Solar Home Hot Water System

Copper Sun Solar Collector Model No. CS-330S

Connection method: Side
Capacity: 30 gallons (113.55 liters)
Aperture area: 22 square feet (1.86 sq m)
Gross Weight - Empty: 226.3 lbs (102.65 kg)
Gross Weight - Filled: 476.6 lbs (216.18 kg)
Foot Print Area: 25.2 square ft (2.34 sq m)
Aperture Length: 95.25 inches (2.42 m)
Aperture Width: 33.25 inches (.845 m)
Frame Width: 36.75 inches (.933 m)
Frame Length: 98.75 inches (2.508 m)
Connections:
1) Center to center dimension: 28.12 inches (.715 m)
2) Center to edge of frame: 3.937 inches (.1 m)
3) Center to bottom of frame: 3.25 inches (.083 m)
4) Solder joint: 3/4 inch, 2-3/4 inch Nom. Type K copper tube 7.8” O.D.
Collector Height: 6.437 inches (.164 m)
Working fluid: potable/domestic tap water
Absorber tube: a) Material: 4 inch nominal diameter DWV copper tubing, 0.058 inch wall thickness, with selective coating. b) Tubing shall not be a rolled seam welded tube. c) End of absorber tube shall be machine spun to form a perfect bullet nose round end. d) Absorber shall be TIG welded in a progressive serpentine configuration that allows for a maximum efficiency with minimum of water mixing.
Selective coating: Solkote a) Minimum absorptivity: 95 percent b) Maximum emissivity: 56%
Header Tube: 3/4 inch nominal type “K” copper formed copper tube .062 inch wall.
Glazing: 1/8 inch thick, low-iron tempered glass with minimum transmissibility of 91%
Gasket material: EPDM
Frame material: 6063 T-5 aluminum. Frame for bottom connected units shall have integral patented counter flashing.
Frame Finish: Powder coated paint
Insulation: polysocyanurate, minimum one inch thickness conforming to ICBO Research report #3223 with 0.012 inch thick laminated aluminum sheet.
Flashing: CopperSun segmented roof flashing pan. a) Length: 110 inches. b) Width: 48 inches for CS330B and CS340B/60 inches for CS440B and CS450B. c) Material 24 gauge galvanized sheet metal. d) Flashing pan only weight: 43.2 lbs. For CS430B and CS440B: 43.2 lbs. For CS440B and CS 450B: 52.7 lbs e) Flashing pan assembled weight: 48.5 lbs. f) Flashing pan upright height: 3.5 inches.

Certification: This solar hot water heating system is certified by the Solar Rating Certification Corporation (SRCC) under system standard OG-300.