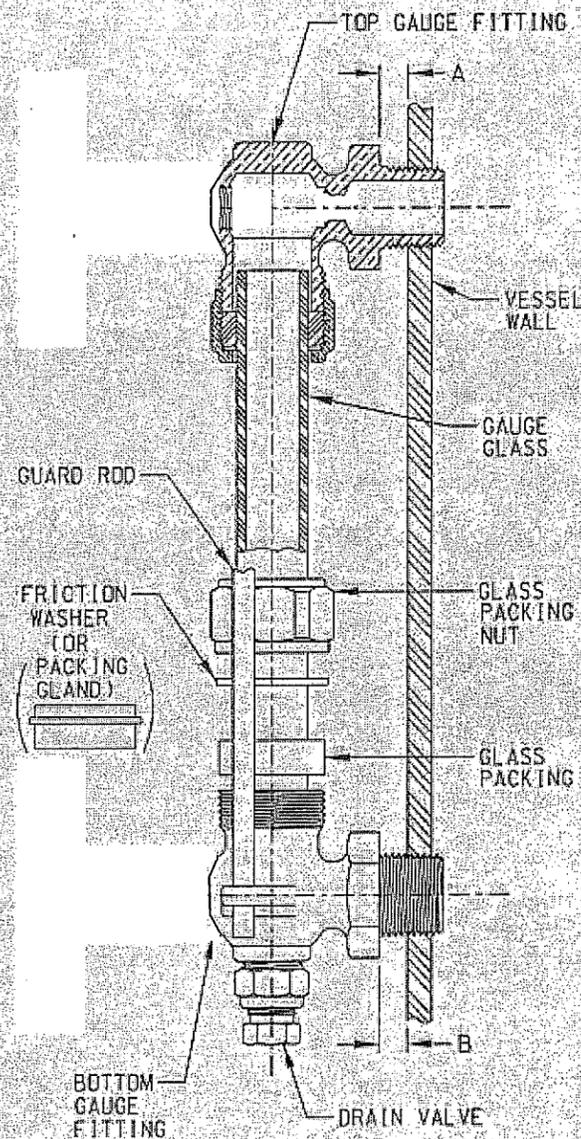


WATER GAUGE & GAUGE GLASS INSTALLATION INSTRUCTIONS

INSTALLATION

Only properly trained personnel should install and maintain water gauge glass and connections. Remember to wear safety gloves and glasses during installation. Before installing, make sure all parts are free of chips and debris.

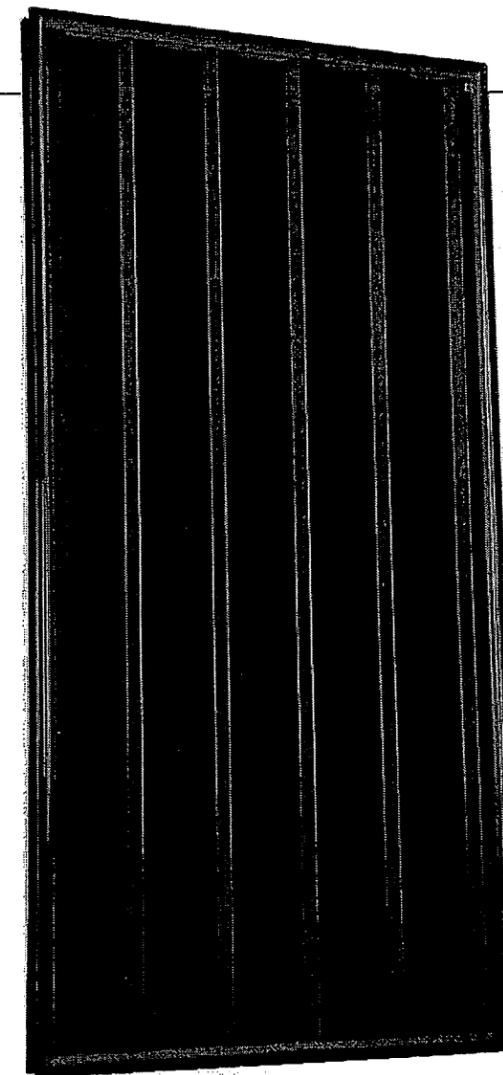
1. Apply Teflon tape or pipe dope to pipe threads. Install top gauge fitting (fitting without a drain valve) into the uppermost tapping. Wrench tighten the fitting until it is snug and the glass outlet is pointing at five o'clock (about 1/8 turn from its final downward vertical position).
2. Install the bottom gauge fitting (the fitting with a drain valve) until it is snug and the glass outlet is pointing directly upward. Verify top and bottom fittings are threaded into the tappings the same number of turns (distance A = distance B).
3. Remove glass packing nut, friction washer (or packing gland, depending upon the model), and glass packing from the fittings, and place them, in same order, on to both ends of the gauge glass. Push both packings about an inch up the gauge glass.
4. Gently insert one end of the glass into the top gauge fitting. Keeping the glass inside the top fitting, gently rotate the top gauge fitting clockwise until vertically aligned with the bottom gauge fitting, then insert glass into bottom fitting until glass bottoms out on the shoulder inside the bottom fitting.
5. Carefully raise glass about 1/16" and slide lower glass packing down until the glass packing contacts the lower gauge fitting. **DO NOT** allow the glass to remain in contact with any metal!
6. Carefully slide upper glass packing up as far as possible.
7. Hand tighten both glass packing nuts, then tighten 1/2 turn more by wrench. Tighten only enough to prevent leakage. **DO NOT OVERTIGHTEN!** If any leakage should occur, tighten slightly, a quarter turn at a time, checking for leakage after each turn.



