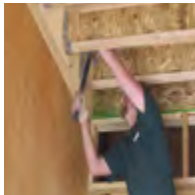
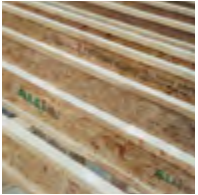




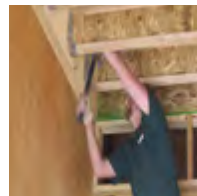
LIMIT STATES DESIGN
CANADA



EASTERN MULTI-FAMILY / COMMERCIAL SPECIFIER GUIDE



Report Number
CCMC 12787-R
PFS BCAR 1355

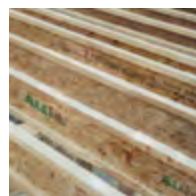


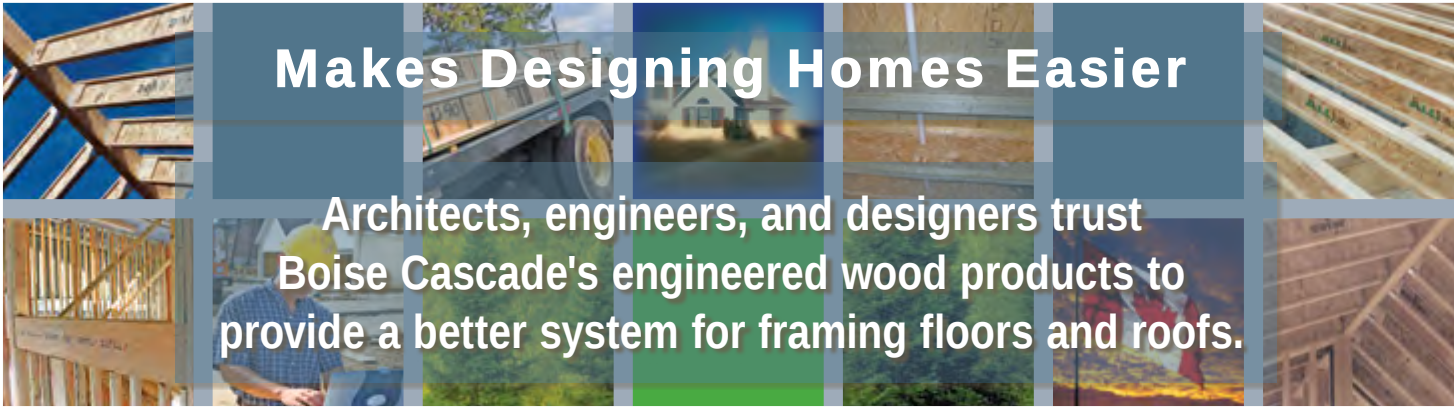
High Performance
Floor & Roof Systems



Boise Cascade
Engineered Wood Products

bc.com/ewp





Makes Designing Homes Easier

Architects, engineers, and designers trust
Boise Cascade's engineered wood products to
provide a better system for framing floors and roofs.

It's the SIMPLE FRAMING SYSTEM®, featuring beams, joists and rim boards that work together as a system, so you spend less time cutting and fitting. In fact, the SIMPLE FRAMING SYSTEM® uses fewer pieces and longer lengths than conventional framing, so you'll complete jobs in less time.

You'll Build Better Homes with the SIMPLE FRAMING SYSTEM®

Now it's easier than ever to design and build better floor systems. When you specify the SIMPLE FRAMING SYSTEM®, your clients will have fewer problems with squeaky floors and ceiling gypsum board cracks. The SIMPLE FRAMING SYSTEM® also means overall better floor and roof framing than dimension lumber allows.

Better Framing Doesn't Have to Cost More

Boise Cascade Engineered Wood Products' SIMPLE FRAMING SYSTEM® often costs less than conventional framing methods when the resulting

reduced labor and materials waste are considered. There's less sorting and cost associated with disposing of waste because you order only what you need. Although our longer lengths help your clients get the job done faster, they cost no more.

Environmentally Sound

As an added bonus, floor and roof systems built with AJS® Joists require about half the number of trees as those built with dimension lumber. This helps you design a home both you and future generations will be proud to own.

What Makes the SIMPLE FRAMING SYSTEM® So Simple?

✓ Floor and Roof Framing with ALLJOIST® Product

Light in weight, but heavy-duty, ALLJOIST® Product (AJS® Joists) have a better strength / weight ratio than dimension lumber. Knockouts can be removed for cross-ventilation and wiring.

✓ Ceilings Framed with AJS® Joists

The consistent size of AJS® Joists helps keep gypsum board flat and free of unsightly nail pops and ugly shadows, while keeping finish work to a minimum.

✓ VERSA-LAM® Beams for Floor and Roof Framing

These highly-stable beams are free of the large-scale defects that plague dimension beams. The result is quieter, flatter floors (no camber) and no shrinkage-related call-backs.

✓ Boise Cascade Rimboard

Boise Cascade Engineered Wood Products offer several engineered rimboard products regionally, including BC RIM BOARD® OSB, BC RIM BOARD® and VERSA-RIM® (check supplier or Boise Cascade EWP representative for availability). These products work with AJS® Joists to provide a solid connection at the critical floor/wall intersection.

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ALLJOIST® & VERSA-LAM® ARCHITECTURAL SPECIFICATIONS 3

Scope: This work includes the complete furnishing and installation of all AJS® Joists as shown on the drawings, herein specified and necessary to complete the work.

Materials: AJS® Joists shall be manufactured by Boise Cascade Engineered Wood Products with oriented strand board webs, machine stress rated (MSR) lumber flanges and waterproof, structural adhesives.

Joist webs shall be rated Structural I Exposure 1 by an agency listed by a model code evaluation service. The web panels shall be glued together to form a continuous web member. The web panels shall be machined to fit into a groove in the center of the wide face of the flange members so as to form a pressed glue joint at that junction.

Design: The AJS® Joists shall be sized and detailed to fit the dimensions and loads indicated on the plans. All designs shall be in accordance with allowable values and section properties developed in accordance with ASTM D5055, CSA O86, and listed under a CCMC product evaluation.

Drawing: Additional drawings showing layout and detail necessary for determining fit and placement in the building are (are not) to be provided by the supplier.

Fabrication: The AJS® Joists and section properties shall be manufactured

in a plant evaluated for fabrication by the governing code evaluation service and under the supervision of a third-party inspection agency listed by the corresponding evaluation service.



Storage and Installation: The AJS® Joists, if stored prior to erection, shall be stored in a vertical and level position and protected from the weather. They shall be handled with care so they are not damaged.

The AJS® Joists are to be installed in accordance with the plans and the Boise Cascade Engineered Wood Products Installation Guide. Temporary construction loads which cause stresses beyond design limits are not permitted. Erection bracing shall be provided to keep the AJS® Joists straight and plumb as required and to assure adequate lateral support for the individual AJS® Joists and the entire system until the sheathing material has been applied.

Codes: The AJS® Joists shall be evaluated by the CCMC evaluation service.

Scope: This work includes the complete furnishing and installation of all VERSA-LAM® beams as shown on the drawings, herein special and necessary to complete the work.

Materials: Southern Pine veneer, laminated in a press with all grain parallel with the length of the member. Glue used in lamination is phenol formaldehyde and isocyanate exterior type adhesive which comply with CSA O112 standards. All adhesives are compliant to NBCC2010 and CCMC requirements for dry use structural applications.

Design: The VERSA-LAM® beams shall be sized and detailed to fit the dimensions and loads indicated on the plans. All designs are in accordance with allowable values developed with ASTM D5456 and CSA O86-09 and listed in the Canadian Construction Materials Center CCMC 12472-R report and section properties based upon standard engineering principles. Verification of design of the beams by complete calculations shall be available upon request.

Drawings: Additional drawings showing layout and detail necessary for determining fit and placement in the buildings are (are not) to be provided by supplier.

Fabrication: The VERSA-LAM® beams shall be manufactured in a plant evaluated for fabrication by the CCMC under the supervision of a third-party inspection agency listed by the CCMC.

Storage: The VERSA-LAM® beams, if stored prior to erection, shall be stored on stickers spaced a maximum of 15 ft. apart. Beams shall be stored on a dry, level surface and protected from the weather. They shall be handled with care so they are not damaged.

Installation: The VERSA-LAM® beams are to be installed in accordance with the plans and Boise Cascade Engineered Wood Products Installation Guide. Temporary construction loads which cause stresses beyond design limits are not permitted. Erection bracing shall be provided to assure adequate lateral support for the individual beams and the entire system until the sheathing material has been applied.



Codes: The design shall be based on CSA O86-09 and the National Building Code of Canada. The VERSA-LAM® beams shall be evaluated by the CCMC evaluation service.

Lifetime Guaranteed Quality and Performance

Boise Cascade warrants its BCI® Joist, VERSA-LAM®, and ALLJOIST® products to comply with our specifications, to be free from defects in material and workmanship, and to meet or exceed our performance specifications for the normal and expected life of the structure when correctly stored, installed and used according to our Installation Guide.

For information about
Boise Cascade's engineered wood products,
including sales terms and conditions, warranties and disclaimers,
visit our web site at
www.BC.com/ewp

Boise Cascade Chain-of-Custody Certifications

Boise Cascade has a proven track record of providing quality wood products and a nationwide building materials distribution network for our customers, helping them to enhance their own businesses.

Boise Cascade Engineered Wood Products build better homes with stronger, stiffer floors using only wood purchased in compliance with a number of green building programs. Take a moment to view our sustainability certification site at <http://www.bc.com/sustainability/certification-audits/> or view our green brochure at <http://www.bc.com/inst11>.

Boise Cascade Engineered Wood Products throughout North America can now be ordered FSC® Chain-of-Custody (COC) certified, enabling homebuilders to achieve LEED® points under U.S. Green Building Council® residential and commercial green building programs including LEED for Homes and LEED for New Construction. Boise Cascade Engineered Wood Products are available as PEFC® Chain-of-Custody certified, SFI® Chain-of-Custody certified and SFI Fiber-Sourcing certified, as well as NAHB Research Center Green Approved, enabling homebuilders to also obtain green building points through the National Green Building Standard.

AJS® 140

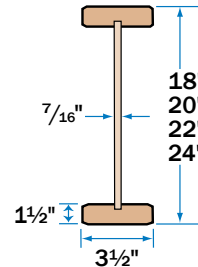
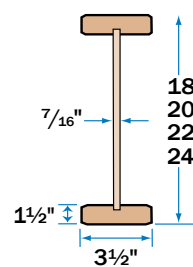
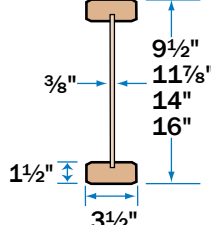
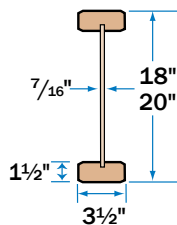
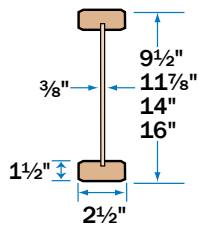
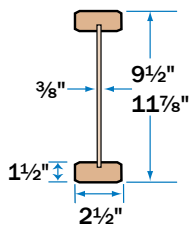
AJS® 20

AJS® 190

AJS® 25

AJS® 25
Deeper Depths

AJS® 30



FACTORED RESISTANCES

Limit States Design (CANADA)

AJS® Joist Series	Joist Depth	Factored Moment Resistance	Factored Shear Resistance	Joist Stiffness EI	Shear Deformation Coefficient, K	Joist Weight	Factored End Bearing Resistance (lbs)		Factored Intermediate Bearing Resistance (lbs)	
							1½" Min. Bearing Length ⁽²⁾		3½" Min. Bearing Length	
							No Web Stiffeners	WITH Web Stiffeners	No Web Stiffeners	WITH Web Stiffeners
	[in]	[lbs-ft]	[lbs]	[x10 ⁶ lbs-in ²]	[x10 ⁶ lbs]	[lbs/ft]	[lbs]	[lbs]	[lbs]	[lbs]
AJS® 140	9½	4095	1830	182	5.2	2.2	1500	1955	3705	3865
	11⅞	5305	2350	311	6.6	2.5	1505	2105	3770	4415
AJS® 20	9½	5675	1830	232	5.2	2.5	1500	1955	3705	3865
	11⅞	7350	2350	394	6.6	2.8	1505	2105	3770	4415
	14	8850	2825	579	7.8	3.0	1515	2240	3835	4940
	16	10265	3255	789	8.9	3.3	1530	2365	3890	5420
AJS® 190	18	13380	4750	1100	12.1	3.9	-	3103	-	6887
	20	14955	5110	1402	13.5	4.1	-	3103	-	6887
AJS® 25	9½	8935	1830	322	5.3	3.1	1500	1955	4100	4495
	11⅞	11575	2350	545	6.7	3.4	1505	2105	4245	5035
	14	13940	2825	798	7.9	3.7	1515	2240	4370	5520
	16	16165	3255	1082	9.1	3.9	1530	2365	4495	5995
	18 ⁽³⁾	18260	4750	1427	12.3	4.6	-	3535	-	7450
	20 ⁽³⁾	20405	5110	1813	13.7	4.9	-	3930	-	8065
	22 ⁽³⁾	22375	5475	2249	15.0	5.1	-	3930	-	8255
	24 ⁽³⁾	24325	5820	2738	16.5	5.4	-	3930	-	8435
AJS® 30	18	22595	4750	1575	12.3	4.6	-	3536	-	7450
	20	25250	5110	1998	13.7	4.9	-	3930	-	8065
	22	27690	5475	2477	15.0	5.1	-	3930	-	8255
	24	30100	5820	3012	16.5	5.4	-	3930	-	8435

NOTES:

1. All resistance factors, as per CSA O86-09 have been applied.
2. Minimum end bearing length is 1½" for 9½" to 16" depths and 1¾" for 18" and deeper.
3. AJS® Joists deeper than 16" require web stiffeners at all bearing locations.
4. The AJS® Joist deflection under uniform load may be calculated with the equation to the right:

$$\Delta = \frac{5wl^4}{384EI} + \frac{wl^2}{K}$$

Δ	=	Deflection [in]
w	=	Uniform load [lb/in]
l	=	Centerline to centerline [in]
EI	=	Stiffness value from table [lb-in ²]
K	=	Shear deflection factor from table [lb]

BUILDING CODE EVALUATION REPORTS
- CCMC Report Number 12787-R

FLOOR SPAN TABLES ²³/₃₂" SUBFLOOR (GLUED & NAILED) 5

Live Load: 40 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 25 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	16'-5"	15'-6"	14'-9"	13'-2"	16'-11"	16'-0"	14'-9"	13'-2"	17'-10"	16'-2"	14'-8"	13'-2"	18'-4"	16'-2"	14'-8"	13'-2"
	11⅞	18'-6"	17'-5"	16'-9"	15'-1"	19'-2"	17'-11"	16'-11"	15'-1"	20'-6"	18'-5"	16'-10"	15'-0"	21'-3"	18'-5"	16'-10"	15'-0"
AJS® 20	9½	17'-2"	16'-2"	15'-7"	14'-11"	17'-6"	16'-6"	15'-11"	15'-4"	18'-8"	17'-6"	16'-10"	15'-6"	19'-3"	17'-11"	17'-3"	15'-6"
	11⅞	19'-6"	18'-1"	17'-5"	16'-9"	20'-1"	18'-8"	17'-10"	17'-2"	21'-7"	20'-0"	19'-1"	16'-6"	22'-3"	20'-8"	19'-9"	16'-6"
	14	21'-8"	20'-1"	19'-2"	18'-2"	22'-4"	20'-9"	19'-9"	18'-9"	23'-11"	22'-2"	21'-0"	16'-9"	24'-9"	23'-0"	21'-0"	16'-9"
	16	23'-7"	21'-10"	20'-10"	19'-9"	24'-4"	22'-7"	21'-7"	20'-6"	26'-1"	24'-2"	21'-3"	17'-0"	26'-11"	25'-0"	21'-3"	17'-0"
AJS® 190	18	26'-0"	24'-1"	22'-11"	21'-9"	26'-9"	24'-11"	23'-9"	22'-6"	28'-9"	26'-8"	25'-5"	24'-1"	29'-8"	27'-7"	26'-4"	23'-11"
	20	27'-10"	25'-9"	24'-7"	23'-3"	28'-8"	26'-7"	25'-5"	24'-1"	30'-9"	28'-6"	27'-2"	25'-4"	31'-8"	29'-6"	28'-2"	25'-4"
AJS® 25	9½	18'-1"	17'-1"	16'-5"	15'-9"	18'-7"	17'-5"	16'-9"	16'-1"	20'-1"	18'-7"	17'-9"	15'-9"	20'-7"	19'-1"	18'-2"	15'-9"
	11⅞	20'-11"	19'-4"	18'-5"	17'-8"	21'-5"	19'-11"	18'-11"	18'-0"	23'-2"	21'-5"	20'-5"	16'-6"	23'-9"	22'-1"	20'-8"	16'-6"
	14	23'-3"	21'-6"	20'-6"	19'-5"	23'-10"	22'-1"	21'-1"	19'-11"	25'-9"	23'-10"	21'-0"	16'-9"	26'-5"	24'-6"	21'-0"	16'-9"
	16	25'-4"	23'-5"	22'-3"	21'-1"	26'-0"	24'-1"	22'-11"	21'-9"	28'-0"	25'-6"	21'-3"	17'-0"	28'-9"	25'-6"	21'-3"	17'-0"
	18	27'-5"	25'-4"	24'-2"	22'-10"	28'-2"	26'-1"	24'-10"	23'-7"	30'-4"	28'-1"	26'-9"	25'-4"	31'-2"	28'-11"	27'-7"	26'-2"
	20	29'-4"	27'-1"	25'-10"	24'-5"	30'-1"	27'-11"	26'-7"	25'-2"	32'-6"	30'-0"	28'-7"	27'-0"	33'-7"	30'-11"	29'-6"	27'-11"
	22	31'-2"	28'-9"	27'-5"	25'-11"	31'-11"	29'-8"	28'-3"	26'-9"	35'-2"	31'-10"	30'-4"	28'-8"	36'-4"	32'-11"	31'-4"	29'-8"
	24	33'-1"	30'-5"	28'-11"	27'-4"	34'-2"	31'-4"	29'-10"	28'-3"	37'-10"	34'-1"	32'-1"	30'-4"	39'-1"	35'-5"	33'-3"	31'-4"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	25'-10"	31'-10"	29'-6"	28'-2"	26'-8"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	27'-7"	34'-6"	31'-7"	30'-1"	28'-6"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-3"	36'-3"	32'-7"	31'-0"	29'-4"	37'-5"	33'-10"	31'-11"	30'-3"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-10"	39'-0"	35'-1"	32'-10"	30'-11"	40'-3"	36'-5"	34'-2"	31'-11"

Live Load: 40 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 25 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 1 011 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	16'-5"	15'-6"	14'-9"	13'-2"	16'-11"	16'-0"	14'-9"	13'-2"	17'-10"	16'-2"	14'-8"	13'-2"	18'-4"	16'-2"	14'-8"	13'-2"
	11⅞	18'-6"	17'-5"	16'-9"	15'-1"	19'-2"	17'-11"	16'-11"	15'-1"	20'-6"	18'-5"	16'-10"	15'-0"	21'-3"	18'-5"	16'-10"	15'-0"
AJS® 20	9½	17'-2"	16'-2"	15'-7"	14'-11"	17'-6"	16'-6"	15'-11"	15'-4"	18'-8"	17'-6"	16'-10"	15'-6"	19'-3"	17'-11"	17'-3"	15'-6"
	11⅞	19'-6"	18'-1"	17'-5"	16'-9"	20'-1"	18'-8"	17'-10"	17'-2"	21'-7"	20'-0"	19'-1"	16'-6"	22'-3"	20'-8"	19'-9"	16'-6"
	14	21'-8"	20'-1"	19'-2"	18'-2"	22'-4"	20'-9"	19'-9"	18'-9"	23'-11"	22'-2"	21'-0"	16'-9"	24'-9"	23'-0"	21'-0"	16'-9"
	16	23'-7"	21'-10"	20'-10"	19'-9"	24'-4"	22'-7"	21'-7"	20'-6"	26'-1"	24'-2"	21'-3"	17'-0"	26'-11"	25'-0"	21'-3"	17'-0"
AJS® 190	18	26'-0"	24'-1"	22'-11"	21'-9"	26'-9"	24'-11"	23'-9"	22'-6"	28'-9"	26'-8"	25'-5"	24'-1"	29'-8"	27'-7"	26'-4"	23'-11"
	20	27'-10"	25'-9"	24'-7"	23'-3"	28'-8"	26'-7"	25'-5"	24'-1"	30'-9"	28'-6"	27'-2"	25'-4"	31'-8"	29'-6"	28'-2"	25'-4"
AJS® 25	9½	18'-1"	17'-1"	16'-5"	15'-9"	18'-7"	17'-5"	16'-9"	16'-1"	20'-1"	18'-7"	17'-9"	15'-9"	20'-7"	19'-1"	18'-2"	15'-9"
	11⅞	20'-11"	19'-4"	18'-5"	17'-8"	21'-5"	19'-11"	18'-11"	18'-0"	23'-2"	21'-5"	20'-5"	16'-6"	23'-9"	22'-1"	20'-8"	16'-6"
	14	23'-3"	21'-6"	20'-6"	19'-5"	23'-10"	22'-1"	21'-1"	19'-11"	25'-9"	23'-10"	21'-0"	16'-9"	26'-5"	24'-6"	21'-0"	16'-9"
	16	25'-4"	23'-5"	22'-3"	21'-1"	26'-0"	24'-1"	22'-11"	21'-9"	28'-0"	25'-6"	21'-3"	17'-0"	28'-9"	25'-6"	21'-3"	17'-0"
	18	27'-5"	25'-4"	24'-2"	22'-10"	28'-2"	26'-1"	24'-10"	23'-7"	30'-4"	28'-1"	26'-9"	25'-4"	31'-2"	28'-11"	27'-7"	26'-2"
	20	29'-4"	27'-1"	25'-10"	24'-5"	30'-1"	27'-11"	26'-7"	25'-2"	32'-6"	30'-0"	28'-7"	27'-0"	33'-7"	30'-11"	29'-6"	27'-11"
	22	31'-2"	28'-9"	27'-5"	25'-11"	31'-11"	29'-8"	28'-3"	26'-9"	35'-2"	31'-10"	30'-4"	28'-8"	36'-4"	32'-11"	31'-4"	29'-8"
	24	33'-1"	30'-5"	28'-11"	27'-4"	34'-2"	31'-4"	29'-10"	28'-3"	37'-10"	34'-1"	32'-1"	30'-4"	39'-1"	35'-5"	33'-3"	31'-4"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	25'-10"	31'-10"	29'-6"	28'-2"	26'-8"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	27'-7"	34'-6"	31'-7"	30'-1"	28'-6"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-3"	36'-3"	32'-7"	31'-0"	29'-4"	37'-5"	33'-10"	31'-11"	30'-3"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-10"	39'-0"	35'-1"	32'-10"	30'-11"	40'-3"	36'-5"	34'-2"	31'-11"

NOTES:

- Spans shown are in accordance with NBCC2010.
- Maximum spans listed are the clear spans between supports.
- Minimum end bearing length is 1½" for 9½" to 16" depths and 1¾" for 18" to 24" depths. Bold spans have a minimum end bearing length of 3½". Minimum interior bearing length is 3½".
- Web stiffeners are required at ALL bearing supports and concentrated load locations for all 18" to 24" deep joists.
- Tabulated values shown assume a glued and nailed subfloor (Oriented Strand Board) and are in compliance with the CCMC Vibration criteria "Concluding" Report (dated September 4, 1997).
- Total load deflection is limited to L/240.
- Live load deflection is limited to L/360 for spans with the live load of 40 psf, and L/480 for spans with the live load greater than 40 psf.
- Lateral support must be provided for the compression edge and also at the bearings to prevent lateral displacement or rotation.

- When using continuous spans over an intermediate bearing, the shortest span shall not be less than 50% of the longest adjacent span. The end of the short span should be anchored to resist the uplift equal to:

$$\text{Uplift} = L_2 \cdot (\text{factor}_1 \cdot W_{FD} - W_{FL}) / \text{factor}_2$$

Where:

W_{FD} = Factored dead load (lb/ft)

W_{FL} = Factored live load (lb/ft)

L_1 = Length of shorter span (ft)

L_2 = Length of longer span (ft)

$\text{factor}_1 = 4a^2 + 3a^3 - 1$

$\text{factor}_2 = 8a(1+a)$

a = Short span/Long span

Short/Long span ratio = a	0.5	0.6	0.7	0.8	0.9	1
factor1	0.38	1.09	1.99	3.10	4.43	6.00
factor2	6	7.68	9.52	11.52	13.68	16

Live Load: 40 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 25 psf		Without Gypsum Ceiling				$\frac{1}{2}$ " Gypsum Ceiling				Without Gypsum Ceiling				$\frac{1}{2}$ " Gypsum Ceiling			
Safe Load: 2 023 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	12'-4"	9'-9"	8'-5"	7'-0"	12'-4"	9'-9"	8'-5"	7'-0"	13'-3"	10'-3"	8'-8"	7'-1"	13'-3"	10'-3"	8'-8"	7'-1"
	11⅞	15'-3"	12'-1"	10'-5"	8'-8"	15'-3"	12'-1"	10'-5"	8'-8"	16'-7"	12'-11"	11'-0"	9'-0"	16'-7"	12'-11"	11'-0"	9'-0"
AJS® 20	9½	16'-1"	12'-9"	11'-0"	9'-2"	16'-1"	12'-9"	11'-0"	9'-2"	17'-6"	13'-8"	11'-8"	9'-7"	17'-6"	13'-8"	11'-8"	9'-7"
	11⅞	19'-6"	15'-9"	13'-7"	11'-4"	19'-10"	15'-9"	13'-7"	11'-4"	21'-7"	17'-1"	14'-8"	12'-1"	21'-8"	17'-1"	14'-8"	12'-1"
	14	21'-8"	18'-3"	15'-9"	13'-2"	22'-4"	18'-3"	15'-9"	13'-2"	23'-11"	19'-11"	17'-2"	14'-2"	24'-9"	19'-11"	17'-2"	14'-2"
	16	23'-7"	20'-6"	17'-9"	14'-10"	24'-4"	20'-6"	17'-9"	14'-10"	26'-1"	22'-5"	19'-4"	16'-1"	26'-11"	22'-5"	19'-4"	16'-1"
AJS® 190	18	26'-0"	24'-1"	21'-11"	18'-4"	26'-9"	24'-11"	21'-11"	18'-4"	28'-9"	26'-8"	23'-11"	20'-0"	29'-8"	27'-7"	23'-11"	20'-0"
	20	27'-10"	25'-9"	24'-0"	20'-1"	28'-8"	26'-7"	24'-0"	20'-1"	30'-9"	28'-6"	26'-2"	21'-11"	31'-8"	29'-6"	26'-2"	21'-11"
AJS® 25	9½	18'-1"	17'-1"	15'-10"	13'-3"	18'-7"	17'-5"	15'-10"	13'-3"	20'-1"	18'-7"	17'-3"	14'-3"	20'-7"	19'-1"	17'-3"	14'-3"
	11⅞	20'-11"	19'-4"	18'-5"	16'-3"	21'-5"	19'-11"	18'-11"	16'-3"	23'-2"	21'-5"	20'-5"	16'-6"	23'-9"	22'-1"	20'-8"	16'-6"
	14	23'-3"	21'-6"	20'-6"	18'-10"	23'-10"	22'-1"	21'-1"	18'-10"	25'-9"	23'-10"	21'-0"	16'-9"	26'-5"	24'-6"	21'-0"	16'-9"
	16	25'-4"	23'-5"	22'-3"	21'-1"	26'-0"	24'-1"	22'-11"	21'-2"	28'-0"	25'-6"	21'-3"	17'-0"	28'-9"	25'-6"	21'-3"	17'-0"
	18	27'-5"	25'-4"	24'-2"	22'-10"	28'-2"	26'-1"	24'-10"	23'-7"	30'-4"	28'-1"	26'-9"	25'-4"	31'-2"	28'-11"	27'-7"	25'-8"
	20	29'-4"	27'-1"	25'-10"	24'-5"	30'-1"	27'-11"	26'-7"	25'-2"	32'-6"	30'-0"	28'-7"	27'-0"	33'-7"	30'-11"	29'-6"	27'-11"
	22	31'-2"	28'-9"	27'-5"	25'-11"	31'-11"	29'-8"	28'-3"	26'-9"	35'-2"	31'-10"	30'-4"	28'-8"	36'-4"	32'-11"	31'-4"	29'-8"
	24	33'-1"	30'-5"	28'-11"	27'-4"	34'-2"	31'-4"	29'-10"	28'-3"	37'-10"	34'-1"	32'-1"	30'-4"	39'-1"	35'-5"	33'-3"	31'-4"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	25'-10"	31'-10"	29'-6"	28'-2"	26'-8"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	27'-7"	34'-6"	31'-7"	30'-1"	28'-6"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-3"	36'-3"	32'-7"	31'-0"	29'-4"	37'-5"	33'-10"	31'-11"	30'-3"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-10"	39'-0"	35'-1"	32'-10"	30'-11"	40'-3"	36'-5"	34'-2"	31'-11"

Live Load: 40 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				$\frac{1}{2}$ " Gypsum Ceiling				Without Gypsum Ceiling				$\frac{1}{2}$ " Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	16'-5"	15'-2"	13'-10"	12'-4"	16'-11"	15'-2"	13'-10"	12'-4"	17'-6"	15'-1"	13'-9"	12'-4"	17'-6"	15'-1"	13'-9"	12'-4"
	11⅞	18'-6"	17'-5"	15'-10"	14'-1"	19'-2"	17'-4"	15'-10"	14'-1"	20'-0"	17'-3"	15'-9"	14'-1"	20'-0"	17'-3"	15'-9"	14'-1"
AJS® 20	9½	17'-2"	16'-2"	15'-7"	14'-5"	17'-6"	16'-6"	15'-11"	14'-5"	18'-8"	17'-6"	16'-3"	13'-10"	19'-3"	17'-11"	16'-3"	13'-10"
	11⅞	19'-6"	18'-1"	17'-5"	16'-9"	20'-1"	18'-8"	17'-10"	16'-6"	21'-7"	20'-0"	18'-2"	14'-6"	22'-3"	20'-5"	18'-2"	14'-6"
	14	21'-8"	20'-1"	19'-2"	18'-2"	22'-4"	20'-9"	19'-9"	18'-2"	23'-11"	22'-2"	18'-5"	14'-9"	24'-9"	22'-2"	18'-5"	14'-9"
	16	23'-7"	21'-10"	20'-10"	19'-3"	24'-4"	22'-7"	21'-7"	19'-3"	26'-1"	22'-6"	18'-9"	15'-0"	26'-11"	22'-6"	18'-9"	15'-0"
AJS® 190	18	26'-0"	24'-1"	22'-11"	21'-9"	26'-9"	24'-11"	23'-9"	22'-6"	28'-9"	26'-8"	25'-2"	22'-5"	29'-8"	27'-7"	25'-2"	22'-5"
	20	27'-10"	25'-9"	24'-7"	23'-3"	28'-8"	26'-7"	25'-5"	23'-10"	30'-9"	28'-6"	26'-7"	23'-9"	31'-8"	29'-2"	26'-7"	23'-9"
AJS® 25	9½	18'-1"	17'-1"	16'-5"	15'-9"	18'-7"	17'-5"	16'-9"	16'-1"	20'-1"	18'-7"	17'-5"	13'-10"	20'-7"	19'-1"	17'-5"	13'-10"
	11⅞	20'-11"	19'-4"	18'-5"	17'-8"	21'-5"	19'-11"	18'-11"	18'-0"	23'-2"	21'-5"	18'-2"	14'-6"	23'-9"	21'-9"	18'-2"	14'-6"
	14	23'-3"	21'-6"	20'-6"	18'-8"	23'-10"	22'-1"	21'-1"	18'-8"	25'-9"	22'-2"	18'-5"	14'-9"	26'-5"	22'-2"	18'-5"	14'-9"
	16	25'-4"	23'-5"	22'-3"	19'-3"	26'-0"	24'-1"	22'-11"	19'-3"	28'-0"	22'-6"	18'-9"	15'-0"	28'-9"	22'-6"	18'-9"	15'-0"
	18	27'-5"	25'-4"	24'-2"	22'-10"	28'-2"	26'-1"	24'-10"	23'-7"	30'-4"	28'-1"	26'-9"	25'-4"	31'-2"	28'-11"	27'-7"	26'-2"
	20	29'-4"	27'-1"	25'-10"	24'-5"	30'-1"	27'-11"	26'-7"	25'-2"	32'-6"	30'-0"	28'-7"	27'-0"	33'-7"	30'-11"	29'-6"	27'-11"
	22	31'-2"	28'-9"	27'-5"	25'-11"	31'-11"	29'-8"	28'-3"	26'-9"	35'-2"	31'-10"	30'-4"	28'-8"	36'-4"	32'-11"	31'-4"	29'-1"
	24	33'-1"	30'-5"	28'-11"	27'-4"	34'-2"	31'-4"	29'-10"	28'-3"	37'-10"	34'-1"	32'-1"	30'-4"	39'-1"	35'-5"	33'-3"	30'-4"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	25'-10"	31'-10"	29'-6"	28'-2"	26'-8"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	27'-7"	34'-6"	31'-7"	30'-1"	28'-6"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-3"	36'-3"	32'-7"	31'-0"	29'-4"	37'-5"	33'-10"	31'-11"	30'-3"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-10"	39'-0"	35'-1"	32'-10"	30'-11"	40'-3"	36'-5"	34'-2"	31'-11"

* See notes on page 5

FLOOR SPAN TABLES $2\frac{3}{32}$ " SUBFLOOR (GLUED & NAILED) 7

Live Load: 40 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 1 011 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	16'-5"	13'-11"	12'-2"	10'-4"	16'-11"	13'-11"	12'-2"	10'-4"	17'-6"	14'-7"	12'-9"	10'-9"	17'-6"	14'-7"	12'-9"	10'-9"
	11⅞	18'-6"	16'-9"	14'-9"	12'-6"	19'-2"	16'-9"	14'-9"	12'-6"	20'-0"	17'-3"	15'-6"	13'-1"	20'-0"	17'-3"	15'-6"	13'-1"
AJS® 20	9½	17'-2"	16'-2"	15'-5"	13'-2"	17'-6"	16'-6"	15'-5"	13'-2"	18'-8"	17'-6"	16'-2"	13'-9"	19'-3"	17'-11"	16'-2"	13'-9"
	11⅞	19'-6"	18'-1"	17'-5"	15'-6"	20'-1"	18'-8"	17'-10"	15'-6"	21'-7"	20'-0"	18'-2"	14'-6"	22'-3"	20'-5"	18'-2"	14'-6"
	14	21'-8"	20'-1"	19'-2"	17'-4"	22'-4"	20'-9"	19'-9"	17'-4"	23'-11"	22'-2"	18'-5"	14'-9"	24'-9"	22'-2"	18'-5"	14'-9"
	16	23'-7"	21'-10"	20'-10"	18'-11"	24'-4"	22'-7"	21'-7"	18'-11"	26'-1"	22'-6"	18'-9"	15'-0"	26'-11"	22'-6"	18'-9"	15'-0"
AJS® 190	18	26'-0"	24'-1"	22'-11"	21'-9"	26'-9"	24'-11"	23'-9"	22'-4"	28'-9"	26'-8"	25'-2"	22'-5"	29'-8"	27'-7"	25'-2"	22'-5"
	20	27'-10"	25'-9"	24'-7"	23'-3"	28'-8"	26'-7"	25'-5"	23'-10"	30'-9"	28'-6"	26'-7"	23'-9"	31'-8"	29'-2"	26'-7"	23'-9"
AJS® 25	9½	18'-1"	17'-1"	16'-5"	15'-9"	18'-7"	17'-5"	16'-9"	16'-1"	20'-1"	18'-7"	17'-5"	13'-10"	20'-7"	19'-1"	17'-5"	13'-10"
	11⅞	20'-11"	19'-4"	18'-5"	17'-8"	21'-5"	19'-11"	18'-11"	18'-0"	23'-2"	21'-5"	18'-2"	14'-6"	23'-9"	21'-9"	18'-2"	14'-6"
	14	23'-3"	21'-6"	20'-6"	18'-8"	23'-10"	22'-1"	21'-1"	18'-8"	25'-9"	22'-2"	18'-5"	14'-9"	26'-5"	22'-2"	18'-5"	14'-9"
	16	25'-4"	23'-5"	22'-3"	19'-3"	26'-0"	24'-1"	22'-11"	19'-3"	28'-0"	22'-6"	18'-9"	15'-0"	28'-9"	22'-6"	18'-9"	15'-0"
	18	27'-5"	25'-4"	24'-2"	22'-10"	28'-2"	26'-1"	24'-10"	23'-7"	30'-4"	28'-1"	26'-9"	25'-4"	31'-2"	28'-11"	27'-7"	26'-2"
	20	29'-4"	27'-1"	25'-10"	24'-5"	30'-1"	27'-11"	26'-7"	25'-2"	32'-6"	30'-0"	28'-7"	27'-0"	33'-7"	30'-11"	29'-6"	27'-11"
	22	31'-2"	28'-9"	27'-5"	25'-11"	31'-11"	29'-8"	28'-3"	26'-9"	35'-2"	31'-10"	30'-4"	28'-8"	36'-4"	32'-11"	31'-4"	29'-1"
	24	33'-1"	30'-5"	28'-11"	27'-4"	34'-2"	31'-4"	29'-10"	28'-3"	37'-10"	34'-1"	32'-1"	30'-4"	39'-1"	35'-5"	33'-3"	30'-4"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	25'-10"	31'-10"	29'-6"	28'-2"	26'-8"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	27'-7"	34'-6"	31'-7"	30'-1"	28'-6"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-3"	36'-3"	32'-7"	31'-0"	29'-4"	37'-5"	33'-10"	31'-11"	30'-3"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-10"	39'-0"	35'-1"	32'-10"	30'-11"	40'-3"	36'-5"	34'-2"	31'-11"

Live Load: 40 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 2 023 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	11'-9"	9'-4"	8'-1"	6'-10"	11'-9"	9'-4"	8'-1"	6'-10"	12'-6"	9'-9"	8'-4"	6'-10"	12'-6"	9'-9"	8'-4"	6'-10"
	11⅞	14'-6"	11'-6"	10'-0"	8'-4"	14'-6"	11'-6"	10'-0"	8'-4"	15'-6"	12'-3"	10'-6"	8'-7"	15'-6"	12'-3"	10'-6"	8'-7"
AJS® 20	9½	15'-3"	12'-2"	10'-6"	8'-10"	15'-3"	12'-2"	10'-6"	8'-10"	16'-4"	12'-11"	11'-1"	9'-1"	16'-4"	12'-11"	11'-1"	9'-1"
	11⅞	18'-8"	14'-11"	12'-11"	10'-10"	18'-8"	14'-11"	12'-11"	10'-10"	20'-1"	16'-0"	13'-10"	11'-5"	20'-1"	16'-0"	13'-10"	11'-5"
	14	21'-6"	17'-3"	14'-11"	12'-7"	21'-6"	17'-3"	14'-11"	12'-7"	23'-2"	18'-7"	16'-1"	13'-4"	23'-2"	18'-7"	16'-1"	13'-4"
	16	23'-7"	19'-3"	16'-9"	14'-1"	23'-11"	19'-3"	16'-9"	14'-1"	25'-10"	20'-9"	18'-0"	15'-0"	25'-10"	20'-9"	18'-0"	15'-0"
AJS® 190	18	26'-0"	23'-7"	20'-6"	17'-4"	26'-9"	23'-7"	20'-6"	17'-4"	28'-9"	25'-5"	22'-2"	18'-8"	29'-8"	25'-5"	22'-2"	18'-8"
	20	27'-10"	25'-7"	22'-4"	18'-10"	28'-8"	25'-7"	22'-4"	18'-10"	30'-9"	27'-7"	24'-1"	20'-4"	31'-8"	27'-7"	24'-1"	20'-4"
AJS® 25	9½	18'-1"	17'-1"	15'-0"	12'-7"	18'-7"	17'-5"	15'-0"	12'-7"	20'-1"	18'-7"	16'-2"	13'-5"	20'-7"	18'-8"	16'-2"	13'-5"
	11⅞	20'-11"	19'-4"	18'-3"	15'-4"	21'-5"	19'-11"	18'-3"	15'-4"	23'-2"	21'-5"	18'-2"	14'-6"	23'-9"	21'-9"	18'-2"	14'-6"
	14	23'-3"	21'-6"	20'-6"	17'-9"	23'-10"	22'-1"	21'-1"	17'-9"	25'-9"	22'-2"	18'-5"	14'-9"	26'-5"	22'-2"	18'-5"	14'-9"
	16	25'-4"	23'-5"	22'-3"	19'-3"	26'-0"	24'-1"	22'-11"	19'-3"	28'-0"	22'-6"	18'-9"	15'-0"	28'-9"	22'-6"	18'-9"	15'-0"
	18	27'-5"	25'-4"	24'-2"	21'-11"	28'-2"	26'-1"	24'-10"	21'-11"	30'-4"	28'-1"	26'-9"	23'-8"	31'-2"	28'-11"	27'-7"	23'-8"
	20	29'-4"	27'-1"	25'-10"	23'-10"	30'-1"	27'-11"	26'-7"	23'-10"	32'-6"	30'-0"	28'-7"	25'-9"	33'-7"	30'-11"	29'-6"	25'-9"
	22	31'-2"	28'-9"	27'-5"	25'-7"	31'-11"	29'-8"	28'-3"	25'-7"	35'-2"	31'-10"	30'-4"	27'-6"	36'-4"	32'-11"	31'-4"	27'-6"
	24	33'-1"	30'-5"	28'-11"	27'-2"	34'-2"	31'-4"	29'-10"	27'-2"	37'-10"	34'-1"	32'-1"	29'-2"	39'-1"	35'-5"	33'-3"	29'-2"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	25'-10"	31'-10"	29'-6"	28'-2"	26'-8"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	27'-7"	34'-6"	31'-7"	30'-1"	28'-6"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-3"	36'-3"	32'-7"	31'-0"	29'-4"	37'-5"	33'-10"	31'-11"	30'-3"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-10"	39'-0"	35'-1"	32'-10"	30'-11"	40'-3"	36'-5"	34'-2"	31'-11"

* See notes on page 5

8 FLOOR SPAN TABLES 2³/₃₂" SUBFLOOR (GLUED & NAILED)

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	16'-3"	14'-2"	12'-11"	11'-7"	16'-3"	14'-2"	12'-11"	11'-7"	16'-4"	14'-1"	12'-10"	11'-6"	16'-4"	14'-1"	12'-10"	11'-6"
	11⅞	18'-6"	16'-2"	14'-9"	13'-1"	18'-9"	16'-2"	14'-9"	13'-1"	18'-8"	16'-1"	14'-8"	12'-8"	18'-8"	16'-1"	14'-8"	12'-8"
AJS® 20	9½	17'-2"	15'-11"	15'-0"	13'-6"	17'-5"	15'-11"	15'-0"	13'-6"	18'-8"	16'-8"	15'-2"	12'-1"	19'-3"	16'-8"	15'-2"	12'-1"
	11⅞	19'-6"	18'-1"	17'-3"	15'-5"	20'-1"	18'-8"	17'-3"	15'-5"	21'-7"	19'-0"	15'-10"	12'-8"	22'-3"	19'-0"	15'-10"	12'-8"
	14	21'-8"	20'-1"	19'-0"	16'-3"	22'-4"	20'-9"	19'-0"	16'-3"	23'-11"	19'-4"	16'-1"	12'-11"	24'-2"	19'-4"	16'-1"	12'-11"
	16	23'-7"	21'-10"	20'-5"	16'-9"	24'-4"	22'-7"	20'-5"	16'-9"	26'-1"	19'-7"	16'-4"	13'-1"	26'-2"	19'-7"	16'-4"	13'-1"
AJS® 190	18	26'-0"	24'-1"	22'-11"	21'-0"	26'-9"	24'-11"	23'-7"	21'-0"	28'-9"	25'-9"	23'-6"	21'-0"	29'-8"	25'-9"	23'-6"	21'-0"
	20	27'-10"	25'-9"	24'-7"	22'-2"	28'-8"	26'-7"	24'-11"	22'-2"	30'-9"	27'-3"	24'-10"	22'-2"	31'-8"	27'-3"	24'-10"	22'-2"
AJS® 25	9½	18'-1"	17'-1"	16'-5"	14'-6"	18'-7"	17'-5"	16'-6"	14'-6"	20'-1"	18'-3"	15'-2"	12'-1"	20'-7"	18'-3"	15'-2"	12'-1"
	11⅞	20'-11"	19'-4"	18'-5"	15'-10"	21'-5"	19'-11"	18'-11"	15'-10"	23'-2"	19'-0"	15'-10"	12'-8"	23'-9"	19'-0"	15'-10"	12'-8"
	14	23'-3"	21'-6"	20'-6"	16'-3"	23'-10"	22'-1"	20'-5"	16'-3"	25'-9"	19'-4"	16'-1"	12'-11"	25'-10"	19'-4"	16'-1"	12'-11"
	16	25'-4"	23'-5"	21'-0"	16'-9"	26'-0"	24'-1"	21'-0"	16'-9"	26'-2"	19'-7"	16'-4"	13'-1"	26'-2"	19'-7"	16'-4"	13'-1"
	18	27'-5"	25'-4"	24'-2"	22'-10"	28'-2"	26'-1"	24'-10"	23'-7"	30'-4"	28'-1"	26'-9"	24'-6"	31'-2"	28'-11"	27'-7"	24'-6"
	20	29'-4"	27'-1"	25'-10"	24'-5"	30'-1"	27'-11"	26'-7"	25'-2"	32'-6"	30'-0"	28'-7"	25'-11"	33'-7"	30'-11"	29'-1"	25'-11"
	22	31'-2"	28'-9"	27'-5"	25'-11"	31'-11"	29'-8"	28'-3"	26'-9"	35'-2"	31'-10"	30'-4"	27'-2"	36'-4"	32'-11"	30'-5"	27'-2"
	24	33'-1"	30'-5"	28'-11"	27'-4"	34'-2"	31'-4"	29'-10"	28'-3"	37'-10"	34'-1"	31'-9"	28'-4"	39'-1"	34'-10"	31'-9"	28'-4"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	25'-1"	31'-10"	29'-6"	28'-2"	25'-1"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	27'-2"	34'-6"	31'-7"	30'-1"	27'-2"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-3"	36'-3"	32'-7"	31'-0"	27'-9"	37'-5"	33'-10"	31'-11"	27'-9"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-10"	39'-0"	35'-1"	32'-10"	28'-4"	40'-3"	36'-5"	34'-2"	28'-4"

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 1,011 lbs		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	16'-3"	13'-11"	12'-2"	10'-4"	16'-3"	13'-11"	12'-2"	10'-4"	16'-4"	14'-1"	12'-9"	10'-9"	16'-4"	14'-1"	12'-9"	10'-9"
	11⅞	18'-6"	16'-2"	14'-9"	12'-5"	18'-9"	16'-2"	14'-9"	12'-5"	18'-8"	16'-1"	14'-8"	12'-8"	18'-8"	16'-1"	14'-8"	12'-8"
AJS® 20	9½	17'-2"	15'-11"	15'-0"	13'-0"	17'-5"	15'-11"	15'-0"	13'-0"	18'-8"	16'-8"	15'-2"	12'-1"	19'-3"	16'-8"	15'-2"	12'-1"
	11⅞	19'-6"	18'-1"	17'-3"	15'-5"	20'-1"	18'-8"	17'-3"	15'-5"	21'-7"	19'-0"	15'-10"	12'-8"	22'-3"	19'-0"	15'-10"	12'-8"
	14	21'-8"	20'-1"	19'-0"	16'-3"	22'-4"	20'-9"	19'-0"	16'-3"	23'-11"	19'-4"	16'-1"	12'-11"	24'-2"	19'-4"	16'-1"	12'-11"
	16	23'-7"	21'-10"	20'-5"	16'-9"	24'-4"	22'-7"	20'-5"	16'-9"	26'-1"	19'-7"	16'-4"	13'-1"	26'-2"	19'-7"	16'-4"	13'-1"
AJS® 190	18	26'-0"	24'-1"	22'-11"	21'-0"	26'-9"	24'-11"	23'-7"	21'-0"	28'-9"	25'-9"	23'-6"	21'-0"	29'-8"	25'-9"	23'-6"	21'-0"
	20	27'-10"	25'-9"	24'-7"	22'-2"	28'-8"	26'-7"	24'-11"	22'-2"	30'-9"	27'-3"	24'-10"	22'-2"	31'-8"	27'-3"	24'-10"	22'-2"
AJS® 25	9½	18'-1"	17'-1"	16'-5"	14'-6"	18'-7"	17'-5"	16'-6"	14'-6"	20'-1"	18'-3"	15'-2"	12'-1"	20'-7"	18'-3"	15'-2"	12'-1"
	11⅞	20'-11"	19'-4"	18'-5"	15'-10"	21'-5"	19'-11"	18'-11"	15'-10"	23'-2"	19'-0"	15'-10"	12'-8"	23'-9"	19'-0"	15'-10"	12'-8"
	14	23'-3"	21'-6"	20'-6"	16'-3"	23'-10"	22'-1"	20'-5"	16'-3"	25'-9"	19'-4"	16'-1"	12'-11"	25'-10"	19'-4"	16'-1"	12'-11"
	16	25'-4"	23'-5"	21'-0"	16'-9"	26'-0"	24'-1"	21'-0"	16'-9"	26'-2"	19'-7"	16'-4"	13'-1"	26'-2"	19'-7"	16'-4"	13'-1"
	18	27'-5"	25'-4"	24'-2"	22'-10"	28'-2"	26'-1"	24'-10"	23'-7"	30'-4"	28'-1"	26'-9"	24'-6"	31'-2"	28'-11"	27'-7"	24'-6"
	20	29'-4"	27'-1"	25'-10"	24'-5"	30'-1"	27'-11"	26'-7"	25'-2"	32'-6"	30'-0"	28'-7"	25'-11"	33'-7"	30'-11"	29'-1"	25'-11"
	22	31'-2"	28'-9"	27'-5"	25'-11"	31'-11"	29'-8"	28'-3"	26'-9"	35'-2"	31'-10"	30'-4"	27'-2"	36'-4"	32'-11"	30'-5"	27'-2"
	24	33'-1"	30'-5"	28'-11"	27'-4"	34'-2"	31'-4"	29'-10"	28'-3"	37'-10"	34'-1"	31'-9"	28'-4"	39'-1"	34'-10"	31'-9"	28'-4"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	25'-1"	31'-10"	29'-6"	28'-2"	25'-1"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	27'-2"	34'-6"	31'-7"	30'-1"	27'-2"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-3"	36'-3"	32'-7"	31'-0"	27'-9"	37'-5"	33'-10"	31'-11"	27'-9"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-10"	39'-0"	35'-1"	32'-10"	28'-4"	40'-3"	36'-5"	34'-2"	28'-4"

