

APA STANDARD

APA PRI-400

Performance Standard for Residential I-Joists

OCTOBER 2021



CONTENTS

1	SCOPE	1	5	QUALIFICATION REQUIREMENTS.	9
2	REFERENCED DOCUMENTS	1	5.1	Introduction	9
2.1	ASTM Standards	1	5.2	Flange Materials	9
2.2	Other Standards	2	5.3	Web Materials.	9
2.3	APA Publications	2	5.4	Adhesives	9
3	TERMINOLOGY.	2	5.5	I-Joist Products	9
4	PERFORMANCE CRITERIA AND REQUIREMENTS.	3	6	QUALITY ASSURANCE	10
4.1	Sizes and Tolerances	3	6.1	Qualification Tests.	10
4.2	Allowable Span	4	6.2	Product Evaluation.	10
4.3	Design Properties	6	6.3	Quality Assurance.	10
4.4	Characteristic Test Values	8	6.4	Trademarking	10
			7	TYPICAL TRADEMARKS (EXAMPLES) . . .	11

APA PRI-400 Performance Standard for Residential I-Joists

October 2021

1. SCOPE

- 1.1 The APA Performance-Rated I-joist is an “I”-shaped prefabricated structural member using solid-sawn lumber or structural composite lumber flanges and wood structural panel webs bonded together with moisture-resistant adhesives.
- 1.2 To be classified as an APA Performance-Rated I-joist, the joist shall meet an L/480 live load deflection criterion for residential floor applications, in addition to meeting all other requirements of this standard.
- 1.3 APA Performance-Rated I-joists are intended for use as joists in residential floor construction. Products carrying the APA Performance-Rated I-joist trademark are to be installed in accordance with recommendations published by APA – The Engineered Wood Association.
- 1.4 APA Performance-Rated I-joists can be used for applications other than residential floor construction provided that appropriate design properties of the I-joists are used in design.
- 1.5 APA Performance-Rated I-joists are intended for use in dry-service conditions where the average equilibrium moisture content of solid-sawn lumber is less than 16%.
- 1.6 This standard provides an allowable span system for a series of APA Performance-Rated I-joists used in residential floor construction. To qualify for trademarking as an APA Performance-Rated I-joist, the I-joist shall demonstrate conformance to the performance requirements for the allowable span as well as the design properties set forth in this standard.

2. REFERENCED DOCUMENTS

The following referenced documents are applicable to this standard. The latest edition of the referenced document (including any amendments) applies.

2.1 ASTM Standards:

D9 Terminology Relating to Wood and Wood-Based Products

D3498 Standard Specification for Adhesives for Field-Gluing Wood Structural Panels
(Plywood or Oriented Strand Board) to Wood Based Floor System Framing

D5055 Standard Specification for Establishing and Monitoring Structural Capacities of Prefabricated Wood I-Joists

D5456 Standard Specification for Evaluation of Structural Composite Lumber Products

2.2 Other Standards:

Voluntary Product Standard PS 1 – Structural Plywood

Voluntary Product Standard PS 2 – Performance Standard for Wood Structural Panels

CAN/CSA O325 – Construction Sheathing

2.3 APA Publications:

Quality Assurance Policy for APA Performance-Rated I-Joists

3. TERMINOLOGY

3.1 Definitions – See the referenced documents for definitions of terms used in this standard.

3.2 Description of terms specific to this standard:

Bending EI: A measure of flexural stiffness without the influence of shear deflection.

Characteristic value: A value determined from test data for derivation of a design property. For the mechanical properties referenced in this standard, the characteristic values represent the 5th percentile estimates with 75% confidence, except for the stiffness (EI) and uniform vertical load capacities (VLC), which are based on the mean values. In addition, the coefficient of shear deflection (K) is determined based on theoretical calculations.

Clear span: The distance between the faces of two adjacent supports, which is the basis for the allowable spans given in this standard.

