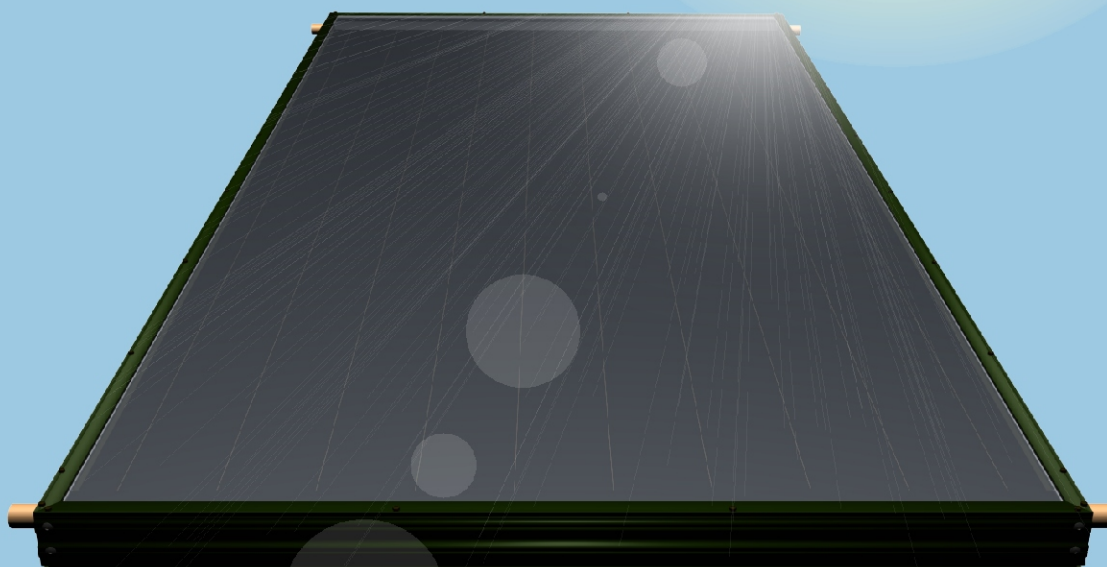




EagleSun™ Collector Series

with exclusive - selective
“Crystal Clear” inside

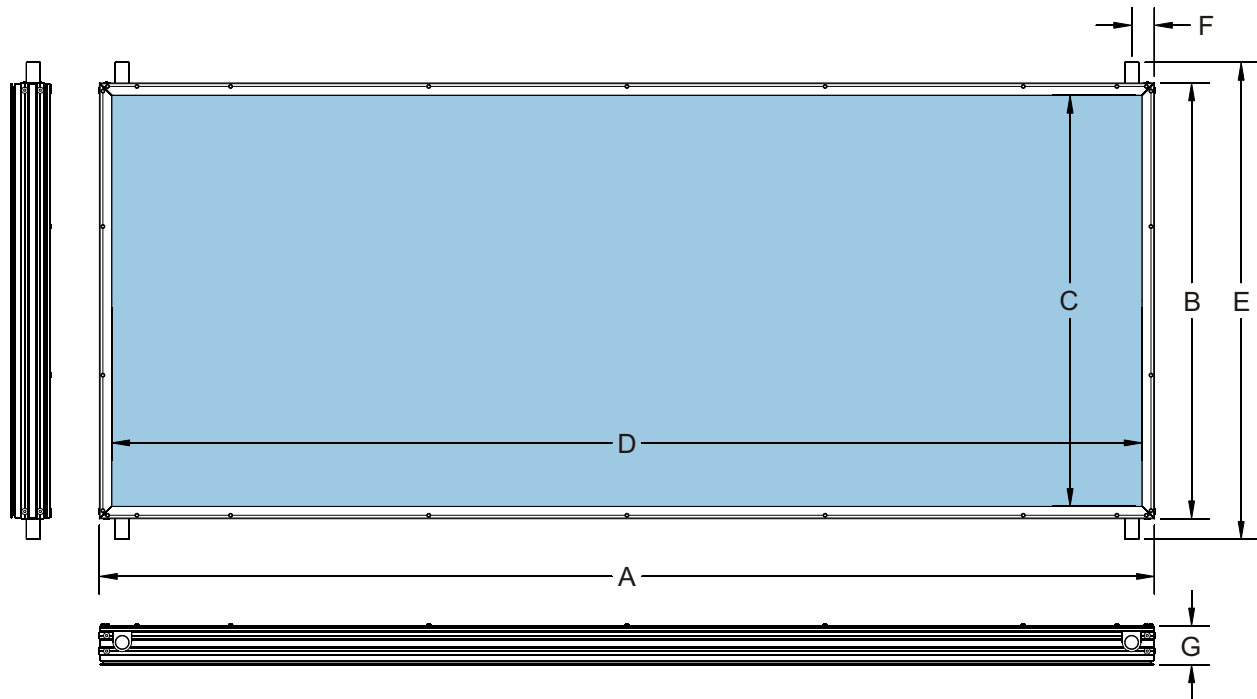


EagleSun™ collectors are designed to meet the needs of any system from 30 to 50,000 gallons with hot water, space heating, air conditioning and industrial process heat. Featuring **Thermafin™** absorbers, **EagleSun™** collectors are factory assembled from the finest materials and with the highest standards of craftsmanship. “Quick-Lock” mounting hardware makes installation easy, and the attractive design is an asset to any building. **EagleSun™** collectors are designed to provide at least 30 years of dependable service with proper maintenance, and are fully warranted for ten years.



ALTERNATE ENERGY TECHNOLOGIES, LLC

DIMENSIONAL DATA



H = Gross Frontal Area (ft²)
 I = Transparent Frontal Area (ft²)
 J = Absorber Plate Area (ft²)

Eagle Sun™ Collectors - Mechanical Specifications

SPEC	AE-21	AE-24	AE-26	AE-28	AE-32	AE-40
A	85.188	97.188	77.188	85.188	97.188	121.188
B	35.188	35.188	47.188	47.188	47.188	47.188
C	33.192	33.192	45.192	45.192	45.192	45.192
D	83.192	95.192	75.192	83.192	95.192	119.192
E	38.500	38.500	50.500	50.500	50.500	50.500
F	1.281	1.281	1.281	1.281	1.281	1.281
G	3.137	3.137	3.137	3.137	3.137	3.137
