

# ICC-ES Evaluation Report

ESR-5444

Issued March 2025

*This report also contains:*

- [City of LA Supplement](#)
- [City of Chicago Supplement](#)
- [OR Supplement](#)
- [CA Supplement w/ DSA and OSHPD](#)
- [FL Supplement](#)

Subject to renewal March 2026

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<b>DIVISION: 31 00 00— EARTHWORK</b>  <b>Section: 31 60 00— Special Foundations and Load-Bearing Elements</b>	<b>REPORT HOLDER:</b>  <b>UNITED CONSTRUCTION PRODUCTS dba BISON INNOVATIVE PRODUCTS</b>	<b>EVALUATION SUBJECT:</b>  <b>LEVEL.UP PEDESTALS</b>	
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## 1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2024, 2021, and 2018 [International Building Code® \(IBC\)](#)
- 2024, 2021, and 2018 [International Residential Code® \(IRC\)](#)

Properties evaluated:

- Structural
- Durability

## 2.0 USES

The Bison Level.Up pedestals are used as footings for the support of wood framed free-standing decks typical in Type V construction under the IBC or any construction regulated under the IRC. The Bison Level.Up pedestals are used as individual, isolated footings supporting gravity loads only.

Under the IRC, Bison Level.Up pedestals may be used where footings shall not be required in accordance with Exception 2 of 2024 and 2021 IRC Section R507.3 or Exception 1 of 2018 IRC Section R507.3.2. Engineered Design under the IRC is required in accordance with IRC Section R301.1.3. Limitations on deck area and deck height from grade shall be in accordance with Exception 2 of the 2024 and 2021 IRC Section R507.3 or Exception 1 of 2018 IRC Section R507.3.2.

## 3.0 DESCRIPTION

The Bison Level.UP pedestals are molded high-density copolymer polypropylene products and can be adjusted to pedestal heights ranging from 1½ inches (32 mm) to 12 inches (304.8 mm). Low height pedestals can range from ½-inch (12.7mm) to 2 inches (51 mm). See [Figure 1](#) for dimensions and components.

## 4.0 DESIGN AND INSTALLATION

### 4.1 Design:

The Bison Level.Up pedestals are designed as shallow rigid footings that support the free-standing deck above soil grade. The applied gravity load imposed are transmitted through the pedestals to the soil. The wood framing must have sufficient bearing on pedestal tops as permitted by Bison Level.Up pedestals and accessories detailed in [Figure 1](#). The wood deck framing members supported by Bison Level.Up pedestals must not exceed the allowable gravity loads shown in [Table 1](#).

Framing members supported by Bison Level.Up pedestals must be preservative-treated wood in accordance with the 2024 and 2021 IBC Section 2304.12.2.6 (2018 IBC Section 2304.12.3) and IRC Section R317.1.2.

Wood deck framing for dimensional lumber must be in accordance with the applicable code including material, grade, and spans to resist all superimposed dead and live loads. Bison Level.Up pedestal spacing may be spaced along framing members as permitted by the loads imposed and the applicable code, and so as to not exceed their allowable gravity load limit for any given type of soil (See [Table 1](#)).

Bison Level.Up pedestals are not meant to be the main lateral and uplift resistant system in the deck structure. Those loads if present must be resisted by other means, to the satisfaction of applicable codes or manufacturer requirements.

#### 4.2 Installation:

Installation of the Bison Level.Up pedestals must comply with this report, applicable codes, and the manufacturer's published installation instructions. The manufacturer's published installation instructions must be available at the jobsite at all times during installation. When the manufacturer's published installation instructions differ from this report, the more restrictive requirement governs.

### 5.0 CONDITIONS OF USE:

The Bison Level.Up pedestals described in this report complies with, or is 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 Installation must comply with this report, the applicable code and the manufacturer's published installation instructions. If there is a conflict between the manufacturer's installation instructions and this report, the most restrictive governs.
- 5.2 The Bison Level.Up pedestals are used to support Type V construction under the IBC or any construction under the IRC.
- 5.3 The Bison Level.Up pedestals must be installed below the frost line of the locality unless protected from frost in accordance with IBC Section 1809.5 and IRC Sections R403.1.4.1 and R507.3.3.
- 5.4 The Bison Level.Up pedestals must be used as individual isolated footings to resist bearing loads only and must not be used to resist lateral or uplift loads.
- 5.5 The design of the structure supported by the Bison Level.Up pedestals is outside the scope of this report.
- 5.6 The Bison Level.Up pedestals are manufactured under a quality control program with inspections by ICC-ES.

### 6.0 EVIDENCE SUBMITTED

Data in accordance with the [ICC-ES Acceptance Criteria for Molded Plastic Footing Pads \(AC49\)](#), dated August 2023 (editorially revised July 2024).

