



Miami-Dade NOA

NOA NO: 23-1122.07

Approved Products: PN# 16319, 16320, 17772



Part #	Box Quantity
16319	36 Mounts + 144 Screws w/ EPDM Washers
16320	36 Black Mounts + 144 Screws w/ EPDM Washers
17772	36 Mounts with T-Bolt + Nut + 144 Screws w/ EPDM Washers

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TAS 100(A)-95 WIND DRIVEN RAIN RESISTANCE



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

Quickscrews Int'l Corp.
5830 Las Positas Rd.
Livermore, CA 94551

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/ or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: QuickBOLT Butyl Bottom Stainless Steel Deck Solar Mount

APPROVAL DOCUMENT: Drawing No. **QBDM-HZ**, titled "QuickBOLT Butyl Deck Mount Solar Bracket" Microflashing", sheets 1 through 2 of 2, prepared by QuickBolt a div of Quickscrews Int'l Corp., dated on 03/14/2024, signed and sealed by Scott Wolters, P.E., bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: None

LABELING: Each box shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved or MDCPCA", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1, evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**




04/17/24

NOA No: 23-1122.07
Expiration Date: April 25, 2029
Approval Date: April 25, 2024
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **QBDM-HZ**, titled "QuickBOLT Butyl Deck Mount Solar Bracket" Microflashing", sheets 1 through 2 of 2, prepared by QuickBolt a div of Quickscrews Int'l Corp., dated on 03/14/2024, signed and sealed by Scott Wolters, P.E.

B. TESTS

1. Test report on Uplift and Shear Allowable Loads of the Butyl Bottom Deck Mounts per ASTM D7147-21, prepared by Intertek, Test Report No. **Q6437.01-106-18 R2**, dated 11/17/2023, with revision dated 03/25/2024, signed and sealed by Tanya A. Dolby, P.E.
2. Test report on Wind Driven Rain Resistance of the Butyl Bottom Deck Mounts per TAS 100(A)-95, prepared by Intertek, Test Report No. **P9590.02-109-18**, dated 08/07/2023, signed and sealed by Tanya A. Dolby, P.E.

C. CALCULATIONS

1. Anchor calculations prepared by Wolters Engineering, Inc., dated 02/13/2024, signed and sealed by Scott Wolters, P.E.

D. MATERIAL CERTIFICATIONS

1. None.

E. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

F. STATEMENTS

1. Statement letter of code conformance to the 8th edition (2023) of the FBC, issued by Wolters Engineering, Inc., dated 02/13/2024, signed and sealed by Scott Wolters, P.E.
2. Statement letter of no financial interest, issued by Wolters Engineering, Inc., dated 02/13/2024, signed and sealed by Scott Wolters, P.E.
3. Distributor agreement dated 01/17/2024.



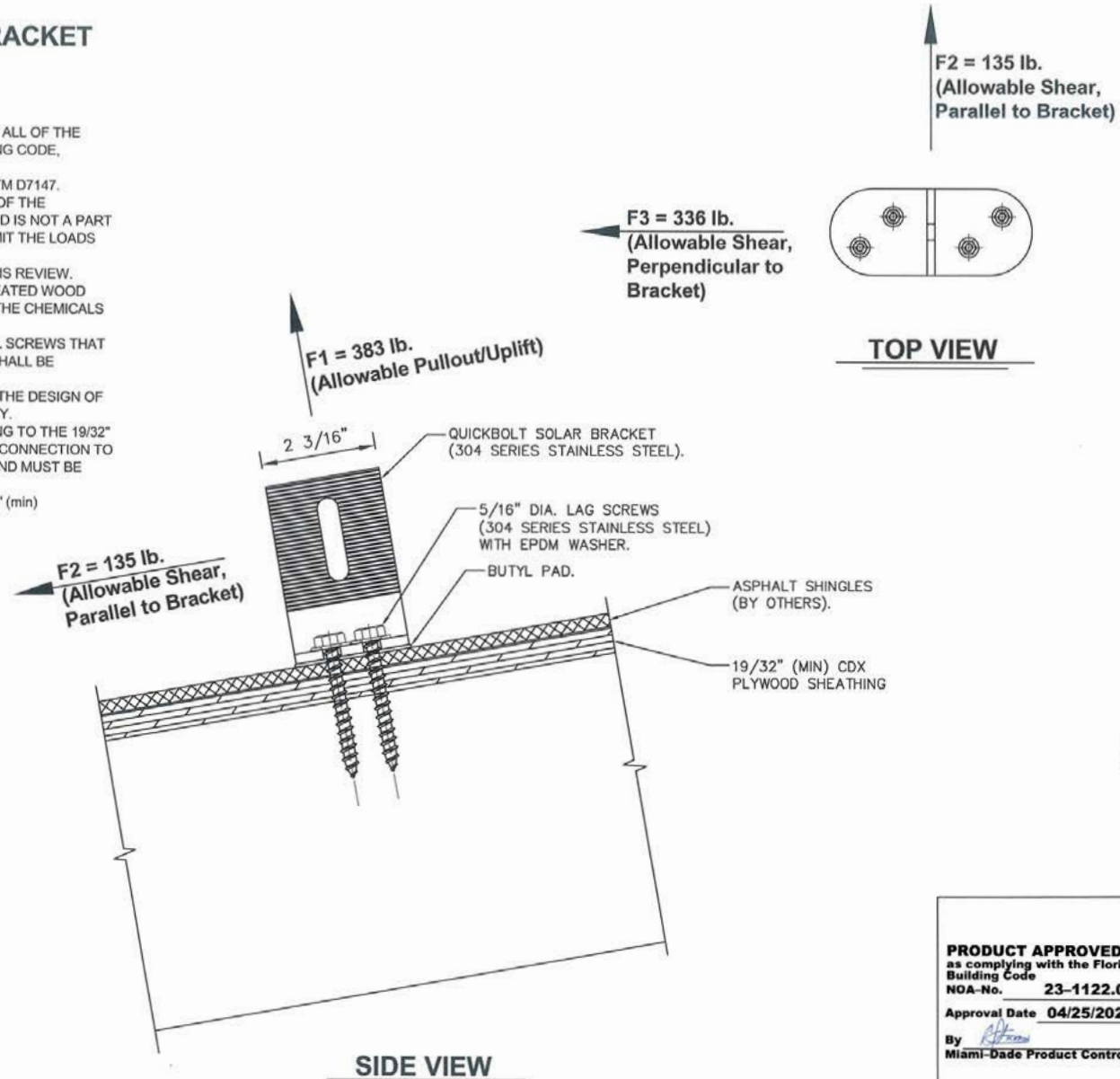
Carlos M. Utrera, P.E.
Product Control Examiner
NOA No: 23-1122.07
Expiration Date: April 25, 2029
Approval Date: April 25, 2024

