

# SOLARO ENERGY, INC

## "SOLARO AIRE"

### SOLAR ATTIC ROOF VENT

### INSTALLATION ANCHORAGE DETAILS

**GENERAL NOTES:**

1. THIS PRODUCT IS DESIGNED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC) REQUIREMENTS EXCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) 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 1709.2 OF THE FLORIDA BUILDING CODE (FBC). THE DESIGN PRESSURES SHOWN ON 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. 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.
4. 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.
5. THE SOLARO INC 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 LOCATION 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 FLORIDA BUILDING CODE AND CHAPTER 9 OF THE FLORIDA RESIDENTIAL CODE.
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.

| TABLE OF CONTENTS |      |                                    |
|-------------------|------|------------------------------------|
| 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   |

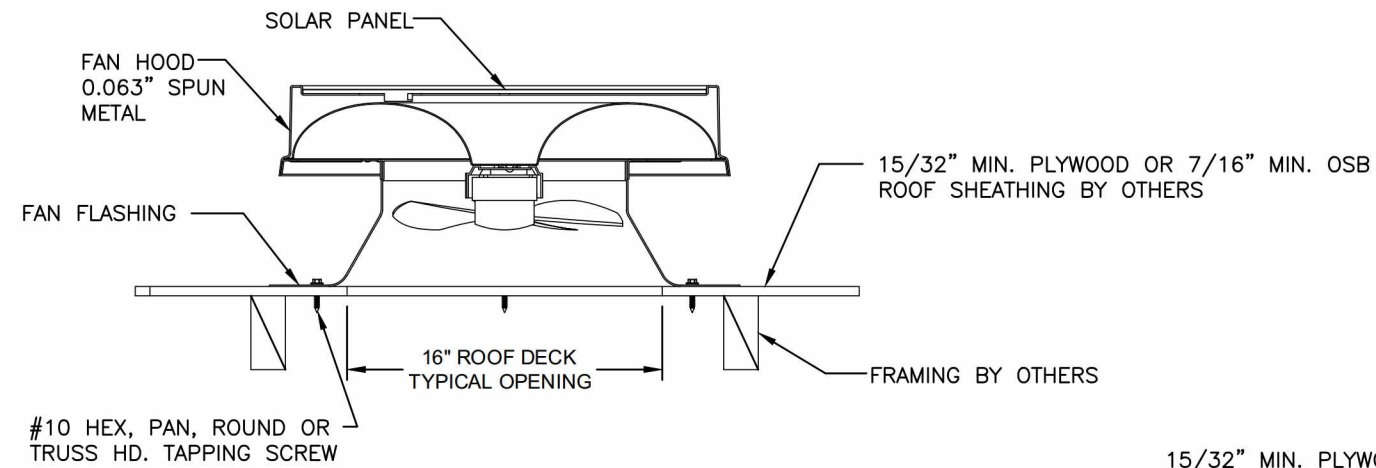
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| <b>SOLARO ENERGY, INC.</b><br>1404 ENTERPRISE ROAD<br>SOCORRO, NM. 87801 | TITLE: MODEL SOLARO AIRE-SOLAR ATTIC ROOF VENT<br>GENERAL AND INSTALLATION NOTES | DATE: 08/31/15<br>DRAWING NO: NL_0054<br>SHEET: 1 OF 4 | DRAWN BY: JM<br>SCALE: N.T.S.<br>REV: |
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ROBERT J. AMORUSO  
FL. P.E. NO. 49752

