

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND

BUILDING PERMIT

This is to certify that FOX STREET REALTY LLC - ENVIROMAT

Located At 109 FOX ST

Job ID: 2012-03-3578-HVAC

CBL: 023- A-008-001

has permission to Install a Fulton high pressure steam boiler for Enviromat in the existing boiler room provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

Fire Prevention Officer

 4/5/12

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
PENALTY FOR REMOVING THIS CARD

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

Final Inspection

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

Acting Director of Planning and Urban Development
Gregory Mitchell

Job ID: 2012-03-3578-HVAC

Located At: 109 FOX ST

CBL: 023- A-008-001

Conditions of Approval:

Fire

1. Installation shall comply with City Code Chapter 10.
2. NFPA 54, *National Fuel Gas Code*,
3. Installation shall comply with NFPA 211, *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances*;
4. Fuel-fired boilers shall be protected in accordance with NFPA 101, *Life Safety Code*.
5. NFPA 91, *Standard for Exhaust Systems for Air Conveying Vapors, Gases, Mists, and Noncombustible Particulate Solids*;
6. NFPA 70, *National Electrical Code*; and the manufacturer's published instructions.

Building

1. Equipment shall be installed in compliance with the manufacturer's specifications and the UL listing.
2. The installation must comply with the State of Maine Gas Regulations.
3. Separate permits are required for any electrical, plumbing, sprinkler, fire alarm, HVAC systems, heating appliances, including pellet/wood stoves, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.
4. The appliance and venting shall be installed in accordance with the UL listing, manufacturer's specifications and NFPA 211

I-16

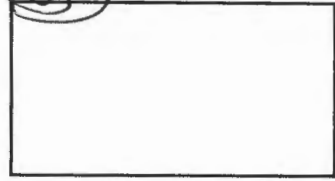
Entered 3/23

(BJ)



FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT



ID: 2012-03-3578-ANAC

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Location / CBL 109 Fox St. 023 A008 001 Use of Building Commercial Laundry Date 3/19/12
 Name and address of owner of appliance ENVIRONAT, LLC BBA Portland's Greener Cleaner
42 Hammond Street Portland, ME 04101
 Installer's name and address John Bain Beaver Creek Plumbing + Heating
P.O. Box 508-A Kennebunkport, ME 04046 Telephone (207) 967-0610

Location of appliance:

- Basement
- Floor
- Attic
- Roof

Type of Fuel:

- Gas
- Oil
- Solid

Appliance Name: Fulton High pressure Steam Boiler
 U.L. Approved Yes No with condensate return

Will appliance be installed in accordance with the manufacture's installation instructions? Yes No

IF NO Explain: _____

The Type of License of Installer:

- Master Plumber # 2823
- Solid Fuel # _____
- Oil # _____
- Gas # _____
- Other _____

Type of Chimney:

- Masonry Lined
Factory built _____
- Metal
Factory Built U.L. Listing # UL-1777
- Direct Vent
Type _____ UL# _____

Type of Fuel Tank

- Oil
- Gas

Size of Tank _____

Number of Tanks _____

Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$ 4,000

Permit Fee: \$ 60.00

RECEIVED
 MAR 23 2012
 Dept. of Building Inspections
 City of Portland Maine

Approved

Fire: _____
 Ele.: _____
 Bldg.: [Signature]

Approved with Conditions

- See attached letter or requirement

Inspector's Signature _____

Date Approved _____

Signature of Installer _____



PORTLAND MAINE

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Receipts Details:

Tender Information: Check , Check Number: 1550
Tender Amount: 60.00

Receipt Header:

Cashier Id: bsaucier
Receipt Date: 3/23/2012
Receipt Number: 42129

Receipt Details:

Referance ID:	5772	Fee Type:	BP-Constr
Receipt Number:	0	Payment Date:	
Transaction Amount:	60.00	Charge Amount:	60.00
Job ID: Job ID: 2012-03-3578-HVAC - Fulton Hi Pressure boiler install			
Additional Comments: 109 Fox			

Thank You for your Payment!

