



# SIMPLE SEAL

WATERTIGHT SEAL FOR  
ECOFASTEN BRACKETS

# INSTALLATION GUIDE

**REVISION:**02/20/24

**VERSION:** V1.0

# SIMPLESEAL

## INSTALLATION GUIDE



**EcoFasten**  
For Installers. By Installers.

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## SIMPLESEAL

SimpleSeal was designed for installation on most metal roofs. The system utilizes a cone-shaped EPDM rubber bushing that fits into the countersink found on the underside of any EcoFasten compression bracket. When fastened to the roof, engaging a purlin or rafter, the SimpleSeal bushing is compressed inside the bracket, creating a watertight seal.

## FEATURES

- Patented watertight technology
- Minimal components
- Compatible with a variety of EcoFasten compression brackets

FEATURES + BENEFITS

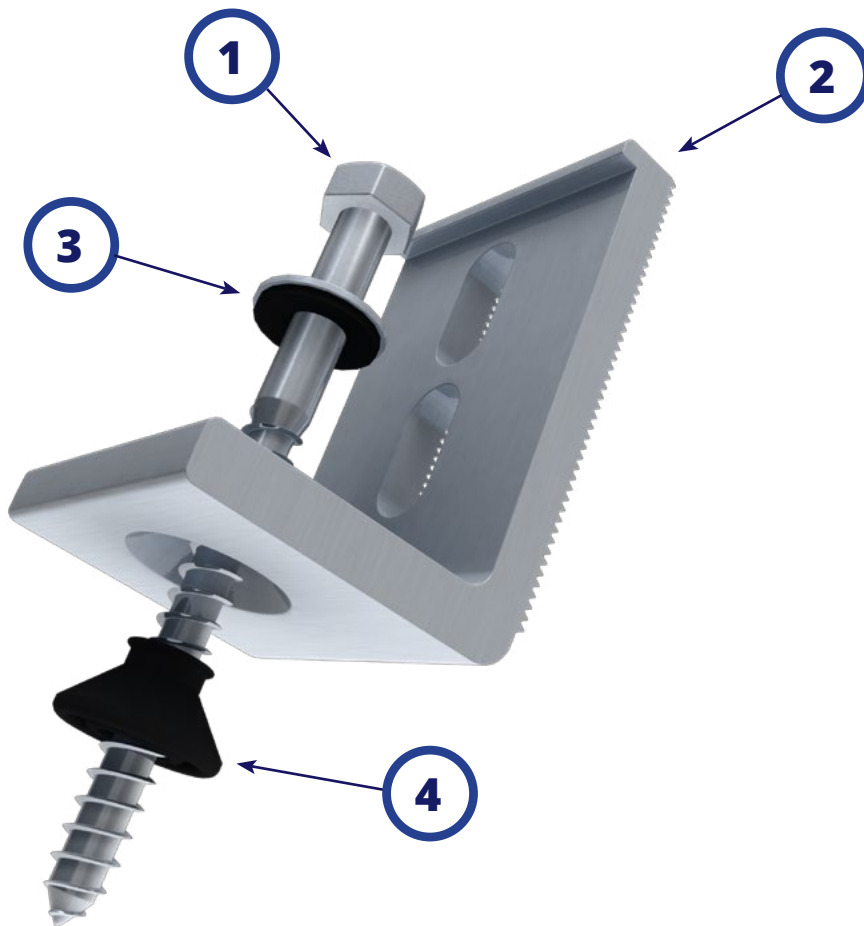
# SIMPLESEAL

## INSTALLATION GUIDE



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## SYSTEM COMPONENTS



**1. 5/16" LAG BOLT**  
(AVAILABLE IN 3" AND 4")

**2. SCL-101-3 COMPRESSION  
BRACKET**  
(OTHER OPTIONS AVAILABLE)

**3. 5/16" EPDM BONDED WASHER**

**4. SIM SEAL BUSHING**

COMPONENTS

# SIMPLESEAL

## INSTALLATION GUIDE

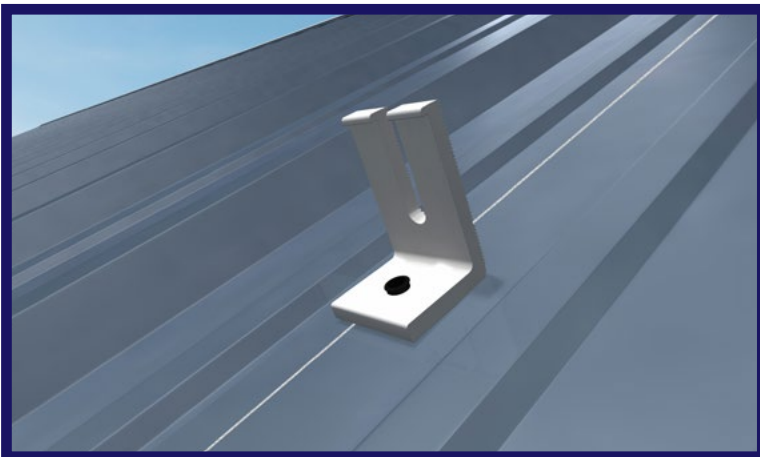


