PKI50	21'-1"	19'-6"	18'-8"	21'-9"	20'-1"	19'-3"
	PKI10	19'-11"	18'-6"	17'-9"	20'-8"	19'-4"	17'-9"
	PKI15	19'-8"	18'-4"	17'-3"	20'-6"	19'-2"	17'-3"
	PKI20	20'-5"	19'-0"	18'-3"	21'-3"	19'-9"	19'-0"
14"	PKI23	21'-1"	19'-7"	18'-9"	21'-10"	20'-4"	19'-6"
	PKI35Plus	21'-4"	19'-9"	17'-9"	22'-1"	20'-6"	17'-9"
	PKI40	22'-11"	21'-3"	20'-4"	23'-8"	21'-11"	21'-0"
	PKI50	23'-5"	21'-7"	20'-8"	24'-1"	22'-4"	21'-4"
	PKI20	22'-3"	20'-8"	19'-10"	23'-2"	21'-7"	20'-8"
	PKI23	22'-11"	21'-3"	20'-5"	23'-10"	22'-2"	20'-9"
16"	PKI35Plus	23'-2"	21'-3"	17'-9"	24'-0"	21'-3"	17'-9"
	PKI40	25'-0"	23'-1"	22'-1"	25'-9"	23'-10"	22'-10"
	PKI50	25'-5"	23'-6"	22'-5"	26'-2"	24'-3"	23'-2"
40"	PKI40	26'-11"	24'-10"	23'-0"	27'-9"	25'-8"	23'-0"
18	PKI50	27'-0"	25'-0"	23'-0"	27'-10"	25'-10"	23'-0"
20"	PKI40	28'-9"	26'-6"	23'-0"	29'-8"	27'-5"	23'-0"
20	PKI50	28'-10"	26'-8"	23'-0"	29'-9"	27'-7"	23'-0"
22"	PKI40	30'-6"	27'-7"	23'-0"	31'-5"	27'-7"	23'-0"
22	PKI50	30'-8"	27'-7"	23'-0"	31'-7"	27'-7"	23'-0"
24"	PKI40	32'-3"	27'-7"	23'-0"	33'-7"	27'-7"	23'-0"
24	PKI50	32'-5"	27'-7"	23'-0"	33'-10"	27'-7"	23'-0"

- 7. The adhesive utilized to glue the sheathing to the joists shall comply with standard CAN/CGSB 71.26-M88.
- 8. The ceiling shall be a single layer of 1/2" thick gypsum board directly applied to the I-joists.
- considered to be a maximum unbraced length of 24".
- 10. Web stiffeners are required for I-Joists seated in hangers where the top flange is not laterally supported.
- 11. Spans are limited to the bearing resistance of an SPF wall plate.
- 12. Lateral support must be provided at all bearing locations to prevent lateral displacement and rotation.
- 15% or less on average over a year without exceeding 19%.

