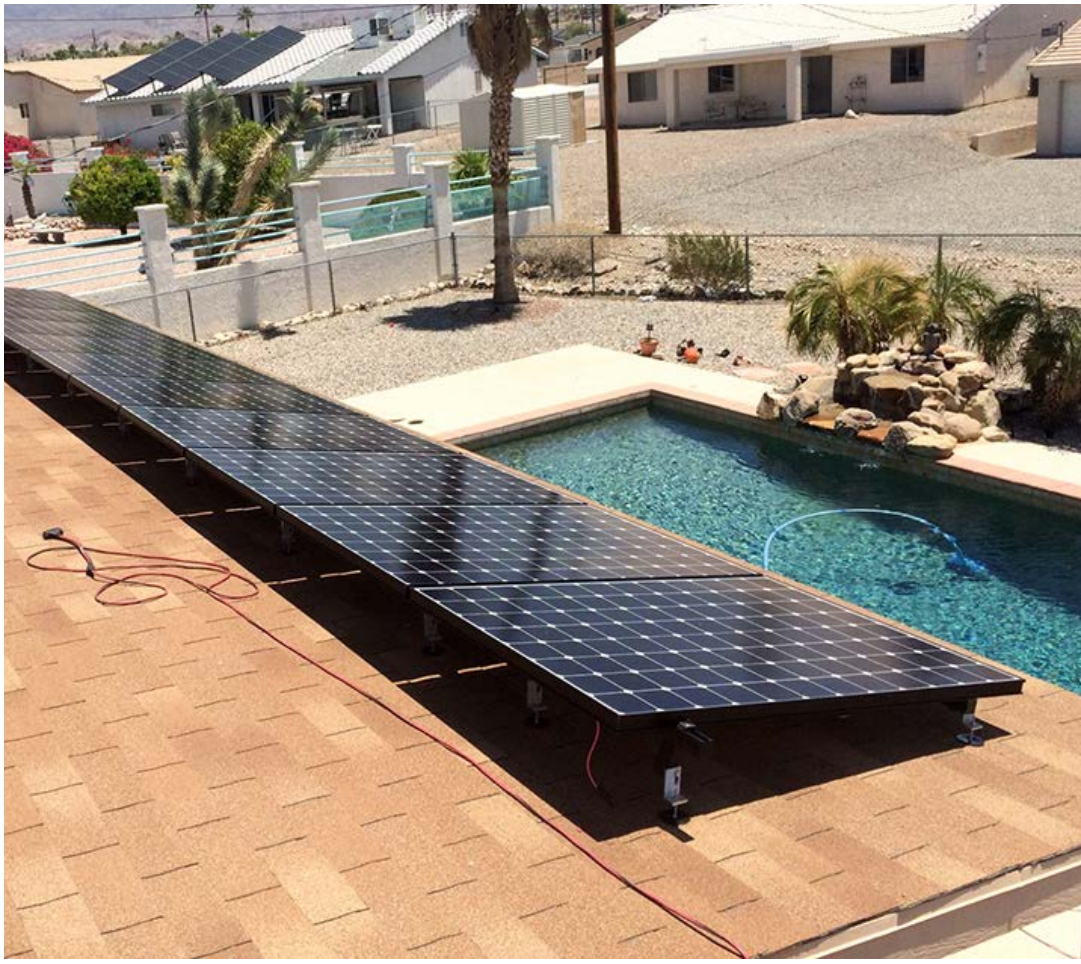
17662

17660, 17771

QB2 WITH 3" MICROFLASHING®

FOR ASPHALT, EPDM, & TPO ROOFS

PATENT # 8448407



QuickBOLT

A DIVISION OF QUICKSCREWS INTERNATIONAL CORP

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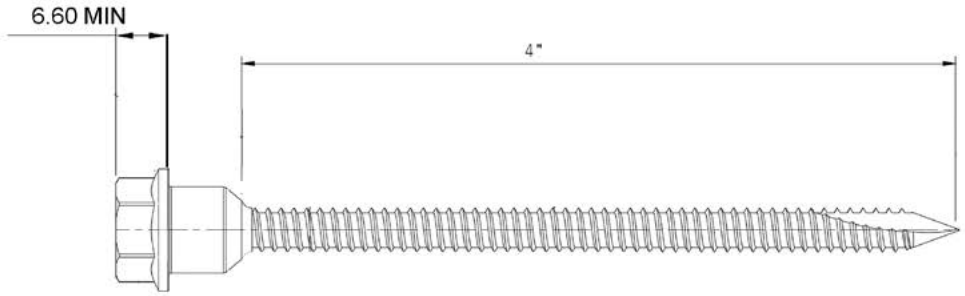
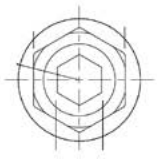
SPEC SHEET

Part #	Box Quantity
17660	4″ QB2 (25)
17662	3″ Microflashing® (25); 4″ QB2 (25); L-Foot (25)
17771	3″ Microflashing® (25); 4″ QB2 (25); L-Foot (25); T-Bolt + Nut (25)