waiting on Specs. BS 3/23/12 11:15

THE CLASSIC VERTICAL TUBELESS BOILER

FEATURES

- Same vertical tubeless 2-pass design as our Classic boiler
- Additional Flue Gas Enhancing System to maximize efficiency
- Top mounted burner for even heat distribution
- Small footprint - compact design
- Built/Certified to ASME, CSD-1 and other applicable codes, UL Packaged Boiler
- All hand-welded pressure vessel
- Stainless steel jacket

DURABLE AND RELIABLE CONSTRUCTION

All of the time-proven benefits and design features of the Classic Vertical Tubeless Boiler have been maintained in the Edge, but with the added value of the Fulton Engineered Flue Gas Enhancing System (FGE) to cut your fuel bills substantially.

Using added heat transfer surface area, the high-velocity flue gases travel over a cylindrical grid of heat convection fins, transferring additional heat evenly to the water in the vessel. This creates increased efficiency up to 84% while still maintaining a rugged pressure vessel design.

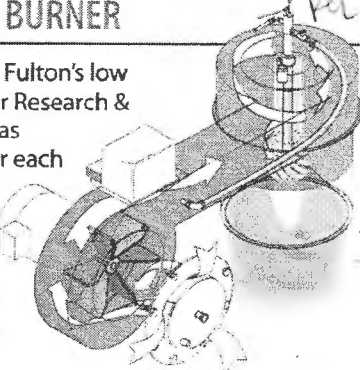
RECEIVED
 MAR 23 2012
 Dept of Building Inspections
 City of Portland, Ore

EDGE BOILER	INPUT BTU/HR	STEAM OUTPUT	HOT WATER OUTPUT	WATER VOLUME	OPERATING WEIGHT	FOOTPRINT W x D x H
6	238,000	207 lbs/hr	201,000 btu/hr	16 gal	1,833 lbs	33 x 44 x 75
9.5	398,000	328 lbs/hr	318,000 btu/hr	16 gal	2,033 lbs	33 x 44 x 85
10	397,000	345 lbs/hr	335,000 btu/hr	24 gal	2,200 lbs	33.5 x 46 x 80.5
15	595,000	519 lbs/hr	503,000 btu/hr	39 gal	2,605 lbs	35.5 x 47 x 86.5
20	794,000	690 lbs/hr	670,000 btu/hr	77 gal	4,041 lbs	43 x 58 x 92.5
30	1,190,000	1,035 lbs/hr	1,005,000 btu/hr	170 gal	6,196 lbs	49 x 67 x 102

*This model**

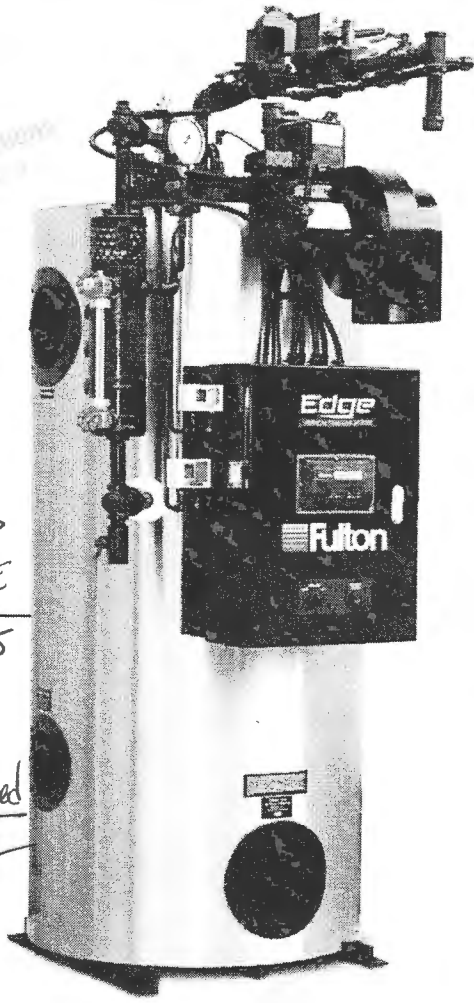
Under 400,000 BTU/hr input - NO FIRE SEP
LOW EMISSIONS BURNER
PORTABLE

An available option is Fulton's low emissions burner. Our Research & Development team has developed burners for each model to meet or exceed the most stringent emissions requirements. This option is available on the Classic, Edge, and VMP models.

