

LOW-SLOPE ROOF SPANS 115% SNOW

ALLOWABLE SPANS FOR PWI JOISTS – 30 PSF LIVE LOAD – 15 PSF DEAD LOAD

Joist Series	Joist Depth	Simple Span			Multiple Spans		
		Slopes to 1 in 12			Slopes to 1 in 12		
		16" o.c.	19.2" o.c.	24" o.c.	16" o.c.	19.2" o.c.	24" o.c.
PWI 20	9½"	18'-9" ⁽¹⁾	17'-8" ⁽¹⁾	15'-10" ⁽¹⁾	19'-5" ⁽¹⁾	17'-8" ⁽¹⁾	15'-9" ⁽¹⁾
	11⅞"	22'-2" ⁽¹⁾	20'-3" ⁽¹⁾	18'-1" ⁽¹⁾	22'-1" ⁽¹⁾	20'-2" ⁽¹⁾	18'-0" ⁽¹⁾
	14"	24'-3" ⁽¹⁾	22'-1" ⁽¹⁾	19'-9" ⁽¹⁾	24'-2" ⁽¹⁾	22'-0" ⁽¹⁾	19'-8" ⁽¹⁾
PWI 30	9½"	19'-5" ⁽¹⁾	18'-3" ⁽¹⁾	16'-11" ⁽¹⁾	21'-9" ⁽¹⁾	20'-0" ⁽¹⁾	17'-11" ⁽¹⁾
	11⅞"	23'-5" ⁽¹⁾	22'-0" ⁽¹⁾	20'-4" ⁽¹⁾	25'-0" ⁽¹⁾	22'-10" ⁽¹⁾	19'-2" ⁽¹⁾
	14"	25'-5" ⁽¹⁾	23'-2" ⁽¹⁾	20'-8" ⁽¹⁾	25'-4" ⁽¹⁾	23'-1" ⁽¹⁾	20'-7" ⁽²⁾
PWI 40	9½"	20'-3" ⁽¹⁾	18'-6" ⁽¹⁾	16'-6" ⁽¹⁾	20'-2" ⁽¹⁾	18'-5" ⁽¹⁾	16'-5" ⁽¹⁾
	11⅞"	23'-1" ⁽¹⁾	21'-1" ⁽¹⁾	18'-10" ⁽¹⁾	23'-0" ⁽¹⁾	21'-0" ⁽¹⁾	18'-9" ⁽¹⁾
	14"	27'-4" ⁽¹⁾	24'-11" ⁽¹⁾	22'-4" ⁽¹⁾	27'-3" ⁽¹⁾	24'-10" ⁽¹⁾	22'-3" ⁽²⁾
PWI 50	9½"	20'-5" ⁽¹⁾	19'-2" ⁽¹⁾	17'-9" ⁽¹⁾	22'-9" ⁽¹⁾	21'-4" ⁽¹⁾	19'-5" ⁽¹⁾