Design span (test span): The distance between the centerlines of two adjacent supports, which is typically referenced in full-scale beam tests or used in a structural design.

Prefabricated wood I-joist: A structural member manufactured using solid-sawn lumber or structural composite lumber flanges and wood structural panel webs, bonded together with moisture-resistant adhesives, forming an “I” cross-sectional shape.

4. PERFORMANCE CRITERIA AND REQUIREMENTS

This section provides performance criteria and requirements for APA Performance-Rated I-joists. APA Performance-Rated I-joists shall be qualified by demonstrating conformance to the performance requirements given in this section.

4.1 Sizes and Tolerances

- 4.1.1 Flanges** – APA Performance-Rated I-joists are produced using either structural composite lumber or solid-sawn lumber as flange materials.
- 4.1.2 Webs** – APA Performance-Rated I-joists are produced using wood structural panels, including plywood or oriented strand board (OSB) meeting PS 1, PS 2 or CSA O325, as web materials.
- 4.1.3 Depth** – APA Performance-Rated I-joists shall have a net depth of 9-1/2 inches, 11-7/8 inches, 14 inches, or 16 inches.
- 4.1.4 Flange dimension** – The net flange width for APA Performance-Rated I-joists depends on the flange materials used, but shall have a minimum net width of 1-1/2 inches and minimum net thickness of 1-5/16 inches.
- 4.1.5 Tolerances** – The tolerances permitted at the time of manufacture shall be as follows:
Flange Width – Plus or minus 1/32 inch
Flange Thickness – Minus 1/16 inch
I-Joist Depth – Plus 0 or minus 1/8 inch

4.2 Allowable Span

4.2.1 The allowable spans, as shown in Tables 1a and 1b, indicate the allowable **clear** span for various joist spacings under typical residential floor loads (10 psf dead load and 40 psf live load).

TABLE 1A

ALLOWABLE SPANS FOR APA PERFORMANCE-RATED I-JOISTS – SIMPLE SPAN ONLY^{a,b,c,d}

Depth	Joist Series	Simple Spans			
		On Center Spacing			
		12"	16"	19.2"	24"
9'-1/2"	PRI-20	16'-2"	14'-10"	14'-0"	13'-1"
	PRI-30	17'-1"	15'-7"	14'-9"	13'-9"
	PRI-40	17'-9"	16'-3"	15'-4"	14'-4"
	PRI-50	17'-10"	16'-4"	15'-5"	14'-5"
	PRI-60	18'-8"	17'-1"	16'-1"	15'-0"
11'-7/8"	PRI-20	19'-3"	17'-8"	16'-8"	15'-7"
	PRI-30	20'-4"	18'-7"	17'-7"	16'-5"
	PRI-40	21'-2"	19'-4"	18'-3"	16'-8"
	PRI-50	21'-2"	19'-5"	18'-4"	17'-1"
	PRI-60	22'-2"	20'-3"	19'-2"	17'-10"
	PRI-70	23'-0"	20'-11"	19'-9"	18'-5"
	PRI-80	24'-6"	22'-4"	21'-0"	19'-7"
	PRI-90	25'-2"	22'-11"	21'-8"	20'-2"
14"	PRI-40	24'-0"	21'-11"	20'-6"	18'-4"
	PRI-50	24'-1"	22'-0"	20'-9"	19'-5"
	PRI-60	25'-2"	23'-0"	21'-9"	20'-3"
	PRI-70	26'-1"	23'-9"	22'-5"	20'-11"
	PRI-80	27'-9"	25'-4"	23'-10"	22'-2"
	PRI-90	28'-7"	26'-0"	24'-6"	22'-10"
16"	PRI-40	26'-7"	24'-3"	22'-1"	19'-9"
	PRI-50	26'-8"	24'-4"	23'-0"	20'-2"
	PRI-60	27'-11"	25'-6"	24'-0"	22'-5"
	PRI-70	28'-10"	26'-4"	24'-10"	23'-1"
	PRI-80	30'-9"	28'-0"	26'-5"	24'-7"
	PRI-90	31'-7"	28'-9"	27'-1"	25'-3"

a. Allowable **clear** span applicable to simple-span residential floor construction with a design dead load of 10 psf and live load of 40 psf. The live load deflection is limited to span/480.