QB2
PN# 17660

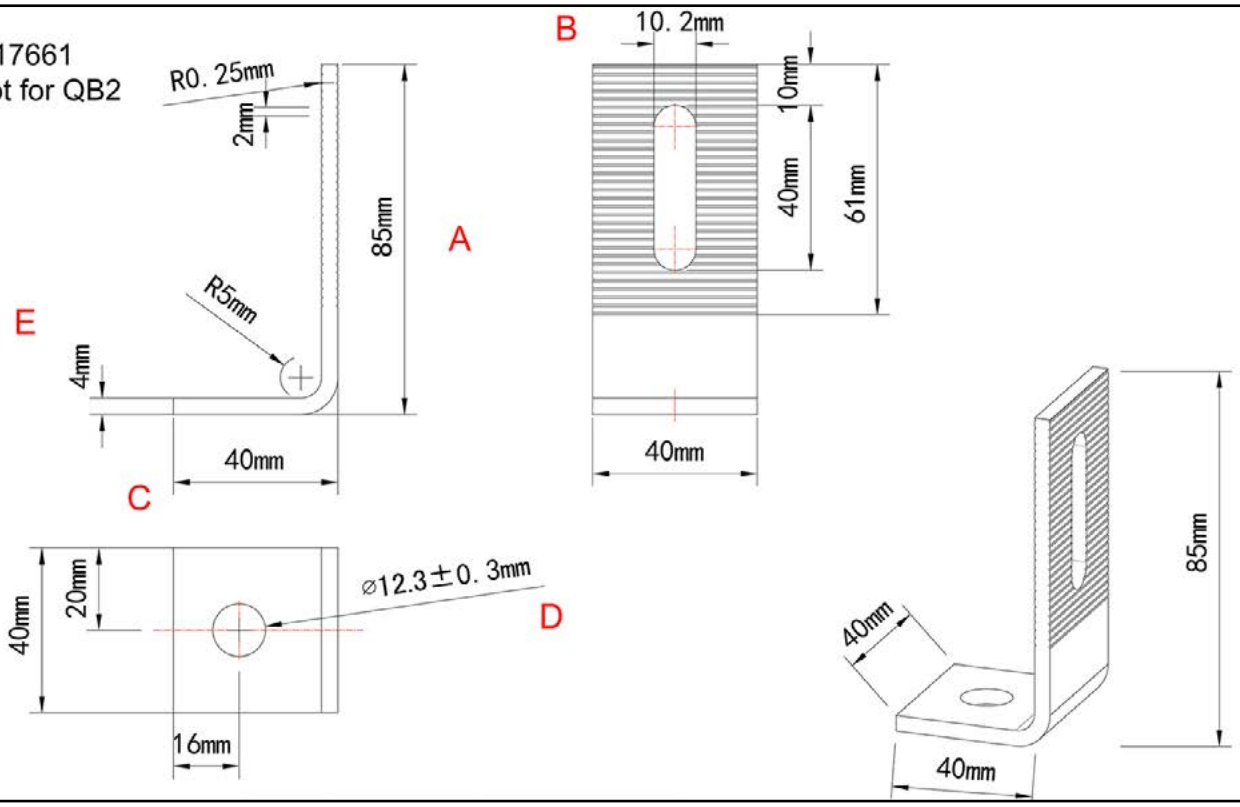




Dual Drive Technology
1/2" Hex Outer Drive
6mm Inner Drive

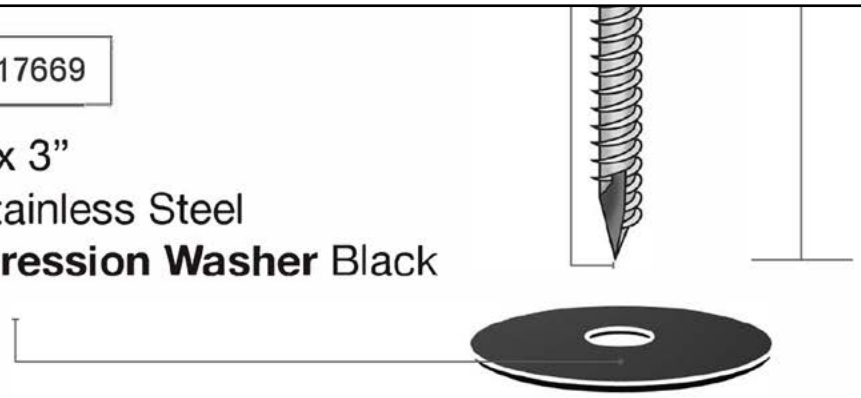
MATERIAL: Stainless Steel 304	QuickBOLT			
SURFACE TREATMENT: PASSIVATION		NAME:	DATE:	STATUS: Approved
	DRAWN:		MAR. 19'19	ITEM: 5/16 X 4" HEX FLANGE QUICK BOLT
	APPROVED:		MAR. 19'19	DRAWING NO. SL20190316-1
TOLERANCE: AS PER DRAWING	VERSION: 01		FORMAT: A3	Scale: 5:1
	ISO:		PAGES: 1/1	UNIT: METRIC

PN# 17661
L-Foot for QB2



Part # 17669

5/16" x 3"
304 Stainless Steel
Compression Washer Black



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UL CERTIFICATION

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

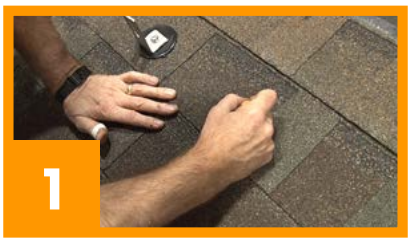
Models:

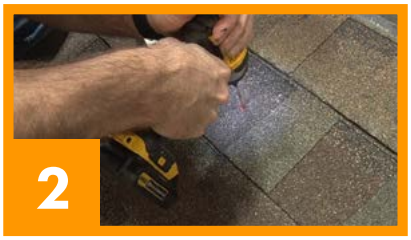
USR – Component, Roof Mounting Hook Units, Models 15891 15893 15987 16000 16317 16318 16319 16320 16988 16990 16991 16993 17508 17509 17510 17511 17512 17513 17514 17515 17516 17517 17518 17519 17520 17521 17522 17523 17524 17525 17526 17527 17536 17537 17538 17539 17540 17541 17542 17543 17544 17545 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

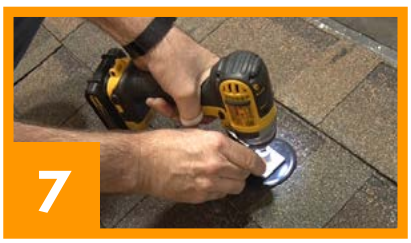
Deborah Jennings-Conner, VP Regulatory Services

UL LLC

INSTALL INSTRUCTIONS







QB2 (17662)

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.

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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

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QUICKSCREWS INTERNATIONAL CORP.
MOCK-UP TEST REPORT

SCOPE OF WORK
UPLIFT AND LATERAL LOAD TEST FOR QB2 QUICKBOLT
Part# 17662 – 4.00" QB2 Kit 3" Microflashing® + SS-LFT 25/KTP
Part# 17663 – 4.00" QB2 Kit 4" Microflashing® + SS-LFT 20/KTP

REPORT NUMBER
K3215.01-301-44

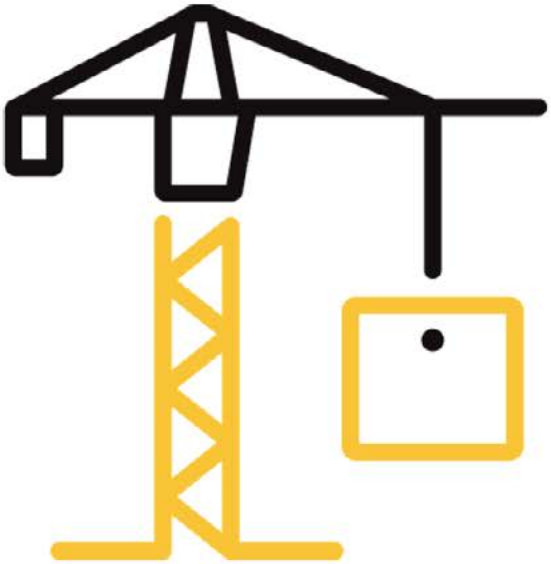
TEST DATES
10/30/19 - 10/31/19

ISSUE DATE 12/06/19
REVISION 1 DATE 12/19/19

RECORD RETENTION END DATE
10/31/24

PAGES
10

DOCUMENT CONTROL NUMBER
RT-R-AMER-Test-2744 (04/05/18)



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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORP.
Report No.: K8370.01-301-18- R1
Date: 05/10/22

SECTION 10
REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	06/04/20	N/A	Original Report Issue
1	05/10/22	N/A	Updated product and installation details. Added the 3x safety factor.