WARNING: California law requires that this warning be given to the consumer. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

I-5334-00 Rev.D

SOLARSHEAT 1500GS

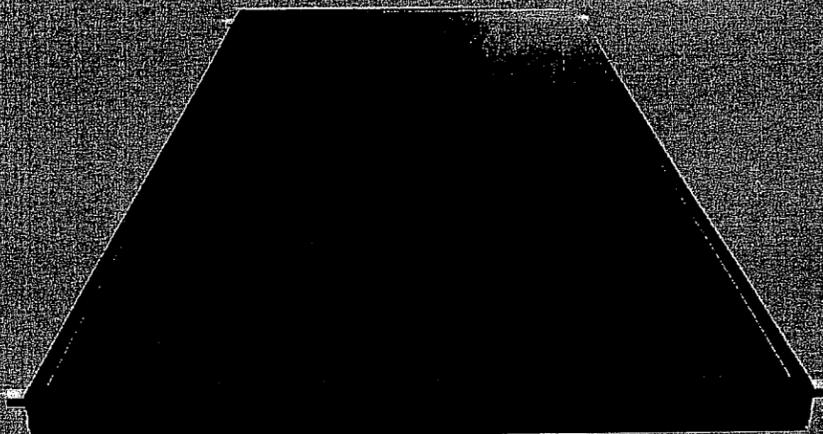
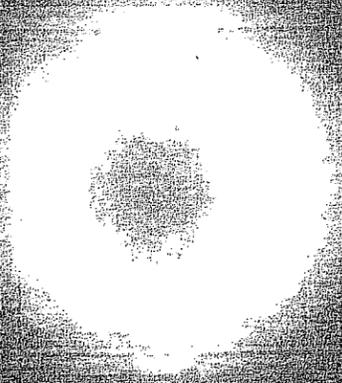


PART NO.	SH1500-GS
ENERGY RATING/DAY	8 MJ (SRCC Rating: mildly cloudy day, category C)
BTU/DAY	8 kBtu
DIMENSIONS	87" X 43.15" X 3.8" 221 cm x 109.6 cm x 9.7 cm
GROSS AREA	26 ft ² or 2.4 m ²
WEIGHT	82 lbs / 37.2 kg
COLOUR	Black
TYPE	Modular solar air collector
MATERIAL	Aluminum extrusion
GLAZED	Yes, tempered glass
THERMAL INSULATION	Polyisocyanurate
FLOW RATE	75 CFM (nominal)
CO₂ REDUCTION	35 tonne per year
TEMP	120°F (49°C)
MOUNTING	Wall or roof
MANUFACTURED IN	Canada
WARRANTY	5 yrs. on collector 1 yr. on electronics
MANUFACTURER	Your Solar Home Inc.

System Name	1500 GS	1502 GS	1504 GS	1506 GS	1508 GS	1510 GS
Floor Space (sq. ft.)	500-1000	1000-2000	2000-3000	3000-4000	4000-5000	5000-6000
No. of 1500GS units (quantity)	1	2	4	6	8	10



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 Thermatin™ 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.

G2Power Technologies, Inc

WATER GAUGE GLASS

NOTICE:

READ ALL WARNINGS AND INSTRUCTIONS BEFORE PERFORMING INSTALLATION OR MAINTENANCE.

WARNING!

SAFETY GLASSES AND GLOVES SHOULD BE WORN AT ALL TIMES WHEN WORKING WITH OR EXAMINING WATER GAUGE GLASS AND CONNECTIONS.

IMPROPER INSTALLATION OR MAINTENANCE OF GAUGE GLASS AND CONNECTIONS CAN CAUSE IMMEDIATE OR DELAYED BREAKAGE RESULTING IN BODILY INJURY AND/OR PROPERTY DAMAGE.

USE AND CARE

DO NOT's

- DO NOT use the glass if it contains any scratches, chips, or any other visible signs of damage.
- DO NOT reuse any tubular glass or glass packings.
- DO NOT subject gauge glass to bending or torsional stresses.
- DO NOT over tighten glass packing nuts.
- DO NOT allow glass to touch any metal parts.
- DO NOT exceed the recommended pressure of the gauge or gauge glass.
- DO NOT clean the gauge or gauge glass while pressurized or in operation.



CONBRACO INDUSTRIES, INC.
P.O. BOX 247
MATTHEWS, NORTH CAROLINA 28106
MADE IN U.S.A.

WATER GAUGE GLASS

DO's

- DO verify proper gauge has been supplied.
- DO examine gauge glass and packings carefully for damage before installation.
- DO install protective guards and utilize automatic ball checks where necessary to help prevent injury in case of glass breakage.
- DO inspect the gauge glass daily, keep maintenance records, and conduct routine replacements.
- DO protect glass from sudden changes in temperatures such as drafts, water spray, etc.

MAINTENANCE

Examine the gauge glass regularly for any signs of clouding, scratching, erosion, or corrosion. The glass should be inspected daily until the need for replacement becomes apparent. This will help establish the routine inspection and routine replacement schedules.

CLEANING

Use commercial non-abrasive glass cleaners to keep the glass clean. Use diluted acids such as Hydrochloric (muriatic) acid when regular cleaners do not seem to work. Do not use wire brushes or any other abrasive materials which could scratch the glass.

