APA PRODUCT REPORT®

SmartLam NA Dothan Glulam Beams and Columns PR-L326
SmartLam NA Dothan, LLC

Revised October 10, 2026

Products: SmartLam NA Dothan Glulam Beams and Columns
SmartLam NA Dothan, LLC, 1371 Hodgesville Road, Dothan, AL 36301
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1. Basis of the product report:
   - 2024, 2021, 2018, and 2015 International Building Code (IBC): Section 2303.1.3 Structural glued laminated timber
   - 2024, 2021, 2018, and 2015 International Residential Code (IRC): Sections R502.1.3, R602.1.3, and R802.1.2 Structural glued laminated timber
   - ANSI 117-2020 and ANSI 117-2015 recognized in the 2024 and 2021 IBC and IRC, and 2018 IBC and IRC, respectively
   - ANSI A190.1-2022, ANSI A190.1-2017, and ANSI A190.1-2012 recognized in the 2024 IBC and IRC, 2021 and 2018 IBC and IRC, and 2015 IBC and IRC, respectively
   - 2024, 2018, and 2015 ANSI/AWC NDS, National Design Specification for Wood Construction recognized in the 2024 IBC and IRC, 2021 and 2018 IBC and IRC, and 2015 IBC and IRC, respectively
   - ASTM D3737-18e1 and D3737-12 recognized in the 2024 and 2021 IBC and IRC, and 2018 and 2015 IBC and IRC, respectively
   - APA Reports T2025P-34 and T2026P-32, and other qualification data

2. Product description:
   SmartLam NA Dothan Glulam Beams and Columns are structural glued laminated timber made of Douglas fir-Larch and southern pine lumber laminations. SmartLam NA Dothan Glulam Beams and Columns are manufactured in Dothan, Alabama in accordance with ANSI A190.1 using layup combinations recognized in ANSI 117 or National Design Specification (NDS) Supplement. SmartLam NA Dothan Glulam Beams and Columns are used as beams, headers, rafters, purlins, or columns. The layup combinations of 28F-E1/SP and 28F-E2/SP are manufactured in nominal width up to 8 inches, depths ranging from 5-1/2 to 30 inches, and lengths up to 60 feet, while layup combinations of 30F-E1/SP and 30F-E2/SP are manufactured in net widths of 3-1/2 to 7-1/4 inches, depths ranging from 5-1/2 to 30 inches, and lengths up to 60 feet.

3. Design properties:
   Table 1 lists the allowable design properties for SmartLam NA Dothan Glulam Beams. The allowable spans for SmartLam NA Dothan Glulam Beams shall be in accordance with the recommendations provided by the manufacturer and APA *Glued Laminated Beam Design Tables*, Form S475 (www.apawood.org/resource-library), as applicable. Table 2 lists the allowable design properties for SmartLam NA Dothan Glulam Columns. The allowable loads for SmartLam NA Dothan Glulam Columns shall be in accordance with the recommendations provided by the manufacturer and APA Data File*: Design of Structural Glued Laminated Timber Columns*, Form Y240 (see link above), as applicable.

4. Product installation:
   SmartLam NA Dothan Glulam Beams and Columns shall be installed in accordance with the recommendations provided by the manufacturer and APA Construction Guide: *Glulam Connection Details*, Form T300 (see link above). Permissible field notching and drilling shall be in accordance with the recommendations provided by the manufacturer and APA Technical Notes: *Field Notching and Drilling of Glued Laminated Timber Beams*, Form

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S560, and *Effect of Large Diameter Horizontal Holes on the Bending and Shear Properties of Structural Glued Laminated Timber*, Form V700 (see link above).

5. Fire-rated assemblies:
Design of fire-resistant exposed wood members in accordance with Chapter 16 of the National Design Specification for Wood Construction (NDS), or Section 722.1 of the 2024, 2021, 2018, and 2015 IBC shall be applicable to SmartLam NA Dothan Glulam Beams and Columns. Fire-rated assemblies shall be constructed in accordance with the recommendations provided by the manufacturer and APA Design and Construction Guide: *Fire-Rated Systems*, Form W305 (see link above).

