

ICC-ES Evaluation Report

ESR-4017

Issued April 2023

This report is subject to renewal April 2024.

DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES
Section: 06 05 23—Wood, Plastic, and Composite Fastenings

REPORT HOLDER:

THE HILLMAN GROUP

EVALUATION SUBJECT:

POWER-PRO® CARBON STEEL STRUCTURAL WOOD SCREWS

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)

Properties evaluated:

- Structural
- Corrosion resistance

2.0 USES

The Power-Pro® Carbon Steel Structural Wood Screws are used for wood-to-wood connections that are designed in accordance with the IBC. For structures regulated under the IRC, the screws may be used where an engineered design is submitted in accordance with IRC Section R301.1.3. The screws are intended for use in the Exposure Conditions shown in Table 6.

3.0 DESCRIPTION

3.1 Power-Pro® Carbon Steel Structural Wood Screws:

The Power-Pro® Carbon Steel Structural Wood Screws are proprietary screws (differing from the requirements of ANSI/ASME B18.2.1). The screws are partially-threaded dowel-type fasteners designed to be installed in wood without drilling a lead hole. The screws have a reamer knurl between the smooth shank of the screw and the screw threads and a Type 17 point. The screws are manufactured

from carbon steel and are case hardened. The Power-Pro® Carbon Steel Structural Wood Screws are coated with a zinc layer and an organic topcoat, except for the Large Hex Washer Head Screws, which are hot dip galvanized in accordance with ASTM A153 Class C. See Table 1 for screw dimensions and Figure 1 for depictions of the screws.

3.1.1 Structural Lag Screws: The Power-Pro® Structural Lag Screws have a truss head with a star drive recess. The coating on these screws is gold-bronze in color.

3.1.2 Lumber-Tite® Screws: The Power-Pro® Lumber-Tite® screws have a flat head with a star drive recess. The coating on these screws is black in color.

3.1.3 Large Hex Washer Head Screws: The Power-Pro® Large Hex Washer Head Screws have a hex head with a large integral washer. The Power-Pro® Large Hex Washer Head Screws have a hot dip galvanized coating complying with ASTM A153 Class C.

3.1.4 Timber-Tite®, Ledger-Tite® and Truss-Tite® Screws: The Power-Pro® Timber-Tite®, Ledger-Tite® and Truss-Tite® screws have a hex washer head. The coating on the Timber-Tite® screws is black in color. The coating on the Ledger-Tite® screws is gray in color. The coating on the Truss-Tite® Screws is red in color.

3.2 Wood Members:

For purposes of connection design, sawn lumber members must have an assigned specific gravity as indicated in the tables in this report. Assigned specific gravity for sawn lumber must be determined in accordance with Table 12.3.3A of the ANSI/AWC National Design Specification for Wood Construction® (NDS) (Table 11.3.3A of the NDS for the 2012 IBC). Unless otherwise noted, sawn lumber members must have a moisture content of 19 percent or less.

For the purposes of connection design, structural glued laminated timber (GL) must have a Specific Gravity for Fastener Design (addressed in Tables 5A through 5D of the NDS Supplement), as indicated in the tables in this report. Unless otherwise noted, GL must have a moisture content of less than 16 percent.

When designing connections with screws installed into the face of cross-laminated timber (CLT) panels fabricated with

sawn lumber laminations, all of the laminations must have a minimum assigned specific gravity in accordance with the NDS as indicated in the tables in this report. Moisture content must be less than 16 percent.

Use of the screws in engineered wood products (EWP) other than those addressed above is outside the scope of this report.

For wood-to-wood connections, the tabulated side member thickness is an absolute value (not a minimum or maximum value). The thickness of the wood main member must be equal to or greater than the screw length less the thickness of the side member.

4.0 DESIGN AND INSTALLATION

4.1 Design:

The design values in this report are intended to aid the designer in meeting the requirements of IBC Section 1604.2. For connections not completely described in this report, determination of the suitability of the Power-Pro® screws for the specific application is the responsibility of the designer and is outside the scope of this report. The designer is responsible for determining the available strengths for the connection, considering all applicable limit states, and for considering serviceability issues.

4.1.1 Screw Strength: Allowable screw tension strengths (ASD), design screw tension strengths (LRFD) and minimum specified bending yield strengths for the screws are shown in Table 1.

