

ICC-ES Evaluation Report

ESR-3072

Reissued September 2024 This report also contains: - City of LA Supplement

Subject to renewal September 2026

- CA Supplement

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WOOD, PLASTICS AND COMPOSITES	REPORT HOLDER: PASLODE, AN ILLINOIS FOOL WORKS COMPANY	EVALUATION SUBJECT: PASLODE NAILS	
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2024, 2021, 2018, 2015 and 2012 *International Building Code*® (IBC)
- 2024, 2021, 2018, 2015 and 2012 International Residential Code® (IRC)

Properties evaluated:

- Bending yield strength
- Lateral connection strength
- Withdrawal strength
- Use in diaphragms and shear walls
- Use in fastening schedules which are alternatives to those prescribed in the codes

2.0 USES

The Paslode Nails are used in engineered wood framing connections, engineered connections of wood structural panels to wood framing, and prescriptive framing connections. The nails are also used in engineered diaphragms and shear walls and for prescriptive attachment of sheathing to framing.

3.0 DESCRIPTION

3.1 Nails:

The Paslode Nails have a proprietary form with nine longitudinal grooves along the shank. Select products have annular ring shank deformations. The nails have a RounDrive[®] head as illustrated in <u>Figure 1</u>. They have an uncoated (bright) finish or a hot-dipped galvanized (HDG) finish with a thermoplastic coating along a portion of the shank, and are collated for loading into a power driving tool. The nail material and dimensional tolerances conform to ASTM F1667. The HDG finish is 1 oz/ft² and complies with the coating weight required by ASTM A153 Class D. See <u>Table 1</u> for designations, dimensions and additional descriptions of the nails, including minimum specified bending yield strength. See <u>Figure 2</u> for an image of the typical framing nails. See <u>Figure 3</u> for an image of the ring shank framing nail.

3.2 Connected Materials:

Wood framing members must comply with the applicable code and the tables in this report.

Wood structural panel sheathing must be rated sheathing or Structural I sheathing complying with DOC PS-2.



4.0 DESIGN AND INSTALLATION

4.1 Design:

4.1.1 Engineered Framing Connections: The Paslode Nails comply with the strength requirements of IBC Section 2303.6. Lateral and withdrawal design values for connections using the Paslode Framing Nails are equivalent to those for connections using smooth round shank nails of the same nominal diameter, and must be determined in accordance with the ANSI/AWC *National Design Specification for Wood Construction*[®] (NDS). Reference head pull-through design values must be determined in accordance with Section 12.2.5 of the 2024 and 2018 NDS.

4.1.2 Prescribed Framing Connections: The Paslode Nails may be used in connections prescribed in the fastening schedule given in <u>Table 2</u>. The nails may be used in other framing connections where the same nominal nail diameter and length is prescribed in the IBC or IRC, as applicable.

4.1.3 Engineered Diaphragms and Shear Walls: The Paslode Nails may be used in engineered diaphragms and shear walls, as substitutes for the code-prescribed nails of the same nominal diameter addressed in the AWC Special Design Provisions for Wind and Seismic (SDPWS). Allowable diaphragm unit shear capacities are given in <u>Table 3A</u> and <u>3B</u>, and allowable shear wall unit shear capacities are given in <u>Tables 4A</u> and <u>4B</u>. The nails may be used in diaphragms and shear walls in all Seismic Design Categories. Diaphragm and shear wall deflections must be determined in accordance with Section 4 of the SDPWS. For the 0.131-inch nail, the G_a values for an 8d common nail are applicable. For the 0.120-inch nail, the G_a values for a 6d common nail are applicable.

4.1.4 Prescriptive Sheathing Attachment: The 0.131-inch Paslode Framing Nails may be directly substituted for the 8d common nails prescribed for attaching wood structural panel sheathing to sawn lumber framing in the codes and tables shown below.

CODE	TABLE	CONNECTIONS
2024 and 2021 IBC	2304.10.2	30, 31, 35, 36
2024 and 2021 IRC	R602.3(1)	31, 32, 38, 39
2018 IBC	2304.10.1	30, 31, 35, 36
2018 IRC	R602.3(1)	30, 31, 37, 38
2015 IBC	2304.10.1	32, 36, 37
2015 IRC	R602.3(1)	30, 31, 37, 38
2012 IBC	2304.9.1	31
2012 IRC	R602.3(1)	32, 33, 39, 40

4.2 Installation:

The nails must be installed in accordance with this report, and the report holder's published installation instructions. The nails described in this report are packaged for use in power tools. The nails must be installed using a tool recommended by the nail manufacturer. Individual nails may be manually driven.

Edge distances, end distances, and spacing must be sufficient to prevent splitting of the wood. When the nails are used in engineered wood products, the end and edge distances and spacing must be in accordance with the applicable ICC-ES evaluation report. For nails used in structural connections, installation must be in accordance with the applicable requirements of Section 12.1.6 of the 2024, 2018 and 2015 NDS (Section 11.1.6 of the 2012 NDS). When used in prescriptive applications for conventional wood frame construction, the Paslode framing nails must be installed in accordance with Table 2.

