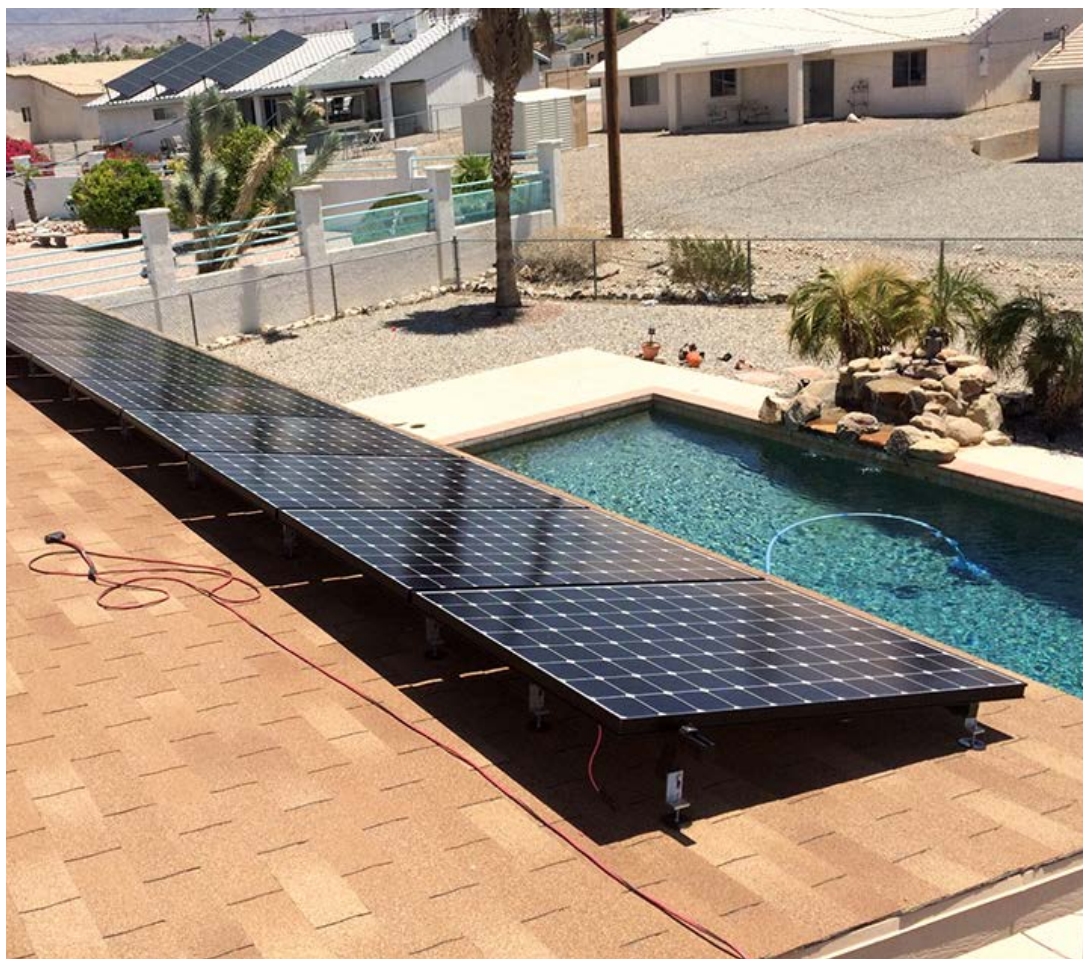


17963

17660

BLACK SPLIT TOP QB2 WITH 4" MICROFLASHING®
FOR ASPHALT, EPDM, & TPO ROOFS
PATENT # 8448407



A DIVISION OF QUICKSCREWS INTERNATIONAL CORP

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MIAMI-DADE FLORIDA APPROVAL

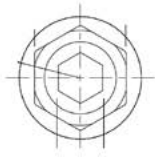
SPEC SHEET

Part #	Box Quantity
17660	4" QB2 (25)
17963	4" Microflashing® (20); 4" QB2 (20); Black Split Top L-Foot (20)



QB2

PN# 17660



Dual Drive Technology
1/2" Hex Outer Drive
6mm Inner Drive



6.60 MIN

4"