b. Spans are based on a composite floor with glued-nailed sheathing meeting the requirements for APA Rated Sheathing or APA Rated STURD-I-FLOOR conforming to PS 1, PS 2 or CSA O325 with a minimum 19/32 Performance Category (40/20 or 20 oc) for a joist spacing of 19.2 inches or less, or 23/32 Performance Category (48/24 or 24 oc) for a joist spacing of 24 inches. Adhesive shall meet ASTM D3498 1/8" P/O Class. Spans shall be reduced 12 inches when the floor sheathing is nailed only.

c. Minimum bearing length shall be 1-3/4 inches for the end bearings.

d. Bearing stiffeners are not required when I-joists are used with the spans and spacings given in this table, except as required by hanger manufacturers.

TABLE 1B

ALLOWABLE SPANS FOR APA PERFORMANCE-RATED I-JOISTS – MULTIPLE SPAN ONLY^{a,b,c,d}

Depth	Joist Series	Multiple Spans			
		On Center Spacing			
		12"	16"	19.2"	24"
9-1/2"	PRI-20	17'-7"	16'-1"	15'-3"	13'-5"
	PRI-30	18'-7"	17'-0"	16'-0"	15'-0"
	PRI-40	19'-4"	17'-8"	16'-4"	14'-7"
	PRI-50	19'-5"	17'-9"	16'-9"	15'-7"
	PRI-60	20'-4"	18'-7"	17'-6"	16'-4"
11-7/8"	PRI-20	21'-0"	19'-2"	16'-9"	13'-5"
	PRI-30	22'-1"	20'-3"	18'-10"	15'-0"
	PRI-40	23'-0"	20'-5"	18'-7"	16'-7"
	PRI-50	23'-1"	21'-1"	19'-11"	16'-1"
	PRI-60	24'-2"	22'-1"	20'-10"	19'-5"
	PRI-70	25'-0"	22'-10"	21'-6"	18'-6"
	PRI-80	26'-8"	24'-3"	22'-11"	21'-3"
	PRI-90	27'-6"	25'-0"	23'-6"	21'-10"
14"	PRI-40	25'-11"	22'-5"	20'-5"	18'-3"
	PRI-50	26'-3"	23'-11"	20'-2"	16'-1"
	PRI-60	27'-6"	25'-1"	23'-8"	19'-9"
	PRI-70	28'-5"	25'-11"	23'-2"	18'-6"
	PRI-80	30'-3"	27'-7"	25'-11"	23'-11"
	PRI-90	31'-2"	28'-4"	26'-8"	24'-10"
16"	PRI-40	27'-11"	24'-2"	22'-0"	19'-8"
	PRI-50	29'-0"	24'-3"	20'-2"	16'-1"
	PRI-60	30'-5"	27'-9"	24'-9"	19'-9"
	PRI-70	31'-5"	27'-10"	23'-2"	18'-6"
	PRI-80	33'-6"	30'-6"	28'-9"	23'-11"
	PRI-90	34'-5"	31'-4"	29'-6"	26'-7"

- a. Allowable **clear** span applicable to multiple-span residential floor construction with a design dead load of 10 psf and live load of 40 psf. The end spans shall be 40% or more of the adjacent span. The live load deflection is limited to span/480.
- b. Spans are based on a composite floor with glued-nailed sheathing meeting the requirements for APA Rated Sheathing or APA Rated STURD-I-FLOOR conforming to PS 1, PS 2 CSA O325 or CSA O437 with a minimum 19/32 Performance Category (40/20 or 20 oc) for a joist spacing of 19.2 inches or less, or 23/32 Performance Category (48/24 or 24 oc) for a joist spacing of 24 inches. Adhesive shall meet ASTM D3498 1/8" P/O Class. Spans shall be reduced 12 inches when the floor sheathing is nailed only.
- c. Minimum bearing length shall be 1-3/4 inches for the end bearings and 3-1/2 inches for the intermediate bearings.
- d. Bearing stiffeners are not required when I-joists are used with the spans and spacings given in this table, except as required by hanger manufacturers.

