

# SOLARO ENERGY, INC

## "SOLARO AIRE"

### SOLAR ATTIC ROOF VENT

### INSTALLATION ANCHORAGE DETAILS

**GENERAL NOTES:**

1. THIS PRODUCT HAS BEEN EVALUATED AND IS IN COMPLIANCE WITH THE 2006 IBC AND 2006 IRC WITH STATE OF TEXAS MODIFICATIONS AT THE DESIGN PRESSURE(S) STATED HEREIN. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORT NCTL-210-4009-01, DATED 07/29/15 BY NATIONAL CERTIFIED TESTING LABORATORIES AND ASSOCIATED LABORATORY STAMPED DRAWINGS.
2. THE PRODUCT HAS BEEN STRUCTURALLY TESTED TO AND FOUND TO BE IN CONFORMANCE TO SECTION 1714.2 OF THE 2006 IBC. THE DESIGN PRESSURES SHOWN IN D.P. CHART ON SHEET 1 OF THIS DRAWING ARE BASED ON THE RESULT OF TEST REPORT NUMBER NCTL-210-4009-01 TESTING TO ASTM E330-02 DIVIDED BY A FACTOR OF SAFETY OF 2.
3. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.
4. ADEQUACY OF THE EXISTING STRUCTURAL 2X FRAMING AND/OR SHEATHING TO WITHSTAND AND TRANSFER THE APPLIED PRODUCT LOADS TO THE STRUCTURE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
5. THE SOLARO AIRE ROOF VENT PRIMARY COMPONENTS ARE COMPRISED OF THE FOLLOWING MATERIALS:
  - 5.1 LOW OR HIGH PROFILE BASE: 0.080" 3003-0 SPUN ALUMINUM
  - 5.2 FAN HOOD, 4.50" X 0.063" THICK: ALUMINUM 3003-0.
6. THIS PRODUCT EVALUATION DOCUMENT ADDRESSES THE STRUCTURAL ATTACHMENT OF THE ROOF VENT TO THE ROOF SHEATHING ONLY. PREPARATION OF THE ROOF SHEATHING AND ROOF COVERINGS TO RECEIVE THE ROOF VENT SHALL BE PER THE MANUFACTURERS INSTRUCTIONS.
7. INTERNAL MECHANISMS, ELECTRICAL COMPONENTS AND SOLAR COMPONENTS ARE BEYOND THE SCOPE OF THIS PRODUCT EVALUATION DOCUMENT.
8. THE SOLAR ATTIC FANS SHALL BE INSTALLED IN COMPLIANCE WITH THE INSTALLATION METHOD LISTED IN THIS DRAWING. THE INSTALLATION METHOD DESCRIBED HEREIN IS IN ACCORDANCE WITH THE SCOPE OF THIS EVALUATION AND BASED ON TESTING. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS AS A SUPPLEMENTAL GUIDE FOR ATTACHMENT.

**INSTALLATION NOTES:**

1. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATIONS SHOWN ON SHEET 2 AND 3.
2. THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION AT THE TESTED SIZE SHOWN SEE SHEETS 2 AND 3 FOR ANCHORAGE.
  - 2.1. SEE INSTALLATION TOP VIEWS ON SHEETS 2 AND 3 FOR ANCHOR QUANTITIES.
3. ANCHORS ARE TO MATCH TYPE, SIZE, AND SPACING OF THOSE SHOWN HEREIN.
4. FOR INSTALLATION INTO PLYWOOD /OSB SHEATHING, USE NO. 10 TYPE AB, HEX HEAD, PAN HEAD, ROUND HEAD OR TRUSS HEAD CORROSION RESISTANT STEEL TAPPING SCREWS MEETING ASME/ANSI B18.6.4 OF SUFFICIENT LENGTH TO ACHIEVE FULL DEPTH OF EMBEDMENT INTO MINIMUM 15/32" THICK PLYWOOD OR 7/16" OSB ROOF SHEATHING. EDGE DISTANCE FROM CENTERLINE OF SCREW TO EDGE OF PLYWOOD/OSB SHALL BE AT LEAST 1-1/4".
5. ALL ROOFING MATERIALS SHALL COMPLY WITH CHAPTER 15 OF THE IBC AND CHAPTER 9 OF THE IRC.
6. INSTALLATION CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON THE FOLLOWING PROPERTIES:
  - 6.1 15/32" THICK PLYWOOD - SPECIES GROUP 1 OR 2 (APA VOLUNTARY PRODUCTS STANDARD PS-1) MINIMUM.
  - 6.2 7/16" OSB - SHEATHING GRADE (APA VOLUNTARY PRODUCTS STANDARD PS 2) MINIMUM.