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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORP.
Report No.: K3215.01-301-44
Date: 12/06/19

REPORT ISSUED TO
QuickBOLT - A Division of
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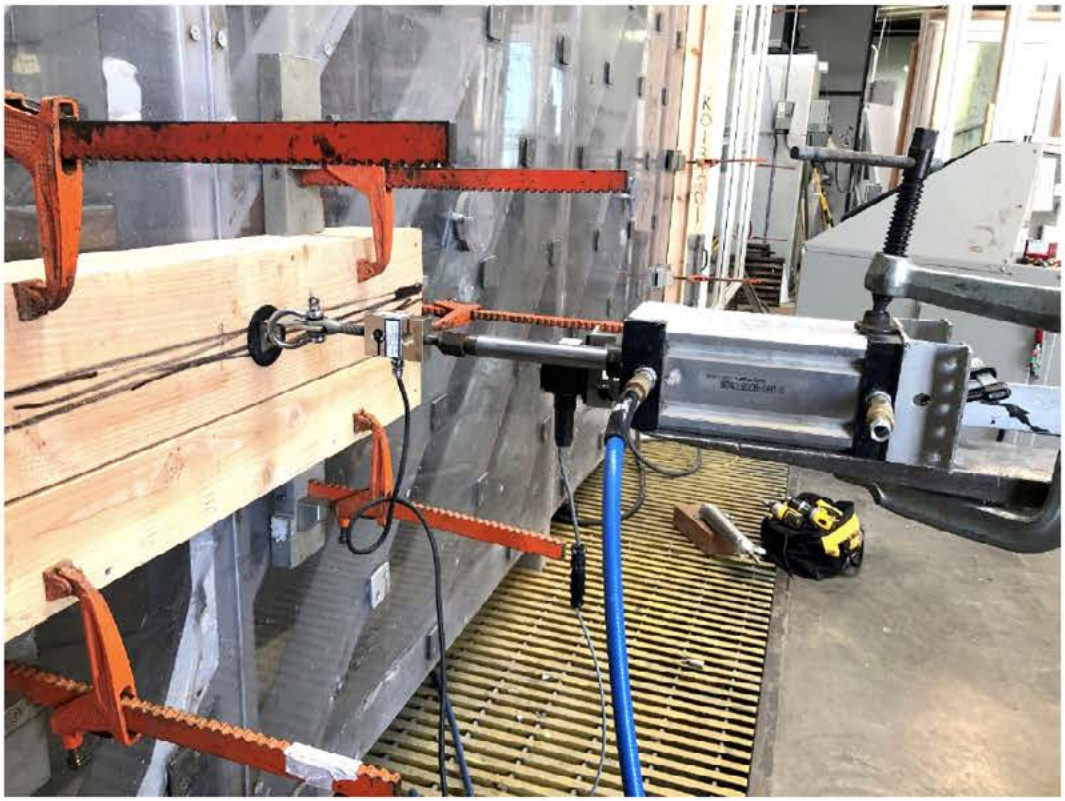
5830 Las Positas Road
Livermore, California 94551

PROJECT
UPLIFT AND LATERAL TEST



For INTERTEK B&C:

COMPLETED BY:	Ricardo Cortez	**REVIEWED BY:**	Tyler Westerling, P.E.
TITLE:	Technician	**TITLE:**	Senior Project Engineer
SIGNATURE:		**SIGNATURE:**	
DATE:	12/19/19	**DATE:**	12/19/19

RC:ms

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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORP.
Report No.: K3215.01-301-44
Date: 12/06/19

SECTION 1
SCOPE

Intertek Building & Construction (B&C) was contracted by QuickBOLT to perform performance testing on the QB2 Asphalt Mount at the Intertek B&C test facility in Fresno, CA. Results obtained are tested values. This report includes complete written and photographic documentation of all testing performed and a copy of "As-Built" mock-up drawings.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. This report and related test records that are retained such as "As-Built" mock-up drawings, datasheets, representative samples of test specimens, or other pertinent project documentation will be serviced by Intertek B&C for the entire test record retention period. At the end of this retention period, such materials shall be discarded without notice and the service life of this report by Intertek B&C will expire.

SECTION 2
TEST METHOD

Mock-up testing was performed in accordance with referenced test methods as specified in the bid documents.

SECTION 3
LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Dustin Harris	Intertek B&C
Meng Vang	Intertek B&C
Tyler Westerling, P.E.	Intertek B&C

SECTION 4
GENERAL MOCK-UP DESCRIPTION

Uplift and Lateral Load Test

Material Source/Installation

The mock-up materials/components were supplied by QuickBOLT. The installation of the mock-up was completed by Intertek B&C.

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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORP.
Report No.: K3215.01-301-44
Date: 12/06/19

SECTION 5
FINAL TEST RESULTS

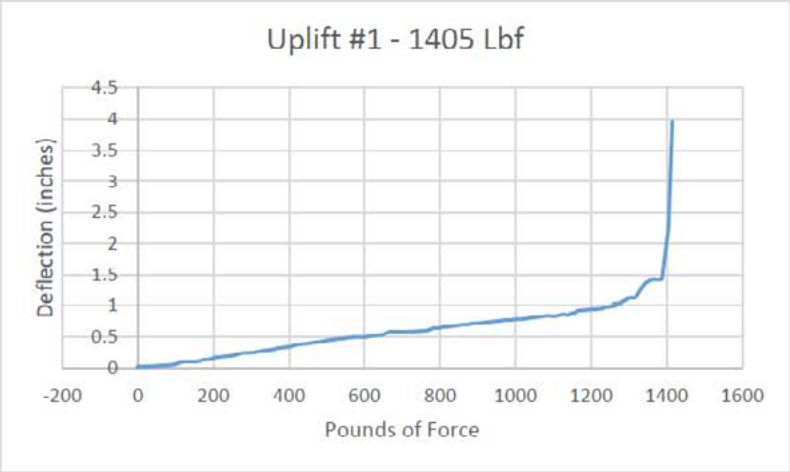
Charts below represent Uplift and Lateral loads.

