

Evaluation Report

"Ultimate Pipe Flashing"

Manufacturer:

Lifetime Tool and Building Products, LLC.

231 Aviation Drive
Winchester, VA 22602
(877) 904-1002

For

Florida Product Approval

FL 16031.1 R4

Florida Building Code 8th Edition (2023)

Per Rule 61G20-3

Method: 2 - B

Category: Roofing

**Sub - Category: Roofing Accessories that are an Integral
Part of the Roof System**

Product Name : "Ultimate Pipe Flashing"

Support: Wood Deck

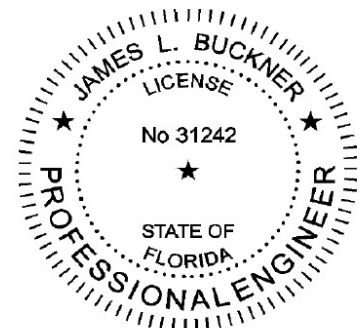
Prepared by:

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Florida Professional Engineer # 31242
Florida Evaluation ANE ID: 1916
Report No. 23-591.01-UltPipeFlash-ER
(Revises Report No. 20-222.01-UltPipeFlash-ER, FL16031.1 R3)
Date: 12/26/2023

Contents:

Evaluation Report Pages 1 – 7

This item has been digitally signed and sealed by James L. Buckner, P.E., on this date below. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.



James L. Buckner, P.E.
FL31242

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CBUCK, Inc.

Phone: (561)491-9927 Email: cbuck@cbuckinc.net Website: www.cbuckinc.net
Main Office: 1374 Community Drive, Jupiter, Florida 33458

Manufacturer: Lifetime Tool and Building Products, LLC.

Product Name: "Ultimate Pipe Flashing"

Product Category: Roofing

Product Sub-Category: Roofing Accessories that are an Integral part of the Roofing System

Compliance Method: State Product Approval Rule 61G20-3.005 (2) (b)

Product/System Description: The "Ultimate Pipe Flashing" is a curb unit used for vent pipes and other roof penetrations. It consists of a molded silicone rubber boot and a 24 gauge galvanized steel base unit with Kynar® PVDF Finish. A molded PVC compound ring is also used to seal the top of the boot to the vent pipe. The "Ultimate Pipe Flashing" is to be installed on approved slate roof or asphalt shingle roof systems.

Models:	Part No.:	Pipe Size for Schedule 40 PVC
	125	1-1/4"
	150	1-1/2"
	200	2"
	300	3"
	400	4"

Product Assembly as Evaluated: Refer to Page 4 of this report for product assembly components/materials & standards:

1. "Ultimate Pipe Flashing"
 2. Fasteners
- Attached to Plywood Deck Support

Support: **Type:**
Wood Deck
(Design of support system is outside the scope of this evaluation)

- Description:**
- 15/32" or greater Plywood,
 - or Wood plank deck (based on minimum density/specific gravity of 0.42)

Structural Rating: 33 Foot Mean Roof Height - Miami Dade Standard

Slope: 2 : 12 or greater

Performance Standards:	The product described herein has demonstrated compliance with: TAS-100(A) - HVHZ code standard for Wind Resistance
Code Compliance:	The product described herein has demonstrated compliance with the: Florida Building Code 8th Edition (2023), Section 1708.2.
Evaluation Report Scope:	This product evaluation is limited to compliance with the structural requirements of the Florida Building Code, as related to the scope section to Florida Product Approval Rule 61G20-3.001.
Limitations and Conditions of Use:	• The evaluation of this product is based on test standard with limit of use roof mean height of 33 feet. • This product has been evaluated to roof slopes greater than or equal to 2 : 12. • Refer to applicable building code for ventilation requirements. • <u>Scope of "Limitations and Conditions of Use" for this evaluation:</u> This evaluation report for "Optional Statewide Approval" contains technical documentation, specifications and installation method(s) which include "Limitations and Conditions of Use" throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under "Optional Statewide Approval". • <u>Option for application outside "Limitations and Conditions of Use"</u> Rule 61G20-3.005(1)(e) allows engineering analysis for "project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code". Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others. • Design of support system is outside the scope of this report. • Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation. • This evaluation report does not evaluate the use of this product for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)
Quality Assurance:	The manufacturer has demonstrated compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through Farabaugh Engineering and Testing, Inc. (FBC Organization #: QUA 7733).