4.3 Special Inspection:

Special inspection of high-load diaphragms is required in accordance with IBC Section 1705.5.1. Periodic inspection of shear walls and diaphragms for wind resistance may be required, as prescribed in accordance with 2024 and 2021 IBC Section 1705.12.1 (2018 and 2015 IBC Section 1705.11.1, 2012 IBC Section 1705.10.1). Periodic inspection of shear walls and diaphragms for seismic resistance may be required in accordance with 2024 and 2021 IBC Section 1705.12.2 (2018 and 2015 IBC Section 1705.12.2, 2012 IBC Section 1705.12.2).

5.0 CONDITIONS OF USE:

The Paslode Nails described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- **5.1** Installation must comply with this report, the manufacturer's published installation instructions and the applicable code. If there is a conflict between the installation instructions and this report, this report governs.
- **5.2** Applied loads must not exceed the allowable loads addressed in Sections 4.1.1 and 4.1.3. Construction documents and calculations demonstrating that the design loads do not exceed the nail capacities must be

submitted to the code official. The calculations must be prepared by a registered design professional when required by statutes of the jurisdiction in which the project is to be constructed.

- **5.3** The HDG nails may be used in treated lumber in accordance with 2024 and 2021 IBC Section 2304.10.6.1 (2018 and 2015 IBC Section 2304.10.5.1, 2012 IBC Section 2304.9.5.1) and IRC Section R304.3 (2021, 2018, 2015 and 2012 IRC Section R317.3). The bright nails must not be used in preservative-treated or fire-retardant treated wood.
- 5.4 The nails are manufactured under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

- **6.1** Data in accordance with the ICC-ES Acceptance Criteria for Nails (AC116), dated March 2018 (editorially revised April 2024).
- **6.2** Results of lateral and withdrawal load tests performed in accordance with Section 4.0 of AC116 on the grooved shank Paslode nails and code-complying smooth shank nails of the same size.

7.0 IDENTIFICATION

- **7.1** The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-3072) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.
- **7.2** In addition, the Paslode Nails described in this report are identified by labels on the cartons bearing an image of the nail and the nail length and diameter.
- 7.3 The report holder's contact information is the following:

PASLODE, AN ILLINOIS TOOL WORKS COMPANY 155 HARLEM AVENUE GLENVIEW, ILLINOIS 60025 (800) 222-6990 www.paslode.com

NOMINAL DIAMETER (inch)	LENGTH (inches)	HEAD STYLE	NOMINAL HEAD DIAMETER (inch)	SHANK STYLE	POINT STYLE	MATERIAL	COATING/ FINISH	SPECIFIED <i>F_{yb}</i> (psi)	PACKAGING
0.120	2 21/		0.250	Fluted			Bright		
0.120	3, 3 ¹ / ₄	Offset	0.252	Fluted / Ring	Diamond	Carbon	HDG	100.000	30° Paper
0.131	3, 3 ¹ / ₄ , 3 ¹ / ₂	round	0.256	Fluted	Diamond	Steel	Bright	100,000	tape strips
0.131	3, 3 /4, 3 /2		0.250	Fluted			HDG		

TABLE 1—PASLODE NAILS

For **SI:** 1 inch = 25.4 mm, 1 psi = 6.89 kPa,

TABLE 2—FASTENING SCHEDULE FOR PRESCRIPTIVE APPLICATIONS IN CONVENTIONAL WOOD-FRAME CONSTRUCTION USING PASLODE FRAMING NAILS^{1,2,3}

	PASLODE NAIL								MBER					
CONNECTION DESCRIPTION	LENGTH /	2012	2012	2015	2015	2018	2018	2021	2021	2024	2024			
	DIAMETER	IBC	IRC	IBC		IBC	IRC	IBC	IRC	IBC	IRC			
	Connection No.:	9				•	•	8	0	8	0			
	3 x 0.131	9	12	8	8	8	8	8	8	8	8			
	3 ¹ / ₄ x 0.131					16"	0.C.							
	3 ¹ / ₂ x 0.131					10	0.0.							
Double Studs (Face Nail)	3 x 0.120													
	3 x 0.120 3 ¹ / ₄ x 0.120	16"	o.c.				14"	0.C.						
and the second s	Connection No.													
and the second	for Braced Walls:			9	9	9	9	9	9	9	9			
1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	3 x 0.131													
	3 ¹ / ₄ x 0.131			12" o.c.										
	3 ¹ / ₂ x 0.131													
	3 x 0.120						10"	0.C.						
	3 ¹ / ₄ x 0.120				-			0.0.	-					
	Connection No.:	23	8	8	8	8	8	8	8	8	8			
	3 x 0.131													
Abutting studs at corners	3 ¹ / ₄ x 0.131	16" o.c.	8" 0.C.				16"	0.C.						
and intersections	3 ¹ / ₂ x 0.131													
(face nail)	3 x 0.120	12"	8"	12" o.c.										
\mathbb{N}^{\prime}	3 ¹ / ₄ x 0.120	0.C.	0.C.				12	0.0.						
	Connection No. for Braced Walls:			9 9 9 8 9 9 9										
	3 x 0.131													
and the second	3 ¹ / ₄ x 0.131						12"	0.C.						
	3 ¹ / ₂ x 0.131													
	3 x 0.120						10"	0.C.						
	3 ¹ / ₄ x 0.120						10	0.0.						
Built-up header 2" to 2" with 1/2" spacer	Connection No.:	14	9	10	10	10	10	10	10	10	10			
(face nail)	3 x 0.131	8" o.c.	12"											
	3 ¹ / ₄ x 0.131	each	o.c. each				8" o.c. e	ach edge						
	3 ¹ / ₂ x 0.131	edge	edge											
	3 x 0.120					0"								
W.	3 ¹ / ₄ x 0.120					o 0.c. e	ach edge							
Continuous header to stud (toe nail)	Connection No.:	16 9 11 11 11 11 11 11 11 11												
	3 x 0.131													
Man	3 ¹ / ₄ x 0.131					4 n	ails							
	3 ¹ / ₂ x 0.131													
	3 x 0.120													
For clarity, nails on opposite side of stud not shown.	3 ¹ / ₄ x 0.120					5 n	ails							