	11⅞"	24'-7" ⁽¹⁾	23'-1" ⁽¹⁾	21'-4" ⁽¹⁾	27'-2" ⁽¹⁾	24'-9" ⁽¹⁾	20'-7" ⁽²⁾
	14"	28'-1" ⁽¹⁾	26'-4" ⁽¹⁾	24'-3" ⁽¹⁾	29'-8" ⁽¹⁾	25'-9" ⁽²⁾	20'-7" ⁽²⁾
PWI 60	9½"	21'-11" ⁽¹⁾	20'-7" ⁽¹⁾	19'-0" ⁽¹⁾	23'-10" ⁽¹⁾	21'-8" ⁽¹⁾	19'-5" ⁽¹⁾
	11⅞"	26'-4" ⁽¹⁾	24'-8" ⁽¹⁾	22'-2" ⁽¹⁾	27'-2" ⁽¹⁾	24'-9" ⁽¹⁾	22'-1" ⁽²⁾
	14"	29'-10" ⁽¹⁾	27'-3" ⁽¹⁾	24'-4" ⁽¹⁾	29'-9" ⁽¹⁾	27'-2" ⁽²⁾	24'-3" ⁽²⁾
PWI 70	11⅞"	27'-3" ⁽¹⁾	25'-7" ⁽¹⁾	23'-8" ⁽¹⁾	30'-5" ⁽²⁾	28'-6" ⁽²⁾	23'-7" ⁽²⁾
	14"	30'-11" ⁽¹⁾	29'-1" ⁽¹⁾	26'-11" ⁽¹⁾	34'-7" ⁽²⁾	29'-6" ⁽²⁾	23'-7" ⁽²⁾
	16"	34'-4" ⁽¹⁾	32'-2" ⁽¹⁾	29'-5" ⁽¹⁾	35'-6" ⁽²⁾	29'-6" ⁽²⁾	23'-7" ⁽²⁾
PWI 77	9½"	22'-10" ⁽¹⁾	21'-6" ⁽¹⁾	19'-10" ⁽¹⁾	25'-6" ⁽¹⁾	23'-11" ⁽¹⁾	22'-2" ⁽²⁾
	11⅞"	27'-4" ⁽¹⁾	25'-8" ⁽¹⁾	23'-9" ⁽¹⁾	30'-6" ⁽²⁾	28'-8" ⁽²⁾	25'-10" ⁽²⁾
	14"	31'-1" ⁽¹⁾	29'-2" ⁽¹⁾	27'-0" ⁽¹⁾	34'-8" ⁽²⁾	31'-7" ⁽²⁾	27'-3" ⁽²⁾
PWI 90	9½"	26'-2" ⁽¹⁾	24'-7" ⁽¹⁾	22'-8" ⁽¹⁾	29'-2" ⁽¹⁾	27'-5" ⁽²⁾	25'-4" ⁽²⁾
	11⅞"	31'-2" ⁽¹⁾	29'-3" ⁽¹⁾	27'-1" ⁽¹⁾	34'-10" ⁽²⁾	32'-8" ⁽²⁾	30'-2" ⁽²⁾
	14"	35'-5" ⁽¹⁾	33'-3" ⁽¹⁾	30'-9" ⁽¹⁾	39'-7" ⁽²⁾	37'-2" ⁽²⁾	34'-0" ⁽²⁾