4.3 Design Properties

4.3.1 APA Performance-Rated I-joists shall be designed based on the tabulated values provided in Table 2.

TABLE 2

DESIGN PROPERTIES FOR APA PERFORMANCE-RATED I-JOISTS^a

Depth	Joist Series	EI ^b 10 ⁶ lbf-in. ²	M ^c lbf-ft	V ^d lbf	IR ^{e,i} lbf	ER ^{f,i} lbf				VLC ^g lbf/ft	K ^h 10 ⁶ lbf
						1-3/4" Brg w/o Stiffeners	1-3/4" Brg w/ Stiffeners	4" Brg w/o Stiffeners	4" Brg w/ Stiffeners		
9-1/2"	PRI-20	132	2,520	1,120	1,700	830	830	1,120	1,120	2,000	4.94
	PRI-30	159	3,225	1,120	1,905	945	945	1,120	1,120	2,000	4.94
	PRI-40	184	2,735	1,120	2,160	1,080	1,080	1,120	1,120	2,000	4.94
	PRI-50	186	3,800	1,120	2,040	1,015	1,015	1,120	1,120	2,000	4.94
	PRI-60	219	3,780	1,120	2,160	1,080	1,080	1,120	1,120	2,000	4.94
11-7/8"	PRI-20	225	3,265	1,420	1,700	830	830	1,420	1,420	2,000	6.18
	PRI-30	271	4,170	1,420	1,905	945	945	1,420	1,420	2,000	6.18
	PRI-40	313	3,545	1,420	2,500	1,200	1,200	1,420	1,420	2,000	6.18
	PRI-50	316	4,915	1,420	2,040	1,015	1,015	1,420	1,420	2,000	6.18
	PRI-60	371	4,900	1,420	2,500	1,200	1,200	1,420	1,420	2,000	6.18
	PRI-70	416	6,595	1,420	2,335	1,160	1,160	1,420	1,420	2,000	6.18
	PRI-80	518	6,940	1,420	2,760	1,280	1,280	1,420	1,420	2,000	6.18
	PRI-90	571	8,770	1,925	3,355	1,400	1,400	1,885	1,925	2,000	6.18
14"	PRI-40	459	4,270	1,710	2,500	1,200	1,200	1,550	1,710	2,000	7.28
	PRI-50	463	5,860	1,710	2,040	1,015	1,015	1,550	1,710	2,000	7.28
	PRI-60	544	5,895	1,710	2,500	1,200	1,200	1,550	1,710	2,000	7.28
	PRI-70	609	7,865	1,710	2,335	1,160	1,160	1,550	1,710	2,000	7.28
	PRI-80	756	8,360	1,710	3,020	1,280	1,280	1,550	1,710	2,000	7.28
	PRI-90	832	10,460	2,125	3,355	1,400	1,400	1,885	2,125	2,000	7.28
16"	PRI-40	625	4,950	1,970	2,500	1,200	1,200	1,550	1,970	2,000	8.32
	PRI-50	630	6,715	1,970	2,040	1,015	1,015	1,550	1,970	2,000	8.32
	PRI-60	739	6,835	1,970	2,500	1,200	1,200	1,550	1,970	2,000	8.32
	PRI-70	826	9,010	1,970	2,335	1,160	1,160	1,550	1,970	2,000	8.32
	PRI-80	1,024	9,690	1,970	3,020	1,280	1,280	1,550	1,970	2,000	8.32
	PRI-90	1,126	11,985	2,330	3,355	1,400	1,400	1,885	2,330	2,000	8.32