* See notes on page 5

FLOOR SPAN TABLES ²³/₃₂" SUBFLOOR (GLUED & NAILED) 9

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 2 023 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	11'-9"	9'-4"	8'-1"	6'-10"	11'-9"	9'-4"	8'-1"	6'-10"	12'-6"	9'-9"	8'-4"	6'-10"	12'-6"	9'-9"	8'-4"	6'-10"
	11⅞	14'-6"	11'-6"	10'-0"	8'-4"	14'-6"	11'-6"	10'-0"	8'-4"	15'-6"	12'-3"	10'-6"	8'-7"	15'-6"	12'-3"	10'-6"	8'-7"
AJS® 20	9½	15'-3"	12'-2"	10'-6"	8'-10"	15'-3"	12'-2"	10'-6"	8'-10"	16'-4"	12'-11"	11'-1"	9'-1"	16'-4"	12'-11"	11'-1"	9'-1"
	11⅞	18'-8"	14'-11"	12'-11"	10'-10"	18'-8"	14'-11"	12'-11"	10'-10"	20'-1"	16'-0"	13'-10"	11'-5"	20'-1"	16'-0"	13'-10"	11'-5"
	14	21'-6"	17'-3"	14'-11"	12'-7"	21'-6"	17'-3"	14'-11"	12'-7"	23'-2"	18'-7"	16'-1"	12'-11"	23'-2"	18'-7"	16'-1"	12'-11"
	16	23'-7"	19'-1"	16'-7"	13'-11"	23'-11"	19'-1"	16'-7"	13'-11"	25'-10"	19'-7"	16'-4"	13'-1"	25'-10"	19'-7"	16'-4"	13'-1"
AJS® 190	18	26'-0"	23'-7"	20'-6"	17'-4"	26'-9"	23'-7"	20'-6"	17'-4"	28'-9"	25'-5"	22'-2"	18'-8"	29'-8"	25'-5"	22'-2"	18'-8"
	20	27'-10"	25'-7"	22'-4"	18'-10"	28'-8"	25'-7"	22'-4"	18'-10"	30'-9"	27'-3"	24'-1"	20'-4"	31'-8"	27'-3"	24'-1"	20'-4"
AJS® 25	9½	18'-1"	17'-1"	15'-0"	12'-6"	18'-7"	17'-5"	15'-0"	12'-6"	20'-1"	18'-3"	15'-2"	12'-1"	20'-7"	18'-3"	15'-2"	12'-1"
	11⅞	20'-11"	19'-4"	18'-3"	15'-4"	21'-5"	19'-11"	18'-3"	15'-4"	23'-2"	19'-0"	15'-10"	12'-8"	23'-9"	19'-0"	15'-10"	12'-8"
	14	23'-3"	21'-6"	20'-6"	16'-3"	23'-10"	22'-1"	20'-5"	16'-3"	25'-9"	19'-4"	16'-1"	12'-11"	25'-10"	19'-4"	16'-1"	12'-11"
	16	25'-4"	23'-5"	21'-0"	16'-9"	26'-0"	24'-1"	21'-0"	16'-9"	26'-2"	19'-7"	16'-4"	13'-1"	26'-2"	19'-7"	16'-4"	13'-1"
	18	27'-5"	25'-4"	24'-2"	21'-11"	28'-2"	26'-1"	24'-10"	21'-11"	30'-4"	28'-1"	26'-9"	23'-8"	31'-2"	28'-11"	27'-7"	23'-8"
	20	29'-4"	27'-1"	25'-10"	23'-10"	30'-1"	27'-11"	26'-7"	23'-10"	32'-6"	30'-0"	28'-7"	25'-9"	33'-7"	30'-11"	29'-1"	25'-9"
	22	31'-2"	28'-9"	27'-5"	25'-7"	31'-11"	29'-8"	28'-3"	25'-7"	35'-2"	31'-10"	30'-4"	27'-2"	36'-4"	32'-11"	30'-5"	27'-2"
	24	33'-1"	30'-5"	28'-11"	27'-2"	34'-2"	31'-4"	29'-10"	27'-2"	37'-10"	34'-1"	31'-9"	28'-4"	39'-1"	34'-10"	31'-9"	28'-4"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	25'-1"	31'-10"	29'-6"	28'-2"	25'-1"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	27'-2"	34'-6"	31'-7"	30'-1"	27'-2"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-3"	36'-3"	32'-7"	31'-0"	27'-9"	37'-5"	33'-10"	31'-11"	27'-9"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-10"	39'-0"	35'-1"	32'-10"	28'-4"	40'-3"	36'-5"	34'-2"	28'-4"

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Joist Series	Depth [in]																
AJS® 140	9½	15'-7"	13'-6"	12'-4"	11'-0"	15'-7"	13'-6"	12'-4"	11'-0"	15'-6"	13'-5"	12'-3"	10'-11"	15'-6"	13'-5"	12'-3"	10'-11"
	11⅞	17'-10"	15'-5"	14'-0"	12'-5"	17'-10"	15'-5"	14'-0"	12'-5"	17'-9"	15'-4"	14'-0"	11'-5"	17'-9"	15'-4"	14'-0"	11'-5"
AJS® 20	9½	17'-2"	15'-11"	14'-4"	12'-10"	17'-5"	15'-11"	14'-4"	12'-10"	18'-4"	15'-10"	13'-8"	10'-11"	18'-4"	15'-10"	13'-8"	10'-11"
	11⅞	19'-6"	18'-0"	16'-5"	14'-3"	20'-1"	18'-0"	16'-5"	14'-3"	20'-11"	17'-2"	14'-4"	11'-5"	20'-11"	17'-2"	14'-4"	11'-5"
	14	21'-8"	19'-10"	18'-1"	14'-8"	22'-4"	19'-10"	18'-1"	14'-8"	23'-0"	17'-6"	14'-7"	11'-8"	23'-0"	17'-6"	14'-7"	11'-8"
	16	23'-7"	21'-4"	19'-0"	15'-1"	24'-4"	21'-4"	19'-0"	15'-1"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
AJS® 190	18	26'-0"	24'-1"	22'-5"	20'-0"	26'-9"	24'-6"	22'-5"	20'-0"	28'-3"	24'-6"	22'-4"	19'-11"	28'-3"	24'-6"	22'-4"	19'-11"
	20	27'-10"	25'-9"	23'-8"	21'-2"	28'-8"	26'-0"	23'-8"	21'-2"	29'-11"	25'-11"	23'-7"	20'-11"	29'-11"	25'-11"	23'-7"	20'-11"
AJS® 25	9½	18'-1"	17'-1"	16'-5"	13'-1"	18'-7"	17'-5"	16'-6"	13'-1"	20'-1"	16'-6"	13'-8"	10'-11"	20'-7"	16'-6"	13'-8"	10'-11"
	11⅞	20'-11"	19'-4"	17'-11"	14'-3"	21'-5"	19'-11"	17'-11"	14'-3"	22'-11"	17'-2"	14'-4"	11'-5"	22'-11"	17'-2"	14'-4"	11'-5"
	14	23'-3"	21'-6"	18'-5"	14'-8"	23'-10"	22'-1"	18'-5"	14'-8"	23'-4"	17'-6"	14'-7"	11'-8"	23'-4"	17'-6"	14'-7"	11'-8"
	16	25'-4"	22'-10"	19'-0"	15'-1"	26'-0"	22'-10"	19'-0"	15'-1"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
	18	27'-5"	25'-4"	24'-2"	22'-10"	28'-2"	26'-1"	24'-10"	23'-5"	30'-4"	28'-1"	26'-1"	22'-8"	31'-2"	28'-7"	26'-1"	22'-8"
	20	29'-4"	27'-1"	25'-10"	24'-5"	30'-1"	27'-11"	26'-7"	24'-9"	32'-6"	30'-0"	27'-7"	24'-6"	33'-7"	30'-3"	27'-7"	24'-6"
	22	31'-2"	28'-9"	27'-5"	25'-11"	31'-11"	29'-8"	28'-3"	25'-11"	35'-2"	31'-10"	28'-11"	25'-1"	36'-4"	31'-9"	28'-11"	25'-1"
	24	33'-1"	30'-5"	28'-11"	27'-1"	34'-2"	31'-4"	29'-10"	27'-1"	37'-10"	33'-1"	30'-2"	25'-8"	38'-3"	33'-1"	30'-2"	25'-8"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	22'-8"	31'-10"	29'-6"	28'-2"	22'-8"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	24'-6"	34'-6"	31'-7"	30'-1"	24'-6"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-3"	36'-3"	32'-7"	31'-0"	25'-1"	37'-5"	33'-10"	31'-5"	25'-1"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-10"	39'-0"	35'-1"	32'-1"	25'-8"	40'-3"	36'-5"	32'-1"	25'-8"

* See notes on page 5

10 FLOOR SPAN TABLES ²³/₃₂" SUBFLOOR (GLUED & NAILED)

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 1 011 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	15'-7"	13'-0"	11'-5"	9'-9"	15'-7"	13'-0"	11'-5"	9'-9"	15'-6"	13'-5"	11'-10"	10'-1"	15'-6"	13'-5"	11'-10"	10'-1"
	11⅞	17'-10"	15'-5"	13'-9"	11'-6"	17'-10"	15'-5"	13'-9"	11'-6"	17'-9"	15'-4"	14'-0"	11'-5"	17'-9"	15'-4"	14'-0"	11'-5"
AJS® 20	9½	17'-2"	15'-11"	14'-2"	12'-0"	17'-5"	15'-11"	14'-2"	12'-0"	18'-4"	15'-10"	13'-8"	10'-11"	18'-4"	15'-10"	13'-8"	10'-11"
	11⅞	19'-6"	18'-0"	16'-5"	14'-1"	20'-1"	18'-0"	16'-5"	14'-1"	20'-11"	17'-2"	14'-4"	11'-5"	20'-11"	17'-2"	14'-4"	11'-5"
	14	21'-8"	19'-10"	18'-1"	14'-8"	22'-4"	19'-10"	18'-1"	14'-8"	23'-0"	17'-6"	14'-7"	11'-8"	23'-0"	17'-6"	14'-7"	11'-8"
	16	23'-7"	21'-4"	19'-0"	15'-1"	24'-4"	21'-4"	19'-0"	15'-1"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
AJS® 190	18	26'-0"	24'-1"	22'-5"	20'-0"	26'-9"	24'-6"	22'-5"	20'-0"	28'-3"	24'-6"	22'-4"	19'-11"	28'-3"	24'-6"	22'-4"	19'-11"
	20	27'-10"	25'-9"	23'-8"	21'-2"	28'-8"	26'-0"	23'-8"	21'-2"	29'-11"	25'-11"	23'-7"	20'-11"	29'-11"	25'-11"	23'-7"	20'-11"
AJS® 25	9½	18'-1"	17'-1"	16'-5"	13'-1"	18'-7"	17'-5"	16'-6"	13'-1"	20'-1"	16'-6"	13'-8"	10'-11"	20'-7"	16'-6"	13'-8"	10'-11"
	11⅞	20'-11"	19'-4"	17'-11"	14'-3"	21'-5"	19'-11"	17'-11"	14'-3"	22'-11"	17'-2"	14'-4"	11'-5"	22'-11"	17'-2"	14'-4"	11'-5"
	14	23'-3"	21'-6"	18'-5"	14'-8"	23'-10"	22'-1"	18'-5"	14'-8"	23'-4"	17'-6"	14'-7"	11'-8"	23'-4"	17'-6"	14'-7"	11'-8"
	16	25'-4"	22'-10"	19'-0"	15'-1"	26'-0"	22'-10"	19'-0"	15'-1"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
	18	27'-5"	25'-4"	24'-2"	22'-10"	28'-2"	26'-1"	24'-10"	23'-5"	30'-4"	28'-1"	26'-1"	22'-8"	31'-2"	28'-7"	26'-1"	22'-8"
	20	29'-4"	27'-1"	25'-10"	24'-5"	30'-1"	27'-11"	26'-7"	24'-9"	32'-6"	30'-0"	27'-7"	24'-6"	33'-7"	30'-3"	27'-7"	24'-6"
	22	31'-2"	28'-9"	27'-5"	25'-11"	31'-11"	29'-8"	28'-3"	25'-11"	35'-2"	31'-10"	28'-11"	25'-1"	36'-4"	31'-9"	28'-11"	25'-1"
	24	33'-1"	30'-5"	28'-11"	27'-1"	34'-2"	31'-4"	29'-10"	27'-1"	37'-10"	33'-1"	30'-2"	25'-8"	38'-3"	33'-1"	30'-2"	25'-8"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	22'-8"	31'-10"	29'-6"	28'-2"	22'-8"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	24'-6"	34'-6"	31'-7"	30'-1"	24'-6"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-3"	36'-3"	32'-7"	31'-0"	25'-1"	37'-5"	33'-10"	31'-5"	25'-1"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-10"	39'-0"	35'-1"	32'-1"	25'-8"	40'-3"	36'-5"	32'-1"	25'-8"

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 2 023 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	11'-4"	9'-1"	7'-10"	6'-7"	11'-4"	9'-1"	7'-10"	6'-7"	11'-11"	9'-4"	8'-0"	6'-7"	11'-11"	9'-4"	8'-0"	6'-7"
	11⅞	13'-10"	11'-1"	9'-7"	8'-1"	13'-10"	11'-1"	9'-7"	8'-1"	14'-8"	11'-8"	10'-0"	8'-3"	14'-8"	11'-8"	10'-0"	8'-3"
AJS® 20	9½	14'-6"	11'-8"	10'-1"	8'-6"	14'-6"	11'-8"	10'-1"	8'-6"	15'-5"	12'-3"	10'-7"	8'-9"	15'-5"	12'-3"	10'-7"	8'-9"
	11⅞	17'-8"	14'-3"	12'-4"	10'-5"	17'-8"	14'-3"	12'-4"	10'-5"	18'-10"	15'-2"	13'-1"	10'-11"	18'-10"	15'-2"	13'-1"	10'-11"
	14	20'-3"	16'-4"	14'-1"	11'-10"	20'-3"	16'-4"	14'-1"	11'-10"	21'-8"	17'-6"	14'-7"	11'-8"	21'-8"	17'-6"	14'-7"	11'-8"
	16	22'-6"	18'-1"	15'-9"	13'-3"	22'-6"	18'-1"	15'-9"	13'-3"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
AJS® 190	18	26'-0"	22'-2"	19'-5"	16'-5"	26'-9"	22'-2"	19'-5"	16'-5"	28'-3"	23'-8"	20'-9"	17'-6"	28'-3"	23'-8"	20'-9"	17'-6"
	20	27'-10"	24'-0"	21'-1"	17'-10"	28'-8"	24'-0"	21'-1"	17'-10"	29'-11"	25'-8"	22'-6"	19'-1"	29'-11"	25'-8"	22'-6"	19'-1"
AJS® 25	9½	18'-1"	16'-5"	14'-2"	11'-11"	18'-7"	16'-5"	14'-2"	11'-11"	20'-1"	16'-6"	13'-8"	10'-11"	20'-7"	16'-6"	13'-8"	10'-11"
	11⅞	20'-11"	19'-4"	17'-4"	14'-3"	21'-5"	19'-11"	17'-4"	14'-3"	22'-11"	17'-2"	14'-4"	11'-5"	22'-11"	17'-2"	14'-4"	11'-5"
	14	23'-3"	21'-6"	18'-5"	14'-8"	23'-10"	22'-1"	18'-5"	14'-8"	23'-4"	17'-6"	14'-7"	11'-8"	23'-4"	17'-6"	14'-7"	11'-8"
	16	25'-4"	22'-10"	19'-0"	15'-1"	26'-0"	22'-10"	19'-0"	15'-1"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
	18	27'-5"	25'-4"	24'-2"	20'-8"	28'-2"	26'-1"	24'-4"	20'-8"	30'-4"	28'-1"	26'-0"	22'-1"	31'-2"	28'-7"	26'-0"	22'-1"
	20	29'-4"	27'-1"	25'-10"	22'-5"	30'-1"	27'-11"	26'-4"	22'-5"	32'-6"	30'-0"	27'-7"	23'-9"	33'-7"	30'-3"	27'-7"	23'-9"
	22	31'-2"	28'-9"	27'-5"	23'-9"	31'-11"	29'-8"	28'-3"	23'-9"	35'-2"	31'-10"	28'-11"	25'-1"	36'-4"	31'-9"	28'-11"	25'-1"
	24	33'-1"	30'-5"	28'-11"	25'-0"	34'-2"	31'-4"	29'-7"	25'-0"	37'-10"	33'-1"	30'-2"	25'-8"	38'-3"	33'-1"	30'-2"	25'-8"
AJS® 30	18	28'-1"	25'-11"	24'-8"	23'-4"	28'-9"	26'-8"	25'-5"	24'-0"	31'-1"	28'-9"	27'-4"	22'-8"	31'-10"	29'-6"	28'-2"	22'-8"
	20	30'-0"	27'-9"	26'-4"	24'-11"	30'-9"	28'-6"	27'-2"	25'-8"	33'-5"	30'-8"	29'-2"	24'-6"	34'-6"	31'-7"	30'-1"	24'-6"
	22	31'-10"	29'-5"	28'-0"	26'-5"	32'-8"	30'-3"	28'-10"	27'-1"	36'-3"	32'-7"	31'-0"	25'-1"	37'-5"	33'-10"	31'-5"	25'-1"
	24	34'-1"	31'-1"	29'-7"	27'-11"	35'-2"	31'-11"	30'-5"	28'-6"	39'-0"	35'-1"	32'-1"	25'-8"	40'-3"	36'-5"	32'-1"	25'-8"

* See notes on page 5

FLOOR SPAN TABLES $2\frac{3}{32}$ " SUBFLOOR (GLUED & NAILED) 11

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				$\frac{1}{2}$ " Gypsum Ceiling				Without Gypsum Ceiling				$\frac{1}{2}$ " Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 20	9½	13'-7"	12'-4"	11'-1"	8'-9"	13'-7"	12'-4"	11'-1"	8'-9"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	16'-3"	14'-9"	12'-0"	9'-7"	16'-3"	14'-9"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	18'-5"	14'-11"	12'-5"	9'-10"	18'-5"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-5"	15'-4"	12'-9"	10'-2"	20'-5"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
AJS® 190	18	22'-11"	20'-2"	18'-5"	16'-3"	22'-11"	20'-2"	18'-5"	16'-3"	23'-3"	20'-1"	17'-9"	14'-2"	23'-3"	20'-1"	17'-9"	14'-2"
	20	24'-8"	21'-4"	19'-5"	17'-3"	24'-8"	21'-4"	19'-5"	17'-3"	24'-7"	21'-3"	17'-9"	14'-2"	24'-7"	21'-3"	17'-9"	14'-2"
AJS® 25	9½	15'-0"	13'-7"	11'-1"	8'-9"	15'-0"	13'-7"	11'-1"	8'-9"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	17'-10"	14'-6"	12'-0"	9'-7"	17'-10"	14'-6"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	20'-3"	14'-11"	12'-5"	9'-10"	20'-3"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-7"	15'-4"	12'-9"	10'-2"	20'-7"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
	18	24'-10"	22'-6"	21'-2"	19'-1"	24'-10"	22'-6"	21'-2"	19'-1"	27'-2"	23'-0"	19'-2"	15'-4"	27'-2"	23'-0"	19'-2"	15'-4"
	20	26'-11"	24'-5"	22'-9"	20'-2"	26'-11"	24'-5"	22'-9"	20'-2"	28'-9"	24'-11"	20'-9"	16'-7"	28'-9"	24'-11"	20'-9"	16'-7"
	22	28'-11"	26'-3"	23'-10"	21'-2"	28'-11"	26'-3"	23'-10"	21'-2"	30'-2"	25'-6"	21'-3"	17'-0"	30'-2"	25'-6"	21'-3"	17'-0"
	24	30'-10"	27'-3"	24'-11"	22'-1"	30'-10"	27'-3"	24'-11"	22'-1"	31'-5"	26'-1"	21'-9"	17'-4"	31'-5"	26'-1"	21'-9"	17'-4"
AJS® 30	18	25'-7"	23'-2"	21'-9"	20'-2"	25'-7"	23'-2"	21'-9"	20'-2"	28'-11"	23'-0"	19'-2"	15'-4"	28'-11"	23'-0"	19'-2"	15'-4"
	20	27'-8"	25'-1"	23'-7"	21'-10"	27'-8"	25'-1"	23'-7"	21'-10"	31'-4"	24'-11"	20'-9"	16'-7"	31'-4"	24'-11"	20'-9"	16'-7"
	22	29'-9"	27'-0"	25'-4"	23'-6"	29'-9"	27'-0"	25'-4"	23'-6"	33'-8"	25'-6"	21'-3"	17'-0"	33'-8"	25'-6"	21'-3"	17'-0"
	24	31'-9"	28'-10"	27'-1"	24'-7"	31'-9"	28'-10"	27'-1"	24'-7"	34'-9"	26'-1"	21'-9"	17'-4"	34'-9"	26'-1"	21'-9"	17'-4"

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				$\frac{1}{2}$ " Gypsum Ceiling				Without Gypsum Ceiling				$\frac{1}{2}$ " Gypsum Ceiling			
Safe Load: 1 011 lbs		Without Gypsum Ceiling				$\frac{1}{2}$ " Gypsum Ceiling				Without Gypsum Ceiling				$\frac{1}{2}$ " Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 20	9½	13'-7"	12'-4"	11'-1"	8'-9"	13'-7"	12'-4"	11'-1"	8'-9"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	16'-3"	14'-9"	12'-0"	9'-7"	16'-3"	14'-9"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	18'-5"	14'-11"	12'-5"	9'-10"	18'-5"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-5"	15'-4"	12'-9"	10'-2"	20'-5"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
AJS® 190	18	22'-11"	20'-2"	18'-5"	16'-3"	22'-11"	20'-2"	18'-5"	16'-3"	23'-3"	20'-1"	17'-9"	14'-2"	23'-3"	20'-1"	17'-9"	14'-2"
	20	24'-8"	21'-4"	19'-5"	17'-3"	24'-8"	21'-4"	19'-5"	17'-3"	24'-7"	21'-3"	17'-9"	14'-2"	24'-7"	21'-3"	17'-9"	14'-2"
AJS® 25	9½	15'-0"	13'-7"	11'-1"	8'-9"	15'-0"	13'-7"	11'-1"	8'-9"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	17'-10"	14'-6"	12'-0"	9'-7"	17'-10"	14'-6"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	20'-3"	14'-11"	12'-5"	9'-10"	20'-3"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-7"	15'-4"	12'-9"	10'-2"	20'-7"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
	18	24'-10"	22'-6"	21'-2"	19'-1"	24'-10"	22'-6"	21'-2"	19'-1"	27'-2"	23'-0"	19'-2"	15'-4"	27'-2"	23'-0"	19'-2"	15'-4"
	20	26'-11"	24'-5"	22'-9"	20'-2"	26'-11"	24'-5"	22'-9"	20'-2"	28'-9"	24'-11"	20'-9"	16'-7"	28'-9"	24'-11"	20'-9"	16'-7"
	22	28'-11"	26'-3"	23'-10"	21'-2"	28'-11"	26'-3"	23'-10"	21'-2"	30'-2"	25'-6"	21'-3"	17'-0"	30'-2"	25'-6"	21'-3"	17'-0"
	24	30'-10"	27'-3"	24'-11"	22'-1"	30'-10"	27'-3"	24'-11"	22'-1"	31'-5"	26'-1"	21'-9"	17'-4"	31'-5"	26'-1"	21'-9"	17'-4"
AJS® 30	18	25'-7"	23'-2"	21'-9"	20'-2"	25'-7"	23'-2"	21'-9"	20'-2"	28'-11"	23'-0"	19'-2"	15'-4"	28'-11"	23'-0"	19'-2"	15'-4"
	20	27'-8"	25'-1"	23'-7"	21'-10"	27'-8"	25'-1"	23'-7"	21'-10"	31'-4"	24'-11"	20'-9"	16'-7"	31'-4"	24'-11"	20'-9"	16'-7"
	22	29'-9"	27'-0"	25'-4"	23'-6"	29'-9"	27'-0"	25'-4"	23'-6"	33'-8"	25'-6"	21'-3"	17'-0"	33'-8"	25'-6"	21'-3"	17'-0"
	24	31'-9"	28'-10"	27'-1"	24'-7"	31'-9"	28'-10"	27'-1"	24'-7"	34'-9"	26'-1"	21'-9"	17'-4"	34'-9"	26'-1"	21'-9"	17'-4"

* See notes on page 5

12 FLOOR SPAN TABLES ²³/₃₂" SUBFLOOR (GLUED & NAILED)

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 2 023 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 20	9½	13'-7"	12'-0"	10'-4"	8'-8"	13'-7"	12'-0"	10'-4"	8'-8"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	16'-3"	14'-9"	12'-0"	9'-7"	16'-3"	14'-9"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	18'-5"	14'-11"	12'-5"	9'-10"	18'-5"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-5"	15'-4"	12'-9"	10'-2"	20'-5"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
AJS® 190	18	22'-11"	20'-2"	18'-5"	16'-3"	22'-11"	20'-2"	18'-5"	16'-3"	23'-3"	20'-1"	17'-9"	14'-2"	23'-3"	20'-1"	17'-9"	14'-2"
	20	24'-8"	21'-4"	19'-5"	17'-3"	24'-8"	21'-4"	19'-5"	17'-3"	24'-7"	21'-3"	17'-9"	14'-2"	24'-7"	21'-3"	17'-9"	14'-2"
AJS® 25	9½	15'-0"	13'-7"	11'-1"	8'-9"	15'-0"	13'-7"	11'-1"	8'-9"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	17'-10"	14'-6"	12'-0"	9'-7"	17'-10"	14'-6"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	20'-3"	14'-11"	12'-5"	9'-10"	20'-3"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-7"	15'-4"	12'-9"	10'-2"	20'-7"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
	18	24'-10"	22'-6"	21'-2"	19'-1"	24'-10"	22'-6"	21'-2"	19'-1"	27'-2"	23'-0"	19'-2"	15'-4"	27'-2"	23'-0"	19'-2"	15'-4"
	20	26'-11"	24'-5"	22'-9"	20'-2"	26'-11"	24'-5"	22'-9"	20'-2"	28'-9"	24'-11"	20'-9"	16'-7"	28'-9"	24'-11"	20'-9"	16'-7"
	22	28'-11"	26'-3"	23'-10"	21'-2"	28'-11"	26'-3"	23'-10"	21'-2"	30'-2"	25'-6"	21'-3"	17'-0"	30'-2"	25'-6"	21'-3"	17'-0"
	24	30'-10"	27'-3"	24'-11"	22'-1"	30'-10"	27'-3"	24'-11"	22'-1"	31'-5"	26'-1"	21'-9"	17'-4"	31'-5"	26'-1"	21'-9"	17'-4"
AJS® 30	18	25'-7"	23'-2"	21'-9"	20'-2"	25'-7"	23'-2"	21'-9"	20'-2"	28'-11"	23'-0"	19'-2"	15'-4"	28'-11"	23'-0"	19'-2"	15'-4"
	20	27'-8"	25'-1"	23'-7"	21'-10"	27'-8"	25'-1"	23'-7"	21'-10"	31'-4"	24'-11"	20'-9"	16'-7"	31'-4"	24'-11"	20'-9"	16'-7"
	22	29'-9"	27'-0"	25'-4"	23'-6"	29'-9"	27'-0"	25'-4"	23'-6"	33'-8"	25'-6"	21'-3"	17'-0"	33'-8"	25'-6"	21'-3"	17'-0"
	24	31'-9"	28'-10"	27'-1"	24'-7"	31'-9"	28'-10"	27'-1"	24'-7"	34'-9"	26'-1"	21'-9"	17'-4"	34'-9"	26'-1"	21'-9"	17'-4"

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 20	9½	13'-7"	12'-4"	10'-4"	8'-3"	13'-7"	12'-4"	10'-4"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	16'-3"	13'-7"	11'-3"	9'-0"	16'-3"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-5"	14'-0"	11'-7"	9'-3"	18'-5"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
AJS® 190	18	22'-7"	19'-6"	17'-10"	15'-9"	22'-7"	19'-6"	17'-10"	15'-9"	22'-6"	19'-6"	16'-8"	13'-4"	22'-6"	19'-6"	16'-8"	13'-4"
	20	23'-11"	20'-8"	18'-8"	16'-8"	23'-11"	20'-8"	18'-8"	16'-8"	23'-10"	20'-0"	16'-8"	13'-4"	23'-10"	20'-0"	16'-8"	13'-4"
AJS® 25	9½	15'-0"	12'-6"	10'-4"	8'-3"	15'-0"	12'-6"	10'-4"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	17'-10"	13'-7"	11'-3"	9'-0"	17'-10"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-10"	14'-0"	11'-7"	9'-3"	18'-10"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
	18	24'-10"	22'-6"	20'-10"	18'-6"	24'-10"	22'-6"	20'-10"	18'-6"	26'-4"	21'-8"	18'-0"	14'-5"	26'-4"	21'-8"	18'-0"	14'-5"
	20	26'-11"	24'-2"	22'-1"	19'-7"	26'-11"	24'-2"	22'-1"	19'-7"	27'-10"	23'-5"	19'-6"	15'-7"	27'-10"	23'-5"	19'-6"	15'-7"
	22	28'-11"	25'-4"	23'-1"	20'-6"	28'-11"	25'-4"	23'-1"	20'-6"	29'-2"	24'-0"	20'-0"	16'-0"	29'-2"	24'-0"	20'-0"	16'-0"
	24	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	24'-6"	20'-5"	16'-4"	30'-6"	24'-6"	20'-5"	16'-4"
AJS® 30	18	25'-7"	23'-2"	21'-9"	19'-9"	25'-7"	23'-2"	21'-9"	19'-9"	28'-10"	21'-8"	18'-0"	14'-5"	28'-10"	21'-8"	18'-0"	14'-5"
	20	27'-8"	25'-1"	23'-7"	21'-10"	27'-8"	25'-1"	23'-7"	21'-10"	31'-3"	23'-5"	19'-6"	15'-7"	31'-3"	23'-5"	19'-6"	15'-7"
	22	29'-9"	27'-0"	25'-4"	22'-10"	29'-9"	27'-0"	25'-4"	22'-10"	32'-0"	24'-0"	20'-0"	16'-0"	32'-0"	24'-0"	20'-0"	16'-0"
	24	31'-9"	28'-10"	26'-8"	23'-10"	31'-9"	28'-10"	26'-8"	23'-10"	32'-8"	24'-6"	20'-5"	16'-4"	32'-8"	24'-6"	20'-5"	16'-4"

* See notes on page 5

FLOOR SPAN TABLES $2\frac{3}{32}$ " SUBFLOOR (GLUED & NAILED) 13

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 1 011 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 20	9½	13'-7"	12'-4"	10'-4"	8'-3"	13'-7"	12'-4"	10'-4"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	16'-3"	13'-7"	11'-3"	9'-0"	16'-3"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-5"	14'-0"	11'-7"	9'-3"	18'-5"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
AJS® 190	18	22'-7"	19'-6"	17'-10"	15'-9"	22'-7"	19'-6"	17'-10"	15'-9"	22'-6"	19'-6"	16'-8"	13'-4"	22'-6"	19'-6"	16'-8"	13'-4"
	20	23'-11"	20'-8"	18'-8"	16'-8"	23'-11"	20'-8"	18'-8"	16'-8"	23'-10"	20'-0"	16'-8"	13'-4"	23'-10"	20'-0"	16'-8"	13'-4"
AJS® 25	9½	15'-0"	12'-6"	10'-4"	8'-3"	15'-0"	12'-6"	10'-4"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	17'-10"	13'-7"	11'-3"	9'-0"	17'-10"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-10"	14'-0"	11'-7"	9'-3"	18'-10"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
	18	24'-10"	22'-6"	20'-10"	18'-6"	24'-10"	22'-6"	20'-10"	18'-6"	26'-4"	21'-8"	18'-0"	14'-5"	26'-4"	21'-8"	18'-0"	14'-5"
	20	26'-11"	24'-2"	22'-1"	19'-7"	26'-11"	24'-2"	22'-1"	19'-7"	27'-10"	23'-5"	19'-6"	15'-7"	27'-10"	23'-5"	19'-6"	15'-7"
	22	28'-11"	25'-4"	23'-1"	20'-6"	28'-11"	25'-4"	23'-1"	20'-6"	29'-2"	24'-0"	20'-0"	16'-0"	29'-2"	24'-0"	20'-0"	16'-0"
	24	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	24'-6"	20'-5"	16'-4"	30'-6"	24'-6"	20'-5"	16'-4"
AJS® 30	18	25'-7"	23'-2"	21'-9"	19'-9"	25'-7"	23'-2"	21'-9"	19'-9"	28'-10"	21'-8"	18'-0"	14'-5"	28'-10"	21'-8"	18'-0"	14'-5"
	20	27'-8"	25'-1"	23'-7"	21'-10"	27'-8"	25'-1"	23'-7"	21'-10"	31'-3"	23'-5"	19'-6"	15'-7"	31'-3"	23'-5"	19'-6"	15'-7"
	22	29'-9"	27'-0"	25'-4"	22'-10"	29'-9"	27'-0"	25'-4"	22'-10"	32'-0"	24'-0"	20'-0"	16'-0"	32'-0"	24'-0"	20'-0"	16'-0"
	24	31'-9"	28'-10"	26'-8"	23'-10"	31'-9"	28'-10"	26'-8"	23'-10"	32'-8"	24'-6"	20'-5"	16'-4"	32'-8"	24'-6"	20'-5"	16'-4"

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 2 023 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 20	9½	13'-7"	11'-6"	10'-0"	8'-3"	13'-7"	11'-6"	10'-0"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	16'-3"	13'-7"	11'-3"	9'-0"	16'-3"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-5"	14'-0"	11'-7"	9'-3"	18'-5"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
AJS® 190	18	22'-7"	19'-6"	17'-10"	15'-9"	22'-7"	19'-6"	17'-10"	15'-9"	22'-6"	19'-6"	16'-8"	13'-4"	22'-6"	19'-6"	16'-8"	13'-4"
	20	23'-11"	20'-8"	18'-8"	16'-8"	23'-11"	20'-8"	18'-8"	16'-8"	23'-10"	20'-0"	16'-8"	13'-4"	23'-10"	20'-0"	16'-8"	13'-4"
AJS® 25	9½	15'-0"	12'-6"	10'-4"	8'-3"	15'-0"	12'-6"	10'-4"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	17'-10"	13'-7"	11'-3"	9'-0"	17'-10"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-10"	14'-0"	11'-7"	9'-3"	18'-10"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
	18	24'-10"	22'-6"	20'-10"	18'-6"	24'-10"	22'-6"	20'-10"	18'-6"	26'-4"	21'-8"	18'-0"	14'-5"	26'-4"	21'-8"	18'-0"	14'-5"
	20	26'-11"	24'-2"	22'-1"	19'-7"	26'-11"	24'-2"	22'-1"	19'-7"	27'-10"	23'-5"	19'-6"	15'-7"	27'-10"	23'-5"	19'-6"	15'-7"
	22	28'-11"	25'-4"	23'-1"	20'-6"	28'-11"	25'-4"	23'-1"	20'-6"	29'-2"	24'-0"	20'-0"	16'-0"	29'-2"	24'-0"	20'-0"	16'-0"
	24	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	24'-6"	20'-5"	16'-4"	30'-6"	24'-6"	20'-5"	16'-4"
AJS® 30	18	25'-7"	23'-2"	21'-9"	19'-9"	25'-7"	23'-2"	21'-9"	19'-9"	28'-10"	21'-8"	18'-0"	14'-5"	28'-10"	21'-8"	18'-0"	14'-5"
	20	27'-8"	25'-1"	23'-7"	21'-10"	27'-8"	25'-1"	23'-7"	21'-10"	31'-3"	23'-5"	19'-6"	15'-7"	31'-3"	23'-5"	19'-6"	15'-7"
	22	29'-9"	27'-0"	25'-4"	22'-10"	29'-9"	27'-0"	25'-4"	22'-10"	32'-0"	24'-0"	20'-0"	16'-0"	32'-0"	24'-0"	20'-0"	16'-0"
	24	31'-9"	28'-10"	26'-8"	23'-10"	31'-9"	28'-10"	26'-8"	23'-10"	32'-8"	24'-6"	20'-5"	16'-4"	32'-8"	24'-6"	20'-5"	16'-4"

* See notes on page 5

14 FLOOR SPAN TABLES 7/8" SUBFLOOR (GLUED & NAILED)

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	16'-5"	14'-2"	12'-11"	11'-7"	16'-5"	14'-2"	12'-11"	11'-7"	16'-4"	14'-1"	12'-10"	11'-6"	16'-4"	14'-1"	12'-10"	11'-6"
	11⅞	18'-9"	16'-2"	14'-9"	13'-1"	18'-9"	16'-2"	14'-9"	13'-1"	18'-8"	16'-1"	14'-8"	12'-8"	18'-8"	16'-1"	14'-8"	12'-8"
AJS® 20	9½	17'-7"	16'-1"	15'-2"	13'-6"	17'-7"	16'-1"	15'-2"	13'-6"	19'-6"	16'-8"	15'-2"	12'-1"	19'-3"	16'-8"	15'-2"	12'-1"
	11⅞	20'-4"	18'-10"	17'-3"	15'-5"	20'-11"	19'-1"	17'-3"	15'-5"	22'-0"	19'-0"	15'-10"	12'-8"	22'-0"	19'-0"	15'-10"	12'-8"
	14	22'-7"	20'-10"	19'-0"	16'-3"	23'-3"	20'-10"	19'-0"	16'-3"	24'-2"	19'-4"	16'-1"	12'-11"	24'-2"	19'-4"	16'-1"	12'-11"
	16	24'-7"	22'-5"	20'-5"	16'-9"	25'-3"	22'-5"	20'-5"	16'-9"	26'-2"	19'-7"	16'-4"	13'-1"	26'-2"	19'-7"	16'-4"	13'-1"
AJS® 190	18	26'-11"	25'-0"	23'-7"	21'-0"	27'-8"	25'-9"	23'-7"	21'-0"	29'-9"	25'-9"	23'-6"	21'-0"	29'-9"	25'-9"	23'-6"	21'-0"
	20	28'-10"	26'-9"	24'-11"	22'-3"	29'-7"	27'-4"	24'-11"	22'-3"	31'-6"	27'-3"	24'-10"	22'-2"	31'-6"	27'-3"	24'-10"	22'-2"
AJS® 25	9½	18'-11"	17'-8"	16'-7"	14'-6"	19'-4"	17'-8"	16'-7"	14'-6"	20'-11"	18'-3"	15'-2"	12'-1"	21'-5"	18'-3"	15'-2"	12'-1"
	11⅞	21'-10"	20'-3"	19'-3"	15'-10"	22'-4"	20'-9"	19'-9"	15'-10"	24'-2"	19'-0"	15'-10"	12'-8"	24'-9"	19'-0"	15'-10"	12'-8"
	14	24'-3"	22'-5"	20'-5"	16'-3"	24'-10"	23'-0"	20'-5"	16'-3"	25'-10"	19'-4"	16'-1"	12'-11"	25'-10"	19'-4"	16'-1"	12'-11"
	16	26'-5"	24'-5"	21'-0"	16'-9"	27'-0"	25'-1"	21'-0"	16'-9"	26'-2"	19'-7"	16'-4"	13'-1"	26'-2"	19'-7"	16'-4"	13'-1"
	18	28'-7"	26'-6"	25'-2"	23'-9"	29'-3"	27'-2"	25'-11"	24'-5"	31'-7"	29'-4"	27'-6"	24'-6"	32'-4"	30'-1"	27'-6"	24'-6"
	20	30'-7"	28'-3"	26'-11"	25'-4"	31'-3"	29'-1"	27'-8"	26'-2"	34'-3"	31'-4"	29'-1"	25'-11"	35'-3"	31'-10"	29'-1"	25'-11"
	22	32'-5"	30'-0"	28'-7"	26'-11"	33'-5"	30'-10"	29'-5"	27'-3"	37'-1"	33'-6"	30'-5"	27'-2"	38'-2"	33'-4"	30'-5"	27'-2"
	24	34'-11"	31'-9"	30'-2"	28'-5"	35'-11"	32'-7"	31'-1"	28'-5"	39'-10"	34'-10"	31'-9"	28'-4"	40'-3"	34'-10"	31'-9"	28'-4"
AJS® 30	18	29'-3"	27'-1"	25'-9"	24'-3"	29'-11"	27'-9"	26'-5"	24'-11"	32'-4"	29'-11"	28'-6"	25'-1"	33'-3"	30'-9"	29'-3"	25'-1"
	20	31'-3"	28'-11"	27'-6"	25'-11"	31'-11"	29'-8"	28'-3"	26'-8"	35'-3"	32'-0"	30'-5"	27'-2"	36'-4"	32'-11"	31'-4"	27'-2"
	22	33'-5"	30'-8"	29'-2"	27'-6"	34'-4"	31'-6"	30'-0"	28'-3"	38'-2"	34'-6"	32'-4"	27'-9"	39'-4"	35'-8"	33'-6"	27'-9"
	24	35'-11"	32'-5"	30'-10"	29'-0"	37'-0"	33'-6"	31'-8"	29'-11"	41'-1"	37'-1"	34'-8"	28'-4"	42'-3"	38'-5"	35'-6"	28'-4"

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 1,011 lbs		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	16'-5"	13'-11"	12'-2"	10'-4"	16'-5"	13'-11"	12'-2"	10'-4"	16'-4"	14'-1"	12'-9"	10'-9"	16'-4"	14'-1"	12'-9"	10'-9"
	11⅞	18'-9"	16'-2"	14'-9"	12'-5"	18'-9"	16'-2"	14'-9"	12'-5"	18'-8"	16'-1"	14'-8"	12'-8"	18'-8"	16'-1"	14'-8"	12'-8"
AJS® 20	9½	17'-7"	16'-1"	15'-2"	13'-0"	17'-7"	16'-1"	15'-2"	13'-0"	19'-6"	16'-8"	15'-2"	12'-1"	19'-3"	16'-8"	15'-2"	12'-1"
	11⅞	20'-4"	18'-10"	17'-3"	15'-5"	20'-11"	19'-1"	17'-3"	15'-5"	22'-0"	19'-0"	15'-10"	12'-8"	22'-0"	19'-0"	15'-10"	12'-8"
	14	22'-7"	20'-10"	19'-0"	16'-3"	23'-3"	20'-10"	19'-0"	16'-3"	24'-2"	19'-4"	16'-1"	12'-11"	24'-2"	19'-4"	16'-1"	12'-11"
	16	24'-7"	22'-5"	20'-5"	16'-9"	25'-3"	22'-5"	20'-5"	16'-9"	26'-2"	19'-7"	16'-4"	13'-1"	26'-2"	19'-7"	16'-4"	13'-1"
AJS® 190	18	26'-11"	25'-0"	23'-7"	21'-0"	27'-8"	25'-9"	23'-7"	21'-0"	29'-9"	25'-9"	23'-6"	21'-0"	29'-9"	25'-9"	23'-6"	21'-0"
	20	28'-10"	26'-9"	24'-11"	22'-3"	29'-7"	27'-4"	24'-11"	22'-3"	31'-6"	27'-3"	24'-10"	22'-2"	31'-6"	27'-3"	24'-10"	22'-2"
AJS® 25	9½	18'-11"	17'-8"	16'-7"	14'-6"	19'-4"	17'-8"	16'-7"	14'-6"	20'-11"	18'-3"	15'-2"	12'-1"	21'-5"	18'-3"	15'-2"	12'-1"
	11⅞	21'-10"	20'-3"	19'-3"	15'-10"	22'-4"	20'-9"	19'-9"	15'-10"	24'-2"	19'-0"	15'-10"	12'-8"	24'-9"	19'-0"	15'-10"	12'-8"
	14	24'-3"	22'-5"	20'-5"	16'-3"	24'-10"	23'-0"	20'-5"	16'-3"	25'-10"	19'-4"	16'-1"	12'-11"	25'-10"	19'-4"	16'-1"	12'-11"
	16	26'-5"	24'-5"	21'-0"	16'-9"	27'-0"	25'-1"	21'-0"	16'-9"	26'-2"	19'-7"	16'-4"	13'-1"	26'-2"	19'-7"	16'-4"	13'-1"
	18	28'-7"	26'-6"	25'-2"	23'-9"	29'-3"	27'-2"	25'-11"	24'-5"	31'-7"	29'-4"	27'-6"	24'-6"	32'-4"	30'-1"	27'-6"	24'-6"
	20	30'-7"	28'-3"	26'-11"	25'-4"	31'-3"	29'-1"	27'-8"	26'-2"	34'-3"	31'-4"	29'-1"	25'-11"	35'-3"	31'-10"	29'-1"	25'-11"
	22	32'-5"	30'-0"	28'-7"	26'-11"	33'-5"	30'-10"	29'-5"	27'-3"	37'-1"	33'-6"	30'-5"	27'-2"	38'-2"	33'-4"	30'-5"	27'-2"
	24	34'-11"	31'-9"	30'-2"	28'-5"	35'-11"	32'-7"	31'-1"	28'-5"	39'-10"	34'-10"	31'-9"	28'-4"	40'-3"	34'-10"	31'-9"	28'-4"
AJS® 30	18	29'-3"	27'-1"	25'-9"	24'-3"	29'-11"	27'-9"	26'-5"	24'-11"	32'-4"	29'-11"	28'-6"	25'-1"	33'-3"	30'-9"	29'-3"	25'-1"
	20	31'-3"	28'-11"	27'-6"	25'-11"	31'-11"	29'-8"	28'-3"	26'-8"	35'-3"	32'-0"	30'-5"	27'-2"	36'-4"	32'-11"	31'-4"	27'-2"
	22	33'-5"	30'-8"	29'-2"	27'-6"	34'-4"	31'-6"	30'-0"	28'-3"	38'-2"	34'-6"	32'-4"	27'-9"	39'-4"	35'-8"	33'-6"	27'-9"
	24	35'-11"	32'-5"	30'-10"	29'-0"	37'-0"	33'-6"	31'-8"	29'-11"	41'-1"	37'-1"	34'-8"	28'-4"	42'-3"	38'-5"	35'-6"	28'-4"

* See notes on page 5

FLOOR SPAN TABLES 7/8" SUBFLOOR (GLUED & NAILED) 15

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 2 023 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	11'-9"	9'-4"	8'-1"	6'-10"	11'-9"	9'-4"	8'-1"	6'-10"	12'-6"	9'-9"	8'-4"	6'-10"	12'-6"	9'-9"	8'-4"	6'-10"
	11⅞	14'-6"	11'-6"	10'-0"	8'-4"	14'-6"	11'-6"	10'-0"	8'-4"	15'-6"	12'-3"	10'-6"	8'-7"	15'-6"	12'-3"	10'-6"	8'-7"
AJS® 20	9½	15'-3"	12'-2"	10'-6"	8'-10"	15'-3"	12'-2"	10'-6"	8'-10"	16'-4"	12'-11"	11'-1"	9'-1"	16'-4"	12'-11"	11'-1"	9'-1"
	11⅞	18'-8"	14'-11"	12'-11"	10'-10"	18'-8"	14'-11"	12'-11"	10'-10"	20'-1"	16'-0"	13'-10"	11'-5"	20'-1"	16'-0"	13'-10"	11'-5"
	14	21'-6"	17'-3"	14'-11"	12'-7"	21'-6"	17'-3"	14'-11"	12'-7"	23'-2"	18'-7"	16'-4"	12'-11"	23'-2"	18'-7"	16'-4"	12'-11"
AJS® 190	16	23'-11"	19'-1"	16'-7"	13'-11"	23'-11"	19'-1"	16'-7"	13'-11"	25'-10"	19'-7"	16'-4"	13'-1"	25'-10"	19'-7"	16'-4"	13'-1"
	18	26'-11"	23'-7"	20'-6"	17'-4"	27'-8"	23'-7"	20'-6"	17'-4"	29'-9"	25'-5"	22'-2"	18'-8"	29'-9"	25'-5"	22'-2"	18'-8"
AJS® 25	20	28'-10"	25'-7"	22'-4"	18'-10"	29'-7"	25'-7"	22'-4"	18'-10"	31'-6"	27'-3"	24'-1"	20'-4"	31'-6"	27'-3"	24'-1"	20'-4"
	9½	18'-11"	17'-4"	15'-0"	12'-6"	19'-4"	17'-4"	15'-0"	12'-6"	20'-11"	18'-3"	15'-2"	12'-1"	21'-5"	18'-3"	15'-2"	12'-1"
AJS® 30	11⅞	21'-10"	20'-3"	18'-3"	15'-4"	22'-4"	20'-9"	18'-3"	15'-4"	24'-2"	19'-0"	15'-10"	12'-8"	24'-9"	19'-0"	15'-10"	12'-8"
	14	24'-3"	22'-5"	20'-5"	16'-3"	24'-10"	23'-0"	20'-5"	16'-3"	25'-10"	19'-4"	16'-1"	12'-11"	25'-10"	19'-4"	16'-1"	12'-11"
	16	26'-5"	24'-5"	21'-0"	16'-9"	27'-0"	25'-1"	21'-0"	16'-9"	26'-2"	19'-7"	16'-4"	13'-1"	26'-2"	19'-7"	16'-4"	13'-1"
	18	28'-7"	26'-6"	25'-2"	21'-11"	29'-3"	27'-2"	25'-11"	21'-11"	31'-7"	29'-4"	27'-6"	23'-8"	32'-4"	30'-1"	27'-6"	23'-8"
	20	30'-7"	28'-3"	26'-11"	23'-10"	31'-3"	29'-1"	27'-8"	23'-10"	34'-3"	31'-4"	29'-1"	25'-9"	35'-3"	31'-10"	29'-1"	25'-9"
	22	32'-5"	30'-0"	28'-7"	25'-7"	33'-5"	30'-10"	29'-5"	25'-7"	37'-1"	33'-6"	30'-5"	27'-2"	38'-2"	33'-4"	30'-5"	27'-2"
	24	34'-11"	31'-9"	30'-2"	27'-2"	35'-11"	32'-7"	31'-1"	27'-2"	39'-10"	34'-10"	31'-9"	28'-4"	40'-3"	34'-10"	31'-9"	28'-4"
AJS® 30	18	29'-3"	27'-1"	25'-9"	24'-3"	29'-11"	27'-9"	26'-5"	24'-11"	32'-4"	29'-11"	28'-6"	25'-1"	33'-3"	30'-9"	29'-3"	25'-1"
	20	31'-3"	28'-11"	27'-6"	25'-11"	31'-11"	29'-8"	28'-3"	26'-8"	35'-3"	32'-0"	30'-5"	27'-2"	36'-4"	32'-11"	31'-4"	27'-2"
	22	33'-5"	30'-8"	29'-2"	27'-6"	34'-4"	31'-6"	30'-0"	28'-3"	38'-2"	34'-6"	32'-4"	27'-9"	39'-4"	35'-8"	33'-6"	27'-9"
	24	35'-11"	32'-5"	30'-10"	29'-0"	37'-0"	33'-6"	31'-8"	29'-11"	41'-1"	37'-1"	34'-8"	28'-4"	42'-3"	38'-5"	35'-6"	28'-4"