### 7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-5444) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.
- 7.2 In addition, a label bearing the name and address of the manufacturer (Bison Innovative Products), the product name (Bison Level.Up), and the production date code is affixed to each pallet.
- 7.3 The report holder's contact information is the following:

**UNITED CONSTRUCTION PRODUCTS dba BISON INNOVATIVE PRODUCTS**  
**701 OSAGE STREET, UNIT 120**  
**DENVER, COLORADO 80204**  
**(303) 892-0400**  
**[www.bisonip.com](http://www.bisonip.com)**

TABLE 1—BISON LEVEL.UP PEDESTALS ALLOWABLE GRAVITY LOADS (lbf) RELATED TO LOAD-BEARING PRESSURES OF FOUNDATION MATERIALS

PRODUCTS	LOAD-BEARING PRESSURES OF FOUNDATION MATERIALS <sup>1,4</sup>	
	OVER SOIL CLASS 1-5 ≥ (1500 psf <sup>2</sup> )	OVER SOIL CLASS 1-4 ≥ (2000 psf <sup>3</sup> )
LU-FH50 PEDESTAL	N/A	377 lbf
LU PEDESTAL WITH LU-JT	N/A	692 lbf
LU-FH50 PEDESTAL ON FFB/LU-FFB	787 lbf	787 lbf
LU PEDESTAL WITH LU-JT ON LU-FFB	871 lbf	871 lbf

For SI: 1 inch = 25.4 mm; 1 lbf = 4.4 N; 1 lbf/ft<sup>2</sup> = 47.9 Pa.

1. Load-bearing pressures of foundation materials shall be determined using the presumptive load-bearing values in IBC Table 1806.2 or IRC R401.4.1, as applicable, or the load-bearing values shall be determined with a site-specific soil investigation, as required by the code official.

2. Load-bearing value based on clay, sandy clay, silty clay, clayey silt, silt, and sandy silt (CL, ML, MH and CH).

3. Load-bearing value based on sand, silty sand, clayey sand, silty gravel and clayey gravel (SW, SP, SM, SC, GM and GC).

4. N/A = Not available.

PRODUCT LINE	MODEL NO.	DESCRIPTION	HEIGHT RANGE
	LU-JT	JOIST TOP ATTACHMENT INCLUDES 1 SCREW	3/16" (4.5 mm)
	LU-ST	3/16" SPACER TAB	--
	LU	LEVEL-UP ADJUSTABLE PEDESTAL	2" TO 4-3/4" (51 TO 121 mm)
	LU-C1	1-1/2" HEIGHT EXTENSION COUPLER	ADDS UP TO 1-1/2" (38 mm)
	LU-C4	4" HEIGHT EXTENSION COUPLER	ADDS UP TO 4" (102 mm)
	LU-SL	BASE LEVELER 1/4" PER FOOT (2%) SLOPE COMPENSATION	1/4" (6 mm)
	LU-FFB	FLOATING FOUNDATION BASE FOR USE OVER SOIL	12" x 12" x 1/4" (305 x 305 x 6 mm)
	LU-FH50	FIXED HEIGHT STACKABLE PEDESTAL 3/16" SPACER TAB	1/2" (13 mm)
	LU-B11	FLEXIBLE SHIM	1/16" (1.5 mm)

FIGURE 1 – BISON LEVEL.UP PEDESTALS AND COMPONENTS

**DIVISION: 31 00 00—EARTHWORK****Section: 31 60 00—Special Foundations and Load-Bearing Elements****REPORT HOLDER:****UNITED CONSTRUCTION PRODUCTS dba BISON INNOVATIVE PRODUCTS****EVALUATION SUBJECT:****LEVEL.UP PEDESTALS****1.0 REPORT PURPOSE AND SCOPE****Purpose:**

The purpose of this evaluation report supplement is to indicate that Level.Up pedestals, described in ICC-ES evaluation report [ESR-5444](#), 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 Level.Up pedestals, described in Sections 2.0 through 7.0 of the evaluation report [ESR-5444](#), comply with the LABC Chapter 18 and the LARC, and are subject to the conditions of use described in this supplement.

**3.0 CONDITIONS OF USE**

The Level.Up pedestals, described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-5444](#).
- The design, installation, conditions of use and identification of the Level.Up pedestals are in accordance with the 2021 *International Building Code*® (IBC) and 2021 *International Residential Code*® (IRC) provisions, as applicable, noted in the evaluation report [ESR-5444](#).
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16 and 17, and LARC Sections R403 and R507, as applicable.

This supplement expires concurrently with the evaluation report, issued March 2025.

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**DIVISION: 31 00 00—EARTHWORK****Section: 31 60 00—Special Foundations and Load-Bearing Elements****REPORT HOLDER:****UNITED CONSTRUCTION PRODUCTS dba BISON INNOVATIVE PRODUCTS****EVALUATION SUBJECT:****LEVEL.UP PEDESTALS**

## 1.0 REPORT PURPOSE AND SCOPE

**Purpose:**

The purpose of this evaluation report supplement is to indicate that the Level.Up pedestals, described in ICC-ES evaluation report ESR-5444, have also been evaluated for compliance with the Chicago Construction Codes (Title 14 of the Chicago Municipal Code) as noted below.