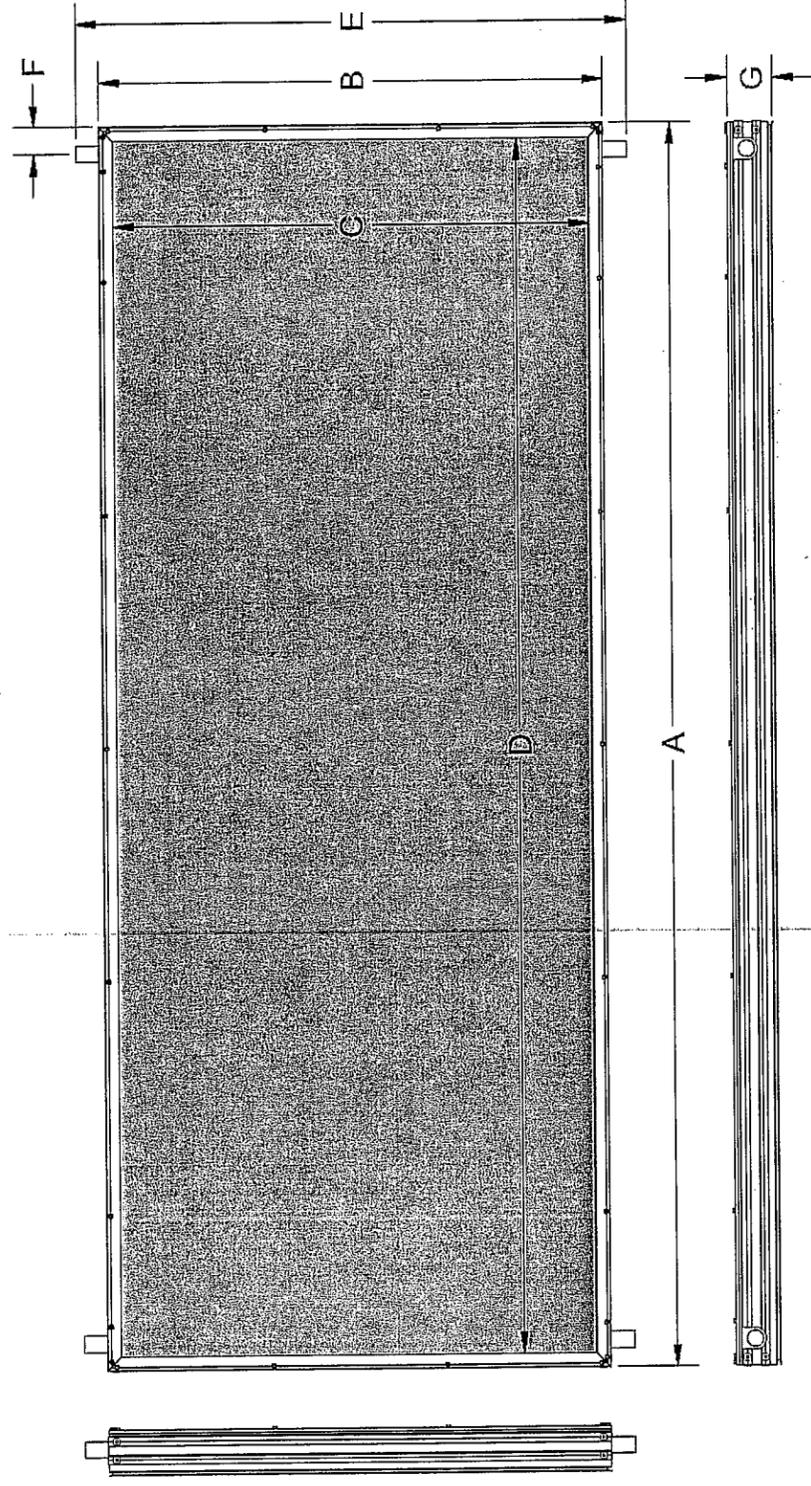
INSPECTION

Examine the surface of the glass for scratches, corrosion, chips, cracks, surface flaws, or nicks. To do this, shine a very bright concentrated light at an angle of about 45 degrees. A defective glass will glisten as the light strikes imperfections. Glass which appears cloudy or roughened, and will not respond to cleaning, should be replaced.

STORING

Keep gauge glass in original packaging until ready to install.

DIMENSIONAL DATA



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

Eagle Sun™ Collectors - Mechanical Specifications

SPEC	AE-32
A	97.188
B	47.188
C	45.192
D	95.192
E	50.500
F	1.281
G	3.137
H	31.8 ft ²
I	29.9 ft ²
J	29.5 ft ²
WEIGHT	1113 lbs
FLUID CAPACITY	1.05 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-rievted 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

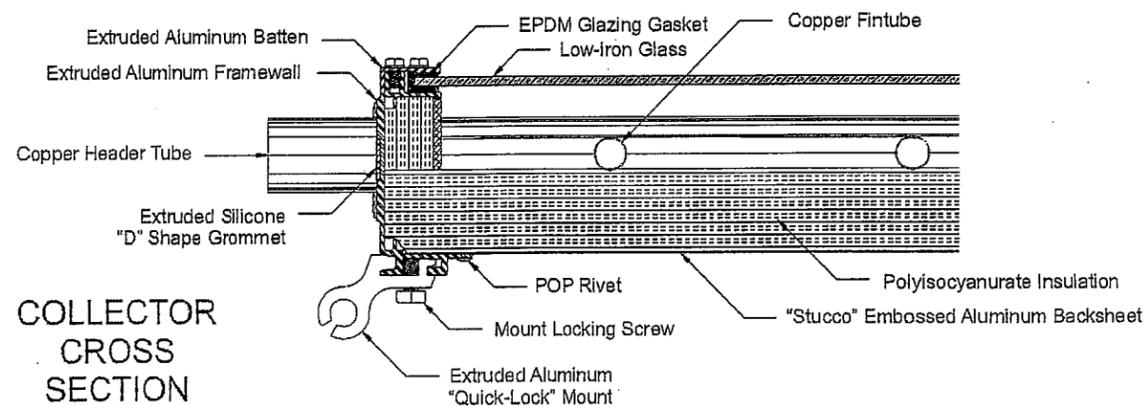
Fasteners:

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

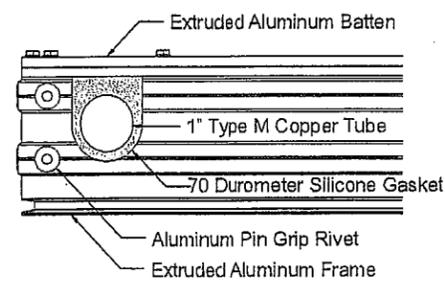
Working Pressure: 165 PSI

Flow Rate: 0.5 to 1.8 GPM (recommended)

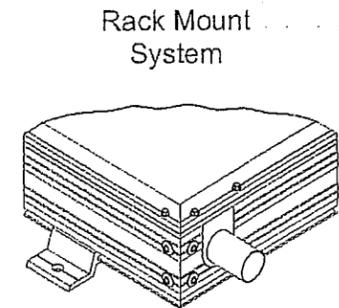
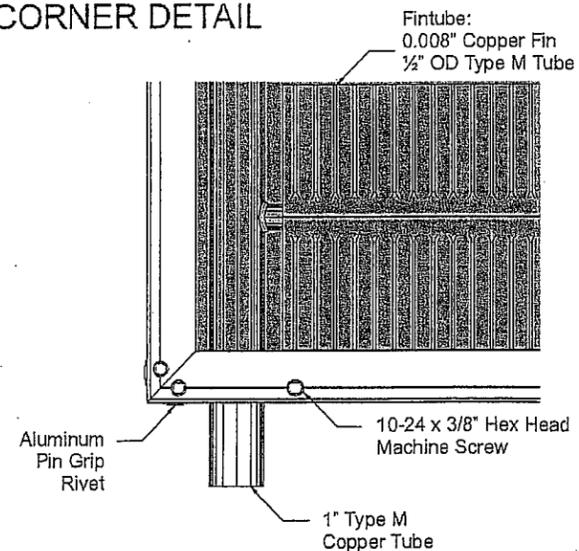
Warranty: 10 Year Full Design Life: 30 Years