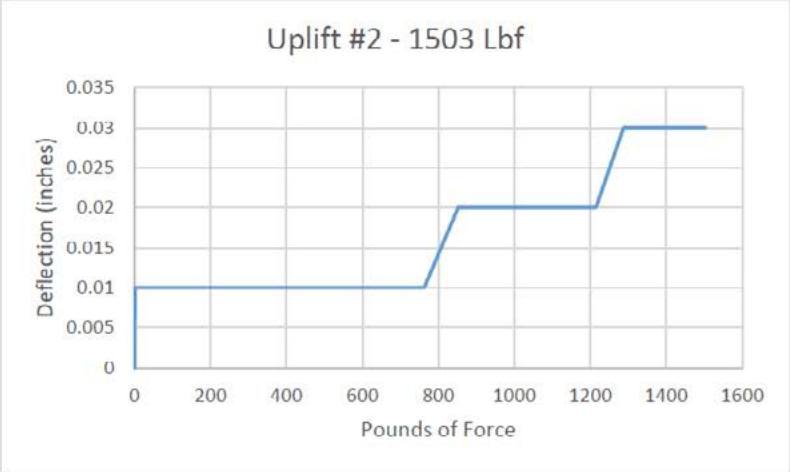
Uplift

Run #	Lbf
#1	1,405
#2	1,503
#3	1,845
#4	1,984
#5	2,113
Average =	1,770 lbf

Lateral

Run #	Lbf
#1	475
#2	498
#3	501
Average =	491 lbf





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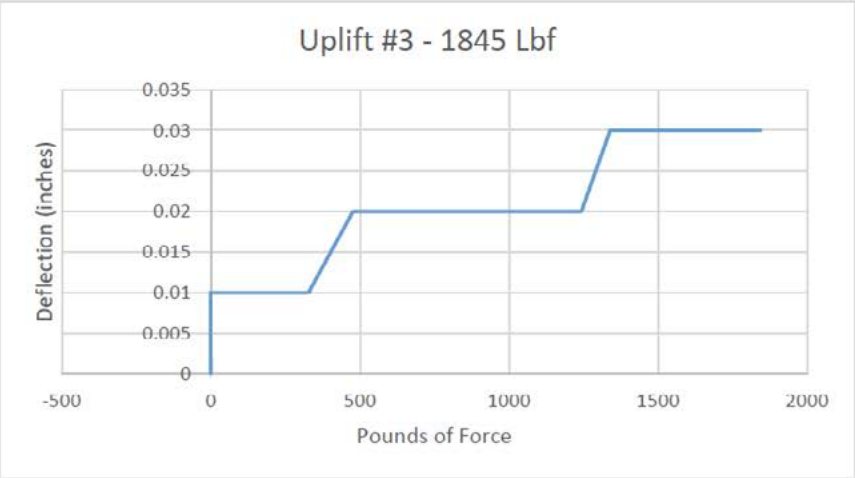
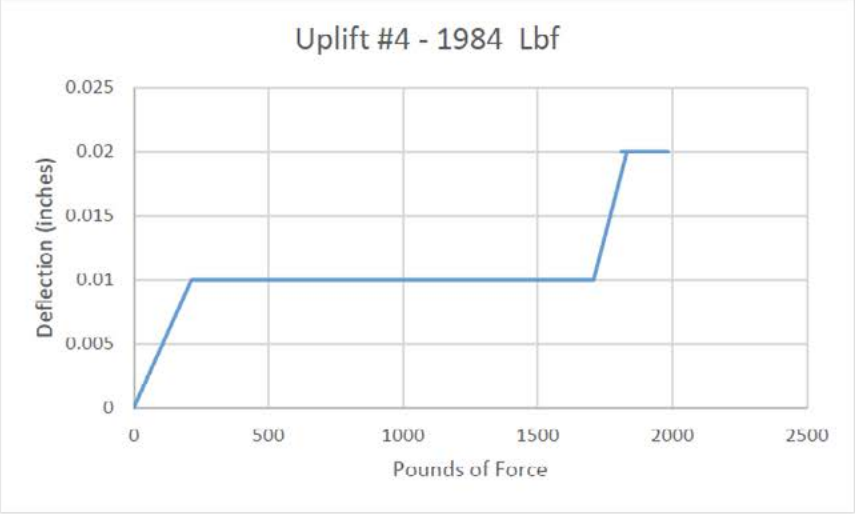
TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORP.
Report No.: K3215.01-301-44
Date: 12/06/19





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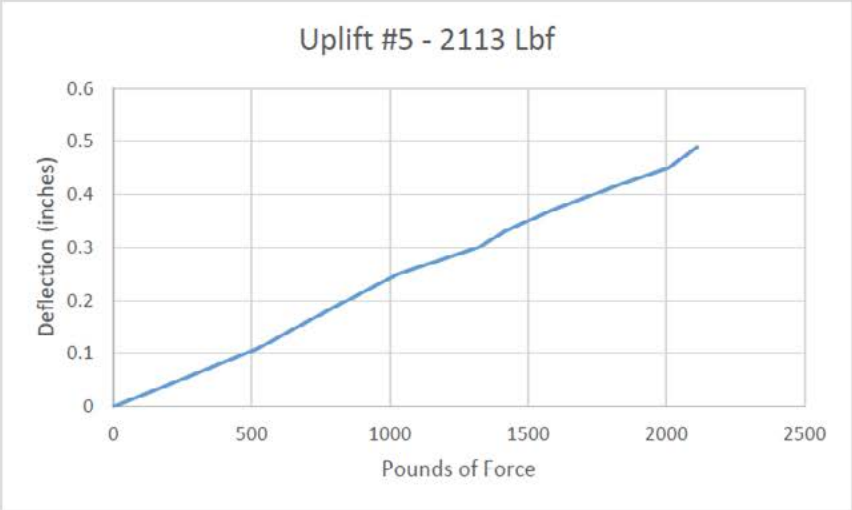
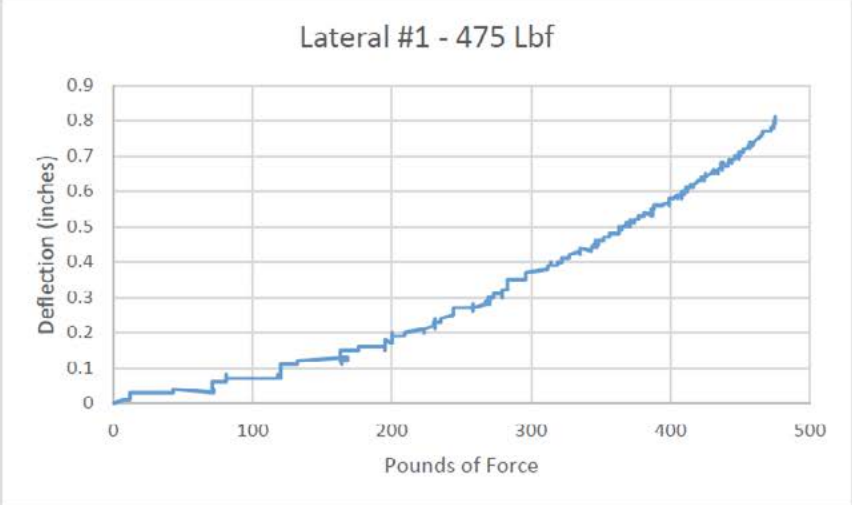
Date: 12/06/19





