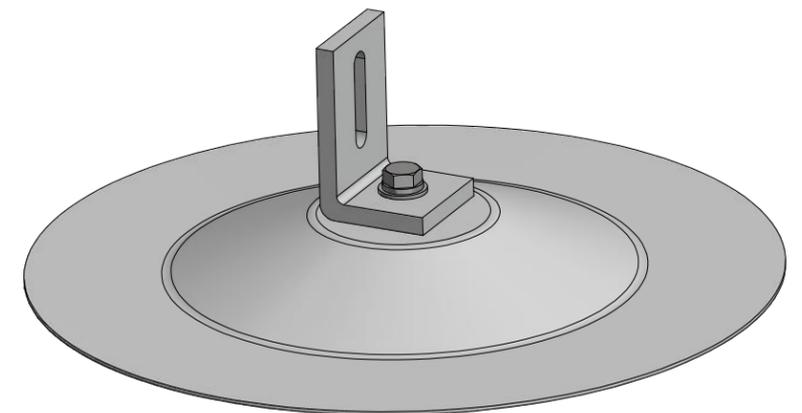


**NOTES:**

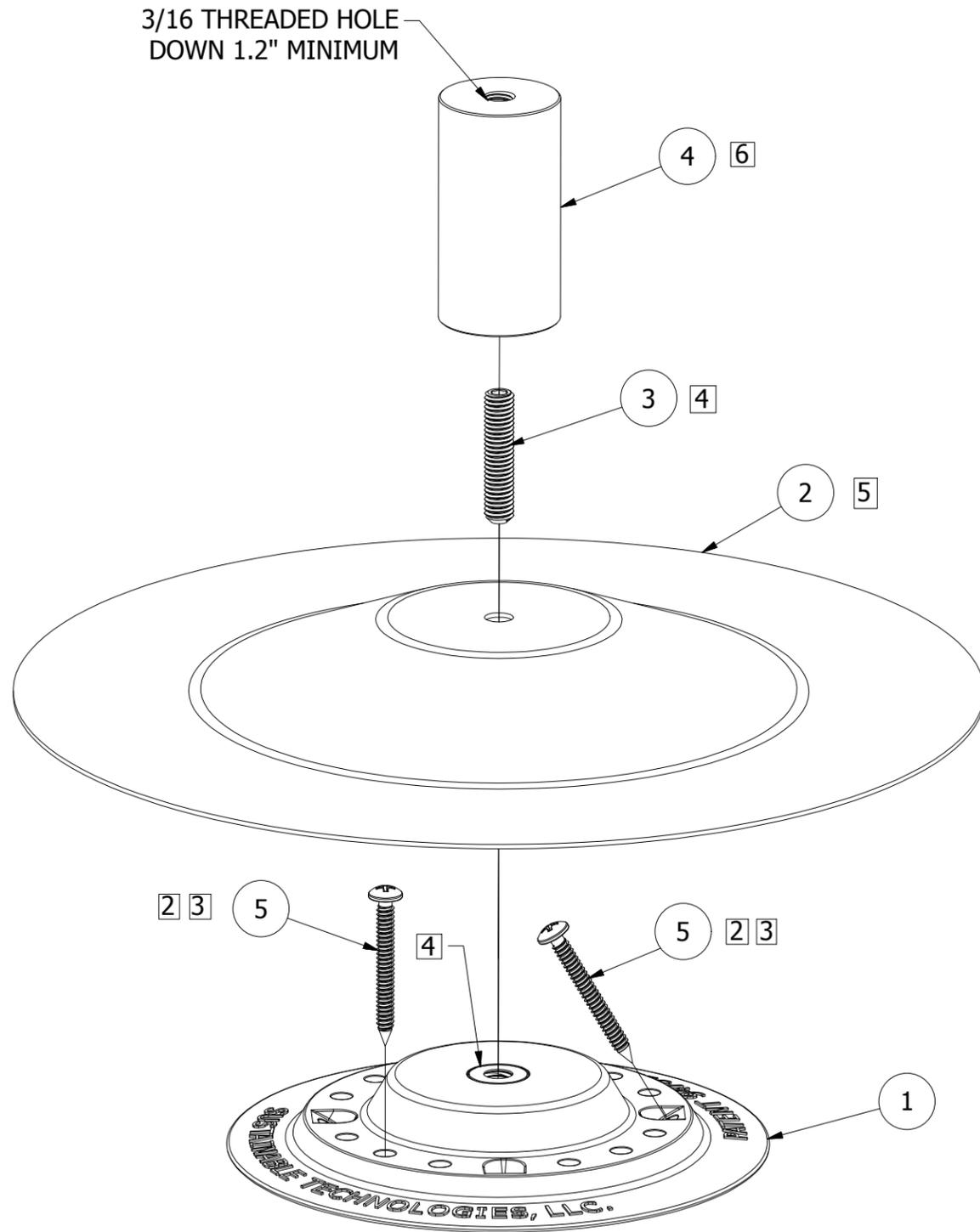
1. This drawing is intended for a guide and is project-dependent. The project's structural engineer is to review and approve.
2. The maximum screw size is #15. The structural engineer is to specify the screw type, size and quantity. The angled and vertical screws should be symmetrical on the Facet.
3. The screws can be installed before or after cover membrane is installed. If the Facet is accessible, the bracket and racking can be installed first followed by lifting the cover membrane edges. With the Facet exposed, attach screws followed by welding or adhering the cover membrane to the roof membrane per roof manufacturer's requirements.
4. Remove the PSA washer top protective liner prior to attaching the cover membrane. A set screw in the Facet threaded hole can be used as a guide to center the cover membrane hole to the Facet threaded hole.
5. The 3/8-16 threaded hole in the Facet has a 0.80 inch minimum thread depth. The project structural engineer needs to determine the minimum thread length engagement in the Facet threaded hole for the project. The bolt length can be determined by the minimum thread depth, the minimum thread engagement, and the bracket and washer thicknesses.
6. The flat washer is only required if the bracket hole is greater than 0.42" in any direction.
7. For freeze/thaw locations, the bolt should be partially threaded in the Facet and then a roof manufacturer's approved sealant (water blocker) should be liberally applied all around the bolt and in the bracket hole prior to tightening the bolt. The flat washer should be large enough to cover the hole in the bracket. The lock washer can be eliminated if a serrated flange bolt is used. If the serrated flange bolt is large enough to cover the bracket hole, then the flat washer can also be eliminated.
8. In non-freeze/thaw locations, the lock washer and flat washer can be eliminated if the bolt is a flanged serrated bolt.
9. Initial torque setting for the bolt is 20 ft-lbs.
10. Attachment of the cover membrane to the roof needs to conform to manufacturers' and roofer's requirements and specifications.