	10107	W/O CE	ILING DIF	RECTLY A	PPLIED	WITH CI	EILING DI	RECTLY	APPLIED
DEPTH	TYPE		O/C SF	ACING			O/C SF	PACING	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	PKI10	16'-11"	15'-2"	13'-10"	12'-5"	17'-4"	15'-2"	13'-10"	12'-5"
	PKI15	16'-7"	15'-8"	14'-4"	12'-6"	17'-1"	15'-8"	14'-4"	12'-6"
	PKI20	17'-3"	16'-4"	15'-5"	13'-10"	17'-9"	16'-9"	15'-5"	13'-10"
9 1/2"	PKI23	17'-9"	16'-9"	16'-1"	14'-2"	18'-2"	17'-2"	16'-6"	14'-2"
	PKI35Plus	17'-10"	16'-10"	16'-3"	14'-2"	18'-4"	17'-3"	16'-8"	14'-2"
	PKI40	19'-2"	17'-9"	17'-2"	16'-5"	19'-7"	18'-2"	17'-6"	16'-9"
	PKI10	19'-1"	16'-6"	15'-1"	13'-6"	19'-1"	16'-6"	15'-1"	13'-6"
	PKI15	18'-11"	17'-8"	16'-2"	12'-11"	19'-7"	17'-11"	16'-2"	12'-11"
	PKI20	19'-8"	18'-4"	17'-7"	15'-1"	20'-4"	19'-0"	17'-10"	15'-1"
11 7/8"	PKI23	20'-4"	18'-10"	18'-0"	15'-1"	21'-0"	19'-6"	18'-7"	15'-1"
	PKI35Plus	20'-6"	19'-0"	17'-9"	14'-2"	21'-2"	19'-8"	17'-9"	14'-2"
	PKI40	22'-1"	20'-5"	19'-6"	18'-6"	22'-8"	21'-0"	20'-0"	19'-0"
	PKI50	22'-7"	20'-10"	19'-10"	18'-10"	23'-1"	21'-5"	20'-5"	19'-4"
	PKI10	21'-3"	19'-6"	17'-9"	14'-2"	22'-1"	19'-6"	17'-9"	14'-2"
	PKI15	21'-1"	19'-7"	17'-3"	13'-10"	21'-11"	19'-11"	17'-3"	13'-10"
	PKI20	21'-10"	20'-4"	19'-4"	15'-10"	22'-7"	21'-1"	19'-4"	15'-10"
14"	PKI23	22'-7"	20'-11"	19'-10"	15'-10"	23'-3"	21'-8"	19'-10"	15'-10"
	PKI35Plus	22'-9"	21'-1"	17'-9"	14'-2"	23'-6"	21'-3"	17'-9"	14'-2"
	PKI40	24'-6"	22'-8"	21'-7"	19'-11"	25'-2"	23'-4"	22'-3"	19'-11"
	PKI50	25'-0"	23'-1"	22'-0"	19'-11"	25'-7"	23'-9"	22'-7"	19'-11"
	PKI20	23'-10"	22'-1"	20'-9"	16'-7"	24'-8"	22'-8"	20'-9"	16'-7"
	PKI23	24'-6"	22'-9"	20'-9"	16'-7"	25'-4"	23'-7"	20'-9"	16'-7"
16"	PKI35Plus	24'-9"	21'-3"	17'-9"	14'-2"	25'-7"	21'-3"	17'-9"	14'-2"
	PKI40	26'-8"	24'-8"	23'-5"	20'-4"	27'-4"	25'-4"	24'-2"	20'-4"
	PKI50	27'-2"	25'-1"	23'-10"	20'-4"	27'-10"	25'-9"	24'-7"	20'-4"
10"	PKI40	28'-8"	26'-6"	23'-0"	18'-5"	29'-5"	27'-4"	23'-0"	18'-5"
10	PKI50	28'-10"	26'-8"	23'-0"	18'-5"	29'-7"	27'-5"	23'-0"	18'-5"
20"	PKI40	30'-8"	27'-7"	23'-0"	18'-5"	31'-5"	27'-7"	23'-0"	18'-5"
20	PKI50	30'-10"	27'-7"	23'-0"	18'-5"	31'-7"	27'-7"	23'-0"	18'-5"
22"	PKI40	32'-8"	27'-7"	23'-0"	18'-5"	33'-10"	27'-7"	23'-0"	18'-5"
22	PKI50	32'-11"	27'-7"	23'-0"	18'-5"	34'-1"	27'-7"	23'-0"	18'-5"
24"	PKI40	35'-2"	27'-7"	23'-0"	18'-5"	36'-5"	27'-7"	23'-0"	18'-5"
24	PKI50	35'-5"	27'-7"	23'-0"	18'-5"	36'-7"	27'-7"	23'-0"	18'-5"

23/32" Sheathing Glued & Screwed

9. Continuous lateral support must be provided for the top and bottom flanges on the compression edge. Continuous lateral support is

13. I-Joists shall be used in dry-service condition — a climatic condition in which the average equilibrium moisture content of wood is

FLOOR INSTALLATION DETAILS - PKI 10, 20, 23, 35 Plus, 40 & 50

Canadian Handling & Installation Recommendations



Disclaimer: The above details represent the most common details found in day to day construction of I-joist floor systems and are not intended to cover all scenarios that may be encountered in the field. When faced with an uncertain design detail, please contact your PKI supplier or PinkWood Ltd. for assistance



" Rim Board, C2 or better^(b) or Rated Sturd-I-Floor 32 oc



PHYSICAL DESCRIPTION:

located at the bottom of the stiffener.