MATERIAL:
Stainless Steel 304

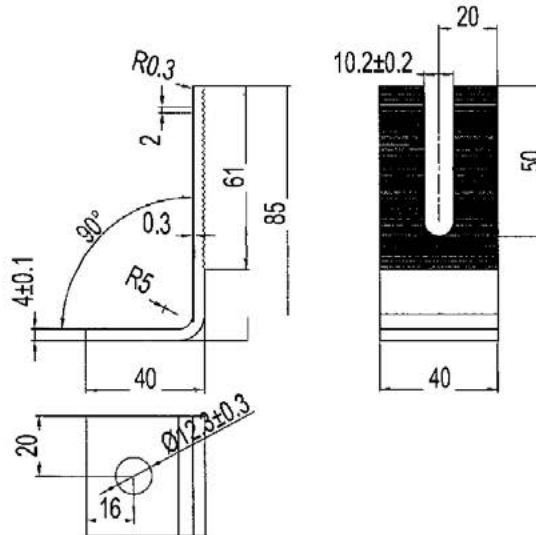
SURFACE TREATMENT:
PASSIVATION

TOLERANCE:
AS PER DRAWING

QuickBOLT

NAME:	DATE:	ITEM:	5/16 X 4" HEX FLANGE QUICK BOLT	STATUS:	Approved
DRAWN:	MAR. 19'19	DRAWING NO.:	SL20190316-1		
APPROVED:	MAR. 19'19	VERSION:	01	FORMAT:	A3
		Scale:	5:1	PAGES:	1/1
		UNIT:	METRIC	SALES:	

PN# 17961



Baiting tolerance	±2 mm
Hole tolerance	±0.5 mm
Hole distance tolerance	±0.5 mm
Form tolerance	±2 mm
Thickness tolerance	±0.1 mm
Angle tolerance	±1°

2/14/21

Design		Scale	Quantity
Drawing		Material	SUS304
Confirm		Drawing No.	
Verify		Finish	

Part # 17659

5/16" x 4"
304 Stainless Steel
Compression Washer Black



CERTIFICATE OF COMPLIANCE

Certificate Number E493748
Report Reference E493748-20170817
Date 2023-April-07

Issued to: QuickBOLT a Division of Quickscrews International Corp
5830 Las Positas Rd
Livermore CA, 94551 US

**This is to certify that
representative samples of**

MOUNTING SYSTEMS, MOUNTING DEVICES, CLAMPING
DEVICES AND GROUND LUGS FOR USE WITH
PHOTOVOLTAIC MODULES AND PANELS - COMPONENT

See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety: UL 2703, Mounting systems, mounting devices, clamping/retention devices, and ground lugs for use with flat-plate photovoltaic modules and panels-.

Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Deborah Jennings-Conner

Deborah Jennings-Conner, VP Regulatory Services

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



CERTIFICATE OF COMPLIANCE

Certificate Number E493748
Report Reference E493748-20170817
Date 2023-April-07

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Models:

USR – Component, Roof Mounting Hook Units, Models 15891 15893 15987 16000 16317 16318 16319 16320 16988 16990 16991 16993 17508 17509 17510 17511 17512 17513 17514 17515 17516 17517 17518 17519 17520 17521 17522 17523 17524 17525 17526 17527 17536 17537 17538 17539 17540 17541 17542 17543 17544 17545 17546 17547 17548 17549 17550 17551 17552 17553 17554 17555 17556 17558 17559 17560 17566 17567 17568 17569 17570 17571 17572 17573 17574 17575 17576 17577 17578 17579 17580 17585 17586 17587 17588 17589 17592 17596 17597 17598 17599 17600 17601 17606 17607 17608 17609 17610 17611 17612 17613 17614 17615 17616 17617 17618 17620 17621 17622 17623 17624 17625 17626 17627 17628 17629 17630 17631 17632 17633 17636 17637 17638 17639 17640 17641 17642 17643 17646 17647 17648 17649 17650 17651 17652 17653 17654 17659 17664 17667 17669 17670 17671 17672 17673 17678 17679 17680 17681 17686 17687 17688 17689 17700 17701 17702 17703 17704 17705 17706 17707 17708 17709 17710 17711 17712 17717 17718 17750 17751 17752 17753 17759 15891-10 15891BLK-10 15987A 15987B 17667SS 17672SS 17680SS 17688SS 17713SS 17720 17721SS 17723 17724SS 17726 17727SS 17729 17730SS 15894SS 15891SS 15987BSS 17660 17661 17662 17663 17747 17748

Deborah Jennings-Conner

Deborah Jennings-Conner, VP Regulatory Services

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



INSTALL INSTRUCTIONS

BLACK SPLIT TOP QB2 (17963)

RECOMMENDED MATERIALS

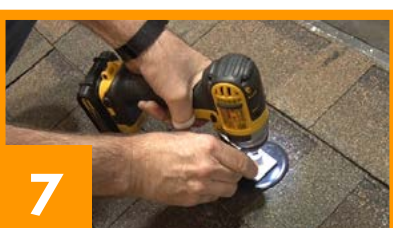
- Tools to locate and mark rafter
- Drill with a 15/64" drill bit
- MFG approved sealant (optional)
- 1/2" Nut Setter

INSTALLATION INSTRUCTIONS

1. Locate and mark the rafter
2. Predrill the hole
3. Optional: Fill the predrilled hole with MFG approved sealant
4. Optional: Place a ring of sealant around the bottom of the Microflashing® washer
5. Place the Microflashing®
6. Insert the Bolt into the L-Foot
7. Drive the Bolt until the Microflashing® is compressed

Use a minimum torque of **150 in-lbs** to properly compress Microflashing® when installing QB2.