See notes on page 31

LOW-SLOPE ROOF SPANS 115% SNOW

ALLOWABLE SPANS FOR PWI JOISTS – 40 PSF LIVE LOAD – 15 PSF DEAD LOAD

Joist Series	Joist Depth	Simple Span			Multiple Spans		
		Slopes to 1 in 12			Slopes to 1 in 12		
		16" o.c.	19.2" o.c.	24" o.c.	16" o.c.	19.2" o.c.	24" o.c.
PWI 20	9½"	17'-6" ⁽¹⁾	16'-0" ⁽¹⁾	14'-4" ⁽¹⁾	17'-6" ⁽¹⁾	16'-0" ⁽¹⁾	14'-3" ⁽¹⁾
	11⅞"	20'-1" ⁽¹⁾	18'-3" ⁽¹⁾	16'-4" ⁽¹⁾	20'-0" ⁽¹⁾	18'-2" ⁽¹⁾	16'-3" ⁽¹⁾
	14"	21'-11" ⁽¹⁾	20'-0" ⁽¹⁾	17'-10" ⁽¹⁾	21'-10" ⁽¹⁾	19'-11" ⁽¹⁾	16'-4" ⁽²⁾
PWI 30	9½"	18'-2" ⁽¹⁾	17'-0" ⁽¹⁾	15'-9" ⁽¹⁾	19'-10" ⁽¹⁾	18'-1" ⁽¹⁾	15'-8" ⁽¹⁾
	11⅞"	21'-10" ⁽¹⁾	20'-6" ⁽¹⁾	18'-6" ⁽¹⁾	22'-7" ⁽¹⁾	19'-8" ⁽¹⁾	15'-8" ⁽¹⁾
PWI 40	9½"	18'-4" ⁽¹⁾	16'-9" ⁽¹⁾	14'-11" ⁽¹⁾	18'-3" ⁽¹⁾	16'-8" ⁽¹⁾	14'-10" ⁽¹⁾
	11⅞"	20'-11" ⁽¹⁾	19'-1" ⁽¹⁾	17'-0" ⁽¹⁾	20'-10" ⁽¹⁾	19'-0" ⁽¹⁾	16'-11" ⁽²⁾
	14"	22'-11" ⁽¹⁾	20'-11" ⁽¹⁾	18'-8" ⁽¹⁾	22'-10" ⁽¹⁾	20'-10" ⁽²⁾	18'-8" ⁽²⁾
PWI 50	9½"	19'-0" ⁽¹⁾	17'-10" ⁽¹⁾	16'-6" ⁽¹⁾	21'-3" ⁽¹⁾	19'-8" ⁽¹⁾	16'-9" ⁽²⁾
	11⅞"	22'-11" ⁽¹⁾	21'-6" ⁽¹⁾	19'-11" ⁽¹⁾	24'-7" ⁽¹⁾	21'-11" ⁽²⁾	16'-9" ⁽²⁾
	14"	26'-2" ⁽¹⁾	24'-7" ⁽¹⁾	21'-0" ⁽¹⁾	25'-4" ⁽²⁾	21'-1" ⁽²⁾	16'-9" ⁽²⁾
PWI 60	9½"	20'-5" ⁽¹⁾	19'-2" ⁽¹⁾	17'-7" ⁽¹⁾	21'-6" ⁽¹⁾	19'-7" ⁽¹⁾	17'-6" ⁽²⁾
	11⅞"	24'-6" ⁽¹⁾	22'-5" ⁽¹⁾	20'-1" ⁽¹⁾	24'-6" ⁽¹⁾	22'-4" ⁽²⁾	20'-11" ⁽²⁾
	14"	27'-0" ⁽¹⁾	24'-8" ⁽¹⁾	22'-0" ⁽¹⁾	26'-11" ⁽²⁾	24'-7" ⁽²⁾	20'-8" ⁽²⁾
PWI 70	16"	29'-1" ⁽¹⁾	26'-6" ⁽¹⁾	23'-9" ⁽¹⁾	29'-0" ⁽²⁾	25'-10" ⁽²⁾	20'-8" ⁽²⁾
	11⅞"	25'-5" ⁽¹⁾	23'-10" ⁽¹⁾	22'-0" ⁽¹⁾	28'-4" ⁽²⁾	24'-2" ⁽²⁾	19'-3" ⁽²⁾