LOCATION OF CIRCULAR HOLES IN PKI JOIST WEBS

	Sim	ole or M	ultiple	Spans	for Liv	e Load	ls Up to	o 40 ps	f and C	ead Lo	oads up	to 30	psf - 24	4″ o.c.	or Less		
						Min. Dis	stance f	rom Insi	de Edge	of Any	Support	to Cent	er of Ho	le (ft-in)			
								I	Round H	lole Diar	neter (in)					
Joist Depth	Series	SAF (ft)	2	3	4	5	6	6 1/4	7	8	8 5/8	9	10	10 3/4	11	12	12 3/4
		c, (,						Recta	ngular I	Hole Lor	igest Sic	de (in)					
			1 1/2	2 1/8	2 7/8	3 5/8	4 1/4	4 1/2	5	5 3/4	6 1/8	6 3/8	7 1/8	7 5/8	7 7/8	8 1/2	9 1/8
	PKI 10	12.13	1'-0"	1'-0"	2'-0"	3'-3"	4'-6"	4'-10"									
	PKI 15	12.21	1'-8"	2'-7"	3'-7"	4'-7"	5'-8"	5'-11"									
0.4/01	PKI 20	13.54	1'-0"	1'-9"	3'-0"	4'-2"	5'-6"	5'-10"									
9 1/2"	PKI 23	13.88	1'-0"	2'-0"	3'-2"	4'-5"	5'-9"	6'-1"									
	PKI 35 Plus	13.88	1'-0"	2'-0"	3'-2"	4'-5"	5'-9"	6'-1"									
	PKI 40	15.63	1'-9"	3'-0"	4'-4"	5'-8"	7'-1"	7'-5"									
	PKI 10	13.21	1'-0"	1'-0"	1'-0"	1'-8"	2'-9"	3'-1"	3'-11"	5'-2"	6'-0"						
	PKI 15	12.63	1'-0"	1'-9"	2'-6"	3'-5"	4'-3"	4'-6"	5'-2"	6'-1"							
	PKI 20	14.79	1'-0"	1'-0"	1'-7"	2'-8"	3'-10"	4'-2"	5'-0"	6'-3"	7'-1"						
11 7/8"	PKI 23	14.79	1'-0"	1'-0"	1'-7"	2'-8"	3'-10"	4'-2"	5'-0"	6'-3"	7'-1"						
	PKI 35 Plus	13.88	1'-0"	1'-0"	1'-0"	2'-1"	3'-3"	3'-6"	4'-5"	5'-8"	6'-5"						
	PKI 40	17.46	1'-0"	1'-10"	3'-1"	4'-3"	5'-7"	5'-11"	6'-11"	8'-4"							
	PKI 50	17.71	1'-0"	1'-0"	1'-0"	2'-0"	3'-6"	3'-11"	5'-2"	6'-11"	8'-0"						
	PKI 10	13.88	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-7"	2'-4"	3'-5"	4'-2"	4'-7"	5'-9"	6'-9"			
	PKI 15	13.54	1'-0"	1'-3"	2'-0"	2'-9"	3'-7"	3'-9"	4'-4"	5'-2"	5'-9"	6'-1"					
	PKI 20	15.54	1'-0"	1'-0"	1'-0"	1'-4"	2'-5"	2'-8"	3'-6"	4'-7"	5'-4"	5'-9"	7'-0"				
14"	PKI 23	15.29	1'-0"	1'-0"	1'-0"	1'-2"	2'-3"	2'-6"	3'-4"	4'-5"	5'-2"	5'-7"	6'-9"	7'-9"			
	PKI 35 Plus	13.88	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-7"	2'-4"	3'-5"	4'-2"	4'-7"	5'-9"	6'-9"			
	PKI 40	19.21	1'-0"	1'-0"	1'-9"	2'-11"	4'-1"	4'-5"	5'-4"	6'-8"	7'-6"	8'-0"	9'-4"				
	PKI 50	19.54	1'-0"	1'-0"	1'-0"	1'-0"	2'-2"	2'-6"	3'-7"	5'-1"	6'-0"	6'-7"	8'-2"	9'-5"			
	PKI 20	16.29	1'-0"	1'-0"	1'-0"	1'-0"	1'-1"	1'-5"	2'-2"	3'-2"	3'-10"	4'-3"	5'-4"	6'-3"	6'-6"	7'-9"	
	PKI 23	16.29	1'-0"	1'-0"	1'-0"	1'-0"	1'-1"	1'-5"	2'-2"	3'-2"	3'-10"	4'-3"	5'-4"	6'-3"	6'-6"	7'-9"	
16"	PKI 35 Plus	13.88	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-7"	2'-3"	2'-8"	3'-8"	4'-6"	4'-10"	6'-0"	6'-11"
	PKI 40	20.04	1'-0"	1'-0"	1'-0"	1'-1"	2'-3"	2'-6"	3'-5"	4'-7"	5'-4"	5'-10"	7'-1"	8'-1"	8'-5"	9'-10"	
	PKI 50	20.04	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"	3'-4"	4'-2"	4'-8"	6'-1"	7'-2"	7'-6"	9'-1"	