## FACET, FORMED MEMBRANE AND BRACKET



PARTS LIST		
ITEM	QTY	DESCRIPTION
1	1	Molded Facet Assembly
2	1	Cover Membrane - Formed
3	1	3/8 Flat washer - Recommend 300 Series SS, 1.5 Inch OD
4	1	3/8 Flat Washer - Recommend 300 Series SS
5	1	3/8-18 Bolt - Recommend 300 Series SS
6	1	3/8 Split Washer - Recommend 300 Series SS
7	2-16	Roof Screw
8	1	Bracket - Generic

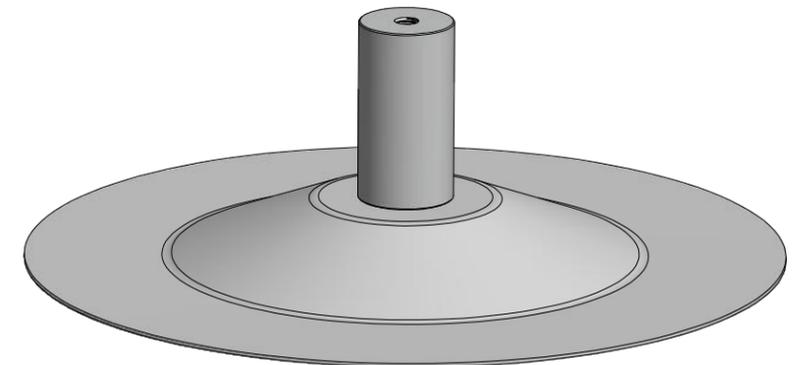
<b>Sustainable Technologies</b> 2543 Warren Drive, Rocklin, CA 95677 916.824.3080 <a href="http://www.sustainabletechnologiesllc.com">www.sustainabletechnologiesllc.com</a>	<b>INSTRUCTIONS</b>	<b>MOLDED FACET MEMBRANE ASSY</b>
	REV DATE: 9/25/17	IN0003-01
	MATERIAL: NOT TO SCALE	SHEET 1 OF 4
PATENTS 9479110, 9647607, & PENDING PATENTS		



**NOTES:**

1. This drawing is intended for a guide and is project-dependent. The project's structural engineer is to review and approve.
2. The maximum screw size is #15. The structural engineer is to specify the screw type, size and quantity. The angled and vertical screws should be symmetrical on the Facet.
3. The screws can be installed before or after cover membrane is installed. If the Facet is accessible, the stanchion and racking can be installed first followed by lifting the cover membrane edges. With the Facet exposed, attach screws followed by welding or adhering the cover membrane to the roof membrane per roof manufacturer's requirements.
4. Remove the PSA washer top protective liner and install the set screw prior to attaching the cover membrane. Bottom the set screw in the Facet.
5. Attachment of the cover membrane to the roof needs to conform to manufacturers' and roofer's requirements and specifications.
6. Initial torque setting for the stanchion is 20 ft-lbs.

## FACET, FORMED MEMBRANE AND STANCHION



PARTS LIST		
ITEM	QTY	DESCRIPTION
1	1	Molded Facet Assembly
2	1	Cover Membrane - Formed
3	1	3/8-16 x 1.75" SS Socket Head Set Screw-Cup - Recommend 300 SS
4	1	Stanchion
5	2-16	Roof Screw
6	1	Bracket - Generic

**St** Sustainable Technologies  
 2543 Warren Drive, Rocklin, CA 95677  
 916.824.3080  
[www.sustainabletechnologiesllc.com](http://www.sustainabletechnologiesllc.com)