	14"	28'-11" ⁽¹⁾	27'-1" ⁽¹⁾	24'-1" ⁽¹⁾	29'-0" ⁽²⁾	24'-2" ⁽²⁾	19'-3" ⁽²⁾
	16"	32'-0" ⁽¹⁾	30'-0" ⁽¹⁾	24'-1" ⁽¹⁾	29'-0" ⁽²⁾	24'-2" ⁽²⁾	19'-3" ⁽²⁾
	18"	35'-0" ⁽¹⁾	30'-1" ⁽¹⁾	24'-1" ⁽¹⁾	29'-0" ⁽²⁾	24'-2" ⁽²⁾	19'-3" ⁽²⁾
PWI 77	20"	36'-2" ⁽¹⁾	30'-1" ⁽¹⁾	24'-1" ⁽¹⁾	29'-0" ⁽²⁾	24'-2" ⁽²⁾	19'-3" ⁽²⁾
	9½"	21'-4" ⁽¹⁾	20'-0" ⁽¹⁾	18'-6" ⁽¹⁾	23'-10" ⁽¹⁾	22'-4" ⁽²⁾	20'-6" ⁽²⁾
	11⅞"	25'-6" ⁽¹⁾	23'-11" ⁽¹⁾	22'-1" ⁽¹⁾	28'-5" ⁽²⁾	26'-2" ⁽²⁾	22'-3" ⁽²⁾
	14"	29'-0" ⁽¹⁾	27'-3" ⁽¹⁾	25'-2" ⁽¹⁾	31'-4" ⁽²⁾	27'-11" ⁽²⁾	22'-3" ⁽²⁾
	16"	32'-2" ⁽¹⁾	30'-2" ⁽¹⁾	26'-8" ⁽¹⁾	33'-6" ⁽²⁾	27'-11" ⁽²⁾	22'-3" ⁽²⁾
	18"	35'-2" ⁽¹⁾	32'-7" ⁽¹⁾	26'-8" ⁽¹⁾	33'-6" ⁽²⁾	27'-11" ⁽²⁾	22'-3" ⁽²⁾
	20"	37'-7" ⁽¹⁾	33'-4" ⁽¹⁾	26'-8" ⁽¹⁾	33'-6" ⁽²⁾	27'-11" ⁽²⁾	22'-3" ⁽²⁾
PWI 90	22"	39'-5" ⁽¹⁾	36'-0" ⁽¹⁾	32'-2" ⁽¹⁾	39'-4" ⁽²⁾	35'-11" ⁽²⁾	32'-1" ⁽²⁾
	24"	41'-2" ⁽¹⁾	37'-7" ⁽¹⁾	33'-7" ⁽¹⁾	41'-1" ⁽²⁾	37'-6" ⁽²⁾	33'-0" ⁽²⁾
	9½"	24'-5" ⁽¹⁾	22'-11" ⁽¹⁾	21'-2" ⁽¹⁾	27'-3" ⁽²⁾	25'-6" ⁽²⁾	23'-7" ⁽²⁾
	11⅞"	29'-1" ⁽¹⁾	27'-4" ⁽¹⁾	25'-3" ⁽¹⁾	32'-6" ⁽²⁾	30'-5" ⁽²⁾	27'-9" ⁽²⁾
	14"	33'-1" ⁽¹⁾	31'-0" ⁽¹⁾	28'-8" ⁽¹⁾	36'-11" ⁽²⁾	34'-7" ⁽²⁾	27'-9" ⁽²⁾
	16"	36'-7" ⁽¹⁾	34'-4" ⁽¹⁾	29'-1" ⁽¹⁾	40'-11" ⁽²⁾	34'-9" ⁽²⁾	27'-9" ⁽²⁾
	18"	40'-0" ⁽¹⁾	36'-4" ⁽¹⁾	29'-1" ⁽¹⁾	41'-9" ⁽²⁾	34'-9" ⁽²⁾	27'-9" ⁽²⁾
	20"	43'-4" ⁽¹⁾	36'-4" ⁽¹⁾	29'-1" ⁽¹⁾	41'-9" ⁽²⁾	34'-9" ⁽²⁾	27'-9" ⁽²⁾
PWI 90	22"	46'-7" ⁽¹⁾	43'-8" ⁽¹⁾	39'-11" ⁽¹⁾	48'-10" ⁽²⁾	41'-4" ⁽²⁾	33'-0" ⁽²⁾
	24"	49'-8" ⁽¹⁾	46'-7" ⁽¹⁾	41'-8" ⁽²⁾	49'-7" ⁽²⁾	41'-4" ⁽²⁾	33'-0" ⁽²⁾