6. Limitations:
   a) SmartLam NA Dothan Glulam Beams and Columns shall be designed in accordance with the applicable code and the National Design Specification for Wood Construction using the allowable design properties specified in this report.
   b) SmartLam NA Dothan Glulam Beams shall have a maximum net width of 7-1/4 inches for 30F-E1/SP and 30F-E2/SP layup combinations. SmartLam NA Dothan Glulam Beams shall have a minimum depth of 5-1/2 inches and a maximum depth of 30 inches for 30F-E1/SP and 30F-E2/SP layup combinations.
   c) SmartLam NA Dothan Glulam Beams and Columns are produced at the Dothan, AL facility under a quality assurance program audited by APA.
   d) This report is subject to re-examination in one year.

7. Identification:
SmartLam NA Dothan Glulam Beams and Columns described in this report are identified by a label bearing the manufacturer's name (SmartLam NA Dothan, LLC) and/or trademark, the APA assigned plant number (1137), the product standard (ANSI A190.1), the APA logo, the layup combination symbol, the report number PR-L326, and a means of identifying the date of manufacture.

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Table 1. Allowable Design Values for SmartLam NA Dothan Glulam Beams for Normal Duration of Load[1,2,3]

Symbol	Species Outer/ Core[4] (Bal or Unbal[5])	Bending About X-X Axis (Loaded Perpendicular to Wide Faces of Laminations)								Bending About Y-Y Axis (Loaded Parallel to Wide Faces of Laminations)						Axially Loaded		Fasteners	
		Extreme Fiber in Bending[6]		Compression Perpendicular to Grain		Shear Parallel to Grain[7]	Modulus of Elasticity[8]			Extreme Fiber in Bending[9]	Comp. Perpen-dicular to Grain	Shear Parallel to Grain[7]	Modulus of Elasticity[8]			Tension Parallel to Grain	Comp. Parallel to Grain	Specific Gravity for Dowel-Type Fastener Design	
		Bottom of Beam Stressed in Tension (Positive Bending)	Top of Beam Stressed in Tension (Negative Bending)	Ten. Face	Comp. Face		True	App-arent	Beam Stabi-lity				True	App-arent	Beam Stabi-lity			Top or Bottom Face	Side Face
		F_{bx}^{+} (psi)	F_{bx}^{-} (psi)	$F_{c\perp x}$ (psi)		F_{vx} (psi)	$E_{x\,true}$ (10^6 psi)	$E_{x\,app}$ (10^6 psi)	$E_{x\,min}$ (10^6 psi)	F_{by} (psi)	$F_{c\perp y}$ (psi)	F_{vy} (psi)	$E_{y\,true}$ (10^6 psi)	$E_{y\,app}$ (10^6 psi)	$E_{y\,min}$ (10^6 psi)	F_t (psi)	F_c (psi)	SG	
16F-V2	SP/SP (U)	1,600	1,400	740	650	300	1.6	1.5	0.79	1,450	650	260	1.5	1.4	0.74	1,000	1,300	0.55	0.55