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SHEET	REV.	SHEET DESCRIPTION
1	---	GENERAL AND INSTALLATION NOTES
2	---	HIGH PROFILE ANCHORING DETAILS
3	---	LOW PROFILE ANCHORING DETAILS
4	---	BILL OF MATERIALS AND INSTALLATION

PERFORMANCE	
DESIGN PRESSURE RATING (PSF)	
DESIGN PRESSURE (PSF)	IMPACT
+/- 90.0	NONE

REV	DESCRIPTION	DATE	BY

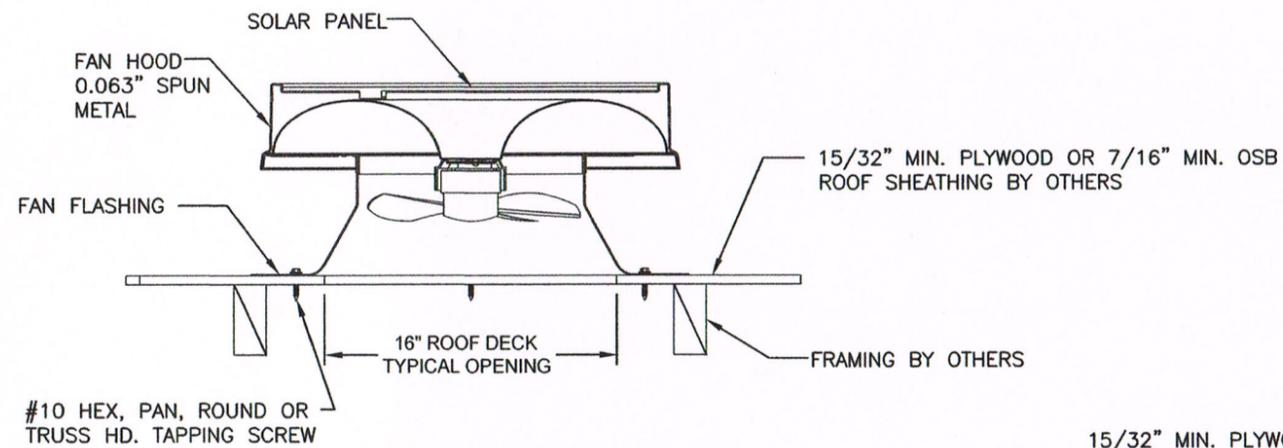
**SOLARO ENERGY, INC.**  
1404 ENTERPRISE ROAD  
SOCORRO, NM 87801

TITLE: MODEL "SOLARO AIRE" SOLAR ATTIC ROOF VENT  
GENERAL AND INSTALLATION NOTES

DRAWN BY: JMR/JA	DATE: 10/21/15
SCALE: N.T.S.	DRAWING NO: NL_0056
REV: -	SHEET: 1 OF 4

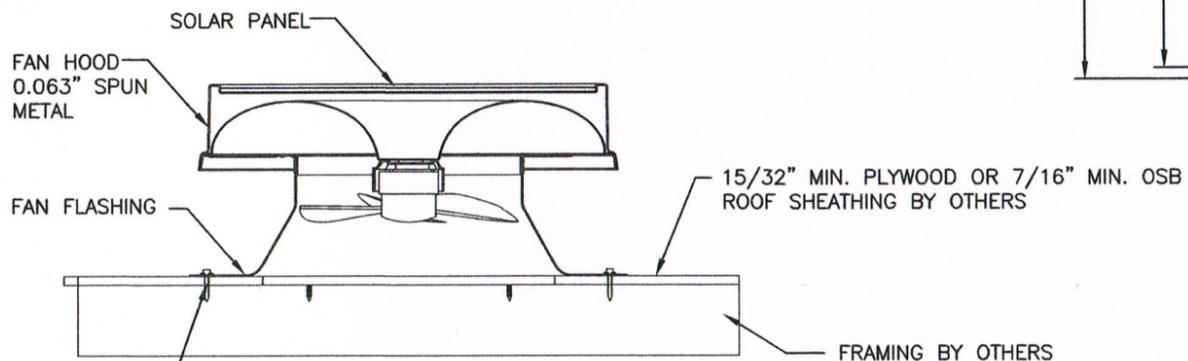
ROBERT J. AMORUSO  
TEXAS P.E. NO. 80817

