

THE CODE PLUS® FLOOR

The Code Plus Program was developed by APA as a way to help builders and remodelers use the best materials and construction methods available. Because Code Plus builders and remodelers agree to use APA trademarked I-joists, glued laminated timbers, plywood, and OSB in their construction, the Code Plus designation is also a symbol of quality to home buyers and homeowners.

When Code Plus floor criteria are met and APA PRIs are used, the resulting floor system will exceed building code requirements, and provide superior performance. APA's Code Plus floor requirements are:

1. APA trademarked I-joists, glued laminated timber or LVL headers or beams, and plywood, COM-PLY® or OSB floor panels must be used.

2. Panel Floor allowable span must be at least 24 for I-joist spacing up to 20" o.c., and 32 for I-joists spaced 24" o.c.
3. Panels must be installed using the APA Glued Floor System guidelines.
4. Panels shall be fastened with 8d nails or other building code approved fasteners spaced per table below. Nail size and spacing may vary, depending on span and sheathing thickness.
5. A 1/8" space at all panel end and edge joints must be left to allow for panel expansion.
6. Panels must be installed continuously over two or more spans, with the long dimension or strength axis of the panel across the I-joist.

APA RATED STURD-I-FLOOR™ FASTENER SCHEDULES FOR PRIs⁽¹⁾

Maximum Joist Spacing (in.)	Panel Thickness ⁽²⁾ (in.)	Fastening: Glued-Nailed ⁽³⁾		
		Nail Size and Type	Maximum Spacing (in.)	
			Supported Panel Edges	Intermediate Supports
16	23/32 ⁽⁵⁾ , 3/4	6d ring- or screw-shank ⁽⁴⁾	12	12
20	23/32 ⁽⁵⁾ , 3/4	6d ring- or screw-shank ⁽⁴⁾	12	12
24	7/8	8d ring- or screw-shank ⁽⁴⁾	6	12

- (1) Special conditions may impose heavy traffic and concentrated loads that require construction in excess of the minimums shown.
- (2) Panels in a given thickness may be manufactured in more than one allowable span. Panels with a allowable span greater than the actual joist spacing may be substituted for panels of the same thickness with allowable span matching the actual joist spacing.
- (3) Use only adhesives conforming to APA Specification AFG-01 or ASTM D3498, applied in accordance with the manufacturer's recommendations. If OSB panels with sealed surfaces and edges are to be used, use only solvent-based glues; check with panel manufacturer.

- (4) 8d common nails may be substituted if ring- or screw-shank nails are not available.
- (5) Recommended minimum thickness for use with I-joists.



APA – The Engineered Wood Association

BONUS ROOM FLOOR JOIST SELECTION GUIDE

BONUS ROOM FLOOR JOIST SELECTION GUIDE

L (Span)	X (Kneewall)	RFPI SERIES			
		12" o.c.	16" o.c.	19.2" o.c.	24" o.c.
20'	4'	11 7/8" RFPI 40	14" RFPI 50	14" RFPI 70	16" RFPI 50
	5'	11 7/8" RFPI 70	14" RFPI 50	14" RFPI 70	16" RFPI 50
	6'	11 7/8" RFPI 70	14" RFPI 50	14" RFPI 70	16" RFPI 70
22'	4'	14" RFPI 50	16" RFPI 50	16" RFPI 70	16" RFPI 90
	5'	14" RFPI 50	16" RFPI 50	16" RFPI 70	16" RFPI 90
	6'	14" RFPI 50	16" RFPI 50	16" RFPI 70	16" RFPI 90
24'	4'	14" RFPI 70	16" RFPI 70	16" RFPI 90	Call
	5'	14" RFPI 70	16" RFPI 70	16" RFPI 90	Call
	6'	14" RFPI 70	16" RFPI 70	16" RFPI 90	Call
	7'	16" RFPI 50	16" RFPI 70	16" RFPI 90	Call

Design Parameters:

1. Roof loads of 30 PSF live load at 115% (snow load).
2. Roof dead load of 12 PSF (asphalt shingles).
3. Roof rafter slope between 8/12 and 12/12.
4. Kneewall weight of 40 PLF.
5. Attic storage load of 20 PSF live load (outside the kneewalls).
6. Floor live load of 40 PSF (within the kneewalls).
7. Attic and floor dead load of 10 PSF.
8. Straight gable roof framing. No hip framing is permitted.
9. All other conditions, call your local representative.