The Bolt will compress the Microflashing® and when fully compressed the L-Foot will not rotate.



INSTALL INSTRUCTIONS CONT.

CRITICAL PLACEMENT: BUTT JOINTS & KEYWAYS

The Microflashing® must be evenly compressed against the shingle surface to seal correctly. At most installations points this occurs normally. However, extra care is required when the mounting location falls over a butt joint or keyway (ridges or gaps in the shingle surface).

The installer is responsible for determining the best method to create a flat, even surface for the Microflashing®, either by adjusting mount location or addressing the shingle condition as appropriate.

SHINGLE OVERLAPS & RIDGES

- Do not place the Microflashing® directly over butt edges or overlapping shingles.
- Edge overlaps create ridges that prevent even compression.

Preferred approach:

Whenever possible, adjust the mount location up or down so the Microflashing® can sit fully flush on a flat shingle surface, either below the edge/overlap or fully onto the upper shingle, allowing the entire flashing to seat evenly.

If the mount location cannot be moved:

The installer must determine the best method to create a flat, supported surface. Options to consider include:

- Add sealant above the mount — when installing where two shingles meet, add a bead of sealant in the gap between the shingles on the sky-side (the uphill side) of where the Microflashing® will sit. This ensures water sheds properly above the mount.
- Sliding the Microflashing® under the upper shingle, or
- Trimming the shingle as needed so the Microflashing® can sit flat and fully supported.



INSTALL INSTRUCTIONS CONT.

KEYWAYS (3-TAB SHINGLES), GAPS AND CHANNELS

- Do not span a keyway gap or butt joint channel with the Microflashing®.
- Keyways and channels are designed to shed water and must remain open to function correctly.

Preferred approach:

Whenever possible, adjust the mount location so the Microflashing® sits entirely on solid shingle, clear of a channel, allowing full, even compression.

If the mount location cannot be moved:

The installer must determine the best method to create a flat, supported surface. Options to consider include:

- Sealing the channel to create a continuous surface even with the surrounding shingles, then installing the Microflashing® flat over the sealed area.

ENSURING PROPER COMPRESSION

- Use the torque specified on page 7 to ensure the fastener is fully compressed
- The Microflashing® should always form a smooth, even concave shape with no gaps, lifting, or uneven deformation around its outer edge.



BUILDING CODE LETTER



March 22nd, 2023

To whom this may concern,

QuickBOLT is committed to excellence. The parts tested are durable goods, meaning the material composition and detailed specifications of the parts do not change. Therefore, all stamps are current. Any part tested will have the same results no matter what year the tests are performed. All testing and reports are current and valid with 2022 CBC standards.

SolarRoofHook is the previous name of QuickBOLT. Any test result referencing SolarRoofHook is referring to a QuickBOLT product.

All our parts were tested by a third-party test facility, in possession of a current engineering license for the state where the tests were performed for the following.

1. Uplift test
2. Downward load test
3. Lateral Test – Asphalt Mounts, and Metal Mounts only
4. ASTM E2440 and ASTM E330 Waterproof Tests - QuickBOLT only

The following is an excerpt from:

CALIFORNIA BOARD FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS
guide to Engineering & Land Surveying for City and County Officials
Page 12, Line 27

27. If the license has expired between the time the engineering documents were prepared and the time when the local agency's review is performed, do the documents need to be re-sealed by a licensee with a current license? (B&P Code §§ 6733, 6735, 6735.3, 6735.4)

As long as the license was current at the time the engineering documents were prepared, the documents do not need to be re-sealed prior to review by the local agency. However, any changes (updates or modifications) to the documents that are made following the review by the local agency would have to be prepared by a licensed engineer with a current license and those changes would have to be signed and sealed.

We trust the information provided will resolve any request for the test reports submitted to have a stamp from the current year.

Regards,

Rick Gentry
Executive Vice President

ENGINEERING REPORT



APPLIED MATERIALS & ENGINEERING, INC.