**Components/Materials Ultimate Pipe Flashing
(by Manufacturer):**

Base Unit:

Material: Steel
Thickness: 24 gauge (min.)
Yield Strength: 40 ksi (min.)
Size: Varies per model (Refer to Table 1 of this report)
Corrosion Resistance: In compliance with FBC 8th Edition (2023),
Table 1507.4.3

Molded Boot:

Manufacturer: Columbia Engineered Rubber, Inc.
Product ID: S60-8279
Material Type: Silicone Rubber
Density/Specific Gravity: 1.19 Nominal per ASTM D297
Tensile Strength: 1242 psi (Typical) per ASTM D412
Height: 4" Nominal

Molded Compound Ring:

Manufacturer: Color Master, Inc.
Product ID: CMR4950
Material Type: Thermoplastic (PVC)
Density/Specific Gravity: 1.45 Nominal per ASTM D297
Tensile Strength: 6,000 psi (Typical) per ASTM D412
Inside & Outside Diameter: Varies per model

Fastener(s):

Base Fastener:

Type: Annular Ring Shank Roofing Nails
Size: 12 gauge $\times$ 1-1/2" (min.)
Corrosion Resistance: Per FBC Section 1506.6
Standard: Per ASTM F 1667

Alternate Fastener:

Type: Hex-Head Wood Screws
Size: #10 $\times$ 1-1/2" (min.)
Corrosion Resistance: Per FBC Section 1506.6 and 1507.4.4
Standard: Per ANSI/ASME B18.6.4

Installation:

Installation Method:

(Refer to drawings on Pages 6-7 of this report.)

Install the "Ultimate Pipe Flashing" assembly in compliance with the installation method listed in this report and applicable code sections of FBC 8th Edition (2023). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

Evaluation

Referenced Data:

1. TAS 100(A) Wind and Wind Driven Rain Test
Farabaugh Engineering and Testing, Inc. (FBC Organization #TST ID: 1654)
Project No.: T237-12, Report Date: 7 / 7 / 12
2. Quality Assurance
Farabaugh Engineering and Testing, Inc. (QUA ID: 7733)
3. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)

Installation Method

Lifetime Tool and Building Products, LLC.

"Ultimate Pipe Flashing" Components

Profile Drawings

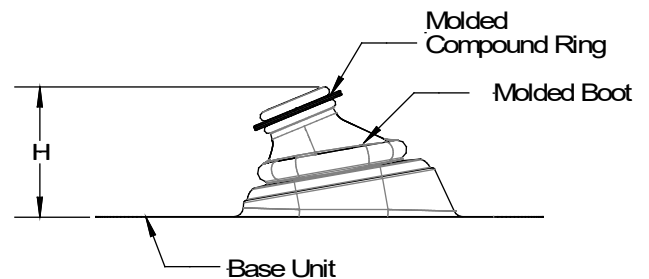
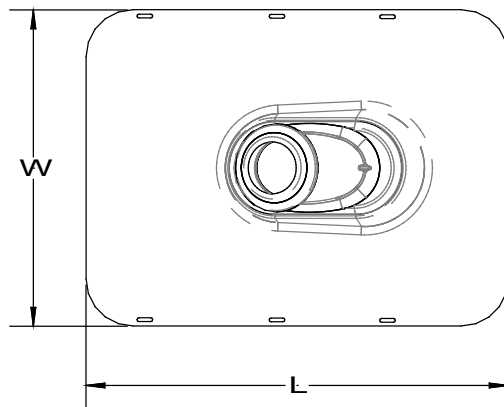
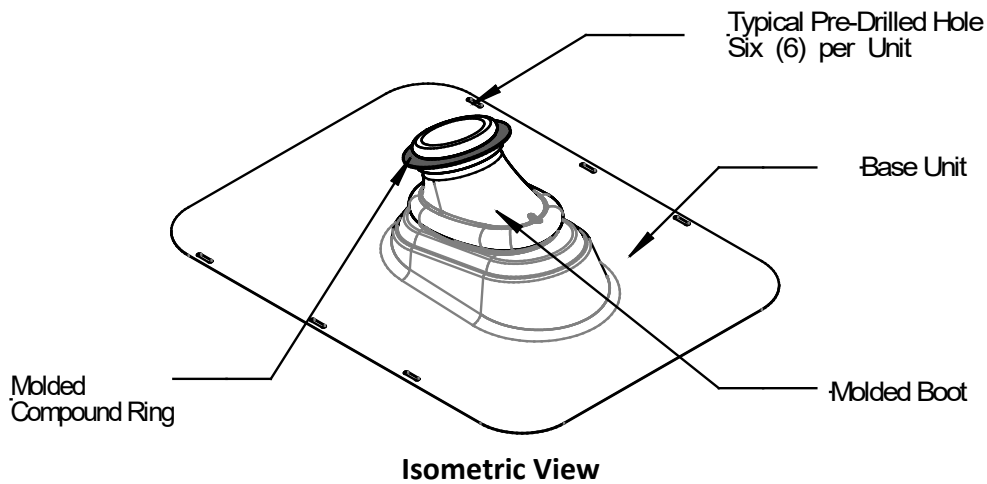