See notes on page 31

LOW-SLOPE ROOF SPANS 115% SNOW

ALLOWABLE SPANS FOR PWI JOISTS – 50 PSF LIVE LOAD – 15 PSF DEAD LOAD

Joist Series	Joist Depth	Simple Span			Multiple Spans		
		Slopes to 1 in 12			Slopes to 1 in 12		
		16" o.c.	19.2" o.c.	24" o.c.	16" o.c.	19.2" o.c.	24" o.c.
PWI 20	9½"	16'-2" ⁽¹⁾	14'-9" ⁽¹⁾	13'-2" ⁽¹⁾	16'-1" ⁽¹⁾	14'-8" ⁽¹⁾	13'-1" ⁽¹⁾
	11⅞"	18'-5" ⁽¹⁾	16'-10" ⁽¹⁾	15'-0" ⁽¹⁾	18'-4" ⁽¹⁾	16'-9" ⁽¹⁾	13'-10" ⁽²⁾
	14"	20'-2" ⁽¹⁾	18'-4" ⁽¹⁾	16'-0" ⁽¹⁾	20'-1" ⁽¹⁾	17'-4" ⁽²⁾	13'-10" ⁽²⁾
PWI 30	9½"	17'-0" ⁽¹⁾	15'-11" ⁽¹⁾	14'-9" ⁽¹⁾	18'-3" ⁽¹⁾	16'-7" ⁽¹⁾	13'-3" ⁽¹⁾
	11⅞"	20'-6" ⁽¹⁾	19'-0" ⁽¹⁾	16'-6" ⁽¹⁾	19'-11" ⁽¹⁾	16'-7" ⁽¹⁾	13'-3" ⁽¹⁾
	14"	21'-1" ⁽¹⁾	19'-3" ⁽¹⁾	17'-2" ⁽¹⁾	21'-0" ⁽²⁾	19'-2" ⁽²⁾	17'-1" ⁽²⁾
PWI 40	9½"	16'-10" ⁽¹⁾	15'-4" ⁽¹⁾	13'-9" ⁽¹⁾	16'-9" ⁽¹⁾	15'-3" ⁽¹⁾	13'-8" ⁽¹⁾
	11⅞"	19'-2" ⁽¹⁾	17'-6" ⁽¹⁾	15'-8" ⁽¹⁾	19'-2" ⁽¹⁾	17'-5" ⁽²⁾	15'-7" ⁽²⁾
	14"	22'-9" ⁽¹⁾	20'-9" ⁽¹⁾	18'-6" ⁽¹⁾	22'-8" ⁽²⁾	20'-8" ⁽²⁾	17'-5" ⁽²⁾
PWI 50	9½"	17'-10" ⁽¹⁾	16'-8" ⁽¹⁾	15'-5" ⁽¹⁾	19'-10" ⁽¹⁾	17'-9" ⁽²⁾	14'-2" ⁽²⁾
	11⅞"	21'-5" ⁽¹⁾	20'-1" ⁽¹⁾	17'-9" ⁽¹⁾	21'-5" ⁽²⁾	17'-9" ⁽²⁾	14'-2" ⁽²⁾
	14"	24'-6" ⁽¹⁾	22'-3" ⁽¹⁾	17'-9" ⁽¹⁾	21'-5" ⁽²⁾	17'-9" ⁽²⁾	14'-2" ⁽²⁾
PWI 60	9½"	19'-1" ⁽¹⁾	17'-11" ⁽¹⁾	16'-2" ⁽¹⁾	19'-9" ⁽¹⁾	18'-0" ⁽²⁾	15'-0" ⁽²⁾
	11⅞"	22'-7" ⁽¹⁾	20'-7" ⁽¹⁾	18'-5" ⁽¹⁾	22'-6" ⁽²⁾	20'-7" ⁽²⁾	17'-5" ⁽²⁾
	14"	24'-10" ⁽¹⁾	22'-8" ⁽¹⁾	20'-3" ⁽¹⁾	24'-9" ⁽²⁾	21'-10" ⁽²⁾	17'-5" ⁽²⁾