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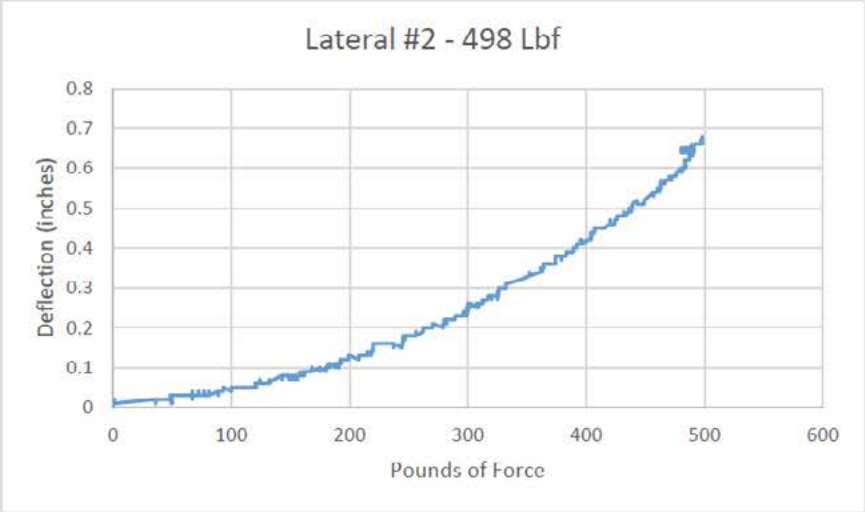
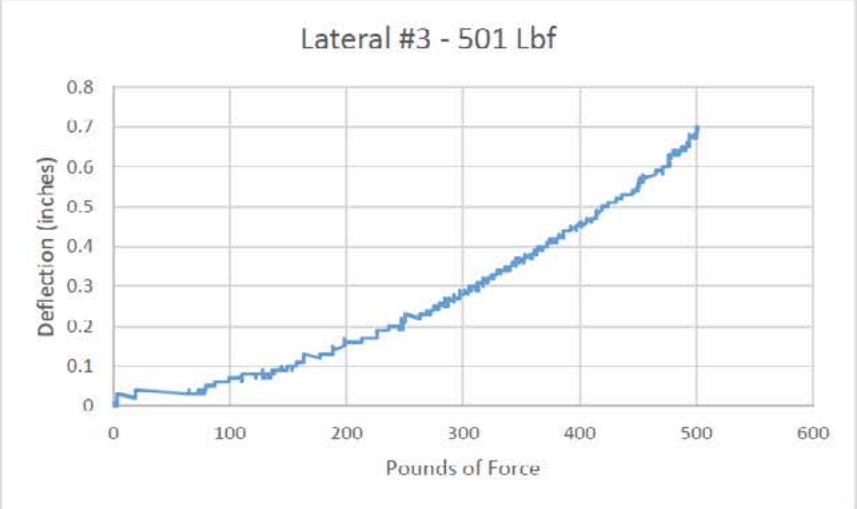
Report No.: K3215.01-301-44
Date: 12/06/19





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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORP.
Report No.: K3215.01-301-44
Date: 12/06/19

SECTION 6
CONCLUSION

The mock-up met the specified performance requirements.

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QUICKSCREWS INTERNATIONAL CORP.
TEST REPORT

SCOPE OF WORK
LOAD TESTING OF Part# 17662 – 4.00" QB2 Kit 3" Microflashing® + SS-LFT 25/KTP

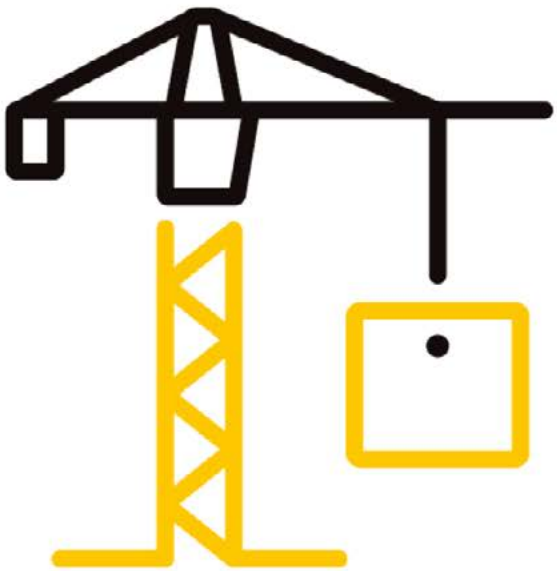
REPORT NUMBER
K8370.01-301-18- R1

TEST DATE
05/04/20

ISSUE DATE 06/04/20
REVISION 1 DATE 05/10/22

PAGES
6

DOCUMENT CONTROL NUMBER
GFT-OP-10c (AUGUST 27, 2018)



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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORP.
Report No.: K8370.01-301-18- R1
Date: 05/10/22

REPORT ISSUED TO
QUICKBOLT - A DIVISION OF QUICKSCREWS INTERNATIONAL CORP.
5830 Las Positas Road
Livermore, California 94551

SECTION 1
SCOPE

Intertek Building & Construction (B&C) was contracted by Quickscrews to perform additional load testing on their 3" Microflashing® + SS-LFT 25/KTP anchor bracket system. Testing was conducted at the Intertek B&C test facility in Fresno, California.