12472 LAKE  
UNDERHILL RD  
NO. 148  
ORLANDO, FL 32828  
robert.amoruso@  
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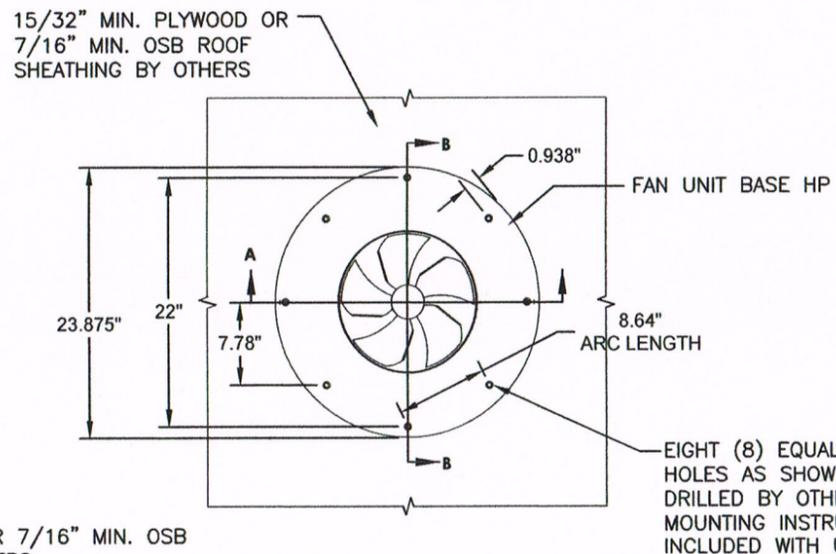
SECTION A-A-BASE UNIT ASSEMBLY  
HIGH PROFILE FRONT SECTION VIEW  
 MODELS SA-20WB-HPE,  
 SA-20WB-HPE-YE

#10 HEX, PAN, ROUND OR TRUSS HD. TAPPING SCREW



SECTION B-B-BASE UNIT ASSEMBLY  
HIGH PROFILE SIDE SECTION VIEW  
 MODELS SA-20WB-HPE,  
 SA-20WB-HPE-YB

#10 HEX, PAN, ROUND OR TRUSS HD. TAPPING SCREW



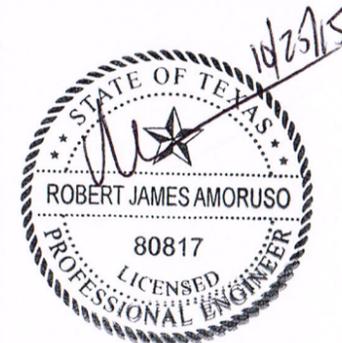
FAN BASE INSTALLATION  
TOP VIEW

EIGHT (8) EQUALLY SPACED INSTALLATION HOLES AS SHOWN. HOLES TO BE DRILLED BY OTHERS. MANUFACTURER'S MOUNTING INSTRUCTIONS WILL BE INCLUDED WITH UNIT.

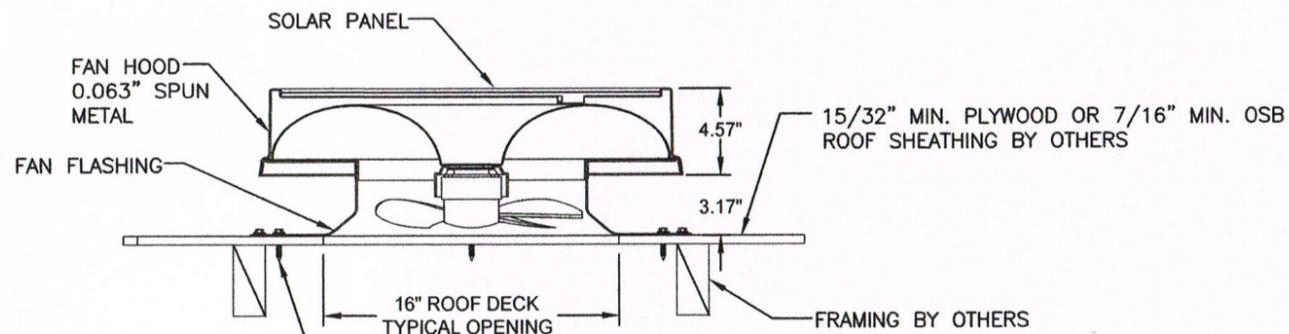
REV	DESCRIPTION	DATE	BY

SOLARO ENERGY, INC. 1404 ENTERPRISE ROAD SOCORRO, NM 87801		DATE: 10/21/15 DRAWING NO: NL_0056 SHEET: 2 OF 4
TITLE: MODEL "SOLARO AIRE" SOLAR ATTIC ROOF VENT HIGH PROFILE ANCHORING DETAILS		DRAWN BY: JMR/JA SCALE: N.T.S. REV:

ROBERT J. AMORUSO  
 TEXAS P.E. NO. 80817



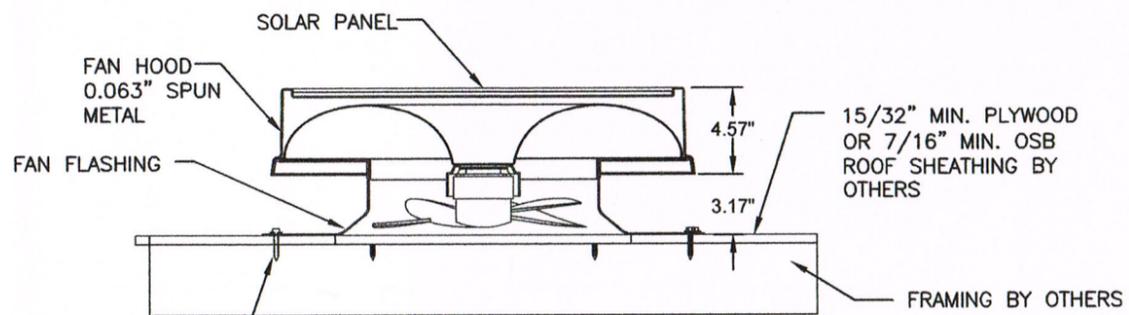
12472 LAKE UNDERHILL RD  
 NO. 148  
 ORLANDO, FL 32828  
 robert.amoruso@comcast.net



#10 HEX, PAN, ROUND OR TRUSS HD. TAPPING SCREW

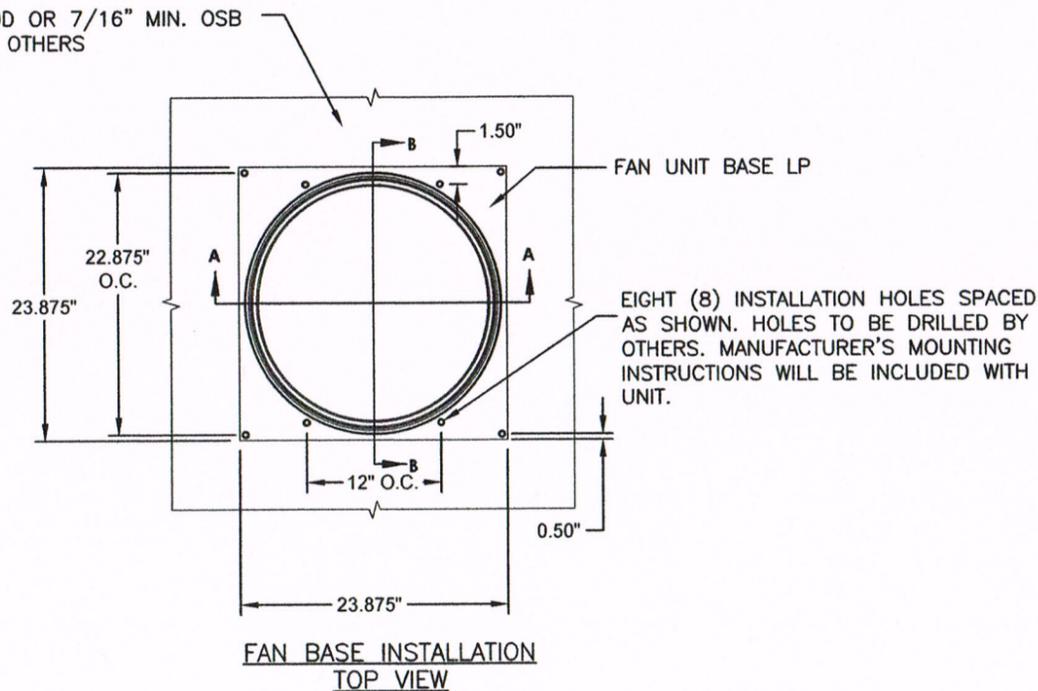
SECTION A-A-BASE UNIT ASSEMBLY  
LOW PROFILE FRONT SECTION VIEW  
MODELS SA-20WB-LPE,  
SA-20WB-LPE-YB