TABLE 2—FASTENING SCHEDULE FOR PRESCRIPTIVE APPLICATIONS IN CONVENTIONAL WOOD-FRAME CONSTRUCTION USING PASLODE FRAMING NAILS ^{1,2,3} (continued)

	PASLODE NAIL								IMBER				
CONNECTION DESCRIPTION	LENGTH / DIAMETER	2012	2012	2015	2015	2018	2018	2021	2021	2024	2024		
	DIAMETER	IBC			IRC ontinued)	IBC	IRC	IBC	IRC	IBC	IRC		
Adjacent full-height stud	Connection No.:				,ontinueu)				12		12		
to end of header (end nail)	3 x 0.131								4 nails		4 nails		
	3 ¹ / ₄ x 0.131								4 nails		4 nails		
	3 ¹ / ₂ x 0.131								4 nails		4 nails		
	3 x 0.120								5 nails		5 nails		
Ц	3 ¹ / ₄ x 0.120								5 nails		5 nails		
Double top plates to	Connection No.:	10a	13	12	12	12	12	12	13	12	13		
each other - each side of joint	3 x 0.131												
louin	3 ¹ / ₄ x 0.131	12"	12"				12"	0.C.					
	3 ¹ / ₂ x 0.131	0.C.	0.C.					0.01					
	3 x 0.120	12"	20"										
·	3 ¹ / ₄ x 0.120	0.C.	20 0.C.				8"	0.C.					
	Connection No.:	10b	14	13	13a	13	13	13	14	13	14		
	3 x 0.131												
	3 ¹ / ₄ x 0.131	12 nails each side of joint											
	3 ¹ / ₂ x 0.131		,										
Top plate to top plate at end joint (lap splice)	3 x 0.120												
end joint (lap splice) each side of joint	3 ¹ / ₄ x 0.120				14	nails eacl	h side of jo	pint					
	Connection No.:				13b								
	3 x 0.131		13										
	3 ¹ / ₄ x 0.131				nails each								
-//	3 ¹ / ₂ x 0.131				side of joint								
	3 x 0.120				16								
	3 ¹ / ₄ x 0.120				nails each side of joint								
Top plate overlap at corners and intersections	Connection No.:	13	19	18	17	17	17	17	18	17	18		
(face nail)	3 x 0.131												
\sim	3 ¹ / ₄ x 0.131					3 n	nails						
2	3 ¹ / ₂ x 0.131												
	3 x 0.120					4 n	ails						
	3 ¹ / ₄ x 0.120					4 11					-		
Sole plate to joist, rim joist, band joist or	Connection No.:	6a	15	14	14	14	14	14	15	14	15		
blocking, not at braced	3 x 0.131												
wall panel (assumes ³ / ₄ " thick floor sheathing)	3 ¹ / ₄ x 0.131					12"	0.C.						
	3 ¹ / ₂ x 0.131												
C. C. C.	3 x 0.120												
	3 ¹ / ₄ x 0.120					8"	0.C.						

TABLE 2—FASTENING SCHEDULE FOR PRESCRIPTIVE APPLICATIONS IN CONVENTIONAL WOOD-FRAME CONSTRUCTION USING PASLODE FRAMING NAILS ^{1,2,3} (continued)

