

# ICC-ES Evaluation Report

ESR-5034

Reissued October 2024

This report also contains:


- CA Supplement

Subject to renewal October 2025

- FL Supplement

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<p><b>DIVISION: 06 00 00—</b> <b>WOOD, PLASTICS AND COMPOSITES</b></p> <p><b>Section: 06 05 23—</b> <b>Wood, Plastic and Composite Fastenings</b></p>	<p><b>REPORT HOLDER: THE HILLMAN™ GROUP, INC.</b></p> <p><b>ADDITIONAL LISTEE: THE HILLMAN™ GROUP CANADA</b></p>	<p><b>EVALUATION SUBJECT: DECKPLUS BOLTS, SCREWS, NUTS AND WASHERS</b></p>	
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## 1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018 and 2015 [International Building Code® \(IBC\)](#)
- 2021, 2018 and 2015 [International Residential Code \(IRC\)](#)

Property evaluated:

- Corrosion Resistance

## 2.0 USES

The Deckplus bolts, screws, nuts, and washers are fasteners and fastener components with a corrosion inhibiting coating system. The fasteners and fastener components are used to connect wood members, where the fasteners and fastener components are required to exhibit resistance to environmental or chemically treated wood corrosion. The corrosion inhibiting coating system is considered an alternative to hot-dip zinc-galvanized fasteners complying to ASTM A153, Class D.

## 3.0 DESCRIPTION

**3.1 General:** The Deckplus bolts, screws, nuts, and washers are manufactured in accordance with the standards noted in Section 3.2. This report evaluates the use of a zinc plating applied to the carbon steel products. The Deckplus products have a zinc layer with a black, tan, gray, green, white, red, or brown organic topcoat. Product names for the report holder and the additional listees are represented in [Table 1](#) of this report. The products are available in the various dimensions noted in [Table 2](#).

**3.2 Manufacturing Standards:**

- 3.2.1 Hex Bolts:** The hex dimensions are in accordance with ASME B18.2.1 specifications.
- 3.2.2 Carriage Bolts:** The carriage dimensions are in accordance with ASME B18.5 specifications.
- 3.2.3 Hex Lag Screws:** The hex lag screw dimensions are in accordance with ASME B18.2.1 specifications.
- 3.2.4 Flat Washers:** The flat washer dimensions are in accordance with ASME B18.21.1 Series N or Series W specifications.
- 3.2.5 Helical Spring Lock Washers:** The lock washer dimensions are in accordance with ASME B18.21.1 specifications for Regular Helical Spring-Lock Washers.
- 3.2.6 Hex Nuts:** The hex nut dimensions are in accordance with ASME B18.2.2 specifications.

## 4.0 DESIGN AND INSTALLATION

The Deckplus bolts, screws, nuts, and washers have been evaluated for use in Exposure Conditions 1 through 4. Limitations of use are as shown in [Table 3](#) of this report. The Deckplus bolts, screws, nuts, and washers have also been evaluated for use in wood treated with water-borne alkaline copper quaternary (ACQ) preservatives with a maximum retention of 0.4 pcf (6.4 kg/m<sup>3</sup>) and preservatives with lesser corrosion effects.

Structural applications for the Deckplus bolts, screws, nuts, and washers must be designed by a registered design professional in accordance with the applicable code-prescribed design standards and are outside of the scope of this report. Installation of the Deckplus bolts, screws, nuts, and washers must be in accordance with the approved design.

## 5.0 CONDITIONS OF USE:

The Deckplus bolts, screws, nuts, and washers described in this report comply with, or are a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The products must be installed in accordance with this evaluation report, the manufacturer's installation instructions and the applicable code. If there are any conflicts between the manufacturer's installation instructions and this report, this report governs.
- 5.2 Use of the products in contact with fire-retardant-treated wood is outside of the scope of this report.

## 6.0 EVIDENCE SUBMITTED

Data in accordance with the [ICC-ES Acceptance Criteria for Corrosion-resistant Fasteners and Evaluation of Corrosion Effects of Wood Treatment Chemicals \(AC257\)](#), dated October 2009 (editorially revised January 2021).

