

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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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 EVALUATION SCOPE

Compliance with the following codes:

- 2024, 2021, 2018, 2015 and 2012 <u>International Building Code[®] (IBC)</u>
- 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 Figure 1. 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 Table 1 for designations, dimensions and additional descriptions of the nails, including minimum specified bending yield strength. See Figure 2 for an image of the typical framing nails. See Figure 3 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 Table 3A and 3B, and allowable shear wall unit shear capacities are given in Tables 4A and 4B. 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 1705.11.2).

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

TABLE 1—PASLODE NAILS

NOMINAL DIAMETER (inch)	LENGTH (inches)	HEAD STYLE	NOMINAL HEAD DIAMETER (inch)	SHANK STYLE	POINT STYLE	MATERIAL	COATING/ FINISH	SPECIFIED F _{yb} (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 1 ₄ , 3 1 ₂		0.230	Fiuled			HDG		

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

	PASLODE NAIL	<u> </u>	IG PASLO		ICABLE C		CONNEC	TION NII	MRFR		
CONNECTION DESCRIPTION	LENGTH /	2012	2012	2015	2015	2018	2018	2021	2021	2024	2024
DEGORAL FIGH	DIAMETER	IBC	IRC	IBC	IRC	IBC	IRC	IBC	IRC	IBC	IRC
		1 1		LL FRAM	1	1					
	Connection No.:	9	12	8	8	8	8	8	8	8	8
	3 x 0.131										
	3 ¹ / ₄ x 0.131					16"	O.C.				
	3 ¹ / ₂ x 0.131										
Double Studs (Face Nail)	3 x 0.120	16"	O.C.				14"	O.C.			
The state of the s	3 ¹ / ₄ x 0.120				_	1			r	•	,
The state of the s	Connection No. for Braced Walls:			9	9	9	9	9	9	9	9
The state of the s	3 x 0.131					ı	1		1	1	
	3 ¹ / ₄ x 0.131						12"	o.c.			
	3 ¹ / ₂ x 0.131										
	3 x 0.120										
	3 ¹ / ₄ x 0.120						10"	O.C.			
	Connection No.:	23	8	8	8	8	8	8	8	8	8
	3 x 0.131				1	1	1		1	L	<u> </u>
	3 ¹ / ₄ x 0.131	16"	8"				16"	O.C.			
Abutting studs at corners and intersections	3 ¹ / ₂ x 0.131	O.C.	O.C.								
(face nail)	3 x 0.120	12"	8"								
abla 7	3 ¹ / ₄ x 0.120	0.C.	O.C.				12"	O.C.			
	Connection No.			9	9	9	8	9	9	9	9
I VIN	for Braced Walls: 3 x 0.131										
							40"				
	3 ¹ / ₄ x 0.131						12	O.C.			
	3 ¹ / ₂ x 0.131										
	3 x 0.120						10"	O.C.			
Built-up header	3 ¹ / ₄ x 0.120	4.4	1 -	- 40	10	1 40	10	10	10	10	- 40
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" o.c.								
	3 ¹ / ₄ x 0.131	each edge	each				8" o.c. e	ach edge			
	3 ¹ / ₂ x 0.131	Ů	edge								
	3 x 0.120					8" o.c. e	ach edge				
Continuous handanta	3 ¹ / ₄ x 0.120				1	1		1			1
Continuous header to stud (toe nail)	Connection No.:	16	9	11	11	11	11	11	11	11	11
	3 x 0.131										
	3 ¹ / ₄ x 0.131					4 r	nails				
	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 nails							