4.1.2 Reference Withdrawal and Pull-through Design Values: Reference withdrawal (W) design values in pounds per inch of thread penetration, for screws installed perpendicular to the face of the wood member are shown in Table 2, and reference head pull-through values (W_H) are shown in Table 3.

4.1.3 Lateral Connections in Accordance with the NDS: The reference lateral design strength for connections of two or more wood members using the Power-Pro® Carbon Steel Structural Screws may be designed in accordance with the NDS, subject to the following conditions:

1. The applicable specified bending yield strength from Table 1 must be used for design.
2. The minor thread diameter, D_r , must be used where 'D' is referenced in Tables 12.3.1A, 12.3.1B and 12.3.3 of the NDS (Tables 11.3.1A, 11.3.1B and 11.3.3 of the 2012 NDS for the 2012 IBC). For partially-threaded screws, when determining if Footnote 1 to Table 12.3.1 applies, the nominal diameter shall be the specified shank diameter, D_s .
3. Wood species combinations must have assigned specific gravity up to and including 0.50.
4. Wood side member thickness must be a minimum of $\frac{3}{4}$ inch (19.1 mm).
5. Screw penetration into the main member must be a minimum of 7 times the major thread diameter, D .
6. Dowel bearing length shall be determined in accordance with Section 12.3.5.3 of the NDS (Section 11.3.5.2 of the 2012 NDS for the 2012 IBC), using $2 \cdot D_r$ as the tapered tip length, E .
7. Spacing, edge and end distance must be in accordance with Table 5, and as needed to prevent splitting of the wood.

4.1.4 Two-member Lateral Wood-to-wood Connections Based on Testing: For select connection configurations, testing has been conducted to determine reference lateral design values which exceed those determined in accordance with the NDS. Reference lateral design values based on testing are shown in Table 4.

4.1.5 Adjustments to Reference Design Values: The reference design values must be adjusted in accordance with the requirements for dowel-type fasteners in Section 11.3 of the NDS (Section 10.3 of the NDS for the 2012 IBC), to determine allowable loads for use with ASD and/or design loads for use with LRFD. The reference design values must also be adjusted in accordance with Section 12.5 of the NDS (Section 11.5 of the NDS for the 2012 IBC), as applicable. When the capacity of a connection is controlled by the screw strength, the allowable connection strength must not be increased by the adjustment factors specified in the NDS.

4.1.6 Governing Design Values: The allowable load for a two-member, single-screw connection in which the screw is subject to tension is the least of: (a) the reference withdrawal design load value given in Table 2, multiplied by the embedded thread length, and adjusted by all applicable adjustment factors; (b) the reference head pull-through design value given in Table 3, adjusted by all applicable factors; and (c) the allowable screw tension strength given in the Table 1.

4.1.7 Connections with Multiple Screws: Connections made with multiple screws must be designed in accordance with Sections 11.2.2 and 12.6 of the NDS (Sections 10.2.2 and 11.6 of the NDS for the 2012 IBC).

4.1.8 Combined Loading: Where the screws are subjected to combined lateral and withdrawal loads, connections shall be designed in accordance with Section 12.4.1 of the NDS (Section 11.4.1 of the NDS for the 2012 IBC).

4.1.9 Capacity Requirements for Wood Members: When designing a connection, the structural members must be checked for load-carrying capacity in accordance with Section 11.1.2 of the NDS (Section 10.1.2 of the NDS for the 2012 IBC), and local stresses within multiple-fastener connections must be checked against Appendix E of the NDS to ensure the capacity of the connection and fastener group.

4.2 Corrosion Resistance:

The Power-Pro® screws with the proprietary coating have been evaluated for use in wood treated with ACQ-D preservatives with a retention of 0.40 pcf (6.4 kg/m³), or wood treated with preservatives with lesser corrosion effects, as alternates to hot-dip galvanized fasteners prescribed in IBC Section 2304.10.6 (2018 and 2015 IBC Section 2304.10.5; 2012 IBC Section 2304.9.5), when subject to the Exposure Conditions 1-4 as shown in Table 6.

The hot-dip galvanized Power-Pro® screws may be used in accordance with the code, without limitation.