E - 1

QUICKBOLT PN 16319/16320 **BUTYL DECK MOUNT SOLAR BRACKET**

GENERAL NOTES:

1. THIS SYSTEM HAS BEEN DESIGNED AND TESTED TO MEET ALL OF THE REQUIREMENTS OF THE 8TH EDITION (2023) FLORIDA BUILDING CODE, INCLUDING THE HVHZ PROVISIONS.
2. THIS SYSTEM HAS BEEN TESTED PER TAS 100(A) AND ASTM D7147.
3. THE DESIGN OF THE SUBSTRATE IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD OR OTHER SPECIALTY ENGINEER, AND IS NOT A PART OF THIS APPROVAL. THE SUBSTRATE MUST SAFELY TRANSMIT THE LOADS APPLIED TO THIS SYSTEM TO THE BUILDING STRUCTURE.
4. FIRE RATINGS OR FIRE RESISTANCE IS NOT A PART OF THIS REVIEW.
5. ALL ANCHORS SECURING THE SYSTEM TO PRESSURE TREATED WOOD SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE CHEMICALS IN THE WOOD.
6. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE PROTECTED PER FBC REQUIREMENTS.
7. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. Cd=1.6 WAS USED FOR WOOD SCREWS ONLY.
8. THE ALLOWABLE LOADS SHOWN ARE BASED ON FASTENING TO THE 19/32" (min) PLYWOOD SHEATHING ONLY. THE SHEATHING AND ITS CONNECTION TO SUPPORTS/RAFTERS ARE NOT A PART OF THIS APPROVAL, AND MUST BE VERIFIED BY THE ENGINEER OF RECORD.
9. BRACKET FASTENERS MUST FULLY PENETRATE THE 19/32" (min) SHEATHING, WITH 3 THREADS (min) BEYOND.



REVISION	1ST SUBMITTAL	DATE
1	2/2/24	
	REV#	
	PRINTS	
	ISSUED	
	FDR	

QuickBOLT
 World's First UL Certified Microfastening®
 5830 Las Positas Rd
 Livermore, CA 94551
 PH: (844) 671-6045
 WWW.QUICKBOLT.COM



PRODUCT APPROVED
 as complying with the Florida
 Building Code
 NOA-No. **23-1122.07**
 Approval Date **04/25/2024**
 By *[Signature]*
 Miami-Dade Product Control