001111=0=:0::	PASLODE NAIL			APPL	ICABLE C	ODE AND	CONNEC	CTION NU	MBER		
CONNECTION DESCRIPTION	LENGTH /	2012	2012	2015	2015	2018	2018	2021	2021	2024	2024
	DIAMETER	IBC	IRC WALL FR	IBC AMING (c	IRC ontinued)	IBC	IRC	IBC	IRC	IBC	IRC
Adjacent full-height stud	Connection No.:		.vall i N		- Critinaea)				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
	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	100	10	12	12	12	'-	12	10	12	10
Jour	3 ¹ / ₄ x 0.131	12"	12"				12"	O.C.			
	3 ¹ / ₂ x 0.131	O.C.	O.C.				12	0.0.			
	3 x 0.120	40"	00"								
	3 ¹ / ₄ x 0.120	12" o.c.	20" o.c.				8"	o.c.			
	Connection No.:	10b	14	13	13a	13	13	13	14	13	14
	3 x 0.131	102					1 .0		1		
	3 ¹ / ₄ x 0.131				12	nails eac	h side of jo	oint			
	3 ¹ / ₂ x 0.131					Traile Gae	0.00 0. jo				
Top plate to top plate at end joint (lap splice)	3 x 0.120										
each side of joint	3 ¹ / ₄ x 0.120	14 nails each side of joint									
	Connection No.:				13b						
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3 x 0.131				13						
	3 ¹ / ₄ x 0.131				nails each						
///	3 ¹ / ₂ x 0.131				side of						
-	3 x 0.120				joint 16						
	3 ¹ / ₄ x 0.120				nails each side of joint						
Top plate overlap at	Connection No.:	13	19	18	17	17	17	17	18	17	18
corners and intersections (face nail)	3 x 0.131						1		1		
	3 ¹ / ₄ x 0.131					3 n	ails				
, >	3 ¹ / ₂ x 0.131										
	3 x 0.120										
	3 ¹ / ₄ x 0.120	4 nails									
Sole plate to joist, rim	Connection No.:	6a	15	14	14	14	14	14	15	14	15
joist, band joist or blocking, not at braced	3 x 0.131		•		•		•	•	•		
wall panel (assumes ³ / ₄ " thick floor sheathing)	3 ¹ / ₄ x 0.131					12"	o.c.				
and noor or or or or	3 ¹ / ₂ x 0.131										
	3 x 0.120										
	3 ¹ / ₄ x 0.120	8" o.c.									

	PASLODE NAIL					CODE AND		CTION NUI	MBFR					
CONNECTION DESCRIPTION	LENGTH /	2012	2012	2015	2015	2018	2018	2021	2021	2024	2024			
	DIAMETER	IBC	IRC	IBC	IRC	IBC	IRC	IBC	IRC	IBC	IRC			
Sole plate to joist, rim	Connection No.		WALL FRA				45	45	40	45	40			
joist, band joist or	3 x 0.131	6b	16	15	15	15	15	15	16	15	16			
blocking at braced wall panel (assumes ³ / ₄ " thick		-				4 @ 4	C"							
floor sheathing)	3 ¹ / ₄ x 0.131	_				4 @ 1	6" O.C.							
	3 ¹ / ₂ x 0.131					5.0.4	0"							
	3 x 0.120					5 @ 1	6" o.c.							
	3 ¹ / ₄ x 0.120					4 @ 1	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						
	$3^{1}/_{2} \times 0.131$													
	3 x 0.120	4 nails	3 nails				4 n	ails						
	3 ¹ / ₄ x 0.120	Titalis	o nans				711							
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 n	ails						
. [3 ¹ / ₂ x 0.131													
	3 x 0.120	5 poils	3 nails				5 n	ails						
	3 ¹ / ₄ x 0.120	5 nails	3 Halls				อก	alis						
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 t	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				3 nail	s at each f	framing m	ember					
			EILING AI	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		<u> </u>						II.	ı	ı			
(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	ails 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			2 nails		2 nails			2 r	ails				
ППП	3 ¹ / ₂ x 0.131													
***	3 x 0.120													
	3 ¹ / ₄ x 0.120			3 nails 3 nails										
<u> </u>														