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## INSTALLING SIMPLESEAL



Pre-install the cone-shaped rubber Sim Seal bushing into an EcoFasten compression bracket of your choice prior to installation by inserting the tip of the cone into the corresponding shape in the bottom of the compression bracket. The ridge around the tip of the cone will hold the bushing in place until the bracket is installed.



Place the compression bracket on roof surface above a supporting structural component, ensuring that the bushing sits flat against the roof surface. SimpleSeal is not designed to be installed on any ridge or corrugation of the metal roof surface.

INSTALLATION

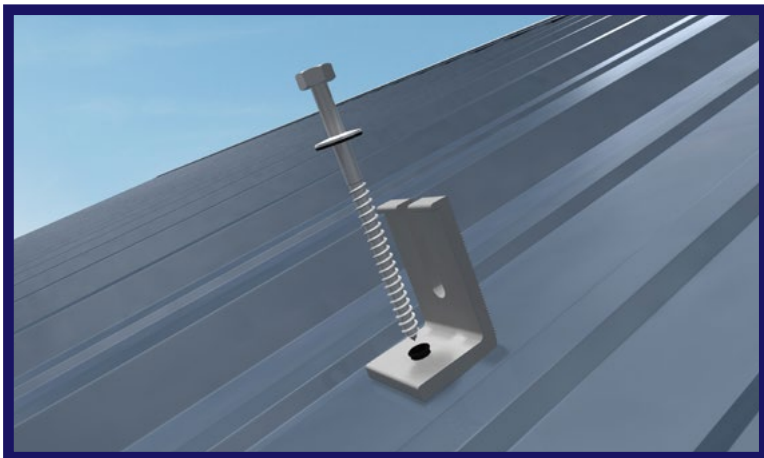
# SIMPLESEAL

## INSTALLATION GUIDE

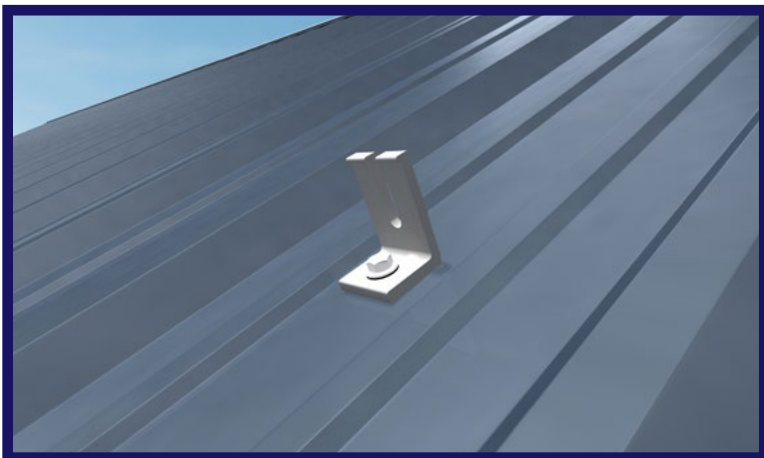


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## INSTALLING SIMPLESEAL



Thread the 5/16" EPDM bonded sealing washer onto the 5/16" lag bolt and insert the bolt into the top of Sim Seal bushing.



Tighten fastener until bracket is pulled down snug to the roof surface. The tension required will vary with the project roof deck, age, and type. Be sure not to over tighten the fasteners and strip the threads.