16F-V3	DF/DF (U)	1,600	1,250	560	560	265	1.6	1.5	0.79	1,450	560	230	1.6	1.5	0.79	975	1,500	0.50	0.50
16F-V3	SP/SP (U)	1,600	1,450	740	740	300	1.5	1.4	0.74	1,450	650	260	1.5	1.4	0.74	975	1,400	0.55	0.55
16F-V5	SP/SP (B)	1,600	1,600	650	650	300	1.7	1.6	0.85	1,600	650	260	1.6	1.5	0.79	1,000	1,550	0.55	0.55
16F-V6	DF/DF (B)	1,600	1,600	560	560	265	1.7	1.6	0.85	1,450	560	230	1.6	1.5	0.79	1,000	1,600	0.50	0.50
20F-V3	DF/DF (U)	2,000	1,450	650	560	265	1.7	1.6	0.85	1,450	560	230	1.6	1.5	0.79	1,000	1,550	0.50	0.50
20F-V3	SP/SP (U)	2,000	1,450	650	650	300	1.6	1.5	0.79	1,600	650	260	1.6	1.5	0.79	1,000	1,400	0.55	0.55
20F-V5	SP/SP (B)	2,000	2,000	740	740	300	1.7	1.6	0.85	1,450	650	260	1.5	1.4	0.74	1,050	1,500	0.55	0.55
20F-V7	DF/DF (B)	2,000	2,000	650	650	265	1.7	1.6	0.85	1,450	560	230	1.7	1.6	0.85	1,050	1,600	0.50	0.50
24F-V4	DF/DF (U)	2,400	1,850	650	650	265	1.9	1.8	0.95	1,450	560	230	1.7	1.6	0.85	1,100	1,650	0.50	0.50
24F-V8	DF/DF (B)	2,400	2,400	650	650	265	1.9	1.8	0.95	1,550	560	230	1.7	1.6	0.85	1,100	1,650	0.50	0.50
24F-V3	SP/SP (U)	2,400	2,000	740	740	300	1.9	1.8	0.95	1,700	650	260	1.7	1.6	0.85	1,150	1,650	0.55	0.55
24F-V4[12]	SP/SP (U)	2,400	1,650	740	650	210	1.8	1.7	0.90	1,350	470	230	1.6	1.5	0.79	975	1,350	0.55	0.43
24F-V5	SP/SP (B)	2,400	2,400	740	740	300	1.8	1.7	0.90	1,700	650	260	1.7	1.6	0.85	1,150	1,600	0.55	0.55
24F-V5M1	SP/SP (B)	2,400	2,400	740	740	300	1.9	1.8	0.95	1,700	650	260	1.7	1.6	0.85	1,150	1,600	0.55	0.55
24F-V8	SP/SP (B)	2,400	2,400	740	740	300	1.9	1.8	0.95	1,700	650	260	1.7	1.6	0.85	1,150	1,650	0.55	0.55
24F-V/DF2	DF/DF (U)	2,400	1,850	650	650	265	2.0	1.9	1.00	1,450	560	230	1.8	1.7	0.90	1,200	1,750	0.50	0.50
24F-V/DF3	DF/DF (B)	2,400	2,400	650	650	265	2.0	1.9	1.00	1,550	560	230	1.8	1.7	0.90	1,200	1,750	0.50	0.50
26F-V1	SP/SP (U)	2,600	2,000	740	740	300	1.9	1.8	0.95	1,700	650	260	1.7	1.6	0.85	1,150	1,600	0.55	0.55
26F-V2	SP/SP (U)	2,600	2,100	740	740	300	2.0	1.9	1.00	1,950	740	260	1.9	1.8	0.95	1,300	1,850	0.55	0.55
26F-V3	SP/SP (U)	2,600	2,100	740	740	300	2.0	1.9	1.00	1,950	650	260	1.9	1.8	0.95	1,250	1,800	0.55	0.55
26F-V3M1[13]	SP/SP (U)	2,600	2,100	740	740	300	2.0	1.9	1.00	1,950	650	260	1.9	1.8	0.95	1,250	1,800	0.55	0.55
26F-V3M2[13]	SP/SP (U)	2,600	2,100	740	740	250	2.0	1.9	1.00	1,950	650	260	1.9	1.8	0.95	1,250	1,800	0.55	0.55
Wet-use factor		0.8		0.53		0.875	0.833			0.8	0.53	0.875	0.833			0.8	0.73	see NDS	