CONNECTION	PASLODE NAIL			APPL	ICABLE	CODE AND		TION NU	MBER					
CONNECTION DESCRIPTION	LENGTH / DIAMETER	2012	2012	2015	2015	2018	2018	2021	2021	2024	2024			
	DIAMETER	IBC	IRC WALL FR		IRC		IRC	IBC	IRC	IBC	IRC			
Sole plate to joist, rim	Connection No.:	6b	16	15	15	, 15	15	15	16	15	16			
joist, band joist or blocking at braced wall	3 x 0.131	•••												
panel (assumes 3/4" thick	3 ¹ / ₄ x 0.131	_				4@1	6" o.c.							
floor sheathing)	3 ¹ / ₂ x 0.131	_												
	3 x 0.120					5@1	6" o.c.							
	3 ¹ / ₄ x 0.120						6" o.c.							
Top or sole plate to stud (end nail)	Connection No.:	7 and 8b	18	17 and 16b	16b	16b	16b	16b	17b	16b	17b			
	3 x 0.131						•		•					
	3 ¹ / ₄ x 0.131	3 nails	2 nails				3 n	ails						
	3 ¹ / ₂ x 0.131													
	3 x 0.120	4	Q m aila				4	- 11-						
	3 ¹ / ₄ x 0.120	4 nails	3 nails				4 N	ails						
Stud to top or sole plate	Connection No.:	8	17	16a	16a	16a	16a	16a	17a	16a	17a			
(toe nail)	3 x 0.131										•			
	3 ¹ / ₄ x 0.131	4 nails	3 nails	4 nails										
	3 ¹ / ₂ x 0.131													
	3 x 0.120	5	0				5	- 11 -						
	3 ¹ / ₄ x 0.120	5 nails 5 nails												
1" diagonal bracing to	Connection No.:	20	20	19	18	18	18	18	19	18	19			
stud/plate (face nail)	3 x 0.131													
	3 ¹ / ₄ x 0.131				2 na	ils at each f	framing me	ember						
	3 ¹ / ₂ x 0.131													
	3 x 0.120	3 nails at each	2 nails at each											
	3 ¹ / ₄ x 0.120	framing member	framing			3 nail	s at each f	framing me	ember					
				ND ROOF	FRAMIN	G								
Blocking between Joists	Connection No.:	11	1a	1a	1a	1a	1a	1a	1a	1a	1a			
or rafters to top plate	3 x 0.131				1		1	1			1			
(toe-nail)	3 ¹ / ₄ x 0.131	1				3 nails e	each end							
	3 ¹ / ₂ x 0.131	1												
	3 x 0.120	4 nails	3 nails											
	3 ¹ / ₄ x 0.120	each end	each end				4 nails e	each end						
Blocking between rafters	Connection No.:			1b-1		1b-1		1b-1	1b-1	1b-1	1b-1			
or truss not at wall top plate, to rafter or truss	3 x 0.131	1								•				
(toe-nail)	3 ¹ / ₄ x 0.131	1		2 nails		2 nails			2 n	nails				
	3 ¹ / ₂ x 0.131	1												
****	3 x 0.120	1					1							
	3 ¹ / ₄ x 0.120			3 nails		3 nails			3 n	ails				

 TABLE 2—FASTENING SCHEDULE FOR PRESCRIPTIVE APPLICATIONS IN CONVENTIONAL WOOD-FRAME CONSTRUCTION

 USING PASLODE FRAMING NAILS 1,2,3 (continued)

	PASLODE NAIL			APPL				TION NU	MBER				
CONNECTION DESCRIPTION	LENGTH /	2012	2012	2015	2015	2018	2018	2021	2021	2024	2024		
	DIAMETER			IBC OOF FRAI		IBC	IRC	IBC	IRC	IBC	IRC		
Blocking between rafters or	Connection No.:			1b-2		1b-2		1b-2	1b-2	1b-2	1b-2		
truss not at wall plates, to rafters or truss (end nail)	3 x 0.131	-		10 2		10 2			10 2	10 2	10 2		
	3 ¹ / ₄ x 0.131	1		3 nails		3 nails		3 r	nails	3 n	ails		
	3 ¹ / ₂ x 0.131	-											
	3 x 0.120	-											
	3 ¹ / ₄ x 0.120			4 nails		4 nails		4 r	nails	4 n	ails		
	Connection No.:			4.		4.		1-	4.	4.	4.		
Flat blocking to truss and		-		1c		1c		1c	1c	1c	1c		
web filler (face nail)	3 x 0.131	-		0"				0"		C "			
	3 ¹ / ₄ x 0.131	-		6" o.c.		6" o.c.		6	0.C.	6 (D.C.		
	3 ¹ / ₂ x 0.131 3 x 0.120	-											
		1		4" o.c.		4" o.c.		4"	0.C.	4" (D.C.		
	3 ¹ / ₄ x 0.120 Connection No.:	15	2	2	2	2	2	2	2	2	2		
Ceiling joist to plate	3 x 0.131	15	2	2	2	2	2	2	2	2	2		
(toe-nail)	3 ¹ / ₄ x 0.131					3 n	ails						
	$3^{1}/_{2} \times 0.131$					51	ans						
	3 x 0.120												
	3 ¹ / ₄ x 0.120	4 nails	3 nails				4 n	ails					
Ceiling joist (not connected	Connection No.:								3	3			
to rafter - no thrust) lap over partition	3 x 0.131		-	-	-	-	-	-	-	-			
(face nail)	3 ¹ / ₄ x 0.131	4 nails	3 nails				4 n	ails					
	3 ¹ / ₂ x 0.131												
	3 x 0.120												
	3 ¹ / ₄ x 0.120	5 nails	4 nails				5 n	ails					
	Connection No.:	26	4	5	5	5	5	5	5	5	5		
Collar tie to rafter (face nail)	3 x 0.131				ı				1				
	3 ¹ / ₄ x 0.131	4 nails	3 nails				4 n	ails					
	3 ¹ / ₂ x 0.131												
	3 x 0.120	5 nails	4 nails				E n	ails					
	3 ¹ / ₄ x 0.120	Shans	4 118115				511	alls					
Roof rafter to plate	Connection No.:	19	5	6	6	6	6	6	6	6	6		
(toe-nail)	3 x 0.131												
	3 ¹ / ₄ x 0.131	3 plus	4	3 plus	4	3 plus	4	3 plus	4	3 plus	4		
Jer Jer	3 ¹ / ₂ x 0.131	connectors per IBC	(2 each side of	connectors per IBC	4 (2 each side of rafter)								
	3 x 0.120	Section 2308.10.1	rafter)	Section 2308.7.5	or raiter)	Section 2308.7.5	or railer)	Section 2308.7.5	or raiter)	Section 2308.11.4	orraner)		
~~	3 ¹ / ₄ x 0.120												
Ridge beam	Connection No.:	28b	6	7a	7b	7a	7b	7a	7b	7a	7b		
(end nail)	3 x 0.131	1											
H .	3 ¹ / ₄ x 0.131	3 nails	5 nails				3 n	ails					
	3 ¹ / ₂ x 0.131												
	3 x 0.120	4 nails	6 nails				4 n	ails					
	3 ¹ / ₄ x 0.120												