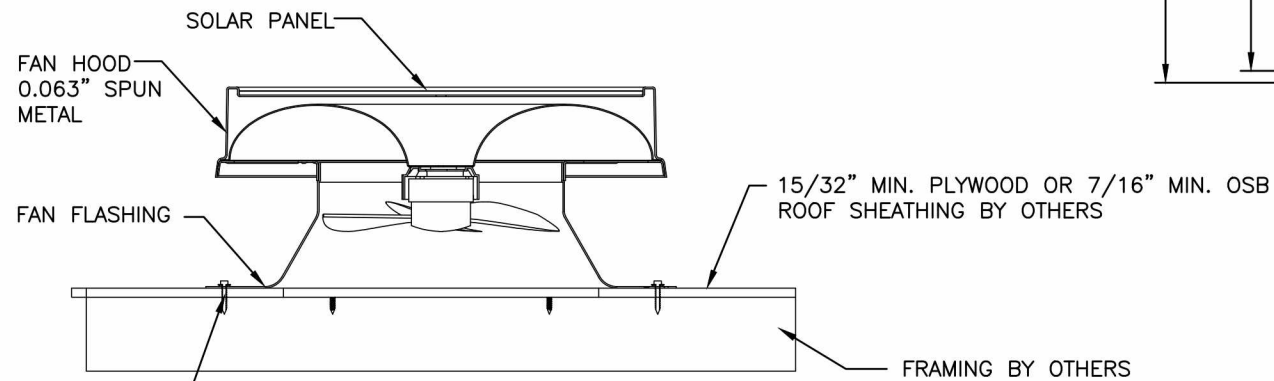
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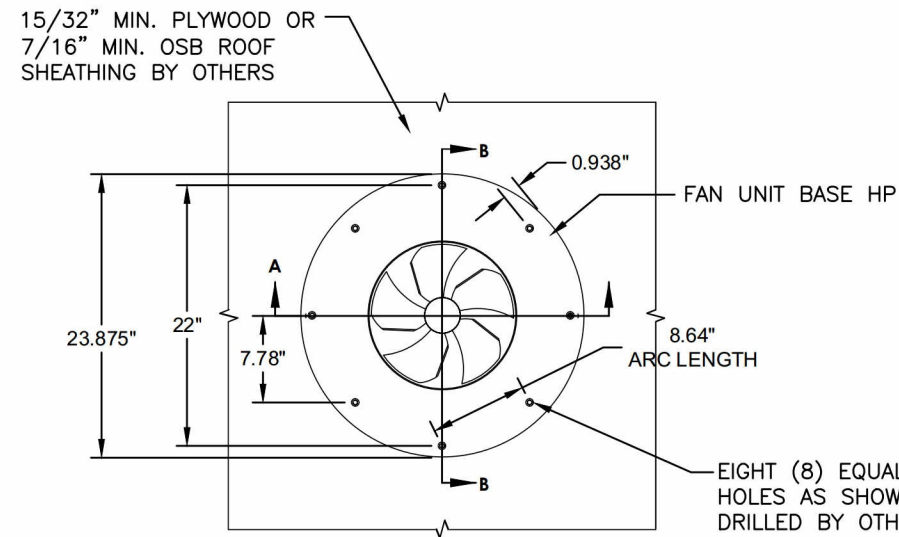
SECTION A-A-BASE UNIT ASSEMBLY  
HIGH PROFILE FRONT SECTION VIEW  
MODELS SA-20WB-HPE,  
SA-20WB-HPE-YE

#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



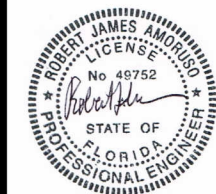
FAN BASE INSTALLATION  
TOP VIEW

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 |
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| <b>SOLARO ENERGY, INC.</b><br>1404 ENTERPRISE ROAD<br>SOCORRO, NM. 87801         |  | DATE: 08/31/15<br>DRAWING NO: NL_0054<br>SHEET: 2 OF 4 |
| TITLE: MODEL SOLARO AIRE-SOLAR ATTIC ROOF VENT<br>HIGH PROFILE ANCHORING DETAILS |  | DRAWN BY: JM<br>SCALE: N.T.S.<br>REV:                  |
| PREPARED BY:   |  |  |

