

**CITY OF SACRAMENTO**

1231 I Street, Sacramento, CA 95814

Permit No: 0513901

Insp Area: 2

Thos Bros: 337A1

Site Address: 1228 58TH AV SAC

Parcel No: 029-0422-023

Sub-Type: RES

Housing (Y/N): N

**CONTRACTOR**  
SOLAHART SERVICES  
7720 LORRAINE AV. SUITE 111  
STOCKTON, CA 95210

**OWNER**  
CHAVEZ JOSE E JR & JOANNE C  
1228 58TH AV  
SACRAMENTO, CA 95831

**ARCHITECT**

**Nature of Work: REPLACE SOLAR WATER HEATER UNIT ON ROOF**

**CONSTRUCTION LENDING AGENCY:** I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name \_\_\_\_\_ Lender's Address \_\_\_\_\_

**LICENSED CONTRACTORS DECLARATION:** I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

X License Class D-046 License Number 479842 Date 9-12-05 Contractor Signature [Signature]

**OWNER-BUILDER DECLARATION:** I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. \_\_\_\_\_ B & PC for this reason: \_\_\_\_\_  
Date \_\_\_\_\_ Owner Signature \_\_\_\_\_

**IN ISSUING THIS BUILDING PERMIT,** the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

X Date 9-12-05 Applicant/Agent Signature [Signature]

**WORKER'S COMPENSATION DECLARATION:** I hereby affirm under penalty of perjury one of the following declarations:  
I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

X I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier STATE FUND Policy Number 1290096-02 Exp Date 01/01/2006

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

X Date 9-12-05 Applicant Signature [Signature]

**WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.**

**THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.**

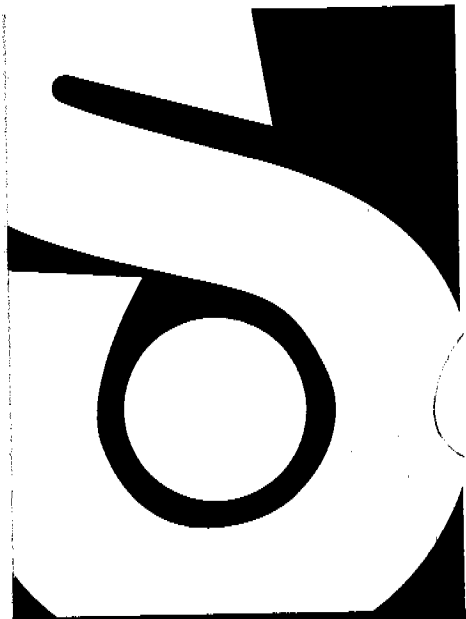
0513901

NEW GENERATION

| BCXII series

Closed Circuit Solar Systems

\* Field verified structural support of unit.



Ultimate



high performance

This set of plans and specifications must be kept on the job at all times and it is unlawful to make any changes or alterations to the same without written permission from the Building Inspection Division.

The approval of this plan and specification SHALL NOT be held to permit or approve the violation of any City Ordinance or State Law

 Solahart.



