DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND BUILDING PERMIT



This is to certify that WILLIAM S RUSSELL

Job ID: 2011-11-2756-HVAC

Located At 43 GALVIN ST

CBL: 166- E-012-001

has permission to Install Biasi Oil Heating System

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

11/29/2011

Fire Prevention Officer

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.

#### Required Inspections:

1. Final Inspection upon completion of work.

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

Director of Planning and Urban Development Penny St. Louis

Job ID: 2011-11-2756-HVAC

Located At: 43 GALVIN ST

CBL: 166- E-012-001

#### **Conditions of Approval:**

#### **Building**

- 1. Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.
- 2. Ventilation of this space is required per ASRAE 62.2 or 62.1, 2007 edition.
- 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.
- Installation shall comply with 2003 International Mechanical Code and State of Maine Oil and Solid Fuel Board Laws and Rules
- Equipment shall be installed in compliance with the manufacturer's specifications and the UL listing.
- 6. This solid fuel appliance/stove/insert shall be installed, operated and maintained per the manufacturers specifications, the UL listing, NFPA 211 and IMC 2003.

### City of Portland, Maine - Building or Use Permit Application 389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

| Job No:<br>2011-11-2756-HVAC                                    | Date Applied: 11/15/2011   |                 | CBL:<br>166- E-012-001                               |  |  |  |
|---|--|-----------------|--|--|--|--|
| Location of Construction:<br>43 GALVIN ST                       | Owner Name:<br>WILLIAM S RUSSELL   |                 | Owner Address: 43 GALVIN ST PORTLAND, ME 04103       |  |  | Phone:                                 |
| Business Name:  | Contractor Name: DOWNEAST ENERGY CO  |                 | Contractor Address: PO BOX 250 BRUNSWICK MAINE 04011 |  | 1  | Phone: 799-5585                        |
| Lessee/Buyer's Name:  | Phone:   |                 | Permit Type:<br>HVAC                                 |  |  | Zone:<br>R-5                           |
| Past Use: Single Family Dwelling                                | ngle Family Dwelling  Same: Single Family  to install Biasi hear system  |                 | Cost of Work:<br>\$9,000.00                          |  |  | CEO District:                          |
| ongo rumiy 2 woming   |  |                 | Fire Dept:   | Approved Denied N/A  |  | Inspection: Use Group: Type: Signature |
| Proposed Project Description 43 Galvin St Install Biasi in base |  | -               | Pedestrian Activ                                     | ities District (P.A.D.)  |  | 1110                                   |
| Permit Taken By: Gayle  |  | Zoning Approval |  |  |  |  |
| e owner to make this application as                             | Special Zone or Reviews  Shoreland Wetlands Flood Zone Subdivision Site Plan  MajMin MM Date:  CERTIFICATION  or that the proposed work is authorize to conform to all applicable laws of the presentative shall have the authority to |                 | his jurisdiction. In addition                        | Not in Dis Does not R Requires R Approved Approved Denied Date:  and that I have been a n, if a permit for wor | Approved w/Conditions  Denied  te:  have been authorized by rmit for work described in |  |
| IGNATURE OF APPLICAN  | NT AI  | DDRESS          |  | DATE   |  | PHONE                                  |
| ESPONSIBLE PERSON IN  | CHARGE OF WORK T   | TITLE           |  | DATE   |  | PHONE                                  |

2011-11-2756

FILL IN AND SIGN WITH INK



## APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

| To the INSPECTOR OF BUILDINGS, PORTLAND, ME.  The undersigned hereby applies for a permit to instance of the control of the second and the second accordance with the Laws of Maine, the Building Code of the second accordance with the Laws of Maine, the Building Code of the second accordance with the Laws of Maine, the Building Code of the second accordance with the Laws of Maine, the Building Code of the second accordance with the Laws of Maine, the Building Code of the second accordance with the second | tall the following heating, cooking or power equipment in the City of Portland, and the following specifications:  |
|--|--|
| Location / CBL $16-E-12^{\xi}13$ Name and address of owner of appliance $504$ Rysse  | Use of Building Voivate Date 11/15/11  43 Calum ST Parthol   |
| Installer's name and address Dougn East Fo   | Telephone Types 585  |
| Location of appliance:  Basement   | Type of Chimney:  Masonry Lined  |
| Type of Fuel:  Gas Oil Solid  Appliance Name: U.L. Approved Yes No  Will appliance be installed in accordance with the manufacture's installation instructions?  We No  No  IF NO Explain:   | Factory built  Metal Factory Built U.L. Listing #  Direct Vent Type   RECFIVED  Type of Fuel Tank   NOV   1 5   2011 Gas Dept. of Building Inspections City of Portland Maine  |
| The Type of License of Installer:  Master Plumber #  Solid Fuel #  Oil #  Gas #  Other   | Number of Tanks  Distance from Tank to Center of Flame  Cost of Work: \$\frac{8}{700.00}\$  Permit Fee: \$   |
| Approved  Fire:Ele.:   | Approved with Conditions  See attached letter or requirement   |
| Signature of Installer  White - Inspection Vellow - File   | Pink - Applicant's Gold - Assessor's Copy  |
| William - Hispardon Tellow - File  | A THE APPRICATE OF COLUMN ASSOCIATION OF COLUMN ASSOCIATION OF THE PROPERTY OF |



