



ICC-ES Evaluation Report

ESR-3072

Reissued September 2022

Revised September 2023

This report is subject to renewal September 2024.

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

REPORT HOLDER:

PASLODE, AN ITW COMPANY

EVALUATION SUBJECT:

PASLODE NAILS

1.0 EVALUATION SCOPE

Compliance with the following codes:

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

For evaluation for compliance with codes adopted by the Los Angeles Department of Building and Safety (LADBS), see [ESR-3072 LABC and LARC Supplement](#).

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 2018 NDS.

4.1.2 Prescribed Framing Connections: The Paslode Nails may be used in connections prescribed in the fastening schedule given in Table 2. 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
2021 IBC	2304.10.2	30, 31, 35, 36
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 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 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 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 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 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 February 2021).
- 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:


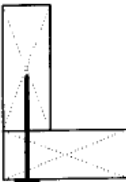
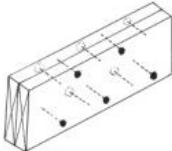
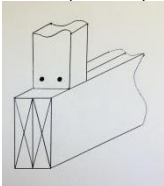
PASLODE, AN ITW COMPANY
155 HARLEM AVENUE
GLENVIEW, ILLINOIS 60025
(800) 222-6990
www.paslode.com

TABLE 1—PASLODE NAILS


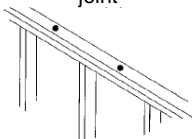
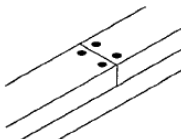
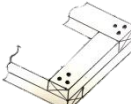
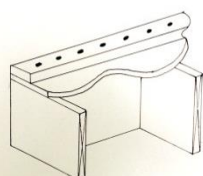
NOMINAL DIAMETER (inch)	LENGTH (inches)	HEAD STYLE	NOMINAL HEAD DIAMETER (inch)	SHANK STYLE	POINT STYLE	MATERIAL	COATING/ FINISH	SPECIFIED F_{yb} (psi)	PACKAGING
0.120	3, 3 1/4	Offset round	0.250	Fluted	Diamond	Carbon Steel	Bright	100,000	30° Paper tape strips
0.120			0.252	Fluted / Ring			HDG		
0.131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

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

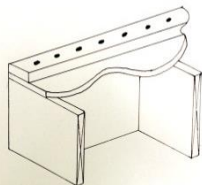
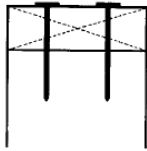
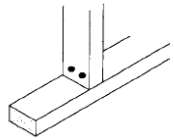
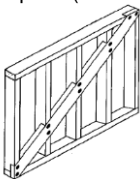
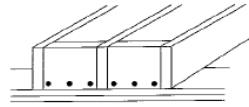
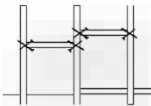
**TABLE 2—FASTENING SCHEDULE FOR PRESCRIPTIVE APPLICATIONS IN CONVENTIONAL WOOD-FRAME CONSTRUCTION
USING PASLODE FRAMING NAILS^{1,2,3}**

CONNECTION DESCRIPTION	PASLODE NAIL LENGTH / DIAMETER	APPLICABLE CODE AND CONNECTION NUMBER								
		2012 IBC	2012 IRC	2015 IBC	2015 IRC	2018 IBC	2018 IRC	2021 IBC	2021 IRC	
WALL FRAMING										
Double Studs (Face Nail) 	Connection No.:	9	12	8	8	8	8	8	8	
	3 x 0.131	16" o.c.								
	3 1/4 x 0.131									
	3 1/2 x 0.131									
	3 x 0.120	16" o.c.	14" o.c.							
	3 1/4 x 0.120									
	Connection No. for Braced Walls:									
	3 x 0.131		12" o.c.							
	3 1/4 x 0.131									
	3 1/2 x 0.131									
	3 x 0.120	10" o.c.								
	3 1/4 x 0.120									
	Abutting studs at corners and intersections (face nail) 	Connection No.:	23	8	8	8	8	8	8	8
		3 x 0.131	16" o.c.	8" o.c.	16" o.c.					
3 1/4 x 0.131										
3 1/2 x 0.131										
3 x 0.120		12" o.c.	8" o.c.	12" o.c.						
3 1/4 x 0.120										
Connection No. for Braced Walls:		12" o.c.								
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		10" o.c.								
Built-up header 2" to 2" with 1/2" spacer (face nail) 		Connection No.:	14	9	10	10	10	10	10	10
	3 x 0.131	8" o.c. each edge	12" o.c. each edge	8" o.c. each edge						
	3 1/4 x 0.131									
	3 1/2 x 0.131									
	3 x 0.120	8" o.c. each edge								
	3 1/4 x 0.120									
Continuous header to stud (toe nail)  For clarity, nails on opposite side of stud not shown.	Connection No.:	16	9	11	11	11	11	11	11	
	3 x 0.131	4 nails								
	3 1/4 x 0.131									
	3 1/2 x 0.131									
	3 x 0.120	5 nails								
	3 1/4 x 0.120									

