

SDE



BALLASTED ROOF SYSTEM



| APPLICATION | FLAT ROOF | | |
|--------------------|-----------------------------|----------------------------|--------------------------------|
| Tilt Angle | 7 Degrees | Ballast Calculations & BOM | Available upon request |
| Module Orientation | Landscape | Wire Management | Available |
| Wind Load | 150 MPH | Foundation | Non Penetrating or Penetrating |
| Roof Load | Site Specific Data (3-5PSF) | Material | Aluminum or HS G90 Steel |
| Grounding | Integrated N/S & E/W UL | Manufacturing | Made in Michigan, USA |

HIGHLIGHT: All structural components are fabricated from 5052-H32 Aluminum or "Prime" 11 Gage (.115-.125) Grade 50 (G-90) Chem Treated USA Steel. All material certifications available upon request.

4 Main Components For Easy Installation

1. NORTH PAN

Designed to reduce footprint (Ballast under module)

2. SOUTH PAN

Designed to reduce footprint (Ballast under module)

3. MID PAN

Lightweight Mounting base

4. BALLAST BLOCK BARS

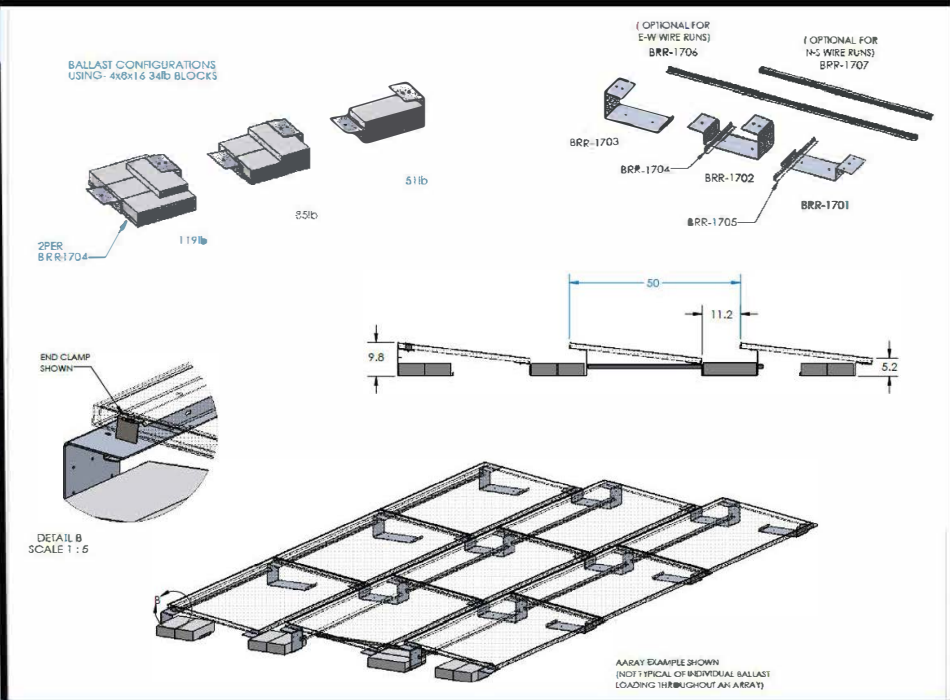
2Block & 3Block "no Installation effort – PM Tabs"

Optional Components

North/South Wireways

East/West Wireways

Wind Deflectors to lower PSF (If needed)



All items are packaged in kits ready for installation

AK Solar UL-467 SS MID CLAMP KIT

- 5/16-18 x 2 ¼ SS HEX CAP BOLT
- 5/16 SS SPLIT LOCK WASHER

AK Solar UL-467 SS END CLAMP KIT

- 5/16-18 x 2 ¼ SS HEX CAP BOLT
- 5/16 SS SPLIT LOCK WASHER



HIGHLIGHT: This system was designed to support rapid installation. Two stamped Stainless Steel 5/16-18 Clinch Nuts allow the installers to quickly assemble the AK clamp kits to the Ballast Pans.



Safety Information



IMPORTANT

It is highly recommended that system installation and any subsequent modifications, disassembly, or reassembly be conducted by a factory authorized representative. Contact SDE for additional information.



CAUTION: WATCH FOR WIRES!

Extreme caution should be taken when installing near power lines. For your own personal protection, the following safety steps should be taken:

- Perform as many functions as possible on the ground.
- Watch out for overhead power lines. Check the distance to the power lines before starting installation.
- Recommended minimum distance of 6 meters (20 feet) from all power lines.
- Do not use metal ladders.
- Do not install assembly on a windy day.
- If assembly slips, move away from it and let it fall.
- If any part of the assembly comes in contact with a power line, call your local power company. DO NOT TRY TO REMOVE IT YOURSELF! They will remove it safely.
- Make sure that the assembly is properly grounded.