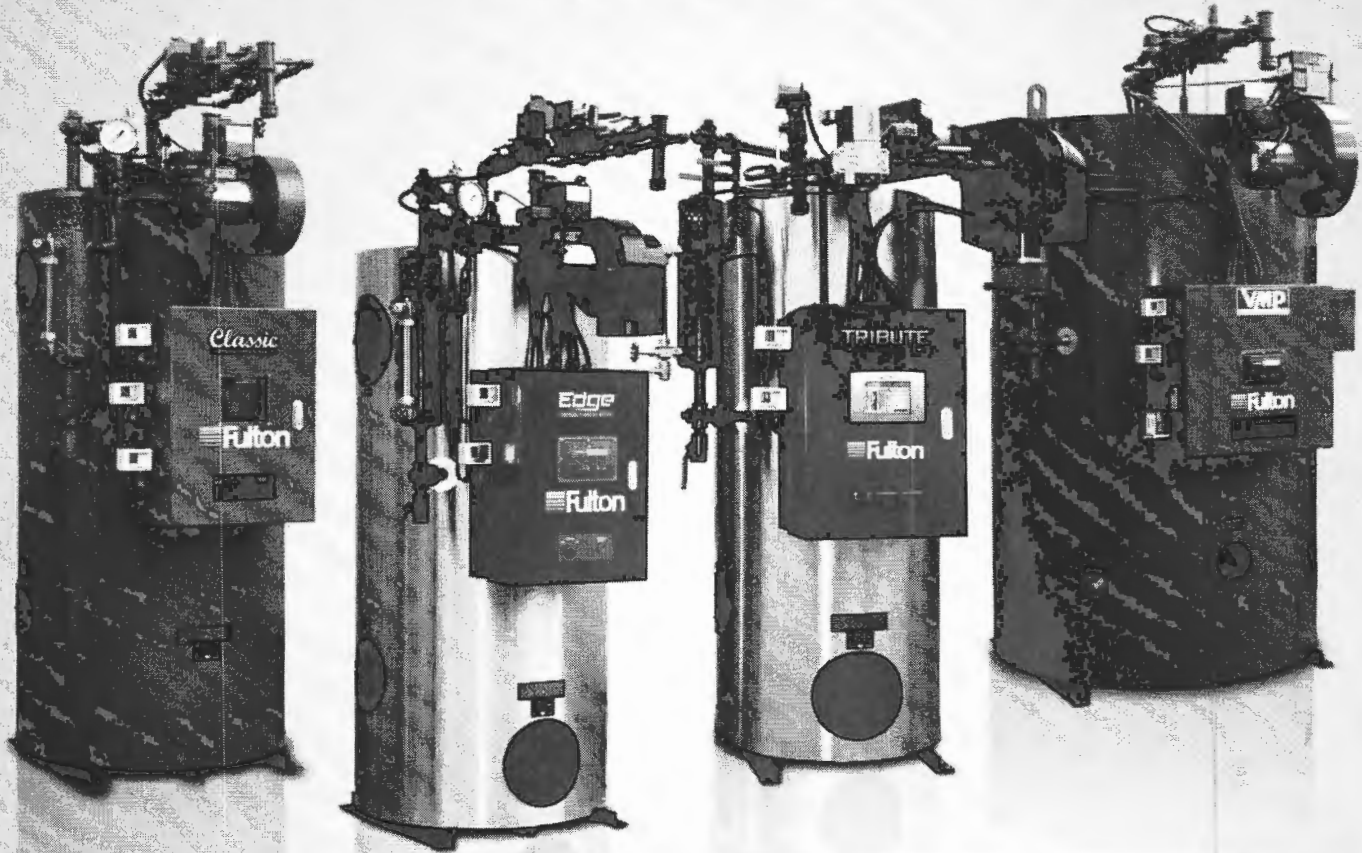


508.25 ALSO Bldg Sprinkled JMB

* A low emissions burner comes standard on all Tribute models



THE FULTON LINE OF VERTICAL TUBELESS BOILERS



Classic 6 - 60 BHP
Type: Steam or Hot Water Boiler
Size Range: 6, 9.5, 10, 15, 20, 25, 30, 50, 60 BHP
Primary Application: Laundries, Drycleaners, Industrial / Commercial
Burner Available: Gas or oil fired and combination fuel fired. <i>* Low emissions burner optional.</i>
Pressure Range: Standard: 15, 150 psig Custom: Up to 500 psig
Efficiency: Up to 81 %