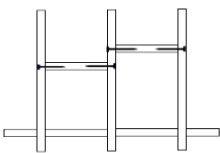
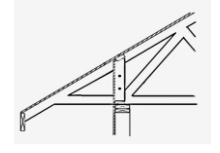
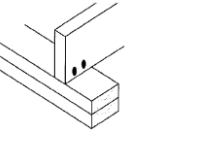
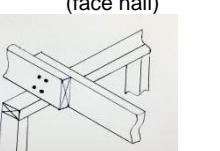

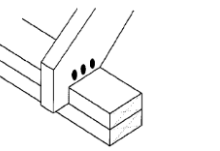

**TABLE 2—FASTENING SCHEDULE FOR PRESCRIPTIVE APPLICATIONS IN CONVENTIONAL WOOD-FRAME CONSTRUCTION
USING PASLODE FRAMING NAILS^{1,2,3} (continued)**

CONNECTION DESCRIPTION	PASLODE NAIL LENGTH / DIAMETER	APPLICABLE CODE AND CONNECTION NUMBER								
		2012 IBC	2012 IRC	2015 IBC	2015 IRC	2018 IBC	2018 IRC	2021 IBC	2021 IRC	
WALL FRAMING (continued)										
<div>Adjacent full-height stud to end of header (end nail)</div> 	Connection No.:								12	
	3 x 0.131								4 nails	
	3 1/4 x 0.131								4 nails	
	3 1/2 x 0.131								4 nails	
	3 x 0.120								5 nails	
	3 1/4 x 0.120								5 nails	
	<div>Double top plates to each other - each side of joint</div> 	Connection No.:	10a	13	12	12	12	12	12	13
3 x 0.131		12" o.c.	12" o.c.	12" o.c.						
3 1/4 x 0.131										
3 1/2 x 0.131										
3 x 0.120		12" o.c.	20" o.c.	8" o.c.						
3 1/4 x 0.120										
<div>Top plate to top plate at end joint (lap splice) each side of joint</div> 		Connection No.:	10b	14	13	13a	13	13	13	14
	3 x 0.131	12 nails each side of joint								
	3 1/4 x 0.131									
	3 1/2 x 0.131									
	3 x 0.120	14 nails each side of joint								
	3 1/4 x 0.120									
	Connection No.:				13b					
	3 x 0.131				13 nails each side of joint					
	3 1/4 x 0.131									
	3 1/2 x 0.131									
	3 x 0.120				16 nails each side of joint					
	3 1/4 x 0.120									
	<div>Top plate overlap at corners and intersections (face nail)</div> 	Connection No.:	13	19	18	17	17	17	17	18
		3 x 0.131	3 nails							
		3 1/4 x 0.131								
3 1/2 x 0.131										
3 x 0.120		4 nails								
3 1/4 x 0.120										
<div>Sole plate to joist, rim joist, band joist or blocking, not at braced wall panel (assumes 3/4" thick floor sheathing)</div> 		Connection No.:	6a	15	14	14	14	14	14	15
	3 x 0.131	12" o.c.								
	3 1/4 x 0.131									
	3 1/2 x 0.131									
	3 x 0.120	8" o.c.								
	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)**