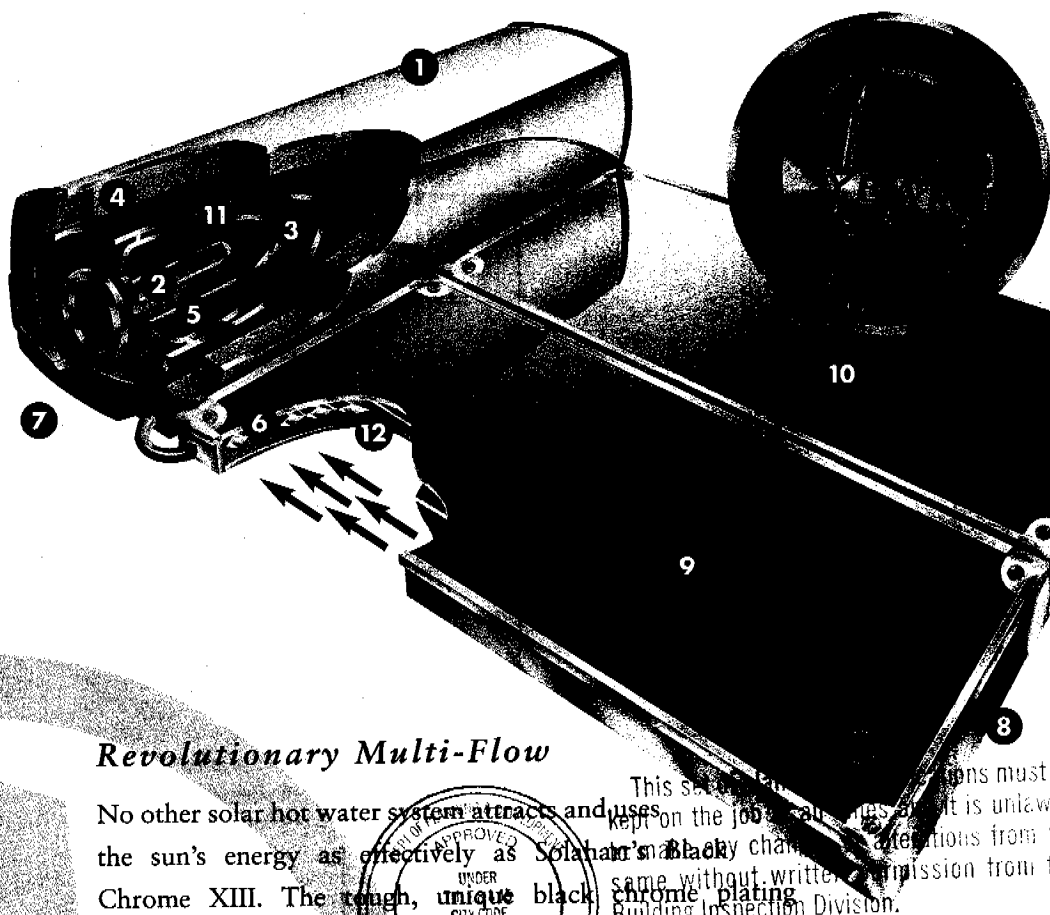
## Low Maintenance

All hot water systems need maintenance. Conventional systems require regular servicing, while standard solar hot water systems usually require a five year service.

Not so with Solahart's Black Chrome XII series. It's designed to take on the toughest conditions and it's maintenance free for the first 6 years! In the unlikely event that a service is required within the first 6 years, it will be carried out free of charge.\*

## You'll always have hot water - 24 hours a day

The superior construction of the Solahart BCXII system, along with its 12 year warranty, give you the peace of mind that your new Solahart is built to last and will be supplying you piping hot water for many years to come. Not only that, but with the standard electric, or the optional gas booster, you'll have hot water even on the cloudiest days.



## Revolutionary Multi-Flow

No other solar hot water system attracts and uses the sun's energy as effectively as Solahart's Black Chrome XIII. The tough, unique black chrome plating combines with Solahart's exclusive Multiflow solar absorber panel to heat water faster and more efficiently.

## Environmentally Friendly.

Your new Black Chrome XII will not only save you money, but you'll be playing your part in reducing greenhouse gas emissions into the atmosphere (up to 4.5 tonnes per annum). Wouldn't it be great if everyone had a Solahart?

### 1. STYLISH SLIM LINE DESIGN

The look made famous by Solahart. Seen on homes in over 70 countries around the world.

### 2. HOT WATER 24 HOURS A DAY, 365 DAYS A YEAR.

On those days when there's insufficient solar energy, your automatic booster (left switched on) cuts in to maintain hot water temperature for loads of hot water around the clock.

### 3. WORLD'S MOST ADVANCED TECHNOLOGY.

Your Black Chrome XII features a revolutionary sealed jacket around the storage cylinder. This enables the 'closed circuit' fluid to flow from the solar collector panels around the outside of the storage cylinder and quickly transfers its heat to the water stored in the cylinder. Simply put, it means plentiful hot water, supplied free from the sun, is ready and waiting for constant use.

### 4. HIGH DENSITY INSULATION.

The cylinder is insulated in its durable aluminium case by pressure injected, high density, environmentally safe polyurethane foam which is CFC FREE! The result, your water stays hotter longer.