Edge 6 - 30 BHP
Type: Steam or Hot Water Boiler
Size Range: 6, 9.5, 10, 15, 20, 30 BHP
Primary Application: Laundries, Drycleaners, Industrial / Commercial
Burner Available: Gas fired only <i>* Low emissions burner optional.</i>
Pressure Range: Standard: 15, 150 psig Custom: Up to 500 psig
Efficiency: Up to 84 %

Tribute 9.5 - 30 BHP
Type: Steam Boiler
Size Range: 9.5, 10, 15, 20, 30 BHP
Primary Application: Laundries, Drycleaners, Industrial / Commercial
Burner Available: Gas fired only <i>* Low emissions burner standard.</i>
Pressure Range: Standard: 15, 150 psig Custom: Up to 500 psig
Efficiency: Up to 84 %

Vertical Multi-Port (VMP) 40 - 150 BHP
Type: Pipe-type, Steam or Hot Water Boiler
Size Range: 40, 49.5, 50, 60, 80, 100, 130, 150 BHP
Primary Application: Laundries, Industrial / Commercial
Burner Available: Gas or oil fired and combination fuel fired. <i>* Low emissions burner optional.</i>
Pressure Range: Standard: 15, 150 psig Custom: Up to 300 psig
Efficiency: Up to 84 %



Guide Specification

Model ICS/ICX _____

BHP _____ PSI _____

Fuel _____

Fulton Packaged Automatic Fuel-Fired Steam Boilers

Section I. General Description

Contractor shall furnish and install a _____HP _____fired _____PSI packaged automatic steam boiler unit per plans. The unit shall be "Fulton" as manufactured by Fulton Boiler Works, Inc., Pulaski, New York.

Each unit shall consist of a vertical tubeless boiler, boiler fittings, burner equipment and automatic controls. The boiler (with all piping and wiring) shall be completely factory assembled as a self-contained unit. Each boiler shall be neatly finished, thoroughly tested and properly packaged for shipping. Both boiler and burner must be the product of the same manufacturer to insure undivided responsibility and simplified servicing. Boiler design and construction shall be in accordance with ASME Code Section I or ASME Code Section IV, and the complete packaged unit shall bear Underwriters' Laboratories Label. The furnace shall be constructed of SA-53B ERW Pipe or SA-516 Grade 70 Plate. The shell shall be constructed of SA-106B Seamless Pipe or SA-516 Grade 70 Plate. The heads shall SA-516 Grade 70 Plate.

Section II. Boiler Size and Ratings

The capacity of each unit at nominal rating shall be to produce continuously _____pounds of steam per hour from and at 212 degrees F, or an equivalent _____boiler horsepower output. Exit flue gas temperature of the boiler shall not exceed _____Degrees F gross at maximum rated input and _____PSI working pressure. The boiler input shall not exceed _____BTU/Hr. while producing a minimum of _____BTU/Hr. output. Boiler shall be constructed and tested in accordance with ASME Section I or Section IV Code Requirements for a design pressure _____PSIG.

Section III. Boiler Design

The boiler shall be a vertical tubeless design with a centrally located furnace. The top mounted forced draft burner will fire from the top of the boiler down and through a circular furnace. Adequate handholes shall be provided for access to the water side of the boiler. Hand-holes and cleanout openings shall be provided at the lower part of the boiler so that the entire bottom of

the boiler may be cleaned. The standard two-pass boiler will make use of welded convection fins to enhance heat transfer and distribute the flow of flue gases.