CONNECTION DESCRIPTION	PASLODE NAIL LENGTH / DIAMETER	APPLICABLE CODE AND CONNECTION NUMBER							
		2012 IBC	2012 IRC	2015 IBC	2015 IRC	2018 IBC	2018 IRC	2021 IBC	2021 IRC
WALL FRAMING (continued)									
<div>Sole plate to joist, rim joist, band joist or blocking at braced wall panel (assumes 3/4" thick floor sheathing)</div> 	Connection No.:	6b	16	15	15	15	15	15	16
	3 x 0.131	4 @ 16" o.c.							
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	5 @ 16" o.c.							
	3 1/4 x 0.120	4 @ 16" o.c.							
<div>Top or sole plate to stud (end nail)</div> 	Connection No.:	7 and 8b	18	17 and 16b	16b	16b	16b	16b	17b
	3 x 0.131	3 nails	2 nails	3 nails					
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	4 nails	3 nails	4 nails					
	3 1/4 x 0.120								
<div>Stud to top or sole plate (toe nail)</div> 	Connection No.:	8	17	16a	16a	16a	16a	16a	17a
	3 x 0.131	4 nails	3 nails	4 nails					
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	5 nails	3 nails	5 nails					
	3 1/4 x 0.120								
<div>1" diagonal bracing to stud/plate (face nail)</div> 	Connection No.:	20	20	19	18	18	18	18	19
	3 x 0.131	2 nails at each framing member							
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	3 nails at each framing member	2 nails at each framing member	3 nails at each framing member					
	3 1/4 x 0.120								
CEILING AND ROOF FRAMING									
<div>Blocking between Joists or rafters to top plate (toe-nail)</div> 	Connection No.:	11	1a	1a	1a	1a	1a	1a	1a
	3 x 0.131	3 nails each end							
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	4 nails each end	3 nails each end	4 nails each end					
	3 1/4 x 0.120								
<div>Blocking between rafters or truss not at wall top plate, to rafter or truss (toe-nail)</div> 	Connection No.:			1b-1			1b-1		
	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	2 nails		2 nails		2 nails			
	3 nails		3 nails		3 nails				

**TABLE 2—FASTENING SCHEDULE FOR PRESCRIPTIVE APPLICATIONS IN CONVENTIONAL WOOD-FRAME CONSTRUCTION
USING PASLODE FRAMING NAILS 1.2.3 (continued)**

CONNECTION DESCRIPTION	PASLODE NAIL LENGTH / DIAMETER	APPLICABLE CODE AND CONNECTION NUMBER									
		2012 IBC	2012 IRC	2015 IBC	2015 IRC	2018 IBC	2018 IRC	2021 IBC	2021 IRC		
CEILING AND ROOF FRAMING (continued)											
Blocking between rafters or truss not at wall plates, to rafters or truss (end nail) 	Connection No.:			1b-2			1b-2			1b-2	1b-2
	3 x 0.131			3 nails			3 nails			3 nails	
	3 1/4 x 0.131										
	3 1/2 x 0.131										
	3 x 0.120			4 nails			4 nails			4 nails	
	3 1/4 x 0.120										
Flat blocking to truss and web filler (face nail) 	Connection No.:			1c			1c			1c	1c
	3 x 0.131			6" o.c.			6" o.c.			6" o.c.	
	3 1/4 x 0.131										
	3 1/2 x 0.131										
	3 x 0.120			4" o.c.			4" o.c.			4" o.c.	
	3 1/4 x 0.120										
Ceiling joist to plate (toe-nail) 	Connection No.:	15	2	2	2	2	2	2	2		
	3 x 0.131	3 nails									
	3 1/4 x 0.131										
	3 1/2 x 0.131										
	3 x 0.120	4 nails	3 nails	4 nails							
	3 1/4 x 0.120										
Ceiling joist (not connected to rafter - no thrust) lap over partition (face nail) 	Connection No.:	17	3	3	3	3	3	3	3		
	3 x 0.131	4 nails	3 nails	4 nails							
	3 1/4 x 0.131										
	3 1/2 x 0.131										
	3 x 0.120	5 nails	4 nails	5 nails							
	3 1/4 x 0.120										
Collar tie to rafter (face nail) 	Connection No.:	26	4	5	5	5	5	5	5		
	3 x 0.131	4 nails	3 nails	4 nails							
	3 1/4 x 0.131										
	3 1/2 x 0.131										
	3 x 0.120	5 nails	4 nails	5 nails							
	3 1/4 x 0.120										
Roof rafter to plate (toe-nail) 	Connection No.:	19	5	6	6	6	6	6	6		
	3 x 0.131	3 plus connectors per IBC Section 2308.10.1	4 (2 each side of rafter)	3 plus connectors per IBC Section 2308.7.5	4 (2 each side of rafter)						
	3 1/4 x 0.131										
	3 1/2 x 0.131										
	3 x 0.120										
	3 1/4 x 0.120										
Ridge beam (end nail) 	Connection No.:	28b	6	7a	7b	7a	7b	7a	7b		
	3 x 0.131	3 nails	5 nails	3 nails							
	3 1/4 x 0.131										
	3 1/2 x 0.131										
	3 x 0.120	4 nails	6 nails	4 nails							
	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)**