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	15'-7"	13'-6"	12'-4"	11'-0"	15'-7"	13'-6"	12'-4"	11'-0"	15'-6"	13'-5"	12'-3"	10'-11"	15'-6"	13'-5"	12'-3"	10'-11"
	11⅞	17'-10"	15'-5"	14'-0"	12'-5"	17'-10"	15'-5"	14'-0"	12'-5"	17'-9"	15'-4"	14'-0"	11'-5"	17'-9"	15'-4"	14'-0"	11'-5"
AJS® 20	9½	17'-7"	16'-1"	14'-4"	12'-10"	17'-7"	16'-1"	14'-4"	12'-10"	18'-4"	15'-10"	13'-8"	10'-11"	18'-4"	15'-10"	13'-8"	10'-11"
	11⅞	20'-4"	18'-0"	16'-5"	14'-3"	20'-11"	18'-0"	16'-5"	14'-3"	20'-11"	17'-2"	14'-4"	11'-5"	20'-11"	17'-2"	14'-4"	11'-5"
	14	22'-7"	19'-10"	18'-1"	14'-8"	22'-11"	19'-10"	18'-1"	14'-8"	23'-0"	17'-6"	14'-7"	11'-8"	23'-0"	17'-6"	14'-7"	11'-8"
AJS® 190	16	24'-7"	21'-4"	19'-0"	15'-1"	24'-8"	21'-4"	19'-0"	15'-1"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
	18	26'-11"	24'-6"	22'-5"	20'-0"	27'-8"	24'-6"	22'-5"	20'-0"	28'-3"	24'-6"	22'-4"	19'-11"	28'-3"	24'-6"	22'-4"	19'-11"
AJS® 25	20	28'-10"	26'-0"	23'-8"	21'-2"	29'-7"	26'-0"	23'-8"	21'-2"	29'-11"	25'-11"	23'-7"	20'-11"	29'-11"	25'-11"	23'-7"	20'-11"
	9½	18'-11"	17'-8"	16'-7"	13'-1"	19'-4"	17'-8"	16'-7"	13'-1"	20'-11"	16'-6"	13'-8"	10'-11"	21'-5"	16'-6"	13'-8"	10'-11"
	11⅞	21'-10"	20'-3"	17'-11"	14'-3"	22'-4"	20'-9"	17'-11"	14'-3"	22'-11"	17'-2"	14'-4"	11'-5"	22'-11"	17'-2"	14'-4"	11'-5"
	14	24'-3"	22'-5"	18'-5"	14'-8"	24'-10"	22'-3"	18'-5"	14'-8"	23'-4"	17'-6"	14'-7"	11'-8"	23'-4"	17'-6"	14'-7"	11'-8"
	16	26'-5"	22'-10"	19'-0"	15'-1"	27'-0"	22'-10"	19'-0"	15'-1"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
	18	28'-7"	26'-6"	25'-2"	23'-5"	29'-3"	27'-2"	25'-11"	23'-5"	31'-7"	28'-7"	26'-1"	22'-8"	32'-4"	28'-7"	26'-1"	22'-8"
	20	30'-7"	28'-3"	26'-11"	24'-9"	31'-3"	29'-1"	27'-8"	24'-9"	34'-3"	30'-3"	27'-7"	24'-6"	35'-0"	30'-3"	27'-7"	24'-6"
	22	32'-5"	30'-0"	28'-7"	25'-11"	33'-5"	30'-10"	29'-0"	25'-11"	36'-8"	31'-9"	28'-11"	25'-1"	36'-8"	31'-9"	28'-11"	25'-1"
AJS® 30	24	34'-11"	31'-9"	30'-2"	27'-1"	35'-11"	32'-7"	30'-3"	27'-1"	38'-3"	33'-1"	30'-2"	25'-8"	38'-3"	33'-1"	30'-2"	25'-8"
	18	29'-3"	27'-1"	25'-9"	24'-3"	29'-11"	27'-9"	26'-5"	24'-11"	32'-4"	29'-11"	28'-4"	22'-8"	33'-3"	30'-9"	28'-4"	22'-8"
	20	31'-3"	28'-11"	27'-6"	25'-11"	31'-11"	29'-8"	28'-3"	26'-8"	35'-3"	32'-0"	30'-5"	24'-6"	36'-4"	32'-11"	30'-8"	24'-6"
	22	33'-5"	30'-8"	29'-2"	27'-6"	34'-4"	31'-6"	30'-0"	28'-3"	38'-2"	34'-6"	31'-5"	25'-1"	39'-4"	35'-4"	31'-5"	25'-1"
AJS® 30	24	35'-11"	32'-5"	30'-10"	29'-0"	37'-0"	33'-6"	31'-8"	29'-11"	41'-1"	36'-10"	32'-1"	25'-8"	42'-3"	36'-10"	32'-1"	25'-8"

* See notes on page 5

16 FLOOR SPAN TABLES 7/8" SUBFLOOR (GLUED & NAILED)

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 1 011 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	15'-7"	13'-0"	11'-5"	9'-9"	15'-7"	13'-0"	11'-5"	9'-9"	15'-6"	13'-5"	11'-10"	10'-1"	15'-6"	13'-5"	11'-10"	10'-1"
	11⅞	17'-10"	15'-5"	13'-9"	11'-6"	17'-10"	15'-5"	13'-9"	11'-6"	17'-9"	15'-4"	14'-0"	11'-5"	17'-9"	15'-4"	14'-0"	11'-5"
AJS® 20	9½	17'-7"	16'-1"	14'-2"	12'-0"	17'-7"	16'-1"	14'-2"	12'-0"	18'-4"	15'-10"	13'-8"	10'-11"	18'-4"	15'-10"	13'-8"	10'-11"
	11⅞	20'-4"	18'-0"	16'-5"	14'-1"	20'-11"	18'-0"	16'-5"	14'-1"	20'-11"	17'-2"	14'-4"	11'-5"	20'-11"	17'-2"	14'-4"	11'-5"
	14	22'-7"	19'-10"	18'-1"	14'-8"	22'-11"	19'-10"	18'-1"	14'-8"	23'-0"	17'-6"	14'-7"	11'-8"	23'-0"	17'-6"	14'-7"	11'-8"
	16	24'-7"	21'-4"	19'-0"	15'-1"	24'-8"	21'-4"	19'-0"	15'-1"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
AJS® 190	18	26'-11"	24'-6"	22'-5"	20'-0"	27'-8"	24'-6"	22'-5"	20'-0"	28'-3"	24'-6"	22'-4"	19'-11"	28'-3"	24'-6"	22'-4"	19'-11"
	20	28'-10"	26'-0"	23'-8"	21'-2"	29'-7"	26'-0"	23'-8"	21'-2"	29'-11"	25'-11"	23'-7"	20'-11"	29'-11"	25'-11"	23'-7"	20'-11"
AJS® 25	9½	18'-11"	17'-8"	16'-7"	13'-1"	19'-4"	17'-8"	16'-7"	13'-1"	20'-11"	16'-6"	13'-8"	10'-11"	21'-5"	16'-6"	13'-8"	10'-11"
	11⅞	21'-10"	20'-3"	17'-11"	14'-3"	22'-4"	20'-9"	17'-11"	14'-3"	22'-11"	17'-2"	14'-4"	11'-5"	22'-11"	17'-2"	14'-4"	11'-5"
	14	24'-3"	22'-5"	18'-5"	14'-8"	24'-10"	22'-3"	18'-5"	14'-8"	23'-4"	17'-6"	14'-7"	11'-8"	23'-4"	17'-6"	14'-7"	11'-8"
	16	26'-5"	22'-10"	19'-0"	15'-1"	27'-0"	22'-10"	19'-0"	15'-1"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
	18	28'-7"	26'-6"	25'-2"	23'-5"	29'-3"	27'-2"	25'-11"	23'-5"	31'-7"	28'-7"	26'-1"	22'-8"	32'-4"	28'-7"	26'-1"	22'-8"
	20	30'-7"	28'-3"	26'-11"	24'-9"	31'-3"	29'-1"	27'-8"	24'-9"	34'-3"	30'-3"	27'-7"	24'-6"	35'-0"	30'-3"	27'-7"	24'-6"
	22	32'-5"	30'-0"	28'-7"	25'-11"	33'-5"	30'-10"	29'-0"	25'-11"	36'-8"	31'-9"	28'-11"	25'-1"	36'-8"	31'-9"	28'-11"	25'-1"
AJS® 30	24	34'-11"	31'-9"	30'-2"	27'-1"	35'-11"	32'-7"	30'-3"	27'-1"	38'-3"	33'-1"	30'-2"	25'-8"	38'-3"	33'-1"	30'-2"	25'-8"
	18	29'-3"	27'-1"	25'-9"	24'-3"	29'-11"	27'-9"	26'-5"	24'-11"	32'-4"	29'-11"	28'-4"	22'-8"	33'-3"	30'-9"	28'-4"	22'-8"
	20	31'-3"	28'-11"	27'-6"	25'-11"	31'-11"	29'-8"	28'-3"	26'-8"	35'-3"	32'-0"	30'-5"	24'-6"	36'-4"	32'-11"	30'-8"	24'-6"
	22	33'-5"	30'-8"	29'-2"	27'-6"	34'-4"	31'-6"	30'-0"	28'-3"	38'-2"	34'-6"	31'-5"	25'-1"	39'-4"	35'-4"	31'-5"	25'-1"
	24	35'-11"	32'-5"	30'-10"	29'-0"	37'-0"	33'-6"	31'-8"	29'-11"	41'-1"	36'-10"	32'-1"	25'-8"	42'-3"	36'-10"	32'-1"	25'-8"

Live Load: 50 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 2 023 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	11'-4"	9'-1"	7'-10"	6'-7"	11'-4"	9'-1"	7'-10"	6'-7"	11'-11"	9'-4"	8'-0"	6'-7"	11'-11"	9'-4"	8'-0"	6'-7"
	11⅞	13'-10"	11'-1"	9'-7"	8'-1"	13'-10"	11'-1"	9'-7"	8'-1"	14'-8"	11'-8"	10'-0"	8'-3"	14'-8"	11'-8"	10'-0"	8'-3"
AJS® 20	9½	14'-6"	11'-8"	10'-1"	8'-6"	14'-6"	11'-8"	10'-1"	8'-6"	15'-5"	12'-3"	10'-7"	8'-9"	15'-5"	12'-3"	10'-7"	8'-9"
	11⅞	17'-8"	14'-3"	12'-4"	10'-5"	17'-8"	14'-3"	12'-4"	10'-5"	18'-10"	15'-2"	13'-1"	10'-11"	18'-10"	15'-2"	13'-1"	10'-11"
	14	20'-3"	16'-4"	14'-1"	11'-10"	20'-3"	16'-4"	14'-1"	11'-10"	21'-8"	17'-6"	14'-7"	11'-8"	21'-8"	17'-6"	14'-7"	11'-8"
	16	22'-6"	18'-1"	15'-9"	13'-3"	22'-6"	18'-1"	15'-9"	13'-3"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
AJS® 190	18	26'-11"	22'-2"	19'-5"	16'-5"	27'-3"	22'-2"	19'-5"	16'-5"	28'-3"	23'-8"	20'-9"	17'-6"	28'-3"	23'-8"	20'-9"	17'-6"
	20	28'-10"	24'-0"	21'-1"	17'-10"	29'-7"	24'-0"	21'-1"	17'-10"	29'-11"	25'-8"	22'-6"	19'-1"	29'-11"	25'-8"	22'-6"	19'-1"
AJS® 25	9½	18'-11"	16'-5"	14'-2"	11'-11"	19'-4"	16'-5"	14'-2"	11'-11"	20'-11"	16'-6"	13'-8"	10'-11"	21'-5"	16'-6"	13'-8"	10'-11"
	11⅞	21'-10"	19'-10"	17'-4"	14'-3"	22'-4"	19'-10"	17'-4"	14'-3"	22'-11"	17'-2"	14'-4"	11'-5"	22'-11"	17'-2"	14'-4"	11'-5"
	14	24'-3"	22'-3"	18'-5"	14'-8"	24'-10"	22'-3"	18'-5"	14'-8"	23'-4"	17'-6"	14'-7"	11'-8"	23'-4"	17'-6"	14'-7"	11'-8"
	16	26'-5"	22'-10"	19'-0"	15'-1"	27'-0"	22'-10"	19'-0"	15'-1"	23'-8"	17'-9"	14'-9"	11'-10"	23'-8"	17'-9"	14'-9"	11'-10"
	18	28'-7"	26'-6"	24'-4"	20'-8"	29'-3"	27'-2"	24'-4"	20'-8"	31'-7"	28'-7"	26'-0"	22'-1"	32'-4"	28'-7"	26'-0"	22'-1"
	20	30'-7"	28'-3"	26'-4"	22'-5"	31'-3"	29'-1"	26'-4"	22'-5"	34'-3"	30'-3"	27'-7"	23'-9"	35'-0"	30'-3"	27'-7"	23'-9"
	22	32'-5"	30'-0"	28'-1"	23'-9"	33'-5"	30'-10"	28'-1"	23'-9"	36'-8"	31'-9"	28'-11"	25'-1"	36'-8"	31'-9"	28'-11"	25'-1"
AJS® 30	24	34'-11"	31'-9"	29'-7"	25'-0"	35'-11"	32'-7"	29'-7"	25'-0"	38'-3"	33'-1"	30'-2"	25'-8"	38'-3"	33'-1"	30'-2"	25'-8"
	18	29'-3"	27'-1"	25'-9"	23'-11"	29'-11"	27'-9"	26'-5"	23'-11"	32'-4"	29'-11"	28'-4"	22'-8"	33'-3"	30'-9"	28'-4"	22'-8"
	20	31'-3"	28'-11"	27'-6"	25'-7"	31'-11"	29'-8"	28'-3"	25'-7"	35'-3"	32'-0"	30'-5"	24'-6"	36'-4"	32'-11"	30'-8"	24'-6"
	22	33'-5"	30'-8"	29'-2"	27'-1"	34'-4"	31'-6"	30'-0"	27'-1"	38'-2"	34'-6"	31'-5"	25'-1"	39'-4"	35'-4"	31'-5"	25'-1"
	24	35'-11"	32'-5"	30'-10"	28'-6"	37'-0"	33'-6"	31'-8"	28'-6"	41'-1"	36'-10"	32'-1"	25'-8"	42'-3"	36'-10"	32'-1"	25'-8"

* See notes on page 5

FLOOR SPAN TABLES 7/8" SUBFLOOR (GLUED & NAILED) 17

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	12'-10"	11'-1"	9'-11"	8'-9"	12'-10"	11'-1"	9'-11"	8'-9"	12'-9"	11'-0"	9'-2"	7'-4"	12'-9"	11'-0"	9'-2"	7'-4"
	11⅞	14'-7"	12'-6"	11'-5"	9'-7"	14'-7"	12'-6"	11'-5"	9'-7"	14'-7"	11'-8"	9'-8"	7'-9"	14'-7"	11'-8"	9'-8"	7'-9"
AJS® 20	9½	13'-9"	12'-6"	11'-1"	8'-9"	13'-9"	12'-6"	11'-1"	8'-9"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	16'-4"	14'-6"	12'-0"	9'-7"	16'-4"	14'-6"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	18'-7"	14'-11"	12'-5"	9'-10"	18'-7"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-3"	15'-4"	12'-9"	10'-2"	20'-3"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
AJS® 190	18	23'-1"	20'-2"	18'-5"	16'-3"	23'-1"	20'-2"	18'-5"	16'-3"	23'-3"	20'-1"	17'-9"	14'-2"	23'-3"	20'-1"	17'-9"	14'-2"
	20	24'-8"	21'-4"	19'-5"	17'-3"	24'-8"	21'-4"	19'-5"	17'-3"	24'-7"	21'-3"	17'-9"	14'-2"	24'-7"	21'-3"	17'-9"	14'-2"
AJS® 25	9½	15'-1"	13'-4"	11'-1"	8'-9"	15'-1"	13'-4"	11'-1"	8'-9"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	18'-0"	14'-6"	12'-0"	9'-7"	18'-0"	14'-6"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	20'-0"	14'-11"	12'-5"	9'-10"	20'-0"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-7"	15'-4"	12'-9"	10'-2"	20'-7"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
	18	24'-11"	22'-8"	21'-4"	19'-1"	24'-11"	22'-8"	21'-4"	19'-1"	27'-2"	23'-0"	19'-2"	15'-4"	27'-2"	23'-0"	19'-2"	15'-4"
	20	27'-0"	24'-7"	22'-9"	20'-2"	27'-0"	24'-7"	22'-9"	20'-2"	28'-9"	24'-11"	20'-9"	16'-7"	28'-9"	24'-11"	20'-9"	16'-7"
	22	29'-0"	26'-2"	23'-10"	21'-2"	29'-0"	26'-2"	23'-10"	21'-2"	30'-2"	25'-6"	21'-3"	17'-0"	30'-2"	25'-6"	21'-3"	17'-0"
	24	31'-0"	27'-3"	24'-11"	22'-1"	31'-0"	27'-3"	24'-11"	22'-1"	31'-5"	26'-1"	21'-9"	17'-4"	31'-5"	26'-1"	21'-9"	17'-4"
AJS® 30	18	25'-8"	23'-4"	21'-11"	20'-4"	25'-8"	23'-4"	21'-11"	20'-4"	29'-1"	23'-0"	19'-2"	15'-4"	29'-1"	23'-0"	19'-2"	15'-4"
	20	27'-10"	25'-3"	23'-9"	22'-0"	27'-10"	25'-3"	23'-9"	22'-0"	31'-6"	24'-11"	20'-9"	16'-7"	31'-6"	24'-11"	20'-9"	16'-7"
	22	29'-11"	27'-2"	25'-6"	23'-8"	29'-11"	27'-2"	25'-6"	23'-8"	33'-7"	25'-6"	21'-3"	17'-0"	33'-7"	25'-6"	21'-3"	17'-0"
	24	31'-11"	29'-0"	27'-3"	24'-7"	31'-11"	29'-0"	27'-3"	24'-7"	34'-9"	26'-1"	21'-9"	17'-4"	34'-9"	26'-1"	21'-9"	17'-4"

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 1 011 lbs		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	12'-10"	11'-1"	9'-11"	8'-9"	12'-10"	11'-1"	9'-11"	8'-9"	12'-9"	11'-0"	9'-2"	7'-4"	12'-9"	11'-0"	9'-2"	7'-4"
	11⅞	14'-7"	12'-6"	11'-5"	9'-7"	14'-7"	12'-6"	11'-5"	9'-7"	14'-7"	11'-8"	9'-8"	7'-9"	14'-7"	11'-8"	9'-8"	7'-9"
AJS® 20	9½	13'-9"	12'-6"	11'-1"	8'-9"	13'-9"	12'-6"	11'-1"	8'-9"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	16'-4"	14'-6"	12'-0"	9'-7"	16'-4"	14'-6"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	18'-7"	14'-11"	12'-5"	9'-10"	18'-7"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-3"	15'-4"	12'-9"	10'-2"	20'-3"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
AJS® 190	18	23'-1"	20'-2"	18'-5"	16'-3"	23'-1"	20'-2"	18'-5"	16'-3"	23'-3"	20'-1"	17'-9"	14'-2"	23'-3"	20'-1"	17'-9"	14'-2"
	20	24'-8"	21'-4"	19'-5"	17'-3"	24'-8"	21'-4"	19'-5"	17'-3"	24'-7"	21'-3"	17'-9"	14'-2"	24'-7"	21'-3"	17'-9"	14'-2"
AJS® 25	9½	15'-1"	13'-4"	11'-1"	8'-9"	15'-1"	13'-4"	11'-1"	8'-9"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	18'-0"	14'-6"	12'-0"	9'-7"	18'-0"	14'-6"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	20'-0"	14'-11"	12'-5"	9'-10"	20'-0"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-7"	15'-4"	12'-9"	10'-2"	20'-7"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
	18	24'-11"	22'-8"	21'-4"	19'-1"	24'-11"	22'-8"	21'-4"	19'-1"	27'-2"	23'-0"	19'-2"	15'-4"	27'-2"	23'-0"	19'-2"	15'-4"
	20	27'-0"	24'-7"	22'-9"	20'-2"	27'-0"	24'-7"	22'-9"	20'-2"	28'-9"	24'-11"	20'-9"	16'-7"	28'-9"	24'-11"	20'-9"	16'-7"
	22	29'-0"	26'-2"	23'-10"	21'-2"	29'-0"	26'-2"	23'-10"	21'-2"	30'-2"	25'-6"	21'-3"	17'-0"	30'-2"	25'-6"	21'-3"	17'-0"
	24	31'-0"	27'-3"	24'-11"	22'-1"	31'-0"	27'-3"	24'-11"	22'-1"	31'-5"	26'-1"	21'-9"	17'-4"	31'-5"	26'-1"	21'-9"	17'-4"
AJS® 30	18	25'-8"	23'-4"	21'-11"	20'-4"	25'-8"	23'-4"	21'-11"	20'-4"	29'-1"	23'-0"	19'-2"	15'-4"	29'-1"	23'-0"	19'-2"	15'-4"
	20	27'-10"	25'-3"	23'-9"	22'-0"	27'-10"	25'-3"	23'-9"	22'-0"	31'-6"	24'-11"	20'-9"	16'-7"	31'-6"	24'-11"	20'-9"	16'-7"
	22	29'-11"	27'-2"	25'-6"	23'-8"	29'-11"	27'-2"	25'-6"	23'-8"	33'-7"	25'-6"	21'-3"	17'-0"	33'-7"	25'-6"	21'-3"	17'-0"
	24	31'-11"	29'-0"	27'-3"	24'-7"	31'-11"	29'-0"	27'-3"	24'-7"	34'-9"	26'-1"	21'-9"	17'-4"	34'-9"	26'-1"	21'-9"	17'-4"

* See notes on page 5

18 FLOOR SPAN TABLES 7/8" SUBFLOOR (GLUED & NAILED)

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 35 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 2 023 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	11'-9"	9'-4"	8'-1"	6'-10"	11'-9"	9'-4"	8'-1"	6'-10"	12'-6"	9'-9"	8'-4"	6'-10"	12'-6"	9'-9"	8'-4"	6'-10"
	11⅞	14'-6"	11'-5"	9'-10"	8'-3"	14'-6"	11'-5"	9'-10"	8'-3"	14'-7"	11'-8"	9'-8"	7'-9"	14'-7"	11'-8"	9'-8"	7'-9"
AJS® 20	9½	13'-9"	12'-0"	10'-4"	8'-8"	13'-9"	12'-0"	10'-4"	8'-8"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	16'-4"	14'-6"	12'-0"	9'-7"	16'-4"	14'-6"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	18'-7"	14'-11"	12'-5"	9'-10"	18'-7"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-3"	15'-4"	12'-9"	10'-2"	20'-3"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
AJS® 190	18	23'-1"	20'-2"	18'-5"	16'-3"	23'-1"	20'-2"	18'-5"	16'-3"	23'-3"	20'-1"	17'-9"	14'-2"	23'-3"	20'-1"	17'-9"	14'-2"
	20	24'-8"	21'-4"	19'-5"	17'-3"	24'-8"	21'-4"	19'-5"	17'-3"	24'-7"	21'-3"	17'-9"	14'-2"	24'-7"	21'-3"	17'-9"	14'-2"
AJS® 25	9½	15'-1"	13'-4"	11'-1"	8'-9"	15'-1"	13'-4"	11'-1"	8'-9"	14'-10"	11'-1"	9'-2"	7'-4"	14'-10"	11'-1"	9'-2"	7'-4"
	11⅞	18'-0"	14'-6"	12'-0"	9'-7"	18'-0"	14'-6"	12'-0"	9'-7"	15'-6"	11'-8"	9'-8"	7'-9"	15'-6"	11'-8"	9'-8"	7'-9"
	14	20'-0"	14'-11"	12'-5"	9'-10"	20'-0"	14'-11"	12'-5"	9'-10"	15'-10"	11'-10"	9'-10"	7'-11"	15'-10"	11'-10"	9'-10"	7'-11"
	16	20'-7"	15'-4"	12'-9"	10'-2"	20'-7"	15'-4"	12'-9"	10'-2"	16'-0"	12'-0"	10'-0"	8'-0"	16'-0"	12'-0"	10'-0"	8'-0"
	18	24'-11"	22'-8"	21'-4"	19'-1"	24'-11"	22'-8"	21'-4"	19'-1"	27'-2"	23'-0"	19'-2"	15'-4"	27'-2"	23'-0"	19'-2"	15'-4"
	20	27'-0"	24'-7"	22'-9"	20'-2"	27'-0"	24'-7"	22'-9"	20'-2"	28'-9"	24'-11"	20'-9"	16'-7"	28'-9"	24'-11"	20'-9"	16'-7"
	22	29'-0"	26'-2"	23'-10"	21'-2"	29'-0"	26'-2"	23'-10"	21'-2"	30'-2"	25'-6"	21'-3"	17'-0"	30'-2"	25'-6"	21'-3"	17'-0"
	24	31'-0"	27'-3"	24'-11"	22'-1"	31'-0"	27'-3"	24'-11"	22'-1"	31'-5"	26'-1"	21'-9"	17'-4"	31'-5"	26'-1"	21'-9"	17'-4"
AJS® 30	18	25'-8"	23'-4"	21'-11"	20'-4"	25'-8"	23'-4"	21'-11"	20'-4"	29'-1"	23'-0"	19'-2"	15'-4"	29'-1"	23'-0"	19'-2"	15'-4"
	20	27'-10"	25'-3"	23'-9"	22'-0"	27'-10"	25'-3"	23'-9"	22'-0"	31'-6"	24'-11"	20'-9"	16'-7"	31'-6"	24'-11"	20'-9"	16'-7"
	22	29'-11"	27'-2"	25'-6"	23'-8"	29'-11"	27'-2"	25'-6"	23'-8"	33'-7"	25'-6"	21'-3"	17'-0"	33'-7"	25'-6"	21'-3"	17'-0"
	24	31'-11"	29'-0"	27'-3"	24'-7"	31'-11"	29'-0"	27'-3"	24'-7"	34'-9"	26'-1"	21'-9"	17'-4"	34'-9"	26'-1"	21'-9"	17'-4"

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	12'-5"	10'-7"	9'-7"	8'-3"	12'-5"	10'-7"	9'-7"	8'-3"	12'-4"	10'-5"	8'-7"	6'-10"	12'-4"	10'-5"	8'-7"	6'-10"
	11⅞	14'-2"	12'-1"	11'-0"	9'-0"	14'-2"	12'-1"	11'-0"	9'-0"	14'-1"	10'-11"	9'-1"	7'-3"	14'-1"	10'-11"	9'-1"	7'-3"
AJS® 20	9½	13'-9"	12'-6"	10'-4"	8'-3"	13'-9"	12'-6"	10'-4"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	16'-4"	13'-7"	11'-3"	9'-0"	16'-4"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-3"	14'-0"	11'-7"	9'-3"	18'-3"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
AJS® 190	18	22'-7"	19'-6"	17'-10"	15'-9"	22'-7"	19'-6"	17'-10"	15'-9"	22'-6"	19'-6"	16'-8"	13'-4"	22'-6"	19'-6"	16'-8"	13'-4"
	20	23'-11"	20'-8"	18'-8"	16'-8"	23'-11"	20'-8"	18'-8"	16'-8"	23'-10"	20'-0"	16'-8"	13'-4"	23'-10"	20'-0"	16'-8"	13'-4"
AJS® 25	9½	15'-1"	12'-6"	10'-4"	8'-3"	15'-1"	12'-6"	10'-4"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	18'-0"	13'-7"	11'-3"	9'-0"	18'-0"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-10"	14'-0"	11'-7"	9'-3"	18'-10"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
	18	24'-11"	22'-8"	20'-10"	18'-6"	24'-11"	22'-8"	20'-10"	18'-6"	26'-4"	21'-8"	18'-0"	14'-5"	26'-4"	21'-8"	18'-0"	14'-5"
	20	27'-0"	24'-2"	22'-1"	19'-7"	27'-0"	24'-2"	22'-1"	19'-7"	27'-10"	23'-5"	19'-6"	15'-7"	27'-10"	23'-5"	19'-6"	15'-7"
	22	29'-0"	25'-4"	23'-1"	20'-6"	29'-0"	25'-4"	23'-1"	20'-6"	29'-2"	24'-0"	20'-0"	16'-0"	29'-2"	24'-0"	20'-0"	16'-0"
	24	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	24'-6"	20'-5"	16'-4"	30'-6"	24'-6"	20'-5"	16'-4"
AJS® 30	18	25'-8"	23'-4"	21'-11"	19'-9"	25'-8"	23'-4"	21'-11"	19'-9"	28'-10"	21'-8"	18'-0"	14'-5"	28'-10"	21'-8"	18'-0"	14'-5"
	20	27'-10"	25'-3"	23'-9"	22'-0"	27'-10"	25'-3"	23'-9"	22'-0"	31'-3"	23'-5"	19'-6"	15'-7"	31'-3"	23'-5"	19'-6"	15'-7"
	22	29'-11"	27'-2"	25'-6"	22'-10"	29'-11"	27'-2"	25'-6"	22'-10"	32'-0"	24'-0"	20'-0"	16'-0"	32'-0"	24'-0"	20'-0"	16'-0"
	24	31'-11"	29'-0"	26'-8"	23'-10"	31'-11"	29'-0"	26'-8"	23'-10"	32'-8"	24'-6"	20'-5"	16'-4"	32'-8"	24'-6"	20'-5"	16'-4"

* See notes on page 5

FLOOR SPAN TABLES 7/8" SUBFLOOR (GLUED & NAILED) 19

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 1 011 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	12'-5"	10'-7"	9'-7"	8'-3"	12'-5"	10'-7"	9'-7"	8'-3"	12'-4"	10'-5"	8'-7"	6'-10"	12'-4"	10'-5"	8'-7"	6'-10"
	11⅞	14'-2"	12'-1"	11'-0"	9'-0"	14'-2"	12'-1"	11'-0"	9'-0"	14'-1"	10'-11"	9'-1"	7'-3"	14'-1"	10'-11"	9'-1"	7'-3"
AJS® 20	9½	13'-9"	12'-6"	10'-4"	8'-3"	13'-9"	12'-6"	10'-4"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	16'-4"	13'-7"	11'-3"	9'-0"	16'-4"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-3"	14'-0"	11'-7"	9'-3"	18'-3"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
AJS® 190	18	22'-7"	19'-6"	17'-10"	15'-9"	22'-7"	19'-6"	17'-10"	15'-9"	22'-6"	19'-6"	16'-8"	13'-4"	22'-6"	19'-6"	16'-8"	13'-4"
	20	23'-11"	20'-8"	18'-8"	16'-8"	23'-11"	20'-8"	18'-8"	16'-8"	23'-10"	20'-0"	16'-8"	13'-4"	23'-10"	20'-0"	16'-8"	13'-4"
AJS® 25	9½	15'-1"	12'-6"	10'-4"	8'-3"	15'-1"	12'-6"	10'-4"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	18'-0"	13'-7"	11'-3"	9'-0"	18'-0"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-10"	14'-0"	11'-7"	9'-3"	18'-10"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
	18	24'-11"	22'-8"	20'-10"	18'-6"	24'-11"	22'-8"	20'-10"	18'-6"	26'-4"	21'-8"	18'-0"	14'-5"	26'-4"	21'-8"	18'-0"	14'-5"
	20	27'-0"	24'-2"	22'-1"	19'-7"	27'-0"	24'-2"	22'-1"	19'-7"	27'-10"	23'-5"	19'-6"	15'-7"	27'-10"	23'-5"	19'-6"	15'-7"
	22	29'-0"	25'-4"	23'-1"	20'-6"	29'-0"	25'-4"	23'-1"	20'-6"	29'-2"	24'-0"	20'-0"	16'-0"	29'-2"	24'-0"	20'-0"	16'-0"
	24	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	24'-6"	20'-5"	16'-4"	30'-6"	24'-6"	20'-5"	16'-4"
AJS® 30	18	25'-8"	23'-4"	21'-11"	19'-9"	25'-8"	23'-4"	21'-11"	19'-9"	28'-10"	21'-8"	18'-0"	14'-5"	28'-10"	21'-8"	18'-0"	14'-5"
	20	27'-10"	25'-3"	23'-9"	22'-0"	27'-10"	25'-3"	23'-9"	22'-0"	31'-3"	23'-5"	19'-6"	15'-7"	31'-3"	23'-5"	19'-6"	15'-7"
	22	29'-11"	27'-2"	25'-6"	22'-10"	29'-11"	27'-2"	25'-6"	22'-10"	32'-0"	24'-0"	20'-0"	16'-0"	32'-0"	24'-0"	20'-0"	16'-0"
	24	31'-11"	29'-0"	26'-8"	23'-10"	31'-11"	29'-0"	26'-8"	23'-10"	32'-8"	24'-6"	20'-5"	16'-4"	32'-8"	24'-6"	20'-5"	16'-4"

Live Load: 100 psf		Maximum Simple Floor Spans								Maximum Multiple Floor Spans							
Dead Load: 45 psf		Without Gypsum Ceiling				½" Gypsum Ceiling				Without Gypsum Ceiling				½" Gypsum Ceiling			
Safe Load: 2 023 lbs																	
Joist Series	Depth [in]	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"
AJS® 140	9½	11'-4"	9'-1"	7'-10"	6'-7"	11'-4"	9'-1"	7'-10"	6'-7"	11'-11"	9'-4"	8'-0"	6'-7"	11'-11"	9'-4"	8'-0"	6'-7"
	11⅞	13'-10"	10'-11"	9'-6"	7'-11"	13'-10"	10'-11"	9'-6"	7'-11"	14'-1"	10'-11"	9'-1"	7'-3"	14'-1"	10'-11"	9'-1"	7'-3"
AJS® 20	9½	13'-9"	11'-6"	10'-0"	8'-3"	13'-9"	11'-6"	10'-0"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	16'-4"	13'-7"	11'-3"	9'-0"	16'-4"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-3"	14'-0"	11'-7"	9'-3"	18'-3"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
AJS® 190	18	22'-7"	19'-6"	17'-10"	15'-9"	22'-7"	19'-6"	17'-10"	15'-9"	22'-6"	19'-6"	16'-8"	13'-4"	22'-6"	19'-6"	16'-8"	13'-4"
	20	23'-11"	20'-8"	18'-8"	16'-8"	23'-11"	20'-8"	18'-8"	16'-8"	23'-10"	20'-0"	16'-8"	13'-4"	23'-10"	20'-0"	16'-8"	13'-4"
AJS® 25	9½	15'-1"	12'-6"	10'-4"	8'-3"	15'-1"	12'-6"	10'-4"	8'-3"	13'-11"	10'-5"	8'-7"	6'-10"	13'-11"	10'-5"	8'-7"	6'-10"
	11⅞	18'-0"	13'-7"	11'-3"	9'-0"	18'-0"	13'-7"	11'-3"	9'-0"	14'-7"	10'-11"	9'-1"	7'-3"	14'-7"	10'-11"	9'-1"	7'-3"
	14	18'-10"	14'-0"	11'-7"	9'-3"	18'-10"	14'-0"	11'-7"	9'-3"	14'-10"	11'-1"	9'-3"	7'-5"	14'-10"	11'-1"	9'-3"	7'-5"
	16	19'-4"	14'-5"	11'-11"	9'-6"	19'-4"	14'-5"	11'-11"	9'-6"	15'-1"	11'-3"	9'-5"	7'-6"	15'-1"	11'-3"	9'-5"	7'-6"
	18	24'-11"	22'-8"	20'-10"	18'-6"	24'-11"	22'-8"	20'-10"	18'-6"	26'-4"	21'-8"	18'-0"	14'-5"	26'-4"	21'-8"	18'-0"	14'-5"
	20	27'-0"	24'-2"	22'-1"	19'-7"	27'-0"	24'-2"	22'-1"	19'-7"	27'-10"	23'-5"	19'-6"	15'-7"	27'-10"	23'-5"	19'-6"	15'-7"
	22	29'-0"	25'-4"	23'-1"	20'-6"	29'-0"	25'-4"	23'-1"	20'-6"	29'-2"	24'-0"	20'-0"	16'-0"	29'-2"	24'-0"	20'-0"	16'-0"
	24	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	26'-5"	23'-11"	21'-5"	30'-6"	24'-6"	20'-5"	16'-4"	30'-6"	24'-6"	20'-5"	16'-4"
AJS® 30	18	25'-8"	23'-4"	21'-11"	19'-9"	25'-8"	23'-4"	21'-11"	19'-9"	28'-10"	21'-8"	18'-0"	14'-5"	28'-10"	21'-8"	18'-0"	14'-5"
	20	27'-10"	25'-3"	23'-9"	22'-0"	27'-10"	25'-3"	23'-9"	22'-0"	31'-3"	23'-5"	19'-6"	15'-7"	31'-3"	23'-5"	19'-6"	15'-7"
	22	29'-11"	27'-2"	25'-6"	22'-10"	29'-11"	27'-2"	25'-6"	22'-10"	32'-0"	24'-0"	20'-0"	16'-0"	32'-0"	24'-0"	20'-0"	16'-0"
	24	31'-11"	29'-0"	26'-8"	23'-10"	31'-11"	29'-0"	26'-8"	23'-10"	32'-8"	24'-6"	20'-5"	16'-4"	32'-8"	24'-6"	20'-5"	16'-4"

* See notes on page 5

Design Span (ft)	Joist Series	AJS® 140		AJS® 20				AJS® 190		AJS® 25								AJS 30			
		9½	11½	9½	11½	14	16	18	20	9½	11½	14	16	18	20	22	24	18	20	22	24
6	Unfactored Live Load for L / 360 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	488	501	488	501	505	510	918	918	488	501	505	510	993	1075	1100	1124	993	1075	1100	1124
8	Unfactored Live Load for L / 360 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	366	376	366	376	378	382	688	688	366	376	378	382	745	806	825	843	745	806	825	843
10	Unfactored Live Load for L / 360 [plf]	227	-	277	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	292	301	292	301	303	306	550	550	292	301	303	306	596	645	660	674	596	645	660	674
12	Unfactored Live Load for L / 360 [plf]	138	227	170	-	-	-	-	-	225	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	207	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	244	250	244	250	252	255	459	459	244	250	252	255	496	537	550	562	496	537	550	562
14	Unfactored Live Load for L / 360 [plf]	89	148	111	182	-	-	-	-	149	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	134	-	167	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	209	215	209	215	216	218	393	393	209	215	216	218	425	460	471	482	425	460	471	482
16	Unfactored Live Load for L / 360 [plf]	61	102	76	126	181	-	334	-	103	168	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	92	153	115	-	-	-	-	-	155	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	183	188	183	188	189	191	344	344	183	188	189	191	372	403	412	421	372	403	412	421
18	Unfactored Live Load for L / 360 [plf]	43	73	54	91	131	-	243	304	74	122	-	-	304	-	-	-	330	-	-	-
	Unfactored Total Load for L / 240 [plf]	65	109	82	136	-	-	-	-	111	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	162	167	162	167	168	170	306	306	162	167	168	170	331	358	366	374	331	358	366	374
20	Unfactored Live Load for L / 360 [plf]	32	54	40	67	97	130	181	228	55	91	130	-	228	285	-	-	249	309	-	-
	Unfactored Total Load for L / 240 [plf]	48	81	60	101	146	-	272	-	82	136	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	146	150	146	150	151	153	275	275	146	150	151	153	298	322	330	337	298	322	330	337
22	Unfactored Live Load for L / 360 [plf]	24	41	30	51	74	100	139	175	41	69	99	133	176	220	268	-	192	239	291	-
	Unfactored Total Load for L / 240 [plf]	36	61	46	77	111	-	208	-	62	104	-	-	264	-	-	-	-	-	-	-
	Factored Total Load [plf]	133	136	133	136	137	139	250	250	133	136	137	139	270	293	300	306	270	293	300	306
24	Unfactored Live Load for L / 360 [plf]	18	31	23	40	58	78	108	137	32	54	78	104	138	173	211	254	150	188	230	276
	Unfactored Total Load for L / 240 [plf]	28	47	35	60	87	117	163	205	49	81	117	-	207	259	-	-	226	-	-	-
	Factored Total Load [plf]	122	125	122	125	126	127	229	229	122	125	126	127	248	268	275	281	248	268	275	281
26	Unfactored Live Load for L / 360 [plf]	14	25	18	31	46	62	86	109	25	43	62	83	110	138	169	204	120	151	184	221
	Unfactored Total Load for L / 240 [plf]	22	37	28	47	69	93	129	163	38	64	93	-	165	207	-	-	180	226	-	-
	Factored Total Load [plf]	112	115	112	115	116	117	211	211	112	115	116	117	229	248	254	259	229	248	254	259
28	Unfactored Live Load for L / 360 [plf]	11	20	15	25	37	50	69	88	20	34	50	67	89	112	137	166	97	122	150	180
	Unfactored Total Load for L / 240 [plf]	17	30	22	38	55	75	104	132	31	52	75	101	133	168	206	-	146	184	225	-
	Factored Total Load [plf]	104	107	104	107	108	109	196	196	104	107	108	109	212	230	235	241	212	230	235	241
30	Unfactored Live Load for L / 360 [plf]	9	16	12	20	30	41	57	72	17	28	41	55	73	92	113	136	80	100	123	149
	Unfactored Total Load for L / 240 [plf]	14	24	18	31	45	61	85	108	25	42	61	83	109	138	169	205	120	151	185	223
	Factored Total Load [plf]	97	100	97	100	101	102	183	183	97	100	101	102	198	215	220	224	198	215	220	224

NOTES:

1. Total Factored Load values are limited by shear, end/interior reactions or bending moment.
2. Unfactored Live Load values are limited by deflection equal to L/360. For deflections limited to L/480, multiply live load values by 0.75.
3. Unfactored Total Load values are limited by deflection equal to L/240.
4. All three loading cases must be checked. Where a Live Load value is not shown, the Factored Total Load value will control.
5. Joists deeper than 16" require web stiffeners at all bearing locations.
6. Table values represent the most restrictive of simple or continuous span beams applications and assume an uniform loading.
7. Span is measured center to center of the supports. Analyze continuous span beams with the BC Calc software if the length of any span is less than half the length of an adjacent span.
8. Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
9. Table values do not consider composite action from gluing and nailing the floor sheathing.
10. Total Factored Load values assume minimum bearing lengths without web stiffeners for joist depths of 16 inches or less. 18 to 24 inch joists require web stiffeners.
11. For 2-ply, double the Factored Total Load, Unfactored Live and Total Load values.
12. This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC Calc® software.

Deflection limit	Actual deflection based on Span and Limit (in)												
	Span (ft)												
	6	8	10	12	14	16	18	20	22	24	26	28	30
L/480	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75
L/360	0.20	0.27	0.33	0.40	0.47	0.53	0.60	0.67	0.73	0.80	0.87	0.93	1.00
L/240	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50

AJS® Joists

NOTE

The illustration below is showing several suggested applications for the Boise Cascade EWP products. It is not intended to show an actual house under construction.

NO MIDSPAN BRIDGING IS REQUIRED FOR ALLJOIST® PRODUCT

FOR INSTALLATION STABILITY,
Temporary strut lines (1x4 min.) 8' on center max. Fasten at each joist with 2-2½" (8d) nails minimum.

Dimension lumber is not suitable for use as a rim board in ALLJOIST® floor systems.

AJS® rim joist. See page 9.

Boise Rimboard. See pages 9 & 22.

For load bearing cantilever details, see page 11 & 12.

AJS® blocking or 2x4 "squash" block on each side required when supporting a load-bearing wall above.

VERSA-LAM® header or an AJS® header.

1½" knockout holes at approximately 12" o.c. are pre-punched.

See page 13 & 14 for allowable hole sizes and location.

VERSA-LAM® LVL beam.

Endwall blocking as required per governing building code.

AJS® Blocking is required when joists are cantilevered.

BCI® Joists, VERSA-LAM® and ALLJOIST® must be stored, installed and used in accordance with the Boise Cascade EWP Installation Guide, building codes, and to the extent not inconsistent with the Boise Cascade EWP Installation Guide, usual and customary building practices and standards. VERSA-LAM®, ALLJOIST®, and BCI® Joists must be wrapped, covered, and stored off of the ground on stickers at all times prior to installation. VERSA-LAM®, ALLJOIST® and BCI® Joists are intended only for applications that assure no exposure

to weather or the elements and an environment that is free from moisture from any source, or any pest, organism or substance which degrades or damages wood or glue bonds. Failure to correctly store, use or install VERSA-LAM®, ALLJOIST®, and BCI® Joist in accordance with the Boise Cascade EWP Installation Guide will void the limited warranty.

SAFETY WARNING

DO NOT ALLOW WORKERS ON AJS® JOISTS UNTIL ALL HANGERS, AJS® RIM JOISTS, RIM BOARDS, AJS® BLOCKING PANELS, X-BRACING AND TEMPORARY 1x4 STRUT LINES ARE INSTALLED AS SPECIFIED BELOW. SERIOUS ACCIDENTS CAN RESULT FROM INSUFFICIENT ATTENTION TO PROPER BRACING DURING CONSTRUCTION. ACCIDENTS CAN BE AVOIDED UNDER NORMAL CONDITIONS BY FOLLOWING THESE GUIDELINES:

- Build a braced end wall at the end of the bay, or permanently install the first eight feet of AJS® Joist and the first course of sheathing. As an alternate, temporary sheathing may be nailed to the first four feet of AJS® Joist at the end of the bay.
- All hangers, AJS® rim joists, rim boards, AJS® blocking panels, and x-bracing must be completely installed and properly nailed as each AJS® Joist is set.
- Install temporary 1x4 strut lines at no more than eight feet on center as additional AJS® Joists are set. Nail the strut lines to the sheathed area, or braced end wall, and to each AJS® Joist with 2-2½" (8d) nails.
- The ends of cantilevers must be temporarily secured by strut lines on both the top and bottom flanges.
- Straighten the AJS® Joist to within ½ inch of true alignment before attaching strut lines and sheathing.
- Remove the temporary strut lines only as required to install the permanent sheathing.
- Failure to install temporary bracing may result in sideways buckling or roll-over under light construction loads.
- Do not stack construction materials (sheathing, drywall, etc) in the middle of AJS® Joist spans, contact Boise Cascade EWP Engineering for proper storage and shoring information.



Additional floor framing details available with BC FRAMER® software

END BEARING DETAILS

F07

Nail Boise Rimboard to AJS® Joists with 2½" (8d) nail into each flange.

Dimension lumber is not suitable for use as rim board with AJS® Joists.

F07A

Dimension lumber is not suitable for use as rim board with AJS® Joists.

F01

AJS® blocking.

F02

AJS® 25/30 requires 2x6 wall for minimum bearing.

F27A

Top Flange or Face Mount Joist Hanger

VERSA-LAM®

F52

One 2½" (8d) nail each side at bearing

1½" minimum bearing length (1¾" for 18" to 24" deep)

To limit splitting flange, start nails at least 1½" from end. Nails may need to be driven at an angle to limit splitting of bearing plate.

F08

Solid block all posts from above to bearing below.

F03

AJS® rim joist

AJS® 25/30 requires 2x6 wall for minimum bearing.

Note: AJS® floor joist must be designed to carry wall above when not stacked over wall below.

INTERMEDIATE BEARING DETAILS

F06

For load bearing wall above (stacked over wall below).

AJS® Joist blocking.

F09

Blocking may be required, consult design professional of record and/or local building official.

Load bearing wall above (stacked over wall below)

2x block.

Nail block with one 3" (10d) nail into each flange.

F10

Backer block (minimum 12" wide). Nail with 10 - 3" (10d) nails.

Joist Hanger

Filler block. Nail with 10 - 3" (10d) nails.

Backer block required where top flange joist hanger load exceeds 250 lbs. Install tight to top flange.