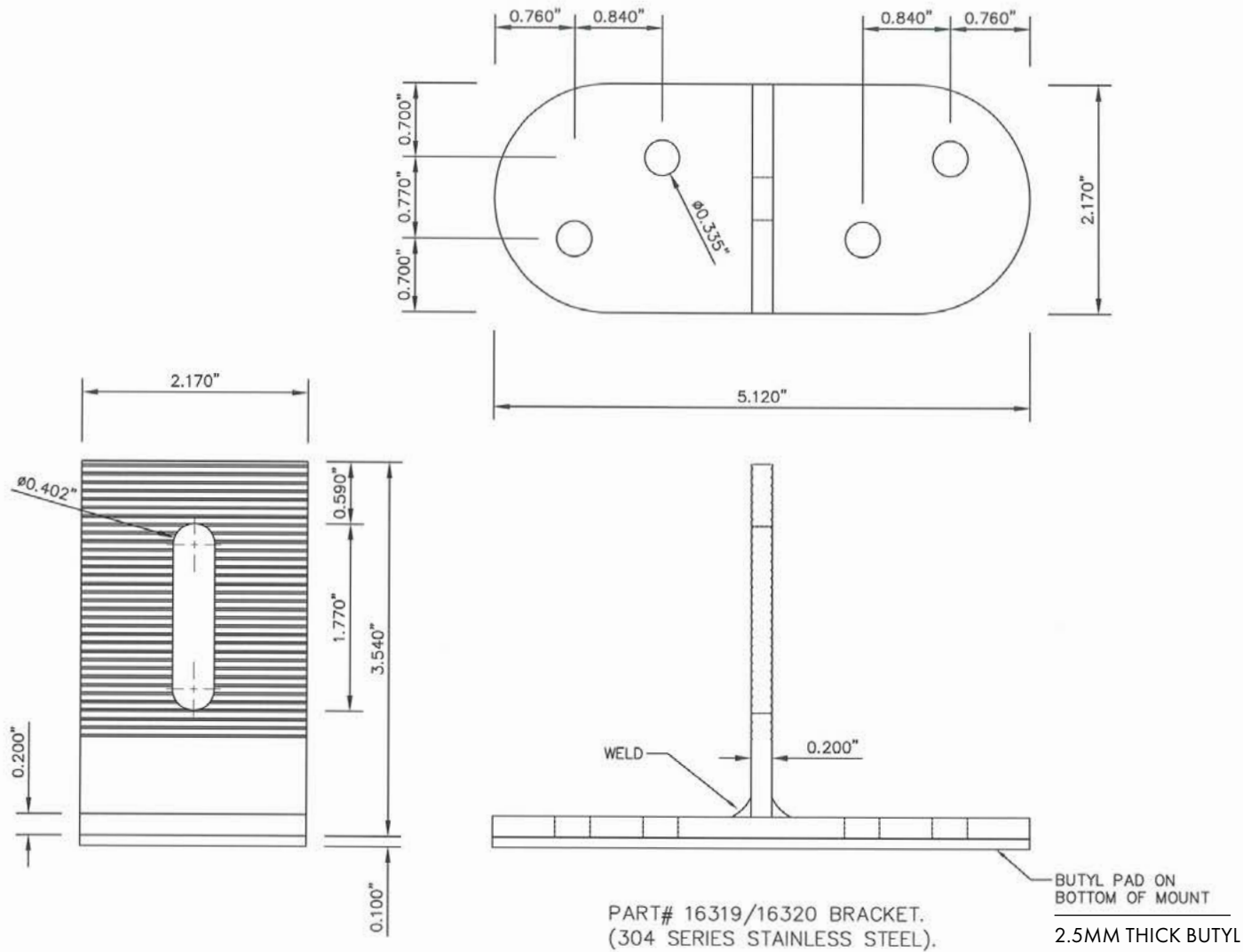
SCOTT WALTERS
 FL FE# 62354
 WALTERS ENGINEERING
 (CO# 27194)
 13211 07TH ROAD N
 WEST PALM BEACH, FL 33412
 PH/FAX: (561) 223-1862

PRODUCT:
**QUICKBOLT BUTYL
 DECK MOUNT
 SOLAR BRACKET**

DWG:
QBDM-HZ

SHEET:
1/2

**QUICKBOLT PN 16319/16320
BUTYL DECK MOUNT SOLAR BRACKET**



PRODUCT APPROVED
as complying with the Florida
Building Code
NOA-No. **23-1122.07**
Approval Date **04/25/2024**
By *[Signature]*
Miami-Dade Product Control



SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING
15201 N. 97TH ROAD, SUITE 100
WEST PALM BEACH, FL 33412
PH/FAX: (561) 225-1882

PRODUCT:
**QUICKBOLT BUTYL
DECK MOUNT
SOLAR BRACKET**
DWG: **QBDM-HZ**
SHEET: **2/2**

REV.#	ISSUED FOR	DATE
1	PRINTS	3/14/24
2	SUBMITTAL	2/2/24

ENGINEERING REPORT #1

LOAD TESTING - DIRECT TO DECK



QUICKSCREWS INTERNATIONAL CORPORATION

MIAMI-DADE TEST REPORT

SCOPE OF WORK

ASTM D7147 BRACKET LOAD EVALUATIONS OF BUTYL BOTTOM DECK MOUNTS

REPORT NUMBER

Q6437.01-106-18 R0

TEST DATES

11/01/23 - 11/01/23

ISSUE DATE

11/17/23

RECORD RETENTION END DATE

11/01/33

PAGES

15

DOCUMENT CONTROL NUMBER

RT-R-AMER-Test-2827 (07/12/22)

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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORPORATION

Report No.: Q6437.01-106-18 R0

Date: 11/17/23

REPORT ISSUED TO

QUICKSCREWS INTERNATIONAL CORPORATION

5830 Las Positas Road
Livermore, California 94551

SECTION 1

SCOPE

Product: Butyl Bottom Deck Mount (16319/16320)

Architectural Testing, Inc. (an Intertek company) dba Intertek Building & Construction (B&C) was contracted by Quickscrews International Corporation to evaluate Butyl Bottom Deck Mount in accordance with ASTM D7147 for Bracket Loading. Results obtained are tested values and were secured by using the designated test method. Testing was conducted at the Intertek B&C test facility in York, Pennsylvania.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

Unless differently required, Intertek reports apply the "Simple Acceptance" rule, also called "Shared Risk approach," of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity.



