

**SOLAR RATING & CERTIFICATION CORPORATION**

**AWARD OF SOLAR WATER HEATING SYSTEM CERTIFICATION**

The solar water heating system listed below has been evaluated by the Solar Rating and Certification Corporation (SRCC) in accordance with SRCC Document OG-300, *Operating Guidelines and Minimum Standards for Certifying Solar Water Heating Systems*, and has been certified by the SRCC as meeting the minimum standards for design, installation, operation and maintenance, performance, reliability and safety as specified in SRCC Document OG-300. Thermal performance ratings are based on the successful durability and performance testing of a sample unit where said tests have been conducted by an independent laboratory accredited by the SRCC and the balance of the system has been modeled using TRNSYS, a computer simulation code developed by the University of Wisconsin.

System Certification Number: **300-2008001A**

SOLAR ENERGY FACTOR = **3.0**

Date Certified: **March 26, 2008**

Expiration Date: **March 26, 2013**

System Type: **Direct Forced Circulation**

Supplier: **Pacific West Solar  
9625 N. 21<sup>st</sup> Drive Suite 9  
Phoenix, AZ 85021 USA  
(602) 870-7715**

System Brand: **Freeze Safe Solar Water Heater**

System Model: **FS410-80-1**

Description: **1 Glazed Flat-Plate Collector(s), Differential Controller, No Load Side Heat Exchanger, Fluid Class I, 302 liter (80 gal.) Electric Auxilliary Tank**

Collector Model Options

Company	Brand	Model	Gross Area (m <sup>2</sup> )	Gross Area (ft <sup>2</sup> )
Pacific West Solar	Freeze Safe	FS410	3.88	41.77

RATING PARAMETERS	TERM	SI Units	Inch-Pound Units
System Set Temperature	Tset	57.2 ° C	135 ° F
Environmental Temperature	Tenv	19.7 ° C	67.5 ° F
Ambient Temperature Profile Average	Tamb	14.4 ° C	58 ° F
Water Mains Temperature	Tmain	14.4 ° C	58 ° F
Delivered Load	Qdel	43.3 MJ/day	41,045 Btu/day
Solar Irradiance	It	4,733 Wh/m <sup>2</sup> -day	1,500 Btu/ft <sup>2</sup> -day

This award of certification is subject to all terms and conditions of the Program Agreement and the documents incorporated therein by reference. It must be renewed annually. Any changes in solar water heating system design, materials, specifications, parts, or construction must be reported to SRCC for evaluation of continued certification

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Technical Director

April 8, 2008

OG-300 SRCC SYSTEM CERTIFICATION