4.3 Installation:

Power-Pro® screws must be installed in accordance with the report holder's published installation instructions and this report. The screws must be installed perpendicular to the face of the wood member. Screws must be installed with the minimum spacing, end distances, and edge distances needed to prevent splitting of the wood or as noted in Table 5, whichever is more restrictive. The underside of the flat portion of the screw head must bear against the surface of the wood side member or steel plate. Screws must not be

overdriven. Installation must be performed without predrilling. The screws must be installed by turning with a power driver, not by driving with a hammer.

5.0 CONDITIONS OF USE

The Power-Pro® screws 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 The screws must be installed in accordance with the report holder's published installation instructions and this report. In the case of a conflict between this report and the report holder's instructions, this report governs.
- 5.2 Design loads for the screws must not exceed the available strengths described in Section 4.1.
- 5.3 Calculations and details demonstrating compliance with this report must be submitted to the code official. The calculations and details must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.4 The screws have only been evaluated for use in dry service applications. Use in wet service conditions is outside the scope of this report.
- 5.5 The screws 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 Dowel-type Threaded Fasteners Used in Wood (AC233), dated February 2022.

- 6.2 Data in accordance with the ICC-ES Acceptance Criteria for Corrosion-resistant Fasteners and Evaluation of Corrosion Effects of Wood Treatments (AC257), dated October 2009 (editorially revised October 2022).

7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-4017) 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 packaging for the screws is labeled with the brand name (Power-Pro®), the screw type (such as Lumber-Tite®), the screw size and length, the coating designation (zinc with organic topcoat or HDG) and the ICC-ES evaluation report number (ESR-4017). Each screw head is marked with "POWERPRO" (except for Timber-Tite® and Truss-Tite® screws) and a mark designating the screw length, as shown in Figure 1.
- 7.3 The report holder's contact information is the following:

THE HILLMAN GROUP
1280 KEMPER MEADOW DRIVE
FOREST PARK, OHIO 45240
(800) 800-4900
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TABLE 1—POWER-PRO® SCREW DIMENSIONS AND STEEL STRENGTHS

NOMINAL SIZE (inch)	OVERALL LENGTH ¹ (inches)	THREAD LENGTH ² (inches)	HEAD DIAMETER ³ (inch) (DRIVE SIZE / HEX SIZE)	UNTHREADED SHANK DIAMETER, D_s (inch)	MINOR THREAD (ROOT) DIAMETER, D_r (inch)	OUTSIDE THREAD DIAMETER, D (inch)	SPECIFIED BENDING YIELD STRENGTH F_{yb} (psi)	AVAILABLE TENSION STRENGTH (lbf)	
								Allowable (ASD)	Design (LRFD)
Structural Lag Screws									
1/4	1 1/2	1.00	0.540 (T25)	0.174	0.155	0.239	180,000	780	1170
	2	1.00							
	2 1/2	1.58							
	3	1.80							
	3 1/2	1.96							
	4	2.38							
	5	2.38							
6	2.38								
5/16	2 1/2	1.50	0.630 (T30)	0.204	0.181	0.284	180,000	970	1460
	3	2.10							
	3 1/2	2.20							
	4	2.60							
	5	3.50							
	6	4.00							
	8	5.50							
10	7.00								
3/8	8	5.20	0.700 (T40)	0.221	0.191	0.317	180,000	1450	2175
	10	7.20							
	12	9.20							
Lumber-Tite® Screws									
1/4	2 7/8	2.00	0.610 (T25)	0.174	0.155	0.239	180,000	780	1170
	4 1/2								
	6								
	7								
	8								
	9								
	10								
	12								
	6								
	8								
	10								
	12								

cont.

TABLE 1—POWER-PRO® SCREW DIMENSIONS AND STEEL STRENGTHS (cont.)