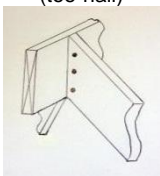
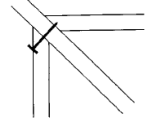
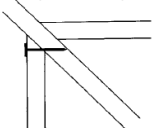
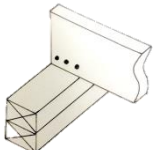
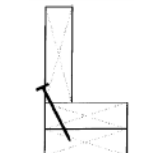
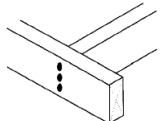
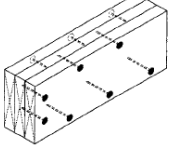
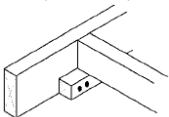
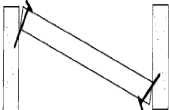
CONNECTION DESCRIPTION	PASLODE NAIL LENGTH / DIAMETER	APPLICABLE CODE AND CONNECTION NUMBER							
		2012 IBC	2012 IRC	2015 IBC	2015 IRC	2018 IBC	2018 IRC	2021 IBC	2021 IRC
CEILING AND ROOF FRAMING (continued)									
Roof rafter to ridge beam (toe-nail) 	Connection No.:	28a	6	7b	7a	7b	7a	7b	7a
	3 x 0.131	3 nails	5 nails	4 nails					
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	4 nails	6 nails	5 nails					
	3 1/4 x 0.120								
Jack raft to hip (toe-nail) 	Connection No.:	27a	6	7b	7a	7b	7a	7b	7a
	3 x 0.131	4 nails	5 nails	4 nails					
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	5 nails	6 nails	5 nails					
	3 1/4 x 0.120								
Jack rafter to hip (face nail) 	Connection No.:	27b	6	7a	7b	7a	7b	7a	7b
	3 x 0.131	3 nails		3 nails					
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	4 nails		4 nails					
	3 1/4 x 0.120								
FLOOR FRAMING									
Joist to Sill or Girder (toe nail) 	Connection No.:	1	24	22	21	21	21	21	22
	3 x 0.131	3 nails							
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	4 nails	3 nails	4 nails					
	3 1/4 x 0.120								
Rim joist to top plate (toe nail) 	Connection No.:	12	25	23	22	22	22	22	23
	3 x 0.131	6" o.c.	8" o.c.	6" o.c.					
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	4" o.c.	6" o.c.	4" o.c.					
	3 1/4 x 0.120								
Joist to band joist (face nail) 	Connection No.:	29		29	26	28	26	28	27
	3 x 0.131	4 nails		4 nails					
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	6 nails		6 nails					
	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)