PWI 70	9½"	26'-6" ⁽¹⁾	24'-5" ⁽¹⁾	21'-0" ⁽¹⁾	26'-3" ⁽²⁾	21'-10" ⁽²⁾	17'-5" ⁽²⁾
	11⅞"	23'-9" ⁽¹⁾	22'-3" ⁽¹⁾	20'-4" ⁽¹⁾	24'-6" ⁽²⁾	20'-5" ⁽²⁾	16'-3" ⁽²⁾
	14"	27'-0" ⁽¹⁾	25'-4" ⁽¹⁾	20'-4" ⁽¹⁾	24'-6" ⁽²⁾	20'-5" ⁽²⁾	16'-3" ⁽²⁾
PWI 77	9½"	29'-11" ⁽¹⁾	25'-5" ⁽¹⁾	20'-4" ⁽¹⁾	24'-6" ⁽²⁾	20'-5" ⁽²⁾	16'-3" ⁽²⁾
	11⅞"	30'-7" ⁽¹⁾	25'-5" ⁽¹⁾	20'-4" ⁽¹⁾	24'-6" ⁽²⁾	20'-5" ⁽²⁾	16'-3" ⁽²⁾
	14"	30'-7" ⁽¹⁾	25'-5" ⁽¹⁾	20'-4" ⁽¹⁾	24'-6" ⁽²⁾	20'-5" ⁽²⁾	16'-3" ⁽²⁾
PWI 90	9½"	30'-7" ⁽¹⁾	25'-5" ⁽¹⁾	20'-4" ⁽¹⁾	24'-6" ⁽²⁾	20'-5" ⁽²⁾	16'-3" ⁽²⁾
	11⅞"	33'-11" ⁽¹⁾	28'-2" ⁽¹⁾	22'-6" ⁽¹⁾	28'-4" ⁽²⁾	23'-7" ⁽²⁾	18'-10" ⁽²⁾
	14"	36'-3" ⁽¹⁾	33'-1" ⁽¹⁾	29'-7" ⁽¹⁾	36'-2" ⁽²⁾	33'-0" ⁽²⁾	27'-11" ⁽²⁾
PWI 90	9½"	37'-10" ⁽¹⁾	34'-6" ⁽¹⁾	30'-10" ⁽¹⁾	37'-9" ⁽²⁾	34'-5" ⁽²⁾	27'-11" ⁽²⁾
	11⅞"	22'-10" ⁽¹⁾	21'-5" ⁽¹⁾	19'-9" ⁽¹⁾	25'-5" ⁽²⁾	23'-10" ⁽²⁾	20'-0" ⁽²⁾
	14"	27'-3" ⁽¹⁾	25'-6" ⁽¹⁾	23'-7" ⁽¹⁾	30'-4" ⁽²⁾	28'-5" ⁽²⁾	23'-6" ⁽²⁾
PWI 90	9½"	30'-11" ⁽¹⁾	29'-0" ⁽¹⁾	24'-7" ⁽¹⁾	34'-6" ⁽²⁾	29'-5" ⁽²⁾	23'-6" ⁽²⁾
	11⅞"	34'-3" ⁽¹⁾	30'-9" ⁽¹⁾	24'-7" ⁽¹⁾	35'-4" ⁽²⁾	29'-5" ⁽²⁾	23'-6" ⁽²⁾
	14"	36'-11" ⁽¹⁾	30'-9" ⁽¹⁾	24'-7" ⁽¹⁾	35'-4" ⁽²⁾	29'-5" ⁽²⁾	23'-6" ⁽²⁾
PWI 90	9½"	36'-11" ⁽¹⁾	30'-9" ⁽¹⁾	24'-7" ⁽¹⁾	35'-4" ⁽²⁾	29'-5" ⁽²⁾	23'-6" ⁽²⁾
	11⅞"	43'-7" ⁽¹⁾	40'-11" ⁽¹⁾	36'-8" ⁽²⁾	41'-11" ⁽²⁾	34'-11" ⁽²⁾	27'-11" ⁽²⁾
	14"	46'-6" ⁽¹⁾	42'-10" ⁽¹⁾	38'-4" ⁽²⁾	41'-11" ⁽²⁾	34'-11" ⁽²⁾	27'-11" ⁽²⁾

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