Continued on next page

TABLE 2 (Continued)

DESIGN PROPERTIES FOR APA PERFORMANCE-RATED I-JOISTS^a

- a. The tabulated values are design values for normal duration of load (10 years). All values, except for EI and K, shall be permitted to be adjusted for other load durations as permitted by the code, and the VLC values shall not be increased for shorter durations.
- b. Bending stiffness (EI) of the I-joist.
- c. Moment capacity (M) of the I-joist.
- d. Shear capacity (V) of the I-joist.
- e. Intermediate reaction (IR) of the I-joist with a minimum bearing length of 3-1/2 inches without bearing stiffeners.
- f. End reaction (ER) of the I-joist. Interpolation between 1-3/4-in. and 4-in. bearings is permitted with or without bearing stiffeners.
- g. Uniform vertical (bearing) load capacity (VLC).
- h. Coefficient of shear deflection (K). For calculating uniform load and center-point load deflections of the I-joist in a simple-span application, use Eqs. 1 and 2.

$$\text{Uniform Load:} \quad \delta = \frac{5\omega\ell^4}{384EI} + \frac{\omega\ell^2}{K} \quad [1]$$

$$\text{Center-Point Load:} \quad \delta = \frac{P\ell^3}{48EI} + \frac{2P\ell}{K} \quad [2]$$

Where:

- δ = calculated deflection (in.),
 P = concentrated load (lbf),
 EI = bending stiffness of the I-joist (lbf-in.²),
 K = coefficient of shear deflection (lbf),
 ω = uniform load (lbf/in.), and
 ℓ = design span (in.).

- i. The IR and ER design values after being adjusted for load duration shall meet the requirement given in Eq. 3.

$ER \times C_D$ or $IR \times C_D$ (lbf) $\leq C_b b_{brg} L_{brg} F_{c\perp}$, or the capacity of the bearing plate supporting the I-joist (lbf),
 whichever is smaller

[3]

Where:

- C_D = Load duration factor for ER and IR in accordance with the applicable code,
 C_b = Bearing area factor as defined in Section 3.10.4 of the NDS = 1.0 for end reaction,
 b_{brg} = Bearing width of the I-joist, typically the flange width (b_f) minus 0.15 in. due to edge easing (in.),
 L_{brg} = Bearing length of the I-joist (in.), and
 $F_{c\perp}$ = Compressive stress perpendicular to grain of the I-joist flanges (lbf/in.²).

Note (Non-mandatory, for information only): Examples of PRI flange width and $F_{c\perp}$ are listed below for reference. Refer to the manufacturer for specific flange widths and $F_{c\perp}$ values as needed.

Series	Flange width b_f , in.	$F_{c\perp}$, lbf/in. ²	Series	Flange width b_f , in.	$F_{c\perp}$, lbf/in. ²
PRI-20 & PRI-30	1-1/2	450	PRI-70	2-5/16	450
PRI-40 & PRI-60	2-1/2	425	PRI-80	3-1/2	425
PRI-50	1-3/4	450	PRI-90	3-1/2	450

4.4 Characteristic Test Values

4.4.1 APA Performance-Rated I-joists shall have characteristic test values that are equal to or greater than the values given in Table 3.