980 41st Street
Oakland, CA 94608

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

August 4, 2021

Mr. Rick Gentry

Project No.: 1210481C

Quickscrews International

5830 Las Posita Road
Livermore, CA 94551

Email: RGentry@quickscrews.com

Subject: PV Mount Split Top L- Foot (#17962, 17963) Laboratory Load Testing

Dear Mr. Gentry:

As requested, Applied Materials & Engineering, Inc. (AME) has completed load-testing the PV Mount split top L- Foot Part. The purpose of our testing was to evaluate the tensile (uplift) and shear load capacity of the PV Mount L-Foot attached to 1/2" OSB.

SAMPLE DESCRIPTION

Mockup samples were delivered to our laboratory on July 12, 2021. Mockup configuration consisted of three 12" long rafters at 6" o.c., screwed to 1/2" OSB.

One 5/16" x 4" QuickBOLT (P #QB2) was screwed through the L-foot and the Microflashing™ (P #17669) and then through the shingles on the OSB into a rafter with a minimum torque of 150 lbs-in. Details of the mount are provided in Appendix A.

TEST PROCEDURES & RESULTS

1. Tensile (Uplift) Load Test

A total of three tests were conducted for tensile (uplift) load capacity on August 2, 2021 using a United Universal testing machine. Samples were rigidly attached to the testing machine and an uplift (tensile) load was applied to the mount. The samples were loaded in tension at a constant rate of axial deformation of 0.05 in. /min. without shock until failure occurred; displacement at maximum load was recorded.

Based on the above testing, the average maximum uplift load of the L- Foot for each configuration attached to 1/2" OSB was determined to be 752 lbf. Detailed results are provided in Table I. Test setup and mode of failure are provided in Appendix B, Figure 1.

The specific gravity and moisture content of the rafters were tested in accordance with ASTM D2395, Method A (oven-dry). The average specific gravity and average moisture content of the nine samples were determined to be 0.465 and 0.8%, respectively.

Mr. Rick Gentry
Quickscrews International
PV Mount Split Top L- Foot Laboratory Load Testing
August 4, 2021

2. Shear (Lateral) Load Test Parallel to Rafter

A total of three tests were conducted for shear load capacity on August 3, 2021 using a United Universal testing machine. Samples were rigidly attached to the testing machine and a shear load (parallel to the rafter) was applied to the hook. The samples were loaded in compression at a constant rate of axial deformation of 0.1 in. /min. without shock until failure occurred; displacement at maximum load was recorded.

Based on the above testing, the average maximum uplift load of the L- Foot for each configuration attached to 1/2" OSB was determined to be and 438 lbf. Detailed results are provided in Table II. Test setup and mode of failure are provided in Appendix B, Figure 2.

The specific gravity and moisture content of the rafters were tested in accordance with ASTM D2395, Method A (oven-dry). The average specific gravity and average moisture content of the three samples were determined to be 0.470 and 1.0%, respectively.

Respectfully Submitted,

APPLIED MATERIALS & ENGINEERING, INC.

Reviewed by:

Mohammed Faiyaz, P.E.
Senior Engineer



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



TABLE I

TENSILE (UPLIFT) LOAD TEST RESULTS

PV MOUNT SPLIT TOP L-FOOT LABORATORY LOAD TESTING

(PART #17962, 17963)

PROJECT NUMBER 1210481C

Test No.	Maximum Uplift Load (lbs)	Displacement At Maximum Load (in.)	Mode of Failure	Test Rafter Specific Gravity	Test Rafter Moisture Content (%)
5970 U-1	696	0.18	Bolt Slips out L-Foot	0.460	0.7
5971 U-2	768	0.25	Bolt Slips out L-Foot	0.454	0.8
5972 U-3	792	0.23	Bolt Slips out L-Foot	0.482	0.8
Average	752	0.22	..	0.465	0.8

TABLE II

SHEAR LOAD TEST RESULTS

PV MOUNT SPLIT TOP L-FOOT LABORATORY LOAD TESTING

(PART #17962, 17963)

PROJECT NUMBER 1210481C

Test No.	Maximum Shear Load (lbs)	Displacement At Maximum Load (in.)	Mode of Failure	Test Rafter Specific Gravity	Test Rafter Moisture Content (%)
6080 L-1	428	0.96	Bent L-Foot	0.455	0.9
6081 L-2	447	0.79	Bent L-Foot	0.464	1.1
6082 L-3	439	0.90	Bent L-Foot	0.491	1.1
Average	438	0.88	..	0.470	1.0

TENSILE LOAD TEST SETUP

PV MOUNT SPLIT TOP L-FOOT LABORATORY LOAD TESTING
(PART #17962, 17963)

PROJECT NUMBER 1210481C



Figure 1a. Test set up.



Figure 1b. Typical failure mode.

SHEAR LOAD TEST SETUP

PV MOUNT SPLIT TOP L-FOOT LABORATORY LOAD TESTING
(PART #17962, 17963)

PROJECT NUMBER 1210481C



Figure 2a. Test set up.