H	20.8 ft ²	23.7 ft ²	25.3 ft ²	27.9 ft ²	31.8 ft ²	39.7 ft ²
I	19.2 ft ²	21.9 ft ²	23.6 ft ²	26.1 ft ²	29.9 ft ²	37.4 ft ²
J	19 ft ²	21.8 ft ²	23.2 ft ²	25.7 ft ²	29.5 ft ²	36.9 ft ²
WEIGHT	74 lbs	84 lbs	90 lbs	99 lbs	113 lbs	153 lbs
FLUID CAPACITY	0.70 gals	0.76 gals	0.90 gals	0.96 gals	1.05 gals	1.22 gals

SPECIFICATIONS

Collector Frame and Battens:

Type 6063-T6 extruded aluminum frame and battens with architectural bronze powder-coat finish.

Backsheet:

Type 3105-H14, 0.019" stucco embossed aluminum sheet (bronze) pop-rieveted to aluminum frame.

Corner Bracket:

Architectural aluminum angles inside with aircraft-grade pin grip rivets to insure high stability.

Insulation:

Polyisocyanurate foam board insulation. Foil-faced, glass fiber-reinforced, rigid board Thermax sheathing (1-1/4" in the bed / 3/4" in the sidewalls).

Absorber Plate:

Manufactured by Thermafin™ Mfg., a 100% copper absorber plate, high frequency forge welded to create a crystalline homogenous connection between the fin and riser tube.

Absorber Coating:

Exclusively by Thermafin™ Manufacturing
Selective Crystal Clear Coating $\alpha \approx 0.96$ $\epsilon \approx 0.08$

Glazing:

Low-Iron Tempered Glass exclusively using our new "High-T" tempered glass with a total solar energy transmission of 90%.