**Applicable code editions:**

- 2019 Chicago Building Code (Title 14B)

## 2.0 CONCLUSIONS

The Level.Up pedestals, described in Sections 2.0 through 7.0 of the evaluation report ESR-5444, comply with Title 14B, and are subject to the conditions of use described in this supplement.

## 3.0 CONDITIONS OF USE

The Level.Up pedestals described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report ESR-5444.
- The design, installation, conditions of use and identification of the Level.Up pedestals are in accordance with the 2018 *International Building Code®* (IBC) provisions noted in the evaluation report ESR-5444.
- The design, installation and inspections are in accordance with additional requirements of Chapters 16, 17 and 18 of Title 14B, as applicable.

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DIVISION: 31 00 00—EARTHWORK

Section: 31 60 00—Special Foundations and Load-Bearing Elements

REPORT HOLDER:

UNITED CONSTRUCTION PRODUCTS dba BISON INNOVATIVE PRODUCTS

EVALUATION SUBJECT:

LEVEL.UP PEDESTALS

## 1.0 REPORT PURPOSE AND SCOPE

### Purpose:

The purpose of this evaluation report supplement is to indicate that the Level.Up pedestals, described in ICC-ES evaluation report [ESR-5444](#), have also been evaluated for compliance with the codes noted below.

### Applicable code editions:

- 2022 Oregon Structural Specialty Code (OSSC) with Amendments Effective Oct. 2023

## 2.0 CONCLUSIONS

The Level.Up pedestals, described in Sections 2.0 through 7.0 of the evaluation report [ESR-5444](#), comply with the OSSC Chapter 18, and are subject to the conditions of use described in this supplement.

## 3.0 CONDITIONS OF USE

The Level.Up pedestals described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-5444](#).
- The design, installation, conditions of use and identification of the Level.Up pedestals are in accordance with the 2021 *International Building Code®* (IBC) provisions noted in the evaluation report [ESR-5444](#).
- The design, installation and inspection are in accordance with additional requirements of OSSC Chapters 16, 17 and 18, as applicable.

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## 1.0 REPORT PURPOSE AND SCOPE

**Purpose:**

The purpose of this evaluation report supplement is to indicate that Level.Up pedestals, described in ICC-ES evaluation report ESR-5444, have also been evaluated for compliance with the code noted below.

**Applicable code edition:**

- 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 Architects \(DSA\)](#), see Sections 2.1.1 and 2.1.2 below.

- 2022 California Residential Code (CRC)

## 2.0 CONCLUSIONS

**2.1 CBC:**

The Level.Up pedestals, described in Sections 2.0 through 7.0 of the evaluation report ESR-5444, comply with CBC Chapter 18, 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 16 and 17, as applicable.

**2.1.1 OSHPD:**

The Level.Up pedestals, described in Sections 2.0 through 7.0 of the evaluation report ESR-5444, comply with CBC Chapter 18 and amendments [OSHPD 1R, 2, 3 & 5], and Chapter 18A [OSHPD 1 & 4], 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 in CBC Chapters 16, 16A, 17 and 17A, as applicable.

**2.1.2 DSA:**

The Level.Up pedestals, described in Sections 2.0 through 7.0 of the evaluation report ESR-5444, comply with Chapter 18A [DSA-SS, DSA-SS/CC], 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 in CRC Chapters 16, 16A and 17A, as applicable.

**2.2 CRC:**

The Level.Up pedestals, described in Sections 2.0 through 7.0 of the evaluation report ESR-5444, comply with CRC Chapters 3, 4 and 5, provided the design and installation are in accordance with the 2021 *International Residential Code*® (IRC) provisions noted in the evaluation report and additional requirements in CRC Chapters 3, 4 and 5 as applicable.

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The purpose of this evaluation report supplement is to indicate that the Level.Up pedestals, described in ICC-ES evaluation report ESR-5444, has also been evaluated for compliance with the codes noted below.

**Applicable code editions:**

- 2023 Florida Building Code—Building
- 2023 Florida Building Code - Residential

**2.0 CONCLUSIONS**

The Level.Up pedestals, described in Sections 2.0 through 7.0 of ICC-ES evaluation report ESR-5444, complies with the *Florida Building Code—Building* and *Florida Building Code—Residential*. The design requirements must be determined in accordance with the *Florida Building Code—Building* and *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-5444 for the 2021 *International Building Code*® meet the requirements of the *Florida Building Code—Building* and *Florida Building Code—Residential*, as applicable.

Use of the Level.Up pedestals 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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