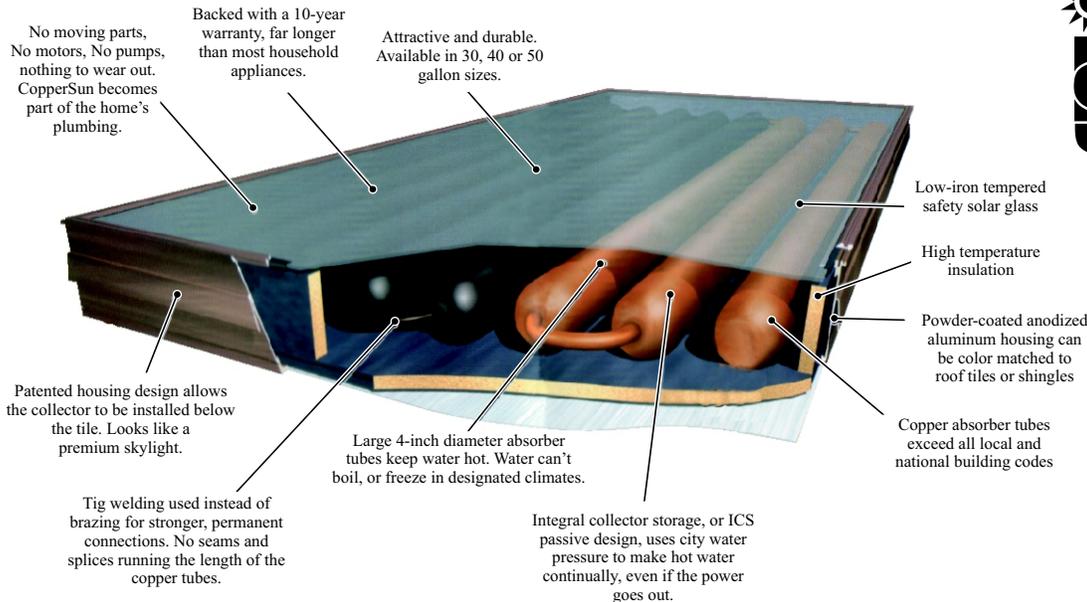


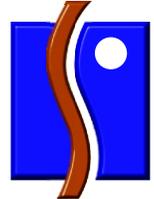


**INTEGRATED SOLAR, LLC**  
Solar Water Heating Manufacturer

2030 West Pinnacle Peak Road  
Phoenix, Arizona 85027  
Office: 623-869-0561  
Fax: 623-869-0891  
integratedsolar.com



## Solar Home Hot Water System



CopperSun

by Integrated Solar

### Copper Sun Solar Collector Model No. CS-330B

**Connection method:** Bottom (Flashing pan required)

**Capacity:** 30 gallons (113055 liters)

**Aperture area:** 22 square feet (1.86 sq m)

**Gross Weight - Empty:** 225.4 lbs (102.24 kg)

**Gross Weight - Filled:** 475.7 lbs (215.8 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 and Counter Flashing width:** 38.125 (.968 m)

**Frame Length:** 98.75 inches (2.5 m)

**Frame and Counter Flashing length:** 100.125 inches (2.543 m)

**Connection:**

- 1) **Center to center dimension:** 28.12 inches (.715 m)
- 2) **Center to end of frame:** 3.687 inches (.0936 m)
- 3) **Center to edge of frame:** 3.937 inches (.1 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:** CopeprSun 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.