 TABLE 2—FASTENING SCHEDULE FOR PRESCRIPTIVE APPLICATIONS IN CONVENTIONAL WOOD-FRAME CONSTRUCTION

 USING PASLODE FRAMING NAILS ^{1,2,3} (continued)

	PASLODE NAIL			APPL				CTION NU	MBER			
CONNECTION DESCRIPTION	LENGTH /	2012	2012	2015	2015	2018	2018	2021	2021	2024	2024	
	DIAMETER	IBC		IBC		IBC	IRC	IBC	IRC	IBC	IRC	
	a		G AND RO		-	r	<u> </u>				_	
Roof rafter to ridge beam (toe-nail)	Connection No.:	28a	6	7b	7a	7b	7a	7b	7a	7b	7a	
	3 x 0.131	-										
	3 ¹ / ₄ x 0.131	3 nails	5 nails				4 n	ails				
·	3 ¹ / ₂ x 0.131											
	3 x 0.120	4 nails	6 nails				5 n	ails				
V	3 ¹ / ₄ x 0.120		_		1	1	-	1		1	1	
Jack raft to hip	Connection No.:	27a	6	7b	7a	7b	7a	7b	7a	7b	7a	
(toe-nail)	3 x 0.131											
	3 ¹ / ₄ x 0.131	4 nails	5 nails	4 nails								
	3 ¹ / ₂ x 0.131											
	3 x 0.120	5 nails	6 nails				5 m	ails				
	3 ¹ / ₄ x 0.120	Jinaiis	0 Halls				51	lalis				
Jack rafter to hip	Connection No.:	27b	6	7a	7b	7a	7b	7a	7b	7a	7b	
(face nail)	3 x 0.131											
	3 ¹ / ₄ x 0.131	3 nails		3 nails								
	3 ¹ / ₂ x 0.131											
	3 x 0.120	4					4	- 11 -				
	3 ¹ / ₄ x 0.120	4 nails					4 n	ails				
			FLO	OR FRAM	ling							
Joist to Sill or Girder	Connection No.:	1	24	22	21	21	21	21	22	21	22	
(toe nail)	3 x 0.131											
	3 ¹ / ₄ x 0.131					3 r	nails					
	3 ¹ / ₂ x 0.131											
	3 x 0.120	4	2 maila				4	aila				
	3 ¹ / ₄ x 0.120	4 nails	3 nails				4 n	ails				
Rim joist to top plate	Connection No.:	12	25	23	22	22	22	22	23	22	23	
(toe nail)	3 x 0.131					•		•		•		
\mathbb{N}	3 ¹ / ₄ x 0.131	6" o.c.	8" o.c.				6"	0.C.				
	3 ¹ / ₂ x 0.131											
	3 x 0.120		0.1									
	3 ¹ / ₄ x 0.120	4" o.c.	6" o.c.				4"	0.C.				
	Connection No.:	29		29	26	28	26	28	27	28	27	
Joist to band joist (face nail)	3 x 0.131					•		•		•		
	3 ¹ / ₄ x 0.131	4 nails					4 n	ails				
	3 ¹ / ₂ x 0.131	1										
	3 x 0.120						_					
	3 ¹ / ₄ x 0.120	6 nails					6 n	ails				
		6 nails										

TABLE 2—FASTENING SCHEDULE FOR PRESCRIPTIVE APPLICATIONS IN CONVENTIONAL WOOD-FRAME CONSTRUCTION USING PASLODE FRAMING NAILS^{1,2,3} (continued)