PATENTS 9479110, 9647607, & PENDING PATENTS

**INSTRUCTIONS**

REV DATE: 9/25/17

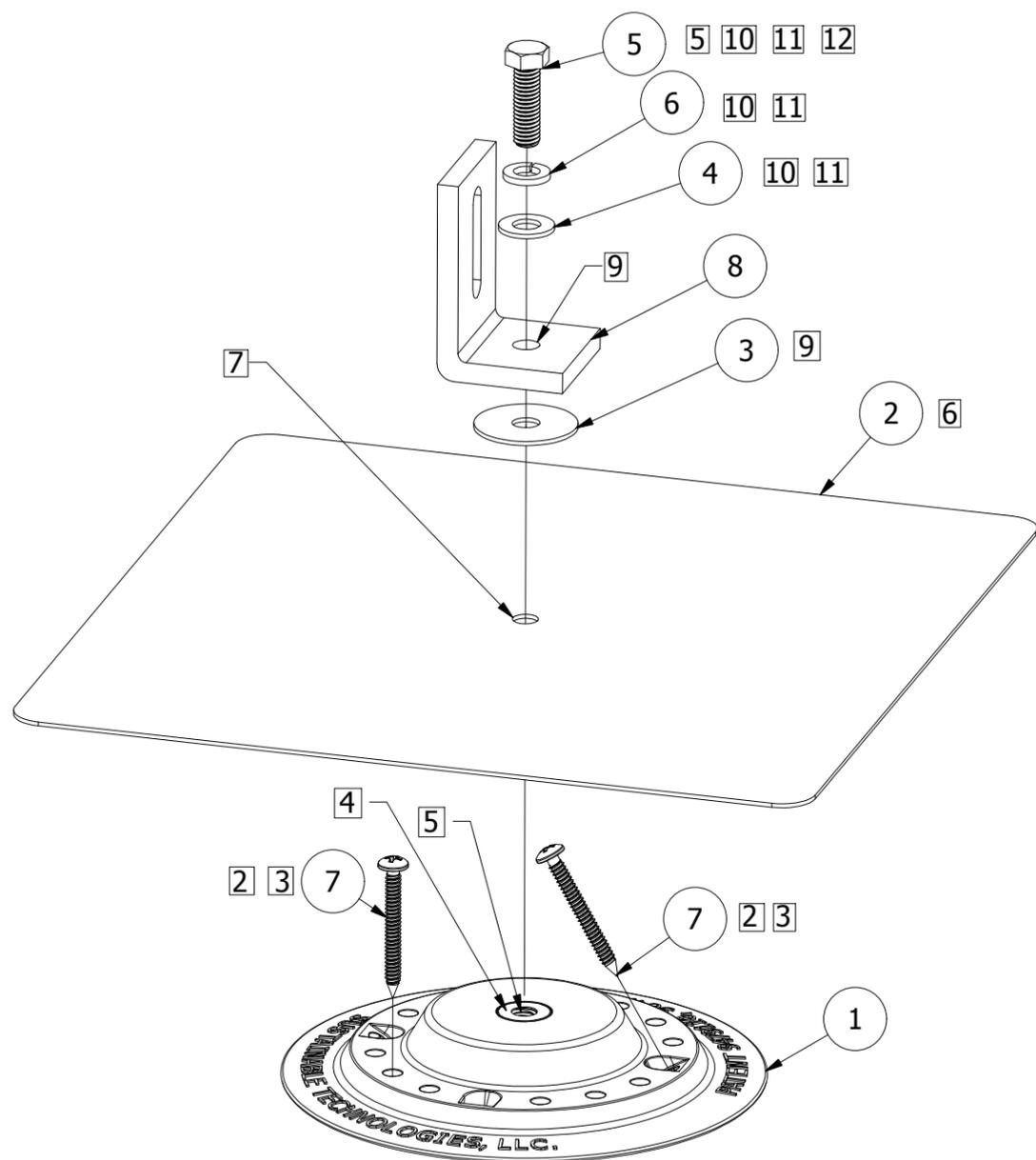
MATERIAL:

NOT TO SCALE

MOLDED FACET  
MEMBRANE ASSY

IN0003-01

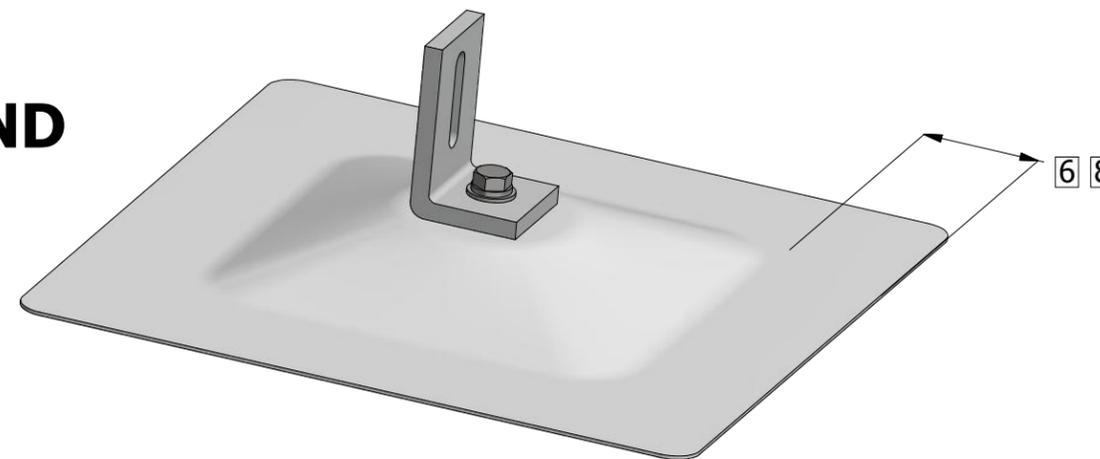
SHEET 2 OF 4



**NOTES:**

1. This drawing is intended for a guide and is project-dependent. The project's structural engineer is to review and approve.
2. The maximum screw size is #15. The structural engineer is to specify the screw type, size and quantity. The angled and vertical screws should be symmetrical on the Facet.
3. The screws can be installed before or after cover membrane is installed. If the Facet is accessible, the bracket and racking can be installed first followed by lifting the cover membrane edges. With the Facet exposed, attach screws followed by welding or adhering the cover membrane to the roof membrane per roof manufacturer's requirements.
4. Remove the PSA washer top protective liner prior to attaching the cover membrane. A set screw in the Facet threaded hole can be used as a guide to center the cover membrane hole to the Facet threaded hole.
5. The 3/8-16 threaded hole in the Facet has a 0.80 inch minimum thread depth. The project structural engineer needs to determine the minimum thread length engagement in the Facet threaded hole for the project. The bolt length can be determined by the minimum thread depth, the minimum thread engagement, and the bracket and washer thicknesses.
6. The cover membrane size (width and length) will be determined by the roofer based on the manufacturer's welding or adhesive attachment width requirements (see note 8). Typically the minimum cover membrane size recommendation is 12" x 12". To aid in the membrane welding or adhering, the cover membrane can be folded and unfolded along the diagonals. The cover membrane material should match the type and manufacturer of the roof membrane. The cover membrane should be non-scrim type (no reinforcement fiber).
7. The cover membrane hole should be 11/32" to 13/32" diameter and centered on the cover membrane. Use of a 3/8" diameter hammer-driven hole punch (McMasterCarr PN 3424A25) is recommended to punch the cover membrane hole.
8. The dimension shown is the manufacturer's minimum attachment width for welding or adhesion. Attachment needs to conform to manufacturers' and roofer's requirements and specifications. It is recommended that either the bracket is attached to the Facet or a bolt is partially threaded in the Facet threaded hole during welding or adhering process so the cover membrane hole remains over the Facet threaded hole.
9. The flat washer is only required if the bracket hole is greater than 0.42" in any direction.
10. For freeze/thaw locations, the bolt should be partially threaded in the Facet and then a roof manufacturers' approved sealant (water blocker) should be liberally applied all around the bolt and in the bracket hole prior to tightening the bolt. The flat washer should be large enough to cover the hole in the bracket. The lock washer can be eliminated if a serrated flange bolt is used. If the serrated flange bolt is large enough to cover the bracket hole, then the flat washer can also be eliminated.
11. In non-freeze/thaw locations, the lock washer and flat washer can be eliminated if the bolt is a flanged serrated bolt.
12. Initial torque setting for the bolt is 20 ft-lbs.