TABLE 3

CHARACTERISTIC TEST VALUES FOR APA PERFORMANCE-RATED I-JOISTS^a

Depth	Joist Series	EI ^b 10 ⁶ lbf-in. ²	M ^c lbf-ft	V ^d lbf	IR ^e lbf	ER ^f lbf				VLC ^g lbf/ft	K ^h 10 ⁶ lbf
						1-3/4" Brg without Stiffeners	1-3/4" Brg with Stiffeners	4" Brg without Stiffeners	4" Brg with Stiffeners		
9-1/2"	PRI-20	132	5,290	2,655	4,030	1,970	1,970	2,655	2,655	6,000	4.94
	PRI-30	159	6,775	2,655	4,515	2,240	2,240	2,655	2,655	6,000	4.94
	PRI-40	184	5,745	2,655	5,120	2,560	2,560	2,655	2,655	6,000	4.94
	PRI-50	186	7,980	2,655	4,835	2,410	2,410	2,655	2,655	6,000	4.94
	PRI-60	219	7,940	2,655	5,120	2,560	2,560	2,655	2,655	6,000	4.94
11-7/8"	PRI-20	225	6,855	3,370	4,030	1,970	1,970	3,370	3,370	6,000	6.18
	PRI-30	271	8,755	3,370	4,515	2,240	2,240	3,370	3,370	6,000	6.18
	PRI-40	313	7,445	3,370	5,925	2,845	2,845	3,370	3,370	6,000	6.18
	PRI-50	316	10,320	3,370	4,835	2,410	2,410	3,370	3,370	6,000	6.18
	PRI-60	371	10,290	3,370	5,925	2,845	2,845	3,370	3,370	6,000	6.18
	PRI-70	416	13,850	3,370	5,535	2,750	2,750	3,370	3,370	6,000	6.18
	PRI-80	518	14,575	3,370	6,545	3,035	3,035	3,370	3,370	6,000	6.18
	PRI-90	571	18,415	4,565	7,955	3,320	3,320	4,465	4,565	6,000	6.18
14"	PRI-40	459	8,965	4,055	5,925	2,845	2,845	3,670	4,055	6,000	7.28
	PRI-50	463	12,305	4,055	4,835	2,410	2,410	3,670	4,055	6,000	7.28
	PRI-60	544	12,380	4,055	5,925	2,845	2,845	3,670	4,055	6,000	7.28
	PRI-70	609	16,515	4,055	5,535	2,750	2,750	3,670	4,055	6,000	7.28
	PRI-80	756	17,555	4,055	7,160	3,035	3,035	3,670	4,055	6,000	7.28
	PRI-90	832	21,965	5,040	7,955	3,320	3,320	4,465	5,040	6,000	7.28
16"	PRI-40	625	10,395	4,670	5,925	2,845	2,845	3,670	4,670	6,000	8.32
	PRI-50	630	14,100	4,670	4,835	2,410	2,410	3,670	4,670	6,000	8.32
	PRI-60	739	14,355	4,670	5,925	2,845	2,845	3,670	4,670	6,000	8.32
	PRI-70	826	18,920	4,670	5,535	2,750	2,750	3,670	4,670	6,000	8.32
	PRI-80	1,024	20,350	4,670	7,160	3,035	3,035	3,670	4,670	6,000	8.32
	PRI-90	1,126	25,170	5,525	7,955	3,320	3,320	4,465	5,525	6,000	8.32

a. The tabulated values are test values. Use the values given in Table 2 for design.

b. Bending stiffness (EI) of the I-joist.

c. Moment capacity (M) of the I-joist. An adjustment factor of 2.1 has been used to derive the design values given in Table 2.

d. Shear capacity (V) of the I-joist. An adjustment factor of 2.37 has been used to derive the design values given in Table 2.

e. Intermediate reaction (IR) of the I-joist with a minimum bearing length of 3-1/2 inches without bearing stiffeners. An adjustment factor of 2.37 has been used to derive the design values given in Table 2.

f. End reaction (ER) of the I-joist. An adjustment factor of 2.37 has been used to derive the design values given in Table 2.

g. Uniform vertical (bearing) load capacity (VLC). The tabulated values are the required average ultimate load. The required test value at the 0.06-inch deformation shall be 1/3 of the tabulated value or greater.

h. Coefficient of shear deflection (K).

5. QUALIFICATION REQUIREMENTS

5.1 All APA Performance-Rated I-joists shall be qualified based on the requirements specified in this section. Qualification tests shall be conducted in accordance with the principles set forth in ASTM D5055 with additional requirements specifically noted in this standard.