CONNECTION	PASLODE NAIL			APPL		ODE AND		CTION NU	MBER		
DESCRIPTION	LENGTH / DIAMETER	2012 IBC	2012 IRC	2015 IBC	2015 IRC	2018 IBC	2018 IRC	2021 IBC	2021 IRC	2024 IBC	2024 IRC
		F	LOOR FR	AMING (c	ontinued))					
	Connection No.	24	30	27	27	26	27	26	28	26	28
Built up girder or beam (face nail)			Face nail a	at top and	bottom, sta	aggered o	n opposite	side AND	at each er	nd or splice	•
	3 x 0.131	24"	32"								
	3 ¹ / ₄ x 0.131	o.c. / 3	o.c. / 3				24" o.c.	/ 3 nails			
	3 ¹ / ₂ x 0.131	nails	nails								
MA .	3 x 0.120	16" o.c. / 4	24" o.c. / 4				16" 0 0	/ 4 nails			
*	3 ¹ / ₄ x 0.120	nails	nails				10 0.0.	/ 4 118115			
Ladaran Otoin	Connection No.:	30	31	28	28	27	28	27	29	27	29
Ledger Strip (face nail)	3 x 0.131										
	3 ¹ / ₄ x 0.131	5	4					5			
	3 ¹ / ₂ x 0.131										
	3 x 0.120	- 6	4					6			
*	3 ¹ / ₄ x 0.120	0	4					0			
Dridging to loist	Connection No.:	2		30	29	29	29	29	30	29	30
Bridging to Joist (toe nail)	3 x 0.131										
	3 ¹ / ₄ x 0.131	2 each end		2 each end							
	3 ¹ / ₂ x 0.131										
	3 x 0.120	3 each		3 each end							
	3 ¹ / ₄ x 0.120	end					5 eau				

For **SI**: 1 inch = 25.4 mm.

¹This fastening schedule applies to sawn lumber framing members having an actual thickness of 1¹/₂ inches (nominal "2-by" lumber) and a minimum assigned specific gravity, SG_{NDS}, of 0.42.
 ²Fastening schedule only applies to buildings of conventional wood frame construction where wind or seismic analysis is not required by the applicable code. In cases where the limitations of IBC Section 2308.2 or IRC Section R301.2 are exceeded, required fastening must be determined by structural analysis.
 ³Connection numbers correspond to numbers in 2024 and 2021 IBC Table 2304.10.2, 2018 and 2015 IBC Table 2304.10.1, 2012 IBC Table 2304.9.1 and IRC Table R602.3(1), or analysis leader.

as applicable.

TABLE 3A—ALLOWABLE SHEAR FOR WIND OR SEISMIC LOADING FOR WOOD STRUCTURAL PANEL HORIZONTAL DIAPHRAGMS WITH FRAMING OF DOUGLAS FIR-LARCH OR SOUTHERN PINE AND STRUCTURAL I SHEATHING (plf)^{1,2,3,4,5}

	MINIMUM	MINIMUM			(inch) AT DI	APHRAGM		S (ALL CAS	ES), AT CON . EDGES (CA		FAST	ENERS SP RAGM BOU	DIAPHRAGI ACED 6" MA INDARIES AI	X. AT
NOMINAL PASLODE NAIL DIAMETER (inch)	NOMINAL FASTENER LENGTH	WIDTH OF FRAMING MEMBER	(6	4	1	2 [°]		2	2		SUPPORT	All other configurations	
	(inches) (inche	(inches) (inches)	(Fas	tener spacing	g at other pa S	inel eages (C	Jases 1, 2, 3 4	& 4) 3	}	Cas	e 1	(Cases) 5 &	2, 3, 4,
			Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind
				³ /8-i	nch Nominal	Panel Thick	iness							
0.131	2 ¹ / ₂	2 3	270 300	380 420	360 400	505 560	530 600	745 840	600 675	840 945	240 265	335 370	180 200	255 280
0.120	3	2 3	230 255	320 360	305 340	435 480	450 510	635 720	510 575	720 810	200 225	290 320	150 170	220 240

See page 12 for footnotes and Case diagrams.

TABLE 3B—ALLOWABLE SHEAR FOR WIND OR SEISMIC LOADING FOR WOOD STRUCTURAL PANEL HORIZONTAL DIAPHRAGMS WITH FRAMING OF DOUGLAS FIR-LARCH OR SOUTHERN PINE AND RATED SHEATHING (pif)^{1,2,3,4,5}