Notes:

(a) Above table may be used for I-joist spacing of 24 inches o.c. or less.

(b) Hole location distance is measured from inside face of supports to center of hole

(c) Distances in this chart are based on uniformly loaded joists.

(d) Hole sizes and/or locations that fall outside the scope of this table may be acceptable based on analysis of actual hole size, span, spacing and loading conditions. The I-joist shear capacity at the location of a circular web hole (V,) is calculated using the following equation

V_{-b} = Published Shear Value x [(Joist Depth – Hole Diameter) / Joist Depth]

(e) SAF = Span Adjustment Factor, used as defined below:

OPTIONAL:

Above table is based on the I-joists used at their maximum span. If the I-joists are placed at less than their full allowable span, the maximum distance from the centerline of the hole to the face of any support (D) as indicated, may be reduced as follows:

$$D_{reduced} = \frac{L_{actual}}{SAF} \times D$$

Where: D_{reduced} = Distance from the inside face of any support to center of hole, reduced for less-than-maximum span applications (ft). The reduced distance shall not be less than 12 inches from the face of the support to edge of the hole.

L_{actual} = The actual measured span distance between the inside faces of supports (ft).

SAF = Span Adjustment Factor given in this table.

D = The minimum distance from the inside face of any support to center of hole from this table.

If $\frac{L_{actual}}{RAE}$ is greater than 1, use 1 in the above calculation for $\frac{L_{actual}}{RAE}$

PKI JOIST TYPICAL HOLES



WEB HOLE SPECIFICATIONS

One of the benefits of using I-joists in residential floor construction is that holes may be cut in the joist webs to accommodate electrical wiring, plumbing lines and other mechanical systems, therefore minimizing the depth of the floor system.

Rules for cutting holes in PKI Joists

- 2. I-joist top and bottom flanges must NEVER be cut, notched or otherwise modified.
- 3. Whenever possible, field-cut holes should be centered on the middle of the web.
- always be maintained between the top or bottom of the hole and the adjacent I-joist flange.
- ments of table on the left.
- 8. A 1-1/2-inch hole or smaller can be placed anywhere in the web provided that it meets the requirements of rule number 6 above.
- 9. All holes shall be cut in a workman-like manner in accordance with the restrictions listed above and as illustrated in Figure 6.
- 10. Limit three maximum-size holes per span.

