

Engineered Lumber





11/2

LVL Flange

High-Strength

OSB Web

-31//"

Georgia-Pacific GPI 90 Series I-Joists feature **wide** LVL flanges



Distributed Exclusively by



4300 Wildwood Parkway Atlanta, GA 30339

1-888-502-BLUE www.BlueLinxCo.com

Features and Benefits:

- Superior performance for long span applications
- Ideal for bonus rooms
- Greater dimensional stability and more uniform depth than ordinary lumber
- Minimizes shrinking and twisting
- Wide flange for easy nailing and stiffer floors
- Electrical conduit, plumbing and most HVAC can be passed through the web, resulting in more clearance space for higher ceilings
- Environmentally responsible
- Lifetime limited warranty (See manufacturer's warranty for terms, conditions and limitations. To receive a copy call 1-888-502 BLUE.)

GPI 90 Residential Floor Span Chart

40 PSF Live Load + 10 PSF Dead Load, Live Load Deflection Criteria (L/480)

Joist	Spacing (Simple Span)				Spacing (Multiple Span)				
Depth	12″ o.c.	16″ o.c.	19.2″ o.c.	24″ o.c.	12″ o.c.	16″ o.c.	19.2″ o.c.	24″ o.c.	
11%″	26'-04"	23'-11″	22′-07″	21'-00"	28'-08"	26'-01"	24'-06"	22'-09"	
14″	29'-10"	27'-02"	25′-07″	23'-09″	32'-07″	29′-07″	27'-10"	25'-10"	
16″	33′-00″	30'-01"	28'-04"	26'-04"	36′-00″	32'-09"	30'-10"	26'-07"	

NOTES:

- These span charts are based on uniform loads, as noted above; live load deflection is limited to L/480 for better performance. Floor performance is greatly influenced by the stiffness of the floor joists. Experience has shown that joists designed to the code minimum live load deflection (L/360) will result in a floor that may not meet the expectations of some end users. GP strongly recommends residential floor spans for Wood I Beam[™] joists in accordance with those given above, which are based on L/480 live load deflection (one-third stiffer than required by code).
- 2. Spans are clear distances between supports, and are based on composite action with glued-nailed APA Rated[®] Sheathing or Sturd-I-Floor[®] panels of minimum thickness ¹⁹/₂₀" (40/20 or 20 oc) for joist spacing of 19.2" or less, or ²³/₂₀" (48/24 or 24 oc) for a joist spacing of 24". Adhesive must meet APA AFG-01 or ASTM D 3498. Apply a continuous line of adhesive (approximately ¼" diameter) to top flange of joists. All surfaces must be clean and dry. If sheathing is nailed only (not recommended), reduce spans by 12".
- 3. Minimum end bearing length is $1\frac{3}{4}$ ". Minimum intermediate bearing length is $3\frac{1}{2}$ ".
- 4. For multiple-span joists: End spans must be at least 40% of the adjacent span. Spans shown above cover a broad range of applications. It may be possible to exceed these spans by analyzing a specific application with FASTBeam[®] selection software.
- 5. For loading other than that shown above, use FASTBeam® software, or contact BlueLinx Engineered Lumber Technical Services.
- 6. Not all products are available at all distribution centers; contact BlueLinx for availability. (1-800-839-2588—Eastern Sales Region, 1-800-830-7370—Western Sales Region)





GPI 90 Series Design Properties

				Allowable Reaction (lbs)					
		Allowable	Allowable	End 1¾″ Brg.		Intermediate 3½" Brg.			
	EI	Moment	Shear	Brg. Stiffeners		Brg. Stiffeners		C	Weight
Depth	(10 ⁶ inch ² lbs)	(ft-lbs)	(lbs)	No	Yes	No	Yes	(10º ft-lbs/in)	(lbs/ft)
111/%"	661	10255	1925	1400	1900	3355	3850	0.515	4.1
14″	965	12235	2125	1400	1900	3355	3855	0.607	4.4
16″	1306	14020	2330	1400	1900	3355	3855	0.693	4.8

NOTES:

- 1. Allowable moment values may not be increased for any code allowed repetitive member use factor.
- 2. Allowable moment, shear, and reaction values are for normal duration loading and may be increased for other load durations in accordance with code.
- 3. For a bearing length of 4", the allowable end reaction without stiffeners for all depths is 1900 lbs.; the allowable end reaction with stiffeners may be set equal to the tabulated shear value. Interpolation of end reaction with or without stiffeners is permitted when the bearing length provided is between 1¾" and 4".
- 4. Tabulated weights are for dead load calculations. For shipping weights, contact BlueLinx.
- 5. Maximum vertical load transfer is 2000 plf.

$$APPROXIMATE DEFLECTION* (Inches) = \frac{22.5 \times W \times L^4}{EI} + \frac{W \times L^2}{C}$$

*Constants have been adjusted to maintain unit consistency.

- W Uniform Load (Ibs/foot) =
- L = Span (feet)
- Stiffness Constant FI =
- С **Shear Deflection Constant** =

The user is responsible for proper storage, handling and installation of these products. Please refer to Georgia-Pacific's Engineered Lumber Residential Floor & Roof Systems Product Guide (Lit. item #123040) for detailed storage, handling and installation guidance.

Distributed Exclusively by

BlueLinx

4300 Wildwood Parkway Atlanta, GA 30339

1-888-502-BLUE www.BlueLinxCo.com

GEORGIA-PACIFIC, GP, the GEORGIA-PACIFIC logo, FASTBEAM, FIBERSTRONG and WOOD I BEAM are owned by or licensed to Georgia-Pacific Wood Products LLC. APA RATED and STURD-I-FLOOR are registered trademarks of APA-The Engineered Wood Association. BLUELINX and the BLUELINX design are trademarks and registered servicemarks oesign are trademarks and registered services of BlueLinx Corporation. ©2007 Georgia-Pacific Wood Products LLC. All rights reserved. Printed in the U.S.A. 8/07 WBM Lit. Item #122163.