WARNING

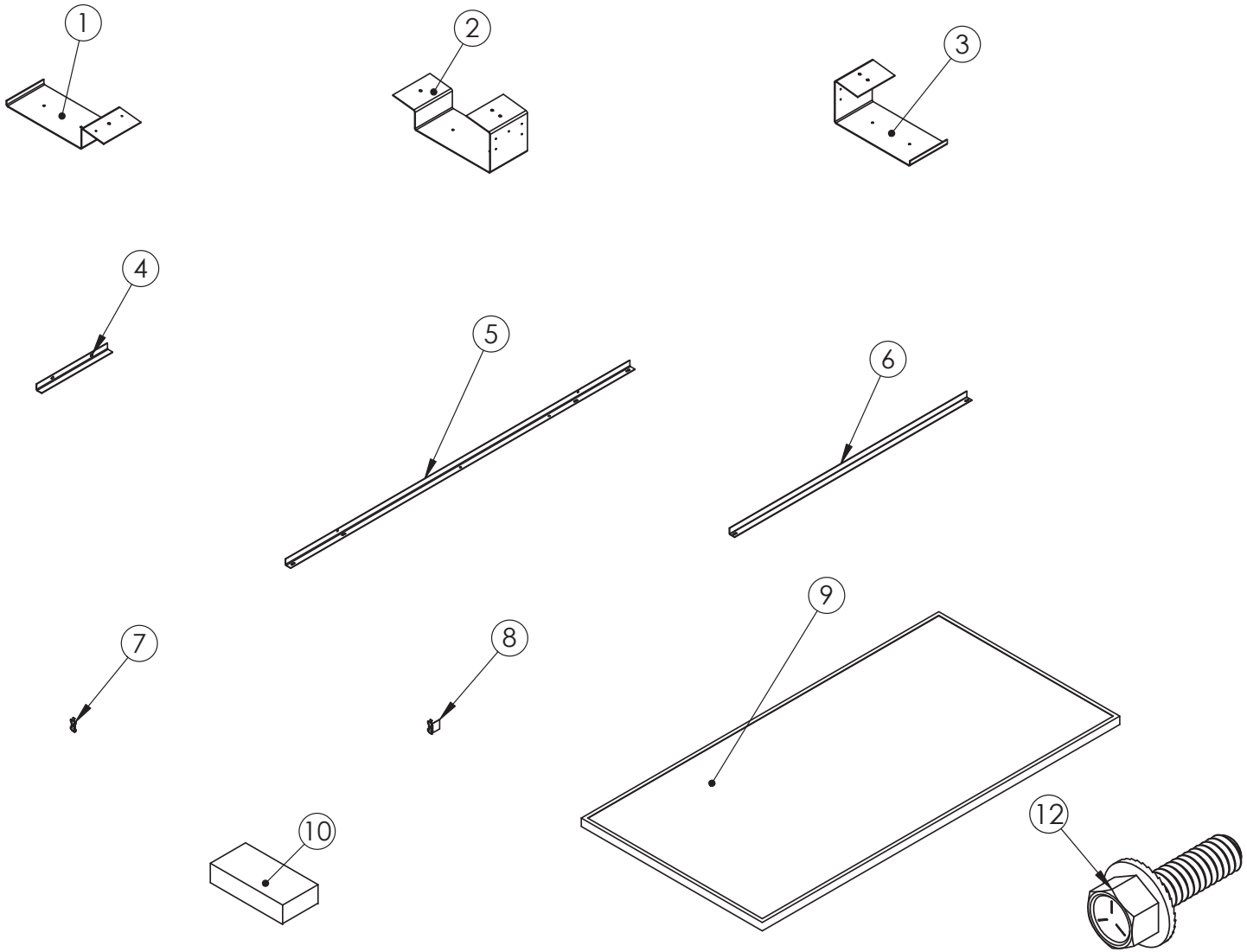
Assembling on windy days can be dangerous. Additional precautions should be taken when assembling in high wind areas. The modules surface, even in slight winds, create strong forces. Be prepared to safely handle these forces at unexpected moments. Do not attempt to assemble, move or mount assembly on windy days or serious, even fatal accidents may occur.

SDE is not responsible or liable for damage or injury resulting from antenna installations.