Figure 2b. Typical failure mode.

CHEMLINK COMPATIBILITY



February 15, 2023

ATTN: Rick Gentry, Executive VP

QuickBolt

5830 Las Positas Blvd.

Livermore, California 94551

Subject: Product compatibility:

This letter is regarding the compatibility of the ChemLink M-1® Universal Adhesive and Sealant with the Microflashing® by QuickBolt. My testing indicated that there are no known compatibilities issues with Microflashings® and M-1® when they are used as directed. Acceptable adhesion was achieved within seven days of application. The M-1® adhesive / sealant was applied at 70° fahrenheit and 50% percent relative humidity.

All surfaces should be clean, dry, and free of all contaminates. Use isopropyl alcohol to prepare surfaces. Do not use mineral spirits or xylene.

Thank you,

Rick Berthiaume

Technical Services Manager

353 E LYONS STREET SCHOOLCRAFT, MICHIGAN 48087 PH 268.879.4440 TOLL FREE 800.826.1681 FAX 268.879.4448 WWW.CHEMLINK.COM



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: Quick Bolt QB2 Stainless Steel L-Foot and 3" Microflashing Solar Mount

APPROVAL DOCUMENT: Drawing No. **QB2HVVHZ**, titled "QB2 Kit with SS L-Foot and 3" Microflashing", sheets 1 through 2 of 2, prepared by QuikBolt a div of Quickscrews Int'l Corp., dated on 02/24/2024, signed and sealed by Scott Wolters, P.E., bearing the Miami-Dade County Product Control revision 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 **revises NOA # 22-0214.03** and 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.**




04/09/24

NOA No: 24-0306.05
Expiration Date: June 23, 2027
Approval Date: April 18, 2024
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under NOA # 22-0214.03 and new

A. DRAWINGS

1. Drawing No. **QB2HVVHZ**, titled "QB2 Kit with SS L-Foot and 3" Microflashing", sheets 1 through 2 of 2, prepared by QuikBolt a div of Quickscrews Int'l Corp., dated on 02/24/2024, signed and sealed by Scott Wolters, P.E.

B. TESTS "*Submitted under NOA # 22-0214.03*"

1. Test report on Uplift and Shear Allowable Loads of the 4" SS QB2 Kit w/ 3" Microflashing Solar Mount per ASTM D7147-11, prepared by Intertek, Test Report No. **K8370.01-301-18 R1**, dated 06/04/2020, with revision 1 dated 05/10/2022, signed and sealed by Tyler Westerling, P.E.
2. Test report on Wind Driven Rain Resistance of the 4" SS QB2 Kit w/ 3" Microflashing Solar Mount per TAS 100(A)-95, prepared by Intertek, Test Report No. **K8370.02-301-18 R0**, dated 06/04/2020, signed and sealed by Tyler Westerling, P.E.

C. CALCULATIONS "*Submitted under NOA # 22-0214.03*"

1. Anchor calculations prepared by Scott Wolters, dated 01/28/2022, 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, dated 02/24/2024, signed and sealed by Scott Wolters, P.E.

"Submitted under NOA # 22-0214.03"

2. Drawing statement of code conformance to the 7th edition (2020) of the FBC issued by QuikBolt a div of Quickscrews Int'l Corp., dated 01/28/2022, signed and sealed by Scott Wolters, P.E. on 05/26/2022
3. Statement letter of no financial interest issued by Wolters Engineering, dated 01/31/2022, signed and sealed by Scott Wolters, P.E.