NOMINAL SIZE (inch)	OVERALL LENGTH ¹ , (inches)	THREAD LENGTH ² , (inches)	HEAD DIAMETER ³ (inch) (DRIVE SIZE / HEX SIZE)	UNTHREADED SHANK DIAMETER, <i>D_s</i> (inch)	MINOR THREAD (ROOT) DIAMETER, <i>D_r</i> (inch)	OUTSIDE THREAD DIAMETER, <i>D</i> (inch)	SPECIFIED BENDING YIELD STRENGTH <i>F_{yb}</i> (psi)	AVAILABLE TENSION STRENGTH (lbf)	
								Allowable (ASD)	Design (LRFD)
Large Hex Washer Head Screws									
3/8	4	3.00	0.935 (0.35" across flats)	0.294	0.251	0.407	150,000	2330	3500
	6								
	8								
	10								
	12								
Timber-Tite® Screws									
1/4	2 1/2	1.25	0.460 (0.31" across flats)	0.174	0.155	0.239	180,000	780	1170
	4								
	6								
	8								
	10								
Ledger-Tite® Screws									
5/16	3 5/8	2.00	0.610 (0.31" across flats)	0.204	0.181	0.284	180,000	970	1460
	5								
Truss-Tite® Screws									
5/16	2 7/8	1.50	0.500 (0.37" across flats)	0.204	0.181	0.284	180,000	970	1460
	3 3/8								
	4								
	4 1/2								
	5								
	6								
6 3/4									

For **SI**: 1 inch = 25.4 mm, 1 psi = 6.89 kPa, 1 lbf = 4.45 N.

¹Overall length is measured from the underside of the screw head to the tip.

²Length of thread includes tip.

³Diameter includes integral washer where applicable.

TABLE 2—REFERENCE WITHDRAWAL DESIGN VALUES (W) FOR INSTALLATION INTO THE FACE OF THE WOOD MEMBER^{1,2,3}

SCREW SIZE	MINIMUM EMBEDDED THREAD LENGTH ⁴ , (inches)	REFERENCE WITHDRAWAL DESIGN VALUE, W (lbf/in)	
		0.42 ≤ SG ⁵ < 0.50	SG ⁵ ≥ 0.50
Structural Lag Screws			
1/4	1.00	110	150
	2.38	145	185
5/16	1.60	165	245
3/8	5.20	140	190
Lumber-Tite® Screws			
1/4	2.00	110	150
Large Hex Washer Head Screws			
3/8	3.00	200	275
Timber-Tite® Screws			
1/4	1.25	110	150
Ledger-Tite® Screws			
5/16	2.00	165	245
Truss-Tite® Screws			
5/16	1.50	165	245

For **SI**: 1 inch = 25.4 mm, 1 lbf/in = 175N/m; 1 lbf = 4.45 N.

¹ Tabulated values must be multiplied by all adjustment factors included in the NDS for dowel-type fasteners to determine allowable loads for use with ASD and/or design loads for use with LRFD.

² Tabulated values are applicable to screws installed perpendicular to the faces of the wood members.

³ The tabulated reference withdrawal design value is in pounds-force per inch of thread embedment into the main member.

⁴ Embedded thread length is that portion of the screw held in the main member including the screw tip.

⁵ SG refers to assigned specific gravity determined in accordance with the NDS.

TABLE 3—REFERENCE PULL THROUGH DESIGN VALUES (W_H)^{1,2}

SCREW SIZE	MINIMUM SIDE MEMBER THICKNESS (inches)	REFERENCE PULL-THROUGH DESIGN VALUE, W_H (lbf)	
		$0.42 \leq SG^3 < 0.50$	$SG^3 \geq 0.50$
Structural Lag Screws			
$1/4$	$3/4$	175	195
$5/16$		155	230
$3/8$		235	340
Lumber-Tite® Screws			
$1/4$	$3/4$	175	195
Large Hex Washer Head Screws			
$3/8$	$3/4$	235	340
Timber-Tite® Screws			
$1/4$	$3/4$	175	195
Ledger-Tite® Screws			
$5/16$	$3/4$	155	230
Truss-Tite® Screws			
$5/16$	$3/4$	155	230

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

¹ Tabulated values must be multiplied by all adjustment factors included in the NDS for dowel-type fasteners to determine allowable loads for use with ASD and/or design loads for use with LRFD.

² Tabulated values are applicable to screws installed perpendicular to the faces of the wood members.

³ SG refers to assigned specific gravity determined in accordance with the NDS.