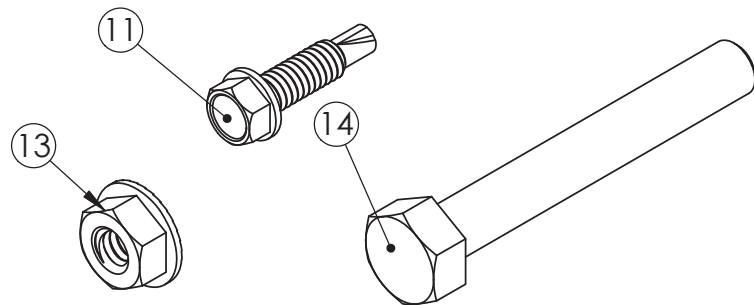
WARNING

Units improperly installed or installed to an inadequate structure can be susceptible to wind damage. This damage can be very serious and even life threatening. The owner and installer assumes full responsibility that the installation is structurally sound to support all loads (weight, wind and ice) and properly sealed against leaks. SDE will not accept liability for any damage caused due to the many unknown variable applications.



NOTE:
QTY TO BE DETERMINED AT TIME OF SALES, 9 MODULE
SYSTEM SHOWN FOR REFERENCE

| ITEM NO. | DESCRIPTION |
|----------|--------------------------|
| 1 | SOUTH BRACKET |
| 2 | MID BRACKET |
| 3 | NORTH BRACKET |
| 4 | BALLAST ADDER BAR |
| 5 | EAST-WEST WIRE CHANNEL |
| 6 | NORTH-SOUTH WIRE CHANNEL |
| 7 | MID CLAMP |
| 8 | END CLAMP |
| 9 | 335W SOLAR MODULE |
| 10 | 36LB BALLAST BLOCK |



| ITEM NO. | DESCRIPTION |
|----------|--------------------------------------|
| 11 | 12-24 X .75 SELF TAPPING SCREW |
| 12 | 5/16-18 X 2.25 SERRATED FLANGED BOLT |
| 13 | 1/4-20 FLANGED NUT |
| 14 | 1/4-20 X 2.25 HEX HEAD BOLT |

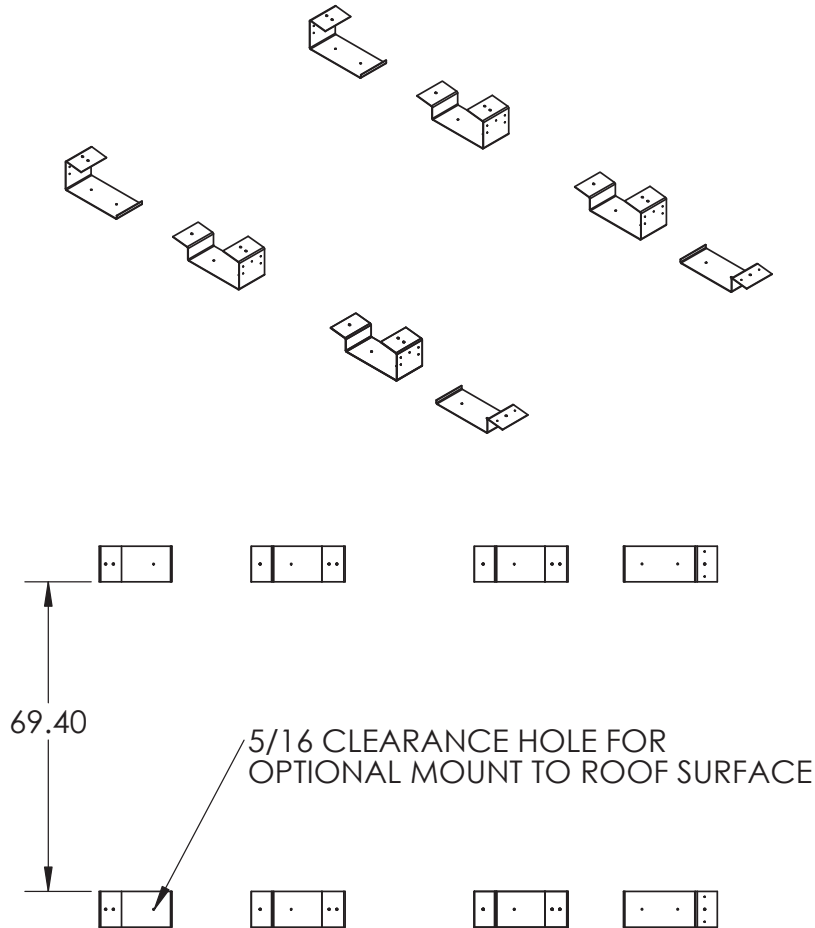
1.0 System Set-up Procedure



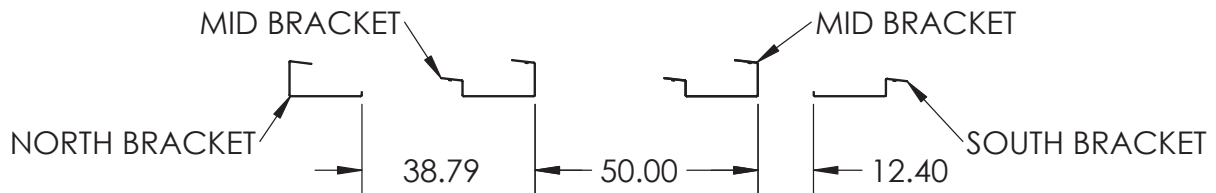
Warning: Extreme care must be taken for this setup procedure to avoid bodily injury and/or equipment damage.