15/32" MIN. PLYWOOD OR 7/16" MIN. OSB ROOF SHEATHING BY OTHERS



#10 HEX, PAN, ROUND OR TRUSS HD. TAPPING SCREW

SECTION B-B-BASE UNIT ASSEMBLY  
LOW PROFILE SIDE SECTION VIEW  
MODELS SA-20WB-LPE,  
SA-20WB-LPE-YB



FAN UNIT BASE LP

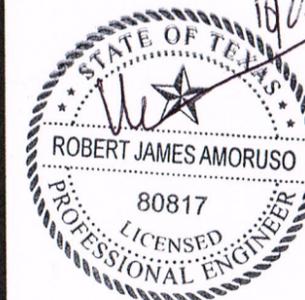
EIGHT (8) INSTALLATION HOLES SPACED AS SHOWN. HOLES TO BE DRILLED BY OTHERS. MANUFACTURER'S MOUNTING INSTRUCTIONS WILL BE INCLUDED WITH UNIT.

FAN BASE INSTALLATION  
TOP VIEW

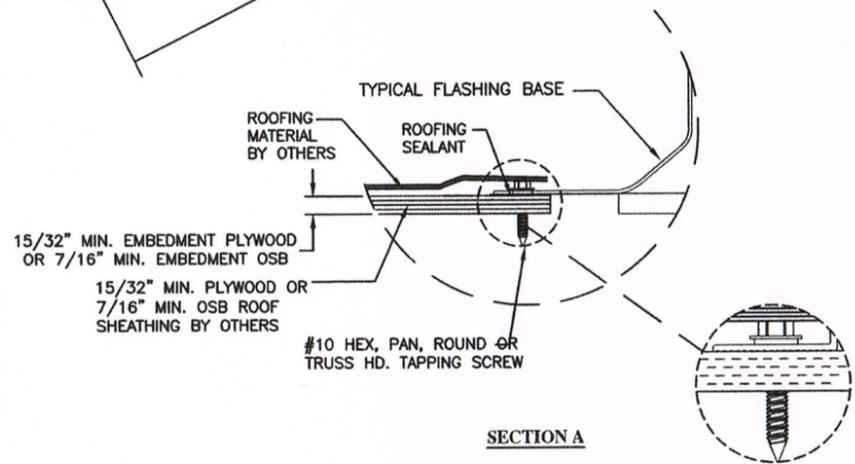
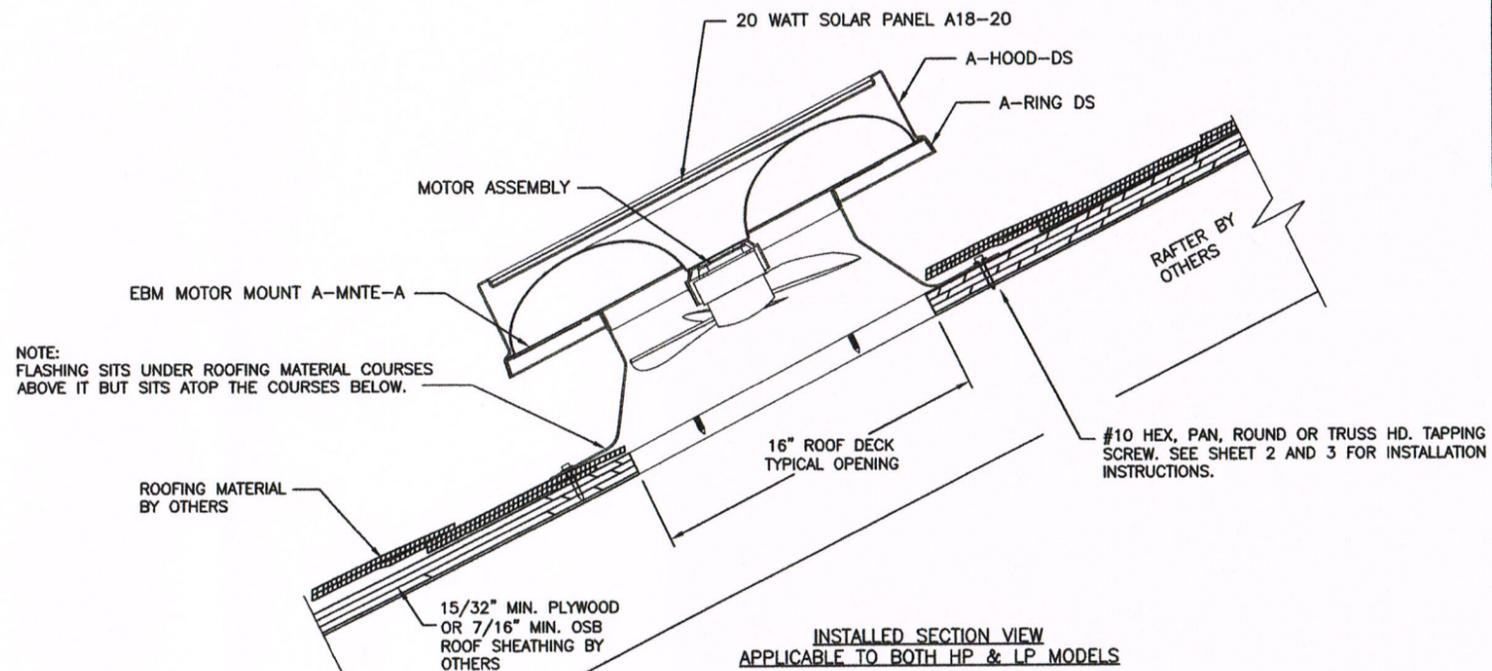
REV	DESCRIPTION	DATE	BY