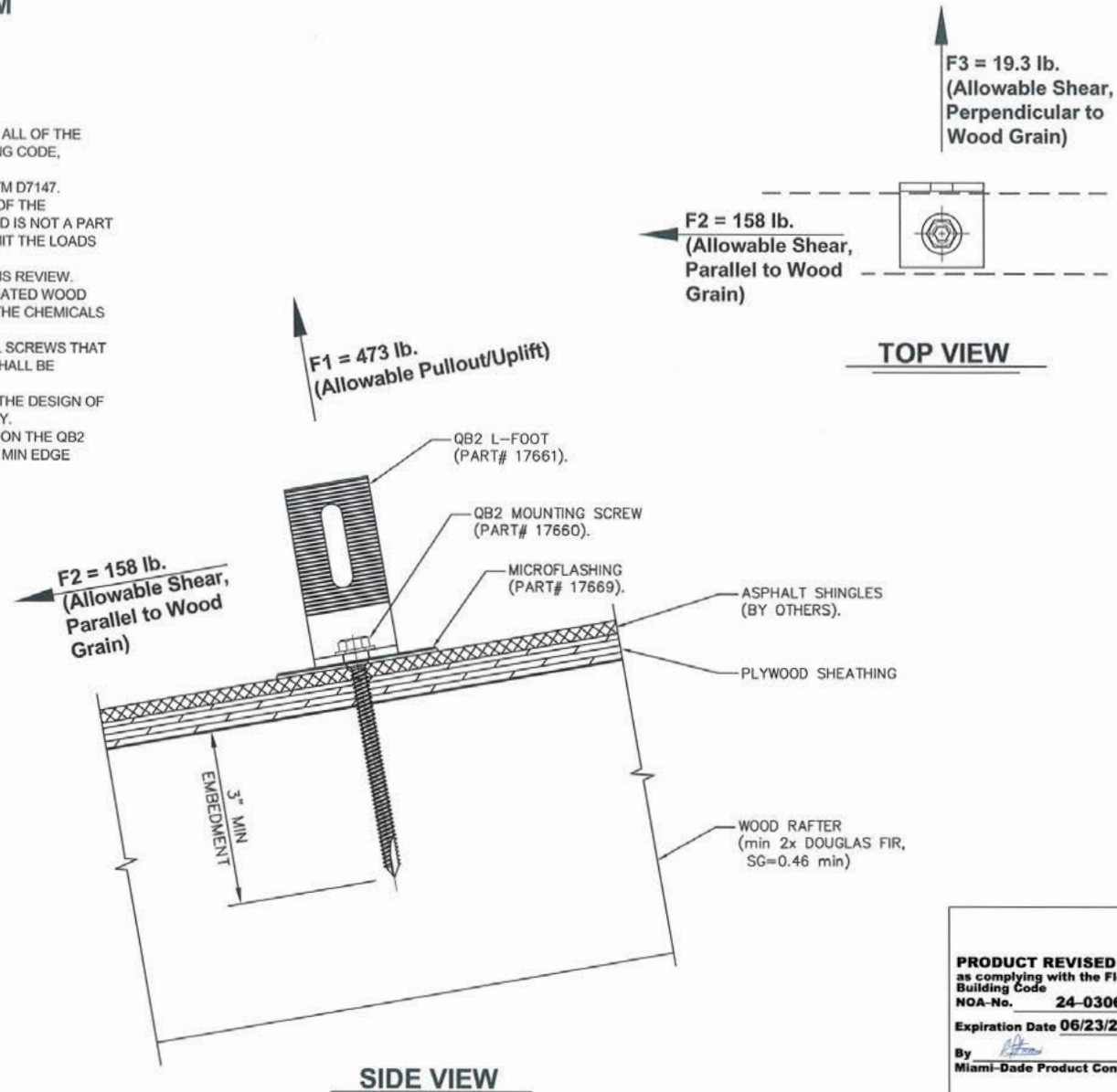
Carlos M. Utrera, P.E.
Product Control Examiner
NOA No: 24-0306.05
Expiration Date: June 23, 2027
Approval Date: April 18, 2024

E - 1

QB2 ANCHOR BRACKET SYSTEM WITH 3" MICROFLASHING.

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. $C_d=1.6$ WAS USED FOR WOOD SCREWS ONLY.
8. VALUES SHOWN FOR THE ALLOWABLE LOADS ARE BASED ON THE QB2 MOUNTING SCREW INSTALLED WITH 3" MIN EMBEDMENT, 5/8" MIN EDGE DISTANCE, AND 2 1/2" MIN. END DISTANCE.



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **24-0306.05**
Expiration Date **06/23/2027**
By *[Signature]*
Miami-Dade Product Control

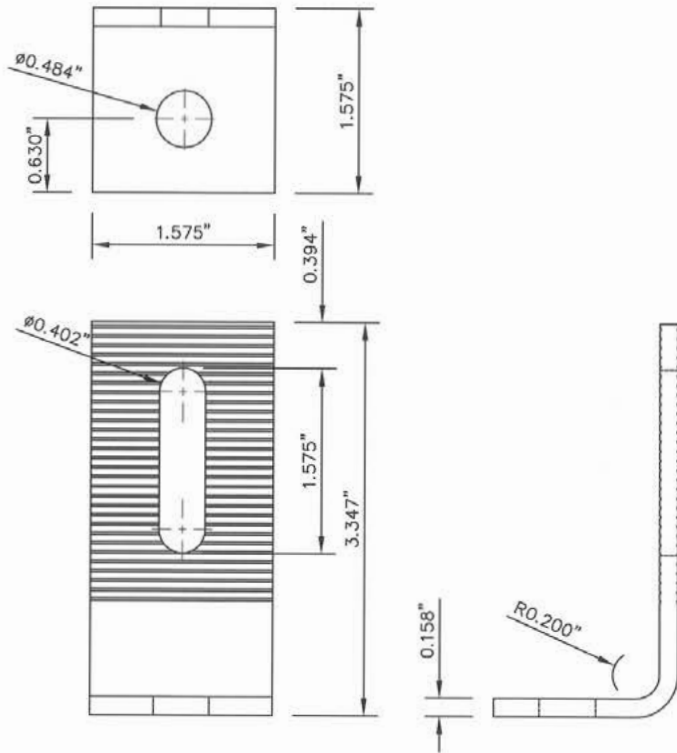
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97	1/28/22	98	2/24/24
98	1/28/22	99	2/24/24
99	1/28/22	100	2/24/24