### 5. SUPERIOR PROTECTION.

The large capacity water storage cylinder is protected from the harshest water with not one, but two coats of Primaglaz® ceramic lining. Plus there's now a long life heavy duty sacrificial anode.

### 6. CORROSION PROTECTION.

Solahart's exclusive closed circuit system also eliminates risk of the collector plate corroding or clogging from the inside.

### 7. MAINTENANCE FREE.

The system is designed to provide long, maintenance free service in harsh climate and water conditions.

### 8. LOOKS BETTER, LASTS LONGER.

Proven premium quality aluminium, used for Solahart's collector case, looks better and, more importantly, lasts longer.

### 9. PROVEN HIGH PERFORMANCE.

Maximum absorption of solar energy is achieved by the unique, super responsive solar collectors which are designed to absorb more solar radiation and transfer it more efficiently.

### 10. SOLAR GLASS.

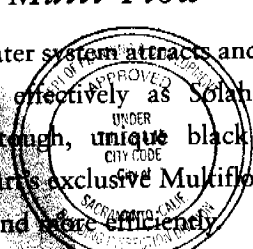
Superior quality solar glass is tougher, providing superior performance, protection and appearance.

### 11. FREEZE PROTECTION.

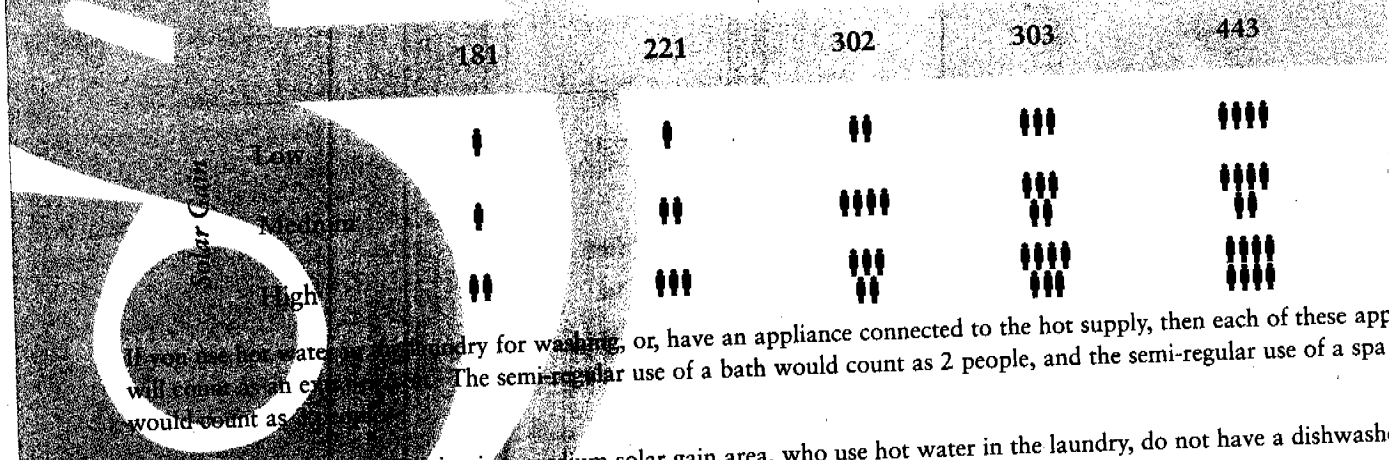
Solahart's exclusive closed circuit technology is all the protection you need to prevent freezing in frost-prone or cold climate regions.

### 12. EXCLUSIVE MULTIFLOW SOLAR

This system must be kept on the job. It is unlawful to alter or tamper with the same without written permission from the Building Inspection Division. The approval of this plan and specifications SHALL NOT be held to permit or approve the violation of any City Ordinance or State Law.



# SIZING RECOMMENDATION\*



When the hot water is used for laundry for washing, or, have an appliance connected to the hot supply, then each of these appliances will count as an extra person. The semi-regular use of a bath would count as 2 people, and the semi-regular use of a spa bath would count as 2 people.

For example, a family of four living in a medium solar gain area, who use hot water in the laundry, do not have a dishwasher, and use the hot water for a bath, should estimate their hot water needs as 6 people and select a 443L system.