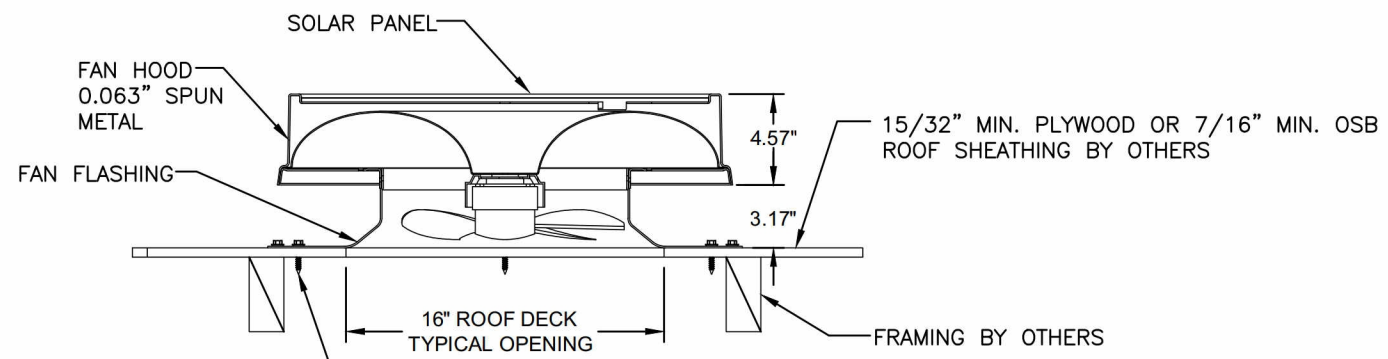
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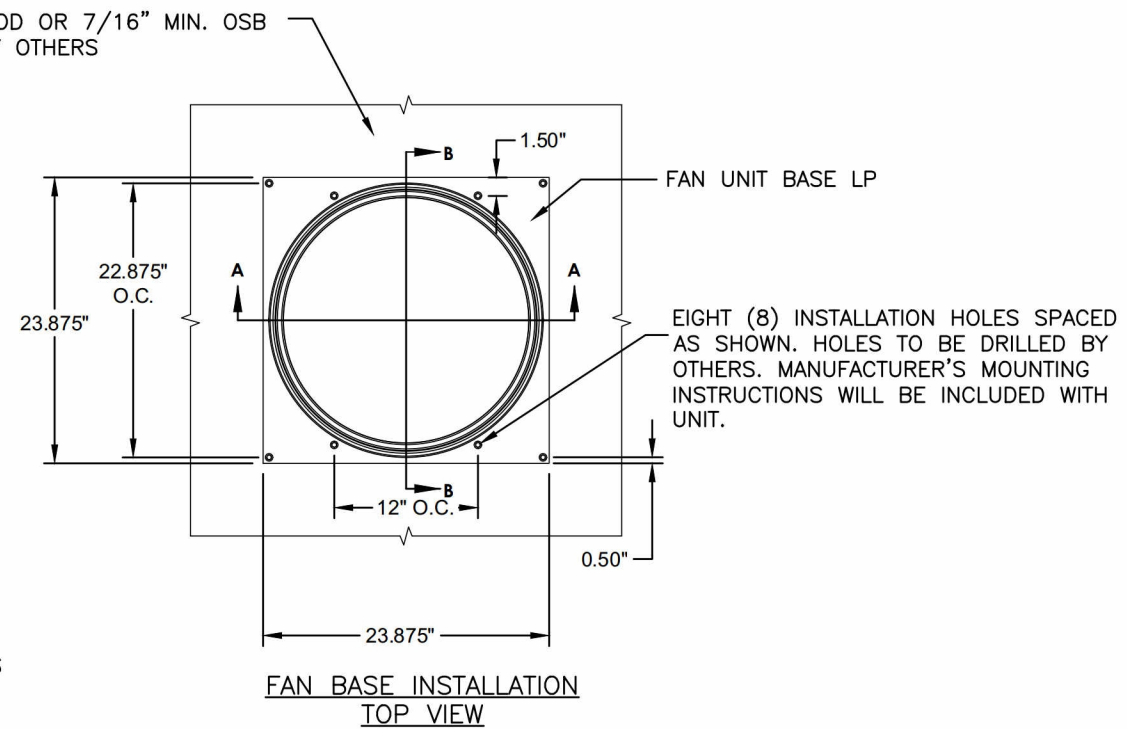




#10 HEX, PAN, ROUND OR TRUSS HD. TAPPING SCREW

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

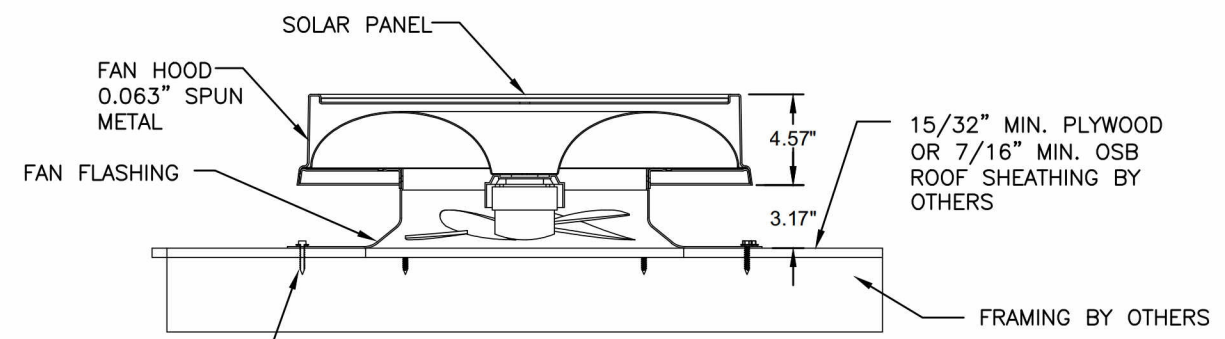
15/32" MIN. PLYWOOD OR 7/16" MIN. OSB ROOF SHEATHING BY OTHERS