INSTALLATION

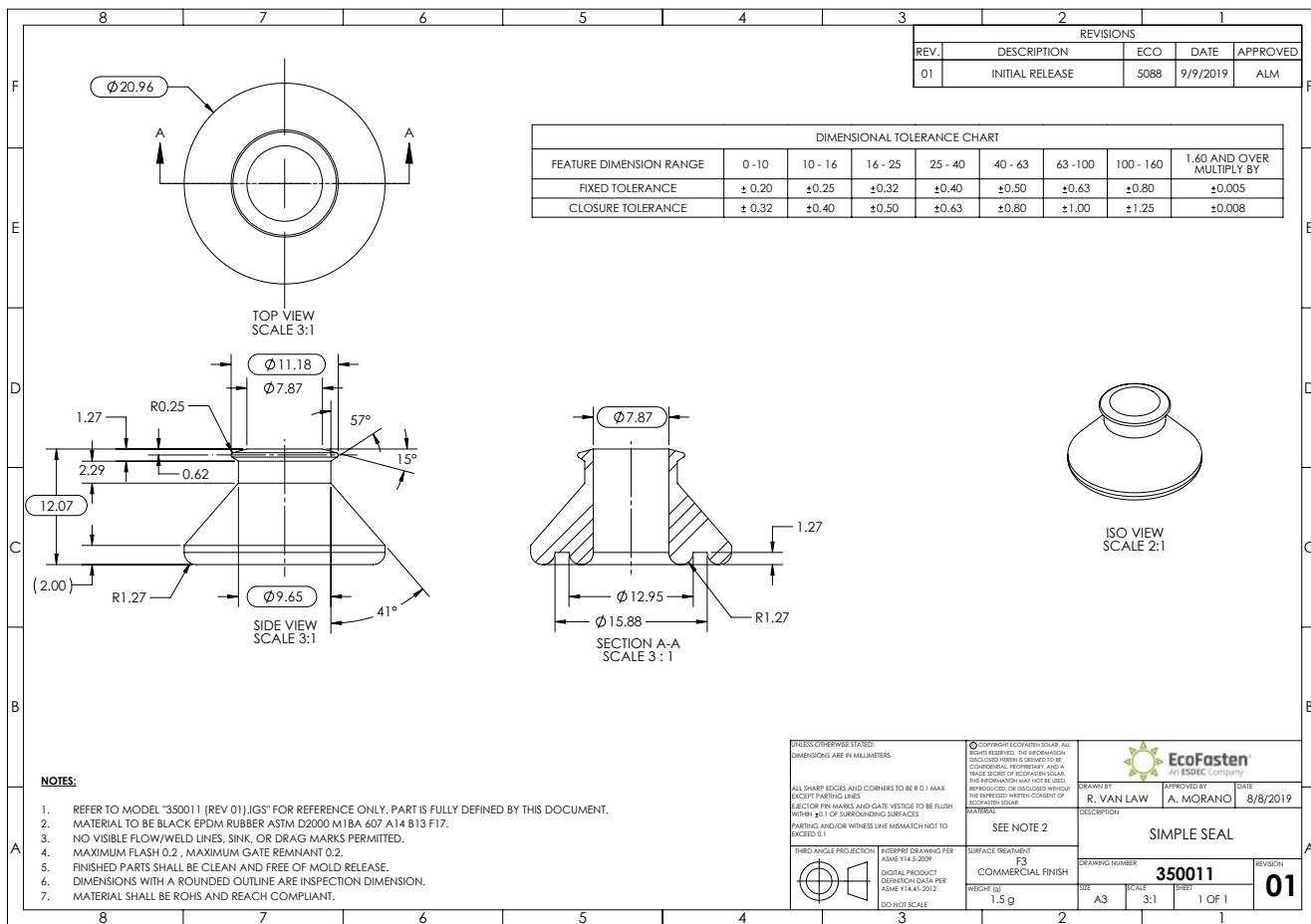
# SIMPLESEAL

## INSTALLATION GUIDE



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### CUT SHEET: SIMPLESEAL



LINE DRAWINGS

# SIMPLESEAL

## INSTALLATION GUIDE



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### CUT SHEET: BRACKET OPTION L-102-3-ANOD BLK

BILL OF MATERIAL				REVISIONS					
ITEM NO.	PART NUMBER	REV	DESCRIPTION	QTY	REV.	DESCRIPTION	ECO	DATE	APPROVED
1	SEE CONFIG TABLE	01	L-101-3	1	01	INITIAL RELEASE SUPERCEDES L-102-3 ASSY	5103	8/22/2019	ALM
2	150009-08	01	SS HEX HD CAP SCREW, FULL THD. 3/8-16 UNC X 1.25 LONG	1					
3	150011-03	01	SS SERRATED FLANGE LOCK NUT, 3/8-16	1					

CONFIGURATION TABLE		
PART NUMBER	ITEM NO. 1 PART NUMBER	ARTICLE NUMBER
750050-01	450050-01	L-102-3 ANOD BLK
750050-02	450050-02	L-102-3

SHIP LOOSE ITEM 2 AND 3 BAG EACH SEPARATELY

EXPLODED ISO VIEW SCALE 2:3

TOP VIEW SCALE 2:3

FRONT VIEW SCALE 2:3

SECTION A-A SCALE 2:3

**NOTES:**

- SHIP ASSEMBLY AS SHOWN IN ASSEMBLED VIEW.
- PARTS SHALL BE FREE OF DIRT, OIL, GREASE, ETC.
- MATERIAL SHALL BE ROHS AND REACH COMPLIANT.