001115071011	PASLODE NAIL			APPL	ICABLE C	ODE AND	CONNEC	TION NU	MBER				
CONNECTION DESCRIPTION	LENGTH /	2012	2012	2015	2015	2018	2018	2021	2021	2024	2024		
	DIAMETER	IBC	IRC IC AND B	IBC	IRC	IBC	IRC	IBC	IRC	IBC	IRC		
Blocking between rafters or	Connection No.:	CEILIN	IG AND R	OOF FRAI	viila (cou	1b-2		1b-2	1b-2	1b-2	1b-2		
truss not at wall plates, to		_		10-2		10-2		10-2	10-2	10-2	10-2		
rafters or truss (end nail)	3 x 0.131 3 ¹ / ₄ x 0.131	_		2 naile		3 nails		2	مانه	2	ails		
		_		3 nails		3 Halls		311	ails	311	alis		
	3 ¹ / ₂ x 0.131	_					 						
	3 x 0.120	_		4 nails		4 nails		4 n	ails	4 n	ails		
	3 ¹ / ₄ x 0.120								_				
Flat blocking to truss and	Connection No.:			1c		1c	ļ	1c	1c	1c	1c		
web filler (face nail)	3 x 0.131												
	3 ¹ / ₄ x 0.131			6" o.c.		6" o.c.		6"	O.C.	6"	O.C.		
	3 ¹ / ₂ x 0.131												
	3 x 0.120			4" o.c.		4" o.c.		4 "	O.C.	4 "	O.C.		
	3 ¹ / ₄ x 0.120			4 0.0.		4 0.0.		7	·····	7	J.U.		
Ceiling joist to plate	Connection No.:	15	2	2	2	2	2	2	2	2	2		
(toe-nail)	3 x 0.131												
	3 ¹ / ₄ x 0.131					3 n	ails						
	$3^{1}/_{2} \times 0.131$		1										
	3 x 0.120	4 nails	3 nails				4 n	ails					
-	$3^{1}/_{4} \times 0.120$				1	1	1	<u>-</u>	1	1	1		
Ceiling joist (not connected to rafter - no thrust) lap	Connection No.:	17	3	3	3	3	3	3 3 3 3					
over partition .	3 x 0.131												
(face nail)	3 ¹ / ₄ x 0.131	4 nails	3 nails				4 n	ails					
	$3^{1}/_{2} \times 0.131$												
	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	3 x 0.131					ı			ı				
(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												
V	3 ¹ / ₄ x 0.120	5 nails	4 nails				5 n	ails					
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	4	3		3		3		3			
	3 ¹ / ₂ x 0.131	plus connectors per IBC	(2 each side of	plus connectors per IBC	4 (2 each side								
	3 x 0.120	Section 2308.10.1	rafter)	Section 2308.7.5	of rafter)	Section 2308.7.5	of rafter)	Section 2308.7.5	of rafter)	Section 2308.11.4	of rafter)		
	3 ¹ / ₄ x 0.120	2000:10:1		2000.7.0		2000.7.0		2000.7.0		2000.11.4			
Ridge beam	Connection No.:	28b	6	7a	7b	7a	7b	7a	7b	7a	7b		
(end nail)	3 x 0.131				1	1	1	1	1		1		
	3 ¹ / ₄ x 0.131	3 nails	5 nails				3 n	ails					
	3 ¹ / ₂ x 0.131												
	3 x 0.120	4 ==!!=	6 22!!-				4	oilo					
	3 ¹ / ₄ x 0.120	4 nails	6 nails				4 n	allS					
		1	1	1									