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



#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

**SOLARO ENERGY, INC.**  
1404 ENTERPRISE ROAD  
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TITLE: MODEL SOLARO AIRE-SOLAR ATTIC ROOF VENT  
LOW PROFILE ANCHORING DETAILS

DATE: 08/31/15  
DRAWING NO: NL\_0054  
SHEET: 3 OF 4

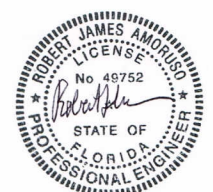
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SCALE: N.T.S.

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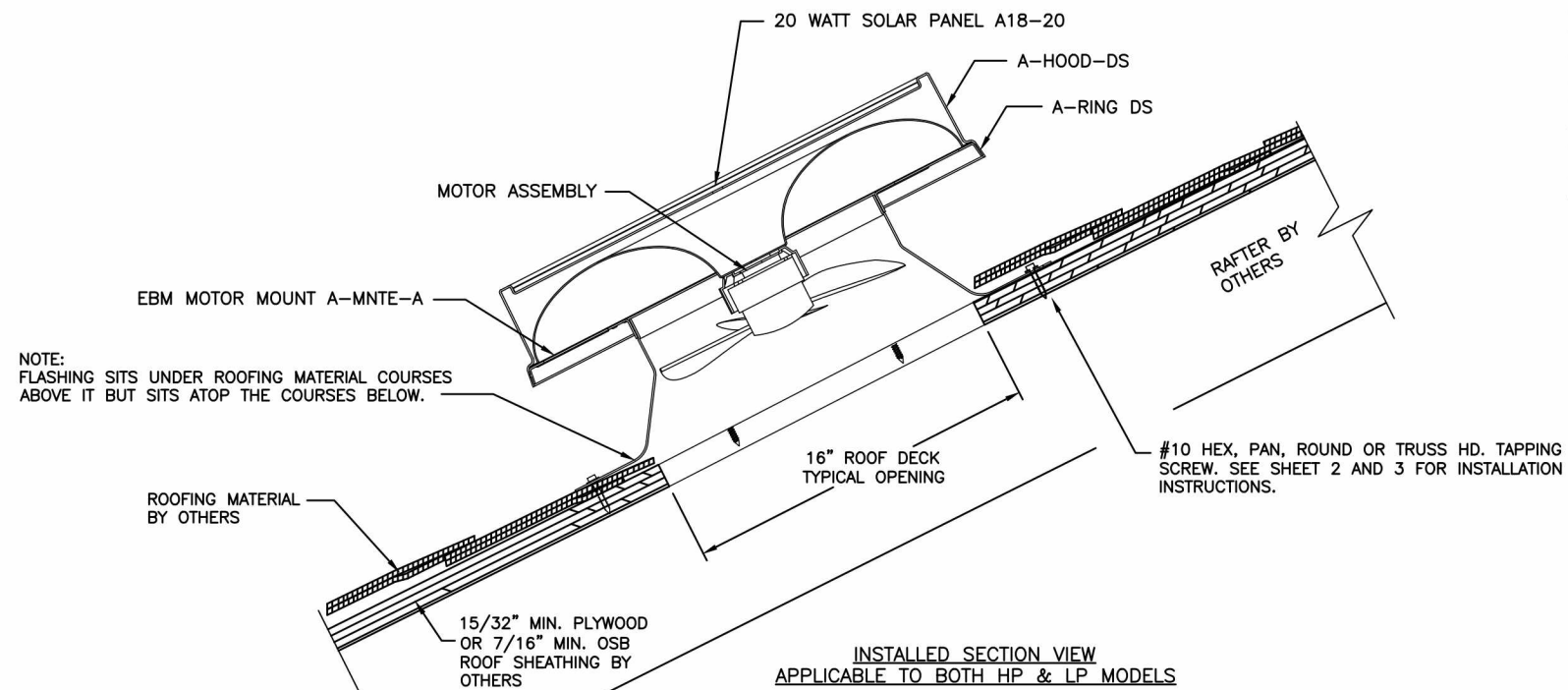
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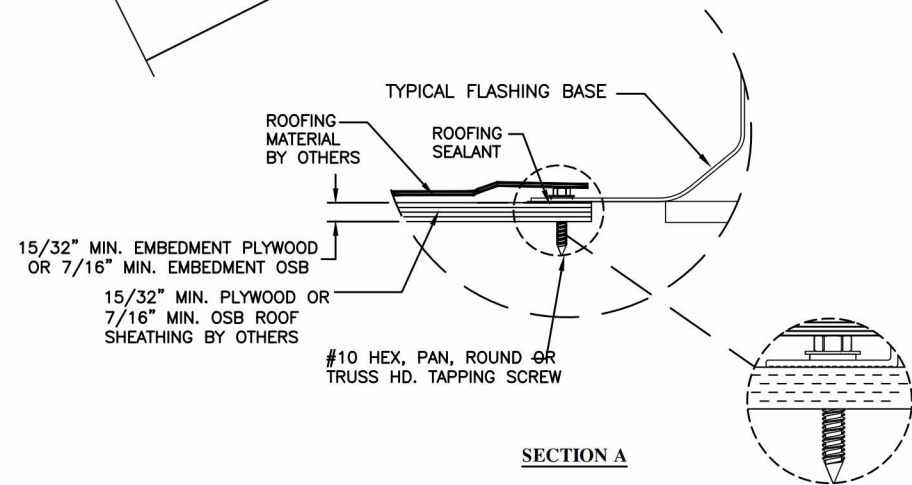
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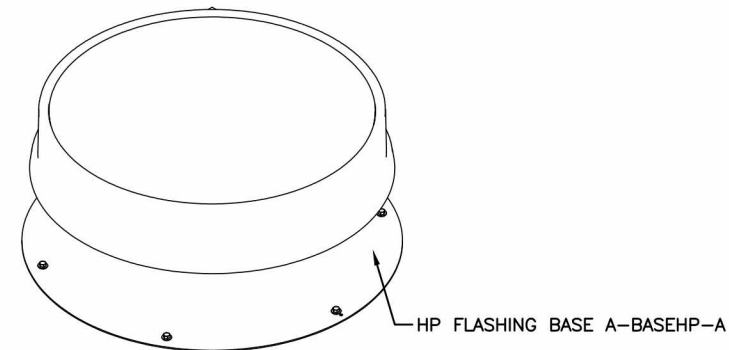
NOTE:  
FLASHING SITS UNDER ROOFING MATERIAL COURSES ABOVE IT BUT SITS ATOP THE COURSES BELOW.