F58

Double AJS® Joist Connection

Filler Block (see chart below)

Web-Filler Nailing 12" on-center

Connection valid for all applications. Contact Boise Cascade EWP Engineering for specific conditions.

F05

Sheathing or rimboard closure

AJS® blocking required for cantilever.

For load bearing cantilever, see pages 11 & 12. Uplift on backspan shall be considered in all cantilever designs.

AJS® RIM JOISTS AND BLOCKING

Joist Depth	Factored Vertical Load Transfer Capacity (plf)
9½"	2950
11½"	2650
18" - 20" ⁽¹⁾	4250 (AJS 190)
18" - 20" ⁽¹⁾	5100 (AJS 25/30)
22" - 24" ⁽¹⁾	4250 ⁽¹⁾

1) Web stiffeners required at each end of blocking panel. Distance between stiffeners must be less than 24".

LATERAL SUPPORT

- AJS® Joists must be laterally supported at the ends with hangers, AJS® rim joists, rim boards, AJS® blocking panels or x-bracing. AJS® blocking panels or x-bracing are required at cantilever supports.
- Blocking may be required at intermediate bearings for floor diaphragm as per Code, consult local building official.

MINIMUM BEARING LENGTH FOR AJS® JOISTS

- 1½ inches is required at end supports (1¾ inches for 18" to 24" deep). 3½ inches is required at cantilever and intermediate supports.
- Longer bearing lengths allow higher reaction values. Refer to the building Code evaluation report or the BC CALC® software.

NAILING REQUIREMENTS

- AJS® rim joist, rim board or closure panel to AJS® Joist:
 - Rims or closure panel 1¼ inches thick and less: 2-2½" (8d) nails, one each in the top and bottom flange.
 - AJS® 140/20/190 rim joist: 2-3½" (16d) box nails, one each in the top and bottom flange.

- AJS® 25/30 rim joist: Toe-nail top flange to rim joist with 2-10d box nails, one each side of flange.
- AJS® rim joist, rim board or AJS® blocking panel to support
 - 2½" (8d) nails at 6 inches on center.
 - When used for shear transfer, follow the building designer's specification.
- AJS® Joist to support:
 - 2-2½" (8d) nails, one on each side of the web, placed 1½ inches minimum from the end of the AJS® Joist to limit splitting.
- Sheathing to AJS® Joist:
 - Prescriptive residential floor sheathing nailing requires 2½" (8d) common nails @ 6" o.c. on edges and @ 12" o.c. in the field as per Code.
 - Maximum nail spacing for minimum lateral stability = 24".
 - 14 gauge staples may be substituted for 2½" (8d) nails if the staples penetrate at least 1 inch into the joist.
 - Wood screws may be acceptable, contact local building official and/or Boise Cascade EWP Engineering for further information.

BACKER AND FILLER BLOCK DIMENSIONS

Joist Series	Backer Block Thickness	Filler Block Thickness
AJS® 140	1½" or two ½" wood panels	2 x ___ + ¾" wood panel
AJS® 20/190	1½" or two ½" wood panels	2 x ___ + ¾" wood panel
AJS® 25/30	2 x ___ lumber	Double 2 x ___ lumber

- Cut backer and filler blocks to a maximum depth equal to the web depth minus ¼" to avoid a forced fit.
- For deeper AJS® 25/30 Joists, stack 2x lumber or use multiple pieces of ¾" wood panels.

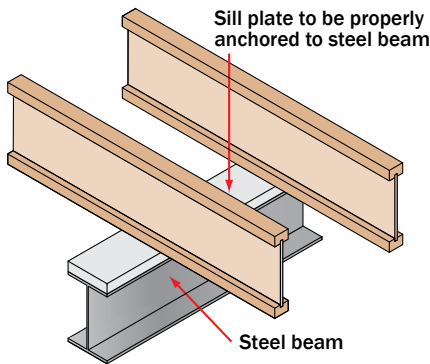
WEB STIFFENER REQUIREMENTS

- See Web Stiffener Requirements on page 25.

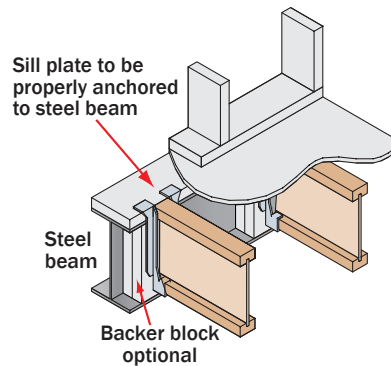
PROTECT AJS® JOISTS FROM THE WEATHER

- AJS® Joists is intended only for applications that provide permanent protection from the weather. Bundles of product should be covered and stored off of the ground on stickers.

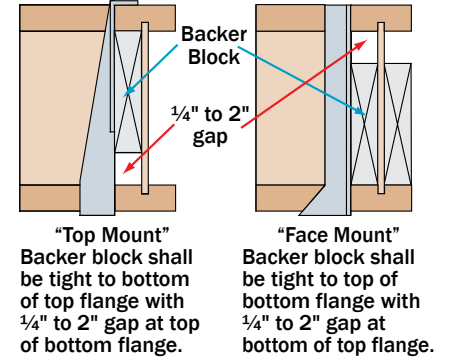
F15D Connection on Steel Beam



F15E Connection with Hanger on Steel Beam

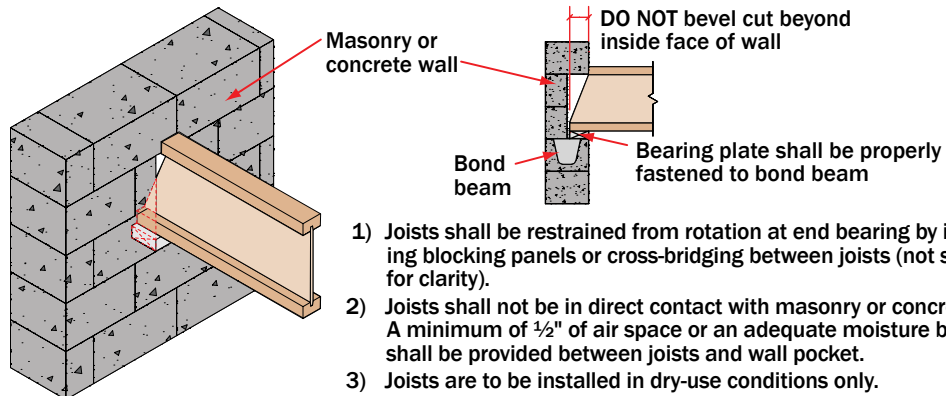
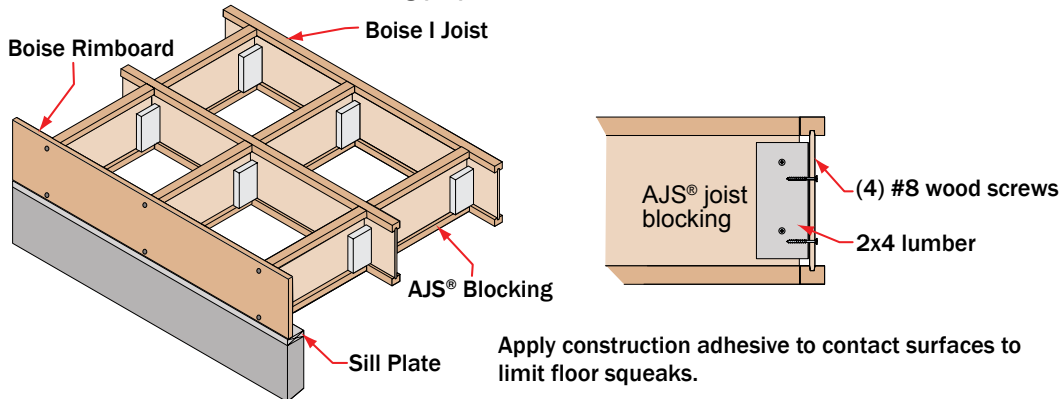


F16D Hanger Connections to AJS® Headers

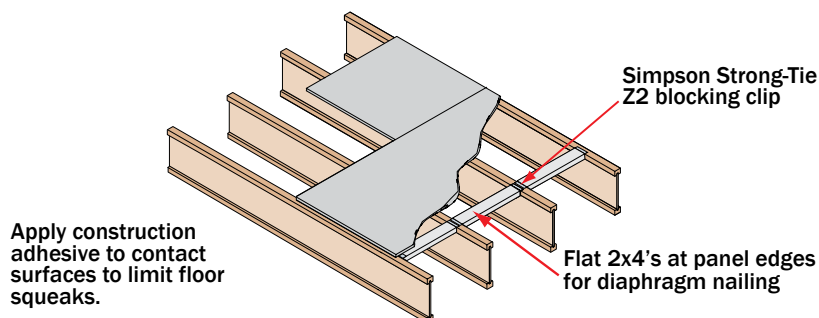


FLOOR BRACING FOR ENDWALL DETAILS

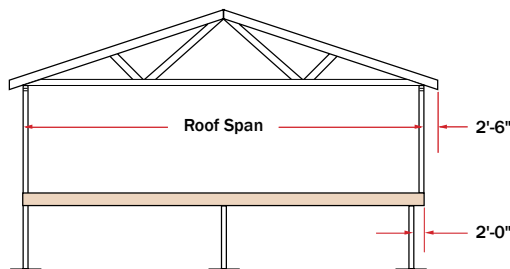
Block spacing per governing code and diaphragm nailing per engineer of record. Intent of blocking is to resist external lateral forces acting perpendicular to wall.



BLOCKED DIAPHRAGM NAILING DETAIL

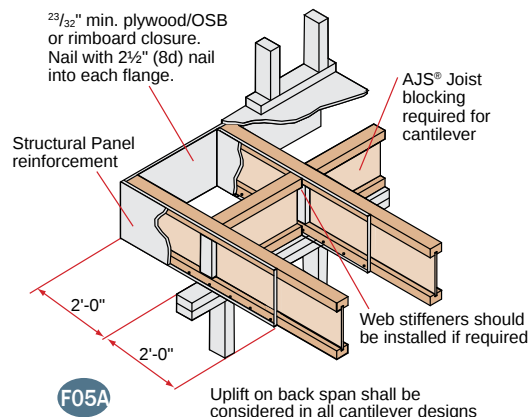


24 REINFORCED LOAD BEARING CANTILEVER DETAIL



- Cantilevers longer than 2'-0" cannot be reinforced. However, longer cantilevers with lower loads may be allowable without reinforcement. Analyze specific applications with the BC CALC® software.

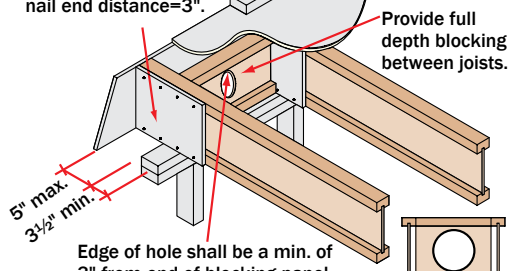
- $\frac{23}{32}$ " Min. x 48" long plywood / OSB rated sheathing must match the full depth of the AJS® Joist. Nail to the AJS® Joist with $2\frac{1}{2}$ " (8d) nails at 6" o.c. and nail with 4- $2\frac{1}{2}$ " (8d) nails into backer block. When reinforcing both sides, stagger nails to limit splitting. Install with horizontal face grain.
- These requirements assume a 100 PLF wall load and apply to AJS® Joists. Additional support may be required for other loadings. See BC CALC® software.
- Contact Boise Cascade EWP Engineering for reinforcement requirements on AJS® Joist depths greater than 16".



BRICK LEDGE LOAD BEARING CANTILEVER DETAILS

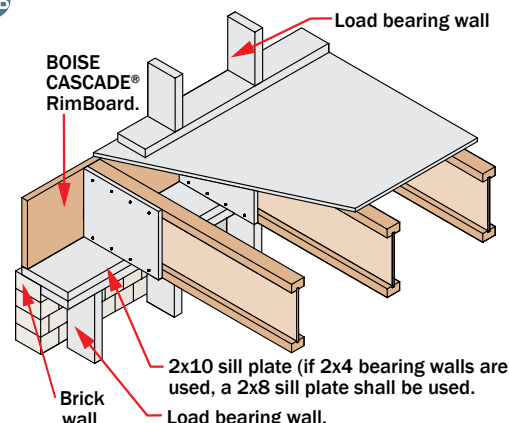
F20A

12" min. length of $\frac{23}{32}$ " plywood / OSB reinforcement nailed to top and bottom flanges with $2\frac{1}{2}$ " (8d) Common nails at 4" o.c. spacing. Minimum nail end distance=3".



Joist depth [in]	Maximum Factored Vertical load for the off-set bearing wall [plf]			
	Joist o.c. spacing [in]			
	12	16	19.2	24
9½	2346	1760	1466	1173
11½	2912	2184	1820	1456
14	3420	2565	2138	1710
16	3465	2599	2166	1733

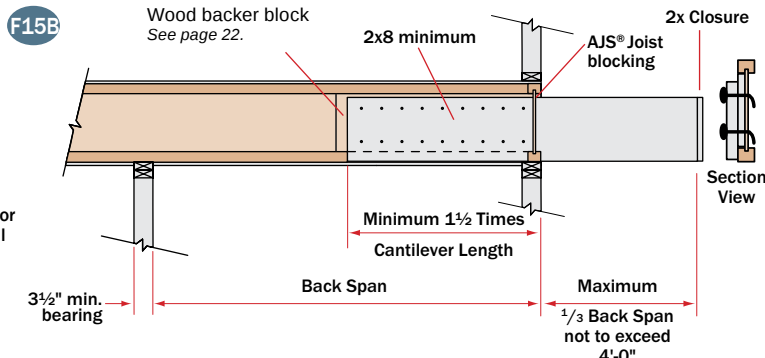
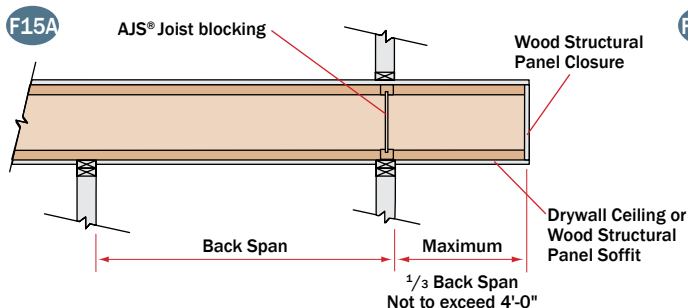
F20B



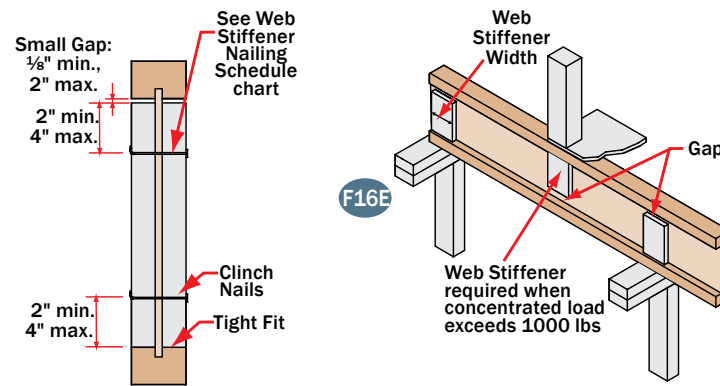
NON-LOAD BEARING WALL CANTILEVER DETAILS

AJS® Joists are intended only for applications that provide permanent protection from the weather.

Fasten the 2x8 minimum to the AJS® Joist by nailing through the backer block and joist web with 2 rows of 3" (10d) nails at 6" on center. Use $3\frac{1}{2}$ " (16d) nails with AJS® 25 joists. Clinch all nails.



- These details apply to cantilevers with uniform loads only.
- It may be possible to exceed the limitations of these details by analyzing a specific application with the BC CALC® software.



Web stiffeners applied to both sides of the joist web

Web Stiffener Nailing Schedule		
Joist Series	Joist Depth	Nailing
AJS® 140/20/190/25/30	9½" – 11⅞"	3-3" (10d)
	14" – 24"	5-3" (10d)

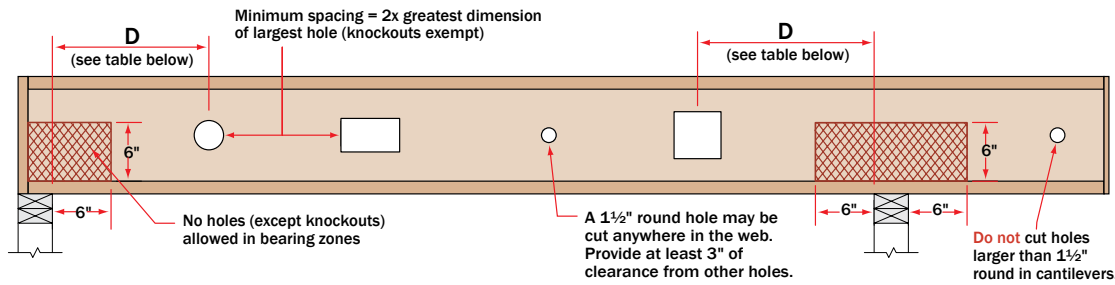
Web Stiffener Specifications			
Joist Series	For Structural Capacity (Min. Thick)	Lateral Restraint in Hanger	Minimum Width
AJS® 140/20/190	1"	1"	2⅝" "
AJS® 25/30	2x4 lumber (vertical)		

NOTES:

Web stiffeners are optional except as noted below:

- Stiffeners required at **ALL** bearing locations for all 18" to 24" deep joists.
- Web stiffeners are always required in hangers that do not extend up to support the top flange of the AJS® Joist. Web stiffeners may be required with certain sloped or skewed hangers or to achieve uplift values. Refer to the hanger manufacturer's installation requirements.
- Web stiffeners may be cut from structural rated wood panels, engineered rimboard or 2x lumber (AJS® 25/30 only).
- For Structural Capacity: Web stiffeners needed to increase the AJS® Joist's reaction capacity at a specific bearing location.
- Web stiffeners are always required in certain roof applications. See *Roof Framing Details* on page 42.
- Web stiffeners are always required under concentrated loads that exceed 1000 pounds. Install the web stiffeners snug to the top flange in this situation. Follow the nailing schedule for intermediate bearings.
- Web stiffeners may be used to increase allowable reaction values. See *Factored Resistances Limit States Design (CANADA)* on page 4 of this guide or the BC CALC® software.





DO NOT
cut or notch
flange

DO
cut in web area
as specified

AJS® Joists are manufactured with 1 1/2" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1 1/2"

TABLE 1

ROUND HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	1' - 0"	1' - 6"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	1' - 0"
10'	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	1' - 0"
12'	1' - 0"	4' - 0"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	1' - 6"
14'	1' - 0"	5' - 0"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 6"	-	1' - 0"	1' - 0"	1' - 0"	2' - 6"
16'	2' - 0"	6' - 6"	-	-	1' - 0"	2' - 0"	-	-	1' - 0"	1' - 0"	2' - 6"	-	1' - 0"	1' - 0"	1' - 0"	3' - 6"
18'	3' - 0"	7' - 6"	-	-	1' - 0"	3' - 6"	-	-	1' - 0"	1' - 0"	4' - 0"	-	1' - 0"	1' - 0"	1' - 0"	4' - 6"
20'	4' - 0"	9' - 0"	-	-	1' - 0"	4' - 6"	-	-	1' - 0"	1' - 0"	5' - 0"	-	1' - 0"	1' - 0"	2' - 0"	6' - 0"
22'	5' - 0"	10' - 0"	-	-	1' - 6"	5' - 6"	-	-	1' - 0"	2' - 6"	6' - 0"	-	1' - 0"	1' - 0"	3' - 0"	7' - 0"
24'	6' - 6"	11' - 6"	-	-	2' - 6"	7' - 0"	-	-	1' - 0"	3' - 6"	7' - 6"	-	1' - 0"	1' - 0"	4' - 0"	8' - 0"
26'	-	-	-	-	4' - 0"	8' - 0"	-	-	1' - 0"	4' - 6"	8' - 6"	-	1' - 0"	1' - 6"	5' - 6"	9' - 6"
28'	-	-	-	-	5' - 0"	9' - 0"	-	-	2' - 0"	5' - 6"	10' - 0"	-	1' - 0"	2' - 6"	6' - 6"	10' - 6"
30'	-	-	-	-	-	-	-	-	3' - 0"	7' - 0"	11' - 0"	-	1' - 0"	4' - 0"	7' - 6"	12' - 0"
32'	-	-	-	-	-	-	-	-	4' - 0"	8' - 0"	12' - 6"	-	1' - 6"	5' - 0"	9' - 0"	13' - 0"
34'	-	-	-	-	-	-	-	-	-	-	-	-	2' - 6"	6' - 0"	10' - 0"	14' - 6"

NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-6 are for uniformly loaded maximum loads of 40 psf live loads and 15 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 2

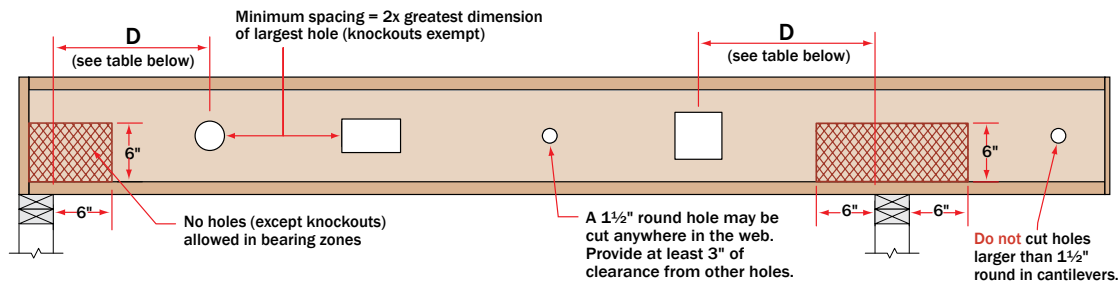
SQUARE HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	1' - 0"	1' - 6"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	1' - 0"
10'	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	2' - 6"
12'	1' - 6"	4' - 0"	-	-	1' - 0"	1' - 6"	-	-	1' - 0"	1' - 0"	2' - 6"	-	1' - 0"	1' - 0"	1' - 0"	3' - 6"
14'	2' - 6"	5' - 0"	-	-	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 0"	3' - 6"	-	1' - 0"	1' - 0"	2' - 0"	4' - 6"
16'	3' - 6"	6' - 6"	-	-	1' - 6"	4' - 0"	-	-	1' - 0"	2' - 0"	4' - 6"	-	1' - 0"	1' - 0"	3' - 0"	6' - 0"
18'	5' - 0"	7' - 6"	-	-	2' - 6"	5' - 0"	-	-	1' - 0"	3' - 0"	6' - 0"	-	1' - 0"	1' - 6"	4' - 0"	7' - 0"
20'	6' - 0"	9' - 0"	-	-	3' - 6"	6' - 6"	-	-	2' - 0"	4' - 6"	7' - 0"	-	1' - 0"	2' - 6"	5' - 6"	8' - 6"
22'	7' - 0"	10' - 0"	-	-	5' - 0"	7' - 6"	-	-	3' - 0"	5' - 6"	8' - 6"	-	1' - 0"	3' - 6"	6' - 6"	10' - 0"
24'	8' - 6"	11' - 6"	-	-	6' - 0"	8' - 6"	-	-	4' - 0"	6' - 6"	9' - 6"	-	2' - 0"	5' - 0"	7' - 6"	11' - 0"
26'	-	-	-	-	7' - 0"	10' - 0"	-	-	5' - 0"	8' - 0"	11' - 0"	-	3' - 6"	6' - 0"	9' - 0"	12' - 6"
28'	-	-	-	-	8' - 6"	11' - 0"	-	-	6' - 0"	9' - 0"	12' - 0"	-	4' - 6"	7' - 0"	10' - 0"	13' - 6"
30'	-	-	-	-	-	-	-	-	7' - 6"	10' - 0"	13' - 6"	-	5' - 6"	8' - 6"	11' - 6"	*
32'	-	-	-	-	-	-	-	-	8' - 6"	11' - 6"	14' - 6"	-	6' - 6"	9' - 6"	12' - 6"	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	8' - 0"	11' - 0"	14' - 0"	*

TABLE 3

RECTANGULAR HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	5"x8"	5"x10"	5"x12"	5"x14"	7"x10"	7"x12"	7"x14"	7"x16"	10"x12"	10"x14"	10"x16"	10"x18"	10"x16"	10"x18"	12"x14"	12"x16"
8'	1' - 6"	2' - 0"	2' - 0"	2' - 6"	1' - 0"	1' - 6"	2' - 0"	2' - 6"	1' - 6"	2' - 6"	3' - 0"	*	1' - 6"	2' - 6"	2' - 0"	3' - 0"
10'	2' - 6"	3' - 0"	3' - 6"	4' - 0"	2' - 0"	2' - 6"	3' - 6"	4' - 0"	3' - 0"	3' - 6"	4' - 6"	*	3' - 0"	4' - 0"	3' - 0"	4' - 0"
12'	3' - 6"	4' - 0"	4' - 6"	5' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"	4' - 0"	4' - 6"	5' - 6"	*	4' - 0"	5' - 0"	4' - 6"	5' - 6"
14'	5' - 0"	5' - 6"	6' - 0"	6' - 6"	4' - 6"	5' - 0"	6' - 0"	6' - 6"	5' - 0"	6' - 0"	*	*	5' - 6"	6' - 6"	5' - 6"	6' - 6"
16'	6' - 0"	6' - 6"	7' - 0"	7' - 6"	5' - 6"	6' - 6"	7' - 0"	*	6' - 6"	7' - 6"	*	*	6' - 6"	7' - 6"	7' - 0"	*
18'	7' - 6"	8' - 0"	8' - 6"	*	7' - 0"	7' - 6"	8' - 6"	*	7' - 6"	8' - 6"	*	*	8' - 0"	*	8' - 0"	*
20'	8' - 6"	9' - 0"	9' - 6"	*	8' - 0"	9' - 0"	9' - 6"	*	9' - 0"	*	*	*	9' - 0"	*	9' - 6"	*
22'	10' - 0"	10' - 6"	*	*	9' - 6"	10' - 0"	*	*	10' - 6"	*	*	*	10' - 6"	*	*	*
24'	11' - 0"	*	*	*	10' - 6"	11' - 6"	*	*	11' - 6"	*	*	*	11' - 6"	*	*	*
26'	-	-	-	-	12' - 0"	*	*	*	*	*	*	*	*	*	*	*
28'	-	-	-	-	13' - 6"	*	*	*	*	*	*	*	*	*	*	*
30'	-	-	-	-	-	-	-	-	*	*	*	*	*	*	*	*
32'	-	-	-	-	-	-	-	-	*	*	*	*	*	*	*	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*	*



DO NOT
cut or notch
flange

DO
cut in web area
as specified

AJS® Joists are manufactured with 1½" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1½"

NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-6 are for uniformly loaded maximum loads of 40 psf live loads and 15 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 4

ROUND HOLES

Minimum distance from inside face of any support to the centerline of hole									JOIST DEPTH • HOLE SIZE [IN]							
Span [ft]	18"				20"				22"				24"			
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"
8'	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	2'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"
10'	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	3'- 6"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"
12'	1'- 0"	1'- 0"	1'- 0"	2'- 6"	1'- 0"	1'- 0"	1'- 0"	4'- 6"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	2'- 0"
14'	1'- 0"	1'- 0"	1'- 0"	3'- 6"	1'- 0"	1'- 0"	1'- 0"	6'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 6"	1'- 0"	1'- 0"	1'- 0"	3'- 6"
16'	1'- 0"	1'- 0"	1'- 0"	4'- 6"	1'- 0"	1'- 0"	1'- 0"	7'- 0"	1'- 0"	1'- 0"	1'- 0"	2'- 6"	1'- 0"	1'- 0"	1'- 0"	4'- 6"
18'	1'- 0"	1'- 0"	1'- 0"	6'- 0"	1'- 0"	1'- 0"	1'- 6"	8'- 6"	1'- 0"	1'- 0"	1'- 0"	3'- 6"	1'- 0"	1'- 0"	1'- 0"	5'- 6"
20'	1'- 0"	1'- 0"	1'- 0"	7'- 0"	1'- 0"	1'- 0"	2'- 6"	9'- 6"	1'- 0"	1'- 0"	1'- 0"	5'- 0"	1'- 0"	1'- 0"	1'- 0"	7'- 0"
22'	1'- 0"	1'- 0"	1'- 6"	8'- 6"	1'- 0"	1'- 0"	3'- 6"	*	1'- 0"	1'- 0"	1'- 0"	6'- 0"	1'- 0"	1'- 0"	2'- 0"	8'- 0"
24'	1'- 0"	1'- 0"	2'- 6"	9'- 6"	1'- 0"	1'- 0"	5'- 0"	*	1'- 0"	1'- 0"	1'- 0"	7'- 0"	1'- 0"	1'- 0"	3'- 6"	9'- 6"
26'	1'- 0"	1'- 0"	3'- 6"	11'- 0"	1'- 0"	1'- 0"	6'- 0"	*	1'- 0"	1'- 0"	2'- 6"	8'- 6"	1'- 0"	1'- 0"	4'- 6"	10'- 6"
28'	1'- 0"	1'- 0"	4'- 6"	12'- 0"	1'- 0"	1'- 0"	7'- 0"	*	1'- 0"	1'- 0"	3'- 6"	9'- 6"	1'- 0"	1'- 0"	5'- 6"	12'- 0"
30'	1'- 0"	1'- 0"	5'- 6"	13'- 6"	1'- 0"	2'- 0"	8'- 6"	*	1'- 0"	1'- 0"	4'- 6"	11'- 0"	1'- 0"	1'- 0"	6'- 6"	13'- 0"
32'	1'- 0"	1'- 0"	7'- 0"	14'- 6"	1'- 0"	3'- 0"	9'- 6"	*	1'- 0"	1'- 0"	5'- 6"	12'- 0"	1'- 0"	2'- 6"	8'- 0"	14'- 6"
34'	1'- 0"	1'- 6"	8'- 0"	16'- 0"	1'- 0"	4'- 6"	11'- 0"	*	1'- 0"	1'- 0"	6'- 6"	13'- 6"	1'- 0"	3'- 6"	9'- 0"	15'- 6"

TABLE 5

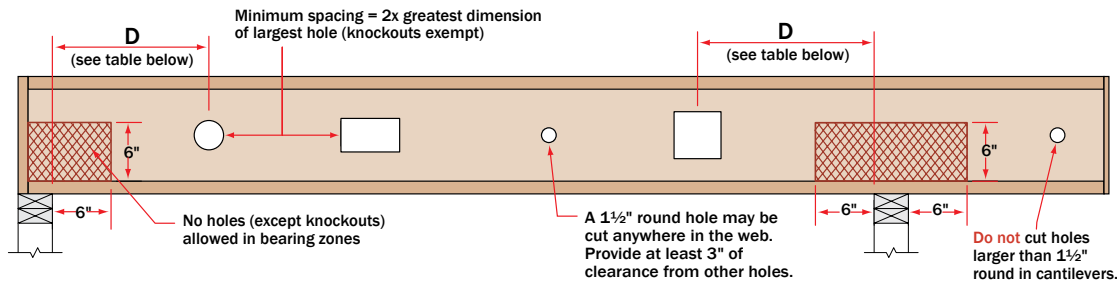
SQUARE HOLES

Minimum distance from inside face of any support to the centerline of hole									JOIST DEPTH • HOLE SIZE [IN]							
Span [ft]	18"				20"				22"				24"			
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"
8'	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 6"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	3'- 0"
10'	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	3'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 6"	1'- 0"	1'- 0"	1'- 0"	4'- 6"
12'	1'- 0"	1'- 0"	1'- 0"	1'- 6"	1'- 0"	1'- 0"	1'- 0"	4'- 0"	1'- 0"	1'- 0"	1'- 0"	2'- 6"	1'- 0"	1'- 0"	1'- 6"	5'- 6"
14'	1'- 0"	1'- 0"	1'- 0"	3'- 0"	1'- 0"	1'- 0"	1'- 6"	5'- 6"	1'- 0"	1'- 0"	1'- 0"	4'- 0"	1'- 0"	1'- 0"	2'- 6"	*
16'	1'- 0"	1'- 0"	1'- 0"	4'- 0"	1'- 0"	1'- 0"	2'- 6"	6'- 6"	1'- 0"	1'- 0"	1'- 6"	5'- 0"	1'- 0"	1'- 0"	4'- 0"	*
18'	1'- 0"	1'- 0"	1'- 6"	5'- 0"	1'- 0"	1'- 0"	3'- 6"	8'- 0"	1'- 0"	1'- 0"	2'- 6"	6'- 6"	1'- 0"	1'- 6"	5'- 0"	*
20'	1'- 0"	1'- 0"	2'- 6"	6'- 6"	1'- 0"	1'- 6"	5'- 0"	9'- 0"	1'- 0"	1'- 0"	3'- 6"	7'- 6"	1'- 0"	2'- 6"	6'- 0"	*
22'	1'- 0"	1'- 0"	3'- 6"	7'- 6"	1'- 0"	2'- 6"	6'- 0"	10'- 6"	1'- 0"	1'- 0"	4'- 6"	9'- 0"	1'- 0"	3'- 6"	7'- 6"	*
24'	1'- 0"	1'- 6"	5'- 0"	9'- 0"	1'- 0"	3'- 6"	7'- 0"	11'- 6"	1'- 0"	2'- 0"	6'- 0"	10'- 0"	1'- 0"	4'- 6"	8'- 6"	*
26'	1'- 0"	2'- 6"	6'- 0"	10'- 0"	1'- 0"	4'- 6"	8'- 6"	*	1'- 0"	3'- 0"	7'- 0"	11'- 6"	2'- 0"	5'- 6"	10'- 0"	*
28'	1'- 0"	3'- 6"	7'- 0"	11'- 6"	2'- 0"	5'- 6"	9'- 6"	*	1'- 0"	4'- 6"	8'- 0"	12'- 6"	3'- 0"	7'- 0"	11'- 0"	*
30'	1'- 0"	4'- 6"	8'- 6"	12'- 6"	3'- 0"	7'- 0"	11'- 0"	*	2'- 0"	5'- 6"	9'- 6"	14'- 0"	4'- 0"	8'- 0"	12'- 6"	*
32'	2'- 6"	5'- 6"	9'- 6"	14'- 0"	4'- 6"	8'- 0"	12'- 0"	*	3'- 0"	6'- 6"	10'- 6"	15'- 0"	5'- 6"	9'- 0"	13'- 6"	*
34'	3'- 6"	7'- 0"	10'- 6"	15'- 0"	5'- 6"	9'- 0"	13'- 6"	*	4'- 0"	7'- 6"	12'- 0"	16'- 6"	6'- 6"	10'- 6"	15'- 0"	*

TABLE 6

RECTANGULAR HOLES

Minimum distance from inside face of any support to the centerline of hole									JOIST DEPTH • HOLE SIZE [IN]							
Span [ft]	18"				20"				22"				24"			
	10"x18"	12"x14"	12"x16"	12"x18"	12"x16"	12"x18"	14"x16"	14"x18"	12"x18"	14"x16"	14"x18"	16"x18"	14"x18"	14"x20"	16"x18"	16"x20"
8'	1'- 6"	1'- 0"	1'- 6"	3'- 0"	1'- 0"	1'- 6"	1'- 6"	3'- 0"	1'- 0"	1'- 0"	2'- 0"	3'- 0"	1'- 0"	2'- 0"	2'- 0"	3'- 6"
10'	2'- 6"	1'- 6"	3'- 0"	4'- 0"	1'- 6"	3'- 0"	3'- 0"	4'- 6"	2'- 0"	1'- 6"	3'- 0"	4'- 6"	2'- 0"	3'- 6"	3'- 0"	*
12'	4'- 0"	3'- 0"	4'- 0"	5'- 6"	2'- 6"	4'- 0"	4'- 0"	5'- 6"	3'- 0"	3'- 0"	4'- 0"	5'- 6"	3'- 0"	4'- 6"	4'- 6"	*
14'	5'- 0"	4'- 0"	5'- 6"	6'- 6"	4'- 0"	5'- 6"	5'- 6"	*	4'- 0"	4'- 0"	5'- 6"	*	4'- 0"	6'- 0"	5'- 6"	*
16'	6'- 6"	5'- 0"	6'- 6"	*	5'- 0"	6'- 6"	6'- 6"	*	5'- 6"	5'- 0"	6'- 6"	*	5'- 6"	7'- 0"	7'- 0"	*
18'	7'- 6"	6'- 6"	8'- 0"	*	6'- 6"	8'- 0"	8'- 0"	*	6'- 6"	6'- 6"	8'- 0"	*	6'- 6"	8'- 6"	8'- 0"	*
20'	9'- 0"	7'- 6"	9'- 0"	*	7'- 6"	9'- 0"	9'- 0"	*	7'- 6"	7'- 6"	9'- 0"	*	8'- 0"	9'- 6"	9'- 6"	*
22'	10'- 0"	9'- 0"	10'- 6"	*	9'- 0"	10'- 6"	10'- 6"	*	9'- 0"	9'- 0"	10'- 6"	*	9'- 0"	*	10'- 6"	*
24'	11'- 6"	10'- 0"	11'- 6"	*	10'- 0"	11'- 6"	11'- 6"	*	10'- 6"	10'- 0"	*	*	10'- 6"	*	*	*
26'	12'- 6"	11'- 6"	*	*	11'- 6"	*	*	*	11'- 6"	11'- 6"	*	*	11'- 6"	*	*	*
28'	*	12'- 6"	*	*	12'- 6"	*	*	*	13'- 0"	12'- 6"	*	*	13'- 0"	*	*	*
30'	*	14'- 0"	*	*	14'- 0"	*	*	*	14'- 0"	14'- 0"	*	*	14'- 6"	*	*	*
32'	*	15'- 6"	*	*	15'- 0"	*	*	*	15'- 6"	15'- 6"	*	*	15'- 6"	*	*	*
34'	*	16'- 6"	*	*	16'- 0"	*	*	*	16'- 6"	16'- 6"	*	*	*	*	*	*



DO NOT
cut or notch
flange

DO
cut in web area
as specified

AJS® Joists are manufactured with 1 1/2" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1 1/2"

TABLE 1

ROUND HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	1' - 0"	2' - 0"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	1' - 0"
10'	1' - 0"	3' - 0"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	1' - 0"
12'	1' - 0"	4' - 6"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 6"	-	1' - 0"	1' - 0"	1' - 0"	2' - 0"
14'	1' - 6"	5' - 6"	-	-	1' - 0"	2' - 0"	-	-	1' - 0"	1' - 0"	2' - 6"	-	1' - 0"	1' - 0"	1' - 0"	3' - 0"
16'	3' - 0"	6' - 6"	-	-	1' - 0"	3' - 0"	-	-	1' - 0"	1' - 0"	3' - 6"	-	1' - 0"	1' - 0"	1' - 0"	4' - 0"
18'	4' - 0"	8' - 0"	-	-	1' - 0"	4' - 0"	-	-	1' - 0"	1' - 6"	4' - 6"	-	1' - 0"	1' - 0"	2' - 0"	5' - 6"
20'	5' - 0"	9' - 0"	-	-	2' - 0"	5' - 6"	-	-	1' - 0"	2' - 6"	6' - 0"	-	1' - 0"	1' - 0"	3' - 0"	6' - 6"
22'	6' - 0"	10' - 6"	-	-	3' - 0"	6' - 6"	-	-	1' - 0"	3' - 6"	7' - 0"	-	1' - 0"	1' - 6"	4' - 6"	8' - 0"
24'	7' - 6"	11' - 6"	-	-	4' - 0"	7' - 6"	-	-	1' - 6"	4' - 6"	8' - 0"	-	1' - 0"	2' - 6"	5' - 6"	9' - 0"
26'	-	-	-	-	5' - 0"	9' - 0"	-	-	2' - 6"	6' - 0"	9' - 6"	-	1' - 0"	3' - 6"	6' - 6"	10' - 0"
28'	-	-	-	-	6' - 6"	10' - 0"	-	-	3' - 6"	7' - 0"	10' - 6"	-	1' - 0"	4' - 6"	7' - 6"	11' - 6"
30'	-	-	-	-	-	-	-	-	5' - 0"	8' - 0"	12' - 0"	-	2' - 6"	5' - 6"	9' - 0"	12' - 6"
32'	-	-	-	-	-	-	-	-	6' - 0"	9' - 6"	13' - 0"	-	3' - 6"	6' - 6"	10' - 0"	14' - 0"
34'	-	-	-	-	-	-	-	-	-	-	-	-	4' - 6"	8' - 0"	11' - 0"	15' - 0"

NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-6 are for uniformly loaded maximum loads of 40 psf live loads and 25 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analysing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 2

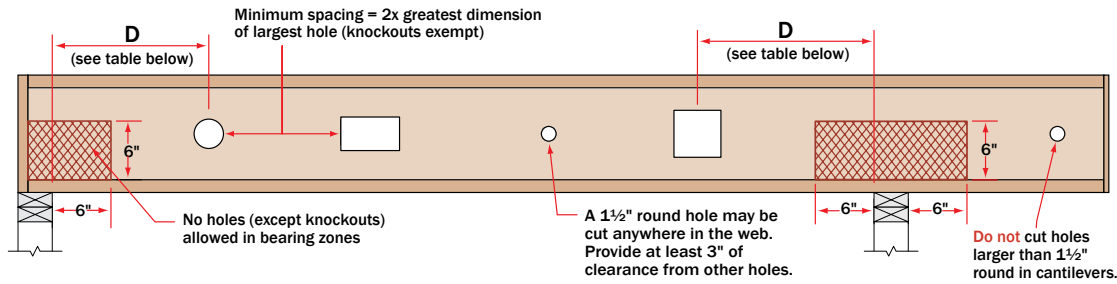
SQUARE HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	1' - 0"	2' - 0"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	1' - 6"
10'	1' - 0"	3' - 0"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	2' - 0"	-	1' - 0"	1' - 0"	1' - 0"	3' - 0"
12'	2' - 0"	4' - 0"	-	-	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 0"	3' - 0"	-	1' - 0"	1' - 0"	1' - 6"	4' - 0"
14'	3' - 0"	5' - 6"	-	-	1' - 6"	3' - 6"	-	-	1' - 0"	2' - 0"	4' - 0"	-	1' - 0"	1' - 0"	2' - 6"	5' - 0"
16'	4' - 6"	6' - 6"	-	-	2' - 6"	4' - 6"	-	-	1' - 0"	3' - 0"	5' - 6"	-	1' - 0"	1' - 6"	4' - 0"	6' - 6"
18'	5' - 6"	8' - 0"	-	-	3' - 6"	6' - 0"	-	-	2' - 0"	4' - 0"	6' - 6"	-	1' - 0"	2' - 6"	5' - 0"	7' - 6"
20'	6' - 6"	9' - 0"	-	-	4' - 6"	7' - 0"	-	-	3' - 0"	5' - 0"	7' - 6"	-	1' - 6"	4' - 0"	6' - 0"	9' - 0"
22'	8' - 0"	10' - 6"	-	-	6' - 0"	8' - 0"	-	-	4' - 0"	6' - 6"	9' - 0"	-	2' - 6"	5' - 0"	7' - 6"	10' - 0"
24'	9' - 0"	11' - 6"	-	-	7' - 0"	9' - 6"	-	-	5' - 0"	7' - 6"	10' - 0"	-	3' - 6"	6' - 0"	8' - 6"	11' - 6"
26'	-	-	-	-	8' - 0"	10' - 6"	-	-	6' - 6"	8' - 6"	11' - 6"	-	5' - 0"	7' - 0"	9' - 6"	12' - 6"
28'	-	-	-	-	9' - 6"	12' - 0"	-	-	7' - 6"	10' - 0"	12' - 6"	-	6' - 0"	8' - 6"	11' - 0"	13' - 6"
30'	-	-	-	-	-	-	-	-	8' - 6"	11' - 0"	14' - 0"	-	7' - 0"	9' - 6"	12' - 0"	*
32'	-	-	-	-	-	-	-	-	10' - 0"	12' - 6"	15' - 0"	-	8' - 0"	10' - 6"	13' - 6"	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	9' - 6"	12' - 0"	14' - 6"	*

TABLE 3

RECTANGULAR HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	5"x8"	5"x10"	5"x12"	5"x14"	7"x10"	7"x12"	7"x14"	7"x16"	10"x12"	10"x14"	10"x16"	10"x18"	10"x16"	10"x18"	12"x14"	12"x16"
8'	2' - 0"	2' - 0"	2' - 6"	3' - 0"	1' - 6"	2' - 0"	2' - 6"	3' - 0"	2' - 0"	2' - 6"	3' - 6"	*	2' - 0"	3' - 0"	2' - 6"	3' - 0"
10'	3' - 0"	3' - 6"	3' - 6"	4' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	3' - 0"	4' - 0"	4' - 6"	*	3' - 6"	4' - 0"	3' - 6"	4' - 6"
12'	4' - 0"	4' - 6"	5' - 0"	5' - 6"	4' - 0"	4' - 6"	5' - 0"	5' - 6"	4' - 6"	5' - 0"	5' - 6"	*	4' - 6"	5' - 6"	4' - 6"	5' - 6"
14'	5' - 6"	5' - 6"	6' - 0"	6' - 6"	5' - 0"	5' - 6"	6' - 0"	6' - 6"	5' - 6"	6' - 0"	*	*	5' - 6"	6' - 6"	6' - 0"	*
16'	6' - 6"	7' - 0"	7' - 6"	*	6' - 0"	6' - 6"	7' - 6"	*	7' - 0"	7' - 6"	*	*	7' - 0"	7' - 6"	7' - 0"	*
18'	7' - 6"	8' - 0"	8' - 6"	*	7' - 6"	8' - 0"	8' - 6"	*	8' - 0"	8' - 6"	*	*	8' - 0"	*	8' - 6"	*
20'	9' - 0"	9' - 6"	*	*	8' - 6"	9' - 0"	*	*	9' - 0"	*	*	*	9' - 6"	*	9' - 6"	*
22'	10' - 0"	10' - 6"	*	*	10' - 0"	10' - 6"	*	*	10' - 6"	*	*	*	10' - 6"	*	*	*
24'	11' - 6"	*	*	*	11' - 0"	11' - 6"	*	*	11' - 6"	*	*	*	*	*	*	*
26'	-	-	-	-	12' - 6"	*	*	*	*	*	*	*	*	*	*	*
28'	-	-	-	-	13' - 6"	*	*	*	*	*	*	*	*	*	*	*
30'	-	-	-	-	-	-	-	-	*	*	*	*	*	*	*	*
32'	-	-	-	-	-	-	-	-	*	*	*	*	*	*	*	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*	*



DO NOT
cut or notch
flange

DO
cut in web area
as specified

AJS® Joists are manufactured with 1½" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1½"

NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-6 are for uniformly loaded maximum loads of 40 psf live loads and 25 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 4

ROUND HOLES

Minimum distance from inside face of any support to the centerline of hole													JOIST DEPTH • HOLE SIZE [IN]			
Span [ft]	18"				20"				22"				24"			
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"
8'	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	2' - 6"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"
10'	1' - 0"	1' - 0"	1' - 0"	2' - 0"	1' - 0"	1' - 0"	1' - 0"	3' - 6"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 6"
12'	1' - 0"	1' - 0"	1' - 0"	3' - 0"	1' - 0"	1' - 0"	1' - 0"	5' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	3' - 0"
14'	1' - 0"	1' - 0"	1' - 0"	4' - 0"	1' - 0"	1' - 0"	1' - 0"	6' - 0"	1' - 0"	1' - 0"	1' - 0"	2' - 6"	1' - 0"	1' - 0"	1' - 0"	4' - 0"
16'	1' - 0"	1' - 0"	1' - 0"	5' - 6"	1' - 0"	1' - 0"	1' - 6"	7' - 6"	1' - 0"	1' - 0"	1' - 0"	3' - 6"	1' - 0"	1' - 0"	1' - 0"	5' - 0"
18'	1' - 0"	1' - 0"	1' - 0"	6' - 6"	1' - 0"	1' - 0"	2' - 6"	8' - 6"	1' - 0"	1' - 0"	1' - 0"	4' - 6"	1' - 0"	1' - 0"	1' - 6"	6' - 6"
20'	1' - 0"	1' - 0"	1' - 6"	7' - 6"	1' - 0"	1' - 0"	4' - 0"	*	1' - 0"	1' - 0"	1' - 0"	5' - 6"	1' - 0"	1' - 0"	2' - 6"	7' - 6"
22'	1' - 0"	1' - 0"	3' - 0"	9' - 0"	1' - 0"	1' - 0"	5' - 0"	*	1' - 0"	1' - 0"	2' - 0"	7' - 0"	1' - 0"	1' - 0"	3' - 6"	8' - 6"
24'	1' - 0"	1' - 0"	4' - 0"	10' - 0"	1' - 0"	1' - 0"	6' - 0"	*	1' - 0"	1' - 0"	3' - 0"	8' - 0"	1' - 0"	1' - 0"	4' - 6"	10' - 0"
26'	1' - 0"	1' - 0"	5' - 0"	11' - 6"	1' - 0"	2' - 0"	7' - 0"	*	1' - 0"	1' - 0"	4' - 0"	9' - 0"	1' - 0"	1' - 0"	6' - 0"	11' - 0"
28'	1' - 0"	1' - 0"	6' - 0"	12' - 6"	1' - 0"	3' - 0"	8' - 6"	*	1' - 0"	1' - 0"	5' - 0"	10' - 6"	1' - 0"	2' - 0"	7' - 0"	12' - 6"
30'	1' - 0"	1' - 6"	7' - 0"	13' - 6"	1' - 0"	4' - 0"	9' - 6"	*	1' - 0"	1' - 6"	6' - 0"	11' - 6"	1' - 0"	3' - 0"	8' - 0"	13' - 6"
32'	1' - 0"	2' - 6"	8' - 6"	15' - 0"	1' - 0"	5' - 0"	10' - 6"	*	1' - 0"	2' - 6"	7' - 0"	13' - 0"	1' - 0"	4' - 6"	9' - 0"	15' - 0"
34'	1' - 0"	4' - 0"	9' - 6"	16' - 0"	1' - 0"	6' - 0"	12' - 0"	*	1' - 0"	3' - 6"	8' - 6"	14' - 0"	1' - 0"	5' - 6"	10' - 6"	16' - 0"