Intertek B&C in Fresno, California has demonstrated compliance with ISO/IEC International Standard 17025 and is consequently accredited as a Testing Laboratory (TL-264) by International Accreditation Service, Inc. (IAS).

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. Intertek B&C will service this report for the entire test record retention period. The test record retention period ends five years after the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for the entire test record retention period.

2022.05.11 10:09:25 -07'00'

For INTERTEK B&C:

COMPLETED BY:	Dennis Janzen	**REVIEWED BY:**	Tyler Westerling., P.E.
TITLE:	Technician	**TITLE:**	Operations Manager
SIGNATURE:	Dennis Janzen Digitally Signed by: Dennis Janzen	**SIGNATURE:**	Digitally Signed by: Tyler Westerling
DATE:	05/10/22	**DATE:**	05/10/22

TW:ms

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TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORP.
Report No.: K8370.01-301-18- R1
Date: 05/10/22

SECTION 2
SUMMARY OF TEST RESULTS

JOIST CONNECTION PERFORMANCE (DIRECT VERTICAL LOAD - SHEAR PERPENDICULAR) [1]	Part# 17662 – 4.00" QB2 Kit 3" Microflashing® + SS-LFT 25/KTP	Load at 1/8 in Displacement

[2]

SECTION 3
TEST METHODS

ASTM D7147-11 (Reapproved 2018), *Standard Specification for Testing and Establishing Allowable Loads of Joist Hangers*

Limitations
Bracket systems to the supporting structure is not included in the scope of this testing and would need to be evaluated separately.

SECTION 4
MATERIAL SOURCE/INSTALLATION

All anchor components including wood posts used for the testing reported herein were supplied by Quickscrews and were not independently sampled or selected by a third-party inspection agency.

SECTION 5
LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Tyler Westerling	Intertek B&C
Dennis Janzen	Intertek B&C

intertek
Total Quality. Assured.

130 Derry Court
York, Pennsylvania 17406

Telephone: 717-764-7700
Facsimile: 717-764-4129
www.intertek.com/building

TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORP.
Report No.: K8370.01-301-18- R1
Date: 05/10/22

SECTION 6
TEST PROCEDURE

Specimens were mounted to an Asphalt shingle covered nominal 2x6 Douglas Fir, with moisture ranging from 7% to 12%, frame. Vertical load was applied to the bearing block through a load cell attached to the testing machine. Test speed was 0.200 in/min. Displacement was taken with one linear transducer, attached to the frame, which were zeroed at zero load. Ultimate load was the maximum load the test assembly could withstand in that direction without deflection exceeding 1/8". See photographs in Section 10 for typical test set-up.

SECTION 7
TEST SPECIMEN DESCRIPTION

COMPONENT	MATERIAL	DESCRIPTION
Microflashing® Part# 17669	Stainless Steel Backed EPDM	3" x 3/16" Thick Microflashing®
L-Foot – Part# 15894SS	0.158" thick Stainless Steel	Measuring 1.575" x 1.575" with a 3.35" tall leg.
QB2 Mount Screw Pt# 17660	5/16" X 4"	Stainless Steel Lag

Refer to photographs in Section 10 and drawings in Section 11 for additional details.

SECTION 8
TEST RESULTS

Connection Performance Testing (Direct Vertical Load - Shear - Perpendicular)

The purpose of this testing was to determine the direct load capacity of the L-foot in three direction in accordance with ASTM D7147.

Specimen No. 1

Pounds Load at 0.125" deflection					
Load Direction	**Anchor #1**	**Anchor #2**	**Anchor #3**	**Average**	**With Safety Factor of 3**
Bending (weak direction)	58 lbs	60 lbs	59 lbs	58 lbs	19.3 lbs
Pullout	1,415 lbs	1421 lbs	1417 lbs	1,418 lbs	473 lbs
Shear	474 lbs	473 lbs	477 lbs	475 lbs	158 lbs

intertek
Total Quality. Assured.

130 Derry Court
York, Pennsylvania 17406

Telephone: 717-764-7700
Facsimile: 717-764-4129
www.intertek.com/building

TEST REPORT FOR QUICKSCREWS INTERNATIONAL CORP.
Report No.: K8370.01-301-18- R1
Date: 05/10/22

Test/Ultimate loads should not be used as design loads or safe working loads.

SECTION 9
PHOTOGRAPHS

Photo No. 1
Pullout Test

VIRGINIA STAMP

AOstructures Inc.
916.541.8586
www.AOstructures.com

June 13, 2022

Re: Quick Bolt 17662
Flashed L Foot

To: Quickscrew
Attn: Rick Gentry

OBJECTIVES/SCOPE OF WORK:
AOstructures, Inc. (AOstructures) was asked to review available testing materials for the QucikBolt 17662 component (subject component) and provide a certification of the subject components lateral (shear) and tensile (uplift) capacities for use in the state of Virginia for roof mounted solar PV applications on composition shingle roofs. The findings of this report are applicable for the following building codes:

DESIGN CRITERIA/BUILDING CODES:
- 2015 International Building Code (IBC)
- Minimum Design Loads for Buildings and Other Structures, ASCE 7-10

USER RELIANCE:
AOstructures was engaged by Quickscrew (Client) to perform this assessment. This report and the information therein, are for the exclusive use of the Client. AOstructures assumes no liability to any party other than the client and liability is limited to the terms and conditions of the agreement between AOstructures and the Client.

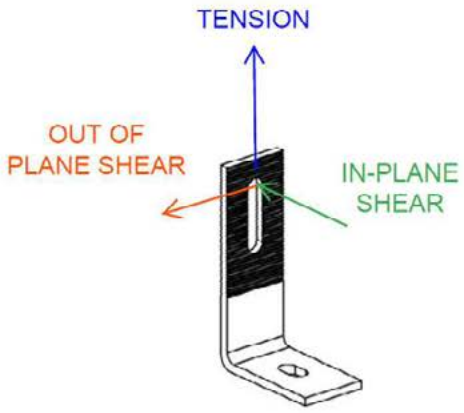
LIMITATIONS:
- A certification of the underlying building is not implied or included in the scope of this report.
- The project specific structural or civil engineer of record shall review the underlying structure's condition and capacity to support any proposed loads to the roof and determine if the subject component meets their intended attachment application and site-specific demand loads.
- It is assumed the underlying structure is in good repair and has not been damaged by water intrusion, fire, mold, pests, etc.
- The installer shall field verify that the roof build-up has not limited lag embedment. The engineer shall adjust the ultimate loads that follow to appropriately account for limited lag embedment if such a condition exists.
- All waterproofing shall be provided by the contractor.