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Table 1. Allowable Design Values for SmartLam NA Dothan Glulam Beams for Normal Duration of Load[1,2,3] (Continued)

Symbol	Species Outer/ Core[4] (Bal or Unbal[5])	Bending About X-X Axis (Loaded Perpendicular to Wide Faces of Laminations)								Bending About Y-Y Axis (Loaded Parallel to Wide Faces of Laminations)						Axially Loaded		Fasteners	
		Extreme Fiber in Bending[6]		Compression Perpendicular to Grain		Shear Parallel to Grain[7]	Modulus of Elasticity[8]			Extreme Fiber in Bending[9]	Comp. Perpen-dicular to Grain	Shear Parallel to Grain[7]	Modulus of Elasticity[8]			Tension Parallel to Grain	Comp. Parallel to Grain	Specific Gravity for Dowel-Type Fastener Design	
		Bottom of Beam Stressed in Tension (Positive Bending)	Top of Beam Stressed in Tension (Negative Bending)	Ten. Face	Comp. Face		True	App-arent	Beam Stabi-lity				True	App-arent	Beam Stabi-lity			Top or Bottom Face	Side Face
		F_{bx}^+ (psi)	F_{bx}^- (psi)	$F_{c\perp x}$ (psi)		F_{vx} (psi)	$E_{x\ true}$ (10^6 psi)	$E_{x\ app}$ (10^6 psi)	$E_{x\ min}$ (10^6 psi)	F_{by} (psi)	$F_{c\perp y}$ (psi)	F_{vy} (psi)	$E_{y\ true}$ (10^6 psi)	$E_{y\ app}$ (10^6 psi)	$E_{y\ min}$ (10^6 psi)	F_t (psi)	F_c (psi)	SG	
26F-V4	SP/SP (B)	2,600	2,600	740	740	300	2.0	1.9	1.00	1,700	650	260	1.9	1.8	0.95	1,200	1,600	0.55	0.55
26F-V4M1[13]	SP/SP (B)	2,600	2,600	740	740	300	2.0	1.9	1.00	1,700	650	260	1.9	1.8	0.95	1,200	1,600	0.55	0.55
26F-V4M2[13]	SP/SP (B)	2,600	2,600	740	740	250	2.0	1.9	1.00	1,700	650	260	1.9	1.8	0.95	1,200	1,600	0.55	0.55
26F-V5	SP/SP (B)	2,600	2,600	740	740	300	2.0	1.9	1.00	1,950	650	260	1.9	1.8	0.95	1,300	1,850	0.55	0.55
28F-E1	SP/SP (U)	2,800	2,300	805	805	300	2.2[11]	2.1[11]	1.11[11]	1,600	650	260	1.8	1.7	0.90	1,300	1,850	0.55	0.55
28F-E1M1	SP/SP (U)	2,800	2,300	805	805	300	2.2	2.1	1.11	1,600	650	260	1.8	1.7	0.90	1,300	1,850	0.55	0.55
28F-E2	SP/SP (B)	2,800	2,800	805	805	300	2.2[11]	2.1[11]	1.11[11]	2,000	650	260	1.8	1.7	0.90	1,300	1,850	0.55	0.55
28F-E2M1	SP/SP (B)	2,800	2,800	805	805	300	2.2	2.1	1.11	2,000	650	260	1.8	1.7	0.90	1,300	1,850	0.55	0.55
30F-E1[10]	SP/SP (U)	3,000	2,400	805	805	300	2.2[11]	2.1[11]	1.11[11]	1,750	650	260	1.8	1.7	0.90	1,250	1,750	0.55	0.55
30F-E2[10]	SP/SP (B)	3,000	3,000	805	805	300	2.2[11]	2.1[11]	1.11[11]	1,750	650	260	1.8	1.7	0.90	1,350	1,750	0.55	0.55
Wet-use factor		0.8		0.53		0.875	0.833			0.8	0.53	0.875	0.833			0.8	0.73	see NDS	

(1) The combinations in this table are intended primarily for members stressed in bending due to loads applied perpendicular to the wide faces of the laminations. Allowable design values are tabulated, however, for loading both perpendicular and parallel to the wide faces of the laminations.

(2) The tabulated allowable design values are for normal duration of loading. For other durations of loading, see the applicable building code. The tabulated allowable design values are for dry conditions of use. For wet conditions of use, multiply the tabulated values by the wet-use factors shown at the bottom of the table.

(3) Referenced design values must be adjusted, as applicable, in accordance with Section 5.3 of the NDS.

(4) DF = Douglas fir-Larch and SP = Southern pine.

(5) The unbalanced (U) layup is intended primarily for simple-span applications and the balanced (B) layup is intended primarily for continuous or cantilevered applications.

(6) The values of F_{bx} are based on members 5-1/8 inches in width by 12 inches in depth by 21 feet in length. For members with a larger volume, F_{bx} shall be multiplied by a volume factor, $C_v = (5.125/b)^{1/10}\ (12/d)^{1/10}\ (21/L)^{1/10}$ for 16F-V3/DF, 16F-V6/DF, 20F-V3/DF, 20F-V7/DF, 24F-V4/DF, 24F-V8/DF, 24F-V/DF2, and 24F-V/DF3 layup combinations or $C_v = (5.125/b)^{1/20}\ (12/d)^{1/20}\ (21/L)^{1/20}$ for 16F-V3/SP, 16F-V5/SP, 20F-V3/SP, 20F-V5/SP, 24F-V3/SP, 24F-V4/SP, 24F-V5/SP, 24F-V5M1/SP, 24F-V8/SP, 26F-V1/SP, 26F-V2/SP, 26F-V3/SP, 26F-V3M1/SP, 26F-V3M2/SP, 26F-V4/SP, 26F-V4M1/SP, 26F-V4M2/SP, 26F-V5/SP, 28F-E1/SP, 28F-E1M1/SP, 28F-E2/SP, 28F-E2M1/SP, 30F-E1/SP, and 30F-E2/SP layup combinations, where b is the beam width (in.), d is the beam depth (in.), and L is the beam length between the points of zero moment (ft).