INSTALLED SECTION VIEW  
APPLICABLE TO BOTH HP & LP MODELS

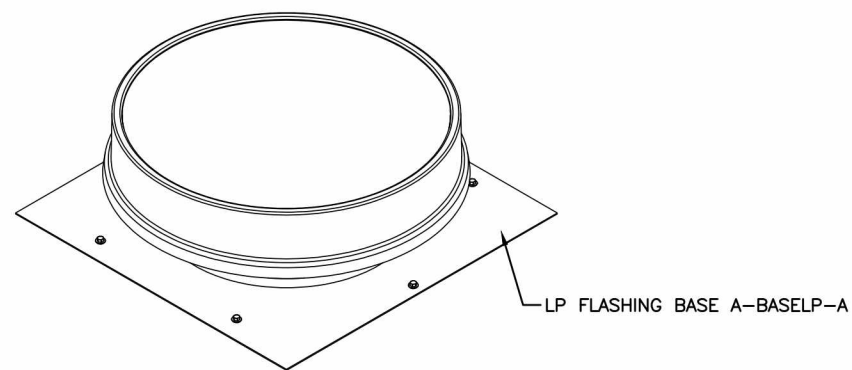


SECTION A

| 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   |



FAN BASE ISO FOR PARTS IDENTIFICATION  
HIGH PROFILE FRONT SECTION VIEW



FAN BASE ISO FOR PARTS IDENTIFICATION  
LOW PROFILE FRONT SECTION VIEW

| REV | DESCRIPTION | DATE | BY |
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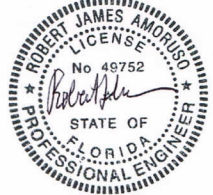
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DATE: 08/31/15  
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