REVIEWED MATERIALS:
We reviewed the following documentation, provided to us by the Client, to conduct this assessment.
- Intertek Report # K8370.01-301-18-R1, Load Testing of Part # 17662 – 4.00" QB2 Kit 3" Microflashing ® + SS-LFT 25/KTP, dated May 10, 2022

AOstructures Inc.
916.541.8586
www.AOstructures.com

DESCRIPTION OF TESTED SYSTEM:
Three tests were conducted on the subject component for uplift, in-plane shear and out of plane shear. Samples consisted of a shingle layer of composition shingle atop CDX plywood atop of 2x6 rafters (G = 0.50) with moisture contents ranging from 7%-12%. The subject component was fastened to the underlying rafter using (1) 5/16" diameter x 4" long lag screw, rigidly affixed to the testing device and loaded until ultimate failure. Per Intertek, ultimate failure is defined as the point at which the subject component deflects 1/8".

RESULTS:
The reported lateral and uplift values below are ultimate failure loads. The project specific engineer shall apply appropriate factors of safety to their design and ensure excessive deflections do not impact the PV module or module/rail attachments, the underlying waterproofing system, or any other facet of the proposed PV system.



The ***ultimate*** tension (uplift) failure loads of the three tests average to 1,418#.

The ***ultimate*** in-plane lateral (in-plane shear) failure loads of the three tests average to 475#.

The ***ultimate*** out of plane lateral (out of plane shear) failure loads of the three tests average to 58#.

If you have any questions on the above, do not hesitate to call.

Sincerely,

Andrew Oesterreicher, PE

5830 Las Positas Road, Livermore CA 94551 | 3948 Airway Drive, Rock Hill SC 29732
Phone: (844) 671-6045 | Fax: (800) 689-7975 | www.quickbolt.com
QuickBOLT is a division of Quickscrews International Corp.

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 49087 PH 269.679.4440 TOLL FREE 800.826.1681 FAX 269.679.4448 WWW.CHEMLINK.COM

MIAMI-DADE NOA

MIAMI-DADE COUNTY

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. **QB2HVHZ**, 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.**

MIAMI-DADE COUNTY APPROVED

04/09/24

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

Quickscrews Int'l Corp.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

A. DRAWINGS

1. Drawing No. **QB2HVHZ**, 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.

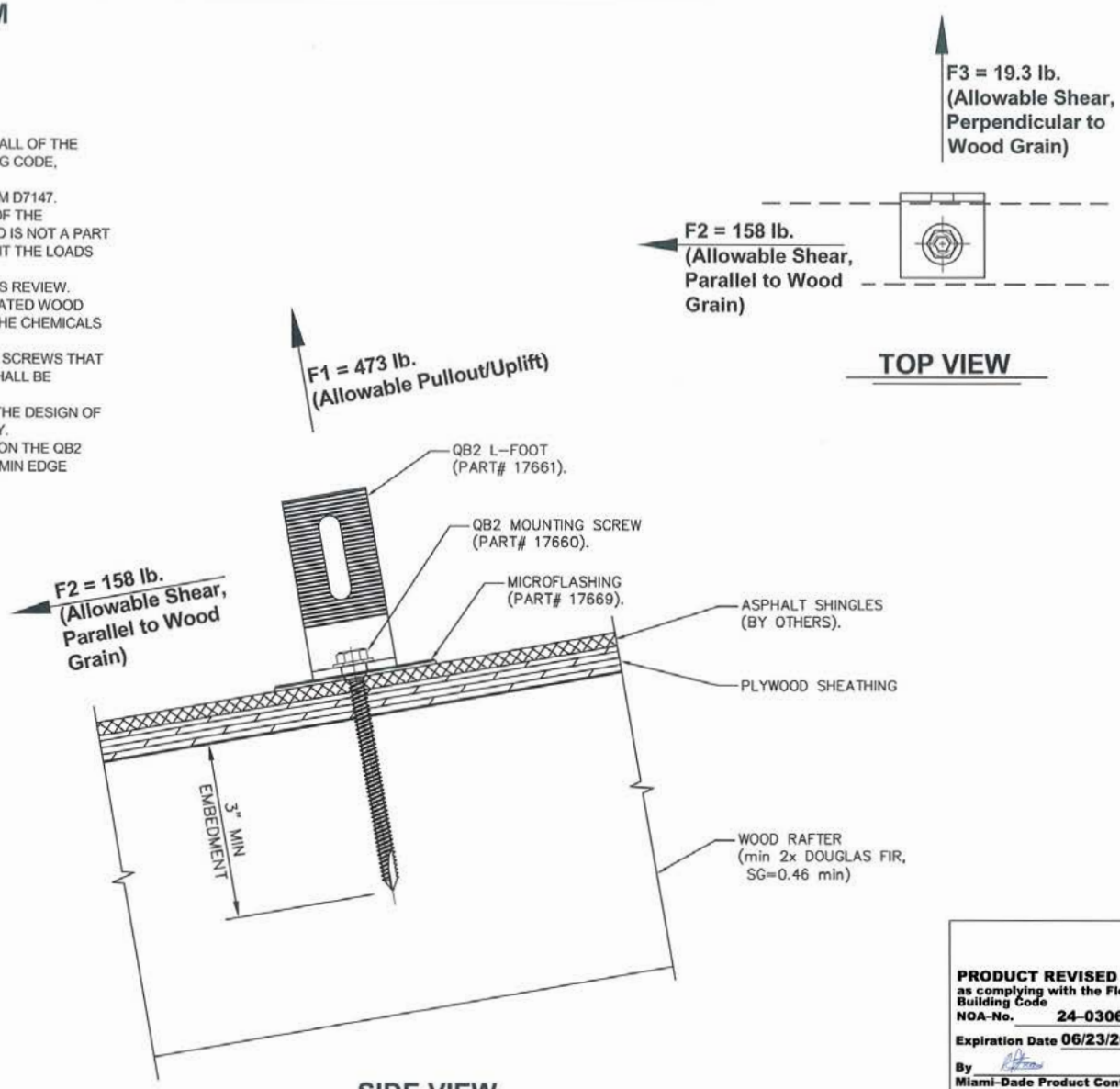
Carlos M. Utrera, P.E.
Product Control Examiner
NOA No: 24-0306.05
Expiration Date: June 23, 2027
Approval Date: April 18, 2024

5830 Las Positas Road, Livermore CA 94551 | 3948 Airway Drive, Rock Hill SC 29732
Phone: (844) 671-6045 | Fax: (800) 689-7975 | www.quickbolt.com
QuickBOLT is a division of Quickscrews International Corp.