DESCRIPTION		PASLODE NAIL	H/ 2012 2012 2015 2015 2018 2018 2021 2021 2024 2024									
CEILING AND ROOF FRAMING (continued) Roof rafter to ridge beam (toe-nail) 3 x 0 x 131 3 x 0 x 131 3 x 0 x 132 3 x 0 x 0 x 0 x 132 3 x 0 x 0 x 0 x 0 x 0 x 0 x 0 x 0 x 0 x	CONNECTION DESCRIPTION	LENGTH /			2015	2015	2018	2018	2021	2021		
Connection No.: 28a 6 7b 7a 3 7b 7a		DIAMETER						IRC	IBC	IRC	IBC	IRC
3 x 0.131 3 / x 0.131 3 / x 0.131 3 / x 0.131 3 / x 0.120 4 / x 0.131 3 / x 0.120 4 / x 0.131 3		Г <u></u>				1	1	Τ	T .	Τ	T .	I
3 x 0.131 3 x 0.120 3 x 0.131 3 x 0.120 4 nails 5 nails 7 nail			28a	6	7b	7a	7b	7a	7b	7a	7b	7a
3/2 x 0.131 3 x 0.120 4 nails 5 nails 5 nails 5 nails 5 nails	(too Hall)											
Jack raft to hip (toe-nail) 3 x 0.120 4 nails 6 nails 5 nails 5 nails			3 nails	5 nails				4 n	ails			
3/1x x 0.120		3 ¹ / ₂ x 0.131										
Jack raft to hip (toe-nail) 3/4 x 0.120 3 x 0.131 3/4 x 0.120 5 nails 5 nails 4 nails 5 nails 4 nails 5 nails 7 na		3 x 0.120	4 nails	6 naile				5 n	عاند			
3 x 0.131 3 / 4 x 0.120 5 nails 3 / 4 x 0.120 3 / 4 x 0.120 4 nails 3 / 4 / 4 / 4 / 4 / 4 / 4 / 4 / 4 / 4 /	V	3 ¹ / ₄ x 0.120	Tiulio	OTIGIIO								
Connection No.: 1 24 22 21 21 21 22 21 22 23 22 23 22 23 24 23 24 25 23 24 25 23 24 25 23 25 25 25 25 25 25	lack raft to hin	Connection No.:	27a	6	7b	7a	7b	7a	7b	7a	7b	7a
33/2 x 0.131 3 x 0.120 5 nails		3 x 0.131										
3 x 0.120 31/4 x 0.120 5 nails 6 nails 5 nails 5 nails 5 nails		3 ¹ / ₄ x 0.131	4 nails	5 nails				4 n	ails			
Simple S		3 ¹ / ₂ x 0.131										
Silva x 0.120		3 x 0.120	F	0				F	- 11 -			
Second Connection No.: 1 24 22 21 21 21 21 22 21 22 21 22 23 24 24 25 25 25 25 25 25		3 ¹ / ₄ x 0.120	5 nails	6 naiis				5 N	ialis			
San to Sill or Girder (toe nail) 3 x 0.131 3 nails	look rofter to him	Connection No.:	27b	6	7a	7b	7a	7b	7a	7b	7a	7b
Section Sect		3 x 0.131				•	•	•	•		•	•
3 x 0.120 3 / 4 x 0.120 4 nails 4 nails 4 nails		3 ¹ / ₄ x 0.131	3 nails	;				3 n	ails			
Sill or Girder (toe nail) Sill or Girder (toe nail) Sill or Operation No.: 1 24 22 21 21 21 21 22 21 22 21 22 21 22 22 23 22 23 24 24 22 24 25 24 25 24 25 24 25 24 25 24 25 24 25 25		3 ¹ / ₂ x 0.131	$3^{1}/_{2} \times 0.131$									
FLOOR FRAMING Joist to Sill or Girder (toe nail) 3 x 0.131 3 x 0.131 3 x 0.120 4 nails 3 nails 4 nails 4 nails 4 nails 4 nails 4 nails 3 x 0.120 4 nails 3 x 0.120 4 nails 3 x 0.131 3 x 0.120 4 nails 3 x 0.131 3 x 0.120 4 nails 3 x 0.131 3 x 0.120 4 nails 4 nails 4 nails 4 nails 3 x 0.131 3 x 0		3 x 0.120	4 11 -	ĺ				4	- 11 -			
Joist to Sill or Girder (toe nail) 3 x 0.131 3 \cdot \lambda x 0.120 4 \cdot \lambda ails 4 \cd		3 ¹ / ₄ x 0.120	4 nails		4 HallS							
(toe nail) 3 x 0.131 3 1/ ₄ x 0.131 3 x 0.120 3 1/ ₄ x 0.120 4 nails 3 nails 4 nails 8				FLO	OR FRAM	IING						