Gasket, Grommets:

A UV durable EPDM, U-channel gasket with molded corners which prohibits water penetration and assures long life. Extruded Silicone Grommet, 1-1/8" Bore

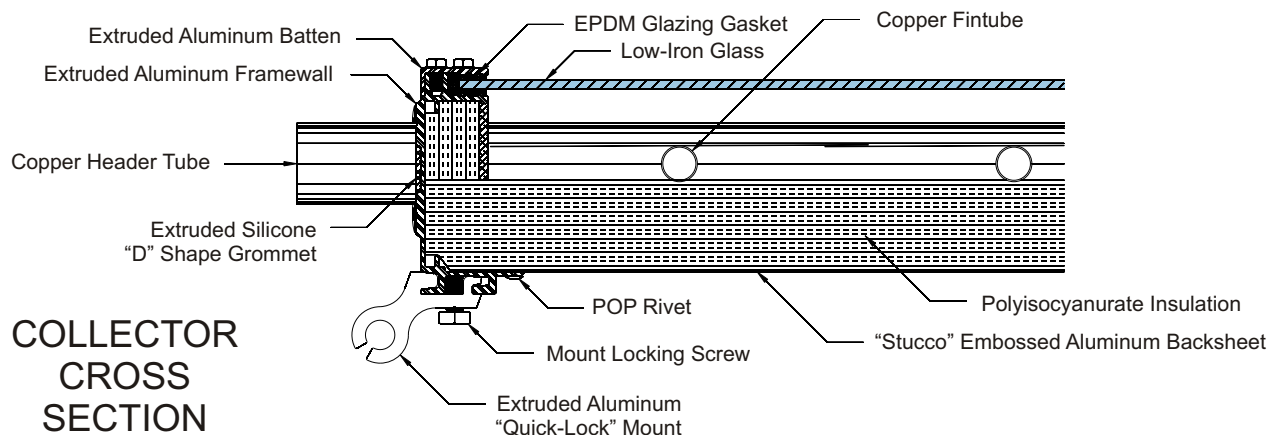
Fasteners:

5056 Aluminum Rivets secure the backsheet. Batten screws are 18-8 SS, 10-24 x 3/8", Hex head screws black oxide coated.

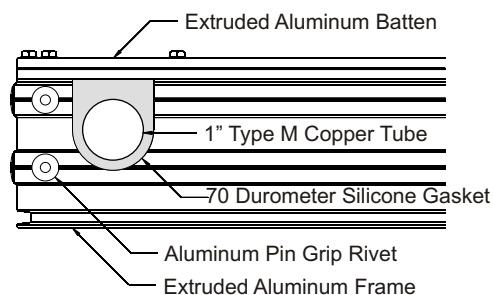
Working Pressure: 165 PSI

Flow Rate: 0.5 to 1.8 GPM (recommended)

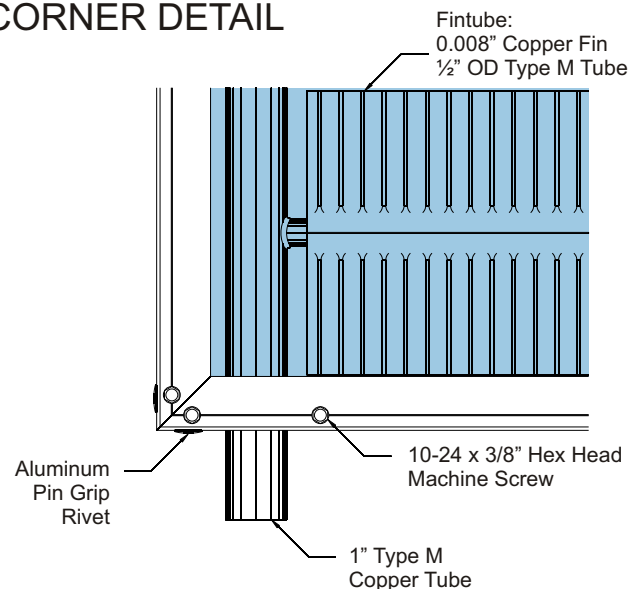
Warranty: 10 Year Full **Design Life:** 30 Years

