

Product Evaluation Report

Rule 61G20-3 F.A.C. | Report No. 2694, Rev. 1 | Project No. 423-0211 | 8/25/23 | Page 1 of 2

Manufacturer

Maxim Industries, Inc
201 Longhorn Rd
Fort Worth, Texas 76179

Product Series, Model and/or Description

Series "BCM" Curb Mount Skylight (HVHZ)

Code: Current Edition of the Florida Building Code including the 8th Edition (2023) Florida Building Code

Compliance Methods: Product Approval Rule 61G20-3.005(1)(D) – Product Evaluation Report by a License Professional Engineer

Product Installation Instructions:

- MAX0004, Rev. A, dated 9/21/2023, signed and sealed by Robert J. Amoruso, Maxim Industries, Inc. Series "BCM" Curb Mount Skylight (HVHZ), Installation Anchorage Details

Product Testing:

- Architectural Testing Inc. Test Report No. G5934.01-801-18, dated 01/03/17, Revision 02/06/17, signed and sealed by Tyler Westerling, P.E., testing to TAS 201-94, TAS 202-94 and TAS 203-94
- Architectural Testing Inc. Test Report No. G5934.02-801-18, dated 01/03/17, Revised 02/06/17 to AAMA/WDMA/CAS 101/I.S.2/A440-11
- Architectural Testing Inc. Test Report No. G5934.03-801-18, dated 01/03/17, Revised 02/09/17 to ASTM E1886-13a and ASTM E1996-12

Engineering Analysis & Product Evaluation: The following engineering and/or rational analysis/calculations have been performed.

- Anchorage and product verification has been substantiated by calculation (PTC Report. No. 2694, Rev. 0) prepared, signed and sealed by Robert J. Amoruso, P.E. in accordance with the current edition of the Florida Building Code.
- Design Pressure Evaluation/Product Evaluation
 - Drawing No. MAX0004
 - High Velocity Hurricane Zone (HVHZ): YES
 - Outside High Velocity Hurricane Zone (HVHZ): YES
 - Impact Resistant: YES
 - Panel Dome Materials:
 - Plaskolite, LLC Tuffak Polycarbonate Panels (formally Covestro Makrolon Polycarbonate Panels – sold to Plaskolite in 2018).
 - Palram Americas, Inc. Corrugated and Flat Polycarbonate Panels
 - HVHZ Performance Testing
 - Architectural Testing Inc. Test Report No. G5934.01-801-18, dated 01/03/17, Revised 02/06/17, signed and sealed by Tyler Westerling, P.E.
 - Design Pressure Evaluation based on testing
 - Margin of Safety = positive loading 3 and negative loading 2 for plastic skylight domes applied to Structural Design Pressure per MD FAQ (<http://www.miamidade.gov/building/products/skylights.asp>) and meeting/exceeding current FBC requirements.
 - +180/-120 psf Structural Design Pressure
 - $180/3 = +60$ psf & $120/2 = -60$ psf DP
 - +9 psf Water Test Pressure equates to $9/.15 = +60$ psf DP
 - Cyclic Test Pressure per TAS 203 was +/-60 psf



Product Evaluation Report

Rule 61G20-3 F.A.C. | Report No. 2694, Rev. 1 | Project No. 423-0211 | 8/25/23 | Page 2 of 2

- Design Pressure = +/-60 psf
- Performance and Testing Standards
 - TAS 201-94
 - TAS 202-94
 - TAS 203-94
- Non-HVHZ Performance Testing
 - Architectural Testing Inc. Test Report No. G5934.02-801-18, dated 01/03/17, Revised 02/06/17
 - AAMA/WDMA/CAS 101/I.S.2/A440-11; Design Pressure of +/- 60 psf
 - Architectural Testing Inc. Test Report No. G5934.03-801-18, dated 01/03/17, Revised 02/09/17
 - ASTM E1886-13a and ASTM E1996-12; Design Pressure of +/- 60 psf

Material Certifications/Component Approvals:

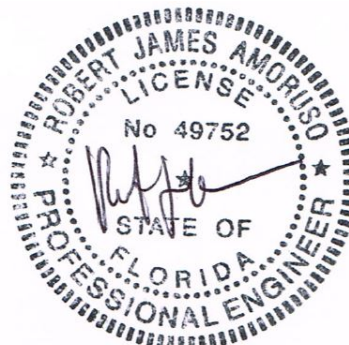
- Polycarbonate Panel Dome Material: See current Miami-Dade Notice of Acceptance (NOA) for component approval for the following approved material.
 - Plaskolite, LLC Tuffak Polycarbonate Panels NOA can be found [here](#).
 - Palram Americas, Inc. Corrugated and Flat Polycarbonate Panels NOA can be found [here](#).
 - Gallina USA, LLC 5/8" RDC Storm Panels NOA can be found [here](#).

Limitations & Conditions of Use:

- This product has been evaluated for use inside the HVHZ (High Velocity Hurricane Zone)
- This product is Impact Resistance; therefore, a protective impact-rated device is not required.
- Refer to Product Installation Instructions noted above for:
 - Maximum allowable wind loads at related maximum allowable size(s).
 - Overall dimensions and material/grade of main product components, accessories, etc.
 - Illustrated diagrams of the attachment of the product to the structure.
 - Anchor type(s), size(s), substrate(s), embedment, edge distance, and spacing/locations.
- Site wind pressures shall be determined by a licensed professional engineer in accordance with the current edition of the Florida Building Code (and/or ASCE 7 as referenced in the current edition of the Florida Building Code) for components and cladding based on allowable stress design.
- Site conditions not covered in this product evaluation document are subject to additional engineering analysis by a licensed professional engineer or registered architect as required by the authority having jurisdiction.
- Adequacy of the existing structural substrates as a main wind force resisting system capable of withstanding and transferring applied product loads to the foundation is the responsibility of the licensed professional engineer or registered architect acting as the design professional of record for the project of installation.

Certificate of Independence per Product Approval Rule 61G20-3.009

PTC Product Design Group, LLC and Robert J. Amoruso, P.E. does not have, nor will acquire, any financial interest in the company manufacturing or distributing product(s) covered by this Product Evaluation Report. PTC Product Design Group, LLC and Robert J. Amoruso, P.E. do not have, nor will acquire any financial interest in any other entity involved in the approval process or testing of the product(s) covered by this Product Evaluation Report.



Digitally signed
by Robert J
Amoruso
Date: 2023.10.06
10:16:10 -04'00'

Evaluated by:
Robert J. Amoruso, P.E.
FL PE License No. 49752



PTC Product Design Group, LLC | PO Box 520775 | Longwood, FL 32752-0775
321-690-1788 | FBPE Certification of Authorization No. 25935