THIRD-ANGLE PROJECTION		UNLESS OTHERWISE STATED, DIMENSIONS ARE IN MILLIMETERS INCHES ARE IN [ ]		 EcoFasten Air EXDREC Company	
INTERPRINT DRAWING PER ASME Y14.5-2009 DIGITAL PRODUCT DEFINITION DATA PER ASME Y14.41-2012 DO NOT SCALE	DRAWING NUMBER <b>750050</b>	DRAWER R. VAN LAW	APPROVED BY A. MORANO	DATE 8/22/2019	REVISION <b>01</b>
WEIGHT (G) 132.11 g	SIZE A3	SCALE 2:3	SHEET 1 OF 1		

LINE DRAWINGS



# SIMPLESEAL

## INSTALLATION GUIDE



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### CUT SHEET: BRACKET OPTION L-102-6

BILL OF MATERIAL				
ITEM NUMBER	PART NUMBER	DESCRIPTION	REV	QTY
1	SEE CONFIG TABLE	L-102-6	01	1
2	150009-08	SS HEX HEAD CAP SCREW, FULL THREAD 3/8-16 UNC	01	1
3	150011-03	SS SERRATED FLANGE LOCKNUT	02	1

REVISIONS				
REV.	DESCRIPTION	ECO	DATE	APPROVED
01	INITIAL RELEASE	5110	10/21/2019	ALM

CONFIGURATION TABLE		
PART NUMBER	ITEM NO 1 PART NUMBER	ARTICLE NUMBER
750067-01	450082-01	L-102-6 BLK
750067-02	450082-02	L-102-6

TOP VIEW

PROFILE ASSEMBLED VIEW

ISO VIEW

BAG ITEMS 2 AND 3 SEPARATELY

**NOTES:**  
1. SHIP ASSEMBLY AS SHOWN IN ISO VIEW.  
2. MATERIAL SHALL BE ROHS AND REACH COMPLIANT.

THIRD ANGLE PROJECTION

INTERIT DRAWING PER ASME Y14.5-2009  
DIGITAL PRODUCT DEFINITION DATA PER ASME Y14.41-2012  
DOW HOSE SCALE

(UNLESS OTHERWISE STATED, DIMENSIONS ARE IN MILLIMETERS INCHES ARE IN | )

**EcoFasten**  
An ESOTEC Company

DRAWN BY: R. VAN LAW  
APPROVED BY: A. MORANO  
DATE: 10/21/2019

DESCRIPTION: L-102-6 ASSEMBLY

DRAWING NUMBER: 750067  
REVISION: 01  
SHEET: 1 OF 1  
SCALE: N/A

WEIGHT (g): 305.11 g  
SHEET: A3

LINE DRAWINGS

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## INSTALLATION GUIDE



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### CUT SHEET: BRACKET OPTION SCL-101-3

BILL OF MATERIAL				REVISIONS					
ITEM NO.	PART NUMBER	REV	DESCRIPTION	QTY	REV.	DESCRIPTION	ECO	DATE	APPROVED
1	SEE CONFIG TABLE	01	SCL-101-3	1	01	INITIAL RELEASE SUPERCEDES SCL-101-3 ASSY	5103	8/22/2019	ALM
2	150009-08	01	SS HEX HD CAP SCREW, FULL THD. 3/8-16 UNC X 1.25 LONG	1					
3	150011-03	01	SS SERRATED FLANGE LOCK NUT, 3/8-16	1					

CONFIGURATION TABLE		
PART NUMBER	ITEM NO. 1 PART NUMBER	ARTICLE NUMBER
750049-01	450049-01	SCL-101-3 ANOD BLK
750049-02	450049-02	SCL-101-3

SHIP LOOSE ITEM 2 AND 3 BAG EACH SEPARATELY

TOP VIEW

EXPLODED ISO VIEW

SECTION A-A

FRONT VIEW

**NOTES:**

- SHIP ASSEMBLY AS SHOWN IN ASSEMBLED VIEW.
- PARTS SHALL BE FREE OF DIRT, OIL, GREASE, ETC.
- MATERIAL SHALL BE ROHS AND REACH COMPLIANT.