For INTERTEK B&C:

COMPLETED BY: Cag S. Saylor
TITLE: Technician III
Materials Laboratory
SIGNATURE:
Digitally Signed by: Cag Saylor
DATE: 11/17/23

CSS:jmb/td/kae

REVIEWED BY: Tanya Dolby, P.E.
TITLE: Manager
Engineering Services
SIGNATURE:
Digitally Signed by: Tanya Dolby
DATE: 2023.11.17 15:24:45 -05'00'

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample(s) tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Version: 07/12/22

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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORPORATION

Report No.: Q6437.01-106-18 R0

Date: 11/17/23

SECTION 2

TEST METHODS

The specimens were evaluated in accordance with the following:

ASTM D7147-21, *Standard Test Specification for Testing and Establishing Allowable Loads of Joist Hangers*

SECTION 3

MATERIAL SOURCE

The materials were provided by Quickscrews International Corporation. The following were received in good condition on 4/13/23:

- Ten (10), Butyl Bottom Deck Mounts

Refer to the product description photos in Section 10 and the drawings in Section 11. The materials were tested as received, except for preparing test specimens from the original materials. Representative materials/test specimens will be retained by Intertek B&C for a minimum of four years from the test completion date.

SECTION 4

TEST EQUIPMENT

NAME	ICN
INSTRON Model UTM	INT02020
30 kN Load Cell	INT02023
Digital Caliper	INT02510



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Report No.: Q6437.01-106-18 R0

Date: 11/17/23

SECTION 5

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Cag S. Saylor	Intertek B&C
Joseph M. Brickner	Intertek B&C
Tanya Dolby, P.E.	Intertek B&C

SECTION 6

TEST PROCEDURE

All conditioning of test specimens and test conditions were at standard laboratory conditions unless otherwise reported. Refer to the test related photos in Section 10. Calibration certificates are available on request.

ASTM D7147 - Vertical, Torsional, and Bending Loads

Specimens for the load tests were assembled out of nominal 2" x 4" lumber frames covered with 19/32" thick plywood and GAF Timberline HDZ shingles. The Butyl Bottom Deck Mounts were centered and fastened with 4, 5/16" x 2-1/2" lag screws into the frame through the plywood without a center joist. Three specimens were tested per configuration (See Drawing in Section 11). Specimens were tested utilizing a INSTRON UTM (ICN: INT02020) equipped with a 30 kN load cell (ICN: INT02023) and loaded in tension or compression at a rate of 0.10 in/min depending on the configuration. Maximum load and displacement were recorded.

SECTION 7

TEST SPECIMEN DESCRIPTIONS

TEST PROCEDURE	NUMBER OF SPECIMENS	NOMINAL SPECIMEN DIMENSIONS
ASTM D7147 – Vertical, Torsional, Bending Loading Tests	3 per configuration	16" x 16" x 4"



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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORPORATION

Report No.: Q6437.01-106-18 R0

Date: 11/17/23

SECTION 8

TEST RESULTS

Vertical Loading (Configuration F1, See Drawing in Section 11)

SPECIMEN NO.	MAXIMUM LOAD (lbf)	DISPLACEMENT (in)
1 – 16319,16320	1,410	0.646
2 – 16319,16320	1,150	0.544
3 – 16319,16320	1,360	0.602
Average	1,310	0.597
Std. Dev.	137	0.05

Torsional Loading (Configuration F2, See Drawing in Section 11)

SPECIMEN NO.	MAXIMUM LOAD (lbf)	DISPLACEMENT (in)
1 – 16319,16320	460	0.960
2 – 16319,16320	406	1.309
3 – 16319,16320	513	0.703
Average	460	0.991
Std. Dev.	53.5	0.304

Bending Load (Configuration F3, See Drawing in Section 11)

SPECIMEN NO.	MAXIMUM LOAD (lbf)	DISPLACEMENT (in)
1 – 16319,16320	1,010	0.599
2 – 16319,16320	1,080	0.564
3 – 16319,16320	1,130	0.463
Average	1,073	0.542
Std. Dev.	60.3	0.071

SECTION 9

CONCLUSION

The requested test method does not contain specific performance requirements. Results are reported as obtained.



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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORPORATION

Report No.: Q6437.01-106-18 R0

Date: 11/17/23

SECTION 10

PHOTOGRAPHS



Photo No. 1
Material as Received



Photo No. 2
Specimen Test Deck

TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORPORATION

Report No.: Q6437.01-106-18 R0

Date: 11/17/23



Photo No. 3
ASTM D7147 - Configuration F3 Test Setup

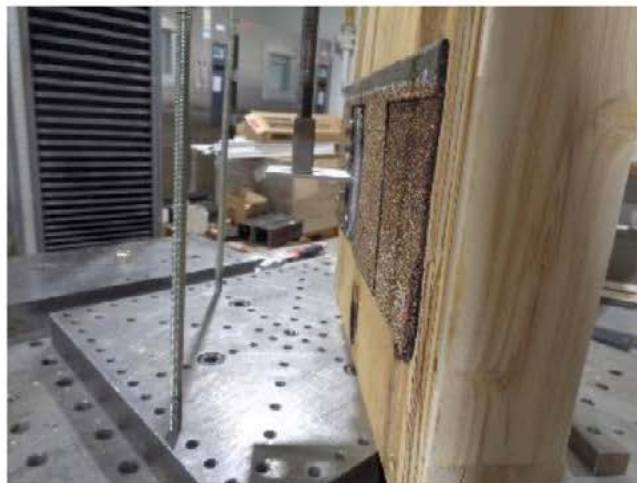


Photo No. 4
ASTM D7147 - Configuration F3 Test in Progress

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Report No.: Q6437.01-106-18 R0