FIRE RATED ASSEMBLIES

PinkWood Assembly PK1.5

One-Hour Fire Resistance Rated Floor/Ceiling Assembly This fire resistance design is listed in accordance with American Wood Council's Design for Code Acceptance (DCA) 3

PKI 10, PKI 20, PKI 23, PKI 35Plus, PKI 40 and PKI 50

A. BASIC ASSEMBLIES

- 1. Floor Topping (Optional): Varies (reference sound ratings if applicable).
- 2.25 inches² (1,452 mm²). Min. web thickness of 3/8 inch (9.5 mm).
- 4. Ceiling: Two layers of 1/2-inch (13-mm) Type C Gypsum Wallboard.
- c. Finish: The face laver joints must be covered with tape and coated with joint compound. Screw heads must also be covered with joint compound.

B. SOUND RATING(a)

Components	ST
Base Assembly with Carpet and Padding, Gypsum Concrete	49

(a) Sound ratings from the American Wood Council piblication Design for Code Acceptance (DCA) 3.

Full PinkWood Fire assembly listings can be found in APA Product Report PR-S315

Cutting the Hole

- Never drill, cut or notch the flange, or over-cut the web.
- · Holes in webs should be cut with a sharp saw.
- · For rectangular holes, avoid over-cutting the corners, as this can cause unnecessary stress concentrations. Slightly rounding the corners is recommended. Starting the rectangular hole by drilling a 1-inch-diameter hole in each of the four corners and then making the cuts between the holes is another good method to minimize damage to the I-joist.



1. The distance between the inside edge of the support and the centerline of any hole shall be in compliance with the requirements of the table on the left.

4. The maximum size hole that can be cut into an I-joist web shall equal the clear distance between the flanges of the I-joist minus 1/4 inch. A minimum of 1/8 inch should

5. The sides of square holes or longest sides of rectangular holes should not exceed three-fourths of the diameter of the maximum round hole permitted at that location. 6. Where more than one hole is necessary, the distance between adjacent hole edges shall exceed twice the diameter of the largest round hole or twice the size of the largest square hole (or twice the length of the longest side of the longest rectangular hole) and each hole must be sized and located in compliance with the require-

7. Holes measuring 1-1/2 inches or smaller shall be permitted anywhere in a cantilevered section of a PKI Joist. Holes of greater size may be permitted subject to verification.

11. A group of round holes at approximately the same location shall be permitted if they meet the requirements for a single round hole circumscribed around them.



2. Floor Sheathing: Min. 23/32-inch (18-mm) T&G Wood Structural Panel. The sheets shall be installed with their long edge perpendicular to the joists with end joints centered over the top flange

of joists. Floor sheathing must be installed per code requirements. 3. Structural Members: Min. 9-1/4 inches (235 mm) deep I-joists. Max. 24 inches (610 mm) on center spacing. Min. flange thickness of 1-1/2 inches (38 mm) and each flange area of at least

a. Base Layer: Install with long dimension perpendicular to joist length. Attach to the bottom flange of the joists using 1-inch (25-mm) Type S drywall screws at 12 inches (305 mm) on center. The end joints of the wallboard must be centered on the bottom flange of the joist and must be staggered.

b. Face Layer: Install with long dimension perpendicular to joist length. Attach to the bottom flange of the joists through the base layer using 1-5/8-inch (41-mm) Type S drywall screws spaced at 12 inches (305 mm) on center on intermediate joists and 8 inches (203 mm) on center at end joints. The longitudinal joints of this layer must be offset 24 inches (610 mm) from those of the base layer. The end joints must be centered on the bottom flange of the joists and offset a min. of 48 inches (1219 mm) from those of the base layer. Additionally, face layer end joints are attached to the base layer with 1-1/2-inch (38-mm) Type G drywall screws at 8 inches (203 mm) on center with a 4-inch (102-mm) stagger, placed 6 inches (152 mm) either side of the

)	IIC
	55

PinkWood Assembly PK1.6 One-Hour Fire Resistance Rated Floor/Ceiling Assembly This fire resistance design is listed in accordance with American Wood Council's Design for Code Acceptance (DCA) 3