3 x 0.131 3 \(\frac{1}{4} \times 0.131 \) 3 x 0.120 3 \(\frac{1}{4} \times 0.120 \) 3 x 0.120 4 nails Rim joist to top plate (toe nail) 3 x 0.131 3 \(\frac{1}{4} \times 0.131 \) 3 x 0.131 3 \(\frac{1}{4} \times 0.131 \) 3 x 0.120 3 \(\frac{1}{4} \times 0.120 \) 3 x 0.131 3 x 0.120 4 " o.c. 6" o.c. 4" o.c. 4" o.c. 4" o.c. 29 29 26 28 26 28 27 28 27 29 26 28 27 28 27 29 26 28 26 28 27 28 27 28 27 29 26 28 26 28 27 28 27 28 27		Connection No.:	1	24	22	21	21	21	21	22	21	22
31/2 x 0.131 3 x 0.120 31/4 x 0.120 4 nails 3 nails 4 nails 4 nails Connection No.: 12 25 23 22 22 22 22 23 23	(toe naii)	3 x 0.131										
3 x 0.120 3 nails 3 nails 4 nails 4 nails 4 nails 3 nails 4 nails 4 nails 4 nails 3 nails 4		3 ¹ / ₄ x 0.131					3 n	ails				
Rim joist to top plate (toe nail) 31/4 x 0.120		3 ¹ / ₂ x 0.131										
31/4 x 0.120 Connection No.: 12 25 23 22 22 22 23 23 23 24 24		3 x 0.120	4!!-	0				4	- 11 -			
3 x 0.131 3 1/4 x 0.131 6" o.c. 8" o.c. 6" o.c. 6" o.c. 4" o.c. 3 x 0.120 4" o.c. 6" o.c. 4" o.c. 3 x 0.120 4" o.c. 6" o.c. 4" o.c. 3 x 0.131 3 x 0.120 4" o.c. 6" o.c. 4" o.c. 3 x 0.131 3 x 0.131 4 nails 4 nails 3 x 0.131 3 x 0.131 3 x 0.120 6 nails 6 nails 6 nails		3 ¹ / ₄ x 0.120	4 nails	3 naiis				4 n	ialis			
(toe nail) 3×0.131 $3^{1}/_{4} \times 0.131$ $6" \text{ o.c.}$ $8" \text{ o.c.}$ $6" \text{ o.c.}$ $6" \text{ o.c.}$ $4" \text{ o.c.}$ $3^{1}/_{2} \times 0.131$ 3×0.120 $4" \text{ o.c.}$ $6" o$	Rim joist to top plate	Connection No.:	12	25	23	22	22	22	22	23	22	23
31/ ₂ x 0.131 3 x 0.120 31/ ₄ x 0.120 4" o.c. 6" o.c. 4" o.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 3 x 0.120 6 nails		3 x 0.131				•	•	•	•		•	•
3 x 0.120 4" o.c. 6" o.c. 4" o.c. 3 x 0.120 4" o.c. 6" o.c. 4" o.c. 3 x 0.120 29 26 28 26 28 27 28 27 3 x 0.131 3 x 0.131 4 nails 3 x 0.131 3 x 0.120 6 nails 6 nails	M	3 ¹ / ₄ x 0.131	6" o.c.	8" o.c.				6"	o.c.			
31/4 x 0.120 4" o.c. 6" o.c. 4" o.c. 4" o.c. 31/4 x 0.120 29 26 28 26 28 27 28 27 3 x 0.131 3 x 0.131 4 nails 4 nails 3 x 0.120 6 nails 6 nails 6 nails	M	3 ¹ / ₂ x 0.131										
31/4 x 0.120 4" o.c. 6" o.c. 4" o.c. 4" o.c. 31/4 x 0.120 29 26 28 26 28 27 28 27 3 x 0.131 3 1/4 x 0.131 4 nails 3 x 0.120 6 nails 6 nails		3 x 0.120										
Joist to band joist (face nail) 3 x 0.131 3 1/ ₄ x 0.131 3 x 0.120 Connection No.: 29 29 29 26 28 26 28 27 28 27 28 27 4 nails 6 nails	The state of the s	3 ¹ / ₄ x 0.120	4" o.c.	6" o.c.				4"	O.C.			
(face nail) 3 x 0.131 4 nails 4 nails 3 x 0.131 3 x 0.120 6 nails 6 nails			29		29	26	28	26	28	27	28	27
3 ¹ / ₄ x 0.131 4 nails 4 nails 4 nails 4 nails 6 nails		3 x 0.131								1		
3 ¹ / ₂ x 0.131 3 x 0.120 6 nails	(lass riall)	3 ¹ / ₄ x 0.131	4 nails					4 n	ails			
3 x 0.120 6 nails												
3 ¹ / ₄ x 0.120 6 nails					6 nails							
		3 ¹ / ₄ x 0.120	6 nails					6 n	ails			