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. Cd=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
Miami-Dade Product Control

REV-#	DATE
--	2/24/24
--	1/28/22

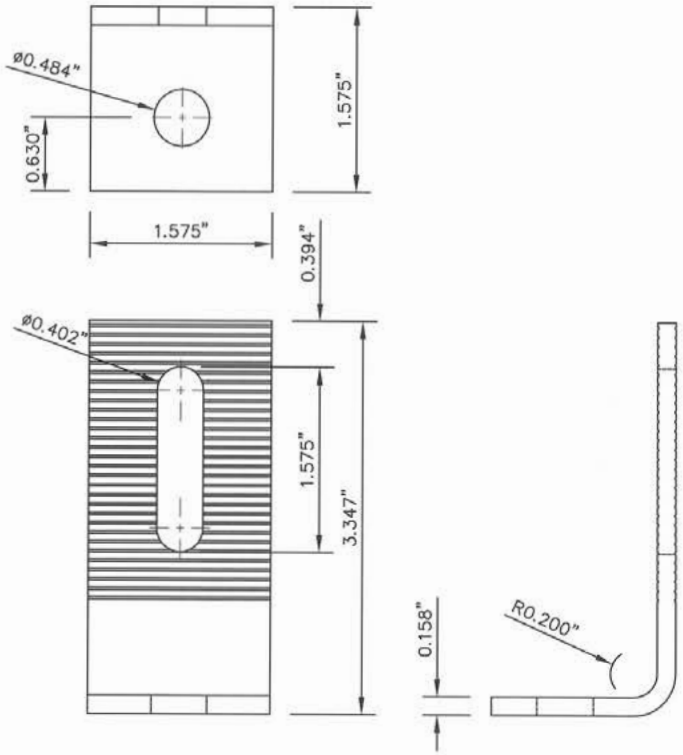
PRINTS ISSUED FOR
1ST SUBMITTAL
2023 CODE UPDATE

QuickBOLT
World's First UL Certified Microflashing®
5830 LAS POSITAS RD
LIVERMORE, CA 94551
PH: (844) 671-6045
WWW.QUICKBOLT.COM

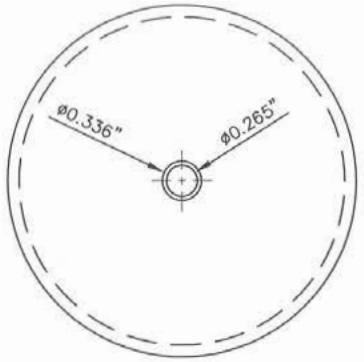
SEAL: SCOTT WOLTERS ENGINEER No. 82354 STATE OF FLORIDA FEB 24 PROFESSIONAL
SCOTT WOLTERS FL PE# 82354
WOLTERS ENGINEERING (COA# 27184) 1551 PALM BEACH LAKES BLVD. WEST PALM BEACH, FL 33412 PH/FAX: (561) 225-1982

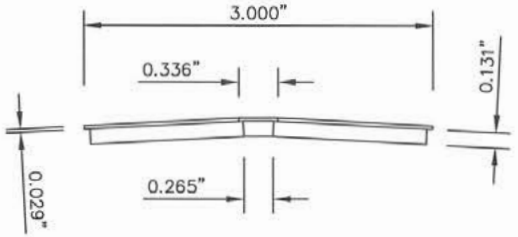
PRODUCT: QB2 KIT WITH SS L-FOOT AND 3" MICROFLASHING
DWG: QB2HVHZ
SHEET: 1/2

QB2 ANCHOR BRACKET SYSTEM WITH 3" MICROFLASHING.

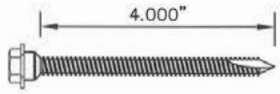


PART# 17661 – QB2 L–FOOT BRACKET. (304 SERIES STAINLESS STEEL).





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



PART# 17660 – 5/16"x4" 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
Miami-Dade Product Control

REV.#	DATE
–	2/24/24
–	1/28/22

1ST SUBMITTAL
2023 CODE UPDATE
PRINTS ISSUED FOR

QuickBOLT
World's First UL Certified Microflashing®
5830 LAS POSITAS RD
LIVERMORE, CA 94551
PH: (844) 671-6045
WWW.QUICKBOLT.COM

SEAL:
SCOTT WOLTERS
FL PE# 82354
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH./FAX: (561) 225-1982

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

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

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Florida dbpr

Product Approval
USER: Public User

Product Approval Menu > **Application Detail**

OFFICE OF THE SECRETARY

FL #	FL35022
Application Type	New
Code Version	2020
Application Status	Approved
Comments	
Archived	☐
Product Manufacturer	QuickBolt - A Division of Quickscrews, Inc.
Address/Phone/Email	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	Structural Components
Subcategory	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	Scott Wolters
Florida License	PE-62354
Quality Assurance Entity	Intertek Testing Services NA, Inc. - QA Entity
Quality Assurance Contract Expiration Date	12/31/2023
Validated By	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	10/24/2020
Date Validated	10/26/2020
Date Pending FBC Approval	11/01/2020
Date Approved	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_II_Q Install.pdf FL35022_R0_II_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.

Max Allowable Loads (ASD):	Direct Tension (F1):	709 lb.
	Strong Axis Shear (F2):	237 lb.
	Weak Axis Shear (F3):	29 lb.
Bracket Dimensions: (304 Series Stainless Steel)	Min. Thickness:	0.158 in
	Min Width:	1.575 in
	Max. Height:	3.347 in
Min. Fastener:	5/16" x 4" 304 Series SS Hex Flange Wood Screw	

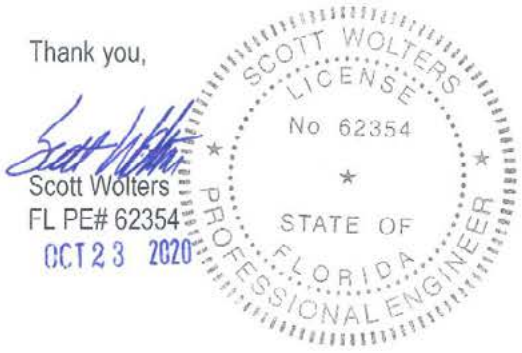
Flashing: 3" Microflashing, made from 3"x.0.29" 304 Series SS Washer with 2 7/8" x 0.131" EPDM Gasket

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