## 7.0 IDENTIFICATION

- 7.1 The bolts, screws, nuts, and washers are identified in cartons bearing labels that provide the company name (as set forth in [Table 1](#) of this report), the name of the product (as set forth in [Table 1](#) of this report), product description, and the evaluation report number (ESR-5034).
- 7.2 The report holder's contact information is the following:

**THE HILLMAN GROUP INC.**  
**10590 HAMILTON AVENUE**  
**CINCINNATI, OHIO 45231**  
[info@hillmangroup.com](mailto:info@hillmangroup.com)

- 7.3 The additional listee's contact information is the following:

**THE HILLMAN GROUP CANADA**  
**900 PASSMORE ROAD**  
**TORONTO, ONTARIO M1X0C6**  
**CANADA**  
[farhad.lajewardi@hillmangroup.com](mailto:farhad.lajewardi@hillmangroup.com)

**TABLE 1—PRODUCT NAMES BY COMPANY**

COMPANY NAME	PRODUCT NAME
The Hillman <sup>™</sup> Group	Deckplus <sup>®</sup>
The Hillman <sup>™</sup> Group & The Hillman <sup>™</sup> Group Canada	Pro-Fast <sup>™</sup>
The Hillman <sup>™</sup> Group & The Hillman <sup>™</sup> Group Canada	Durasteel <sup>®</sup>
The Hillman <sup>™</sup> Group & The Hillman <sup>™</sup> Group Canada	Paulin-Pro

**TABLE 2—NOMINAL PRODUCT DIMENSIONS**

Product Name	Nominal Product Diameters
Hex Bolts <sup>1</sup>	1/4"-20, 5/16"-18, 3/8"-16, 7/16"-14, 1/2"-13, 5/8"-11, 3/4"-10
Carriage Bolts <sup>1</sup>	#10-24, 1/4"-20, 5/16"-18, 3/8"-16, 7/16"-14, 1/2"-13, 5/8"-11, 3/4"-10, 7/8"-9, 1"-8
Hex Lag Screws <sup>1</sup>	1/4"-10, 5/16"-9, 3/8"-7, 1/2"-6
Flat Washers	1/4", 5/16", 3/8", 1/2"
Helical Spring Lock Washers	1/4", 5/16", 3/8", 1/2"
Hex Nuts	1/4"-20, 3/8"-16, 1/2"-13

For SI: 1 inch = 25.4 mm

<sup>1</sup> Products are available in various lengths.

**TABLE 3—EXPOSURE CONDITIONS FOR FASTENERS WITH INTENDED USE AND LIMITATIONS OF USE**

EXPOSURE CONDITION	TYPICAL APPLICATIONS	USE LIMITATIONS
<b>Corrosion Resistance of Fasteners</b>		
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 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 on use with respect to moisture and chemically treated wood except that chemical wood treatment must have the same or lesser corrosion effects as qualification conditions.

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

**REPORT HOLDER:**

THE HILLMAN GROUP, INC

**EVALUATION SUBJECT:**

DECKPLUS BOLTS, SCREWS, NUTS AND WASHERS

**1.0 REPORT PURPOSE AND SCOPE****Purpose:**

The purpose of this evaluation report supplement is to indicate that the Deckplus bolts, screws, nuts and washers, described in ICC-ES evaluation report ESR-5034, have also been evaluated for compliance with the codes noted below.

**Applicable code editions:**

- 2019 *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.

- 2019 *California Residential Code* (CRC)

**2.0 CONCLUSIONS****2.1 CBC:**

The Deckplus bolts, screws, nuts and washers, described in Sections 2.0 through 7.0 of the evaluation report ESR-5034, comply with CBC Chapter 23, provided the design and installation are in accordance with the 2018 *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 Deckplus bolts, screws, nuts and washers, described in Sections 2.0 through 7.0 of the evaluation report ESR-5034, comply with CRC Chapter 3, provided the design and installation are in accordance with the 2018 *International Residential Code*® (IRC) provisions noted in the evaluation report and the additional requirements of CRC Chapter 3

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

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**Applicable code editions:**

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

**2.0 CONCLUSIONS**

The Deckplus bolts, screws, nuts and washers, described in Sections 2.0 through 7.0 of ICC-ES evaluation report ESR-5034, comply with the 2020 *Florida Building Code—Building* and the 2020 *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-5034 for the 2018 *International Building Code*® meet the requirements of the 2020 *Florida Building Code—Building* or the 2020 *Florida Building Code—Residential*, as applicable, with the following conditions:

Use of the Deckplus bolts, screws, nuts and washers 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).

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