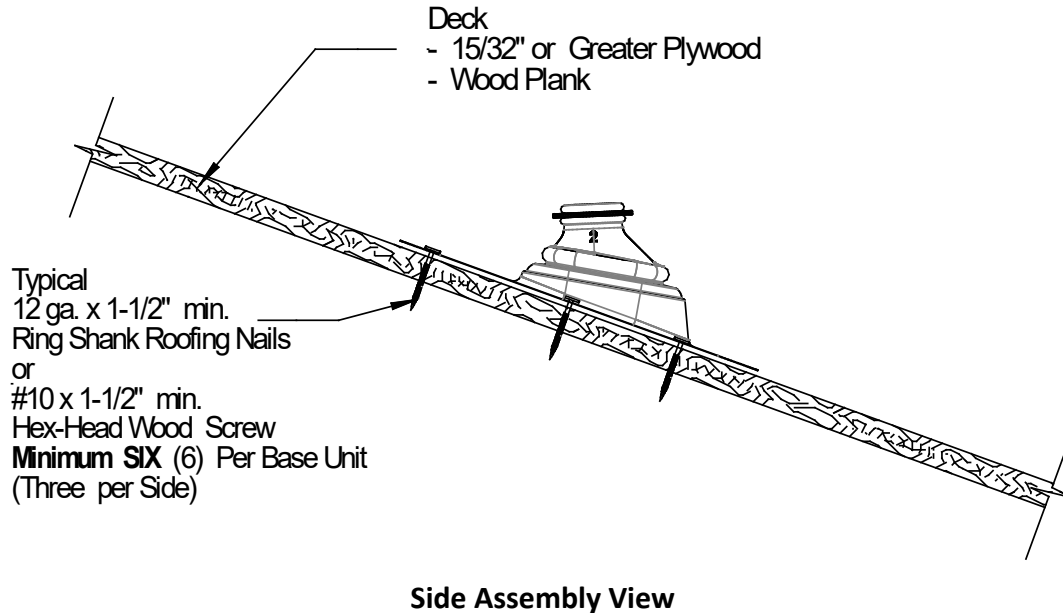
Table 1

<u>Model No.</u>	<u>Length (L)</u>	<u>Width (W)</u>	<u>Height (H)</u>
125	17.96 "	13.46 "	5.37 "
150	17.96 "	13.46 "	5.41 "
200	17.96 "	13.46 "	5.50 "
300	19.96 "	15.46 "	5.88 "
400	19.96 "	15.46 "	6.06 "

Installation Method

Lifetime Tool and Building Products, LLC.

"Ultimate Pipe Flashing" Attached to Plywood Deck



Additional Standards

Tests:

Performed with Ultimate Pipe Flashing but not evaluated in this report.

1. ASTM B117-11 – Salt spray Test
By Farabaugh Engineering & Testing Inc. (FBC Organization #TST ID: 1654)
Project No.: T272-12, Dated: 8/21/12
2. FM 4471-95 Appendix G – Leakage Test
By Farabaugh Engineering & Testing Inc. (FBC Organization #TST ID: 1654)
Project No.: T184-11, Dated: 4/28/11
3. ASTM E2140-01 – Static Water Pressure Test
By Farabaugh Engineering & Testing Inc. (FBC Organization #TST ID: 1654)
Project No.: T181-11, Dated: 4/25/11
4. ASTM E283-04 – Air Leakage Test
ASTM E331-00 – Water Penetration Test
By Farabaugh Engineering & Testing Inc. (FBC Organization #TST ID: 1654)
Project No.: T183-11, Dated: 4/25/11
5. ASTM E330-02 – Structural Performance Test (*Positive Load Only*)
By Farabaugh Engineering & Testing Inc. (FBC Organization #TST ID: 1654)
Project No.: T183-11, Dated: 4/25/11