	1									
PASLODE NAIL			APPL	ICABLE C	ODE AND	CONNEC	CTION NU	MBER		
_	2012	2012	2015	2015	2018	2018	2021	2021	2024	2024
DIAMETER	IBC	IRC	IBC	IRC	IBC	IRC	IBC	IRC	IBC	IRC
	F	LOOR FR	AMING (c	ontinued)						
Connection No.	24	30	27	27	26	27	26	28	26	28
		Face nail a	at top and	bottom, sta	aggered or	n opposite	side AND	at each en	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								
3 x 0.120	16"	24"				16"	/ 4 poils			
3 ¹ / ₄ x 0.120	nails	nails				10 0.0.	/ 4 HallS			
Connection No.:	30	31	28	28	27	28	27	29	27	29
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				,	9			
3 ¹ / ₄ x 0.120	0	4				,	0			
Connection No.:	2		30	29	29	29	29	30	29	30
3 x 0.131										
3 ¹ / ₄ x 0.131						2 eac	h end			
3 ¹ / ₂ x 0.131]									
3 x 0.120	3 each					2 0	h and			
3 ¹ / ₄ x 0.120	end					3 eac	in ena			
	Connection No. 3 x 0.131 3 ¹ / ₄ x 0.131 3 ¹ / ₂ x 0.131 3 x 0.120 3 ¹ / ₄ x 0.120 Connection No.: 3 x 0.131 3 ¹ / ₂ x 0.131 3 ¹ / ₄ x 0.131 3 ¹ / ₄ x 0.120 Connection No.: 3 x 0.131 3 ¹ / ₄ x 0.120 Connection No.: 3 x 0.120 3 ¹ / ₄ x 0.131 3 x 0.120 3 x 0.131 3 ¹ / ₂ x 0.131 3 ¹ / ₂ x 0.131 3 ¹ / ₂ x 0.131	Connection No. 24	Connection No. Conn	Connection No. 24 30 27	LENGTH DIAMETER 1BC 1B	LENGTH DIAMETER 1BC	LENGTH / DIAMETER 2012 2015 18C 18C	LENGTH / DIAMETER 2012 18C 18C	LENGTH / DIAMETER 2012 18C 18C	LENGTH DIAMETER 18C 18