## FACET, FLAT MEMBRANE AND BRACKET



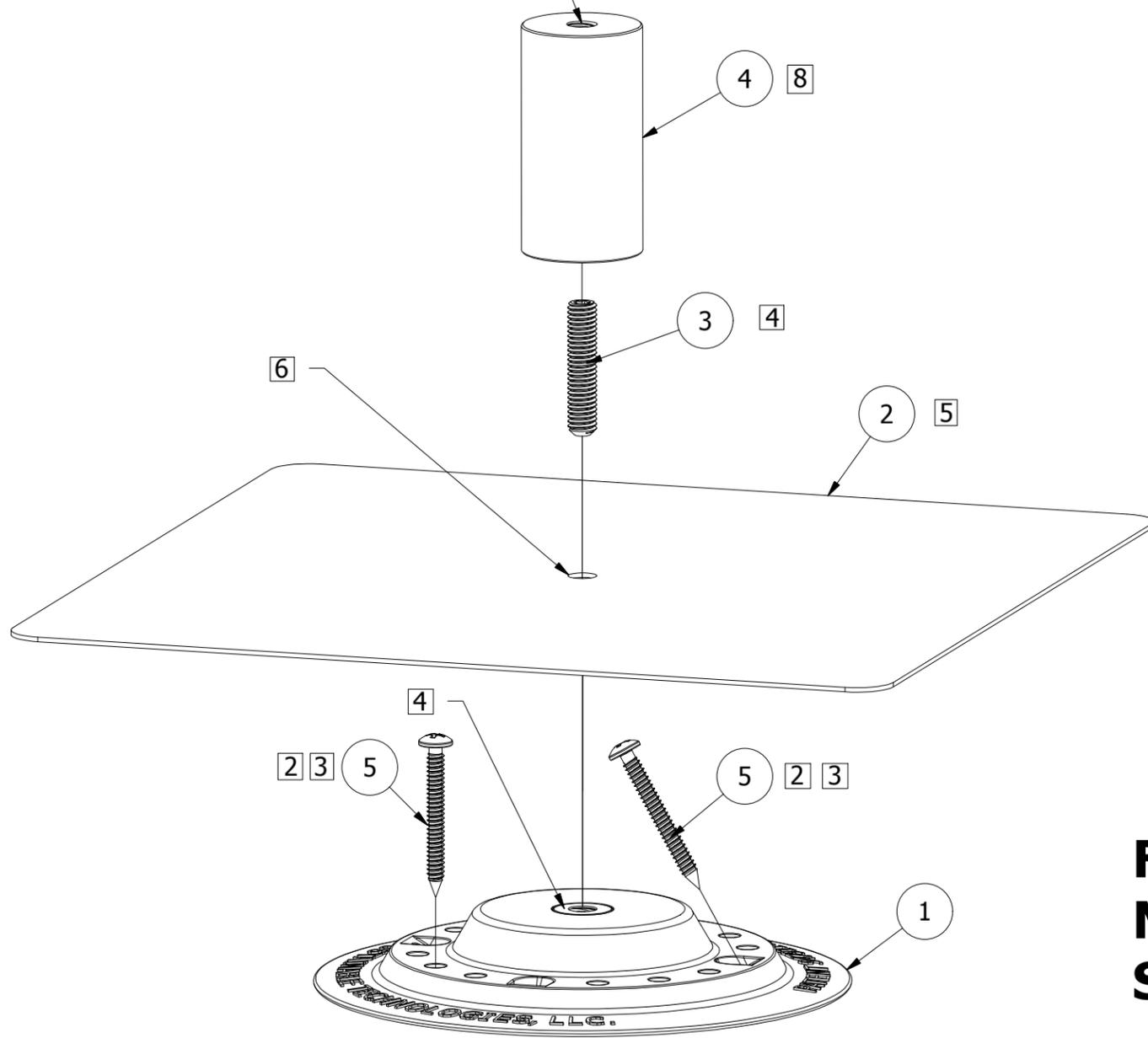
PARTS LIST		
ITEM	QTY	DESCRIPTION
1	1	Molded Facet Assembly
2	1	Cover Membrane-Flat
3	1	3/8 Flat Washer - Recommed 300 Series SS, 1.5 inch OD
4	1	3/8 Flat Washer - Recommend 300 Series SS
5	1	3/8-16 Bolt - Recommend 300 Series SS
6	1	3/8-Split Lockwasher - Recommend 300 Series SS
7	2-16	Roof Screw
8	1	Bracket-Generic

**St** Sustainable Technologies  
 2543 Warren Drive, Rocklin, CA 95677  
 916.824.3080  
 www.sustainabletechnologiesllc.com