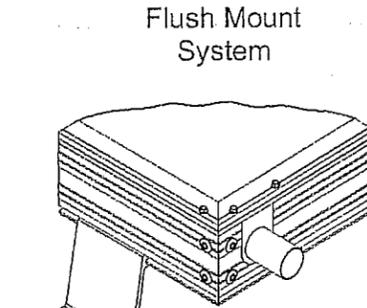
MANIFOLD OUTLET



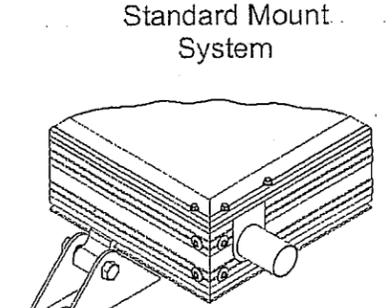
CORNER DETAIL



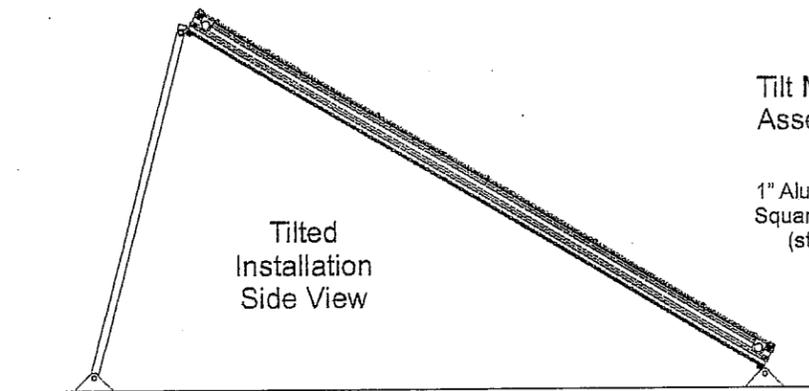
AE-RM



AE-FM



AE-MH



Tilt Mount Assembly

1" Aluminum Square Tube (strut)

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:

International Testing

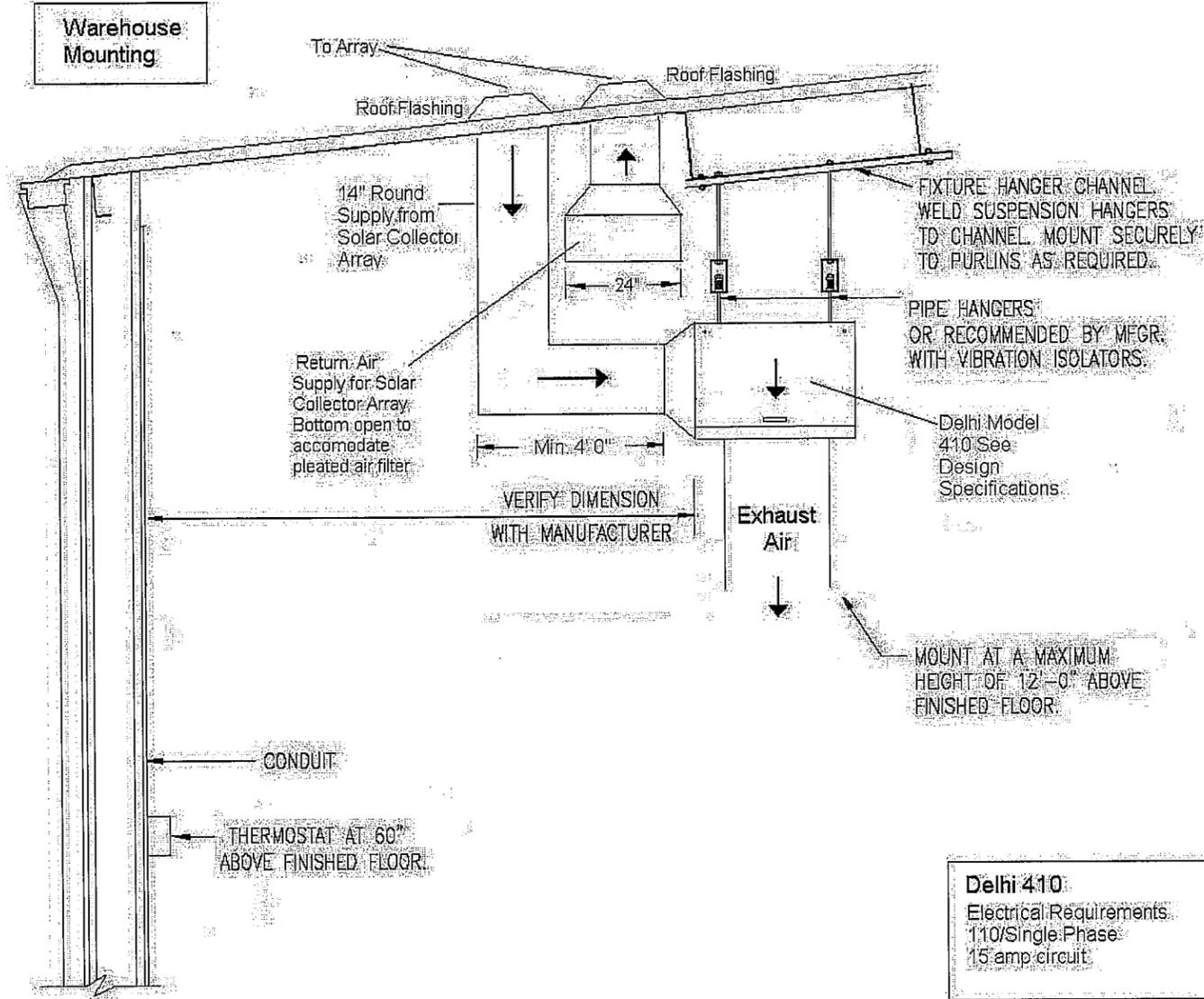
- Solar Rating and Certification Corporation (SRCC) Standard 100 - Test Methods and Minimum Standards for Certifying Solar Collectors (ASHRAE Std. 93 - 1986)
- Florida Solar Energy Center Test Methods and Minimum Standards for Solar Collectors (ASHRAE Std. 93 - 1986)
- Miami Testing Laboratory Wind Load Test (ASTM 3800) Certification No. 94-1028-01