Date: 11/17/23



Photo No. 5
ASTM D7147 - Configuration F3 Test in Progress



Photo No. 6
ASTM D7147 - Configuration F2 Test Setup

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Report No.: Q6437.01-106-18 R0

Date: 11/17/23



Photo No. 7
ASTM D7147 - Configuration F2 Test in Progress



Photo No. 8
ASTM D7147 - Configuration F2 Test in Progress



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Date: 11/17/23



Photo No. 9

ASTM D7147 – Configuration F1 Vertical Load Test Setup



Photo No. 10

ASTM D7147 – Configuration F1 Vertical Load Test in Progress



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Photo No. 11

ASTM D7147 – Configuration F1 Vertical Load Test in Progress



Photo No. 12

ASTM D7147 – Configuration F1 Vertical Load Test in Progress

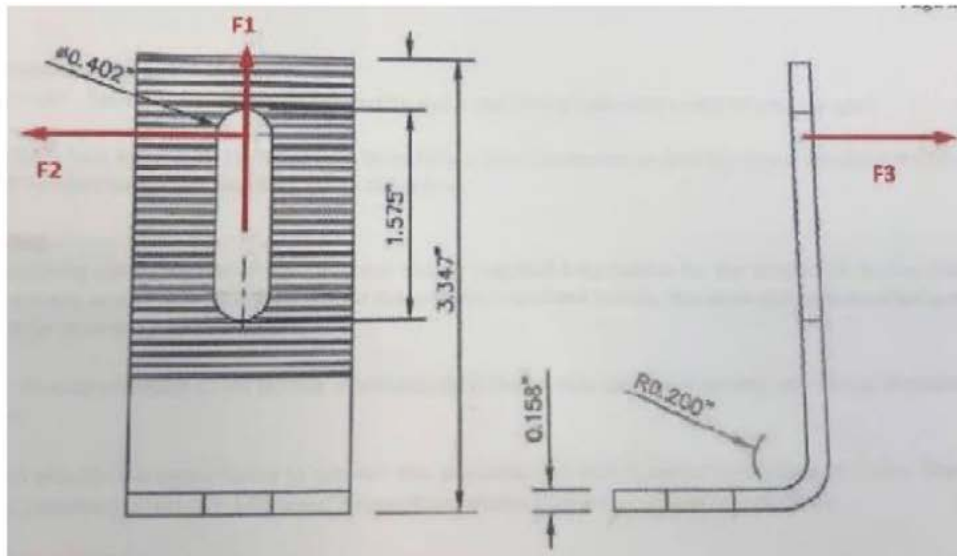
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Report No.: Q6437.01-106-18 R0

Date: 11/17/23

SECTION 11

DRAWINGS



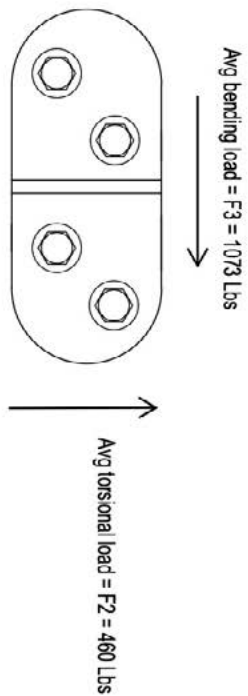
Load Orientation Details

BUTYL DECK MOUNT - QUICKBOLT PN1631916320

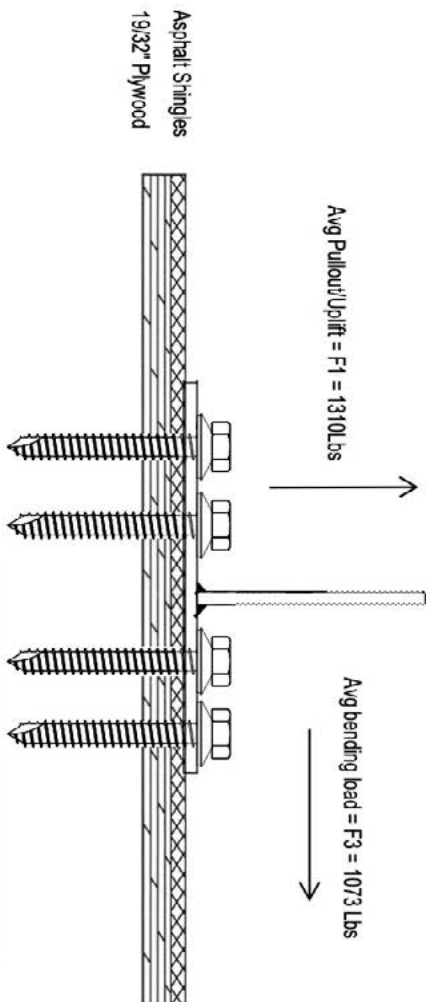
GENERAL NOTES:

1. THIS SYSTEM HAS BEEN DESIGNED AND TESTED TO MEET ALL OF THE REQUIREMENTS OF THE 8TH EDITION (2023) FLORIDA BUILDING CODE, INCLUDING THE HMZ PROVISIONS.
2. THIS SYSTEM HAS BEEN TESTED PER TAS 100(A) AND ASTM D7147.
3. THE DESIGN OF THE SUBSTRATE IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD OR OTHER SPECIALTY ENGINEER, AND IS NOT A PART OF THIS APPROVAL. THE SUBSTRATE MUST SAFELY TRANSMIT THE LOADS APPLIED TO THIS SYSTEM TO THE BUILDING STRUCTURE.
4. FIRE RATINGS OR FIRE RESISTANCE IS NOT A PART OF THIS REVIEW.
5. ALL ANCHORS SECURING THE SYSTEM TO PRESSURE TREATED WOOD SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE CHEMICALS IN THE WOOD.
6. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE PROTECTED PER FBC REQUIREMENTS.
7. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT.