TABLE 5

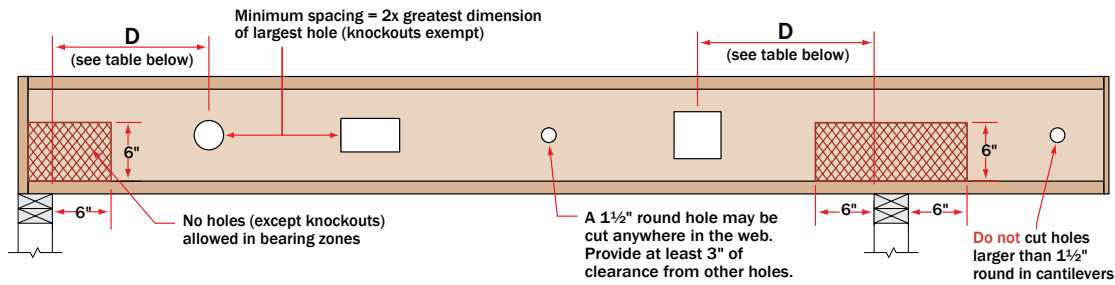
SQUARE HOLES

Minimum distance from inside face of any support to the centerline of hole													JOIST DEPTH • HOLE SIZE [IN]			
Span [ft]	18"				20"				22"				24"			
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"
8'	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	2' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	3' - 6"
10'	1' - 0"	1' - 0"	1' - 0"	1' - 6"	1' - 0"	1' - 0"	1' - 0"	3' - 6"	1' - 0"	1' - 0"	1' - 0"	2' - 0"	1' - 0"	1' - 0"	1' - 0"	4' - 6"
12'	1' - 0"	1' - 0"	1' - 0"	2' - 6"	1' - 0"	1' - 0"	1' - 6"	4' - 6"	1' - 0"	1' - 0"	1' - 0"	3' - 6"	1' - 0"	1' - 0"	2' - 6"	*
14'	1' - 0"	1' - 0"	1' - 0"	3' - 6"	1' - 0"	1' - 0"	2' - 6"	5' - 6"	1' - 0"	1' - 0"	1' - 6"	4' - 6"	1' - 0"	1' - 0"	3' - 6"	*
16'	1' - 0"	1' - 0"	1' - 6"	4' - 6"	1' - 0"	1' - 0"	3' - 6"	7' - 0"	1' - 0"	1' - 0"	2' - 6"	5' - 6"	1' - 0"	1' - 6"	4' - 6"	*
18'	1' - 0"	1' - 0"	2' - 6"	6' - 0"	1' - 0"	1' - 6"	4' - 6"	8' - 0"	1' - 0"	1' - 0"	3' - 6"	7' - 0"	1' - 0"	2' - 6"	5' - 6"	*
20'	1' - 0"	1' - 0"	4' - 0"	7' - 0"	1' - 0"	2' - 6"	5' - 6"	9' - 6"	1' - 0"	1' - 6"	4' - 6"	8' - 0"	1' - 0"	3' - 6"	7' - 0"	*
22'	1' - 0"	2' - 0"	5' - 0"	8' - 0"	1' - 0"	3' - 6"	7' - 0"	10' - 6"	1' - 0"	2' - 6"	5' - 6"	9' - 0"	1' - 6"	4' - 6"	8' - 0"	*
24'	1' - 0"	3' - 0"	6' - 0"	9' - 6"	2' - 0"	5' - 0"	8' - 0"	*	1' - 0"	3' - 6"	7' - 0"	10' - 6"	2' - 6"	6' - 0"	9' - 6"	*
26'	1' - 0"	4' - 0"	7' - 0"	10' - 6"	3' - 0"	6' - 0"	9' - 6"	*	1' - 6"	4' - 6"	8' - 0"	11' - 6"	3' - 6"	7' - 0"	10' - 6"	*
28'	2' - 0"	5' - 0"	8' - 6"	12' - 0"	4' - 0"	7' - 0"	10' - 6"	*	3' - 0"	6' - 0"	9' - 0"	13' - 0"	5' - 0"	8' - 0"	11' - 6"	*
30'	3' - 0"	6' - 0"	9' - 6"	13' - 0"	5' - 0"	8' - 0"	11' - 6"	*	4' - 0"	7' - 0"	10' - 6"	14' - 0"	6' - 0"	9' - 0"	13' - 0"	*
32'	4' - 6"	7' - 6"	10' - 6"	14' - 6"	6' - 0"	9' - 6"	13' - 0"	*	5' - 0"	8' - 0"	11' - 6"	15' - 6"	7' - 0"	10' - 6"	14' - 0"	*
34'	5' - 6"	8' - 6"	12' - 0"	15' - 6"	7' - 0"	10' - 6"	14' - 0"	*	6' - 0"	9' - 6"	13' - 0"	16' - 6"	8' - 0"	11' - 6"	15' - 6"	*

TABLE 6

RECTANGULAR HOLES

Minimum distance from inside face of any support to the centerline of hole													JOIST DEPTH • HOLE SIZE [IN]			
Span [ft]	18"				20"				22"				24"			
	10"x18"	12"x14"	12"x16"	12"x18"	12"x16"	12"x18"	14"x16"	14"x18"	12"x18"	14"x16"	14"x18"	16"x18"	14"x18"	14"x20"	16"x18"	16"x20"
8'	2' - 0"	1' - 0"	2' - 0"	3' - 0"	1' - 0"	2' - 0"	2' - 0"	3' - 0"	1' - 0"	1' - 0"	2' - 0"	3' - 6"	1' - 6"	2' - 6"	2' - 6"	3' - 6"
10'	3' - 0"	2' - 0"	3' - 0"	4' - 6"	2' - 0"	3' - 0"	3' - 6"	4' - 6"	2' - 6"	2' - 0"	3' - 6"	4' - 6"	2' - 6"	3' - 6"	3' - 6"	*
12'	4' - 6"	3' - 6"	4' - 6"	5' - 6"	3' - 6"	4' - 6"	4' - 6"	5' - 6"	3' - 6"	3' - 6"	4' - 6"	*	3' - 6"	5' - 0"	4' - 6"	*
14'	5' - 6"	4' - 6"	5' - 6"	*	4' - 6"	5' - 6"	5' - 6"	*	4' - 6"	4' - 6"	6' - 0"	*	5' - 0"	6' - 0"	6' - 0"	*
16'	6' - 6"	5' - 6"	7' - 0"	*	5' - 6"	7' - 0"	7' - 0"	*	6' - 0"	5' - 6"	7' - 0"	*	6' - 0"	7' - 6"	7' - 0"	*
18'	8' - 0"	7' - 0"	8' - 0"	*	7' - 0"	8' - 0"	8' - 0"	*	7' - 0"	7' - 0"	8' - 0"	*	7' - 0"	8' - 6"	8' - 6"	*
20'	9' - 0"	8' - 0"	9' - 6"	*	8' - 0"	9' - 6"	9' - 6"	*	8' - 0"	8' - 0"	9' - 6"	*	8' - 6"	*	9' - 6"	*
22'	10' - 6"	9' - 6"	10' - 6"	*	9' - 6"	10' - 6"	10' - 6"	*	9' - 6"	9' - 6"	10' - 6"	*	9' - 6"	*	*	*
24'	11' - 6"	10' - 6"	*	*	10' - 6"	*	*	*	10' - 6"	10' - 6"	*	*	11' - 0"	*	*	*
26'	*	12' - 0"	*	*	11' - 6"	*	*	*	12' - 0"	11' - 6"	*	*	12' - 0"	*	*	*
28'	*	13' - 0"	*	*	13' - 0"	*	*	*	13' - 0"	13' - 0"	*	*	13' - 6"	*	*	*
30'	*	14' - 6"	*	*	14' - 0"	*	*	*	14' - 6"	14' - 0"	*	*	14' - 6"	*	*	*
32'	*	15' - 6"	*	*	15' - 6"	*	*	*	15' - 6"	15' - 6"	*	*	15' - 6"	*	*	*
34'	*	16' - 6"	*	*	16' - 6"	*	*	*	*	16' - 6"	*	*	*	*	*	*



DO NOT
cut or notch
flange

DO
cut in web area
as specified

AJS® Joists are manufactured with 1 1/2" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1 1/2"

TABLE 1 ROUND HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	1' - 0"
10'	1' - 0"	3' - 6"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	1' - 6"
12'	1' - 6"	4' - 6"	-	-	1' - 0"	1' - 6"	-	-	1' - 0"	1' - 0"	2' - 0"	-	1' - 0"	1' - 0"	1' - 0"	2' - 6"
14'	2' - 6"	5' - 6"	-	-	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 0"	3' - 0"	-	1' - 0"	1' - 0"	1' - 0"	3' - 6"
16'	3' - 6"	7' - 0"	-	-	1' - 0"	4' - 0"	-	-	1' - 0"	1' - 6"	4' - 0"	-	1' - 0"	1' - 0"	2' - 0"	5' - 0"
18'	4' - 6"	8' - 0"	-	-	2' - 0"	5' - 0"	-	-	1' - 0"	2' - 6"	5' - 6"	-	1' - 0"	1' - 0"	3' - 0"	6' - 0"
20'	5' - 6"	9' - 6"	-	-	3' - 0"	6' - 0"	-	-	1' - 0"	3' - 6"	6' - 6"	-	1' - 0"	1' - 6"	4' - 0"	7' - 0"
22'	7' - 0"	10' - 6"	-	-	4' - 0"	7' - 0"	-	-	2' - 0"	4' - 6"	7' - 6"	-	1' - 0"	2' - 6"	5' - 6"	8' - 6"
24'	8' - 0"	11' - 6"	-	-	5' - 0"	8' - 6"	-	-	3' - 0"	6' - 0"	9' - 0"	-	1' - 0"	3' - 6"	6' - 6"	9' - 6"
26'	-	-	-	-	6' - 6"	9' - 6"	-	-	4' - 0"	7' - 0"	10' - 0"	-	2' - 0"	4' - 6"	7' - 6"	10' - 6"
28'	-	-	-	-	7' - 6"	10' - 6"	-	-	5' - 0"	8' - 0"	11' - 0"	-	3' - 0"	6' - 0"	8' - 6"	12' - 0"
30'	-	-	-	-	-	-	-	-	6' - 0"	9' - 0"	12' - 6"	-	4' - 0"	7' - 0"	10' - 0"	13' - 0"
32'	-	-	-	-	-	-	-	-	7' - 6"	10' - 6"	13' - 6"	-	5' - 0"	8' - 0"	11' - 0"	14' - 0"
34'	-	-	-	-	-	-	-	-	-	-	-	-	6' - 6"	9' - 0"	12' - 0"	15' - 6"

NOTES:

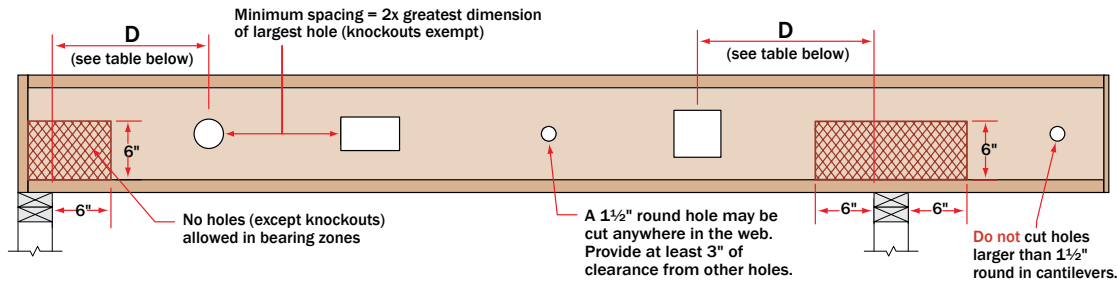
- Hole may be positioned vertically anywhere in the web.
- Tables 1-6 are for uniformly loaded maximum loads of 40 psf live loads and 35 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 2 SQUARE HOLES

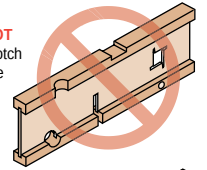
Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	1' - 0"	2' - 0"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	2' - 0"
10'	1' - 6"	3' - 6"	-	-	1' - 0"	2' - 0"	-	-	1' - 0"	1' - 0"	2' - 6"	-	1' - 0"	1' - 0"	1' - 0"	3' - 0"
12'	2' - 6"	4' - 6"	-	-	1' - 0"	3' - 0"	-	-	1' - 0"	1' - 6"	3' - 6"	-	1' - 0"	1' - 0"	2' - 0"	4' - 6"
14'	4' - 0"	5' - 6"	-	-	2' - 0"	4' - 0"	-	-	1' - 0"	2' - 6"	4' - 6"	-	1' - 0"	1' - 6"	3' - 6"	5' - 6"
16'	5' - 0"	7' - 0"	-	-	3' - 0"	5' - 0"	-	-	2' - 0"	3' - 6"	5' - 6"	-	1' - 0"	2' - 6"	4' - 6"	6' - 6"
18'	6' - 0"	8' - 0"	-	-	4' - 6"	6' - 6"	-	-	3' - 0"	5' - 0"	7' - 0"	-	1' - 6"	3' - 6"	5' - 6"	8' - 0"
20'	7' - 0"	9' - 6"	-	-	5' - 6"	7' - 6"	-	-	4' - 0"	6' - 0"	8' - 0"	-	2' - 6"	4' - 6"	7' - 0"	9' - 0"
22'	8' - 6"	10' - 6"	-	-	6' - 6"	8' - 6"	-	-	5' - 0"	7' - 0"	9' - 0"	-	4' - 0"	6' - 0"	8' - 0"	10' - 0"
24'	9' - 6"	11' - 6"	-	-	8' - 0"	10' - 0"	-	-	6' - 0"	8' - 0"	10' - 6"	-	5' - 0"	7' - 0"	9' - 0"	11' - 6"
26'	-	-	-	-	9' - 0"	11' - 0"	-	-	7' - 6"	9' - 6"	11' - 6"	-	6' - 0"	8' - 0"	10' - 6"	12' - 6"
28'	-	-	-	-	10' - 0"	12' - 0"	-	-	8' - 6"	10' - 6"	13' - 0"	-	7' - 0"	9' - 0"	11' - 6"	*
30'	-	-	-	-	-	-	-	-	9' - 6"	12' - 0"	14' - 0"	-	8' - 0"	10' - 6"	12' - 6"	*
32'	-	-	-	-	-	-	-	-	11' - 0"	13' - 0"	15' - 0"	-	9' - 6"	11' - 6"	14' - 0"	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	10' - 6"	12' - 6"	15' - 0"	*

TABLE 3 RECTANGULAR HOLES

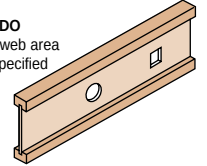
Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	5"x8"	5"x10"	5"x12"	5"x14"	7"x10"	7"x12"	7"x14"	7"x16"	10"x12"	10"x14"	10"x16"	10"x18"	10"x16"	10"x18"	12"x14"	12"x16"
8'	2' - 0"	2' - 6"	3' - 0"	3' - 0"	2' - 0"	2' - 6"	2' - 6"	3' - 0"	2' - 6"	3' - 0"	3' - 6"	*	2' - 6"	3' - 0"	2' - 6"	3' - 6"
10'	3' - 6"	3' - 6"	4' - 0"	4' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	3' - 6"	4' - 0"	4' - 6"	*	3' - 6"	4' - 0"	4' - 0"	4' - 6"
12'	4' - 6"	5' - 0"	5' - 0"	5' - 6"	4' - 0"	4' - 6"	5' - 0"	5' - 6"	4' - 6"	5' - 0"	*	*	5' - 0"	5' - 6"	5' - 0"	5' - 6"
14'	5' - 6"	6' - 0"	6' - 6"	6' - 6"	5' - 6"	6' - 0"	6' - 6"	6' - 6"	6' - 0"	6' - 6"	*	*	6' - 0"	6' - 6"	6' - 0"	*
16'	7' - 0"	7' - 0"	7' - 6"	*	6' - 6"	7' - 0"	7' - 6"	*	7' - 0"	7' - 6"	*	*	7' - 0"	*	7' - 6"	*
18'	8' - 0"	8' - 6"	8' - 6"	*	7' - 6"	8' - 0"	8' - 6"	*	8' - 0"	*	*	*	8' - 6"	*	8' - 6"	*
20'	9' - 0"	9' - 6"	*	*	9' - 0"	9' - 6"	*	*	9' - 6"	*	*	*	9' - 6"	*	9' - 6"	*
22'	10' - 6"	10' - 6"	*	*	10' - 0"	10' - 6"	*	*	10' - 6"	*	*	*	10' - 6"	*	*	*
24'	11' - 6"	*	*	*	11' - 0"	11' - 6"	*	*	*	*	*	*	*	*	*	*
26'	-	-	-	-	12' - 6"	*	*	*	*	*	*	*	*	*	*	*
28'	-	-	-	-	13' - 6"	*	*	*	*	*	*	*	*	*	*	*
30'	-	-	-	-	-	-	-	-	*	*	*	*	*	*	*	*
32'	-	-	-	-	-	-	-	-	*	*	*	*	*	*	*	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*	*



DO NOT
cut or notch
flange



DO
cut in web area
as specified



AJS® Joists are manufactured with 1½" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1½"

TABLE 4

ROUND HOLES

Minimum distance from inside face of any support to the centerline of hole										JOIST DEPTH • HOLE SIZE [IN]							
Span [ft]	18"				20"				22"				24"				
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"	
8'	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	3'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	
10'	1'-0"	1'-0"	1'-0"	2'-6"	1'-0"	1'-0"	1'-0"	4'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"	
12'	1'-0"	1'-0"	1'-0"	3'-6"	1'-0"	1'-0"	1'-0"	5'-0"	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"	1'-0"	1'-0"	3'-6"	
14'	1'-0"	1'-0"	1'-0"	4'-6"	1'-0"	1'-0"	1'-6"	6'-6"	1'-0"	1'-0"	1'-0"	1'-0"	3'-0"	1'-0"	1'-0"	4'-6"	
16'	1'-0"	1'-0"	1'-0"	5'-6"	1'-0"	1'-0"	2'-6"	7'-6"	1'-0"	1'-0"	1'-0"	1'-0"	4'-0"	1'-0"	1'-0"	5'-6"	
18'	1'-0"	1'-0"	2'-0"	7'-0"	1'-0"	1'-0"	3'-6"	8'-6"	1'-0"	1'-0"	1'-0"	5'-0"	1'-0"	1'-0"	2'-6"	6'-6"	
20'	1'-0"	1'-0"	3'-0"	8'-0"	1'-0"	1'-0"	4'-6"	*	1'-0"	1'-0"	2'-0"	6'-6"	1'-0"	1'-0"	3'-6"	8'-0"	
22'	1'-0"	1'-0"	4'-0"	9'-0"	1'-0"	1'-6"	6'-0"	*	1'-0"	1'-0"	3'-0"	7'-6"	1'-0"	1'-0"	4'-6"	9'-0"	
24'	1'-0"	1'-0"	5'-0"	10'-6"	1'-0"	2'-6"	7'-0"	*	1'-0"	1'-0"	4'-0"	8'-6"	1'-0"	1'-6"	5'-6"	10'-6"	
26'	1'-0"	1'-6"	6'-0"	11'-6"	1'-0"	3'-6"	8'-0"	*	1'-0"	1'-0"	5'-0"	10'-0"	1'-0"	2'-6"	7'-0"	11'-6"	
28'	1'-0"	2'-6"	7'-0"	13'-0"	1'-0"	4'-6"	9'-0"	*	1'-0"	2'-0"	6'-6"	11'-0"	1'-0"	3'-6"	8'-0"	12'-6"	
30'	1'-0"	3'-6"	8'-6"	14'-0"	1'-0"	5'-6"	10'-6"	*	1'-0"	3'-0"	7'-6"	12'-0"	1'-0"	5'-0"	9'-0"	14'-0"	
32'	1'-0"	4'-6"	9'-6"	15'-0"	2'-0"	6'-6"	11'-6"	*	1'-0"	4'-0"	8'-6"	13'-6"	2'-0"	6'-0"	10'-0"	15'-0"	
34'	1'-0"	5'-6"	10'-6"	16'-6"	3'-0"	7'-6"	12'-6"	*	1'-0"	5'-0"	9'-6"	14'-6"	3'-0"	7'-0"	11'-6"	16'-0"	

NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-6 are for uniformly loaded maximum loads of 40 psf live loads and 35 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 5

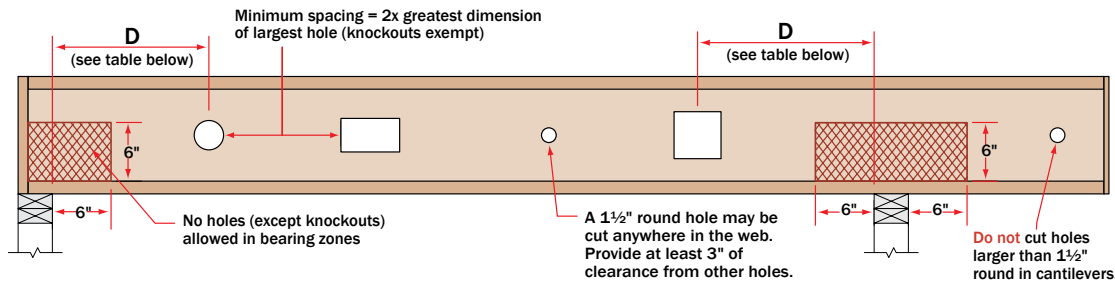
SQUARE HOLES

Minimum distance from inside face of any support to the centerline of hole										JOIST DEPTH • HOLE SIZE [IN]							
Span [ft]	18"				20"				22"				24"				
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"	
8'	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	1'- 0"	2'- 6"	1'- 0"	1'- 0"	1'- 0"	1'- 6"	1'- 0"	1'- 0"	1'- 0"	3'- 6"	
10'	1'- 0"	1'- 0"	1'- 0"	2'- 0"	1'- 0"	1'- 0"	1'- 0"	3'- 6"	1'- 0"	1'- 0"	1'- 0"	2'- 6"	1'- 0"	1'- 0"	1'- 6"	4'- 6"	
12'	1'- 0"	1'- 0"	1'- 0"	3'- 0"	1'- 0"	1'- 0"	2'- 0"	4'- 6"	1'- 0"	1'- 0"	1'- 0"	3'- 6"	1'- 0"	1'- 0"	3'- 0"	*	
14'	1'- 0"	1'- 0"	1'- 6"	4'- 0"	1'- 0"	1'- 0"	3'- 0"	6'- 0"	1'- 0"	1'- 0"	2'- 0"	5'- 0"	1'- 0"	1'- 0"	4'- 0"	*	
16'	1'- 0"	1'- 0"	2'- 6"	5'- 0"	1'- 0"	1'- 6"	4'- 0"	7'- 0"	1'- 0"	1'- 0"	3'- 0"	6'- 0"	1'- 0"	2'- 0"	5'- 0"	*	
18'	1'- 0"	1'- 0"	3'- 6"	6'- 6"	1'- 0"	2'- 6"	5'- 0"	8'- 6"	1'- 0"	1'- 6"	4'- 0"	7'- 0"	1'- 0"	3'- 6"	6'- 0"	*	
20'	1'- 0"	2'- 0"	4'- 6"	7'- 6"	1'- 0"	3'- 6"	6'- 6"	9'- 6"	1'- 0"	2'- 6"	5'- 6"	8'- 6"	1'- 6"	4'- 6"	7'- 6"	*	
22'	1'- 0"	3'- 0"	6'- 0"	8'- 6"	2'- 0"	4'- 6"	7'- 6"	10'- 6"	1'- 0"	3'- 6"	6'- 6"	9'- 6"	3'- 0"	5'- 6"	8'- 6"	*	
24'	1'- 6"	4'- 0"	7'- 0"	10'- 0"	3'- 0"	6'- 0"	8'- 6"	*	2'- 0"	5'- 0"	7'- 6"	10'- 6"	4'- 0"	6'- 6"	9'- 6"	*	
26'	2'- 6"	5'- 6"	8'- 0"	11'- 0"	4'- 0"	7'- 0"	10'- 0"	*	3'- 0"	6'- 0"	9'- 0"	12'- 0"	5'- 0"	8'- 0"	11'- 0"	*	
28'	3'- 6"	6'- 6"	9'- 0"	12'- 0"	5'- 6"	8'- 0"	11'- 0"	*	4'- 6"	7'- 0"	10'- 0"	13'- 0"	6'- 0"	9'- 0"	12'- 0"	*	
30'	5'- 0"	7'- 6"	10'- 6"	13'- 6"	6'- 6"	9'- 0"	12'- 0"	*	5'- 6"	8'- 0"	11'- 0"	14'- 6"	7'- 0"	10'- 0"	13'- 6"	*	
32'	6'- 0"	8'- 6"	11'- 6"	14'- 6"	7'- 6"	10'- 6"	13'- 6"	*	6'- 6"	9'- 6"	12'- 6"	15'- 6"	8'- 6"	11'- 6"	14'- 6"	*	
34'	7'- 0"	9'- 6"	12'- 6"	16'- 0"	8'- 6"	11'- 6"	14'- 6"	*	7'- 6"	10'- 6"	13'- 6"	16'- 6"	9'- 6"	12'- 6"	15'- 6"	*	

TABLE 6

RECTANGULAR HOLES

Minimum distance from inside face of any support to the centerline of hole										JOIST DEPTH • HOLE SIZE [IN]							
Span [ft]	18"				20"				22"				24"				
	10"x18"	12"x14"	12"x16"	12"x18"	12"x16"	12"x18"	14"x16"	14"x18"	12"x18"	14"x16"	14"x18"	16"x18"	14"x18"	14"x20"	16"x18"	16"x20"	
8'	2'- 6"	1'- 6"	2'- 6"	3'- 6"	1'- 6"	2'- 6"	2'- 6"	3'- 6"	1'- 6"	1'- 6"	2'- 6"	3'- 6"	1'- 6"	3'- 0"	2'- 6"	3'- 6"	
10'	3'- 6"	2'- 6"	3'- 6"	4'- 6"	2'- 6"	3'- 6"	3'- 6"	4'- 6"	2'- 6"	2'- 6"	3'- 6"	4'- 6"	3'- 0"	4'- 0"	3'- 6"	*	
12'	4'- 6"	4'- 0"	4'- 6"	5'- 6"	3'- 6"	4'- 6"	4'- 6"	*	4'- 0"	4'- 0"	5'- 0"	*	4'- 0"	5'- 0"	5'- 0"	*	
14'	5'- 6"	5'- 0"	6'- 0"	*	5'- 0"	6'- 0"	6'- 0"	*	5'- 0"	5'- 0"	6'- 0"	*	5'- 0"	6'- 6"	6'- 0"	*	
16'	7'- 0"	6'- 0"	7'- 0"	*	6'- 0"	7'- 0"	7'- 0"	*	6'- 0"	6'- 0"	7'- 0"	*	6'- 6"	7'- 6"	7'- 6"	*	
18'	8'- 0"	7'- 6"	8'- 6"	*	7'- 0"	8'- 6"	8'- 6"	*	7'- 6"	7'- 0"	8'- 6"	*	7'- 6"	8'- 6"	8'- 6"	*	
20'	9'- 6"	8'- 6"	9'- 6"	*	8'- 6"	9'- 6"	9'- 6"	*	8'- 6"	8'- 6"	9'- 6"	*	8'- 6"	*	9'- 6"	*	
22'	10'- 6"	9'- 6"	10'- 6"	*	9'- 6"	10'- 6"	10'- 6"	*	9'- 6"	9'- 6"	*	*	10'- 0"	*	*	*	
24'	11'- 6"	11'- 0"	*	*	11'- 0"	*	*	*	11'- 0"	11'- 0"	*	*	11'- 0"	*	*	*	
26'	*	12'- 0"	*	*	12'- 0"	*	*	*	12'- 0"	12'- 0"	*	*	12'- 0"	*	*	*	
28'	*	13'- 0"	*	*	13'- 0"	*	*	*	13'- 6"	13'- 0"	*	*	13'- 6"	*	*	*	
30'	*	14'- 6"	*	*	14'- 6"	*	*	*	14'- 6"	14'- 6"	*	*	14'- 6"	*	*	*	
32'	*	15'- 6"	*	*	15'- 6"	*	*	*	15'- 6"	15'- 6"	*	*	*	*	*	*	
34'	*	*	*	*	16'- 6"	*	*	*	*	*	*	*	*	*	*	*	



DO NOT
cut or notch
flange

DO
cut in web area
as specified

AJS® Joists are manufactured with 1 1/2" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1 1/2"

TABLE 1

ROUND HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	1' - 0"
10'	1' - 0"	4' - 0"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 6"	-	1' - 0"	1' - 0"	1' - 0"	2' - 0"
12'	2' - 0"	5' - 0"	-	-	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 0"	2' - 6"	-	1' - 0"	1' - 0"	1' - 0"	3' - 0"
14'	3' - 0"	6' - 0"	-	-	1' - 0"	3' - 6"	-	-	1' - 0"	1' - 6"	4' - 0"	-	1' - 0"	1' - 0"	2' - 0"	4' - 6"
16'	4' - 0"	7' - 6"	-	-	2' - 0"	4' - 6"	-	-	1' - 0"	2' - 6"	5' - 0"	-	1' - 0"	1' - 0"	3' - 0"	5' - 6"
18'	5' - 6"	8' - 6"	-	-	3' - 0"	5' - 6"	-	-	1' - 0"	3' - 6"	6' - 0"	-	1' - 0"	1' - 6"	4' - 0"	6' - 6"
20'	6' - 6"	*	-	-	4' - 0"	7' - 0"	-	-	2' - 0"	4' - 6"	7' - 6"	-	1' - 0"	2' - 6"	5' - 0"	8' - 0"
22'	7' - 6"	*	-	-	5' - 0"	8' - 0"	-	-	3' - 0"	5' - 6"	8' - 6"	-	1' - 6"	3' - 6"	6' - 6"	9' - 0"
24'	9' - 0"	*	-	-	6' - 6"	9' - 0"	-	-	4' - 0"	7' - 0"	9' - 6"	-	2' - 6"	5' - 0"	7' - 6"	10' - 0"
26'	-	-	-	-	7' - 6"	10' - 6"	-	-	5' - 6"	8' - 0"	11' - 0"	-	3' - 6"	6' - 0"	8' - 6"	11' - 6"
28'	-	-	-	-	8' - 6"	11' - 6"	-	-	6' - 6"	9' - 0"	12' - 0"	-	4' - 6"	7' - 0"	10' - 0"	12' - 6"
30'	-	-	-	-	-	-	-	-	7' - 6"	10' - 6"	13' - 6"	-	5' - 6"	8' - 0"	11' - 0"	14' - 0"
32'	-	-	-	-	-	-	-	-	8' - 6"	11' - 6"	14' - 6"	-	7' - 0"	9' - 6"	12' - 0"	15' - 0"
34'	-	-	-	-	-	-	-	-	-	-	-	-	8' - 0"	10' - 6"	13' - 6"	16' - 6"

NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-6 are for uniformly loaded maximum loads of 50 psf live loads and 35 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 2

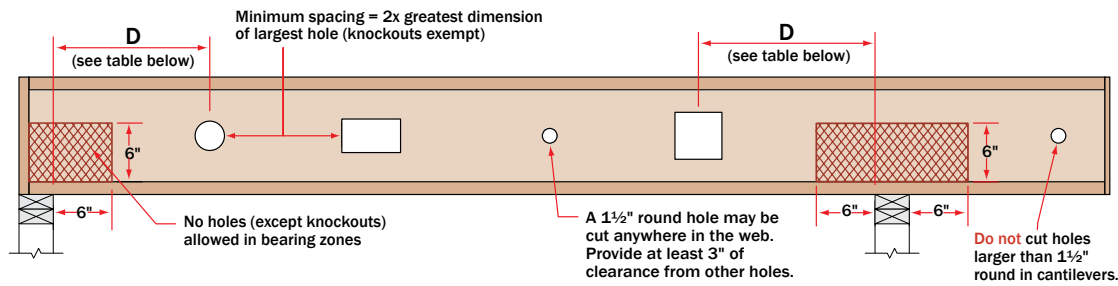
SQUARE HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 6"	-	1' - 0"	1' - 0"	1' - 0"	2' - 6"
10'	2' - 0"	4' - 0"	-	-	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 0"	3' - 0"	-	1' - 0"	1' - 0"	1' - 6"	3' - 6"
12'	3' - 0"	5' - 0"	-	-	2' - 0"	3' - 6"	-	-	1' - 0"	2' - 0"	4' - 0"	-	1' - 0"	1' - 0"	3' - 0"	5' - 0"
14'	4' - 6"	6' - 0"	-	-	3' - 0"	4' - 6"	-	-	1' - 6"	3' - 6"	5' - 0"	-	1' - 0"	2' - 0"	4' - 0"	6' - 0"
16'	5' - 6"	7' - 6"	-	-	4' - 0"	5' - 6"	-	-	2' - 6"	4' - 6"	6' - 6"	-	1' - 6"	3' - 6"	5' - 0"	7' - 0"
18'	6' - 6"	8' - 6"	-	-	5' - 0"	7' - 0"	-	-	4' - 0"	5' - 6"	7' - 6"	-	2' - 6"	4' - 6"	6' - 6"	8' - 6"
20'	8' - 0"	*	-	-	6' - 6"	8' - 0"	-	-	5' - 0"	6' - 6"	8' - 6"	-	4' - 0"	5' - 6"	7' - 6"	9' - 6"
22'	9' - 0"	*	-	-	7' - 6"	9' - 6"	-	-	6' - 0"	8' - 0"	10' - 0"	-	5' - 0"	6' - 6"	8' - 6"	*
24'	10' - 6"	*	-	-	8' - 6"	10' - 6"	-	-	7' - 0"	9' - 0"	11' - 0"	-	6' - 0"	8' - 0"	10' - 0"	*
26'	-	-	-	-	10' - 0"	12' - 0"	-	-	8' - 6"	10' - 6"	12' - 6"	-	7' - 0"	9' - 0"	11' - 0"	*
28'	-	-	-	-	11' - 0"	13' - 0"	-	-	9' - 6"	11' - 6"	13' - 6"	-	8' - 6"	10' - 6"	12' - 6"	*
30'	-	-	-	-	-	-	-	-	11' - 0"	12' - 6"	*	-	9' - 6"	11' - 6"	13' - 6"	*
32'	-	-	-	-	-	-	-	-	12' - 0"	14' - 0"	*	-	10' - 6"	12' - 6"	14' - 6"	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	12' - 0"	14' - 0"	16' - 0"	*

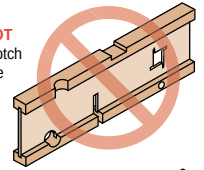
TABLE 3

RECTANGULAR HOLES

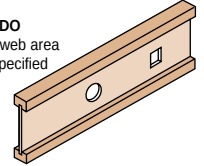
Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	5"x8"	5"x10"	5"x12"	5"x14"	7"x10"	7"x12"	7"x14"	7"x16"	10"x12"	10"x14"	10"x16"	10"x18"	10"x16"	10"x18"	12"x14"	12"x16"
8'	2' - 6"	3' - 0"	3' - 0"	3' - 6"	2' - 6"	2' - 6"	3' - 0"	3' - 6"	2' - 6"	3' - 0"	3' - 6"	*	3' - 0"	3' - 6"	3' - 0"	3' - 6"
10'	3' - 6"	4' - 0"	4' - 6"	4' - 6"	3' - 6"	4' - 0"	4' - 0"	4' - 6"	4' - 0"	4' - 6"	*	*	4' - 0"	4' - 6"	4' - 0"	4' - 6"
12'	5' - 0"	5' - 0"	5' - 6"	*	4' - 6"	5' - 0"	5' - 6"	*	5' - 0"	5' - 6"	*	*	5' - 0"	*	5' - 6"	*
14'	6' - 0"	6' - 6"	6' - 6"	*	6' - 0"	6' - 0"	6' - 6"	*	6' - 6"	*	*	*	6' - 6"	*	6' - 6"	*
16'	7' - 6"	7' - 6"	*	*	7' - 0"	7' - 6"	*	*	7' - 6"	*	*	*	7' - 6"	*	*	*
18'	8' - 6"	*	*	*	8' - 0"	8' - 6"	*	*	8' - 6"	*	*	*	*	*	*	*
20'	9' - 6"	*	*	*	9' - 6"	*	*	*	*	*	*	*	*	*	*	*
22'	*	*	*	*	10' - 6"	*	*	*	*	*	*	*	*	*	*	*
24'	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
26'	-	-	-	-	*	*	*	*	*	*	*	*	*	*	*	*
28'	-	-	-	-	*	*	*	*	*	*	*	*	*	*	*	*
30'	-	-	-	-	-	-	-	-	*	*	*	*	*	*	*	*
32'	-	-	-	-	-	-	-	-	*	*	*	*	*	*	*	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*	*



DO NOT
cut or notch
flange



DO
cut in web area
as specified



AJS® Joists are manufactured with 1½" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1½"

TABLE 4

ROUND HOLES

Minimum distance from inside face of any support to the centerline of hole													JOIST DEPTH • HOLE SIZE [IN]			
Span [ft]	18"				20"				22"				24"			
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"
8'	1' - 0"	1' - 0"	1' - 0"	1' - 6"	1' - 0"	1' - 0"	1' - 0"	3' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 6"
10'	1' - 0"	1' - 0"	1' - 0"	3' - 0"	1' - 0"	1' - 0"	1' - 0"	4' - 6"	1' - 0"	1' - 0"	1' - 0"	1' - 6"	1' - 0"	1' - 0"	1' - 0"	2' - 6"
12'	1' - 0"	1' - 0"	1' - 0"	4' - 0"	1' - 0"	1' - 0"	1' - 0"	5' - 6"	1' - 0"	1' - 0"	1' - 0"	2' - 6"	1' - 0"	1' - 0"	1' - 0"	4' - 0"
14'	1' - 0"	1' - 0"	1' - 0"	5' - 0"	1' - 0"	1' - 0"	2' - 0"	6' - 6"	1' - 0"	1' - 0"	1' - 0"	3' - 6"	1' - 0"	1' - 0"	1' - 0"	5' - 0"
16'	1' - 0"	1' - 0"	1' - 6"	6' - 6"	1' - 0"	1' - 0"	3' - 6"	*	1' - 0"	1' - 0"	1' - 0"	5' - 0"	1' - 0"	1' - 0"	2' - 6"	6' - 0"
18'	1' - 0"	1' - 0"	3' - 0"	7' - 6"	1' - 0"	1' - 0"	4' - 6"	*	1' - 0"	1' - 0"	2' - 0"	6' - 0"	1' - 0"	1' - 0"	3' - 6"	7' - 6"
20'	1' - 0"	1' - 0"	4' - 0"	8' - 6"	1' - 0"	1' - 6"	5' - 6"	*	1' - 0"	1' - 0"	3' - 0"	7' - 0"	1' - 0"	1' - 0"	4' - 6"	8' - 6"
22'	1' - 0"	1' - 0"	5' - 0"	10' - 0"	1' - 0"	2' - 6"	6' - 6"	*	1' - 0"	1' - 0"	4' - 0"	8' - 6"	1' - 0"	2' - 0"	5' - 6"	9' - 6"
24'	1' - 0"	2' - 0"	6' - 0"	11' - 0"	1' - 0"	3' - 6"	8' - 0"	*	1' - 0"	1' - 6"	5' - 6"	9' - 6"	1' - 0"	3' - 0"	7' - 0"	11' - 0"
26'	1' - 0"	3' - 0"	7' - 6"	12' - 6"	1' - 0"	5' - 0"	9' - 0"	*	1' - 0"	2' - 6"	6' - 6"	10' - 6"	1' - 0"	4' - 0"	8' - 0"	12' - 0"
28'	1' - 0"	4' - 0"	8' - 6"	13' - 6"	2' - 0"	6' - 0"	10' - 6"	*	1' - 0"	3' - 6"	7' - 6"	12' - 0"	1' - 6"	5' - 0"	9' - 0"	13' - 6"
30'	1' - 0"	5' - 0"	9' - 6"	*	3' - 0"	7' - 0"	11' - 6"	*	1' - 0"	4' - 6"	8' - 6"	13' - 0"	3' - 0"	6' - 6"	10' - 6"	14' - 6"
32'	2' - 0"	6' - 0"	11' - 0"	*	4' - 0"	8' - 0"	12' - 6"	*	2' - 0"	6' - 0"	10' - 0"	14' - 6"	4' - 0"	7' - 6"	11' - 6"	*
34'	3' - 0"	7' - 6"	12' - 0"	*	5' - 0"	9' - 6"	14' - 0"	*	3' - 0"	7' - 0"	11' - 0"	15' - 6"	5' - 0"	8' - 6"	12' - 6"	*

NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-6 are for uniformly loaded maximum loads of 50 psf live loads and 35 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 5

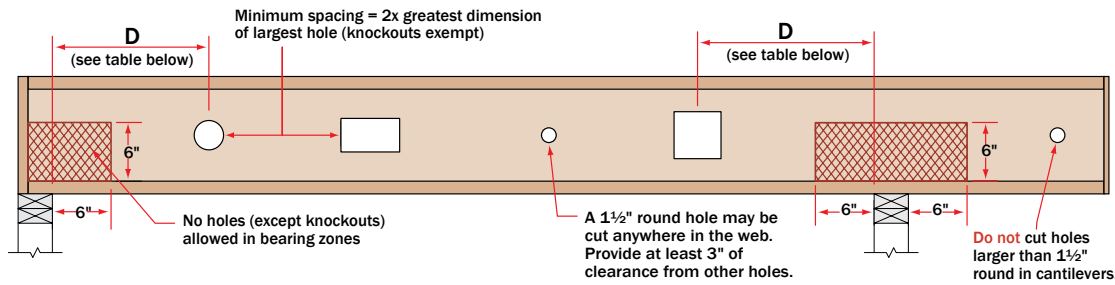
SQUARE HOLES

Minimum distance from inside face of any support to the centerline of hole													JOIST DEPTH • HOLE SIZE [IN]			
Span [ft]	18"				20"				22"				24"			
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"
8'	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	1' - 0"	2' - 6"	1' - 0"	1' - 0"	1' - 0"	2' - 0"	1' - 0"	1' - 0"	1' - 0"	*
10'	1' - 0"	1' - 0"	1' - 0"	2' - 6"	1' - 0"	1' - 0"	1' - 6"	4' - 0"	1' - 0"	1' - 0"	1' - 0"	3' - 0"	1' - 0"	1' - 0"	2' - 0"	*
12'	1' - 0"	1' - 0"	1' - 0"	3' - 6"	1' - 0"	1' - 0"	2' - 6"	5' - 0"	1' - 0"	1' - 0"	1' - 6"	4' - 0"	1' - 0"	1' - 0"	3' - 6"	*
14'	1' - 0"	1' - 0"	2' - 0"	4' - 6"	1' - 0"	1' - 6"	3' - 6"	6' - 6"	1' - 0"	1' - 0"	3' - 0"	5' - 6"	1' - 0"	2' - 0"	4' - 6"	*
16'	1' - 0"	1' - 0"	3' - 6"	6' - 0"	1' - 0"	2' - 6"	5' - 0"	7' - 6"	1' - 0"	1' - 6"	4' - 0"	6' - 6"	1' - 0"	3' - 0"	5' - 6"	*
18'	1' - 0"	2' - 0"	4' - 6"	7' - 0"	1' - 0"	3' - 6"	6' - 0"	*	1' - 0"	2' - 6"	5' - 0"	8' - 0"	2' - 0"	4' - 0"	7' - 0"	*
20'	1' - 0"	3' - 0"	5' - 6"	8' - 0"	2' - 6"	4' - 6"	7' - 0"	*	1' - 6"	3' - 6"	6' - 0"	9' - 0"	3' - 0"	5' - 6"	8' - 0"	*
22'	2' - 0"	4' - 6"	6' - 6"	9' - 6"	3' - 6"	5' - 6"	8' - 6"	*	2' - 6"	5' - 0"	7' - 6"	10' - 0"	4' - 0"	6' - 6"	9' - 6"	*
24'	3' - 0"	5' - 6"	8' - 0"	10' - 6"	4' - 6"	7' - 0"	9' - 6"	*	3' - 6"	6' - 0"	8' - 6"	11' - 6"	5' - 0"	7' - 6"	10' - 6"	*
26'	4' - 0"	6' - 6"	9' - 0"	12' - 0"	5' - 6"	8' - 0"	10' - 6"	*	4' - 6"	7' - 0"	9' - 6"	12' - 6"	6' - 0"	9' - 0"	11' - 6"	*
28'	5' - 0"	7' - 6"	10' - 0"	13' - 0"	6' - 6"	9' - 0"	12' - 0"	*	5' - 6"	8' - 0"	11' - 0"	*	7' - 6"	10' - 0"	13' - 0"	*
30'	6' - 6"	9' - 0"	11' - 6"	14' - 6"	8' - 0"	10' - 6"	13' - 0"	*	7' - 0"	9' - 6"	12' - 0"	*	8' - 6"	11' - 0"	14' - 0"	*
32'	7' - 6"	10' - 0"	12' - 6"	15' - 6"	9' - 0"	11' - 6"	14' - 6"	*	8' - 0"	10' - 6"	13' - 6"	*	9' - 6"	12' - 6"	15' - 6"	*
34'	8' - 6"	11' - 0"	14' - 0"	16' - 6"	10' - 0"	12' - 6"	15' - 6"	*	9' - 0"	11' - 6"	14' - 6"	*	11' - 0"	13' - 6"	16' - 6"	*

TABLE 6

RECTANGULAR HOLES

Minimum distance from inside face of any support to the centerline of hole													JOIST DEPTH • HOLE SIZE [IN]			
Span [ft]	18"				20"				22"				24"			
	10"x18"	12"x14"	12"x16"	12"x18"	12"x16"	12"x18"	14"x16"	14"x18"	12"x18"	14"x16"	14"x18"	16"x18"	14"x18"	14"x20"	16"x18"	16"x20"
8'	2' - 6"	2' - 0"	2' - 6"	3' - 6"	2' - 0"	2' - 6"	2' - 6"	3' - 6"	2' - 0"	2' - 0"	3' - 0"	3' - 6"	2' - 0"	3' - 0"	3' - 0"	*
10'	4' - 0"	3' - 0"	4' - 0"	*	3' - 0"	4' - 0"	4' - 0"	*	3' - 0"	3' - 0"	4' - 0"	*	3' - 0"	4' - 6"	4' - 0"	*
12'	5' - 0"	4' - 6"	5' - 0"	*	4' - 0"	5' - 0"	5' - 0"	*	4' - 6"	4' - 0"	5' - 0"	*	4' - 6"	5' - 6"	5' - 6"	*
14'	6' - 0"	5' - 6"	6' - 6"	*	5' - 6"	6' - 6"	6' - 6"	*	5' - 6"	5' - 6"	6' - 6"	*	5' - 6"	6' - 6"	6' - 6"	*
16'	7' - 6"	6' - 6"	7' - 6"	*	6' - 6"	7' - 6"	7' - 6"	*	6' - 6"	6' - 6"	7' - 6"	*	7' - 0"	*	7' - 6"	*
18'	8' - 6"	8' - 0"	*	*	8' - 0"	8' - 6"	*	*	8' - 0"	8' - 0"	*	*	8' - 0"	*	*	*
20'	*	9' - 0"	*	*	9' - 0"	*	*	*	9' - 0"	9' - 0"	*	*	9' - 0"	*	*	*
22'	*	10' - 6"	*	*	10' - 0"	*	*	*	10' - 6"	10' - 0"	*	*	10' - 6"	*	*	*
24'	*	11' - 6"	*	*	11' - 6"	*	*	*	11' - 6"	11' - 6"	*	*	11' - 6"	*	*	*
26'	*	12' - 6"	*	*	12' - 6"	*	*	*	*	12' - 6"	*	*	*	*	*	*
28'	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
30'	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
32'	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
34'	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*



DO NOT
cut or notch
flange

DO
cut in web area
as specified

AJS® Joists are manufactured with 1 1/2" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1 1/2"

TABLE 1

ROUND HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	1' - 0"	3' - 0"	-	-	1' - 0"	1' - 0"	-	-	1' - 0"	1' - 0"	1' - 0"	-	1' - 0"	1' - 0"	1' - 0"	1' - 6"
10'	1' - 6"	4' - 0"	-	-	1' - 0"	1' - 6"	-	-	1' - 0"	1' - 0"	2' - 0"	-	1' - 0"	1' - 0"	1' - 0"	2' - 6"
12'	2' - 6"	5' - 0"	-	-	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 0"	3' - 0"	-	1' - 0"	1' - 0"	1' - 6"	3' - 6"
14'	3' - 6"	6' - 6"	-	-	1' - 6"	4' - 0"	-	-	1' - 0"	2' - 0"	4' - 0"	-	1' - 0"	1' - 0"	2' - 6"	4' - 6"
16'	4' - 6"	7' - 6"	-	-	2' - 6"	5' - 0"	-	-	1' - 0"	3' - 0"	5' - 6"	-	1' - 0"	1' - 6"	3' - 6"	6' - 0"
18'	6' - 0"	8' - 6"	-	-	3' - 6"	6' - 0"	-	-	2' - 0"	4' - 0"	6' - 6"	-	1' - 0"	2' - 6"	4' - 6"	7' - 0"
20'	7' - 0"	*	-	-	5' - 0"	7' - 6"	-	-	3' - 0"	5' - 0"	7' - 6"	-	1' - 6"	3' - 6"	5' - 6"	8' - 0"
22'	8' - 0"	*	-	-	6' - 0"	8' - 6"	-	-	4' - 0"	6' - 6"	9' - 0"	-	2' - 6"	4' - 6"	7' - 0"	9' - 6"
24'	9' - 6"	*	-	-	7' - 0"	9' - 6"	-	-	5' - 0"	7' - 6"	10' - 0"	-	3' - 6"	5' - 6"	8' - 0"	10' - 6"
26'	-	-	-	-	8' - 0"	11' - 0"	-	-	6' - 0"	8' - 6"	11' - 0"	-	4' - 6"	7' - 0"	9' - 0"	11' - 6"
28'	-	-	-	-	9' - 6"	12' - 0"	-	-	7' - 6"	10' - 0"	12' - 6"	-	5' - 6"	8' - 0"	10' - 6"	13' - 0"
30'	-	-	-	-	-	-	-	-	8' - 6"	11' - 0"	13' - 6"	-	6' - 6"	9' - 0"	11' - 6"	14' - 0"
32'	-	-	-	-	-	-	-	-	9' - 6"	12' - 0"	14' - 6"	-	8' - 0"	10' - 0"	12' - 6"	15' - 0"
34'	-	-	-	-	-	-	-	-	-	-	-	-	9' - 0"	11' - 6"	14' - 0"	16' - 6"

NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-6 are for uniformly loaded maximum loads of 50 psf live loads and 45 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 2

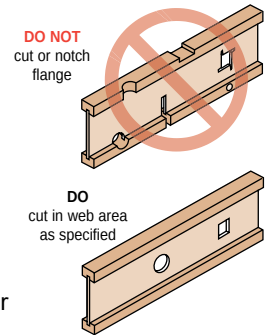
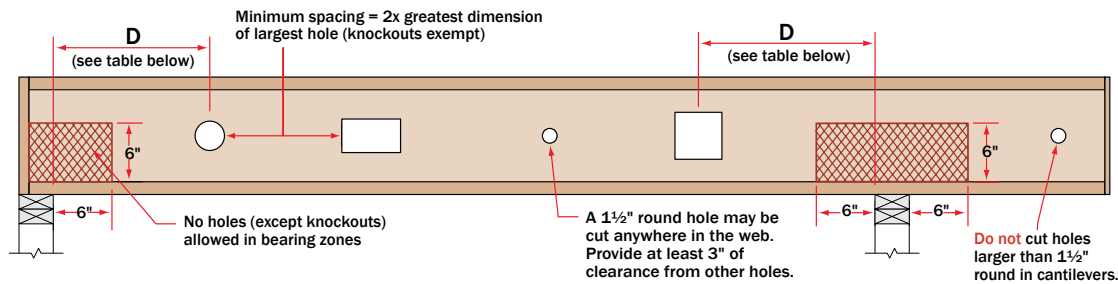
SQUARE HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	1' - 6"	3' - 0"	-	-	1' - 0"	1' - 6"	-	-	1' - 0"	1' - 0"	2' - 0"	-	1' - 0"	1' - 0"	1' - 0"	2' - 6"
10'	2' - 6"	4' - 0"	-	-	1' - 0"	2' - 6"	-	-	1' - 0"	1' - 6"	3' - 0"	-	1' - 0"	1' - 0"	2' - 0"	4' - 0"
12'	3' - 6"	5' - 0"	-	-	2' - 6"	3' - 6"	-	-	1' - 0"	2' - 6"	4' - 0"	-	1' - 0"	1' - 6"	3' - 0"	5' - 0"
14'	4' - 6"	6' - 6"	-	-	3' - 6"	5' - 0"	-	-	2' - 0"	3' - 6"	5' - 6"	-	1' - 0"	2' - 6"	4' - 6"	6' - 0"
16'	6' - 0"	7' - 6"	-	-	4' - 6"	6' - 0"	-	-	3' - 6"	5' - 0"	6' - 6"	-	2' - 6"	4' - 0"	5' - 6"	7' - 6"
18'	7' - 0"	8' - 6"	-	-	5' - 6"	7' - 0"	-	-	4' - 6"	6' - 0"	7' - 6"	-	3' - 6"	5' - 0"	6' - 6"	8' - 6"
20'	8' - 0"	*	-	-	7' - 0"	8' - 6"	-	-	5' - 6"	7' - 0"	9' - 0"	-	4' - 6"	6' - 0"	8' - 0"	9' - 6"
22'	9' - 6"	*	-	-	8' - 0"	9' - 6"	-	-	6' - 6"	8' - 6"	10' - 0"	-	5' - 6"	7' - 6"	9' - 0"	*
24'	10' - 6"	*	-	-	9' - 0"	11' - 0"	-	-	8' - 0"	9' - 6"	11' - 6"	-	6' - 6"	8' - 6"	10' - 0"	*
26'	-	-	-	-	10' - 6"	12' - 0"	-	-	9' - 0"	10' - 6"	12' - 6"	-	8' - 0"	9' - 6"	11' - 6"	*
28'	-	-	-	-	11' - 6"	13' - 0"	-	-	10' - 0"	12' - 0"	13' - 6"	-	9' - 0"	10' - 6"	12' - 6"	*
30'	-	-	-	-	-	-	-	-	11' - 6"	13' - 0"	*	-	10' - 0"	12' - 0"	13' - 6"	*
32'	-	-	-	-	-	-	-	-	12' - 6"	14' - 0"	*	-	11' - 6"	13' - 0"	15' - 0"	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	12' - 6"	14' - 6"	16' - 0"	*

TABLE 3

RECTANGULAR HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 1/8"				14"				16"			
	5"x8"	5"x10"	5"x12"	5"x14"	7"x10"	7"x12"	7"x14"	7"x16"	10"x12"	10"x14"	10"x16"	10"x18"	10"x16"	10"x18"	12"x14"	12"x16"
8'	2' - 6"	3' - 0"	3' - 0"	3' - 6"	2' - 6"	3' - 0"	3' - 0"	3' - 6"	3' - 0"	3' - 6"	3' - 6"	*	3' - 0"	3' - 6"	3' - 0"	3' - 6"
10'	4' - 0"	4' - 0"	4' - 6"	4' - 6"	3' - 6"	4' - 0"	4' - 6"	4' - 6"	4' - 0"	4' - 6"	*	*	4' - 0"	4' - 6"	4' - 6"	*
12'	5' - 0"	5' - 6"	5' - 6"	*	5' - 0"	5' - 0"	5' - 6"	*	5' - 0"	5' - 6"	*	*	5' - 6"	*	5' - 6"	*
14'	6' - 0"	6' - 6"	*	*	6' - 0"	6' - 6"	6' - 6"	*	6' - 6"	*	*	*	6' - 6"	*	6' - 6"	*
16'	7' - 6"	7' - 6"	*	*	7' - 0"	7' - 6"	*	*	7' - 6"	*	*	*	7' - 6"	*	*	*
18'	8' - 6"	*	*	*	8' - 6"	8' - 6"	*	*	*	*	*	*	*	*	*	*
20'	*	*	*	*	9' - 6"	*	*	*	*	*	*	*	*	*	*	*
22'	*	*	*	*	10' - 6"	*	*	*	*	*	*	*	*	*	*	*
24'	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
26'	-	-	-	-	*	*	*	*	*	*	*	*	*	*	*	*
28'	-	-	-	-	*	*	*	*	*	*	*	*	*	*	*	*
30'	-	-	-	-	-	-	-	-	*	*	*	*	*	*	*	*
32'	-	-	-	-	-	-	-	-	*	*	*	*	*	*	*	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	*	*	*	*



AJS® Joists are manufactured with 1½" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1½"

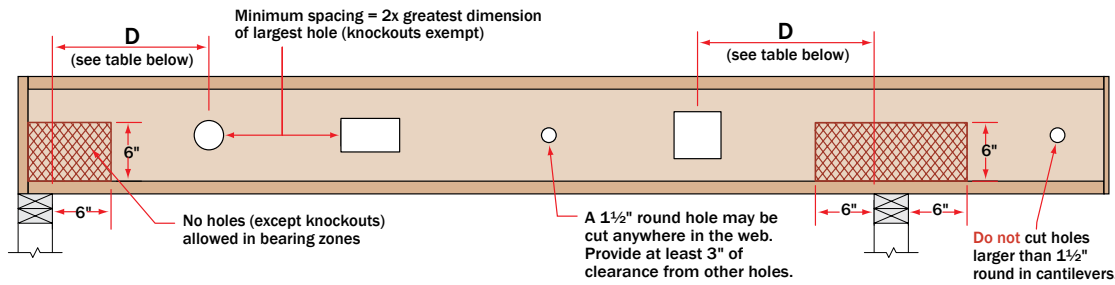
TABLE 4		ROUND HOLES																
Minimum distance from inside face of any support to the centerline of hole												JOIST DEPTH • HOLE SIZE [IN]						
Span [ft]	18"				20"				22"				24"					
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"		
8'	1'-0"	1'-0"	1'-0"	2'-0"	1'-0"	1'-0"	1'-0"	3'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"		
10'	1'-0"	1'-0"	1'-0"	3'-0"	1'-0"	1'-0"	1'-0"	4'-6"	1'-0"	1'-0"	1'-0"	2'-0"	1'-0"	1'-0"	1'-0"	3'-0"		
12'	1'-0"	1'-0"	1'-0"	4'-0"	1'-0"	1'-0"	1'-6"	5'-6"	1'-0"	1'-0"	1'-0"	3'-0"	1'-0"	1'-0"	1'-0"	4'-0"		
14'	1'-0"	1'-0"	1'-6"	5'-6"	1'-0"	1'-0"	2'-6"	*	1'-0"	1'-0"	1'-0"	4'-0"	1'-0"	1'-0"	2'-0"	5'-0"		
16'	1'-0"	1'-0"	2'-6"	6'-6"	1'-0"	1'-0"	4'-0"	*	1'-0"	1'-0"	1'-6"	5'-0"	1'-0"	1'-0"	3'-0"	6'-6"		
18'	1'-0"	1'-0"	3'-6"	7'-6"	1'-0"	1'-6"	5'-0"	*	1'-0"	1'-0"	2'-6"	6'-6"	1'-0"	1'-0"	4'-0"	7'-6"		
20'	1'-0"	1'-0"	4'-6"	9'-0"	1'-0"	2'-6"	6'-0"	*	1'-0"	1'-0"	4'-0"	7'-6"	1'-0"	2'-0"	5'-0"	9'-0"		
22'	1'-0"	2'-0"	5'-6"	10'-0"	1'-0"	3'-6"	7'-6"	*	1'-0"	1'-6"	5'-0"	8'-6"	1'-0"	3'-0"	6'-0"	10'-0"		
24'	1'-0"	3'-0"	7'-0"	11'-6"	1'-0"	4'-6"	8'-6"	*	1'-0"	2'-6"	6'-0"	10'-0"	1'-0"	4'-0"	7'-6"	11'-0"		
26'	1'-0"	4'-0"	8'-0"	12'-6"	2'-0"	5'-6"	9'-6"	*	1'-0"	3'-6"	7'-0"	11'-0"	2'-0"	5'-0"	8'-6"	12'-6"		
28'	1'-6"	5'-0"	9'-0"	13'-6"	3'-0"	7'-0"	10'-6"	*	1'-6"	5'-0"	8'-6"	12'-0"	3'-0"	6'-0"	9'-6"	13'-6"		
30'	2'-6"	6'-0"	10'-6"	*	4'-0"	8'-0"	12'-0"	*	2'-6"	6'-0"	9'-6"	13'-6"	4'-0"	7'-6"	11'-0"	14'-6"		
32'	3'-6"	7'-0"	11'-6"	*	5'-6"	9'-0"	13'-0"	*	3'-6"	7'-0"	10'-6"	14'-6"	5'-0"	8'-6"	12'-0"	*		
34'	4'-6"	8'-6"	12'-6"	*	6'-6"	10'-0"	14'-6"	*	4'-6"	8'-0"	12'-0"	15'-6"	6'-0"	9'-6"	13'-0"	*		

NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-6 are for uniformly loaded maximum loads of 50 psf live loads and 45 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 5		SQUARE HOLES																
Minimum distance from inside face of any support to the centerline of hole													JOIST DEPTH • HOLE SIZE [IN]					
Span [ft]	18"				20"				22"				24"					
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"		
8'	1' - 0"	1' - 0"	1' - 0"	1' - 6"	1' - 0"	1' - 0"	1' - 0"	3' - 0"	1' - 0"	1' - 0"	1' - 0"	2' - 0"	1' - 0"	1' - 0"	1' - 6"	*		
10'	1' - 0"	1' - 0"	1' - 0"	2' - 6"	1' - 0"	1' - 0"	2' - 0"	4' - 0"	1' - 0"	1' - 0"	1' - 0"	3' - 6"	1' - 0"	1' - 0"	2' - 6"	*		
12'	1' - 0"	1' - 0"	1' - 6"	4' - 0"	1' - 0"	1' - 0"	3' - 0"	5' - 6"	1' - 0"	1' - 0"	2' - 0"	4' - 6"	1' - 0"	1' - 6"	3' - 6"	*		
14'	1' - 0"	1' - 0"	2' - 6"	5' - 0"	1' - 0"	2' - 0"	4' - 0"	6' - 6"	1' - 0"	1' - 0"	3' - 6"	5' - 6"	1' - 0"	2' - 6"	5' - 0"	*		
16'	1' - 0"	2' - 0"	4' - 0"	6' - 0"	1' - 0"	3' - 0"	5' - 0"	7' - 6"	1' - 0"	2' - 0"	4' - 6"	7' - 0"	1' - 6"	3' - 6"	6' - 0"	*		
18'	1' - 0"	3' - 0"	5' - 0"	7' - 6"	2' - 0"	4' - 0"	6' - 6"	*	1' - 0"	3' - 6"	5' - 6"	8' - 0"	2' - 6"	5' - 0"	7' - 0"	*		
20'	2' - 0"	4' - 0"	6' - 0"	8' - 6"	3' - 0"	5' - 0"	7' - 6"	*	2' - 6"	4' - 6"	6' - 6"	9' - 0"	3' - 6"	6' - 0"	8' - 6"	*		
22'	3' - 0"	5' - 0"	7' - 0"	9' - 6"	4' - 0"	6' - 6"	8' - 6"	*	3' - 6"	5' - 6"	8' - 0"	10' - 6"	5' - 0"	7' - 0"	9' - 6"	*		
24'	4' - 0"	6' - 0"	8' - 6"	11' - 0"	5' - 6"	7' - 6"	10' - 0"	*	4' - 6"	6' - 6"	9' - 0"	11' - 6"	6' - 0"	8' - 0"	10' - 6"	*		
26'	5' - 0"	7' - 6"	9' - 6"	12' - 0"	6' - 6"	8' - 6"	11' - 0"	*	5' - 6"	8' - 0"	10' - 0"	12' - 6"	7' - 0"	9' - 6"	12' - 0"	*		
28'	6' - 0"	8' - 6"	10' - 6"	13' - 0"	7' - 6"	10' - 0"	12' - 0"	*	6' - 6"	9' - 0"	11' - 6"	*	8' - 0"	10' - 6"	13' - 0"	*		
30'	7' - 6"	9' - 6"	12' - 0"	14' - 6"	8' - 6"	11' - 0"	13' - 6"	*	8' - 0"	10' - 0"	12' - 6"	*	9' - 6"	11' - 6"	14' - 6"	*		
32'	8' - 6"	10' - 6"	13' - 0"	15' - 6"	10' - 0"	12' - 0"	14' - 6"	*	9' - 0"	11' - 0"	13' - 6"	*	10' - 6"	13' - 0"	15' - 6"	*		
34'	9' - 6"	12' - 0"	14' - 0"	*	11' - 0"	13' - 6"	16' - 0"	*	10' - 0"	12' - 6"	15' - 0"	*	11' - 6"	14' - 0"	16' - 6"	*		

TABLE 6		RECTANGULAR HOLES															
Minimum distance from inside face of any support to the centerline of hole										JOIST DEPTH • HOLE SIZE [IN]							
Span [ft]	18"				20"				22"				24"				
	10"x18"	12"x14"	12"x16"	12"x18"	12"x16"	12"x18"	14"x16"	14"x18"	12"x18"	14"x16"	14"x18"	16"x18"	14"x18"	14"x20"	16"x18"	16"x20"	
8'	3' - 0"	2' - 0"	3' - 0"	3' - 6"	2' - 0"	3' - 0"	3' - 0"	3' - 6"	2' - 0"	2' - 0"	3' - 0"	*	2' - 6"	3' - 0"	3' - 0"	*	
10'	4' - 0"	3' - 6"	4' - 0"	*	3' - 6"	4' - 0"	4' - 0"	*	3' - 6"	3' - 6"	4' - 0"	*	3' - 6"	4' - 6"	4' - 0"	*	
12'	5' - 0"	4' - 6"	5' - 0"	*	4' - 6"	5' - 0"	5' - 6"	*	4' - 6"	4' - 6"	5' - 6"	*	4' - 6"	5' - 6"	5' - 6"	*	
14'	6' - 6"	5' - 6"	6' - 6"	*	5' - 6"	6' - 6"	6' - 6"	*	5' - 6"	5' - 6"	6' - 6"	*	6' - 0"	*	6' - 6"	*	
16'	7' - 6"	7' - 0"	7' - 6"	*	7' - 0"	7' - 6"	7' - 6"	*	7' - 0"	7' - 0"	7' - 6"	*	7' - 0"	*	*	*	
18'	8' - 6"	8' - 0"	*	*	8' - 0"	*	*	*	8' - 0"	8' - 0"	*	*	8' - 0"	*	*	*	
20'	*	9' - 0"	*	*	9' - 0"	*	*	*	9' - 6"	9' - 0"	*	*	9' - 6"	*	*	*	
22'	*	10' - 6"	*	*	10' - 6"	*	*	*	10' - 6"	10' - 6"	*	*	10' - 6"	*	*	*	
24'	*	11' - 6"	*	*	11' - 6"	*	*	*	11' - 6"	5	*	*	*	*	*	*	
26'	*	*	*	*	12' - 6"	*	*	*	*	*	*	*	*	*	*	*	
28'	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
30'	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
32'	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
34'	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	



DO NOT
cut or notch
flange

DO
cut in web area
as specified

AJS® Joists are manufactured with 1 1/2" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1 1/2"

TABLE 1

ROUND HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 5/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	1' - 6"	3' - 6"	-	-	1' - 0"	2' - 0"	-	-	1' - 0"	1' - 0"	2' - 0"	-	1' - 0"	1' - 0"	1' - 0"	2' - 6"
10'	3' - 0"	*	-	-	1' - 6"	3' - 0"	-	-	1' - 0"	1' - 6"	3' - 6"	-	1' - 0"	1' - 0"	2' - 0"	3' - 6"
12'	4' - 0"	*	-	-	2' - 6"	4' - 6"	-	-	1' - 0"	3' - 0"	4' - 6"	-	1' - 0"	1' - 6"	3' - 0"	5' - 0"
14'	5' - 6"	*	-	-	3' - 6"	5' - 6"	-	-	2' - 6"	4' - 0"	6' - 0"	-	1' - 0"	2' - 6"	4' - 6"	6' - 0"
16'	6' - 6"	*	-	-	5' - 0"	7' - 0"	-	-	3' - 6"	5' - 0"	7' - 0"	-	2' - 6"	4' - 0"	5' - 6"	7' - 6"
18'	8' - 0"	*	-	-	6' - 0"	8' - 0"	-	-	4' - 6"	6' - 6"	8' - 6"	-	3' - 6"	5' - 0"	7' - 0"	*
20'	9' - 0"	*	-	-	7' - 6"	9' - 6"	-	-	6' - 0"	7' - 6"	9' - 6"	-	4' - 6"	6' - 0"	8' - 0"	*
22'	10' - 6"	*	-	-	8' - 6"	10' - 6"	-	-	7' - 0"	9' - 0"	*	-	5' - 6"	7' - 6"	9' - 6"	*
24'	11' - 6"	*	-	-	10' - 0"	*	-	-	8' - 0"	10' - 0"	*	-	7' - 0"	8' - 6"	10' - 6"	*
26'	-	-	-	-	11' - 0"	*	-	-	9' - 6"	11' - 6"	*	-	8' - 0"	10' - 0"	12' - 0"	*
28'	-	-	-	-	12' - 6"	*	-	-	10' - 6"	12' - 6"	*	-	9' - 6"	11' - 0"	13' - 0"	*
30'	-	-	-	-	-	-	-	-	12' - 0"	14' - 0"	*	-	10' - 6"	12' - 6"	14' - 6"	*
32'	-	-	-	-	-	-	-	-	13' - 6"	15' - 6"	*	-	12' - 0"	13' - 6"	*	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	13' - 0"	15' - 0"	*	*

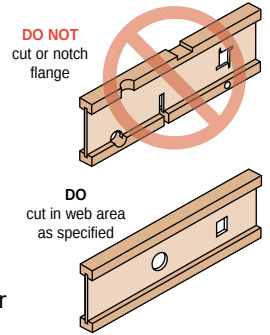
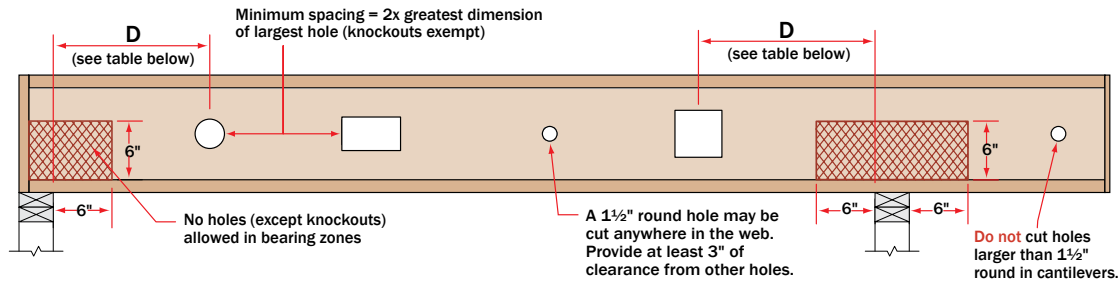
NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-4 are for uniformly loaded maximum loads of 100 psf live loads and 35 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 2

SQUARE HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 5/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	2' - 6"	3' - 6"	-	-	1' - 6"	2' - 6"	-	-	1' - 0"	2' - 0"	3' - 0"	-	1' - 0"	1' - 0"	2' - 0"	3' - 6"
10'	3' - 6"	*	-	-	2' - 6"	4' - 0"	-	-	2' - 0"	3' - 0"	4' - 0"	-	1' - 0"	2' - 6"	3' - 6"	*
12'	5' - 0"	*	-	-	4' - 0"	5' - 0"	-	-	3' - 0"	4' - 0"	5' - 6"	-	2' - 6"	3' - 6"	4' - 6"	*
14'	6' - 6"	*	-	-	5' - 0"	6' - 6"	-	-	4' - 0"	5' - 6"	*	-	3' - 6"	4' - 6"	6' - 0"	*
16'	7' - 6"	*	-	-	6' - 6"	7' - 6"	-	-	5' - 6"	6' - 6"	*	-	4' - 6"	6' - 0"	7' - 0"	*
18'	*	*	-	-	7' - 6"	*	-	-	6' - 6"	8' - 0"	*	-	6' - 0"	7' - 0"	8' - 6"	*
20'	*	*	-	-	9' - 0"	*	-	-	8' - 0"	9' - 6"	*	-	7' - 0"	8' - 6"	*	*
22'	*	*	-	-	10' - 0"	*	-	-	9' - 0"	10' - 6"	*	-	8' - 6"	9' - 6"	*	*
24'	*	*	-	-	11' - 6"	*	-	-	10' - 6"	*	*	-	9' - 6"	11' - 0"	*	*
26'	-	-	-	-	*	*	-	-	12' - 0"	*	*	-	11' - 0"	12' - 6"	*	*
28'	-	-	-	-	*	*	-	-	13' - 0"	*	*	-	12' - 0"	13' - 6"	*	*
30'	-	-	-	-	-	-	-	-	14' - 6"	*	*	-	13' - 6"	*	*	*
32'	-	-	-	-	-	-	-	-	15' - 6"	*	*	-	14' - 6"	*	*	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	16' - 0"	*	*	*



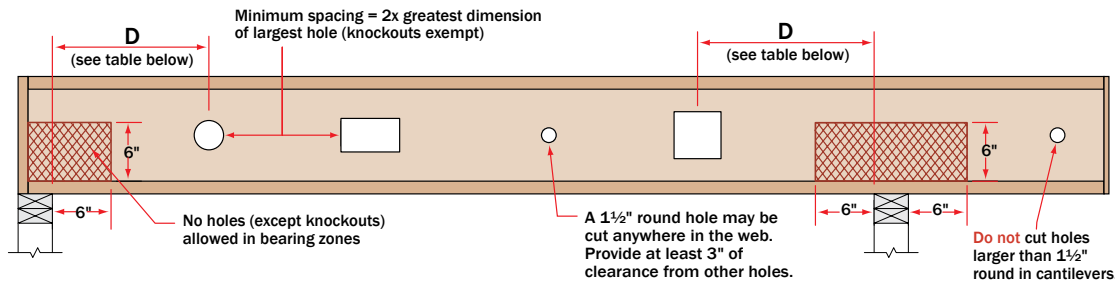
AJS® Joists are manufactured with 1½" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1½"

TABLE 3		ROUND HOLES															
Minimum distance from inside face of any support to the centerline of hole										JOIST DEPTH • HOLE SIZE [IN]							
Span [ft]	18"				20"				22"				24"				
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"	
8'	1'-0"	1'-0"	1'-0"	3'-0"	1'-0"	1'-0"	1'-0"	*	1'-0"	1'-0"	1'-0"	2'-0"	1'-0"	1'-0"	1'-0"	3'-0"	
10'	1'-0"	1'-0"	1'-6"	4'-0"	1'-0"	1'-0"	2'-6"	*	1'-0"	1'-0"	1'-0"	3'-0"	1'-0"	1'-0"	1'-6"	4'-0"	
12'	1'-0"	1'-0"	2'-6"	5'-6"	1'-0"	1'-0"	3'-6"	*	1'-0"	1'-0"	2'-0"	4'-6"	1'-0"	1'-0"	2'-6"	5'-6"	
14'	1'-0"	1'-0"	3'-6"	*	1'-0"	2'-0"	4'-6"	*	1'-0"	1'-0"	3'-0"	5'-6"	1'-0"	1'-6"	4'-0"	6'-6"	
16'	1'-0"	2'-0"	4'-6"	*	1'-0"	3'-0"	6'-0"	*	1'-0"	1'-6"	4'-0"	7'-0"	1'-0"	2'-6"	5'-0"	*	
18'	1'-0"	3'-0"	6'-0"	*	1'-6"	4'-0"	7'-0"	*	1'-0"	3'-0"	5'-6"	8'-0"	1'-6"	4'-0"	6'-6"	*	
20'	1'-6"	4'-0"	7'-0"	*	3'-0"	5'-6"	8'-6"	*	1'-6"	4'-0"	6'-6"	9'-6"	2'-6"	5'-0"	7'-6"	*	
22'	2'-6"	5'-6"	8'-6"	*	4'-0"	6'-6"	9'-6"	*	2'-6"	5'-0"	8'-0"	*	4'-0"	6'-0"	9'-0"	*	
24'	3'-6"	6'-6"	9'-6"	*	5'-0"	8'-0"	11'-0"	*	4'-0"	6'-6"	9'-0"	*	5'-0"	7'-6"	10'-0"	*	
26'	5'-0"	7'-6"	11'-0"	*	6'-0"	9'-0"	12'-6"	*	5'-0"	7'-6"	10'-6"	*	6'-0"	8'-6"	11'-6"	*	
28'	6'-0"	9'-0"	12'-0"	*	7'-6"	10'-6"	13'-6"	*	6'-0"	8'-6"	11'-6"	*	7'-0"	10'-0"	12'-6"	*	
30'	7'-0"	10'-0"	13'-6"	*	8'-6"	11'-6"	*	*	7'-0"	10'-0"	13'-0"	*	8'-6"	11'-0"	14'-0"	*	
32'	8'-0"	11'-6"	15'-0"	*	10'-0"	13'-0"	*	*	8'-6"	11'-0"	14'-0"	*	9'-6"	12'-6"	15'-6"	*	
34'	9'-6"	12'-6"	16'-0"	*	11'-0"	14'-0"	*	*	9'-6"	12'-6"	15'-6"	*	11'-0"	13'-6"	16'-6"	*	

NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-4 are for uniformly loaded maximum loads of 100 psf live loads and 35 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 4		SQUARE HOLES															
Minimum distance from inside face of any support to the centerline of hole										JOIST DEPTH • HOLE SIZE [IN]							
Span [ft]	18"				20"				22"				24"				
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"	
8'	1' - 0"	1' - 0"	1' - 0"	2' - 6"	1' - 0"	1' - 0"	2' - 0"	*	1' - 0"	1' - 0"	1' - 6"	3' - 0"	1' - 0"	1' - 0"	2' - 6"	*	
10'	1' - 0"	1' - 0"	2' - 6"	4' - 0"	1' - 0"	1' - 6"	3' - 0"	*	1' - 0"	1' - 0"	2' - 6"	4' - 6"	1' - 0"	2' - 0"	4' - 0"	*	
12'	1' - 0"	2' - 0"	3' - 6"	5' - 0"	1' - 6"	3' - 0"	4' - 6"	*	1' - 0"	2' - 0"	4' - 0"	5' - 6"	1' - 6"	3' - 6"	5' - 0"	*	
14'	1' - 6"	3' - 0"	4' - 6"	6' - 6"	2' - 6"	4' - 0"	5' - 6"	*	2' - 0"	3' - 6"	5' - 0"	*	3' - 0"	4' - 6"	6' - 6"	*	
16'	2' - 6"	4' - 0"	6' - 0"	7' - 6"	3' - 6"	5' - 0"	7' - 0"	*	3' - 0"	4' - 6"	6' - 6"	*	4' - 0"	5' - 6"	7' - 6"	*	
18'	4' - 0"	5' - 6"	7' - 0"	*	4' - 6"	6' - 6"	8' - 6"	*	4' - 0"	6' - 0"	7' - 6"	*	5' - 0"	7' - 0"	*	*	
20'	5' - 0"	6' - 6"	8' - 6"	*	6' - 0"	7' - 6"	9' - 6"	*	5' - 6"	7' - 0"	9' - 0"	*	6' - 6"	8' - 0"	*	*	
22'	6' - 0"	8' - 0"	9' - 6"	*	7' - 0"	9' - 0"	*	*	6' - 6"	8' - 0"	10' - 0"	*	7' - 6"	9' - 6"	*	*	
24'	7' - 6"	9' - 0"	11' - 0"	*	8' - 6"	10' - 0"	*	*	7' - 6"	9' - 6"	11' - 6"	*	9' - 0"	11' - 0"	*	*	
26'	8' - 6"	10' - 6"	12' - 0"	*	9' - 6"	11' - 6"	*	*	9' - 0"	11' - 0"	*	*	10' - 0"	12' - 0"	*	*	
28'	10' - 0"	11' - 6"	13' - 6"	*	11' - 0"	13' - 0"	*	*	10' - 0"	12' - 0"	*	*	11' - 6"	13' - 6"	*	*	
30'	11' - 0"	13' - 0"	*	*	12' - 0"	14' - 0"	*	*	11' - 6"	13' - 6"	*	*	12' - 6"	14' - 6"	*	*	
32'	12' - 6"	14' - 0"	*	*	13' - 6"	15' - 6"	*	*	12' - 6"	14' - 6"	*	*	14' - 0"	*	*	*	
34'	13' - 6"	15' - 6"	*	*	14' - 6"	16' - 6"	*	*	14' - 0"	16' - 0"	*	*	15' - 0"	*	*	*	



DO NOT
cut or notch
flange

DO
cut in web area
as specified

AJS® Joists are manufactured with 1 1/2" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1 1/2"

TABLE 1

ROUND HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 5/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	2' - 0"	3' - 6"	-	-	1' - 0"	2' - 0"	-	-	1' - 0"	2' - 0"	2' - 6"	-	1' - 0"	1' - 0"	1' - 0"	2' - 6"
10'	3' - 0"	*	-	-	1' - 6"	3' - 0"	-	-	1' - 0"	2' - 0"	3' - 6"	-	1' - 0"	1' - 0"	2' - 0"	4' - 0"
12'	4' - 0"	*	-	-	3' - 0"	4' - 6"	-	-	1' - 6"	3' - 0"	4' - 6"	-	1' - 0"	2' - 0"	3' - 6"	5' - 0"
14'	5' - 6"	*	-	-	4' - 0"	5' - 6"	-	-	2' - 6"	4' - 0"	6' - 0"	-	1' - 6"	3' - 0"	4' - 6"	6' - 6"
16'	6' - 6"	*	-	-	5' - 0"	7' - 0"	-	-	4' - 0"	5' - 6"	7' - 0"	-	2' - 6"	4' - 0"	6' - 0"	7' - 6"
18'	8' - 0"	*	-	-	6' - 6"	8' - 0"	-	-	5' - 0"	6' - 6"	8' - 6"	-	4' - 0"	5' - 6"	7' - 0"	*
20'	9' - 0"	*	-	-	7' - 6"	9' - 6"	-	-	6' - 0"	8' - 0"	9' - 6"	-	5' - 0"	6' - 6"	8' - 0"	*
22'	10' - 6"	*	-	-	9' - 0"	10' - 6"	-	-	7' - 6"	9' - 0"	*	-	6' - 0"	8' - 0"	9' - 6"	*
24'	*	*	-	-	10' - 0"	*	-	-	8' - 6"	10' - 6"	*	-	7' - 6"	9' - 0"	10' - 6"	*
26'	-	-	-	-	11' - 6"	*	-	-	10' - 0"	11' - 6"	*	-	8' - 6"	10' - 0"	12' - 0"	*
28'	-	-	-	-	12' - 6"	*	-	-	11' - 0"	13' - 0"	*	-	9' - 6"	11' - 6"	13' - 6"	*
30'	-	-	-	-	-	-	-	-	12' - 6"	14' - 0"	*	-	11' - 0"	12' - 6"	14' - 6"	*
32'	-	-	-	-	-	-	-	-	13' - 6"	15' - 6"	*	-	12' - 0"	14' - 0"	*	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	13' - 6"	15' - 0"	*	*

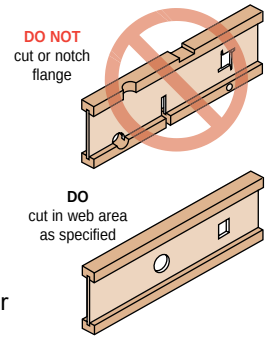
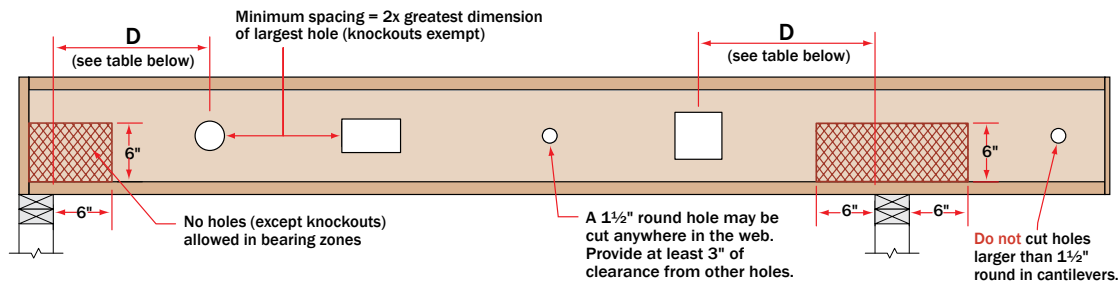
NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-4 are for uniformly loaded maximum loads of 100 psf live loads and 45 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 2

SQUARE HOLES

Minimum distance from inside face of any support to the centerline of hole					JOIST DEPTH • HOLE SIZE [IN]											
Span [ft]	9 1/2"				11 5/8"				14"				16"			
	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"	3"	6"	9"	12"
8'	2' - 6"	3' - 6"	-	-	2' - 0"	2' - 6"	-	-	1' - 0"	2' - 0"	3' - 0"	-	1' - 0"	1' - 6"	2' - 6"	3' - 6"
10'	4' - 0"	*	-	-	3' - 0"	4' - 0"	-	-	2' - 0"	3' - 0"	4' - 6"	-	1' - 6"	2' - 6"	3' - 6"	*
12'	5' - 0"	*	-	-	4' - 0"	5' - 0"	-	-	3' - 6"	4' - 6"	5' - 6"	-	2' - 6"	3' - 6"	5' - 0"	*
14'	6' - 6"	*	-	-	5' - 6"	6' - 6"	-	-	4' - 6"	5' - 6"	*	-	3' - 6"	5' - 0"	6' - 0"	*
16'	7' - 6"	*	-	-	6' - 6"	7' - 6"	-	-	5' - 6"	7' - 0"	*	-	5' - 0"	6' - 0"	7' - 6"	*
18'	*	*	-	-	8' - 0"	*	-	-	7' - 0"	8' - 0"	*	-	6' - 0"	7' - 6"	8' - 6"	*
20'	*	*	-	-	9' - 0"	*	-	-	8' - 0"	9' - 6"	*	-	7' - 6"	8' - 6"	*	*
22'	*	*	-	-	10' - 6"	*	-	-	9' - 6"	10' - 6"	*	-	8' - 6"	10' - 0"	*	*
24'	*	*	-	-	11' - 6"	*	-	-	10' - 6"	*	*	-	10' - 0"	11' - 0"	*	*
26'	-	-	-	-	*	*	-	-	12' - 0"	*	*	-	11' - 0"	12' - 6"	*	*
28'	-	-	-	-	*	*	-	-	13' - 0"	*	*	-	12' - 6"	13' - 6"	*	*
30'	-	-	-	-	-	-	-	-	14' - 6"	*	*	-	13' - 6"	*	*	*
32'	-	-	-	-	-	-	-	-	15' - 6"	*	*	-	15' - 0"	*	*	*
34'	-	-	-	-	-	-	-	-	-	-	-	-	16' - 0"	*	*	*



AJS® Joists are manufactured with 1½" round perforated knockouts in the web at approximately 12" on center. Minimum distance from support, listed in table below, is required for all holes greater than 1½"

Minimum distance from inside face of any support to the centerline of hole																JOIST DEPTH • HOLE SIZE [IN]			
Span [ft]	18"				20"				22"				24"						
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"			
8'	1'-0"	1'-0"	1'-0"	3'-0"	1'-0"	1'-0"	1'-6"	*	1'-0"	1'-0"	1'-0"	2'-0"	1'-0"	1'-0"	1'-0"	3'-0"			
10'	1'-0"	1'-0"	1'-6"	4'-6"	1'-0"	1'-0"	2'-6"	*	1'-0"	1'-0"	1'-0"	3'-6"	1'-0"	1'-0"	2'-0"	4'-0"			
12'	1'-0"	1'-0"	2'-6"	5'-6"	1'-0"	1'-6"	3'-6"	*	1'-0"	1'-0"	2'-0"	4'-6"	1'-0"	1'-0"	3'-0"	5'-6"			
14'	1'-0"	1'-6"	4'-0"	*	1'-0"	2'-6"	5'-0"	*	1'-0"	1'-0"	3'-6"	6'-0"	1'-0"	2'-0"	4'-0"	6'-6"			
16'	1'-0"	2'-6"	5'-0"	*	1'-0"	3'-6"	6'-0"	*	1'-0"	2'-0"	4'-6"	7'-0"	1'-0"	3'-0"	5'-6"	*			
18'	1'-0"	3'-6"	6'-0"	*	2'-0"	4'-6"	7'-6"	*	1'-0"	3'-6"	5'-6"	8'-6"	2'-0"	4'-0"	6'-6"	*			
20'	2'-0"	4'-6"	7'-6"	*	3'-6"	6'-0"	8'-6"	*	2'-0"	4'-6"	7'-0"	9'-6"	3'-0"	5'-6"	8'-0"	*			
22'	3'-0"	5'-6"	8'-6"	*	4'-6"	7'-0"	10'-0"	*	3'-6"	5'-6"	8'-0"	*	4'-6"	6'-6"	9'-0"	*			
24'	4'-0"	7'-0"	10'-0"	*	5'-6"	8'-0"	11'-0"	*	4'-6"	6'-6"	9'-6"	*	5'-6"	7'-6"	10'-6"	*			
26'	5'-6"	8'-0"	11'-0"	*	6'-6"	9'-6"	12'-6"	*	5'-6"	8'-0"	10'-6"	*	6'-6"	9'-0"	11'-6"	*			
28'	6'-6"	9'-6"	12'-6"	*	8'-0"	10'-0"	13'-6"	*	6'-6"	9'-0"	12'-0"	*	8'-0"	10'-0"	13'-0"	*			
30'	7'-6"	10'-6"	13'-6"	*	9'-0"	12'-0"	*	*	8'-0"	10'-6"	13'-0"	*	9'-0"	11'-6"	14'-0"	*			
32'	9'-0"	11'-6"	15'-0"	*	10'-6"	13'-0"	*	*	9'-0"	11'-6"	14'-6"	*	10'-0"	12'-6"	15'-6"	*			
34'	10'-0"	13'-0"	16'-0"	*	11'-6"	14'-6"	*	*	10'-0"	12'-6"	15'-6"	*	11'-6"	14'-0"	16'-6"	*			

NOTES:

- Hole may be positioned vertically anywhere in the web.
- Tables 1-4 are for uniformly loaded maximum loads of 100 psf live loads and 45 psf dead loads on simple span application.
- For other load conditions or hole sizes, contact your local distributor.
- It may be possible to exceed the limitations of those tables by analyzing a specific situation with the BC CALC® Software.
- * = Holes may be acceptable, contact your local distributor.

TABLE 4		SQUARE HOLES															
Minimum distance from inside face of any support to the centerline of hole												JOIST DEPTH • HOLE SIZE [IN]					
Span [ft]	18"				20"				22"				24"				
	3"	6"	9"	12"	6"	9"	12"	15"	6"	9"	12"	15"	9"	12"	15"	18"	
8'	1'-0"	1'-0"	1'-6"	3'-0"	1'-0"	1'-0"	2'-0"	*	1'-0"	1'-0"	1'-6"	3'-0"	1'-0"	1'-0"	2'-6"	*	
10'	1'-0"	1'-0"	2'-6"	4'-0"	1'-0"	2'-0"	3'-6"	*	1'-0"	1'-6"	3'-0"	4'-6"	1'-0"	2'-6"	4'-0"	*	
12'	1'-0"	2'-0"	3'-6"	5'-0"	1'-6"	3'-0"	4'-6"	*	1'-0"	2'-6"	4'-0"	5'-6"	2'-0"	3'-6"	5'-0"	*	
14'	2'-0"	3'-6"	5'-0"	6'-6"	3'-0"	4'-0"	6'-0"	*	2'-0"	3'-6"	5'-0"	*	3'-0"	4'-6"	6'-6"	*	
16'	3'-0"	4'-6"	6'-0"	*	4'-0"	5'-6"	7'-0"	*	3'-6"	5'-0"	6'-6"	*	4'-6"	6'-0"	7'-6"	*	
18'	4'-0"	5'-6"	7'-6"	*	5'-0"	6'-6"	8'-6"	*	4'-6"	6'-0"	7'-6"	*	5'-6"	7'-0"	*	*	
20'	5'-6"	7'-0"	8'-6"	*	6'-6"	8'-0"	9'-6"	*	5'-6"	7'-6"	9'-0"	*	6'-6"	8'-6"	*	*	
22'	6'-6"	8'-0"	10'-0"	*	7'-6"	9'-0"	*	*	7'-0"	8'-6"	10'-6"	*	8'-0"	9'-6"	*	*	
24'	7'-6"	9'-6"	11'-0"	*	8'-6"	10'-6"	*	*	8'-0"	9'-6"	11'-6"	*	9'-0"	11'-0"	*	*	
26'	9'-0"	10'-6"	12'-6"	*	10'-0"	11'-6"	*	*	9'-6"	11'-0"	*	*	10'-6"	12'-0"	*	*	
28'	10'-0"	12'-0"	13'-6"	*	11'-0"	13'-0"	*	*	10'-6"	12'-0"	*	*	11'-6"	13'-6"	*	*	
30'	11'-6"	13'-0"	*	*	12'-6"	14'-0"	*	*	11'-6"	13'-6"	*	*	13'-0"	14'-6"	*	*	
32'	12'-6"	14'-6"	*	*	13'-6"	15'-6"	*	*	13'-0"	15'-0"	*	*	14'-0"	*	*	*	
34'	14'-0"	15'-6"	*	*	15'-0"	16'-6"	*	*	14'-0"	16'-0"	*	*	15'-6"	*	*	*	

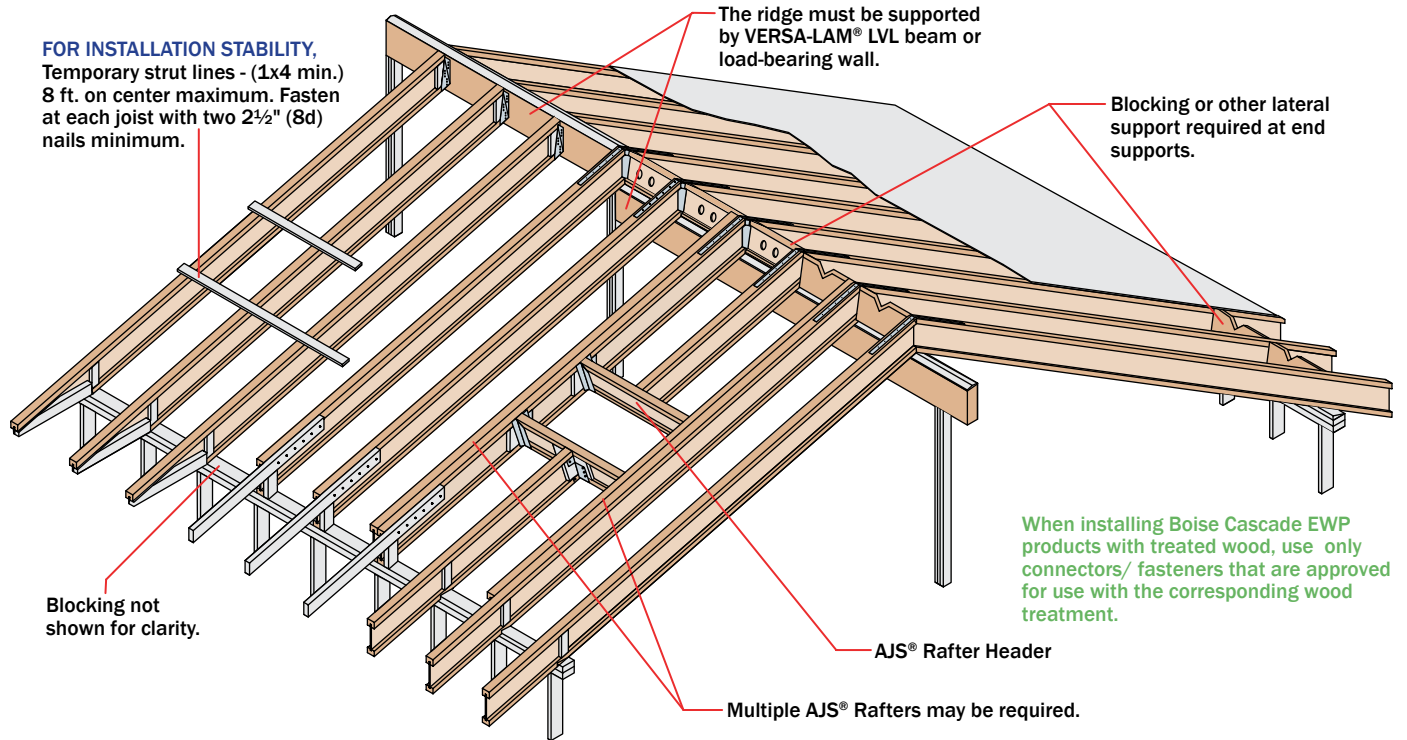
Specified Shear Strength [plf] for Diaphragms with AJS® Joists Framing

Common nail diameter	Minimum nail penetration in framing	Minimum panel thickness	Minimum width of framing member	Blocked horizontal diaphragms			Unblocked horizontal diaphragms	
				Nail spacing at diaphragm boundaries and at continuous panel edges parallel to load			Nails spaced at 6" max. at supported edges	
				in			Case 1	Case 2, 3 & 4
				6	4	3		
				Nail spacing at other panel edges				
				in				
(in)	(in)	(in)	(in)	6	6	4		
0.112	1.220	0.295	1.5	252	334	499	225	164
			2.5	285	373	565	252	186
		0.374	1.5	274	373	559	247	186
			2.5	312	417	625	274	208
0.128	1.496	0.374	1.5	356	477	735	323	241
			2.5	400	537	806	356	269
		0.433	1.5	378	504	751	345	252
			2.5	428	565	850	378	285
		0.492	1.5	400	537	789	356	269
			2.5	450	598	894	395	296
0.144	1.614	0.492	1.5	433	576	855	378	285
			2.5	482	641	970	433	323
		0.610	1.5	477	636	954	428	323
			2.5	537	713	1074	477	356
		0.728	1.5		959	1392		
			2.5		1118	1601		

NOTES:

- Tabulated values are in accordance with the specified shear strength values from CSA 086 - table 9.5.2 that were multiplied by the SPF factor (as per CSA 086 - section 9.4.3).
- Nails should be staggered around diaphragm perimeter.
- Tabulated values are based on dry service conditions, standard-term duration of load, and apply to nailed shear panels using structural wood-based panels.
- Nails shall be space 12" on centre along intermediate framing members.
- Nails should be staggered at adjoining panel edges.
- For diaphragms fabricated with nails having a diameter that deviates from the diameter specified in this table (diameters within 80% of the standard common nail diameter), the tabulated values should be adjusted by $(d_{F1}/d_{F2})^2$ where:
 d_{F1} = diameter of the nail being considered
 d_{F2} = diameter of the common wire nail given in this table

AJS® Rafters



SAFETY WARNING

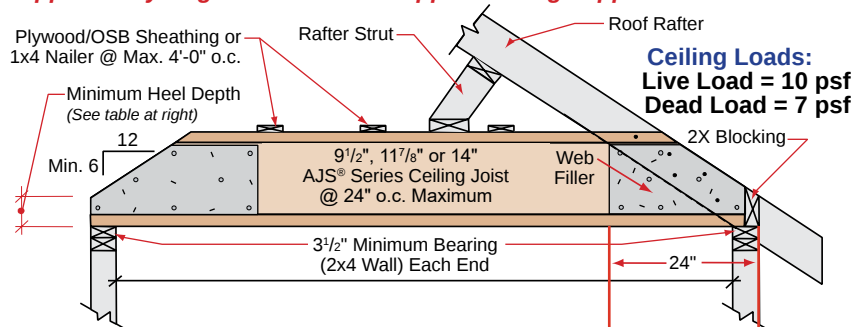
DO NOT ALLOW WORKERS ON AJS® JOISTS UNTIL ALL HANGERS, AJS® RIM JOISTS, RIM BOARDS, AJS® BLOCKING PANELS, X-BRACING AND TEMPORARY 1x4 STRUT LINES ARE INSTALLED AS SPECIFIED BELOW.