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



Solar Warm Air Collector System - Blower mounting

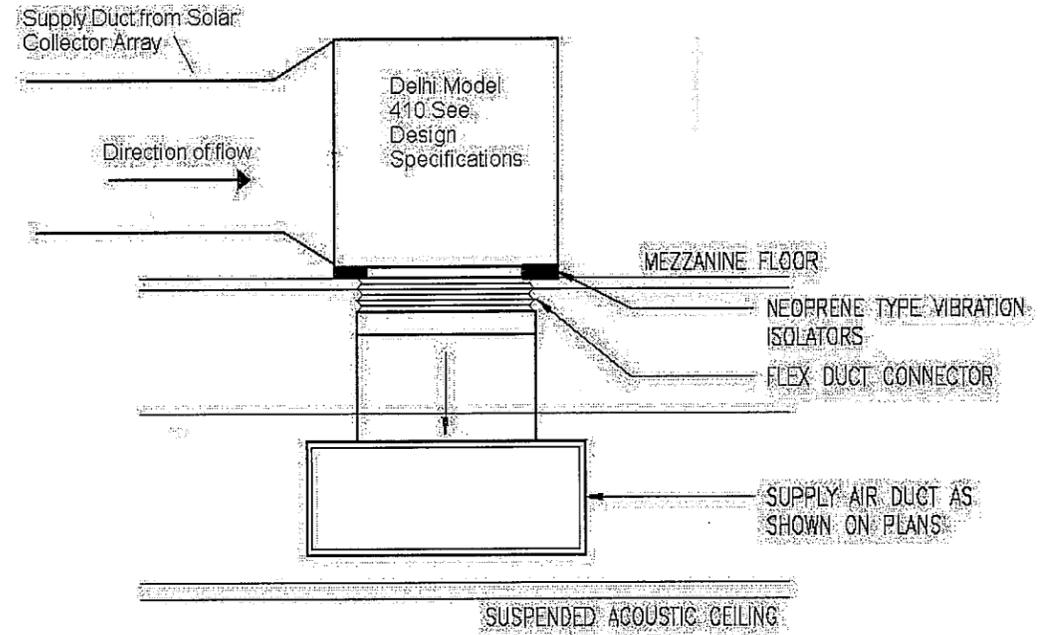
North
→



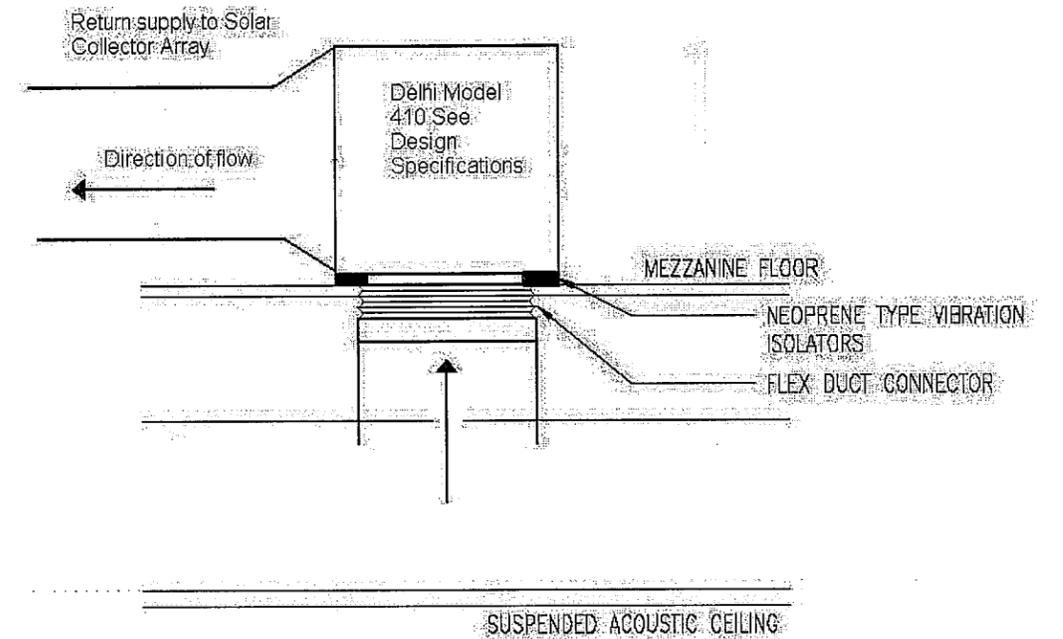
Delhi 410:
Electrical Requirements:
110/Single Phase
15 amp circuit

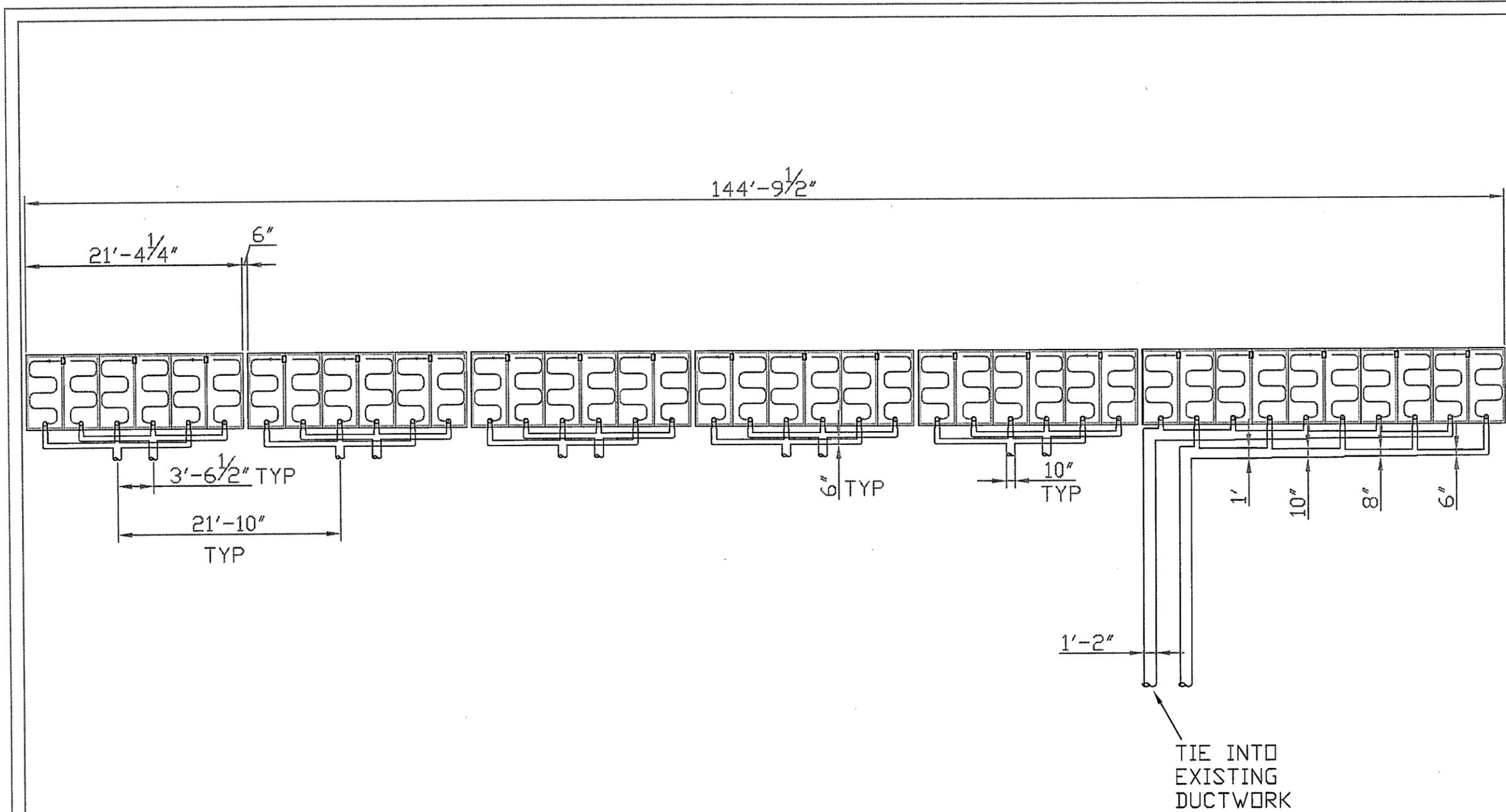
Special Notes: Carwash Bay Unit, return air supply should be drawing air from warehouse area and not Carwash Bay.

