

CITY OF SACRAMENTO  
1231 I Street, Sacramento, CA 95814

Permit No: 0009148

Insp Area: 1

Site Address: 8649 KIEFER BL SAC

Parcel No: 078-0190-025

Sub-Type: REM

Housing (Y/N): N

**CONTRACTOR**

MARK III ENGINEERING  
5101 FLORIN PERKINS RD  
SACRAMENTO CA 95826

**OWNER**

OATES MARVIN L  
SACRAMENTO CA  
00000

**ARCHITECT**

Nature of Work: NEW GAS LINE

**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.

Y License Class <sup>A, B, C-10</sup> ~~C-10 C-50~~ License Number 574134 Date 8-8-00 Contractor Signature [Signature]  
*MARK III ENGINEERING CONTR.*

**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: PAID OPEN OF SACRAMENTO

Date \_\_\_\_\_ Owner Signature [Signature]  
AUG 9 8 2000

**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 improvements to be permitted does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. **NEIGHBORHOOD PLANNING AND DEVELOPMENT SERVICES** I hereby 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 above mentioned property for inspection purposes.

Date 8-8-00 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.

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 692-98 UNIT 0002087 Exp Date 10/01/2000

(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.

Date 8-8-00 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.**



# WATER BLAZE 120 INSTALLATION CHECKLIST

## 6. COMPRESSED AIR

Compressed air will be used as operational air for the diaphragm pumps and foam suppression system. The compressed air line connection will be made on the back panel of the Water Blaze labeled "Compressed Air."

The Water Blaze will be supplied with an air regulator, no prior regulation is needed.

|     |         |
|-----|---------|
| PSI | 20-100  |
| CFM | Min. 10 |

## 7. VENTING

Each evaporator must have its own vent stack. The WB-120 will require a 12" vent pipe.

Recommended materials:

- CPVC Schedule 80 (Preferred material)
- Stainless Steel Positive Pressure Stacking
- Boiler Stacking

**Note:** If possible, the stack should be a single piece. However, if the stack has seams, the seams must be sealed with duct sealant to prevent moisture leaks; since the exhaust is 190° and 100% water saturated. A tube of RTV silicone will be supplied with each unit shipped for this purpose. Moisture leakage may result in damage to the Water Blaze electrical systems. All stack installations must be performed only by qualified personnel.

The top of the exhaust should be unobstructed and in compliance with all local and federal codes. Avoid bends in the stack if possible, a straight stack is always best. If you must have bends, use 45°, not 90° bends. No more than two bends should be used. A vertical discharge design should be used, together with a rain diverter. A conventional raincap is not recommended due to induced back pressure. A vertical rain diverter is an over-sized piece of stack material that is concentric with the stack. The diverter extends 6" over the top of the stack to allow flexibility in positioning fasteners. Both rain protection and back pressure reduction is achieved with this design. This type of rain diverter can be purchased from Landa.



# WATER BLAZE 120 INSTALLATION CHECKLIST

## 1. LOCATION

Locate the Water Blaze on a level concrete surface in a room that is well ventilated. Protect the unit from the environment, i.e., wind, rain, freezing temperatures. **Caution:** For natural gas, air ventilation should be located near the ceiling. For liquid propane, air ventilation should be located near the floor. Air ventilation openings and evaporator stack should be located a safe distance from building climate control air intake ducts.

## 2. GAS

The Water Blaze Evaporator is available for operation with either natural gas or liquid propane. **Caution:** There are major differences in the adjustments of the natural gas and propane evaporators.

**Do not operate unit using the wrong fuel!**

The one and one half inch (1 1/2") dedicated gas supply line must have a minimum of 2 PSIG and a maximum of 10 PSIG for proper burner operation. There must be a main gas shut-off valve (not provided) in the supply line to the Water Blaze that can be used as an emergency shut-off for repair or maintenance purposes. **Caution:** The gas must be installed only by qualified personnel. It must be checked for leaks before installing the Water Blaze. All gas piping must comply the local and national fuel gas codes.

Connect the gas vent line on the 1" vent pipe on the rear panel of the Water Blaze. (See Operators Manual) **Caution:** This vent pipe must be vented to atmosphere.

## 3. ELECTRICAL

The Water Blaze requires 230 volts single phase. All electrical lines must be tested with a voltage meter for proper voltage before connecting to the Water Blaze.

**Caution:** If the voltage is lower than 220 volts, you must order kit #7-8130 (230 to 208 volt conversion), it is very important to have the correct voltage for component life and operation.

- 230 volts single phase
- 40 amp breaker

All lines must be installed only by qualified personnel. All installations must be electrically grounded and conform to all local and national electrical codes. The Water Blaze is ETL certified. The electrical connections for the Water Blaze is located on the rear panel junction box with 1/2" threaded port. Electrical conduit must be run all the way to the connection point in accordance with local codes.

## 4. FRESH WATER

Fresh water must be supplied using a 3/4" I.D. hose with common connectors and must have a pressure of no less than 30 psi. Connect the hose to the Water Blaze at the female connector located on the rear panel. This connector is labeled "Fresh Water Supply".

## 5. WASTEWATER

Wastewater is drawn directly into the evaporator using an air operated diaphragm pump supplied with the unit. A 16 mesh stainless steel filter protects the pump from debris. The connection between the above ground wastewater tank and the Water Blaze unit is made by using a 3/4" I.D. or larger supply hose with common connectors supplied by the customer. The connection is located on the rear panel with the label, "Wastewater Connection." Landa recommends the installation of a ball valve next to the filter that will allow stoppage of the water stream during maintenance.

- **NOTE:** The Water Blaze pump is automatically controlled by floats and will supply wastewater as needed after startup. **Caution:** Foaming chemicals will affect the evaporation process in the Water Blaze. The foam suppression system will spray defoamer onto the surface of the liquid with 2 psi of compressed air.