					BLOCKED DIAPHRAGMS FASTENER SPACING (inch) AT DIAPHRAGM BOUNDARIES (ALL CASES), AT CONTINUO								DIAPHRAG	MS
NOMINAL PASLODE NAIL	MINIMUM REQUIRED	MINIMUM WIDTH OF			i (inch) AT DI. LEL TO LOA						DIAPHR	AGM BOU	PACED 6" MAX. AT UNDARIES AND ALL TED EDGES	
DIAMETER (inch)	FASTENER	FRAMING MEMBER	6	;	4		2 ¹	l2	2					other
	LENGTH (inches)	(inches)		Fas	tener spacing	g at other pa	anel edges (C	ases 1, 2, 3	& 4)		Cas	e 1	configu (Cases	
	((e	i	6	i	4	ļ	3	;			5 8	
			Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind
				³ /8-i	inch Nominal	Panel Thick	iness							
0.131	2 ¹ / ₂	2 3	240 270	335 380	320 360	450 505	480 540	670 755	545 610	765 855	215 240	300 335	160 180	225 255
0.120	3	2 3	205 230	285 315	270 305	375 425	405 455	565 640	460 515	640 720	180 205	255 285	135 150	190 210
				⁷ / ₁₆ -	inch Nominal	Panel Thic	kness							
0.131	2 ¹ / ₂	2 3	255 285	360 400	340 380	475 535	505 570	710 800	575 645	805 905	230 255	325 360	170 190	240 265
0.120	3	2 3	215 240	305 340	290 325	405 450	430 485	600 680	490 550	685 765	195 215	270 300	145 160	200 225
				¹⁵ / ₃₂ .	-inch Nomina	I Panel Thic	kness							
0.131	21/2	2 3	270 300	380 420	360 400	505 560	530 600	745 840	600 675	840 945	240 265	335 370	180 200	255 280
0.120	3	2 3	230 255	325 360	305 340	430 480	450 510	630 715	510 575	715 805	205 225	285 315	155 170	220 240

See page 12 for footnotes and Case diagrams.

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CC-ES^{*} Most Widely Accepted and Trusted

FOOTNOTES FOR HORIZONTAL DIAPHRAGM TABLES 3A AND 3B

For SI: 1 inch = 25.4 mm, 1 pound per foot = 14.6 N/m

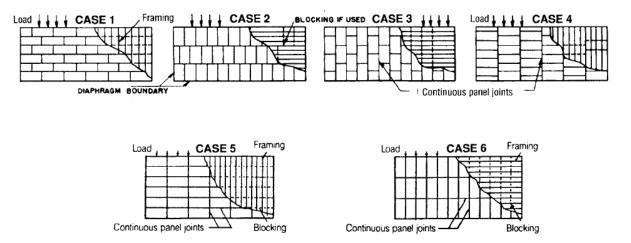
¹ Diaphragms must be constructed in general accordance with the requirements of Section 4.2 of AWC SDPWS.

² Tabulated values are for short-time loading due to wind or seismic. The tabulated seismic values must be reduced by 37 percent and 44 percent for normal and permanent load duration, respectively.

³ The tabulated values are for fasteners installed in Douglas Fir-larch or Southern Pine lumber. For other species, the tabulated allowable unit shear values must be reduced by multiplying the applicable value by the Specific Gravity Adjustment Factor = [1- (0.5-G)], where G= Specific Gravity of the framing lumber from Table 12.3.3A of the NDS (Table 11.3.3A of NDS-12). This adjustment factor must not be greater than 1.

⁴ Structural I panels must comply with DOC PS1 or PS2. Rated Sheathing includes Sheathing and Single-Floor grades and must comply with DOC PS1 or PS2.

⁵ Space fasteners maximum 12" o.c. along intermediate framing members (6 in. o.c. when supports are spaced 48 inches o.c.).



NOTE: Framing orientation in either direction for diaphragms is permitted provided sheathing is properly designed for vertical loading.

TABLE 4A—ALLOWABLE SHEAR FOR WIND OR SEISMIC LOADING FOR WOOD STRUCTURAL PANEL SHEAR WALLS WITH FRAMING OF DOUGLAS FIR-LARCH OR SOUTHERN PINE AND STRUCTURAL I SHEATHING (plf)^{1,2,3,4,5}

NOMINAL PASLODE NAIL	MINIMUM NOMINAL FASTENER		SEIS	SMIC		WIND					
DIAMETER (inch)	LENGTH (inches)	Fastener	Spacing at	Panel Edge	s (inches)	Fastener Spacing at Panel Edges (inches)					
		6	4	3	2	6	4	3	2		
		³ / ₈ -inch No	minal Pane	l Thicknes	S						
0.131	2 ¹ / ₂	230	360	460	610	320	505	645	855		
0.120	3	195	305	390	520	275	435	550	730		
		// ₁₆ -inch No	minal Pane	l Thicknes	s						
0.131	2 ¹ / ₂	255	395	505	670	355	550	705	935		
0.120	3	215	335	430	570	305	475	610	805		
	1	⁵ / ₃₂ -inch No	minal Pan	el Thicknes	S						
0.131	2 ¹ / ₂	280	430	550	730	390	600	770	1020		
0.120	3	245	370	475	630	340	520	665	880		

See footnotes below Table 4B.