TABLE 4—REFERENCE LATERAL DESIGN VALUES (Z) FOR TWO MEMBER WOOD-TO-WOOD CONNECTIONS^{1,2,3,4}

SCREW SIZE	MINIMUM OVERALL LENGTH (inches)	SIDE MEMBER THICKNESS (inches)	MINIMUM PENETRATION IN MAIN MEMBER (inches)	Z (lbf) FOR FOR ASSIGNED SPECIFIC GRAVITIES (SG) OF:			
				$0.42 \leq SG < 0.50$		$SG \geq 0.50$	
				Parallel to Grain, $Z_{ }$	Perp. to Grain, Z_{\perp}	Parallel to Grain, $Z_{ }$	Perp. to Grain, Z_{\perp}
Structural Lag Screws							
$1/4$	$2 1/2$	$3/4$	$1 3/4$	160	170	180	-
$1/4$	4	$1 1/2$	$2 1/2$	-	-	-	225
$5/16$	3	$3/4$	$2 1/4$	230	240	-	-
$5/16$	4	$1 1/2$	$2 1/2$	-	-	235	255
$3/8$	8	$3 1/2$	$4 1/2$	430	500	650	560
Lumber-Tite® Screws							
$1/4$	$2 7/8$	$3/4$	$2 1/8$	200	220	200	290
Large Hex Washer Head Screws							
$3/8$	4	$3/4$	$3 1/4$	340	340	-	-
Timber-Tite® Screws							
$1/4$	$2 1/2$	$3/4$	$1 3/4$	120	-	-	-
$1/4$	4	$3/4$	$3 1/4$	-	145	-	-
$1/4$	4	$1 1/2$	$2 1/2$	-	-	155	205
Ledger-Tite® Screws							
$5/16$	$3 5/8$	$3/4$	$2 7/8$	200	205	260	260
Truss-Tite® Screws							
$5/16$	$2 7/8$	$3/4$	$2 1/8$	155	170	175	170

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

¹ Tabulated values must be multiplied by all adjustment factors included in the NDS for dowel-type fasteners to determine allowable loads for use with ASD and/or design loads for use with LRFD.

² Tabulated values are applicable to screws installed perpendicular to the faces of the wood members.

³ The wood main member thickness must be equal to or greater than the screw length less the thickness of the wood side member.

⁴ The tabulated lateral design values are based on both wood members having the same specific gravity.

TABLE 5—CONNECTION GEOMETRY REQUIREMENTS^{1,2,3}

CONDITION		REQUIRED DIMENSION				
		Large Hex Washer Head Screws		All other Power-Pro® screws		
		SG < 0.50	SG ≥ 0.50	SG < 0.50	SG ≥ 0.50	
End distance	Tension loading parallel to grain (fastener bearing toward end)		15D	20D	15D	20D
	Compression loading parallel to grain (fastener bearing away from end)		10D	15D	10D	15D
	Loading perpendicular to grain		10D	15D	10D	15D
	Axial loading (fastener withdrawal or pull-through)		10D	10D	10D	10D
Edge distance	Loading parallel to grain		5D	7D	5D	7D
	Loading perpendicular to grain	Load toward edge	10D	12D	10D	12D
		Load away from edge	5D	7D	5D	7D
	Axial Loading		4D	4D	4D	4D
Spacing between fasteners in a row (parallel to grain of main member)	Loading parallel to grain		15D	15D	15D	15D
	Loading perpendicular to grain		10D	10D	10D	10D
	Axial loading		7D	7D	7D	7D
Spacing between rows (perpendicular to grain of main member)	Lateral loading	In-line rows – loading parallel to grain	5D	7D	5D	7D
		In-line rows – loading perpendicular to grain	5D	5D	5D	7D
		Staggered rows ⁴	–	–	2.5D	3D
	Axial loading		5D	5D	4D	4D

¹End distances, edge distances and fastener spacing must be sufficient to prevent splitting of the wood, or as required by this table, whichever is the more restrictive.

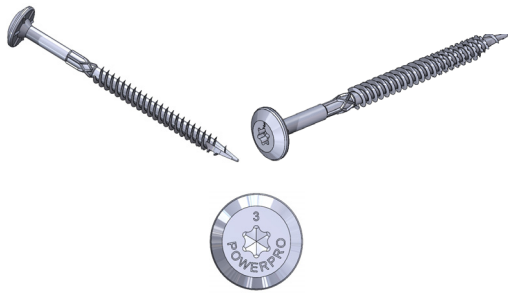
²Wood member stresses must be checked in accordance with Section 11.1.2 and Appendix E of the NDS, and end distances, edge distances and fastener spacing may need to be increased accordingly.