SOLARO ENERGY, INC. 1404 ENTERPRISE ROAD SOCORRO, NM 87801		DATE: 10/21/15 DRAWN BY: JMR/JA SCALE: N.T.S. SHEET: 3 OF 4
TITLE: MODEL "SOLARO AIRE" SOLAR ATTIC ROOF VENT LOW PROFILE ANCHORING DETAILS		DRAWING NO: NL_0056

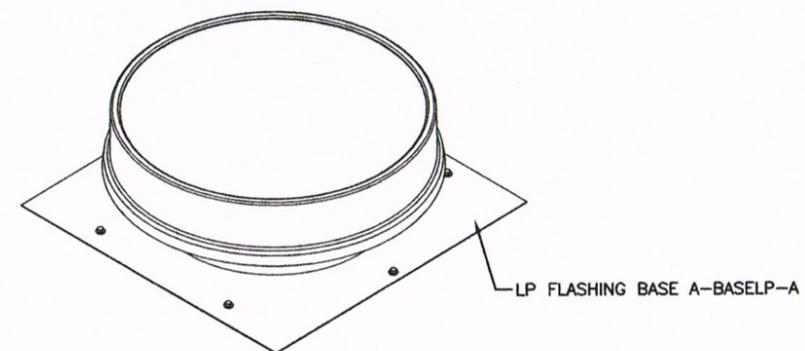
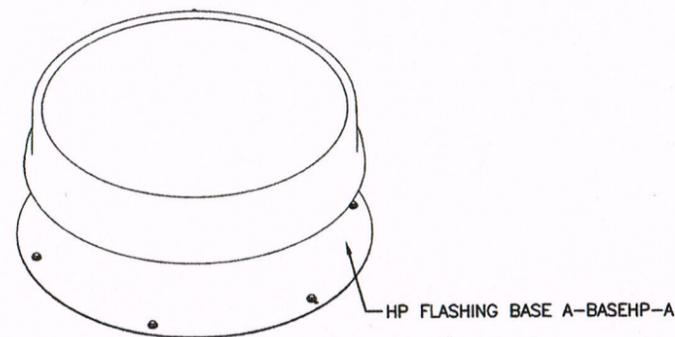
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ITEM NO.	DESCRIPTION	QTY
1	20 WATT SOLAR PANEL A18-20	1
2	A-HOOD-DS 0.063" SPUN METAL	1
3	BRUSHLESS MOTOR MOUNT A-MNTE	1
4	A-RING DS	1
5	MOTOR ASSEMBLY	1
6	LP FLASHING BASE A-BASELP-A	1
7	HP FLASHING BASE A-BASEHP-A	1
8	#10 X 1-1/2" HEX HD. OR TRUSS HD. SCREW	8



REV	DESCRIPTION	DATE	BY

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1404 ENTERPRISE ROAD  
SOCORRO, NM 87801

TITLE: MODEL "SOLARO AIRE" SOLAR ATTIC ROOF VENT  
BILL OF MATERIALS AND INSTALLATION

DRAWN BY: JMR/JA  
DATE: 10/21/15  
SCALE: N.T.S.  
DRAWING NO: NL\_0056  
REV: 4 OF 4

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