CONNECTION DESCRIPTION	PASLODE NAIL LENGTH / DIAMETER	APPLICABLE CODE AND CONNECTION NUMBER							
		2012 IBC	2012 IRC	2015 IBC	2015 IRC	2018 IBC	2018 IRC	2021 IBC	2021 IRC
FLOOR FRAMING (continued)									
<div>Built up girder or beam (face nail)</div> 	Connection No.	24	30	27	27	26	27	26	28
		Face nail at top and bottom, staggered on opposite side AND at each end or splice							
	3 x 0.131	24" o.c. / 3 nails	32" o.c. / 3 nails	24" o.c. / 3 nails					
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	16" o.c. / 4 nails	24" o.c. / 4 nails	16" o.c. / 4 nails					
3 1/4 x 0.120									
<div>Ledger Strip (face nail)</div> 	Connection No.:	30	31	28	28	27	28	27	29
	3 x 0.131	5	4	5					
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	6	4	6					
	3 1/4 x 0.120								
<div>Bridging to Joist (toe nail)</div> 	Connection No.:	2		30	29	29	29	29	30
	3 x 0.131	2 each end		2 each end					
	3 1/4 x 0.131								
	3 1/2 x 0.131								
	3 x 0.120	3 each end		3 each end					
	3 1/4 x 0.120								

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

¹This fastening schedule applies to sawn lumber framing members having an actual thickness of 1 1/2 inches (nominal "2-by" lumber) and a minimum assigned specific gravity 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 2021 IBC Table 2304.10.2, 2018 and 2015 IBC Table 2304.10.1, 2012 IBC Table 2304.9.1 and 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 (plf)^{1,2,3,4,5}**

NOMINAL PASLODE NAIL DIAMETER (inch)	MINIMUM NOMINAL FASTENER LENGTH (inches)	MINIMUM WIDTH OF FRAMING MEMBER (inches)	BLOCKED DIAPHRAGMS								UNBLOCKED DIAPHRAGMS			
			FASTENER SPACING (inch) AT DIAPHRAGM BOUNDARIES (ALL CASES), AT CONTINUOUS PANEL EDGES PARALLEL TO LOAD (CASES 3, 4), AND AT ALL PANEL EDGES (CASES 5 & 6)								FASTENERS SPACED 6" MAX. AT DIAPHRAGM BOUNDARIES AND ALL SUPPORTED EDGES			
			6		4		2½		2		Case 1	All other configurations (Cases 2, 3, 4, 5 & 6)		
			Fastener spacing at other panel edges (Cases 1, 2, 3 & 4)											
			6		6		4		3					
			Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind
¾-inch Nominal Panel Thickness														
0.131	2½	2	270	380	360	505	530	745	600	840	240	335	180	255
		3	300	420	400	560	600	840	675	945	265	370	200	280
0.120	3	2	230	320	305	435	450	635	510	720	200	290	150	220
		3	255	360	340	480	510	720	575	810	225	320	170	240

See [page 10](#) 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 (plf)^{1,2,3,4,5}**