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

Frastering schedule applies to sawn tumber framing members having an actual thickness of 1½ inches (nominal 2-by furnier) and a minimum assigned specific gravity, SG_{NDS}, of 0.42.

Frastening 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.

Connection 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),

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 (pif)^{1,2,3,4,5}

						BLOCKED D	IAPHRAGMS	3			UN	BLOCKED	DIAPHRAGI	MS
NOMINAL PASLODE NAIL	MINIMUM NOMINAL	MINIMUM WIDTH OF							ES), AT CON . EDGES (CA		DIAPHR	AGM BOL	ACED 6" MA INDARIES AI TED EDGES	
DIAMETER (inch)	FASTENER	FRAMING	6 4 21/2 2 Fastener spacing at other panel edges (Cases 1, 2, 3 & 4)							SUFFOR	All of	ther		
	LENGTH	MEMBER					Cases 1, 2, 3	& 4)		Cas	e 1	configurations		
	(inches)	es) (inches) 6		6		6		4	3	3			(Cases 2, 3, 4, 5 & 6)	
			Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind
				³ / ₈ -i	nch Nominal	Panel Thick	ness							
0.131	21/2	2	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	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}

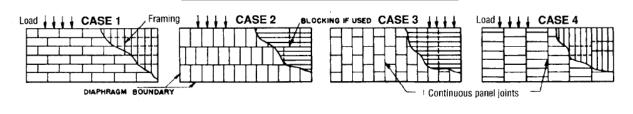
					ı	BLOCKED D	IAPHRAGMS	3			UNI	BLOCKED	DIAPHRAGI	MS
NOMINAL PASLODE NAIL	MINIMUM REQUIRED	MINIMUM WIDTH OF							ES), AT CON LEDGES (CA		DIAPHR	AGM BOU	ACED 6" MA NDARIES AI ED EDGES	
DIAMETER (inch)	FASTENER LENGTH	FRAMING MEMBER	6	1	4	ļ	21	1/2	2	2			All o	
	(inches)	(inches)		Fas	tener spacin	g at other pa	anel edges (C	Cases 1, 2, 3	& 4)		Cas	e 1	configu (Cases	
			6	i	(5	4	4	3	3			5 &	
			Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind
				³ / ₈ -i	nch Nominal	Panel Thick	kness							
0.131	21/2	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 Nomina	l Panel Thic	kness							
0.131	21/2	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

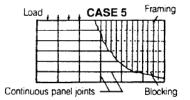
See page 12 for footnotes and Case diagrams.

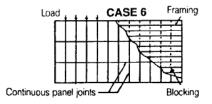
FOOTNOTES FOR HORIZONTAL DIAPHRAGM TABLES 3A AND 3B

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.

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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 (pif)^{1,2,3,4,5}

NOMINAL PASLODE NAIL DIAMETER (inch)	MINIMUM NOMINAL FASTENER		SEIS	SMIC			WI	ND	
DIAMETER (IIICII)	LENGTH (inches)	Fastener	Spacing at	Panel Edge	s (inches)	Fastener	Spacing at I	Panel Edge	s (inches)
		6	4	3	2	6	4	3	2
		3/8-inch No	minal Pane	l Thicknes	s				
0.131	21/2	230	360	460	610	320	505	645	855
0.120	3	195	305	390	520	275	435	550	730
		7/ ₁₆ -inch No	minal Pane	l Thicknes	s				
0.131	21/2	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	ss				
0.131	21/2	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 WALLS WITH FRAMING OF DOUGLAS FIR-LARCH OR SOUTHERN PINE AND RATED SHEATHING (pif)^{1,2,3,4,5}

NOMINAL PASLODE NAIL	MINIMUM NOMINAL FASTENER		SEIS	SMIC			WI	ND	
DIAMETER (inch)	LENGTH (inches)	Fastener	Spacing at	Panel Edge	s (inches)	Fastener	Spacing at	Panel Edge	s (inches)
		6	4	3	2	6	4	3	2
		3/8-inch No	minal Pane	l Thicknes	s				
0.131	21/2	220	320	410	530	305	445	575	740
0.120	3	185	270	345	450	260	375	485	625
		7/ ₁₆ -inch No	minal Pane	el Thicknes	s				
0.131	21/2	240	350	450	585	335	490	630	820
0.120	3	205	395	380	495	285	415	535	695
	1	5/32-inch No	minal Pan	el Thicknes	ss				
0.131	21/2	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



RounDrive[®]

FIGURE 1—NAIL HEAD STYLE



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

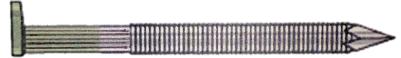


FIGURE 3—PASLODE RING SHANK FRAMING NAIL WITH ROUNDRIVE HEAD AND DEFORMED SHANK

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.



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 (LARC)

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 <u>ESR-3072</u>.
- 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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The purpose of this evaluation report supplement is to indicate that Paslode Nails, described in ICC-ES evaluation report ESR-3072, have also been evaluated for compliance with the codes noted below.

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.