PKI 10, PKI 20, PKI 23, PKI 35 Plus, PKI 40 and PKI 50

A. BASIC ASSEMBLIES

- 1. Floor Topping (Optional): Varies (reference sound ratings if applicable)
- 2. Floor Sheathing: Min. 23/32-inch (18-mm) T&G Wood Structural Panel. The sheets shall be installed with their long edge perpendicular to the joists with end joints centered over the top flange of joists. Floor sheathing must be installed per code requirements
- 3. Structural Members: Min. 9-1/4 inches (235 mm) Deep I-joists. Max. 24 inches (610 mm) on center spacing. Min. flange thickness of 1-1/2 inches (38 mm) and each flange area of at least 2.25 inches² (1,452 mm²). Min. web thickness of 3/8 inch (9.5 mm).
- 4. Resilient Channelst: Min. 0.019-inch (0.5-mm) Galvanized Resilient Channels. Attached percendicular to the bottom flange of the I-joist with 1-1/4-inch (32-mm) Type S drywall screws. Channels are spaced a max. of 16 inches (406 mm) on center (24 inches or 610 mm when I-joists are spaced a max. of 16 inches or 406 mm on center), are doubled at each base layer wallboard end joint, and extend to the next joist beyond each joint.
- Ceiling: Two layers of 1/2-inch (13-mm) Type C Gypsum Wallboard.
 Base Layer: Install with long dimension perpendicular to resilient channels. Attach to the resilient channels using 1-1/4 inch (32-mm) Type S drywall screws at 12 inches (305 mm) on center. The end joints of the wallboard must be staggered.
- b. Face Layer: Install with long dimension perpendicular to resilient channels. Attach to the resilient channels through the base layer using 1-5/8-inch (41-mm) Type S drywall screws spaced at 12 inches (305 mm) on center. The longitudinal joints of this layer must be offset 24 inches (610 mm) from those of the base layer. Additionally, face layer end joints are attached to the base layer with 1-1/2-inch (38-mm) Type G drywall screws at 8 inches (203 mm) on center placed 1-1/2 inches (38 mm) either side of the joint.
- c. Finish: The face layer joints must be covered with tape and coated with joint compound. Screw heads must also be covered with joint compound.

B. SOUND RATING(a)

Components	STC	IIC
Base Assembly with Carpet and Padding	54	68
Base Assembly with Carpet and Padding, Gypsum Concrete	58	55

(a) Sound ratings from the American Wood Council piblication Design for Code Acceptance (DCA) 3.

PinkWood Assembly PK1.7

One-Hour Fire Resistance Rated Floor/Ceiling Assembly This fire resistance design is listed in accordance with American Wood Council's Design for Code Acceptance (DCA) 3