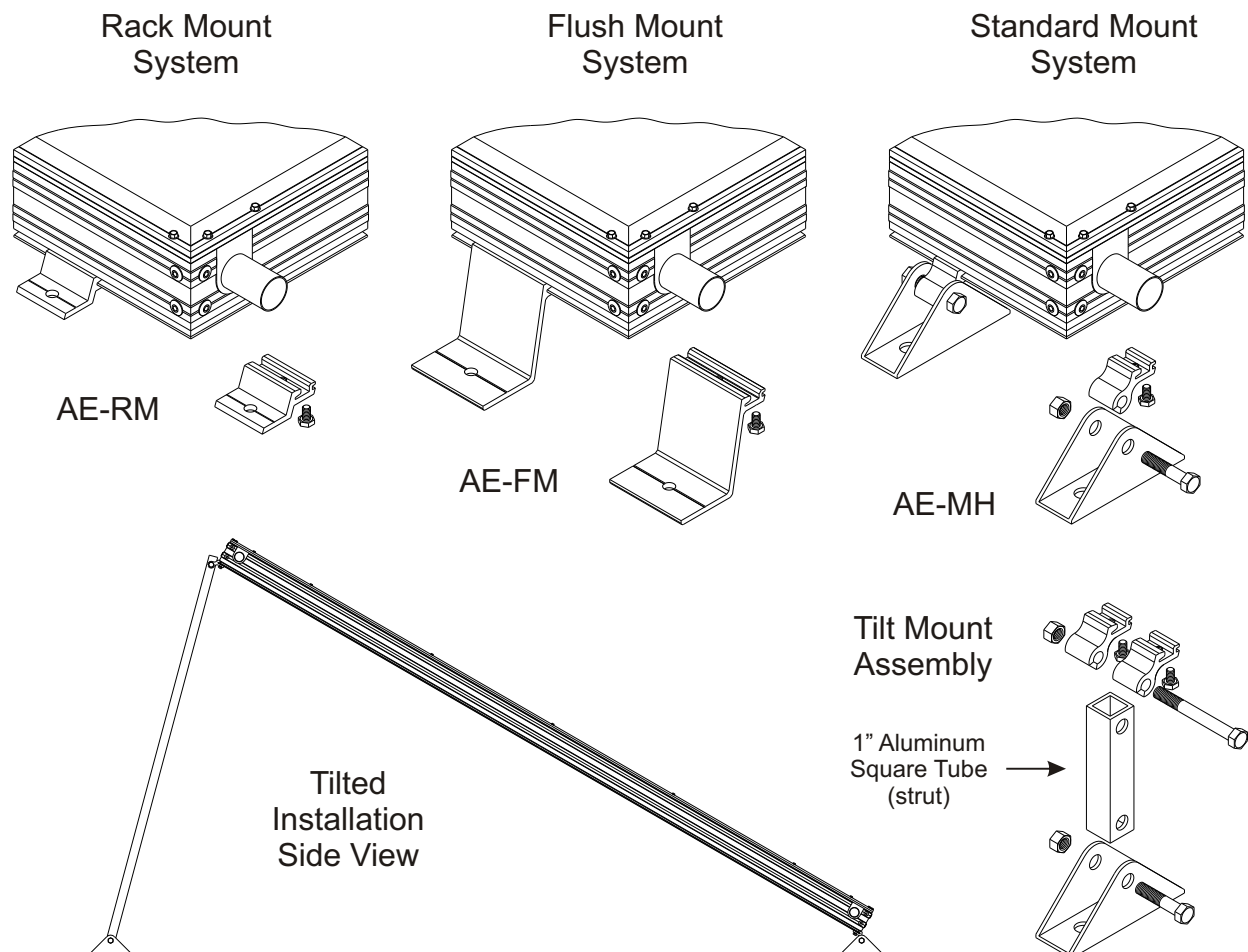


MANIFOLD OUTLET



CORNER DETAIL





AET's exclusive "Quick-Lock" mounting systems allow for virtually any collector orientation and mounting. Collectors can be mounted to any roof, vertical wall, fascia boards, pre-constructed racks or ground mount systems. The framewall and mount have been certified to withstand 180 mph winds. The framewall will accept the mounts anywhere around the collector without drilling or tapping so the integrity of the framewall is not violated. The rear struts can be cut to any length allowing proper elevation and orientation.

CODE APPROVAL

Eagle Sun™ Solar Collectors have been designed and constructed to meet the major applicable nationwide codes, including the following:

- Solar Rating and Certification Corporation
SRCC Standard 100 - *Test Methods and Minimum Standards for Certifying Solar Collectors (ASHRAE Std 93 -1986)*
- Florida Solar Energy Center
- *Test Methods and Minimum Standards for Solar Collectors (ASHRAE Std 93 - 1986)*
- Miami Testing Laboratory
Wind Load Test (ASTM 3300)
Certification No. 94-1028.01



International Testing

- Bodycote Materials Testing Canada Inc.
Report No. 02-08-0513
- TÜV Bayern Sachsen e.V. (DIN 4757)
Report No. 28600399
- Bundesforschungs - und Prüfzentrum Arsenal
ÖNORM M 7714 - Order No. M 4 015