SERIOUS ACCIDENTS CAN RESULT FROM INSUFFICIENT ATTENTION TO PROPER BRACING DURING CONSTRUCTION. ACCIDENTS CAN BE AVOIDED UNDER NORMAL CONDITIONS BY FOLLOWING THESE GUIDELINES:

- Build a braced end wall at the end of the bay, or permanently install the first eight feet of AJS® Joists and the first course of sheathing. As an alternate, temporary sheathing may be nailed to the first four feet of AJS® Joists at the end of the bay.
- All hangers, AJS® rim joists, rim boards, AJS® blocking panels, and x-bracing must be completely installed and properly nailed as each AJS® Joist is set.
- Install temporary 1x4 strut lines at no more than eight feet on center as additional AJS® Joists are set. Nail the strut lines to the sheathed area, or braced end wall, and to each AJS® Joist with two 2½" (8d) nails.
- The ends of cantilevers must be temporarily secured by strut lines on both the top and bottom flanges.
- Straighten the AJS® Joist to within ½ inch of true alignment before attaching strut lines and sheathing.
- Remove the temporary strut lines only as required to install the permanent sheathing.
- Failure to install temporary bracing may result in sideways buckling or roll-over under light construction loads.

AJS® Ceiling Joist with Bevel End Cut (For Limited-Access Attics Only)

AJS® Joist shall not be used as collar/tension tie. Roof rafter shall be supported by ridge beam or other upper bearing support.



Maximum Span Lengths Without Roof Loads

9½" AJS® 140, 20, 25	19'-6"
11⅞" AJS® 140, 20, 25	22'-0"
14" AJS® 140, 20, 25	25'-0"

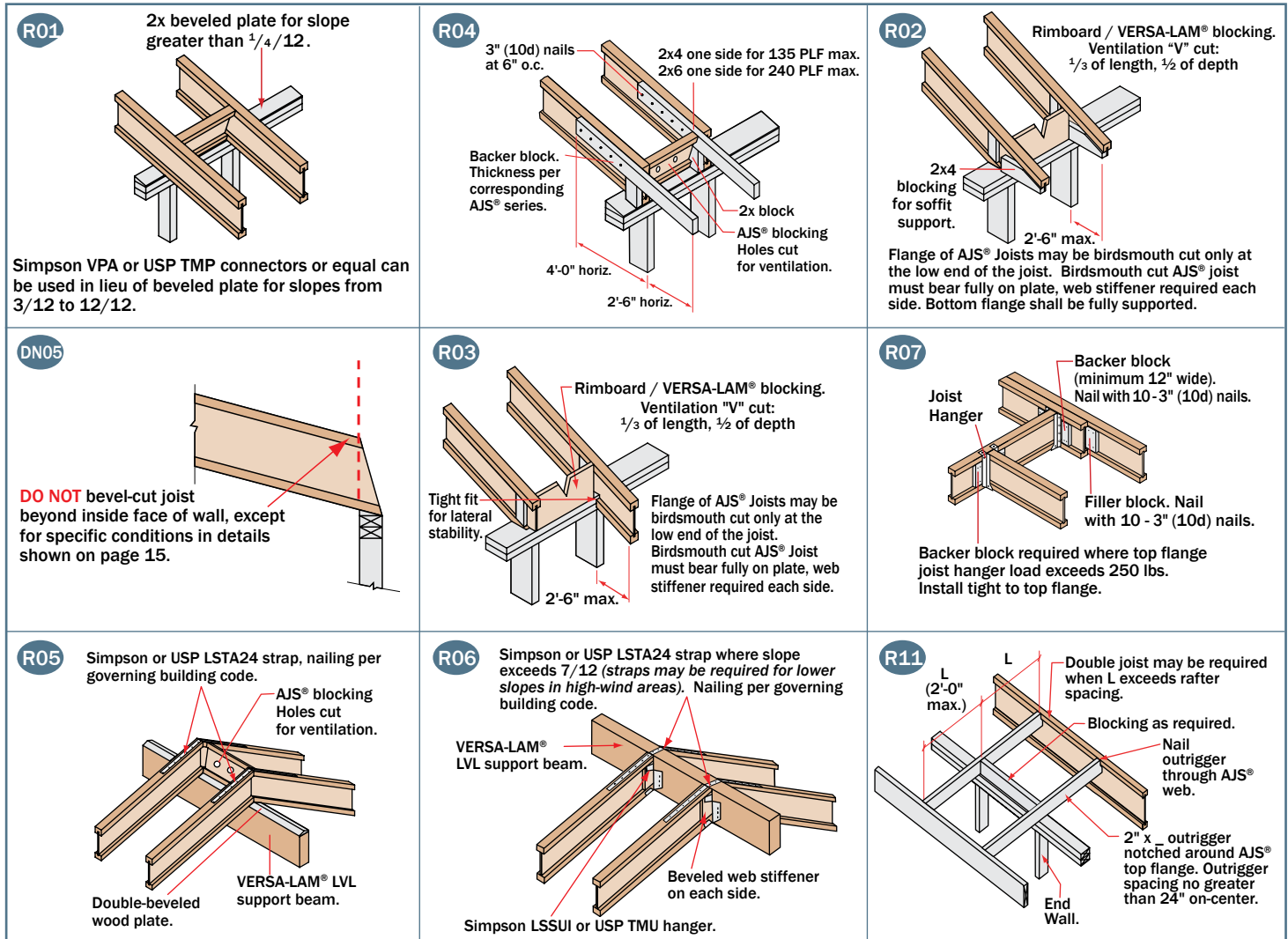
(If roof loads present, see Notes 2 & 3 at right)

Minimum Heel Depths	Joist Depth	End Wall	
		2 x 4	2 x 6
	9½"	2½"	1½"
	11⅞"	3½"	2½"
	14"	4½"	3½"

NOTES:

- Detail is to be used only for ceiling joists with no access to attic space.
- Ceiling joist must be designed to carry all roof load transferred through rafter struts as shown.
- AJS® ceiling joist end reaction may not exceed 550 pounds.
- Minimum roof slope is 6/12.
- Nail roof rafter to AJS® top flange with 1-3½" (16d) sinker or box nail.
- 1x4 nailers must be continuous and nailed to a braced end wall.
- Install a web stiffener on each side of AJS® Joist at beveled ends. Nail roof rafter to AJS® Joist per building code requirements for ceiling joist to roof rafter connection.

Additional roof framing details available with BC FRAMER® software



LATERAL SUPPORT

- AJS® Joists must be laterally supported at the ends with hangers, AJS® rim joists, rim boards, AJS® blocking panels or x-bracing. AJS® blocking panels or x-bracing are required at cantilever supports.
- Blocking may be required at intermediate bearings for floor diaphragm as per Code, consult local building official.

MINIMUM BEARING LENGTH FOR AJS® JOISTS

- 1½ inches is required at end supports (1¾ inches for 18" to 24" deep). 3½ inches is required at cantilever and intermediate supports.
- Longer bearing lengths allow higher reaction values. Refer to the building code evaluation report or the BC CALC® software.

NAILING REQUIREMENTS

- AJS® rim joist, rim board or closure panel to AJS® Joist:
 - Rims or closure panel 1¾ inches thick and less: 2-2½" (8d) nails, one each in the top and bottom flange.
 - AJS® 140/20/190 rim joist: 2-3½" (16d) box nails, one each in the top and bottom flange.
 - AJS® 25/30 rim joist: Toe-nail top flange to rim joist with 2-3" (10d) box nails, one each side of flange.
- AJS® rim joist, rim board or AJS® blocking panel to support:
 - 2½" (8d) nails at 6 inches on center.

- When used for shear transfer, follow the building designer's specification.
- AJS® Joist to support:
 - 2-2½" (8d) nails, one on each side of the web, placed 1½ inches minimum from the end of the AJS® Joist to limit splitting.
- Sheathing to AJS® Joist:
 - Prescriptive residential roof sheathing nailing requires 2½" (8d) common nails @ 6" o.c. on edges and @ 12" o.c. in the field as per Code.
 - Maximum nail spacing for minimum lateral stability = 24".
 - 14 gauge staples may be substituted for 2½" (8d) nails if the staples penetrate at least 1 inch into the joist.
 - Wood screws may be acceptable, contact local building official and/or Boise Cascade EWP Engineering for further information.

BACKER AND FILLER BLOCK DIMENSIONS

Series	Backer Block Thickness	Filler Block Thickness
AJS® 140	1½" or two ¾" wood panels	2 x ¾" wood panel
AJS® 20/190	1½" or two ¾" wood panels	2 x ¾" wood panel
AJS® 25/30	2 x _ lumber	Double 2 x _ lumber

- Cut backer and filler blocks to a maximum depth equal to the web depth minus ¼" to avoid a forced fit.
- For deeper AJS® 25/30 Joists, stack 2x lumber or use multiple pieces of ¾" wood panels.

WEB STIFFENER REQUIREMENTS

- See *Web Stiffener Requirements* on page 25.

MAXIMUM SLOPE

- Unless otherwise noted, all roof details are valid for slopes of 12 in 12 or less.

VENTILATION

- The 1½ inch, pre-stamped knock-out holes spaced at 12 inches on center along the AJS® Joist may all be knocked out and used for cross ventilation. Deeper joists than what is structurally needed may be advantageous in ventilation design. Consult local building official and/or ventilation specialist for specific ventilation requirements.

BIRDSMOUTH CUTS

- AJS® Joists may be birdsmouth cut only at the low end support. AJS® Joists with birdsmouth cuts may cantilever up to 2'-6" past the low end support. The bottom flange must sit fully on the support and may not overhang the inside face of the support. High end supports and intermediate supports may not be birdsmouth cut.

PROTECT AJS® JOISTS FROM THE WEATHER

- AJS® Joists are intended only for applications that provide permanent protection from the weather. Bundles of AJS® Joists should be covered and stored off of the ground on stickers.

ROOF SPAN TABLES (30/25 - 40/25)

43

Loads	Series	Depth (in)	Roof Pitch = 6:12 (or less) o.c. spacing				Roof Pitch = 6:12 to 12:12 o.c. spacing			
			12"	16"	19,2"	24"	12"	16"	19,2"	24"
Snow Load = 30 psf Dead Load = 25 psf - Concentrated Live Load of 292 lb	AJS® 140	9½"	18'-10"	16'-9"	15'-5"	14'-0"	17'-8"	15'-7"	14'-5"	13'-0"
		11⅞"	22'-0"	19'-5"	17'-11"	16'-1"	20'-7"	18'-1"	16'-8"	15'-0"
	AJS® 20	9½"	22'-0"	19'-11"	18'-9"	16'-7"	19'-6"	17'-8"	16'-7"	15'-4"
		11⅞"	26'-3"	23'-3"	21'-2"	18'-10"	23'-3"	21'-1"	19'-10"	16'-10"
		14"	29'-5"	25'-6"	23'-3"	19'-2"	26'-6"	24'-0"	21'-5"	17'-2"
		16"	31'-9"	27'-6"	24'-4"	19'-5"	29'-5"	25'-9"	21'-9"	17'-5"
	AJS® 190	18"	36'-4"	31'-5"	28'-8"	25'-7"	32'-11"	29'-7"	27'-0"	24'-2"
		20"	38'-5"	33'-3"	30'-4"	27'-1"	35'-8"	31'-4"	28'-7"	25'-6"
	AJS® 25	9½"	24'-6"	22'-2"	20'-10"	18'-1"	21'-9"	19'-8"	18'-6"	16'-2"
		11⅞"	29'-3"	26'-6"	23'-7"	18'-10"	25'-11"	23'-6"	21'-1"	16'-10"
		14"	33'-3"	28'-9"	23'-11"	19'-2"	29'-5"	25'-9"	21'-5"	17'-2"
		16"	36'-10"	29'-2"	24'-4"	19'-5"	32'-8"	26'-2"	21'-9"	17'-5"
		18"	40'-6"	36'-8"	33'-6"	30'-0"	35'-11"	32'-6"	30'-7"	28'-3"
		20"	43'-10"	38'-11"	35'-6"	31'-8"	38'-10"	35'-3"	33'-1"	29'-10"
		22"	47'-2"	40'-9"	37'-2"	33'-2"	41'-9"	37'-10"	34'-11"	31'-5"
		24"	49'-1"	42'-6"	38'-9"	34'-8"	44'-8"	40'-0"	36'-4"	32'-9"
	AJS® 30	18"	41'-10"	37'-11"	35'-7"	33'-0"	37'-1"	33'-7"	31'-7"	29'-2"
		20"	45'-4"	41'-1"	38'-7"	35'-3"	40'-2"	36'-5"	34'-2"	31'-8"
		22"	48'-8"	44'-1"	41'-5"	37'-0"	43'-2"	39'-1"	36'-9"	34'-0"
		24"	52'-0"	47'-1"	43'-2"	38'-7"	46'-1"	41'-9"	39'-3"	36'-4"

Loads	Series	Depth (in)	Roof Pitch = 6:12 (or less) o.c. spacing				Roof Pitch = 6:12 to 12:12 o.c. spacing			
			12"	16"	19,2"	24"	12"	16"	19,2"	24"
Snow Load = 40 psf Dead Load = 25 psf - Concentrated Live Load of 292 lb	AJS® 140	9½"	18'-6"	15'-10"	14'-5"	12'-10"	17'-0"	15'-1"	13'-9"	12'-3"
		11⅞"	20'-11"	18'-1"	16'-6"	14'-8"	19'-11"	17'-3"	15'-8"	14'-0"
	AJS® 20	9½"	20'-0"	18'-1"	17'-0"	15'-2"	18'-5"	16'-8"	15'-7"	13'-10"
		11⅞"	23'-11"	21'-4"	19'-5"	15'-10"	22'-0"	19'-11"	18'-1"	14'-5"
		14"	27'-3"	23'-5"	20'-2"	16'-1"	25'-1"	22'-1"	18'-4"	14'-8"
		16"	29'-2"	24'-7"	20'-5"	16'-4"	27'-10"	22'-4"	18'-8"	14'-11"
	AJS® 190	18"	33'-4"	28'-10"	26'-3"	23'-6"	31'-2"	27'-6"	25'-1"	22'-5"
		20"	35'-3"	30'-6"	27'-10"	24'-10"	33'-7"	29'-1"	26'-6"	23'-8"
	AJS® 25	9½"	22'-3"	20'-2"	18'-11"	15'-2"	20'-6"	18'-7"	17'-5"	13'-10"
		11⅞"	26'-7"	23'-10"	19'-10"	15'-10"	24'-6"	21'-8"	18'-1"	14'-5"
		14"	30'-3"	24'-2"	20'-2"	16'-1"	27'-10"	22'-1"	18'-4"	14'-8"
		16"	32'-9"	24'-7"	20'-5"	16'-4"	29'-10"	22'-4"	18'-8"	14'-11"
		18"	36'-10"	33'-5"	30'-9"	27'-6"	34'-0"	30'-9"	28'-10"	26'-3"
		20"	39'-11"	35'-8"	32'-6"	29'-1"	36'-10"	33'-4"	31'-0"	27'-9"
		22"	42'-11"	37'-4"	34'-1"	30'-5"	39'-7"	35'-10"	32'-6"	29'-1"
		24"	45'-0"	39'-0"	35'-7"	31'-9"	42'-4"	37'-2"	33'-11"	30'-4"
	AJS® 30	18"	38'-1"	34'-6"	32'-4"	29'-11"	35'-1"	31'-9"	29'-10"	27'-7"
		20"	41'-3"	37'-4"	35'-1"	32'-5"	38'-0"	34'-5"	32'-4"	29'-10"
		22"	44'-4"	40'-2"	37'-8"	33'-11"	40'-10"	37'-0"	34'-9"	31'-8"
		24"	47'-4"	42'-10"	39'-7"	35'-6"	43'-8"	39'-6"	37'-1"	32'-4"

NOTES:

- Spans shown are in accordance with NBCC2010.
- Maximum spans listed are the clear horizontal spans between supports (simple/multiple spans, or one span + 2 ft overhang).
- Minimum end bearing length is 1½" for 9½" to 16" depths and 1¼" for 18" to 24" depths.
- Web stiffeners are required at ALL bearing supports and concentrated load locations for all 18" to 24" deep joists.
- Total load deflection is limited to L/180.**
- Live load deflection is limited to L/360.**
- A concentrated live load of 292 lbs over an area of 0.656 x 0.656 (ft x ft) was also considered as per NBCC 2010 - 4.1.5.9.
- Spans shown have not been evaluated for snow drift.
- Lateral support must be provided for the compression edge and also at the bearings to prevent lateral displacement or rotation.
- The specified snow loads are reduced by the importance factor (IS = 0.9) for deflection calculations.
- When using continuous spans over an intermediate bearing, the shortest span shall not be less than 50% of the longest adjacent span. The end of the short span should be anchored to resist the uplift to:

$$\text{Uplift} = L_2 \cdot (\text{factor}_1 \cdot W_{FD} - W_{FL}) / \text{factor}_2$$

Where:

W_{FD} = Factored dead load (lb/ft)

W_{FL} = Factored live load (lb/ft)

L_1 = Length of shorter span (ft)

L_2 = Length of longer span (ft)

$\text{factor}_1 = 4a^2 + 3a^3 - 1$

$\text{factor}_2 = 8a(1+a)$

a = Short span/Long span

Short/Long span ratio = a	0.5	0.6	0.7	0.8	0.9	1
factor1	0.38	1.09	1.99	3.10	4.43	6.00
factor2	6	7.68	9.52	11.52	13.68	16

Loads	Series	Depth (in)	Roof Pitch = 6:12 (or less) o.c. spacing				Roof Pitch = 6:12 to 12:12 o.c. spacing			
			12"	16"	19,2"	24"	12"	16"	19,2"	24"
Snow Load = 50 psf Dead Load = 25 psf - Concentrated Live Load of 292 lb	AJS® 140	9½"	17'-1"	14'-8"	13'-4"	11'-11"	15'-9"	14'-3"	12'-10"	11'-5"
		11⅞"	19'-5"	16'-9"	15'-3"	13'-8"	18'-7"	16'-1"	14'-8"	12'-7"
	AJS® 20	9½"	18'-6"	16'-9"	15'-8"	13'-1"	17'-1"	15'-5"	14'-5"	12'-0"
		11⅞"	22'-2"	19'-9"	17'-1"	13'-8"	20'-5"	18'-5"	15'-9"	12'-7"
		14"	25'-2"	20'-11"	17'-5"	13'-11"	23'-2"	19'-3"	16'-1"	12'-10"
		16"	27'-1"	21'-2"	17'-8"	14'-1"	25'-9"	19'-6"	16'-3"	13'-0"
	AJS® 190	18"	30'-11"	26'-9"	24'-5"	21'-10"	28'-11"	25'-8"	23'-5"	20'-11"
		20"	32'-9"	28'-4"	25'-10"	23'-1"	31'-4"	27'-2"	24'-9"	22'-2"
	AJS® 25	9½"	20'-7"	18'-8"	16'-5"	13'-1"	19'-0"	17'-2"	15'-1"	12'-0"
		11⅞"	24'-7"	20'-7"	17'-1"	13'-8"	22'-8"	18'-11"	15'-9"	12'-7"
		14"	27'-10"	20'-11"	17'-5"	13'-11"	25'-8"	19'-3"	16'-1"	12'-10"
		16"	28'-3"	21'-2"	17'-8"	14'-1"	26'-1"	19'-6"	16'-3"	13'-0"
		18"	34'-2"	30'-11"	28'-7"	25'-6"	31'-6"	28'-6"	26'-8"	24'-8"
		20"	37'-0"	33'-1"	30'-2"	27'-0"	34'-1"	30'-10"	28'-11"	25'-11"
		20"	39'-9"	34'-8"	31'-8"	28'-3"	36'-8"	33'-2"	30'-5"	27'-2"
		24"	41'-10"	36'-2"	33'-0"	29'-6"	39'-2"	34'-9"	31'-8"	28'-3"
	AJS® 30	18"	35'-3"	31'-11"	29'-11"	27'-1"	32'-6"	29'-5"	27'-7"	25'-0"
		20"	38'-2"	34'-7"	32'-5"	29'-4"	35'-2"	31'-10"	29'-10"	27'-0"
		20"	41'-0"	37'-2"	34'-10"	30'-0"	37'-10"	34'-3"	32'-1"	27'-8"
		24"	43'-10"	39'-8"	36'-9"	30'-8"	40'-5"	36'-7"	34'-4"	28'-3"

Loads	Series	Depth (in)	Roof Pitch = 6:12 (or less) o.c. spacing				Roof Pitch = 6:12 to 12:12 o.c. spacing			
			12"	16"	19,2"	24"	12"	16"	19,2"	24"
Snow Load = 60 psf Dead Load = 25 psf - Concentrated Live Load of 292 lb	AJS® 140	9½"	16'-1"	13'-9"	12'-6"	11'-2"	14'-9"	13'-4"	12'-1"	10'-8"
		11⅞"	18'-2"	15'-9"	14'-4"	12'-0"	17'-8"	15'-2"	14'-0"	11'-2"
	AJS® 20	9½"	17'-4"	15'-8"	14'-5"	11'-6"	16'-0"	14'-5"	13'-6"	10'-8"
		11⅞"	20'-9"	18'-1"	15'-1"	12'-0"	19'-1"	16'-10"	14'-0"	11'-2"
		14"	23'-8"	18'-5"	15'-4"	12'-3"	21'-9"	17'-1"	14'-3"	11'-5"
		16"	24'-10"	18'-8"	15'-6"	12'-5"	23'-2"	17'-4"	14'-5"	11'-7"
	AJS® 190	18"	29'-0"	25'-1"	22'-10"	20'-5"	27'-1"	24'-2"	22'-1"	19'-8"
		20"	30'-8"	26'-6"	24'-2"	21'-7"	29'-5"	25'-7"	23'-4"	20'-6"
	AJS® 25	9½"	19'-4"	17'-6"	14'-5"	11'-6"	17'-9"	16'-1"	13'-5"	10'-8"
		11⅞"	23'-1"	18'-1"	15'-1"	12'-0"	21'-3"	16'-10"	14'-0"	11'-2"
		14"	24'-6"	18'-5"	15'-4"	12'-3"	22'-10"	17'-1"	14'-3"	11'-5"
		16"	24'-10"	18'-8"	15'-6"	12'-5"	23'-2"	17'-4"	14'-5"	11'-7"
		18"	32'-1"	29'-0"	26'-9"	23'-10"	29'-6"	26'-8"	25'-0"	22'-2"
		20"	34'-9"	31'-1"	28'-4"	25'-4"	32'-0"	28'-11"	27'-2"	24'-0"
		20"	37'-4"	32'-6"	29'-8"	26'-5"	34'-5"	31'-1"	28'-7"	24'-7"
		24"	39'-3"	33'-11"	30'-11"	27'-0"	36'-9"	32'-9"	29'-10"	25'-1"
	AJS® 30	18"	33'-1"	29'-11"	28'-1"	23'-10"	30'-6"	27'-7"	25'-10"	22'-2"
		20"	35'-10"	32'-5"	30'-5"	25'-9"	33'-0"	29'-10"	28'-0"	24'-0"
		20"	38'-6"	34'-10"	32'-8"	26'-5"	35'-6"	32'-1"	30'-1"	24'-7"
		24"	41'-2"	37'-3"	33'-9"	27'-0"	37'-11"	34'-4"	31'-5"	25'-1"

NOTES:

- Spans shown are in accordance with NBCC2010.
- Maximum spans listed are the clear horizontal spans between supports (simple/multiple spans, or one span + 2 ft overhang).
- Minimum end bearing length is 1½" for 9½" to 16" depths and 1¾" for 18" to 24" depths.
- Web stiffeners are required at ALL bearing supports and concentrated load locations for all 18" to 24" deep joists.
- Total load deflection is limited to L/180.**
- Live load deflection is limited to L/360.**
- A concentrated live load of 292 lbs over an area of 0.656 x 0.656 (ft x ft) was also considered as per NBCC 2010 - 4.1.5.9.
- Spans shown have not been evaluated for snow drift.
- Lateral support must be provided for the compression edge and also at the bearings to prevent lateral displacement or rotation.
- The specified snow loads are reduced by the importance factor (IS = 0.9) for deflection calculations.
- When using continuous spans over an intermediate bearing, the shortest span shall not be less than 50% of the longest adjacent span. The end of the short span should be anchored to resist the uplift equal to:

$$\text{Uplift} = L_2 \cdot (\text{factor}_1 \cdot W_{FD} - W_{FL}) / \text{factor}_2$$

Where:

 W_{FD} = Factored dead load (lb/ft) W_{FL} = Factored live load (lb/ft) L_1 = Length of shorter span (ft) L_2 = Length of longer span (ft) $\text{factor}_1 = 4a^2 + 3a^3 - 1$ $\text{factor}_2 = 8a(1+a)$ a = Short span/Long span

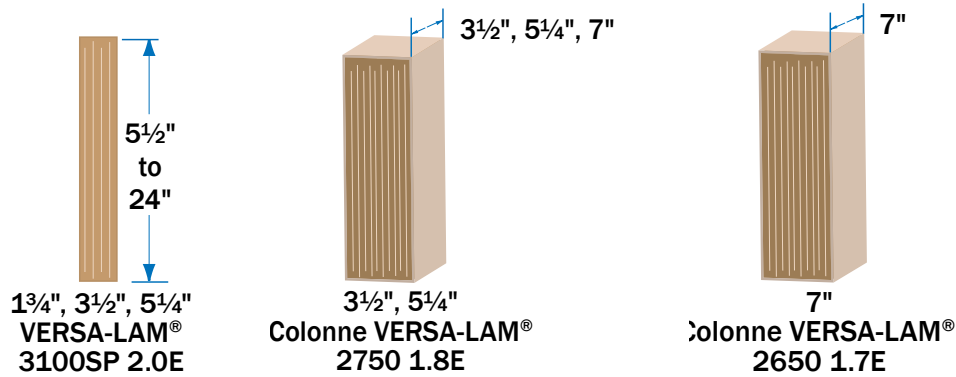
Short/Long span ratio = a	0.5	0.6	0.7	0.8	0.9	1
factor1	0.38	1.09	1.99	3.10	4.43	6.00
factor2	6	7.68	9.52	11.52	13.68	16

Design Span (ft)	Joist Series	AJS® 140		AJS® 20				AJS® 190		AJS® 25								AJS 30			
		9½	11½	9½	11½	14	16	18	20	9½	11½	14	16	18	20	22	24	18	20	22	24
6	Unfactored snow Load for L / 240 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	488	501	488	501	505	510	918	918	488	501	505	510	993	1075	1100	1124	993	1075	1100	1124
8	Unfactored snow Load for L / 240 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	366	376	366	376	378	382	688	688	366	376	378	382	745	806	825	843	745	806	825	843
10	Unfactored snow Load for L / 240 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	292	301	292	301	303	306	550	550	292	301	303	306	596	645	660	674	596	645	660	674
12	Unfactored snow Load for L / 240 [plf]	207	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	244	250	244	250	252	255	459	459	244	250	252	255	496	537	550	562	496	537	550	562
14	Unfactored snow Load for L / 240 [plf]	134	-	167	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	179	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	209	215	209	215	216	218	393	393	209	215	216	218	425	460	471	482	425	460	471	482
16	Unfactored snow Load for L / 240 [plf]	92	153	115	-	-	-	-	-	155	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	122	-	153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	183	188	183	188	189	191	344	344	183	188	189	191	372	403	412	421	372	403	412	421
18	Unfactored snow Load for L / 240 [plf]	65	109	82	136	-	-	-	-	111	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	87	146	109	-	-	-	-	-	148	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	162	167	162	167	168	170	306	306	162	167	168	170	331	358	366	374	331	358	366	374
20	Unfactored snow Load for L / 240 [plf]	48	81	60	101	146	-	272	-	82	136	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	64	108	81	135	-	-	-	-	110	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	146	150	146	150	151	153	275	275	146	150	151	153	298	322	330	337	298	322	330	337
22	Unfactored snow Load for L / 240 [plf]	36	61	46	77	111	-	208	-	62	104	-	-	264	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	48	82	61	102	-	-	-	-	83	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	133	136	133	136	137	139	250	250	133	136	137	139	270	293	300	306	270	293	300	306
24	Unfactored snow Load for L / 240 [plf]	28	47	35	60	87	117	163	205	49	81	117	-	207	259	-	-	226	-	-	-
	Unfactored Total Load for L / 180 [plf]	37	63	47	80	116	-	217	-	65	108	-	-	-	-	-	-	-	-	-	-
	Factored Total Load [plf]	122	125	122	125	126	127	229	229	122	125	126	127	248	268	275	281	248	268	275	281
26	Unfactored snow Load for L / 240 [plf]	22	37	28	47	69	93	129	163	38	64	93	-	165	207	-	-	180	226	-	-
	Unfactored Total Load for L / 180 [plf]	29	50	37	63	92	-	173	-	51	86	-	-	220	-	-	-	-	-	-	-
	Factored Total Load [plf]	112	115	112	115	116	117	211	211	112	115	116	117	229	248	254	259	229	248	254	259
28	Unfactored snow Load for L / 240 [plf]	17	30	22	38	55	75	104	132	31	52	75	101	133	168	206	-	146	184	225	-
	Unfactored Total Load for L / 180 [plf]	23	40	30	51	74	100	139	176	41	69	100	-	178	224	-	-	195	-	-	-
	Factored Total Load [plf]	104	107	104	107	108	109	196	196	104	107	108	109	212	230	235	241	212	230	235	241
30	Unfactored snow Load for L / 240 [plf]	14	24	18	31	45	61	85	108	25	42	61	83	109	138	169	205	120	151	185	223
	Unfactored Total Load for L / 180 [plf]	19	33	24	41	60	82	114	144	34	57	82	-	146	184	-	-	160	201	-	-
	Factored Total Load [plf]	97	100	97	100	101	102	183	183	97	100	101	102	198	215	220	224	198	215	220	224

NOTES:

1. Total Factored Load values are limited by shear, end/interior reactions or bending moment.
2. Unfactored Snow Load values are limited by deflection equal to L / 240. For deflections limited to L / 360, multiply snow load values by 0.67.
3. Unfactored Total Load values are limited by deflection equal to L / 180.
4. All three loading cases must be checked. Where a Snow Load value is not shown, the Factored Total Load value will control.
5. Joists deeper than 16" require web stiffeners at all bearing locations.
6. Table values represent the most restrictive of simple or continuous span beams applications and assume an uniform loading. Span is measured center to center of the supports. Analyze continuous span beams with the BC Calc software if the length of any span is less than half the length of an adjacent span.
7. Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
8. Table values do not consider composite action from gluing and nailing floor sheathing
9. Total Factored Load values assume minimum bearing lengths without web stiffeners for joist depths of 16 inches or less. 18 to 24 inch joists require web stiffeners.
10. For 2-ply, double the Factored Total Load, Unfactored Snow and Total Load values.
11. This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

Deflection limit	Actual deflection based on Span and Limit (in)								
	Span (ft)								
	6	8	10	12	15	18	20	25	30
L/360	0.20	0.27	0.33	0.40	0.50	0.60	0.67	0.83	1.00
L/240	0.30	0.40	0.50	0.60	0.75	0.90	1.00	1.25	1.50
L/180	0.40	0.53	0.67	0.80	1.00	1.20	1.33	1.67	2.00



DESIGN PROPERTIES

Width	Depth	Size factor	Weight	Factored Shear Resistance (Joist), V _r	Factored Bending Resistance (Joist), M _r	Stiffness, EI	Modulus of Elasticity, E	Specified Bending Strength (Joist), f _b	Specified Shear Strength (Joist), f _v	Specified Compression Parallel to Grain, f _c	Specified Compression Perpendicular to Grain, f _{cp}
(in)	(in)		(lb/ft)	(lb)	(lb-ft)	(x10 ⁶ lb-in ²)	(x10 ⁶ psi)	(psi)	(psi)	(psi)	(psi)
VERSA-LAM® COLUMN 2750Fb 1.8E DESIGN PROPERTIES											
3½	3½	1.15	3.5	4 263	3 451	23	1.8	5 615	580	5 300	1 525
3½	5¼	1.10	5.3	6 395	7 422	76					
3½	7	1.06	7.1	8 526	12 780	180					
5¼	5¼	1.10	7.9	9 592	11 133	114					
5¼	7	1.06	10.6	12 789	19 170	270					
VERSA-LAM® COLUMN 2650Fb 1.7E DESIGN PROPERTIES											
7	7	1.06	12.6	17 052	24 040	340	1.7	5 281	580	4396	1525
VERSA-LAM® 3100Fb 2.0E DESIGN PROPERTIES											
1¾	5½	1.09	2.8	3350	4252	49	2.0	6 270	580	5 300	1 525
	7¼	1.06	3.7	4 415	7 624	111					
	9¼	1.03	4.7	5 633	12 080	231					
	9½	1.03	4.8	5 786	12 704	250					
	11¼	1.01	5.7	6 851	17 484	415					
	11½	1.00	6.0	7 232	19 364	488					
	14	0.98	7.1	8 526	26 426	800					
	16	0.97	8.1	9 744	34 007	1 195					
	18	0.96	9.1	10 962	42 481	1 701					
3½	20	0.94	10.1	12 180	51 835	2 333	2.0	6 270	580	5 300	1 525
	5½	1.09	5.5	6 699	9 049	97					
	7¼	1.06	7.3	8 831	15 249	222					
	9¼	1.03	9.3	11 267	24 160	462					
	9½	1.03	9.6	11 571	25 408	500					
	11¼	1.01	11.3	13 703	34 968	831					
	11½	1.00	12.0	14 464	38 727	977					
	14	0.98	14.1	17 052	52 852	1 601					
	16	0.97	16.1	19 488	68 015	2 389					
5¼	18	0.96	18.2	21 924	84 962	3 402	2.0	6 270	580	5 300	1 525
	20	0.94	20.2	24 360	103 671	4 667					
	5½	1.09	8.3	10 049	13 574	146					
	7¼	1.06	11.0	13 246	22 873	333					
	9¼	1.03	14.0	16 900	36 239	692					
	9½	1.03	14.4	17 357	38 112	750					
	11¼	1.01	17.0	20 554	52 451	1 246					
	11½	1.00	18.0	21 696	58 091	1 465					
	14	0.98	21.2	25 578	79 278	2 401					

NOTES:

- Repetitive member factor has not been applied to the Factored Bending Resistance.
- Size factors have been applied to the Factored Bending Resistance.
- VERSA-LAM® Specific Gravity for fasteners design = 0.5
- Specified compression perpendicular to grain on plank orientation (plate) is 809 psi.

VERSA-LAM® 3100Fb 2.0E Allowable Floor uniform Load (lbs/ft)

LL /360; TL/240

Design Span [ft]	Beam Thickness	1 3/4" - 1 Ply										
	Beam Depth	7 1/4"	9 1/4"	9 1/2"	11 1/4"	11 1/8"	14"	16"	18"	20"	22"	24"
6' - 0"	Unfactored Live Load for L / 360 [plf]	762	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	1399	1885	1950	2429	2613	3292	4022	-	-	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	4 / 10	5.5 / 13.25	5.5 / 13.75	7 / 17	7.5 / 18.25	9.25 / 23	11.25 / 28.25	-	-	-	-
	Bearing Lengths [End / Int.] - beam [in]	2 / 5	2.75 / 6.75	2.75 / 7	3.5 / 8.75	3.75 / 9.25	4.75 / 11.75	5.75 / 14.25	-	-	-	-
8' - 0"	Unfactored Live Load for L / 360 [plf]	321	667	723	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	478	-	-	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	947	1326	1369	1679	1796	2215	-	-	-	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	3.75 / 9	5 / 12.5	5.25 / 12.75	6.25 / 15.75	6.75 / 16.75	8.25 / 20.75	-	-	-	-	-
	Bearing Lengths [End / Int.] - beam [in]	2 / 4.5	2.5 / 6.25	2.75 / 6.5	3.25 / 8	3.5 / 8.5	4.25 / 10.5	-	-	-	-	-
10' - 0"	Unfactored Live Load for L / 360 [plf]	164	341	370	615	723	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	243	508	550	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	604	959	1009	1282	1367	1668	1972	2296	-	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	3 / 7.25	4.5 / 11.25	4.75 / 11.75	6 / 15	6.5 / 16	8 / 19.5	9.25 / 23	10.75 / 26.75	-	-	-
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.75	2.25 / 5.75	2.5 / 6	3.25 / 7.75	3.25 / 8.25	4 / 10	4.75 / 11.75	5.5 / 13.5	-	-	-
12' - 0"	Unfactored Live Load for L / 360 [plf]	95	197	214	355	418	686	1024	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	139	292	316	528	622	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	418	664	699	963	1067	1337	1570	1816	2075	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	2.5 / 6	3.75 / 9.5	4 / 9.75	5.5 / 13.5	6 / 15	7.5 / 18.75	9 / 22	10.25 / 25.5	11.75 / 29	-	-
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	2 / 4.75	2 / 5	2.75 / 7	3.25 / 7.75	4 / 9.5	4.5 / 11.25	5.25 / 13	6 / 14.75	-	-
14' - 0"	Unfactored Live Load for L / 360 [plf]	59	124	134	224	263	432	644	918	-	-	-
	Unfactored Total Load for L / 240 [plf]	86	182	197	330	389	641	-	-	-	-	-
	Factored Total Load, Wf [plf]	306	486	512	706	782	1069	1304	1501	1707	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	2 / 5	3.25 / 8	3.5 / 8.5	4.75 / 11.5	5.25 / 12.75	7 / 17.5	8.5 / 21.25	10 / 24.5	11.25 / 28	-	-
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	1.75 / 4	1.75 / 4.25	2.5 / 6	2.75 / 6.5	3.75 / 9	4.5 / 10.75	5 / 12.5	5.75 / 14.25	-	-
16' - 0"	Unfactored Live Load for L / 360 [plf]	-	83	90	150	176	289	432	615	843	-	-
	Unfactored Total Load for L / 240 [plf]	-	120	130	219	258	427	639	-	-	-	-
	Factored Total Load, Wf [plf]	-	371	390	538	597	816	1051	1278	1449	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	3 / 7	3 / 7.5	4.25 / 10.25	4.5 / 11.25	6.25 / 15.25	8 / 19.75	9.75 / 24	11 / 27	-	-
	Bearing Lengths [End / Int.] - beam [in]	-	1.5 / 3.5	1.5 / 3.75	2.25 / 5.25	2.25 / 5.75	3.25 / 7.75	4 / 10	5 / 12	5.5 / 13.75	-	-
18' - 0"	Unfactored Live Load for L / 360 [plf]	-	58	63	105	124	203	303	432	592	788	-
	Unfactored Total Load for L / 240 [plf]	-	83	90	152	180	297	447	639	-	-	-
	Factored Total Load, Wf [plf]	-	292	307	424	470	643	829	1036	1258	1409	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	2.5 / 6.25	2.75 / 6.5	3.75 / 9	4 / 10	5.5 / 13.5	7 / 17.5	8.75 / 21.75	10.75 / 26.5	12 / 29.5	-
	Bearing Lengths [End / Int.] - beam [in]	-	1.5 / 3.5	1.5 / 3.5	2 / 4.5	2 / 5	2.75 / 7	3.5 / 8.75	4.5 / 11	5.5 / 13.5	6 / 15	-
20' - 0"	Unfactored Live Load for L / 360 [plf]	-	42	46	76	90	148	221	314	432	575	746
	Unfactored Total Load for L / 240 [plf]	-	59	64	109	129	215	323	463	638	-	-
	Factored Total Load, Wf [plf]	-	235	247	342	379	519	669	837	1023	1226	1377
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	2.25 / 5.5	2.5 / 6	3.25 / 8	3.75 / 9	5 / 12.25	6.25 / 15.75	8 / 19.5	9.75 / 24	11.5 / 28.5	13 / 32
	Bearing Lengths [End / Int.] - beam [in]	-	1.5 / 3.5	1.5 / 3.5	1.75 / 4.25	2 / 4.5	2.5 / 6.25	3.25 / 8	4 / 10	5 / 12	5.75 / 14.5	6.5 / 16.25
22' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	57	67	111	166	236	324	432	560
	Unfactored Total Load for L / 240 [plf]	-	-	-	80	95	159	241	345	476	636	-
	Factored Total Load, Wf [plf]	-	-	-	281	312	427	551	690	843	1011	1193
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	3 / 7.25	3.25 / 8	4.5 / 11	5.75 / 14.25	7.25 / 17.75	8.75 / 21.75	10.5 / 26	12.25 / 30.5
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	1.5 / 3.75	1.75 / 4.25	2.25 / 5.75	3 / 7.25	3.75 / 9	4.5 / 11	5.25 / 13.25	6.25 / 15.5
24' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	44	52	85	127	182	250	332	432
	Unfactored Total Load for L / 240 [plf]	-	-	-	61	72	121	183	264	364	488	636
	Factored Total Load, Wf [plf]	-	-	-	235	261	357	461	578	706	847	1000
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	2.75 / 6.75	3 / 7.5	4 / 10	5.25 / 13	6.5 / 16.25	8 / 19.75	9.5 / 23.75	11.25 / 28
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	1.5 / 3.5	1.5 / 3.75	2.25 / 5.25	2.75 / 6.5	3.5 / 8.25	4 / 10	5 / 12	5.75 / 14.25
26' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	41	67	100	143	196	261	339	432
	Unfactored Total Load for L / 240 [plf]	-	-	-	55	94	142	205	284	381	497	636
	Factored Total Load, Wf [plf]	-	-	-	221	303	392	491	600	720	849	1000
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	2.75 / 6.75	3.75 / 9.25	4.75 / 12	6 / 15	7.5 / 18.25	8.75 / 21.75	10.5 / 25.75	12.25 / 30.5
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	1.5 / 3.5	2 / 4.75	2.5 / 6	3 / 7.5	3.75 / 9.25	4.5 / 11	5.25 / 13	6.25 / 15.5
28' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	-	53	80	114	157	209	272	339
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	73	112	163	226	303	395	497
	Factored Total Load, Wf [plf]	-	-	-	-	260	336	421	515	618	730	849
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	-	3.5 / 8.5	4.5 / 11	5.5 / 13.75	6.75 / 17	8.25 / 20.25	9.75 / 24	11.25 / 28
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	-	1.75 / 4.5	2.25 / 5.75	3 / 7	3.5 / 8.5	4.25 / 10.25	5 / 12	5.75 / 14.25
30' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	-	43	65	93	127	170	221	272
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	58	90	130	181	244	319	395
	Factored Total Load, Wf [plf]	-	-	-	-	225	291	365	447	537	634	730
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	-	3.25 / 8	4.25 / 10.25	5.25 / 13	6.25 / 15.75	7.5 / 18.75	9 / 22.25	10.5 / 25.75
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	-	1.75 / 4	2.25 / 5.25	2.75 / 6.5	3.25 / 8	4 / 9.5	4.5 / 11.25	5.25 / 13

NOTES:

- Factored Total Load values are limited by shear or moment. Total Load values are given by the beam capacity in addition to its own weight.
- All 3 loading cases must be checked. Where a Live Load value is not shown, the Factored Total Load value will control.
- Table values represent the most restrictive of simple or continuous span beams applications and assume a uniform loading. Span is measured center to center of the supports. Analyze continuous span beams with the BC CALC® software if the length of any span is less than half the length of an adjacent span.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the Total Factored

Load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.

- For 2-ply, 3-ply or 4-ply beams; double, triple or quadruple the Factored Total Load, Unfactored Live and Total Load values. Minimum Required Bearing Lengths remain the same for any number of plies.
- 1 3/4 inch members deeper than 14 inches are recommended to be used as multiple-member beams. See details for proper connection.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

Actual deflection based on Span and Limit (in)

Deflection limit	Span (ft)												
	6	8	10	12	14	16	18	20	22	24	26	28	30
L/360	0.20	0.27	0.33	0.40	0.47	0.53	0.60	0.67	0.73	0.80	0.87	0.93	1.00
L/240	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50

VERSA-LAM® 3100Fb 2.0E Allowable Floor uniform Load (lbs/ft)

LL /480; TL/240

Design Span [ft]	Beam Thickness	1½" - 1 Ply										
	Beam Depth	7¼"	9¼"	9½"	11¼"	11⅞"	14"	16"	18"	20"	22"	24"
6' - 0"	Unfactored Live Load for L / 480 [plf]	571	1187	1286	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	1399	1885	1950	2429	2613	3292	4022	-	-	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	4 / 10	5.5 / 13.25	5.5 / 13.75	7 / 17	7.5 / 18.25	9.25 / 23	11.25 / 28.25	-	-	-	-
	Bearing Lengths [End / Int.] - beam [in]	2 / 5	2.75 / 6.75	2.75 / 7	3.5 / 8.75	3.75 / 9.25	4.75 / 11.75	5.75 / 14.25	-	-	-	-
8' - 0"	Unfactored Live Load for L / 480 [plf]	241	500	542	901	1059	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	478	-	-	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	947	1326	1369	1679	1796	2215	2648	3121	-	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	3.75 / 9	5 / 12.5	5.25 / 12.75	6.25 / 15.75	6.75 / 16.75	8.25 / 20.75	10 / 24.75	11.75 / 29.25	-	-	-
	Bearing Lengths [End / Int.] - beam [in]	2 / 4.5	2.5 / 6.25	2.75 / 6.5	3.25 / 8	3.5 / 8.5	4.25 / 10.5	5 / 12.5	6 / 14.75	-	-	-
10' - 0"	Unfactored Live Load for L / 480 [plf]	123	256	277	461	542	889	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	243	508	550	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	604	959	1009	1282	1367	1668	1972	2296	2645	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	3 / 7.25	4.5 / 11.25	4.75 / 11.75	6 / 15	6.5 / 16	8 / 19.5	9.25 / 23	10.75 / 26.75	12.5 / 30.75	-	-
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.75	2.25 / 5.75	2.5 / 6	3.25 / 7.75	3.25 / 8.25	4 / 10	4.75 / 11.75	5.5 / 13.5	6.25 / 15.5	-	-
12' - 0"	Unfactored Live Load for L / 480 [plf]	71	148	160	266	314	514	768	1093	-	-	-
	Unfactored Total Load for L / 240 [plf]	139	292	316	528	622	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	418	664	699	963	1067	1337	1570	1816	2075	2351	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	2.5 / 6	3.75 / 9.5	4 / 9.75	5.5 / 13.5	6 / 15	7.5 / 18.75	9 / 22	10.25 / 25.5	11.75 / 29	13.25 / 33	-
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	2 / 4.75	2 / 5	2.75 / 7	3.25 / 7.75	4 / 9.5	4.5 / 11.25	5.25 / 13	6 / 14.75	6.75 / 16.75	-
14' - 0"	Unfactored Live Load for L / 480 [plf]	44	93	101	168	197	324	483	688	944	1257	-
	Unfactored Total Load for L / 240 [plf]	86	182	197	330	389	641	-	-	-	-	-
	Factored Total Load, Wf [plf]	306	486	512	706	782	1069	1304	1501	1707	1923	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	2 / 5	3.25 / 8	3.5 / 8.5	4.75 / 11.5	5.25 / 12.75	7 / 17.5	8.5 / 21.25	10 / 24.5	11.25 / 28	12.75 / 31.5	-
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	1.75 / 4	1.75 / 4.25	2.5 / 6	2.75 / 6.5	3.75 / 9	4.5 / 10.75	5 / 12.5	5.75 / 14.25	6.5 / 16	-
16' - 0"	Unfactored Live Load for L / 480 [plf]	-	62	67	112	132	217	324	461	632	842	-
	Unfactored Total Load for L / 240 [plf]	-	120	130	219	258	427	639	-	-	-	-
	Factored Total Load, Wf [plf]	-	371	390	538	597	816	1051	1278	1449	1627	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	3 / 7	3 / 7.5	4.25 / 10.25	4.5 / 11.25	6.25 / 15.25	8 / 19.75	9.75 / 24	11 / 27	12.25 / 30.25	-
	Bearing Lengths [End / Int.] - beam [in]	-	1.5 / 3.5	1.5 / 3.75	2.25 / 5.25	2.25 / 5.75	3.25 / 7.75	4 / 10	5 / 12	5.5 / 13.75	6.25 / 15.25	-
18' - 0"	Unfactored Live Load for L / 480 [plf]	-	43	47	79	92	152	227	324	444	591	768
	Unfactored Total Load for L / 240 [plf]	-	83	90	152	180	297	447	639	-	-	-
	Factored Total Load, Wf [plf]	-	292	307	424	470	643	829	1036	1258	1409	1565
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	2.5 / 6.25	2.75 / 6.5	3.75 / 9	4 / 10	5.5 / 13.5	7 / 17.5	8.75 / 21.75	10.75 / 26.5	12 / 29.5	13.25 / 32.75
	Bearing Lengths [End / Int.] - beam [in]	-	1.5 / 3.5	1.5 / 3.5	2 / 4.5	2 / 5	2.75 / 7	3.5 / 8.75	4.5 / 11	5.5 / 13.5	6 / 15	6.75 / 16.75
20' - 0"	Unfactored Live Load for L / 480 [plf]	-	-	-	57	67	111	165	236	324	431	559
	Unfactored Total Load for L / 240 [plf]	-	-	-	109	129	215	323	463	638	-	-
	Factored Total Load, Wf [plf]	-	-	-	342	379	519	669	837	1023	1226	1377
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	3.25 / 8	3.75 / 9	5 / 12.25	6.25 / 15.75	8 / 19.5	9.75 / 24	11.5 / 28.5	13 / 32
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	1.75 / 4.25	2 / 4.5	2.5 / 6.25	3.25 / 8	4 / 10	5 / 12	5.75 / 14.5	6.5 / 16.25
22' - 0"	Unfactored Live Load for L / 480 [plf]	-	-	-	43	50	83	124	177	243	324	420
	Unfactored Total Load for L / 240 [plf]	-	-	-	80	95	159	241	345	476	636	-
	Factored Total Load, Wf [plf]	-	-	-	281	312	427	551	690	843	1011	1193
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	3 / 7.25	3.25 / 8	4.5 / 11	5.75 / 14.25	7.25 / 17.75	8.75 / 21.75	10.5 / 26	12.25 / 30.5
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	1.5 / 3.75	1.75 / 4.25	2.25 / 5.75	3 / 7.25	3.75 / 9	4.5 / 11	5.25 / 13.25	6.25 / 15.5
24' - 0"	Unfactored Live Load for L / 480 [plf]	-	-	-	-	64	95	136	187	249	324	-
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	121	183	264	364	488	636	-
	Factored Total Load, Wf [plf]	-	-	-	-	357	461	578	706	847	1000	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	-	4 / 10	5.25 / 13	6.5 / 16.25	8 / 19.75	9.5 / 23.75	11.25 / 28	-
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	-	2.25 / 5.25	2.75 / 6.5	3.5 / 8.25	4 / 10	5 / 12	5.75 / 14.25	-
26' - 0"	Unfactored Live Load for L / 480 [plf]	-	-	-	-	50	75	107	147	196	254	-
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	94	142	205	284	381	497	-
	Factored Total Load, Wf [plf]	-	-	-	-	303	392	491	600	720	849	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	-	3.75 / 9.25	4.75 / 12	6 / 15	7.5 / 18.25	8.75 / 21.75	10.5 / 25.75	-
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	-	2 / 4.75	2.5 / 6	3 / 7.5	3.75 / 9.25	4.5 / 11	5.25 / 13	-
28' - 0"	Unfactored Live Load for L / 480 [plf]	-	-	-	-	40	60	86	118	157	204	-
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	73	112	163	226	303	395	-
	Factored Total Load, Wf [plf]	-	-	-	-	260	336	421	515	618	730	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	-	3.5 / 8.5	4.5 / 11	5.5 / 13.75	6.75 / 17	8.25 / 20.25	9.75 / 24	-
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	-	1.75 / 4.5	2.25 / 5.75	3 / 7	3.5 / 8.5	4.25 / 10.25	5 / 12	-
30' - 0"	Unfactored Live Load for L / 480 [plf]	-	-	-	-	-	-	49	69	95	127	165
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	-	-	90	130	181	244	319
	Factored Total Load, Wf [plf]	-	-	-	-	-	-	291	365	447	537	634
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	-	-	-	4.25 / 10.25	5.25 / 13	6.25 / 15.75	7.5 / 18.75	9 / 22.25
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	-	-	-	2.25 / 5.25	2.75 / 6.5	3.25 / 8	4 / 9.5	4.5 / 11.25

NOTES:

- Factored Total Load values are limited by shear or moment. Total Load values are given by the beam capacity in addition to its own weight.
- All 3 loading cases must be checked. Where a Live Load value is not shown, the Factored Total Load value will control.
- Table values represent the most restrictive of simple or continuous span beams applications and assume a uniform loading. Span is measured center to center of the supports. Analyze continuous span beams with the BC CALC® software if the length of any span is less than half the length of an adjacent span.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the Total Factored

Load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.