³D refers to the outside thread diameter.

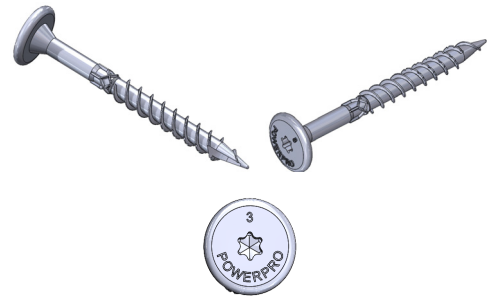
⁴Values for spacing between staggered rows apply where fasteners in adjacent rows are offset by half of the spacing between fasteners in a row.

TABLE 6—APPLICABLE EXPOSURE CONDITIONS

EXPOSURE CONDITION	TYPICAL APPLICATIONS	LIMITATIONS
1	Treated wood in dry use applications	Limited to use where equilibrium moisture content of the chemically treated wood meets the dry service conditions as described in the NDS.
2	Aboveground with coastal salt exposure	Limited to use in clean untreated wood and materials without known corrosion effects greater than that of clean untreated wood.
3	General construction	Limited to freshwater and chemically treated wood exposure, i.e., no saltwater exposure.
4	Coastal construction	No limitations with respect to moisture and chemically treated wood except that chemical wood treatment must have the same or lesser corrosion effects as qualification conditions.



Structural Lag



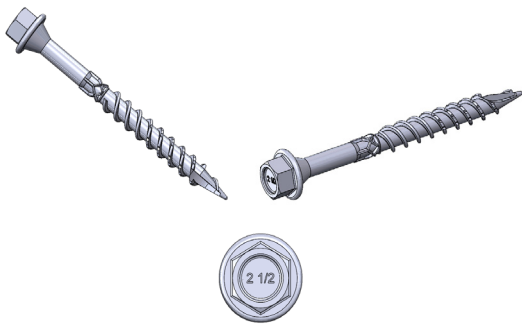
Lumber-Tite®



Large Hex Washer Head



Ledger-Tite®



Timber-Tite®



Truss-Tite®

FIGURE 1 – POWER-PRO® SCREWS

DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES
Section: 06 05 23—Wood, Plastic, and Composite Fastenings

REPORT HOLDER:

THE HILLMAN GROUP

EVALUATION SUBJECT:

POWER-PRO® CARBON STEEL STRUCTURAL WOOD SCREWS

1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that the Power-Pro® Carbon Steel Wood Structural Screws, described in ICC-ES evaluation report ESR-4017, have also been evaluated for compliance with the code(s) 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 Power-Pro® Carbon Steel Wood Structural Screws, described in Sections 2.0 through 7.0 of the evaluation report ESR-4017, 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 Chapters 16, 17 and 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 Power-Pro® Carbon Steel Wood Structural Screws, described in Sections 2.0 through 7.0 of the evaluation report ESR-4017, comply with the CRC, 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, issued April 2023.

DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES
Section: 06 05 23—Wood, Plastic, and Composite Fastenings

REPORT HOLDER:

THE HILLMAN GROUP

EVALUATION SUBJECT:

POWER-PRO® CARBON STEEL STRUCTURAL WOOD SCREWS

1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that the Power-Pro® Carbon Steel Wood Structural Screws, subject of ICC-ES evaluation report ESR-4017, have also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2020 *Florida Building Code—Building*
- 2020 *Florida Building Code—Residential*

2.0 CONCLUSIONS

The Power-Pro® Carbon Steel Wood Structural Screws, described in Sections 2.0 through 7.0 of ICC-ES evaluation report ESR-4017, comply with the 2020 *Florida Building Code—Building* and the *Florida Building Code—Residential*. The design requirements must be determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-4017 for the 2018 *International Building Code*® meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable, with the following conditions:

Use of the Power-Pro® Carbon Steel Wood Structural Screws for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* or the *Florida Building Code—Residential* has not been evaluated, and is outside the scope of this supplemental report.

For products falling under Florida Rule 61G20-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the evaluation report, issued April 2023.