UNLESS OTHERWISE STATED: DIMENSIONS ARE IN MILLIMETERS INCHES ARE IN ( )			
DRAWN BY R. VAN LAW	APPROVED BY A. MORANO	DATE 8/22/2019	
DESCRIPTION <b>SCL-101-3 ASSEMBLY</b>			
DRAWING NUMBER <b>750049</b>		REVISION <b>01</b>	
WEIGHT OF <b>132.11 g</b>	SIZE A3	SCALE N/A	SHEET 1 OF 1

LINE DRAWINGS

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# EcoFasten

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## CUT SHEET: BRACKET OPTION 150004

ITEM NO.	PART NUMBER	REV	DESCRIPTION	QTY.
1	201085	02	CLICKFIT L-BRACKET USA	1
2	201084	06	CLICKFIT CLICKER USA	1
3	150027-02	02	SS HEX FLANGE BOLT, 5/16-18 UNC-2A, LENGTH 12.7 MM, GREY COATED	1
4	150033	01	SPECIAL SQUARE NUT	1

REVISIONS				
REV.	DESCRIPTION	ECO	DATE	APPROVED
06	ADDED ITEM 4, CHANGED TORQUE VALUE	5106	10/11/19	ALM

ISOMETRIC VIEW

SIDE VIEW - EXPLODED

SIDE VIEW - ASSEMBLED

FRONT VIEW - ASSEMBLED

— LANCE ITEM 4 AFTER INSTALLING IN ITEM 2 TO ATTACH BOTH ITEMS PERMANENTLY

**NOTES:**

- SHIP ASSEMBLY AS SHOWN IN ASSEMBLED VIEW.
- MATERIAL SHALL BE ROHS AND REACH COMPLIANT.
- ARTICLE NUMBER: 1500004 (FOR INDIVIDUAL SALE ONLY, NOT SET PACKS)
- DIMENSIONS WITH A ROUNDED OUTLINE ARE INSPECTIONS DIMENSIONS.

THIRD ANGLE PROJECTION

REF: ASME Y14.5-2009

DIGITAL PRODUCT DEFINITION DATA PER ASME Y14.41-2012

DO NOT SCALE

UNLESS OTHERWISE STATED: DIMENSIONS ARE IN MILLIMETERS INCHES ARE IN [ ]

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ECOFASTEN  
An ESDEC Company

DRAWN BY: A. MORANO    APPROVED BY: D. LITTLETON    DATE: 2/22/19

DESCRIPTION: CLICK FIT L FOOT

DRAWING NUMBER: 701043    REVISION: 06

SIZE: 175.5    SCALE: A3 1:1    SHEET: 1 OF 1

# LINE DRAWINGS

# SIMPLESEAL

## INSTALLATION GUIDE



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### SYSTEM COMPONENTS

1. **Sim Seal Bushing:**

Consists of (1) EPDM Rubber cone-shaped bushing.

2. **Aluminum Compression Bracket:**

Compatible with a variety of EcoFasten compression brackets. EcoFasten compression brackets are made out 6000 series aluminum with options available for mill or black finishes depending on the bracket.

3. **Recommended Fasteners**

5/16"x4" lag bolts.

4. **Recommended Sealant:**

If required by roof manufacturer, sealant shall be roof manufacturer approved.

### DELIVERY / STORAGE / HANDLING

Inspect material upon delivery. Notify manufacturer within 24 hours of any missing or defective items. Keep material dry, covered and off the ground until installed.

### PATENTS

Visit [www.efpatents.com](http://www.efpatents.com) for patent information.

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### DESIGN REQUIREMENTS

1. Bracket spacing to be recommended by project engineer.
2. Fasten attachment to roof using 1 5/16" lag bolt.
3. It is important to design new structures or assess existing structures to make sure they withstand retained loads.

### EXAMINATION

1. Substrate: Inspect structure on which brackets are to be installed and verify that it will withstand any additional loading that may be incurred.
2. Notify General Contractor of any deficiencies before installing EcoFasten Solar brackets.
3. Verify that roofing material has been installed correctly prior to installing solar attachment bracket.

### INSTALLATION

Comply with architectural drawings and project engineer's recommendation for location of system. Comply with Manufacturer's written installation instructions for installation and layout.

SPECIFICATIONS

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