Office/Mezzanine Mounting Heated Air



Office/Mezzanine Mounting Return air





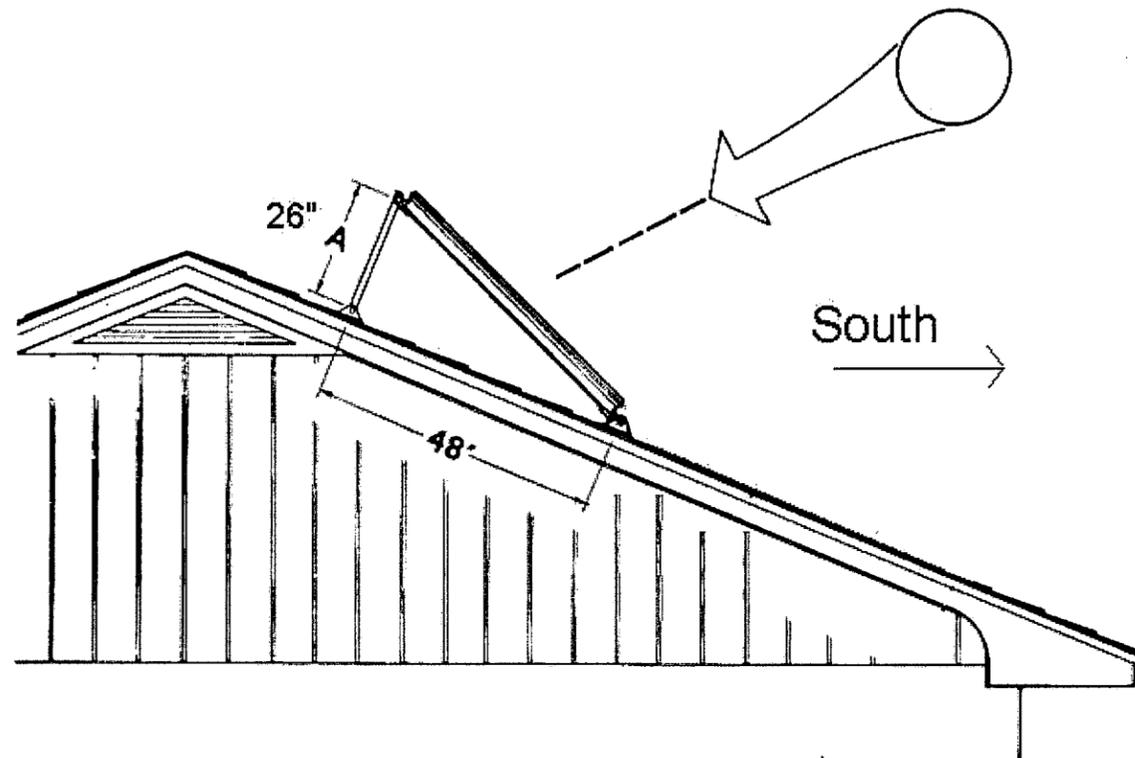
CONCEPTUAL LAYOUT ONLY

Copyright Reserved

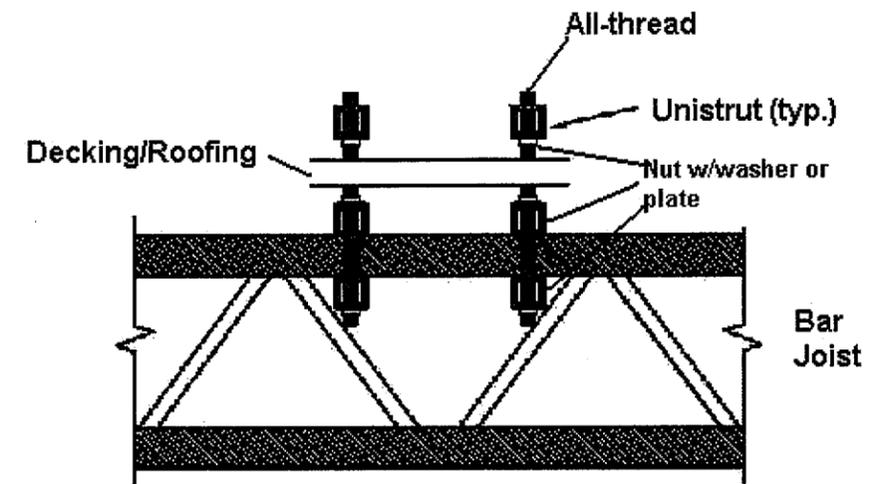
The Contractor shall verify and be responsible for all dimensions. All building, electrical, plumbing, and safety codes supersede information provided by Your Solar Home Inc.. Do not scale the drawing - any errors or omissions shall be immediately reported to Your Solar Home Inc. The Copyrights to all designs and drawings are the property of Your Solar Home Inc.. Reproduction or use for any purpose other than that authorized by Your Solar Home Inc. is forbidden.