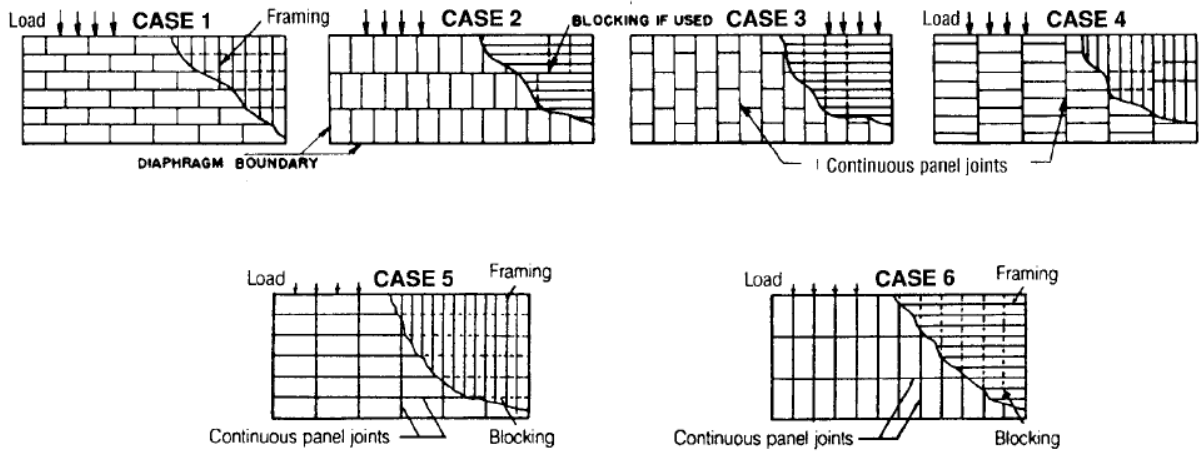
NOMINAL PASLODE NAIL DIAMETER (inch)	MINIMUM REQUIRED FASTENER LENGTH (inches)	MINIMUM WIDTH OF FRAMING MEMBER (inches)	BLOCKED DIAPHRAGMS								UNBLOCKED DIAPHRAGMS			
			FASTENER SPACING (inch) AT DIAPHRAGM BOUNDARIES (ALL CASES), AT CONTINUOUS PANEL EDGES PARALLEL TO LOAD (CASES 3, 4), AND AT ALL PANEL EDGES (CASES 5 & 6)								FASTENERS SPACED 6" MAX. AT DIAPHRAGM BOUNDARIES AND ALL SUPPORTED EDGES			
			6		4		2½		2		Case 1		All other configurations (Cases 2, 3, 4, 5 & 6)	
			Fastener spacing at other panel edges (Cases 1, 2, 3 & 4)											
			6		6		4		3					
			Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind	Seismic	Wind
¾-inch Nominal Panel Thickness														
0.131	2½	2 3	240	335	320	450	480	670	545	765	215	300	160	225
			270	380	360	505	540	755	610	855	240	335	180	255
0.120	3	2 3	205	285	270	375	405	565	460	640	180	255	135	190
			230	315	305	425	455	640	515	720	205	285	150	210
7/16-inch Nominal Panel Thickness														
0.131	2½	2 3	255	360	340	475	505	710	575	805	230	325	170	240
			285	400	380	535	570	800	645	905	255	360	190	265
0.120	3	2 3	215	305	290	405	430	600	490	685	195	270	145	200
			240	340	325	450	485	680	550	765	215	300	160	225
15/32-inch Nominal Panel Thickness														
0.131	2½	2 3	270	380	360	505	530	745	600	840	240	335	180	255
			300	420	400	560	600	840	675	945	265	370	200	280
0.120	3	2 3	230	325	305	430	450	630	510	715	205	285	155	220
			255	360	340	480	510	715	575	805	225	315	170	240

See [page 10](#) 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-18 and NDS-15 (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 DIAMETER (inch)	MINIMUM NOMINAL FASTENER LENGTH (inches)	SEISMIC				WIND			
		Fastener Spacing at Panel Edges (inches)				Fastener Spacing at Panel Edges (inches)			
		6	4	3	2	6	4	3	2
³ / ₈ -inch Nominal Panel Thickness									
0.131	2 ¹ / ₂	230	360	460	610	320	505	645	855
0.120	3	195	305	390	520	275	435	550	730
⁷ / ₁₆ -inch Nominal Panel Thickness									
0.131	2 ¹ / ₂	255	395	505	670	355	550	705	935
0.120	3	215	335	430	570	305	475	610	805
¹⁵ / ₃₂ -inch Nominal Panel Thickness									
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 WALLS WITH 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				WIND			
		Fastener Spacing at Panel Edges (inches)				Fastener Spacing at Panel Edges (inches)			
		6	4	3	2	6	4	3	2
³ / ₈ -inch Nominal Panel Thickness									
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 Nominal Panel Thickness									
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 Nominal Panel Thickness									
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.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 NDS-18 and NDS-15 (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.

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**

DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES

Section: 06 05 23.13—Nails

REPORT HOLDER:

PASLODE, AN ITW 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 [ESR-3072](#), 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 [ESR-3072](#), 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 [ESR-3072](#).
- 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 2022 and revised September 2023.