\* This is a guide only - actual hot water requirements will vary from location to location, will depend on cold water temperatures, ambient temperature, seasonal variations and other factors.

## TECHNICAL SPECIFICATIONS

Model	181BCXII		303BCXII	303BCXII	
	Tank	System		Tank	System
Number of Collectors		1		3	
Number of Panels	180		300		
Volume (Litres)	48		80		
Pressure (Bar)		160		280	
Weight (kg)		42.3		74	
Height (mm)		135		230	
Width (mm)		36		61	
Weight (kg)	66	108	105	231	
Volume (Litres)	145	238	231	509	
Weight (kg)	246	288	405	531	
Volume (Litres)	542	635	893	1170	
Weight (kg)	1.49	2.48	2.31	2.48	
Length (mm)	59	95	91	95	
Width (mm)	0.51	0.51	0.51	0.51	
Height (mm)	20	20	20	20	
Weight (kg)	0.51	1.49	0.51	3.16	
Volume (Litres)	20	58	20	124	
Weight (kg)		1000		1000	
Volume (Litres)		145		145	
Weight (kg)		2100		2100	
Volume (Litres)		305		305	

Cylinder Material	304 L Stainless Steel
Cylinder Lining	Electrolytic Ceramic Lining
Insulation	Pressure Insulated, Zero CFC
Case	Aluminium Marine Grade, Galvan (0.15%)
End Caps	Polystyrene, Carbon Black, UV Stabilised
Anode	Magnesium with Steel Core

YOUR LOCAL SOLAHART EXPERT IS:



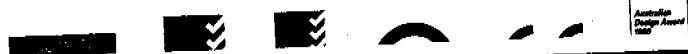
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**Solahart Australia Head Office**  
PO Box 6  
Rydalmere NSW 2116  
Telephone: 02 9684 9100  
Facsimile: 02 9684 9180

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112 Pilbara Street, Welshpool  
Western Australia 6106  
Telephone: +618 9351 4600  
Facsimile: +618 9351 8034  
Email: solahart@solahart.com.au  
Internet: www.solahart.com  
**Solahart Industries Pty Ltd**  
ABN 45 064 945 848

Visit our website at  
[www.solahart.com.au](http://www.solahart.com.au)



# THE SOLAHART BCXII SERIES

*... on top of the world*

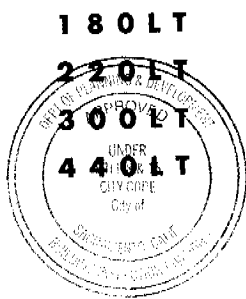
*Millions of dollars in research and over a decade of scientific development has culminated in the new generation Black Chrome XII (BCXII).*

*A solar hot water system so advanced, so reliable, it is backed by an exclusive 12 YEAR WARRANTY on our solar panels and cylinder. Additionally, the BCXII series offers a 6 year warranty on all parts and labour.*

*So, what does this mean to you?*

*Unprecedented reliability and lasting hot water without the worry and inconvenience of the breakdowns associated with traditional systems.*

NEW GENERATION  
BCXII series



## You'll Recoup Your Investment

True! The savings you'll make on your power bills, from the sun's free energy, means that you will recover the cost of your initial investment in a few short years. So, your Solahart BCXII not only pays for itself, but it provides you with genuine savings year after year. Guaranteed. Depending on where you live and how much hot water you use, up to 90% of your hot water can be free from the sun. You won't get that with an

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**Why not download the Solahart "SCF" Program from our website, [WWW.SOLAHART.COM](http://WWW.SOLAHART.COM), to see exactly how much you could save.**

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## APPLICATION GUIDE

System	Mains Pressure	Water Quality	Frost Conditions	Solar Gain Area			Warranty
				Low	Medium	High	
L System	✓	Potable	✗	✗	✓	✓	5 Years
J System	✓	Range of Water Qualities	✓	✗	✓	✓	5 Years
K System	✓		✓	✓	✓	☆	5 Years

- ✓ Signifies system is ideally suited for this application
- ☆ Signifies system may be over rated for this application during the summer months and we recommend fitting a temperature limiting device.