	MODEL	40 SolarSheats	
	PARTS	PANELS & DUCTWORK	
DRAWN BY MIKE D.	VIEW	ROOF	
DATE AUG 26/09	Scale	SCALE	DWG NO. 1

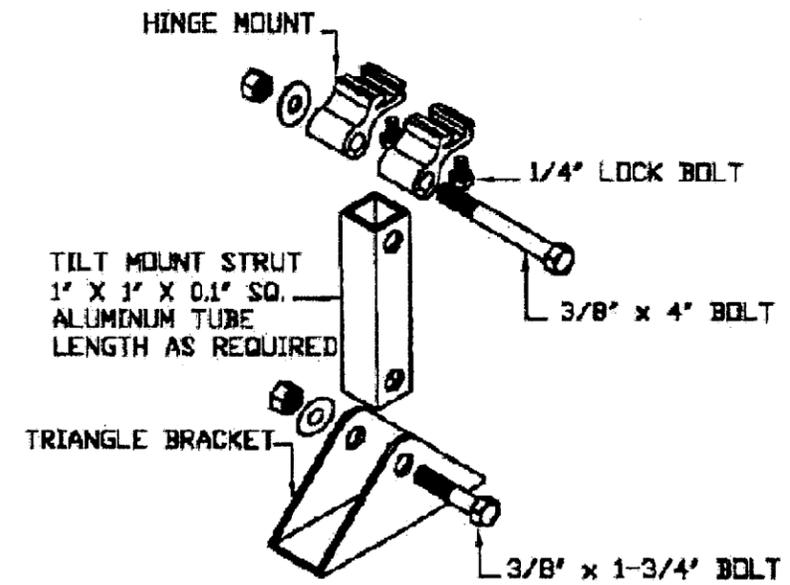
Solar Hot Water Collector Pitch and Brackets



Mounting through to bar joist

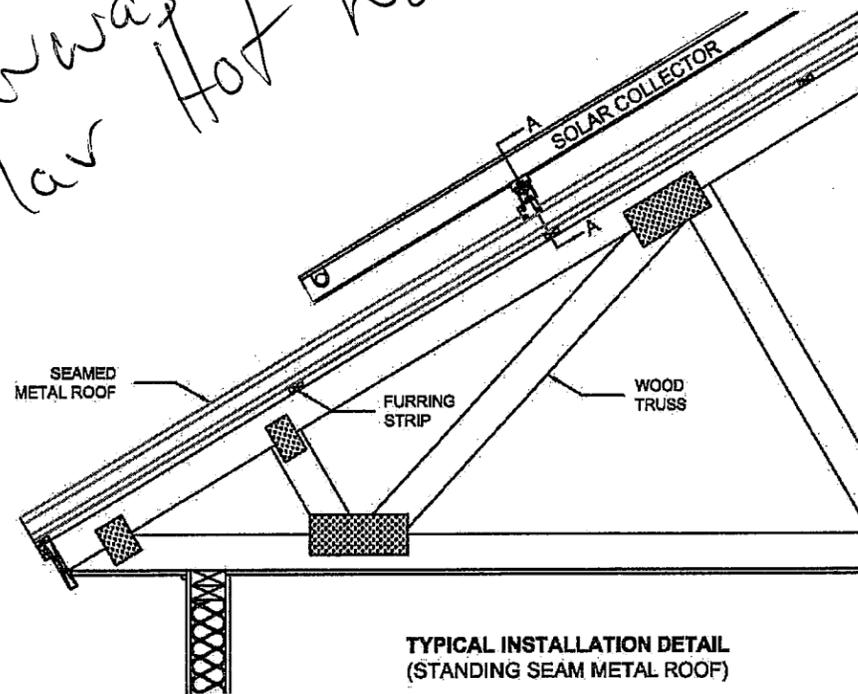


Stilt Bracket details

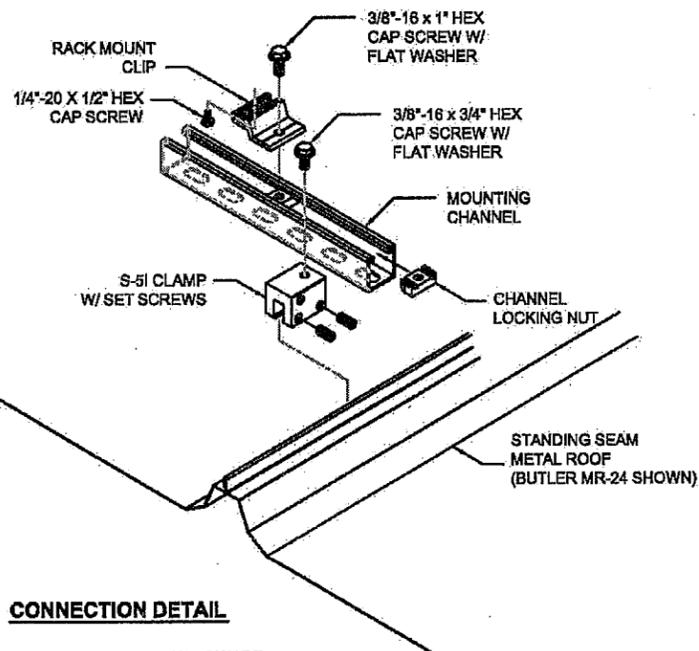


INSTALLATION DETAILS - STANDING SEAM METAL ROOF

Carwash Solar Hot Water



**TYPICAL INSTALLATION DETAIL
(STANDING SEAM METAL ROOF)**



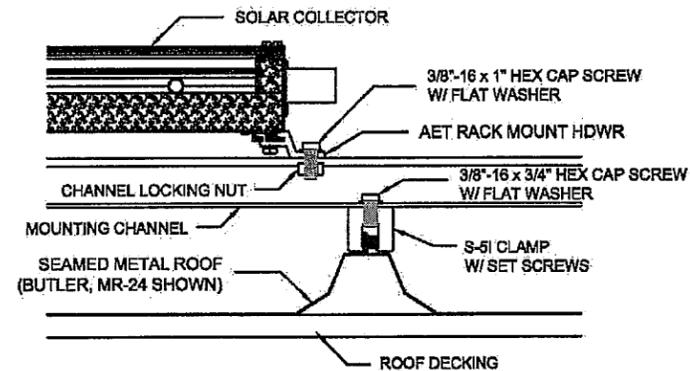
CONNECTION DETAIL

USING MANUFACTURERS HARDWARE FOR PARALLEL MOUNT ON SEAMED METAL ROOFS

NOTES

- 1) THE SOLAR COLLECTOR INSTALLATION AS DETAILED IN THESE DRAWINGS IS FOR THE INSTALLATION OF ALTERNATE ENERGY TECHNOLOGIES AE-SERIES SOLAR COLLECTORS ON STRUCTURES SUBJECTED TO A MAXIMUM UPLIFT PRESSURE OF 51 POUNDS PER SQUARE FOOT (PSF).
- 2) THE DESIGN OF THIS INSTALLATION IS BASED ON REQUIREMENTS OF THE 2004 FLORIDA BUILDING CODE, ASCE 7 AND TESTING OF THE SOLAR COLLECTOR IN ACCORDANCE WITH PA 202 (TAS 202-94), ASTM E 330
- 3) THE INSTALLATION SHALL UTILIZE HARDWARE PROVIDED BY THE MANUFACTURER AS DETAILED IN THESE DRAWING.
- 4) ALL ALUMINUM STRUCTURAL MEMBERS TO BE 6061-T6. ALL STRUCTURAL STEEL MEMBERS TO BE LOW CARBON GALVANIZED STEEL, AND ALL HARDWARE (BOLTS, NUTS, ETC) TO BE STAINLESS STEEL.