TOP VIEW BUTYL DECK MOUNT

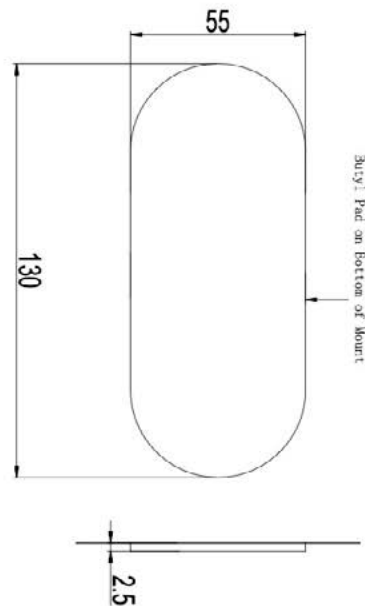
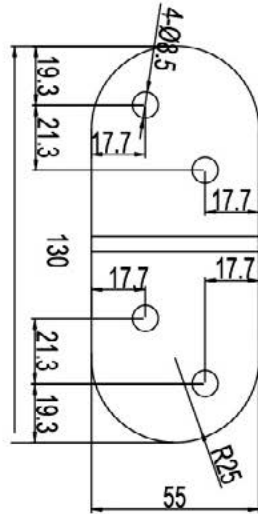
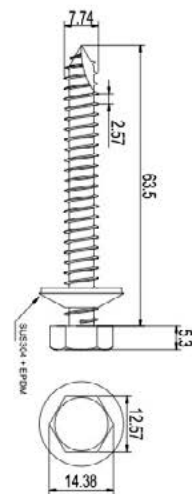
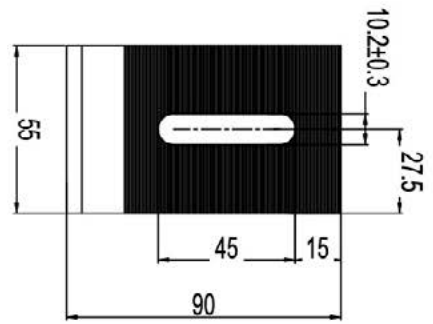
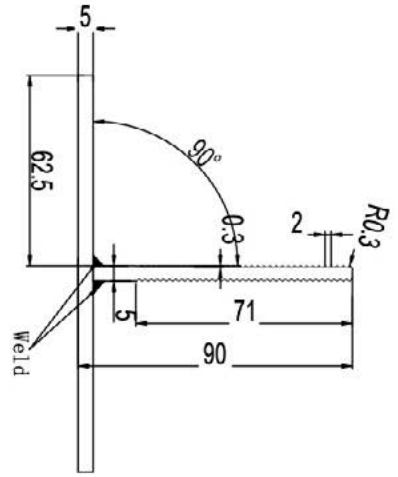


SIDE VIEW BUTYL DECK MOUNT



BUTYL DECK MOUNT - QUICKBOLT PM16319/16320

Measurements are in mm





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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORPORATION

Report No.: Q6437.01-106-18 R0

Date: 11/17/23

SECTION 12

REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	11/17/23	N/A	Original Report Issue

ENGINEERING REPORT #2

LOAD TESTING - RAFTER MOUNTED



APPLIED MATERIALS & ENGINEERING, INC.

980 41st Street
Oakland, CA 94608

Tel: (510) 420-8190
FAX: (510) 420-8186
e-mail: info@appmateng.com

January 4, 2023

Mr. Rick Gentry
QUICKSCREWS INTERNATIONAL
5830 Las Positas Road
Livermore, CA 94551

Project Number 1220938C

Subject: Deck Mount Butyl Kit 36M-144S/CS (Part # 16319, 16320) Laboratory Load Testing

Dear Mr. Gentry:

As requested, Applied Materials & Engineering, Inc. (AME) has completed load-testing the Deck Mount Butyl Kit 36M-144S/CS (Part # 16319). The purpose of our testing was to evaluate the tensile and shear load capacity of the Deck Mount attached to a 2"x6" Douglas Fir rafter using four (4) 5/16"Øx2-1/2" lag screws.

SAMPLE DESCRIPTION

Six Deck Mount Butyl Kits with 2"x6" Douglas Fir samples were delivered to our laboratory on December 9, 2022. Mockup configuration consisted of three 12" long rafters at 6.5"o.c., screwed to 1/2" Structural I plywood. The Deck Mount is attached through the plywood into a rafter with four 5/16"Øx2-1/2" lag screws.