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

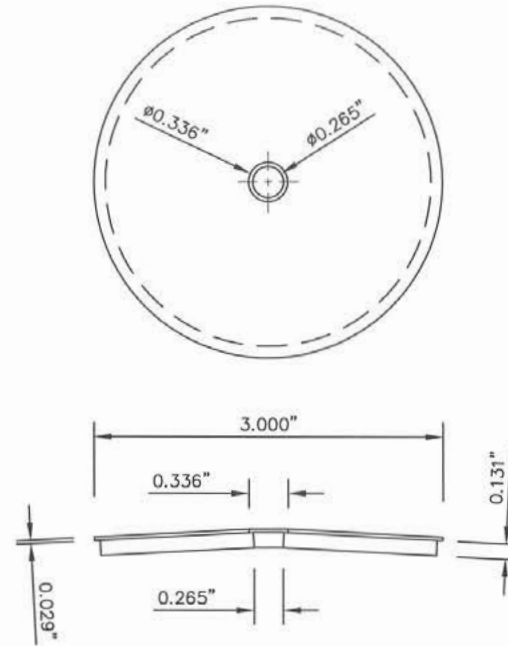
SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING
15211 57TH ROAD N
WEST PALM BEACH, FL 33418
PH/FAX: (561) 228-1882

PRODUCT:
QB2 KIT WITH
SS L-FOOT AND
MICROFLASHING
DWG: QB2HVHZ
SHEET: 1/2

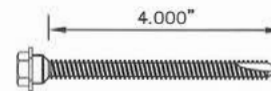
QB2 ANCHOR BRACKET SYSTEM WITH 3" MICROFLASHING.



PART# 17661 – QB2 L-FOOT
BRACKET. (304 SERIES
STAINLESS STEEL).



PART# 17669 – 3" MICROFLASHING.
3" ϕ x 0.029" STAINLESS STEEL
(304 SERIES) WASHER, WITH
2 7/8" ϕ x 0.131" EPDM GASKET.



PART# 17660 – 5/16" x 4"
STAINLESS STEEL (304 SERIES)
HEX FLANGE DUAL DRIVE WOOD
SCREW.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **24-0306.05**
Expiration Date **06/23/2027**
By *[Signature]*
Miami-Dade Product Control

PRODUCT:
QB2 KIT WITH
SS L-FOOT AND
3" MICROFLASHING
DWG: QB2HVHZ
SHEET: 2/2



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REV #	ISSUED FOR	DATE
1	2023 CODE UPDATE	2/24/24
2	1ST SUBMITTAL	1/26/22

FLORIDA APPROVAL LETTER



FL# 35022

December 8th, 2021

To whom this may concern,

QuickBOLT's strongest Top Mount, QB2, has been officially approved by the Florida Department of Business and Professional Regulations. Now that QB2 has been approved, solar installers in Florida can expect an even easier permitting process when submitting designs that include the QB2.

Florida is known for having notoriously high standards for building codes due to its High-Velocity Hurricane Zones (HVHZ), like in Miami Dade County. All new projects must meet a set of requirements to ensure products are secure when tested against these extreme weather conditions. Florida Product Approval Numbers (FL#) are the state measurement for these requirements. This approval requires going through a series of rigorous product evaluations.

QuickBOLT received its Florida Approval in January 2021 for their QB2 Kit with 3" Microflashing®, which mounts over asphalt shingle. Our Florida Approval included TAS 100(A) and Load Testing, which are the same tests required for Miami-Dade approval.

Regards,

Corrina Roberts
Campaign Manager

FLORIDA BUILDING CODE

APPROVED APPLICANT PAGE

FLORIDA DEPARTMENT OF
Business & Professional Regulation



Product Approval
USER: Public User

[Product Approval Menu](#) > [Application Detail](#)

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FL #

Application Type

Code Version

Application Status

FL35022

New

2020

Approved

Comments

Archived

Product Manufacturer

Address/Phone/Email

QuickBolt - A Division of Quickscrews, Inc.