(7) For non-prismatic members, members subject to impact or cyclic loading, or shear design of bending members at connections (2024 NDS 3.4.4.1 or 2018 and 2015 NDS 3.4.3.3), the F_{vx} and F_{vy} values shall be multiplied by a factor of 0.72. The tabulated F_{vy} values are for timbers with laminations made from a single piece of lumber across the width or multiple pieces that have been edge bonded. For timber manufactured from multiple-piece laminations (across width) that are not edge bonded, value shall be multiplied by 0.4 for members with 5, 7, or 9 laminations or by 0.5 for all other members.

(8) The tabulated E values include true E (also known as "shear-free E"), apparent E, and E for beam stability calculation (NDS 3.3.3.8). For calculating beam deflections, the tabulated E_{app} values shall be used unless the shear deflection is determined in addition to bending deflection based on the tabulated E_{true}. The axial modulus of elasticity, E_{axial} and $E_{axial\ min}$, shall be equal to the tabulated $E_{y\ true}$ and $E_{y\ min}$ values.

(9) The values of F_{by} are based on members 12 inches in depth. For depths less than 12 inches, F_{by} shall be permitted to be increased by multiplying by the flat use factor, $(12/d)^{1/9}$, where d is the beam depth in inches. When d is less than 3 inches, use the size adjustment factor for 3 inches.

(10) This layup combination is limited to 7-1/4 inches or less in net width and 5-1/2 to 30 inches in depth.

(11) For members of more than 15 laminations, $E_{x\ true} = 2.1 \times 10^6$ psi, $E_{x\ app} = 2.0 \times 10^6$ psi, and $E_{x\ min} = 1.06 \times 10^6$ psi.

(12) This combination may contain lumber with wane. If lumber with wane is used, the design value for shear parallel to grain, F_{vx}, shall be multiplied by 0.67 if wane is allowed on both sides. If wane is limited to one side, F_{vx} shall be multiplied by 0.83. This reduction shall be cumulative with the adjustment in footnote (7).

(13) When containing wane, this combination must be used in dry conditions only. In this case, wet-use factors must not be applied. Because of the wane, this combination is available only for an industrial appearance characteristic. If wane is omitted, these restrictions must not apply. This combination is limited to 9 to 20 laminations in depth.

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Table 2. Allowable Design Values for SmartLam NA Dothan Glulam Columns for Normal Duration of Load[1,2]

Combination Symbol	Species[3]	Grade	All Loading				Axially Loaded			Bending about Y-Y Axis				Bending about X-X Axis		Fasteners
			Modulus of Elasticity[4]			Compression Perpendicular to Grain	Tension Parallel to Grain	Compression Parallel to Grain		Loaded Parallel to Wide Faces of Laminations				Loaded Perpendicular to Wide Faces of Laminations		Specific Gravity for Dowel-Type Fastener Design
										Bending[5]			Shear Parallel to Grain[6,7]	Bending[8]	Shear Parallel to Grain[6]	
							2 or More Lams	4 or More Lams	2 or 3 Lams	4 or More Lams	3 Lams	2 Lams		2 Lams to 15 in. Deep[9]		
			$E_{x\,true}$, $E_{y\,true}$ or E_{axial} (10^6 psi)	$E_{x\,app}$ or $E_{y\,app}$ (10^6 psi)	$E_{x\,min}$, $E_{y\,min}$ or $E_{axial\,min}$ (10^6 psi)	$F_{c\perp}$ (psi)	F_t (psi)	F_c (psi)	F_c (psi)	F_{by} (psi)	F_{by} (psi)	F_{by} (psi)	F_{vy} (psi)	F_{bx} (psi)	F_{vx} (psi)	SG
Combination No. 2	DF	L2	1.7	1.6	0.85	560	1,250	1,950	1,600	1,800	1,600	1,300	230	1,700	265	0.50
Combination No. 3	DF	L2D	2.0	1.9	1.00	650	1,450	2,300	1,900	2,100	1,850	1,550	230	2,000	265	0.50
Combination No. 5	DF	L1	2.1	2.0	1.06	650	1,650	2,400	2,100	2,400	2,100	1,800	230	2,200	265	0.50
Combination No. 47	SP	N2M12	1.5	1.4	0.74	650	1,200	1,900	1,150	1,750	1,550	1,300	260	1,400	300	0.55
Combination No. 50	SP	N1D14	2.0	1.9	1.00	740	1,550	2,300	1,700	2,300	2,100	1,750	260	2,100	300	0.55
Wet-use factors			0.833			0.53	0.8	0.73		0.8			0.875	0.8	0.875	see NDS