TEST PROCEDURES & RESULTS

1. Tensile Load Test

A total of three tests were conducted for tensile (uplift) load capacity on December 28, 2022 using a United Universal testing machine. Samples were rigidly attached to the testing machine and a tensile load was applied to the hook. The samples were loaded in tension at a constant rate of axial deformation of 0.10 in./min. without shock until failure occurred; displacement at maximum load was recorded. Based on the above testing, the average maximum tensile load and displacement of the Deck Mount Butyl Kit attached to a 2"x6" Douglas Fir rafter using four 5/16"Øx2-1/2" lag screws was determined to be 3238 lbf and 0.4 in., respectively. Detailed results are provided in Table I and tensile load vs. displacement curves are provided in Figure 1. Test setup and mode of failure are provided in Appendix A, Figure 3.

The specific gravity and moisture content of the rafter was tested in accordance with ASTM D2395, Method A (oven-dry). The average specific gravity and moisture content were determined to be 0.493 and 16.3%, respectively.

Mr. Rick Gentry

Quickscrews International

Deck Mount Butyl Kit 36M-144S/CS (Part # 16319, 16320) Laboratory Load Testing

January 4, 2023

3. Shear Load Test Parallel to Rafter

A total of three tests were conducted for shear load capacity parallel to the rafter on December 29, 2022 using a United Universal testing machine. Samples were rigidly attached to the testing machine and a tensile load was applied to the hook. The samples were loaded in compression at a constant rate of axial deformation of 0.10 in. /min. without shock until failure occurred; displacement at maximum load was recorded. Based on the above testing, the average maximum tensile load and displacement of the Deck Mount Butyl Kit attached to a 2"x6" Douglas Fir rafter using four 5/16"Øx2-1/2" lag screws was determined to be 5234 lbs and 2.1 in., respectively. Detailed results are provided in Table II and shear load vs. displacement curves are provided in Figure 2. Test setup and mode of failure are provided in Appendix A, Figure 4.

The specific gravity and moisture content of the rafter was tested in accordance with ASTM D2395, Method A (oven-dry). The average specific gravity and moisture content were determined to be 0.448 and 17.7%, respectively.

Respectfully Submitted,

APPLIED MATERIALS & ENGINEERING, INC.

Reviewed by:

Armen Tajirian, Ph.D., P.E.
Principal

TABLE I

TENSILE (UPLIFT) LOAD TEST RESULTS

DECK MOUNT BUTYL KIT 36M-144S/CS (Part # 16319, 16320)

PROJECT NUMBER 1220938C

TEST NUMBER	MAXIMUM TENSILE LOAD (lbf)	DISPLACEMENT AT MAXIMUM LOAD (in.)	MODE OF FAILURE	RAFTER SPECIFIC GRAVITY	RAFTER MOISTURE CONTENT (%)
8173	3613	0.4	Rafter Split	0.508	15.4
8174	2949	0.4		0.411	19.2
8175	3153	0.3		0.560	14.2
AVERAGE	3238	0.4	..	0.493	16.3

TENSILE LOAD-DISPLACEMENT CURVES



Report No 1639 Tensile Test - XHD Control

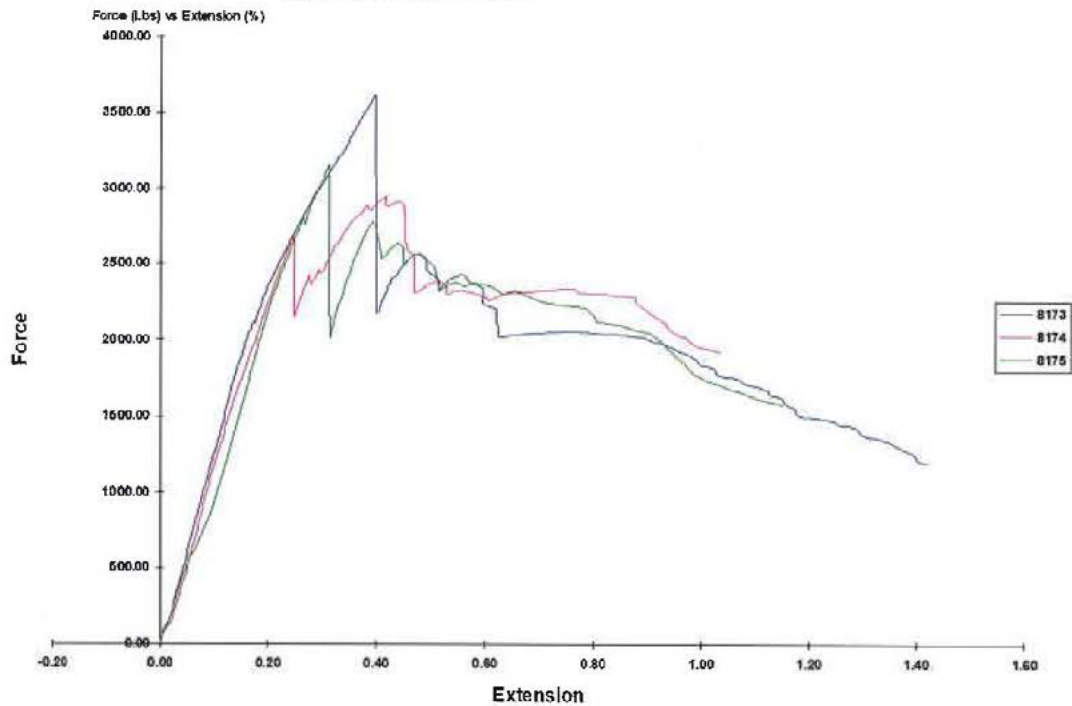


Figure 1. Test 8173, 8174, 8175 tensile load vs. displacement curve.