5830 Las Positas Road
Livermore, CA 94551
(925) 371-8215
gwiener@quickscrews.com

Authorized Signature

Greg Wiener
gwiener@quickscrews.com

Technical Representative

Address/Phone/Email

Quality Assurance Representative

Address/Phone/Email

Category

Subcategory

Structural Components

Anchors

Compliance Method

Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer
☐ Evaluation Report - Hardcopy Received

Florida Engineer or Architect Name who developed the Evaluation Report

Florida License

Quality Assurance Entity

Quality Assurance Contract Expiration Date

Validated By

Scott Wolters

PE-62354

Intertek Testing Services NA, Inc. - QA Entity

12/31/2023

Lucas A. Turner, P.E., MBA

☒ Validation Checklist - Hardcopy Received

Certificate of Independence

[FL35022_R0_COI_QB2_COI.pdf](#)

Referenced Standard and Year (of Standard)

Standard	Year
ASTM D7147	2011
TAS 100(A)	1995

Equivalence of Product Standards

Certified By

Sections from the Code

Product Approval Method

Method 1 Option D

Date Submitted

Date Validated

Date Pending FBC Approval

Date Approved

10/24/2020

10/26/2020

11/01/2020

12/16/2020

Summary of Products

FL #	Model, Number or Name	Description
35022.1	QB2 Anchor Bracket System	Solar Anchor Bracket with 3" Microflashing.
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: Please see Installation Drawings and Eval Report for Limits of Use.		Installation Instructions FL35022_R0_IL_Q_Install.pdf FL35022_R0_IL_QB2_Dwg.pdf Verified By: Scott Wolters FLPE# 62394 Created by Independent Third Party: Yes Evaluation Reports FL35022_R0_AE_QB2_Eval.pdf Created by Independent Third Party: Yes

FLORIDA PRODUCT EVALUATION

WOLTERS ENGINEERING

ENGINEERING, DRAFTING, CONSULTING

15211 97th Road N
West Palm Beach, FL 33412
Ph/Fx: (561) 225-1982

PRODUCT EVALUATION

PRODUCT: QB2 ANCHOR BRACKET SYSTEM WITH 3" MICROFLASHING

MANUFACTURER: QUICKBOLT – A DIVISION OF QUICKSCREWS INC.
5830 LAS POSITAS ROAD
LIVERMORE, CA 94551

To all concerned,

The QB2 Anchor Bracket System with 3" Microflashing, manufactured by Quickbolt, has been tested per ASTM D7147 and TAS 100(A) by Intertek B&C, with results shown in test reports K8370.01-301-18-R0 and K8370.02-301-18-R0. This anchor bracket system meets all of the requirements of 7th Edition (2020) Florida Building Code, including the HVHZ provisions.

Technical Documentation:

1. Drawing "QB2HVHZ" dated 10/5/20, signed and sealed by Scott Wolters, PE.
2. Test Reports listed above by Intertek B&C. signed and sealed by Tyler Westerling, PE
3. Supplemental Calculations to support "QB2HVHZ" drawing, signed and sealed by Scott Wolters, PE.

I have reviewed this submittal per the requirements of FAC Product Approval Rule Chapter 61G20-3.005 (4). Based on the limitations listed below and those provided in the documents above, this product meets all the requirements of the 7th Edition (2020) Florida Building Code generally, and chapter 15 specifically, including the HVHZ provisions.

Limitations: This Roof System is approved for use inside and outside of the HVHZ.

<u>Max Allowable Loads (ASD):</u>	Direct Tension (F1):	709 lb.
	Strong Axis Shear (F2):	237 lb.
	Weak Axis Shear (F3):	29 lb.

<u>Bracket Dimensions:</u> (304 Series Stainless Steel)	Min. Thickness:	0.158 in
	Min Width:	1.575 in
	Max. Height:	3.347 in

<u>Min. Fastener:</u>	5/16" x 4" 304 Series SS Hex Flange Wood Screw
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SPECIALIZING IN IMPACT RESISTANT CURTAINWALLS, STOREFRONTS, & WINDOWS

Flashing:

3" Microflashing, made from 3"x.0.29" 304 Series SS Washer
with 2 7/8" x 0.131" EPDM Gasket

Other Limitations:

1. Fire classification is not a part of this evaluation. Refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Design of substrate is by others and is not a part of this evaluation.
3. Existing roofing is not a part of this evaluation.

If you have any questions or need more information concerning this approval, please contact me.

Thank you,


Scott Wolters
FL PE# 62354
OCT 23 2020



SPECIALIZING IN IMPACT RESISTANT CURTAINWALLS, STOREFRONTS, & WINDOWS