- For 2-ply, 3-ply or 4-ply beams; double, triple or quadruple the Factored Total Load, Unfactored Live and Total Load values. Minimum Required Bearing Lengths remain the same for any number of plies.
- 1¾ inch members deeper than 14 inches are recommended to be used as multiple-member beams. See details for proper connection.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

Actual deflection based on Span and Limit (in)

Deflection limit	Span (ft)												
	6	8	10	12	14	16	18	20	22	24	26	28	30
L/480	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75
L/240	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50

VERSA-LAM® 3100Fb 2.0E Allowable Roof Uniform Load (lbs / ft)

SL /240; TL/180

Design Span [ft]	Beam Thickness	1½" - 1 Ply										
	Beam Depth	7¼"	9¼"	9½"	11¼"	11½"	14"	16"	18"	20"	22"	24"
6' - 0"	Unfactored Live Load for L / 240 [plf]	-	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	1399	1885	1950	2429	2613	3292	4022				
	Bearing Lengths [End / Int.] - SPF Plate [in]	4 / 10	5.5 / 13.25	5.5 / 13.75	7 / 17	7.5 / 18.25	9.25 / 23	11.25 / 28.25				
	Bearing Lengths [End / Int.] - beam [in]	2 / 5	2.75 / 6.75	2.75 / 7	3.5 / 8.75	3.75 / 9.25	4.75 / 11.75	5.75 / 14.25				
8' - 0"	Unfactored Live Load for L / 240 [plf]	482	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 2180 [plf]	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	947	1326	1369	1679	1796	2215	2648	3121			
	Bearing Lengths [End / Int.] - SPF Plate [in]	3.75 / 9	5 / 12.5	5.25 / 12.5	6.25 / 15.75	6.75 / 16.75	8.25 / 20.75	10 / 24.75	11.75 / 29.25			
	Bearing Lengths [End / Int.] - beam [in]	2 / 4.5	2.5 / 6.25	2.75 / 6.5	3.25 / 8	3.5 / 8.5	4.25 / 10.5	5 / 12.5	6 / 14.75			
10' - 0"	Unfactored Live Load for L / 240 [plf]	246	512	555	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	325	-	-	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	604	959	1009	1282	1367	1668	1972	2296	2645		
	Bearing Lengths [End / Int.] - SPF Plate [in]	3 / 7.25	4.5 / 11.25	4.75 / 11.75	6 / 15	6.5 / 16	8 / 19.5	9.25 / 23	10.75 / 26.75	12.5 / 30.75		
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.75	2.25 / 5.75	2.5 / 6	3.25 / 7.75	3.25 / 8.25	4 / 10	4.75 / 11.75	5.5 / 13.5	6.25 / 15.5		
12' - 0"	Unfactored Live Load for L / 240 [plf]	142	296	321	533	628	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	186	391	423	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	418	664	699	963	1067	1337	1570	1816	2075	2351	
	Bearing Lengths [End / Int.] - SPF Plate [in]	2.5 / 6	3.75 / 9.5	4 / 9.75	5.5 / 13.5	6 / 15	7.5 / 18.75	9 / 22	10.25 / 25.5	11.75 / 29	13.25 / 33	
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	2 / 4.75	2 / 5	2.75 / 7	3.25 / 7.75	4 / 9.5	4.5 / 11.25	5.25 / 13	6 / 14.75	6.75 / 16.75	
14' - 0"	Unfactored Live Load for L / 240 [plf]	89	186	202	336	395	648	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	116	244	265	442	521	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	306	486	512	706	782	1069	1304	1501	1707	1923	
	Bearing Lengths [End / Int.] - SPF Plate [in]	2 / 5	3.25 / 8	3.5 / 8.5	4.75 / 11.5	5.25 / 12.75	7 / 17.5	8.5 / 21.25	10 / 24.5	11.25 / 28	12.75 / 31.5	
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	1.75 / 4	1.75 / 4.25	2.5 / 6	2.75 / 6.5	3.75 / 9	4.5 / 10.75	5 / 12.5	5.75 / 14.25	6.5 / 16	
16' - 0"	Unfactored Live Load for L / 240 [plf]	60	125	135	225	264	434	648	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	76	162	176	294	347	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	233	371	390	538	597	816	1051	1278	1449	1627	
	Bearing Lengths [End / Int.] - SPF Plate [in]	1.75 / 4.5	3 / 7	3 / 7.5	4.25 / 10.25	4.5 / 11.25	6.25 / 15.25	8 / 19.75	9.75 / 24	11 / 27	12.25 / 30.25	
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	1.5 / 3.5	1.5 / 3.75	2.25 / 5.25	2.25 / 5.75	3.25 / 7.75	4 / 10	5 / 12	5.5 / 13.75	6.25 / 15.25	
18' - 0"	Unfactored Live Load for L / 240 [plf]	42	87	95	158	186	304	455	648	-	-	-
	Unfactored Total Load for L / 180 [plf]	52	112	122	205	242	399	-	-	-	-	-
	Factored Total Load, Wf [plf]	183	292	307	424	470	643	829	1036	1258	1409	1565
	Bearing Lengths [End / Int.] - SPF Plate [in]	1.75 / 4	2.5 / 6.25	2.75 / 6.5	3.75 / 9	4 / 10	5.5 / 13.5	7 / 17.5	8.75 / 21.75	10.75 / 26.5	12 / 29.5	13.25 / 32.75
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	2 / 4.5	2 / 5	2.75 / 7	3.5 / 8.75	4.5 / 11	5.5 / 13.5	6 / 15	6.75 / 16.75
20' - 0"	Unfactored Live Load for L / 240 [plf]	30	64	69	115	135	222	331	472	648	-	-
	Unfactored Total Load for L / 180 [plf]	37	80	87	148	174	289	434	-	-	-	-
	Factored Total Load, Wf [plf]	147	235	247	342	379	519	669	837	1023	1226	1377
	Bearing Lengths [End / Int.] - SPF Plate [in]	1.5 / 3.5	2.25 / 5.5	2.5 / 6	3.25 / 8	3.75 / 9	5 / 12.25	6.25 / 15.75	8 / 19.5	9.75 / 24	11.5 / 28.5	13 / 32
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.75 / 4.25	2 / 4.5	2.5 / 6.25	3.25 / 8	4 / 10	5 / 12	5.75 / 14.5	6.5 / 16.25
22' - 0"	Unfactored Live Load for L / 240 [plf]	-	48	52	86	101	166	249	354	486	648	-
	Unfactored Total Load for L / 180 [plf]	-	59	64	109	129	215	324	-	-	-	-
	Factored Total Load, Wf [plf]	-	193	203	281	312	427	551	690	843	1011	1193
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	2 / 5	2.25 / 5.25	3 / 7.25	3.25 / 8	4.5 / 11	5.75 / 14.25	7.25 / 17.75	8.75 / 21.75	10.5 / 26	12.25 / 30.5
	Bearing Lengths [End / Int.] - beam [in]	-	1.5 / 3.5	1.5 / 3.5	1.5 / 3.75	1.75 / 4.25	2.25 / 5.75	3 / 7.25	3.75 / 9	4.5 / 11	5.25 / 13.25	6.25 / 15.5
24' - 0"	Unfactored Live Load for L / 240 [plf]	-	37	40	66	78	128	191	273	375	499	648
	Unfactored Total Load for L / 180 [plf]	-	44	48	83	98	164	247	355	-	-	-
	Factored Total Load, Wf [plf]	-	161	170	235	261	357	461	578	706	847	1000
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	2 / 4.75	2 / 4.75	2.75 / 6.75	3 / 7.5	4 / 10	5.25 / 13	6.5 / 16.25	8 / 19.75	9.5 / 23.75	11.25 / 28
	Bearing Lengths [End / Int.] - beam [in]	-	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.75	2.25 / 5.25	2.75 / 6.5	3.5 / 8.25	4 / 10	5 / 12	5.75 / 14.25
26' - 0"	Unfactored Live Load for L / 240 [plf]	-	-	31	52	61	101	151	215	294	392	509
	Unfactored Total Load for L / 180 [plf]	-	-	37	64	76	127	193	277	383	-	-
	Factored Total Load, Wf [plf]	-	-	144	199	221	303	392	491	600	720	849
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	1.75 / 4.5	2.5 / 6.25	2.75 / 6.75	3.75 / 9.25	4.75 / 12	6 / 15	7.5 / 18.25	8.75 / 21.75	10.5 / 25.75
	Bearing Lengths [End / Int.] - beam [in]	-	-	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	2 / 4.75	2.5 / 6	3 / 7.5	3.75 / 9.25	4.5 / 11	5.25 / 13
28' - 0"	Unfactored Live Load for L / 240 [plf]	-	-	-	42	49	80	120	172	236	314	408
	Unfactored Total Load for L / 180 [plf]	-	-	-	50	59	100	153	220	304	408	-
	Factored Total Load, Wf [plf]	-	-	-	171	189	260	336	421	515	618	730
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	2.25 / 5.75	2.5 / 6.25	3.5 / 8.5	4.5 / 11	5.5 / 13.75	6.75 / 17	8.25 / 20.25	9.75 / 24
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	1.5 / 3.5	1.5 / 3.5	1.75 / 4.5	2.25 / 5.75	3 / 7	3.5 / 8.5	4.25 / 10.25	5 / 12
30' - 0"	Unfactored Live Load for L / 240 [plf]	-	-	-	34	40	65	98	139	191	255	331
	Unfactored Total Load for L / 180 [plf]	-	-	-	39	47	80	122	177	245	329	-
	Factored Total Load, Wf [plf]	-	-	-	148	164	225	291	365	447	537	634
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	2.25 / 5.25	2.5 / 5.75	3.25 / 8	4.25 / 10.25	5.25 / 13	6.25 / 15.75	7.5 / 18.75	9 / 22.25
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	1.5 / 3.5	1.5 / 3.5	1.75 / 4	2.25 / 5.25	2.75 / 6.5	3.25 / 8	4 / 9.5	4.5 / 11.25

NOTES:

- Factored Total Load values are limited by shear or moment. Total Load values are given by the beam capacity in addition to its own weight.
- All 3 loading cases must be checked. Where a Live Load value is not shown, the Factored Total Load value will control.
- Table values represent the most restrictive of simple or continuous span beams applications and assume a uniform loading. Span is measured center to center of the supports. Analyze continuous span beams with the BC CALC® software if the length of any span is less than half the length of an adjacent span.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the Total Factored

Load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.

- For 2-ply, 3-ply or 4-ply beams; double, triple or quadruple the Factored Total Load, Unfactored Live and Total Load values. Minimum Required Bearing Lengths remain the same for any number of plies.
- 1½ inch members deeper than 14 inches are recommended to be used as multiple-member beams. See details for proper connection.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

Actual deflection based on Span and Limit (in)

Deflection limit	Actual deflection based on Span and Limit (in)												
	Span (ft)												
	6	8	10	12	14	16	18	20	22	24	26	28	30
L/240	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
L/180	0.40	0.53	0.67	0.80	0.93	1.07	1.20	1.33	1.47	1.60	1.73	1.87	2.00

VERSA-LAM® 3100Fb 2.0E Allowable Roof Uniform Load (lbs / ft)

SL /360; TL/180

Design Span [ft]	Beam Thickness	1 3/4" - 1 Ply										
	Beam Depth	7 1/4"	9 1/4"	9 1/2"	11 1/4"	11 1/8"	14"	16"	18"	20"	22"	24"
6' - 0"	Unfactored Live Load for L / 360 [plf]	762	-	-	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	1399	1885	1950	2429	2613	3292	4022	-	-	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	4 / 10	5.5 / 13.25	5.5 / 13.75	7 / 17	7.5 / 18.25	9.25 / 23	11.25 / 28.25	-	-	-	-
	Bearing Lengths [End / Int.] - beam [in]	2 / 5	2.75 / 6.75	2.75 / 7	3.5 / 8.75	3.75 / 9.25	4.75 / 11.75	5.75 / 14.25	-	-	-	-
8' - 0"	Unfactored Live Load for L / 360 [plf]	321	667	723	-	-	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	-	-	-	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	947	1326	1369	1679	1796	2215	2648	3121	-	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	3.75 / 9	5 / 12.5	5.25 / 12.75	6.25 / 15.75	6.75 / 16.75	8.25 / 20.75	10 / 24.75	11.75 / 29.25	-	-	-
	Bearing Lengths [End / Int.] - beam [in]	2 / 4.5	2.5 / 6.25	2.75 / 6.5	3.25 / 8	3.5 / 8.5	4.25 / 10.5	5 / 12.5	6 / 14.75	-	-	-
10' - 0"	Unfactored Live Load for L / 360 [plf]	164	341	370	615	723	-	-	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	325	-	-	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	604	959	1009	1282	1367	1668	1972	2296	2645	-	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	3 / 7.25	4.5 / 11.25	4.75 / 11.75	6 / 15	6.5 / 16	8 / 19.5	9.25 / 23	10.75 / 26.75	12.5 / 30.75	-	-
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.75	2.25 / 5.75	2.5 / 6	3.25 / 7.75	3.25 / 8.25	4 / 10	4.75 / 11.75	5.5 / 13.5	6.25 / 15.5	-	-
12' - 0"	Unfactored Live Load for L / 360 [plf]	95	197	214	355	418	686	1024	-	-	-	-
	Unfactored Total Load for L / 180 [plf]	186	391	423	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	418	664	699	963	1067	1337	1570	1816	2075	2351	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	2.5 / 6	3.75 / 9.5	4 / 9.75	5.5 / 13.5	6 / 15	7.5 / 18.75	9 / 22	10.25 / 25.5	11.75 / 29	13.25 / 33	-
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	2 / 4.75	2 / 5	2.75 / 7	3.25 / 7.75	4 / 9.5	4.5 / 11.25	5.25 / 13	6 / 14.75	6.75 / 16.75	-
14' - 0"	Unfactored Live Load for L / 360 [plf]	59	124	134	224	263	432	644	918	-	-	-
	Unfactored Total Load for L / 180 [plf]	116	244	265	442	521	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	306	486	512	706	782	1069	1304	1501	1707	1923	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	2 / 5	3.25 / 8	3.5 / 8.5	4.75 / 11.5	5.25 / 12.75	7 / 17.5	8.5 / 21.25	10 / 24.5	11.25 / 28	12.75 / 31.5	-
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	1.75 / 4	1.75 / 4.25	2.5 / 6	2.75 / 6.5	3.75 / 9	4.5 / 10.75	5 / 12.5	5.75 / 14.25	6.5 / 16	-
16' - 0"	Unfactored Live Load for L / 360 [plf]	40	83	90	150	176	289	432	615	843	-	-
	Unfactored Total Load for L / 180 [plf]	76	162	176	294	347	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	233	371	390	538	597	816	1051	1278	1449	1627	-
	Bearing Lengths [End / Int.] - SPF Plate [in]	1.75 / 4.5	3 / 7	3 / 7.5	4.25 / 10.25	4.5 / 11.25	6.25 / 15.25	8 / 19.75	9.75 / 24	11 / 27	12.25 / 30.25	-
	Bearing Lengths [End / Int.] - beam [in]	1.5 / 3.5	1.5 / 3.5	1.5 / 3.75	2.25 / 5.25	2.25 / 5.75	3.25 / 7.75	4 / 10	5 / 12	5.5 / 13.75	6.25 / 15.25	-
18' - 0"	Unfactored Live Load for L / 360 [plf]	-	58	63	105	124	203	303	432	592	788	1024
	Unfactored Total Load for L / 180 [plf]	-	112	122	205	242	399	-	-	-	-	-
	Factored Total Load, Wf [plf]	-	292	307	424	470	643	829	1036	1258	1409	1565
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	2.5 / 6.25	2.75 / 6.5	3.75 / 9	4 / 10	5.5 / 13.5	7 / 17.5	8.75 / 21.75	10.75 / 26.5	12 / 29.5	13.25 / 32.75
	Bearing Lengths [End / Int.] - beam [in]	-	1.5 / 3.5	1.5 / 3.5	2 / 4.5	2 / 5	2.75 / 7	3.5 / 8.75	4.5 / 11	5.5 / 13.5	6 / 15	6.75 / 16.75
20' - 0"	Unfactored Live Load for L / 360 [plf]	-	42	46	76	90	148	221	314	432	575	746
	Unfactored Total Load for L / 180 [plf]	-	80	87	148	174	289	434	-	-	-	-
	Factored Total Load, Wf [plf]	-	235	247	342	379	519	669	837	1023	1226	1377
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	2.25 / 5.5	2.5 / 6	3.25 / 8	3.75 / 9	5 / 12.25	6.25 / 15.75	8 / 19.5	9.75 / 24	11.5 / 28.5	13 / 32
	Bearing Lengths [End / Int.] - beam [in]	-	1.5 / 3.5	1.5 / 3.5	1.75 / 4.25	2 / 4.5	2.5 / 6.25	3.25 / 8	4 / 10	5 / 12	5.75 / 14.5	6.5 / 16.25
22' - 0"	Unfactored Live Load for L / 360 [plf]	-	32	34	57	67	111	166	236	324	432	560
	Unfactored Total Load for L / 180 [plf]	-	59	64	109	129	215	324	-	-	-	-
	Factored Total Load, Wf [plf]	-	193	203	281	312	427	551	690	843	1011	1193
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	2 / 5	2.25 / 5.25	3 / 7.25	3.25 / 8	4.5 / 11	5.75 / 14.25	7.25 / 17.75	8.75 / 21.75	10.5 / 26	12.25 / 30.5
	Bearing Lengths [End / Int.] - beam [in]	-	1.5 / 3.5	1.5 / 3.5	1.5 / 3.75	1.75 / 4.25	2.25 / 5.75	3 / 7.25	3.75 / 9	4.5 / 11	5.25 / 13.25	6.25 / 15.5
24' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	44	52	85	127	182	250	332	432
	Unfactored Total Load for L / 180 [plf]	-	-	-	83	98	164	247	355	-	-	-
	Factored Total Load, Wf [plf]	-	-	-	235	261	357	461	578	706	847	1000
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	2.75 / 6.75	3 / 7.5	4 / 10	5.25 / 13	6.5 / 16.25	8 / 19.75	9.5 / 23.75	11.25 / 28
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	1.5 / 3.5	1.5 / 3.75	2.25 / 5.25	2.75 / 6.5	3.5 / 8.25	4 / 10	5 / 12	5.75 / 14.25
26' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	34	41	67	100	143	196	261	339
	Unfactored Total Load for L / 180 [plf]	-	-	-	64	76	127	193	277	383	-	-
	Factored Total Load, Wf [plf]	-	-	-	199	221	303	392	491	600	720	849
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	2.5 / 6.25	2.75 / 6.75	3.75 / 9.25	4.75 / 12	6 / 15	7.5 / 18.25	8.75 / 21.75	10.5 / 25.75
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	1.5 / 3.5	1.5 / 3.5	2 / 4.75	2.5 / 6	3 / 7.5	3.75 / 9.25	4.5 / 11	5.25 / 13
28' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	-	32	53	80	114	157	209	272
	Unfactored Total Load for L / 180 [plf]	-	-	-	-	59	100	153	220	304	408	-
	Factored Total Load, Wf [plf]	-	-	-	-	189	260	336	421	515	618	730
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	-	2.5 / 6.25	3.5 / 8.5	4.5 / 11	5.5 / 13.75	6.75 / 17	8.25 / 20.25	9.75 / 24
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	-	1.5 / 3.5	1.75 / 4.5	2.25 / 5.75	3 / 7	3.5 / 8.5	4.25 / 10.25	5 / 12
30' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	-	-	43	65	93	127	170	221
	Unfactored Total Load for L / 180 [plf]	-	-	-	-	-	80	122	177	245	329	-
	Factored Total Load, Wf [plf]	-	-	-	-	-	225	291	365	447	537	634
	Bearing Lengths [End / Int.] - SPF Plate [in]	-	-	-	-	-	3.25 / 8	4.25 / 10.25	5.25 / 13	6.25 / 15.75	7.5 / 18.75	9 / 22.25
	Bearing Lengths [End / Int.] - beam [in]	-	-	-	-	-	1.75 / 4	2.25 / 5.25	2.75 / 6.5	3.25 / 8	4 / 9.5	4.5 / 11.25

NOTES:

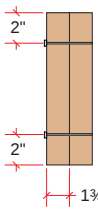
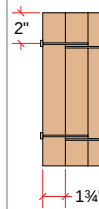
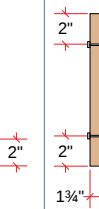
- Factored Total Load values are limited by shear or moment. Total Load values are given by the beam capacity in addition to its own weight.
- All 3 loading cases must be checked. Where a Live Load value is not shown, the Factored Total Load value will control.
- Table values represent the most restrictive of simple or continuous span beams applications and assume a uniform loading. Span is measured center to center of the supports. Analyze continuous span beams with the BC CALC® software if the length of any span is less than half the length of an adjacent span.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the Total Factored

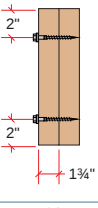
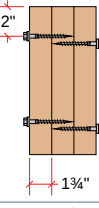
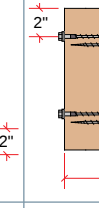
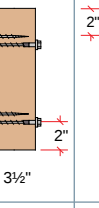
Load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.

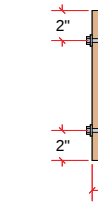
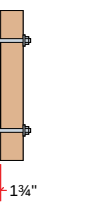
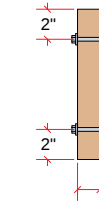
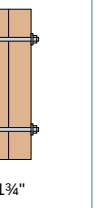
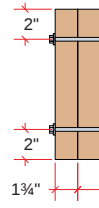
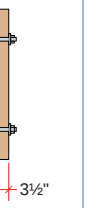
- For 2-ply, 3-ply or 4-ply beams; double, triple or quadruple the Factored Total Load, Unfactored Live and Total Load values. Minimum Required Bearing Lengths remain the same for any number of plies.
- 1 1/4 inch members deeper than 14 inches are recommended to be used as multiple-member beams. See details for proper connection.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

Actual deflection based on Span and Limit (in)

Deflection limit	Span (ft)												
	6	8	10	12	14	16	18	20	22	24	26	28	30
L/360	0.20	0.27	0.33	0.40	0.47	0.53	0.60	0.67	0.73	0.80	0.87	0.93	1.00
L/180	0.40	0.53	0.67	0.80	0.93	1.07	1.20	1.33	1.47	1.60	1.73	1.87	2.00

Rows	Depth Range	Spacing				
			3 1/2" (2 plies)	5 1/4" (3 plies)	5 1/4" (2 plies)	7" (3 plies)
			Maximum Factored Uniform Load (PLF) Applied to Either Outside Member			
			3.5" Common Wire Nails (16d)			
2	7 1/4" to 11 7/8"	24"	434	325	325	289
		12"	867	650	650	578
		6"	1734	1301	1301	1156
3	11 7/8" to 14"	24"	650	488	488	434
		12"	1301	976	976	867
		6"	2602	1951	1951	1734
4	14" to 24"	24"	867	650	650	578
		12"	1734	1301	1301	1156
		6"	3469	2602	2602	2312

Rows	Depth Range	Spacing				
			3 1/2" (2 plies)	5 1/4" (3 plies)	7" (2 plies)	7" (4 plies)
			Maximum Factored Uniform Load (PLF) Applied to Either Outside Member			
			SDS 1/4"x3.5"	SDS 1/4"x3.5"	SDS 1/4"x6"	SDS 1/4"x6"
2	7 1/4" to 11 7/8"	24"	610	458	610	520
		12"	1220	915	1220	1040
		6"	2440	1830	2440	2080
3	11 7/8" to 14"	24"	915	686	915	780
		12"	1830	1373	1830	1560
		6"	3660	2745	3660	3120
4	14" to 24"	24"	1220	915	1220	1040
		12"	2440	1830	2440	2080
		6"	4880	3660	4880	4160

Rows	Depth Range	Spacing						
			3 1/2" (2 plies)	5 1/4" (3 plies)	5 1/4" (2 plies)	7" (3 plies)	7" (2 plies)	7" (4 plies)
			Maximum Factored Uniform Load (PLF) Applied to Either Outside Member					
			1/2" Bolts					
2	7 1/4" to 11 7/8"	12"	1560	1170	1755	1560	3120	1040
		6"	3120	2340	3510	3120	6240	2080
3	11 7/8" to 24"	12"	2340	1755	2632	2340	4680	1560
		6"	4680	3510	5265	4680	9360	3120

NOTES

- Design values apply to common bolts that conform to ASTM A307 Grades A&B, SAE J429 Grades 2 or higher. A washer not less than a standard cut washer shall be between the wood and the bolt head and between the wood and the nut. The minimum edge distance for SDS/TrussLok screws and bolts shall be 2". The minimum end distance for SDS/TrussLok screws and bolts shall be 4", except for SDW screws where the end distance should not be less than 6". Bolt holes shall not be greater than 1/16 of the bolt diameter.
- When 3 1/4" sinker nails (16d) are used, multiply the maximum factored uniform load for the 3.5" common wire nails by 0.87 factor.
- When 3 1/4" pneumatic gun nails 0.122" diameter (10d) are used, multiply the maximum factored uniform load for the 3.5" common wire nails by 0.61 factor.
- The nail schedules shown apply to both sides of a 3-member beam.
- 4-ply beams must be loaded from both sides. Lesser side shall be no less than 25% of the opposite side.
- Beams wider than 7" must be designed by the professional engineer of record.
- An equivalent specific gravity of 0.5 may be used when designing specific connections with VERSA-LAM®. Connection design is based on CSA O86-09.
- Refer to current technical literature from FastenMaster TrussLok and Simpson Strong-Tie to confirm information herein has not been superseded.
- Other fasteners may also be used to connect multiple VERSA-LAM® BEAMS. Contact Boise Cascade EWP Engineering for further information.

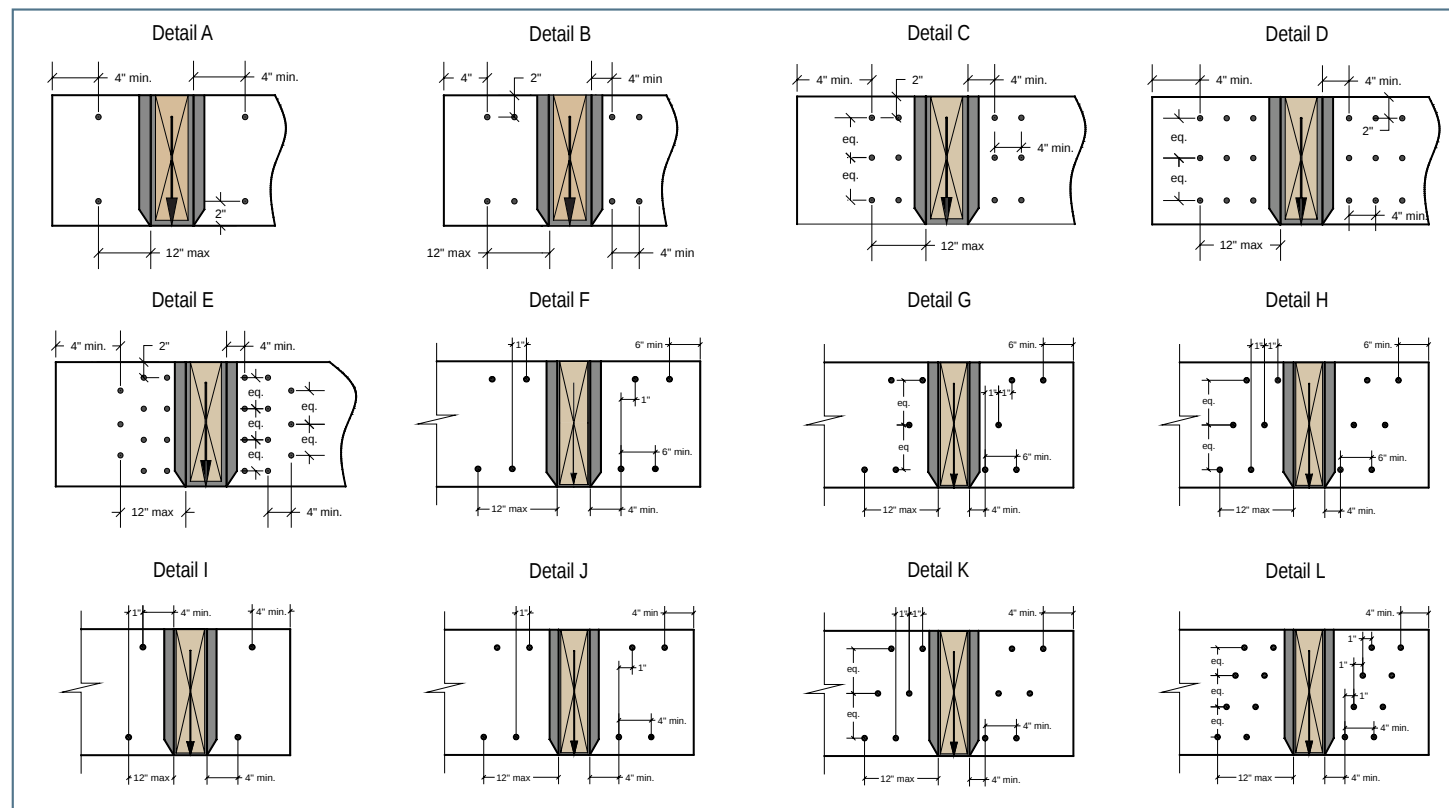
52 MULTIPLE SIDE LOADED MEMBERS CONNECTIONS

VERSA-LAM® 2800 2.0E (1½")							
Maximum Factored Point Load Applied to Either Outside Member (lbs)							
Connector Type	Number of Connectors	Min. Beam Depth (in)	Max. Beam Depth (in)	2-ply	3-ply	4-ply	Detail
3½" (16d) Common Wire Nail (0.160" x 3½")	4	7¼	18	1 734	1 301	-	Detail A
	8	7¼	18	3 469	2 602	-	Detail B
	12	9¼	18	5 203	3 902	-	Detail C
	18	9¼	18	7 805	5 853	-	Detail D
	22	11¼	18	9 539	7 154	-	Detail E
SDW 22338	8	7¼	18	5 440	-	-	Detail F
	10	9¼	18	6 800	-	-	Detail G
	12	9¼	18	8 160	-	-	Detail H
SDW 22500	8	7¼	18	-	4 980	-	Detail F
	10	9¼	18	-	6 225	-	Detail G
	12	9¼	18	-	7 470	-	Detail H
SDW 22634	8	7¼	18	-	-	4 427	Detail F
	10	9¼	18	-	-	5 533	Detail G
	12	9¼	18	-	-	6 640	Detail H
SDS ¼ X 6*	4	7¼	18	-	-	2 080	Detail I
	8	7¼	18	-	-	4 160	Detail J
	12	9¼	18	-	-	6 240	Detail K
	16	11¼	18	-	-	8 320	Detail L

*Fasteners on both sides

NOTES

- When 3¼" sinker nails (16d) are used, multiply the maximum factored side load for the 3.5" common wire nails by 0.87 factor.
- When 3¼" pneumatic gun nails 0.122" diameter (10d) are used, multiply the maximum factored side load for the 3.5" common wire nails by 0.61 factor.
- 3-ply members must be fastened on both sides.
- An equivalent specific gravity of 0.5 may be used when designing specific connections with VERSA-LAM®. Connection design is based on CSA O86-09.
- FastenMaster TrussLok and USP WS screws may also be used to connect multiple VERSA-LAM® BEAMS. Contact Boise Cascade EWP Engineering for further information.

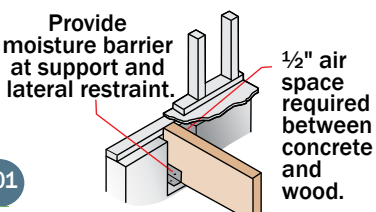
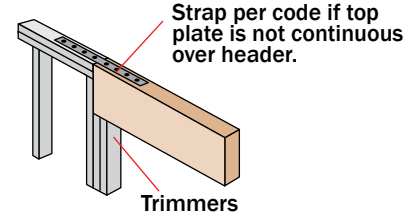
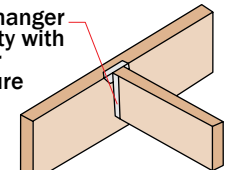
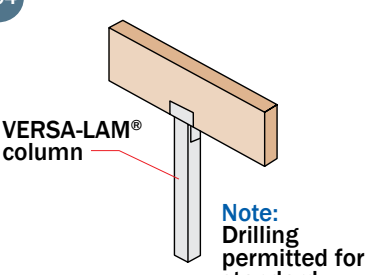
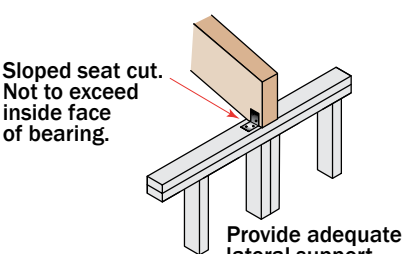
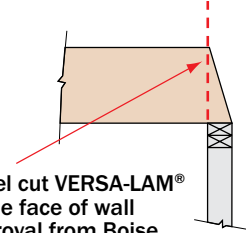
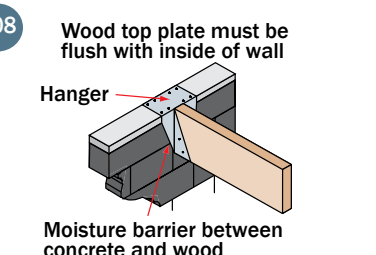
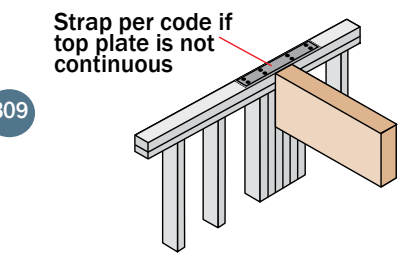
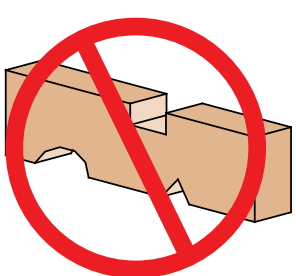


MULTIPLE BEAM CONNECTIONS – TOP LOADS

VERSA-LAM® 2800Fb 2.0E (1½")				
Depth (in)	Number of plies			
	2	3	4	
5½	2 rows of 16d Common Wire Nails at 12" o.c.	2 rows of 16d Common Wire Nails at 12" o.c.	N/A	
7¼ to 11¼	2 rows of 16d Common Wire Nails at 12" o.c.	2 rows of 16d Common Wire Nails at 12" o.c.	2 rows of ½" Bolts at 24" o.c.	2 rows of SDS ¼ x 6 screws at 24" o.c. (both sides)
14 to 18	3 rows of 16d Common Wire Nails at 12" o.c.	3 rows of 16d Common Wire Nails at 12" o.c.	3 rows of ½" Bolts at 24" o.c.	3 rows of SDS ¼ x 6 screws at 24" o.c. (both sides)
20 to 24	4 rows of 16d Common Wire Nails at 12" o.c.	4 rows of 16d Common Wire Nails at 12" o.c.	4 rows of ½" Bolts at 24" o.c.	4 rows of SDS ¼ x 6 screws at 24" o.c. (both sides)

NOTE

- Load is applied evenly across the entire member width.

Bearing at concrete/masonry walls  B01	Bearing for door or window header  B02	Beam to beam connector  B03
Bearing at column  B04	Slope seat cut  B06	Bevel cut  B07
Beam to concrete/masonry walls  B08	Bearing framing into wall  B09	DO NOT drill, notch, cut or alter VERSA-LAM® beams 

NOTES

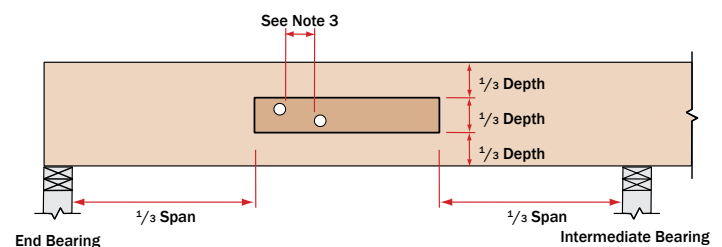
- Minimum of 1/2" air space between beam and wall pocket or adequate barrier must be provided between beam and concrete/masonry.
- Adequate bearing shall be provided. If not shown on plans, please refer to load tables in your region's Specifier Guide.
- VERSA-LAM® beams are intended for interior applications only and should be kept as dry as possible during construction.
- Continuous lateral support of top of beam shall be provided (side or top bearing framing).

ALLOWABLE HOLES IN VERSA-LAM® BEAMS

NOTES

- Square and rectangular holes are not permitted.
- Round holes may be drilled or cut with a hole saw anywhere within the shaded area of the beam.
- The horizontal distance between adjacent holes must be at least two times the size of the larger hole.
- Do not drill more than three access holes in any four foot long section of beam.
- The maximum round hole diameter permitted is:

Beam Depth	Max. Hole Diameter
5 1/2"	3/4"
7 1/4"	1"
Greater than 7 1/4"	2"



- These limitations apply to holes drilled for plumbing or wiring access only. The size and location of holes drilled for fasteners are under the regulations of the CSA O86-09 Engineering Design in Wood.
- Beams deflect under load. Size holes to provide clearance where required.
- This hole chart is valid for beams supporting uniform load only. For beams supporting concentrated loads or for beams with larger holes, contact Boise Cascade EWP Engineering.

54 COLUMN DESIGN : MAXIMUM FACTORED AXIAL LOADS (LBS)

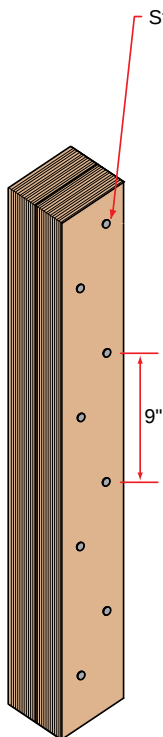
VERSA-LAM® 2650Fb 1.7E						
Solid Column						
Effective length of column (ft)	Column Size (inches)					
	3½ x 3½	3½ x 5¼	3½ x 7	5¼ x 5¼	5¼ x 7	7 x 7
4	21 343	32 015	42 687	51 997	69 330	94 341
4½	20 404	30 606	40 808	51 241	68 321	93 745
5	19 341	29 012	38 682	50 326	67 101	93 011
5½	18 184	27 276	36 367	49 252	65 669	92 129
6	16 966	25 449	33 932	48 023	64 030	91 094
6½	15 723	23 584	31 445	46 647	62 197	89 901
7	14 484	21 726	28 968	45 139	60 186	88 549
7½	13 212	19 817	26 423	43 517	58 023	87 038
8	11 976	17 964	23 804	41 800	55 733	85 373
8½	10 854	16 281	21 565	40 011	53 349	83 563
9	9 838	14 756	19 539	38 174	50 899	81 616
9½	8 920	13 379	17 710	36 310	48 414	79 545
10	8 091	12 137	16 063	34 443	45 923	77 364
10½	7 345	10 972	14 579	32 590	43 452	75 088
11	6 673	9 967	13 243	30 710	40 947	72 735
11½	6 068	9 063	12 042	28 771	38 360	70 321
12	5 524	8 250	10 961	26 946	35 929	67 864
14	3 837	5 733	7 617	20 733	27 644	57 937
16				16 004	21 339	47 905
18				12 427	16 514	39 349
20				9 726	12 926	32 364

VERSA-LAM® 2800Fb 2.0E (1¾")					
Built-up Column					
Effective length of column (ft)	Column Size (inches)				
	3½ x 5½	3½ x 7¼	5¼ x 5½	5¼ x 7¼	7 x 7¼
4	28 119	37 066	46 390	61 151	83 566
4½	26 661	35 144	45 578	60 080	82 927
5	25 040	33 007	44 603	58 795	82 142
5½	23 308	30 725	43 467	57 297	81 204
6	21 524	28 372	42 178	55 599	80 107
6½	19 738	26 018	40 751	53 718	78 848
7	17 996	23 723	39 204	51 678	77 429
7½	16 334	21 426	37 559	49 510	75 854
8	14 775	19 377	35 841	47 245	74 132
8½	13 333	17 483	34 075	44 917	72 272
9	12 013	15 752	32 285	42 558	70 288
9½	10 817	14 183	30 495	40 198	68 196
10	9 711	12 770	28 726	37 865	66 013
10½	8 748	11 504	26 995	35 584	63 758
11	7 888	10 373	25 317	33 372	61 449
11½	7 121	9 365	23 703	31 245	59 105
12	6 439	8 468	22 162	29 213	56 743
14	4 380	5 761	16 804	22 150	47 445
16			12 713	16 759	38 951
18			9 686	12 739	31 672
20			7 466	9 820	25 678

- NOTES:**
1. The maximum factored axial loads assume a maximum eccentricity of either ¼ column width or ¼ column depth, whichever is worse.
 2. These values are for preliminary design only. Final design should include a complete analysis, including bearing capacity of the foundation supporting the column.
 3. The column is subjected to a simple axial load.
 4. P - Δ effect was included in the analysis.

VERSA-STUD® & VERSA-LAM® COLUMN DETAILS

Multiple Ply Stud Connections



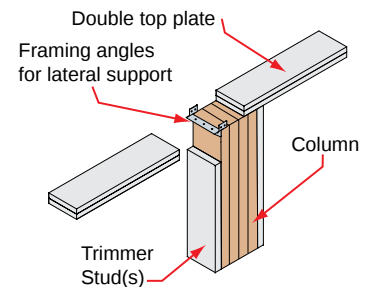
Staggered rows

Thick- ness (in)	Number of plies	Fastener type	Fastener diameter (in)	Fastener length (in)	Min. end distance (in)	Min. edge distance (in)
1¾	2	Common Nail 3½" (16d)	0.162	3½	4.0	2.0
		SDS ¼ x 3½	0.250			
	3	Common Nail 5" (40d)	0.225	5		
	4	½" dia. Bolts	0.500	7		
		SDS ¼ x 6 (on both sides)	0.250	6		

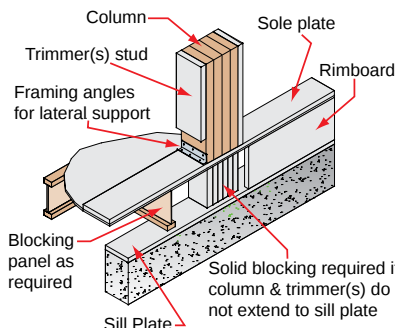
NOTE:
The number of rows of fasteners should be as follows:

Stud/ column depth	Rows of fasteners (staggered)
3½"	1
5½"	2
7¼"	2
9¼"	3
9½"	3
11¼"	3
11⅞"	3
14"	4

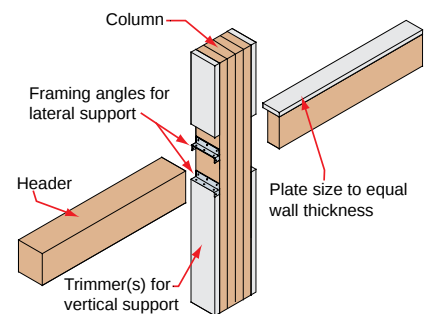
Column to Top Plate



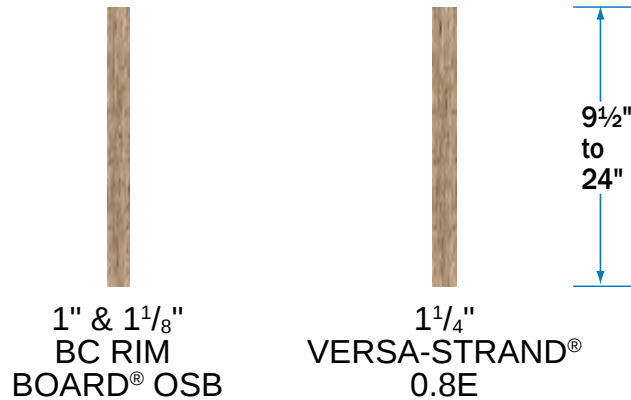
Column to Bottom Plate



Header to Column



Boise Cascade Rimboard Product Profiles



F07 Perpendicular See chart for vertical load capacity. When used for shear transfer, nail to bearing plate with the same nailing capacity as required by the horizontal diaphragm schedule.	F07A Parallel See chart for vertical load capacity. When used for shear transfer, nail to bearing plate with the same nailing capacity as required by the horizontal diaphragm schedule.	F56 1/2" dia through bolts (ASTM A307 Grades A&B, SAE J429 Grades 1 or 2, or higher) with washers and nuts or 1/2" dia lag screws (full penetration) 585 lbs capacity for 1 1/4" & thicker rim, 500 lbs capacity for 1" rim, per fastener Exterior wood sheathing Treated Ledger Use only fasteners that are approved for use with corresponding wood treatment. Boise Cascade Rimboard Design of moisture control by others (only structural components shown above)
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BOISE CASCADE RIMBOARD PROPERTIES

Rim Board Type	Thickness [in]	ϕH	ϕV [lbs/ft]		ϕZ	ϕP
		[lbs/ft]	d ≤ 16"	d > 16"	[lbs]	[lbs]
Boise Cascade Rimboard	1"	235	5500	2750	495	5840
	1 1/8"	235	7340	5000	585	5840
Boise Cascade Rimboard Plus	1 1/8"	260	8090	5340	585	5840
Boise Cascade VERSA-STRAND 0.8E	1 1/4"	310	9460	5820	830	8990

NOTES

1. ϕH = Factored horizontal (shear) load transfer capacity is based on the minimum nailing attachment schedule specified in NBCC 2005 and APA document D340CA.
2. ϕV = Factored uniform bearing (vertical) load resistance. The uniform bearing load shall be simultaneously satisfied with the concentrated vertical load resistance, when applicable.
3. ϕZ = Factored lateral resistance of a 1/2 inch (12.7 mm) diameter lag screw.
4. ϕP = Factored concentrated vertical load resistance based on 4 1/2 inch (114 mm) bearing length. The concentrated vertical load shall be simultaneously satisfied with the uniform bearing load capacity, when applicable.
5. All tabulated values are applicable to the standard-term load duration and permitted to be adjusted for other load durations in accordance with CSA O86.
6. See CCMC Evaluation Report No. 13143 for further product information on Boise Cascade VERSA-STRAND 0.8E.



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