TABLE II

SHEAR LOAD TEST RESULTS

DECK MOUNT BUTYL KIT 36M-144S/CS (Part # 16319, 16320)

PROJECT NUMBER 1220938C

TEST NUMBER	MAXIMUM SHEAR LOAD (lbf)	DISPLACEMENT AT MAXIMUM LOAD (in.)	MODE OF FAILURE	RAFTER SPECIFIC GRAVITY	RAFTER MOISTURE CONTENT (%)
8176	7180	2.5	Bolt Shear	0.425	18.4
8177	4744	2.0	Mount Break	0.518	15.0
8178	3778	1.9	Mount Break	0.400	19.9
AVERAGE	5234	2.1	..	0.448	17.7

SHEAR LOAD-DISPLACEMENT CURVES



Report No 1640 Compressive Test - XHD Control

Force (-Lbs) vs Extension (-Inches)

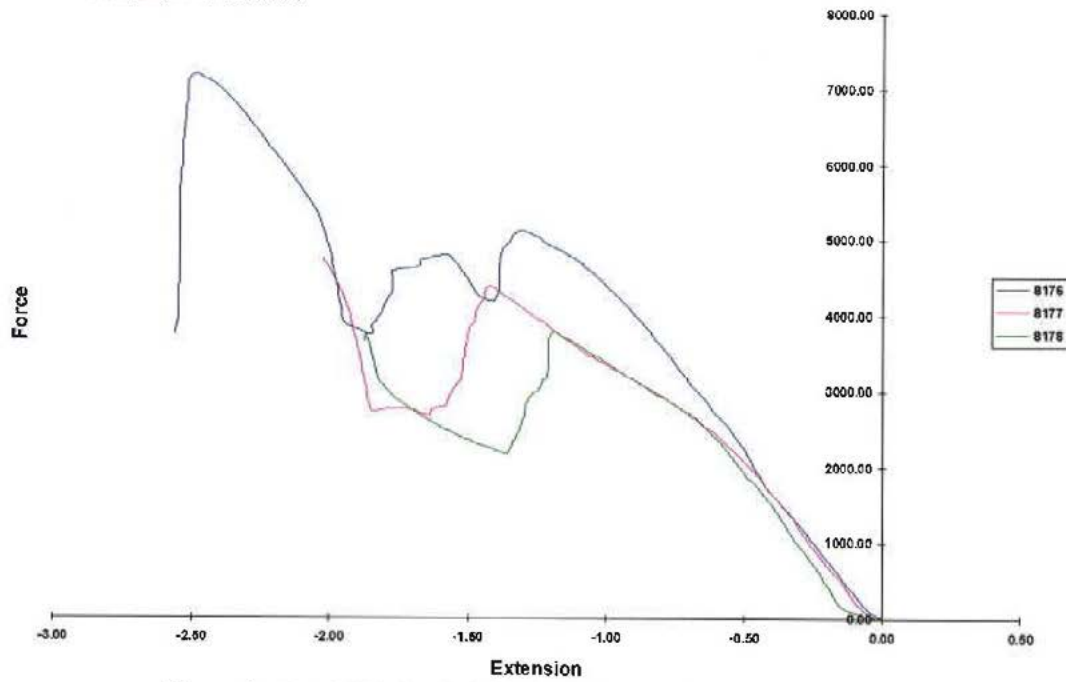


Figure 2. Test 8176, 8177, 8178 shear load vs. displacement curve.

FIGURE 3

DECK MOUNT BUTYL KIT 36M-144S/CS (Part # 16319, 16320)

TENSILE (UPLIFT) LOAD TEST SETUP

PROJECT NUMBER 1220938C



Figure 3a. Test setup.

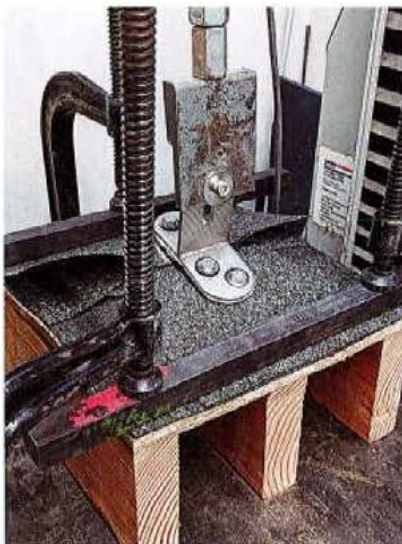


Figure 3b. Typical failure mode.



Figure 3c. Rafter view of typical failure

FIGURE 4

DECK MOUNT BUTYL KIT 36M-144S/CS (Part # 16319, 16320)

SHEAR LOAD TEST SETUP

PROJECT NUMBER 1220938C



Figure 4a. Test setup.



Figure 4b. Mount failure mode.



Figure 4c. Bolt failure mode.

ENGINEERING REPORT #3

TAS 100 (A)-95, WIND DRIVEN RAIN RESISTANCE