PATENTS 9479110, 9647607, & PENDING PATENTS

INSTRUCTIONS		MOLDED FACET MEMBRANE ASSY
REV DATE:	9/25/17	
MATERIAL:	IN0003-01	
NOT TO SCALE	SHEET 3 OF 4	

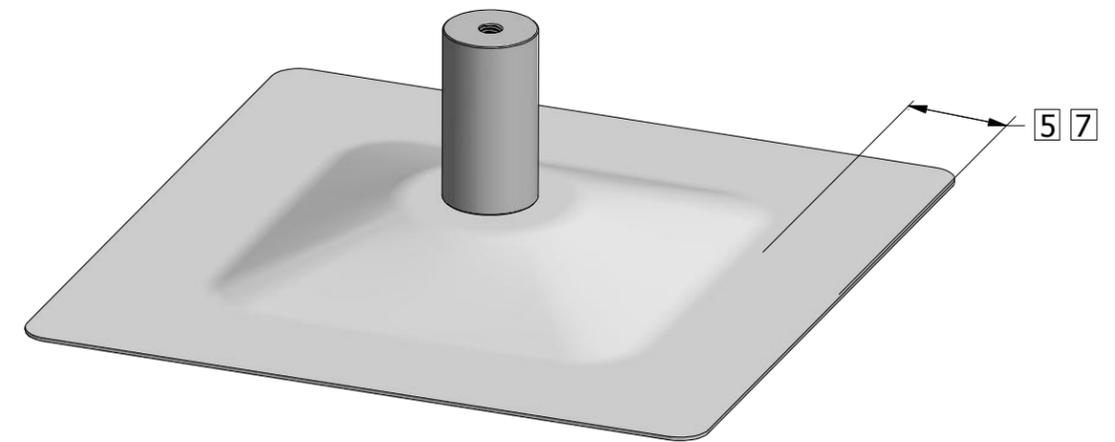
3/8-16 THREADED HOLE  
DOWN 1.2" MINIMUM



**NOTES:**

1. This drawing is intended for a guide and is project-dependent. The project's structural engineer is to review and approve.
2. The maximum screw size is #15. The structural engineer is to specify the screw type, size and quantity. The angled and vertical screws should be symmetrical on the Facet.
3. The screws can be installed before or after cover membrane is installed. If the Facet is accessible, the stanchion and racking can be installed first followed by lifting the cover membrane edges. With the Facet exposed, attach screws followed by welding or adhering the cover membrane to the roof membrane per roof manufacturer's requirements.
4. Remove the PSA washer top protective liner and install the set screw prior to attaching the cover membrane. Bottom the set screw in the Facet.
5. The cover membrane size (width and length) will be determined by the roofer based on the manufacturer's welding or adhesive attachment width requirements (see note 7). Typically the minimum cover membrane size recommendation is 12" x 12". To aid in the membrane welding or adhering, the cover membrane can be folded and unfolded along the diagonals. The cover membrane material should match the type and manufacturer of the roof membrane. The cover membrane should be non-scrim type (no reinforcement fiber).
6. The cover membrane hole should be 11/32" to 13/32" diameter and centered on the cover membrane. Use of a 3/8" diameter hammer-driven hole punch (McMasterCarr PN 3424A25) is recommended to punch the cover membrane hole.
7. The dimension shown is the manufacturers' minimum attachment width for welding or adhesion. Attachment needs to conform to manufacturers' and roofer's requirements and specifications.
8. Initial torque setting for the stanchion is 20 ft-lbs.

## FACET, FLAT MEMBRANE AND STANCHION



**PARTS LIST**

ITEM	QTY	DESCRIPTION
1	1	Molded Facet Assembly
2	1	Cover Membrane-Flat
3	1	3/8-16 x 1.75" SS Socket Head Set Screw-Cup, Recommend 300 SS
4	1	Stanchion
5	2-16	Roof Screw

**St** Sustainable Technologies  
 2543 Warren Drive, Rocklin, CA 95677  
 916.824.3080  
 www.sustainabletechnologiesllc.com

PATENTS 9479110, 9647607, & PENDING PATENTS

**INSTRUCTIONS**

REV DATE: 9/25/17

MATERIAL:

NOT TO SCALE

**MOLDED FACET  
MEMBRANE ASSY**

IN0003-01

SHEET 4 OF 4