(1) The tabulated allowable design values are for normal duration of loading. For other durations of loading, see applicable building code. The tabulated allowable design values are for dry conditions of use. For wet conditions of use, multiply the tabulated values by the factors shown at the bottom of the table.

(2) Referenced design values must be adjusted, as applicable, in accordance with Section 5.3 of the NDS.

(3) DF = Douglas fir-Larch and SP = Southern pine.

(4) The tabulated E values include shear-free (true) modulus of elasticity ($E_{x\,true}$, $E_{y\,true}$, and E_{axial}), apparent modulus of elasticity ($E_{x\,app}$ and $E_{y\,app}$), and 5th percentile modulus of elasticity ($E_{x\,min}$, $E_{y\,min}$, and $E_{axial\,min}$). For column stability calculation (NDS 3.7.1), $E_{axial\,min}$ shall be used. For calculating the total deflection due to bending, the tabulated $E_{x\,app}$ or $E_{y\,app}$ values shall be used, or as an alternative, the true (shear-free) bending deflection shall be calculated using the tabulated $E_{x\,true}$ or $E_{y\,true}$, which shall be added to the calculated shear deflection to determine the total deflection due to bending.

(5) The values of F_{by} are based on members 12 inches in depth. For depths less than 12 inches, F_{by} shall be permitted to be increased by multiplying by the flat use factor, $(12/d)^{1/9}$, where d is the beam depth in inches. When d is less than 3 inches, use the size adjustment factor for 3 inches.

(6) For non-prismatic members, notched members, members subject to impact or cyclic loading, or shear design of bending members at connections (2024 NDS 3.4.4.1 or 2018 and 2015 NDS 3.4.3.3), the tabulated F_{vx} and F_{vy} values shall be multiplied by 0.72.

(7) The tabulated F_{vy} values are for members of 4 or more lams. The tabulated F_{vy} values shall be multiplied by a factor of 0.95 for 3 lams and 0.84 for 2 lams. For members with 5, 7, or 9 lams manufactured from multiple-piece lams with unbonded edge joints, the tabulated F_{vy} values shall be multiplied by a factor of 0.4. For all other members manufactured from multiple-piece lams with unbonded edge joints, the tabulated F_{vy} values shall be multiplied by a factor of 0.5. This adjustment shall be cumulative with the adjustment specified in Footnote 6.

(8) The values of F_{bx} are based on members 5-1/8 inches in width by 12 inches in depth by 21 feet in length. For members with a larger volume, F_{bx} shall be multiplied by a volume factor, $C_v = (5.125/b)^{1/10}\,(12/d)^{1/10}\,(21/L)^{1/10}$ for Combination 2 (L2/DF), Combination 3 (L2D/DF), Combination 5 (L1//DF) layup combinations or $C_v = (5.125/b)^{1/20}\,(12/d)^{1/20}\,(21/L)^{1/20}$ for Combination 47 (N2M12/SP) and Combination 50 (N1D14//SP) layup combinations, where b is the beam width (in.), d is the beam depth (in.), and L is the beam length between the points of zero moment (ft).

(9) The tabulated F_{bx} values are for members without special tension lams up to 15 inches in depth. When the member depth is greater than 15 inches, the tabulated F_{bx} values shall be multiplied by a factor of 0.88. If special tension lams are used, the tabulated F_{bx} values are permitted to be increased by a factor of 1.18, regardless of the member depth, provided that the increased F_{bx} values do not exceed 2,400 psi. This factor shall be cumulative with the volume factor, C_v, specified in Footnote (8).

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