**DESIGN WIND PRESSURE
MAXIMUM SUCTION UPLIFT: 51 PSF**



**SECTION VIEW A:A
SEAMED METAL ROOF**

1. ALL MOUNTING HARDWARE (SCREWS, NUTS AND BOLTS) SHALL BE STAINLESS STEEL UNLESS NOTED OTHERWISE.
2. S-51 CLAMP SELECTION TO BE AS RECOMMENDED BY THE CLAMP MANUFACTURER FOR THE METAL ROOFING PANEL SPECIFIED.
3. SAFETY FACTOR FOR THE CLAMP SELECTION IS THE RESPONSIBILITY OF THE DESIGNER AND SHOULD BE EMPLOYED AS APPROPRIATE.
4. THE S-51 CLAMP IS BE BE INSTALLED PER THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
5. SEAMED METAL ROOFING IS AS SPECIFIED BY THE DESIGN ARCHITECT AND IS TO BE CAPABLE OF HANDLING THE ADDITIONAL LOADS IMPOSED BY THE SOLAR COLLECTORS.
6. SEAMED METAL ROOFING TO BE INSTALLED PER THE MANUFACTURER'S INSTALLATION REQUIREMENTS AND ONLY MANUFACTURER APPROVED FASTENERS ARE TO BE USED.

* BUTLER, MR-24 STANDING SEAM METAL ROOFING SHOWN FOR ILLUSTRATION PURPOSES ONLY AND WILL VARY PER THE DESIGN ARCHITECT'S RECOMMENDATION.

General Notes

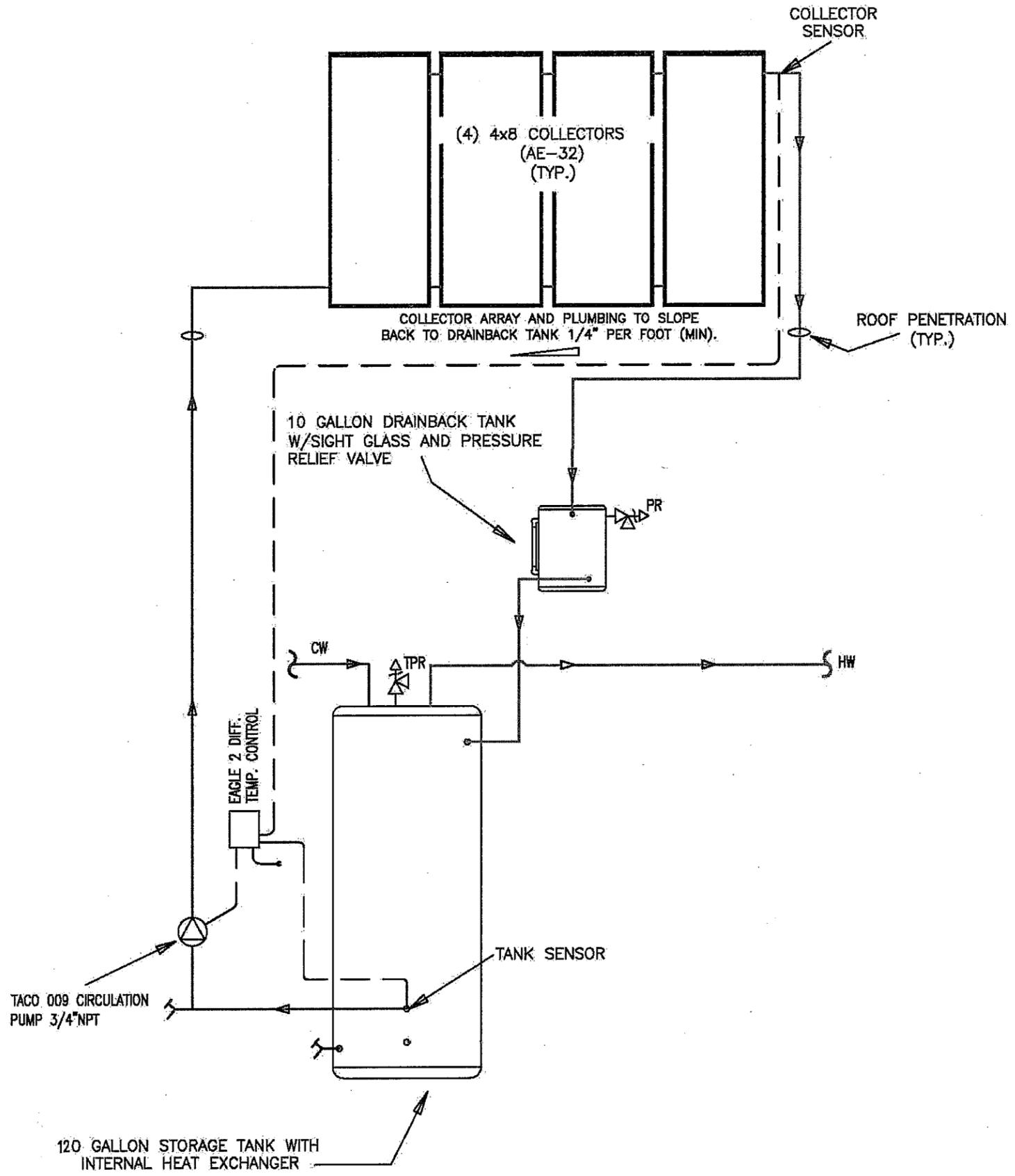
No.	Revision/Issue	Date

Project Name and Address

Project Name and Address

Project	Sheet
Date	02 / 06 / 2006
Scale	N.T.S.

*Cannash
Solar Hot Water*



LEGEND	
	AIR VENT
	BALL VALVE
	BALANCING VALVE
	RELIEF VALVE (SPECIFY)
	CIRCULATION PUMP
	CHECK VALVE
	VACUUM BREAKER
	DRAIN VALVE

General Notes

No.	Revisions/Issues	Date
Plant Name and Address		
Project Name and Address		
Project	Sheet	
Date		
Scale		