1.1.0 Foundation

Brackets are laid out in the approximate layout shown below per 3 module section shown as an example. Refer to the sales documentation to determine the proposed layout.



APPROXIMATE LAYOUT FOR A 3 MODULE ROW



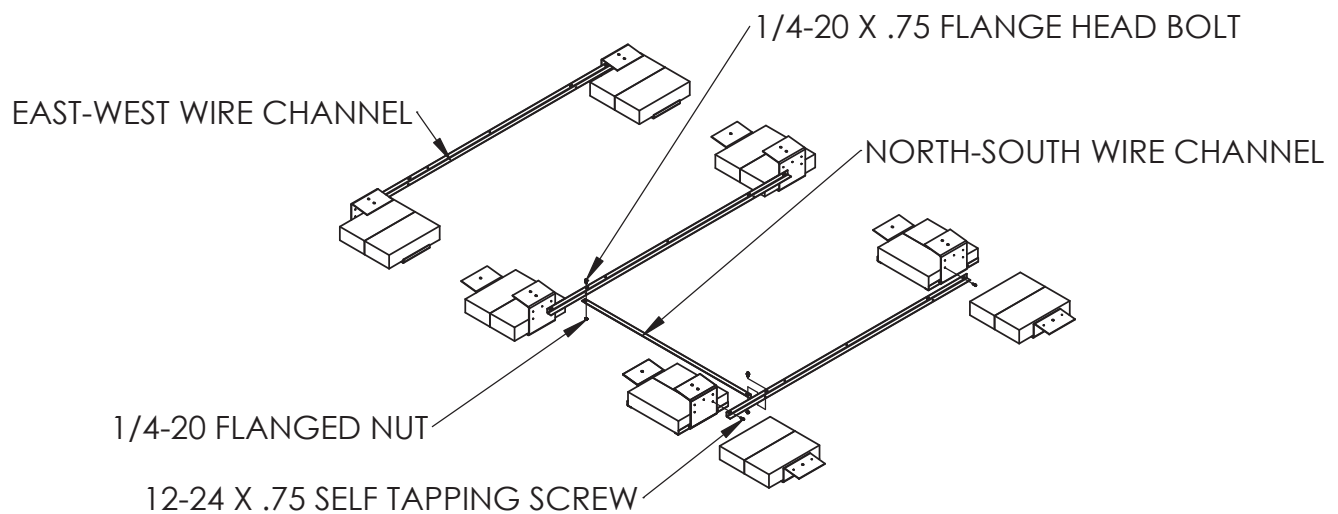
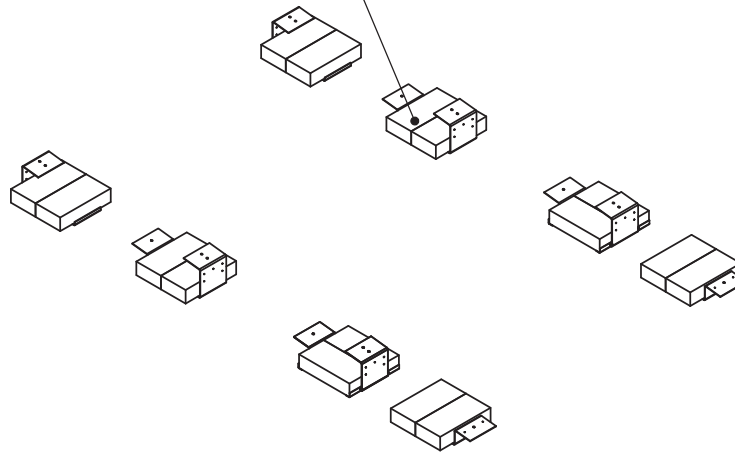
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1.1.1 Adding Ballast Blocks

34 lb BALLAST BLOCKS ARE ADDED TO SECURE BRACKETS. SEE SALES MATERIAL TO DETERMINE PROPER WEIGHT REQUIREMENTS.



1.0 System Set-up Procedure



1.3 MODULE INSTALL

Tighten the hex bolts into the clamps to secure panels. The mid clamps will secure two module sides at the same time. Only one side shown below.