TABLE 4B—ALLOWABLE SHEAR FOR WIND OR SEISMIC LOADING FOR WOOD STRUCTURAL PANEL SHEAR WALLSWITH FRAMING OF DOUGLAS FIR-LARCH OR SOUTHERN PINE AND RATED SHEATHING (plf)^{1,2,3,4,5}

NOMINAL PASLODE NAIL DIAMETER (inch)	MINIMUM NOMINAL FASTENER LENGTH (inches)	SEISMIC Fastener Spacing at Panel Edges (inches)				WIND Fastener Spacing at Panel Edges (inches)			
				³ / ₈ -inch No	minal Pane	l Thicknes	S	•	
0.131	2 ¹ / ₂	220	320	410	530	305	445	575	740
0.120	3	185	270	345	450	260	375	485	625
		⁷ / ₁₆ -inch No	minal Pan	el Thicknes	S			•	
0.131	2 ¹ / ₂	240	350	450	585	335	490	630	820
0.120	3	205	395	380	495	285	415	535	695
		¹⁵ / ₃₂ -inch No	ominal Pan	el Thickne	ss	•		•	
0.131	2 ¹ / ₂	260	380	490	640	365	530	685	895
0.120	3	220	325	420	550	310	450	585	765

For SI: 1 inch = 25.4 mm, 1 pound per foot = 14.6 N/m

¹ Shear walls must be constructed in general accordance with the requirements of Section 4.3 of AWC SDPWS.

² Tabulated values are for short-time loading due to wind or seismic. The tabulated seismic values must be reduced by 37 percent and 44 percent for normal and permanent load duration, respectively.
³The tabulated values are for fasteners installed in Douglas Fir-larch or Southern Pine lumber. For other species, the tabulated allowable unit shear values must be

³The tabulated values are for fasteners installed in Douglas Fir-larch or Southern Pine lumber. For other species, the tabulated allowable unit shear values must be reduced by multiplying the applicable value by the Specific Gravity Adjustment Factor = [1- (0.5-G)], where G= Specific Gravity of the framing lumber from Table 12.3.3A of the NDS (Table 11.3.3A of NDS-12). This adjustment factor must not be greater than 1.

⁴ Structural I and rated Sheathing panels must comply with DOC PS1 or PS2. Install panels either horizontally or vertically. All panel edges must be backed by framing members.

⁵ Space fasteners at a maximum of 6 inches on center along intermediate framing members – Exception: When panel thickness is greater than ⁷/₁₆-inch or studs are spaced less than 24 inches on center, space fasteners at a maximum of 12 inches on center.



FIGURE 2—PASLODE FRAMING NAIL WITH ROUNDRIVE HEAD AND DEFORMED SHANK

RounDrive®



FIGURE 1—NAIL HEAD STYLE

FIGURE 3—PASLODE RING SHANK FRAMING NAIL WITH ROUNDRIVE HEAD AND DEFORMED SHANK



ICC-ES Evaluation Report

ESR-3072 City of LA Supplement

Reissued September 2024 This report is subject to renewal September 2026.

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A Subsidiary of the International Code Council®

DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES Section: 06 05 23.13—Nails

REPORT HOLDER:

PASLODE, AN ILLINOIS TOOL WORKS COMPANY

EVALUATION SUBJECT:

PASLODE NAILS

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Paslode Nails, described in ICC-ES evaluation report <u>ESR-3072</u>, have also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

Applicable code editions:

- 2023 City of Los Angeles Building Code (LABC)
- 2023 City of Los Angeles Residential Code (<u>LARC</u>)

2.0 CONCLUSIONS

The Paslode Nails, described in Sections 2.0 through 7.0 of the evaluation report <u>ESR-3072</u>, comply with the LABC Chapter 23, and the LARC, and are subjected to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The Paslode Nails described in this evaluation report must comply with all of the following conditions:

- All applicable sections in the evaluation report ESR-3072.
- The design, installation, conditions of use and identification of the nails are in accordance with the 2021 International Building Code[®] (IBC) provisions noted in the evaluation report <u>ESR-3072</u>.
- The design, installation and inspection are in accordance with additional requirements of the LABC Chapters 16, 17 and 23, and LARC Sections R502, R503, R602, R802 and R803, as applicable.
- The nails made from bright steel wire must not be used in exterior or exposed conditions.

This supplement expires concurrently with the evaluation report, reissued September 2024.





ICC-ES Evaluation Report

ESR-3072 CA Supplement

Reissued September 2024 This report is subject to renewal September 2026.

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Applicable code edition(s):

■ 2022 California Building Code (CBC)

For evaluation of applicable Chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

■ 2022 California Residential Code (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Paslode Nails, described in Sections 2.0 through 7.0 of the evaluation report ESR-3072, comply with CBC Chapter 23, provided the design and installation are in accordance with the 2021 *International Building Code*[®] (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapter 23, as applicable.

2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Paslode Nails, described in Sections 2.0 through 7.0 of the evaluation report ESR-3072, comply with CRC Chapter 3, provided the design and installation are in accordance with the 2021 *International Residential Code*[®] (IRC) provisions noted in the evaluation report and the additional requirements of CRC Chapter 3, as applicable.

This supplement expires concurrently with the evaluation report, reissued September 2024.