5.2 Flange Materials

5.2.1 Flanges can be solid-sawn lumber or structural composite lumber with a net dimension in conformance with Section 4.1.4. The flange materials shall have a published specific gravity of 0.42 or higher on average.

5.2.2 End joints are permitted for flange materials provided that such joints conform to the requirements of ASTM D5055.

5.2.3 Flange materials used for the top flange of the I-joist shall be the same grade/type as those used for the bottom (balanced construction).

5.2.4 Qualification for flange materials shall be in accordance with ASTM D5055 and *Quality Assurance Policy for APA Performance-Rated I-Joists*.

5.3 Web Materials

5.3.1 Wood structural panels in conformance with PS 1, PS 2 or CSA O325 shall be used as web materials provided that the glue bond characteristics meet the requirements of EXPOSURE 1 or EXTERIOR, and *Quality Assurance Policy for APA Performance-Rated I-Joists*.

5.4 Adhesives

5.4.1 Adhesives shall conform to the requirements of ASTM D5055.

5.5 I-Joist Products

5.5.1 Sampling procedures, number of samples, test methods and data analyses for the I-joist qualification shall conform to the principles set forth in ASTM D5055 with additional requirements specifically noted in this section.

5.5.2 Manufacturing parameters, such as web types, thicknesses and grades; flange types and sizes; web-flange joints; and web joints shall be identified as part of the qualification procedures. Changes in these parameters shall require an engineering evaluation or re-qualification by APA.

5.5.3 Qualification test results for APA Performance-Rated I-joists shall conform to the characteristic test values given in Table 3.

6. QUALITY ASSURANCE

6.1 Qualification Tests

- 6.1.1** Required qualification tests and criteria are detailed in Sections 1 and 4 of this standard. Retests shall be conducted using a new independent sample set.

6.2 Product Evaluation

- 6.2.1** Upon satisfactory completion of the requirements in Sections 1 and 4, all manufacturing variables shall be documented in the in-plant quality manual in accordance with the *Quality Assurance Policy for APA Performance-Rated I-Joists*.
- 6.2.2** Periodic reevaluation of structural capacities shall be conducted in accordance with the requirements given in ASTM D5055 and the *Quality Assurance Policy for APA Performance-Rated I-Joists*. This reevaluation shall be performed at the end of the first 6 months for any new plant or any new production line and shall not be longer than every 12 months for any existing plant or any existing production line.

6.3 Quality Assurance

- 6.3.1** Quality assurance of APA Performance-Rated I-joists shall follow the in-plant manufacturing standard and the *Quality Assurance Policy for APA Performance Rated I-Joists*.

6.4 Trademarking

- 6.4.1** All APA Performance-Rated I-joists shall be identified with an APA trademark, as shown in Section 7, bearing the net I-joist depth, joist series, referenced standard (PRI-400) or APA Product Report number, and manufacturing plant number.

7. TYPICAL TRADEMARKS (EXAMPLES)

|| **APA** 9-1/2" PRI-40 MILL 0000 PR-LXXX PRI-400 || APA GLUED RESIDENTIAL FLOORS |

|| **APA** 11-7/8" PRI-40 MILL 0000 PR-LXXX PRI-400 || APA GLUED RESIDENTIAL FLOORS |

|| **APA** 14" PRI-40 MILL 0000 PR-LXXX PRI-400 || APA GLUED RESIDENTIAL FLOORS |

|| **APA** 16" PRI-40 MILL 0000 PR-LXXX PRI-400 || APA GLUED RESIDENTIAL FLOORS |

APA PRI-400 Performance Standard for Residential I-Joists

We have field representatives in many major U.S. cities and in Canada who can help answer questions involving APA trademarked products. For additional assistance in specifying engineered wood products, contact us:

APA HEADQUARTERS

7011 So. 19th St. ■ Tacoma, Washington 98466
(253) 565-6600 ■ Fax: (253) 565-7265

PRODUCT SUPPORT HELP DESK

(253) 620-7400 ■ help@apawood.org

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