All necessary refractories shall be installed in the boiler. The boiler shall be insulated with compatible high temperature castable mixtures. The boiler section subject to direct flame shall be insulated with a high strength, low permanent linear change, high temperature limit castable. The remaining area shall be insulated with a lightweight, low thermal conductive castable. These castables assure strength so that cyclic thermal stress and cracking which can damage the insulation, does not occur. Insulation thickness shall be as follows:

4-15 BHP--3 1/2"; 20 BHP--4"; 30 BHP--4 1/4"; 50-60 BHP--4 1/2".

The 18 gauge metal jacket shall have a primer and finish coat of paint (Stainless Steel for ICX models).

Section IV. Boiler Fittings

- A. Safety valve(s) shall be ASME Section I or Section IV approved side outlet type. Their size and number shall be in accordance with Code requirements and set to open at _____PSIG
- B. A water column shall be piped to the boiler at the factory. A gauge glass and drain valve will be supplied. The gauge glass shall be protected by a plexi-glass gauge protector as an additional safety feature. Water column shall also include the primary low water cut-off probe to automatically shutoff burner operation when the water falls below a predetermined level. An auxiliary low water cut-off (probe type) shall be mounted in the boiler shell. The water column shall contain two additional water level probes to "start" and "stop" the feedwater pump.
- C. Steam pressure gauge shall be mounted on the water column complete with test connection.
- D. Feedwater stop and check valve shall be supplied at factory in line to an internally baffled feed connection in boiler shell to prevent thermal shock.
- E. Additional standard trim shall include Y-type blow down valve and water column blowdown valve.

Section V. Burner Equipment

Burner location and firing method to be such that combustion takes place within the water-backed furnace of the boiler. Burner controls shall be of on/off (modulation recommended over 40 HP) operation type and are to include the following:

- A. Operating pressure control for automatic start and stop of burner operation.
- B. Two low water cut-off probes to cause shut down of unit when water level drops to minimum safe level (one in the water column and one in the boiler shell). The one in the shell shall be manual reset to comply with ANSI/ASME CSD-1 Code.
- C. Gas fired boilers shall have an air safety switch to prevent operation until sufficient combustion is assured.
- D. A contact for a feedwater pump shall be included and consist of a single phase pump motor starter or contacts for 3 phase pump.
- E. An electronic type combustion flame safeguard shall be included to provide full protection against flame failure. The control shall maintain a running history of operating hours, number of cycles, and the most recent six flame failures. This control shall have the capability to be connected to a keyboard display module which will retrieve that information (standard on 60-100 HP).
- F. Burner motor controller shall have thermal overload protection.

All controls to be panel mounted and so located on the boiler as to provide ease of servicing the burner and boiler without disturbing the controls; and also located to prevent possible damage by water, fuel or heat of combustion gases. Controls connected to water or fuel shall be installed outside the main boiler control panel. All controls shall be mounted and wired according to Underwriters' Laboratories requirements. Electric current supply 120 volts, 60 cycle single phase.

Section VI. Tests

- A. Boiler inspection shall include a hydrostatic test in the presence of an inspector having a National Board Commission. He shall certify a Data Report which shall be delivered with the boiler as evidence of ASME Code compliance. In addition to an ASME symbol, the boiler shall bear a National Board Registration Number.
- B. Proper operation of the boiler and all controls will be assured by filling with water and test firing at the factory. Test firing will include adjusting all operating and safety controls to the correct settings.

Section VII. Operating Manual

- A. Instructions for installation, operation, and maintenance of the boiler shall be contained in a manual provided with each boiler unit.
- B. A wiring diagram corresponding to the boiler shall be included in the boiler panel box.

Section VIII. Warranty

The pressure vessel shall have a 5 year (60 month) material and workmanship warranty. All other components are covered by a one year (12 month) warranty.

**Industrial/Commercial Division
Fulton Boiler Works, Inc.**



3981 Port St., Box 257
Pulaski, New York USA 13142

Call 315-298-5121
Fax 315-298-6390

email: info@fulton.com web site: www.fulton.com

**Fulton Boiler Works, Inc.
Fulton Thermal Corporation**

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