PKI 10, PKI 20, PKI 23, PKI 35 Plus, PKI 40 and PKI 50

A. BASIC ASSEMBLIES

- 1. Floor Topping (Optional): Varies (reference sound ratings if applicable)
- 2. Floor Sheathing: Min. 23/32-inch (18-mm) T&G Wood Structural Panel. The sheets shall be installed with their long edge perpendicular to the joists with end joints centered over the top flange of joists. Floor sheathing must be installed per code requirements.
- 3. Insulation: Glass Fiber Insulation. Installed between I-joists and supported by resilient channels.
- 4. Structural Members: Min. 9-1/4 inches (235 mm) Deep I-joists. Max. 24 inches (610 mm) on center spacing. Min. flange thickness of 1-1/2 inches (38 mm) and each flange area of at least 2.25 inches² (1.452 mm²). Min. web thickness of 3/8 inch (9.5 mm).
- 5. Resilient Channels: Min. 0.019-inch (0.5-mm) Galvanized Resilient Channels. Attached perpendicular to the bottom flange of the I-joist with 1-1/4-inch (32-mm) Type S drywall screws. Channels are spaced a max. of 16 inches (406 mm) on center (24 inches or 610 mm when I-joists are spaced a max. of 16 inches or 406 mm on center), are doubled at each base layer wallboard end joint, and extend to the next joist beyond each joint.
- 6. Ceiling: Two layers of 1/2-inch (13-mm) Type C Gypsum Wallboard. a. Base Layer: Install with long dimension perpendicular to resilient channels. Attach to the resilient channels using 1-1/4 inch (32-mm) Type S drywall screws at 12 inches (305 mm) on center. The end joints of the wallboard must be staggered.
- b. Face Layer: Install with long dimension perpendicular to resilient channels. Attach to the resilient channels through the base layer using 1-5/8-inch (41-mm) Type S drywall screws spaced at 12 inches (305 mm) on center. The longitudinal joints of this layer must be offset 24 inches (610 mm) from those of the base layer. Additionally, face layer end joints are attached to the base layer with 1-1/2-inch (38-mm) Type G drywall screws at 8 inches (203 mm) on center placed 1-1/2 inches (38 mm) either side of the joint.
- c. Finish: The face layer joints must be covered with tape and coated with joint compound. Screw heads must also be covered with joint compound.

B. SOUND RATING(a)

Components	STC	IIC
Base Assembly with cushioned vinyl	59	50
Base Assembly with Carpet and Padding	55	68
Base Assembly with cushioned vinyl, Gypsum Concrete	65	51
Base Assembly with Carpet and Padding, Gypsum Concrete	63	65

(a) Sound ratings from the American Wood Council piblication Design for Code Acceptance (DCA) 3.



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PRODUCT STORAGE

Protect products from sun and water. Caution: Wrap is slippery when wet. Use support blocks at 10' on centre to keep products out of mud and water.







drill anv holes over a support.

cut or notch split the flange top or bottom Ensure proper cords. toe nailing.

bevel cut the joist past the inside face of wall.

WARNING

Joists are unstable until braced laterally

Bracing includes:

- Blocking
- Hangers
- Rim Board
- Rim

Strut Lines



Follow these guidelines:

- placed on the system.

DO NOT walk on joists until braced. INJURY CAN OCCUR.





SAFETY PRECAUTIONS



use conventional lumber for structural rim or band board



install joists on an angle



built-up.



use conventional prolong exposure to the lumber combined elements, (rain, snow, with PKI Joists as sun) either on-site or at lumber yard.

Lack of proper bracing during construction can result in serious injuries.

1. All blocking, hangers, rim boards and rim joists at the end supports of the PKI Joists must be

2. Lateral strength, like a braced end wall or an existing deck, must be established at the end of the bay. This can also be accomplished by a temporary or permanent deck (sheathing) fastened to the first four feet of joists at the end of the bay.

3. Safety bracing of 1x4 (minimum) must be nailed to a braced end wall or sheathed area (as in #2) and to each joist. Without this bracing, buckling sideways or rollover is highly probable under light construction loads - such as a worker or one layer of unnailed sheathing.

4. Sheathing must be completely attached to each PKI Joist before additional loads can be

5. Ends of cantilevers require safety bracing on both the top and bottom flanges. 6. The flanges must remain straight within a tolerance of $\frac{1}{2}$ from true alignment.

> DO NOT stack building materials on unsheathed joists. Stack only over beams or walls.



DO NOT walk on joists that are lying flat





ENGINEERED FLOOR SYSTEM GUARANTEE

PinkWood joists are manufactured to meet or exceed the rigorous engineering and testing standards set by every major code approval agency in North America.

All PinkWood joist products are unconditionally guaranteed to be free of manufacturing defects. When installed and handled as per the PKjoist Installation Guide, our joists will perform in accordance with the published structural specifications.

In the unlikely event that a problem occurs due to a manufacturing defect, PinkWood shall be given a reasonable opportunity to inspect the PinkWood product on site. If this evaluation reveals a problem due to manufacturing defects, the situation shall be promptly corrected.

Please feel free to contact a representative of PinkWood for specific details and limitations of this guarantee.



Authorized Dealer:



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