#### **Home Construction Contract**

November 9, 2011

Scott Russell 43 Galvin St. Portland, ME 04103

NAME: \_\_

Steve Trudelle

Tel: 874-9790

Downeast Energy is pleased to quote the following to replace your existing hot water boiler:

<u>Installation of:</u> 1- Biasi model B10/5. This is a 5-section, cast iron, 3-pass wet base boiler. This comes with a new Riello flame retention oil burner and Honeywell controls. This also comes with 1- Amtrol model CH-41, 41-gallon indirect fired hot water heater to be tied in tandem with the above listed boiler for your domestic hot water use. All necessary boiler hook-up parts and zoning materials would be included. We would be replacing your existing oil storage tank using 1- Granby 275-gallon upright oil tank package which includes all new fill and vent to the outside of the building as well as a new gauge and vent alarm. Removal and disposal of your old oil tank is included. The old boiler will be left behind, as per our discussion.

This price includes: All other necessary materials, taxes and permits. All workmanship would be guaranteed for 12 months from date of installation.

Total NET price installed (including all parts & labor): \$8,700.00.

CHANGE ORDERS: Any alteration or deviation from the above contractual specifications that results in a revision of the contract price will be executed only upon the parties entering into a written change order.

If Downeast Energy determines that asbestos needs to be removed, it must be done by a licensed asbestos abatement contractor. Downeast Energy will do the installation only after receiving written acknowledgement from the contractor that the asbestos has been properly abated.

PAYMENT: Due in full within 30 days from date of completion. FINANCING AVAILABLE UPON CREDIT APPROVAL. WOULD YOU LIKE TO APPLY YES NOTE: Special financing programs require that you purchase your total fuel requirements on automatic delivery from Downeast Energy for the duration of the financing term. Should you fail to purchase your total fuel requirements on automatic delivery from Downeast Energy, the outstanding balance is immediately due and payable. ANY SPECIAL PAYMENT TERMS MUST BE APPROVED PRIOR TO INSTALLATION BY AN AUTHORIZED COMPANY REPRESENTATIVE. QUOTATION VALIDITY: The above quote is firm for the period of 30 days. Beyond that period, quotes are subject to adjustment should there be a change in the various costs to us. Said changes would, of course, be confirmed by us prior to ordering. WARRANTY: In addition to any additional warranties agreed to by the parties, the contractor warrants that the work will be free from faulty materials: constructed according to the standards of the building code applicable for this location; constructed in a skillful manner and fit for habitation or appropriate use. The warranty rights and remedies set forth in the Maine Uniform Commercial Code apply to this contract. RESOLUTION OF DISPUTES: If a dispute arises concerning the provisions of this contract or the performance by the parties, then the parties agree to settle this dispute by jointly paying for one of the following (check only one): Binding arbitration as regulated by the Maine Uniform Arbitration Act, with the parties agreeing to accept as final the arbitrator's decision. Nonbinding arbitration, with the parties free to not accept the arbitrator's decision and to seek satisfaction through other means, including a Mediation, with the parties agreeing to enter into good faith negotiations through a neutral mediator in order to attempt to resolve their differences. CONSUMER PROTECTION INFORMATION: Maine law requires the Contractor to attach to this Contract a copy of the Attorney General's consumer protection Information on home construction and repair, which includes information on contractors successfully sued by the State, as provided on the Attorney General's publicly accessible website, unless the parties agree otherwise. We agree that we will not attach this information to this contract. You may access these pages at: http://www.maine.gov/ag/consumer/housing/home\_construction.shtml, or by calling the Attorney General's telephone number - (207)626-8800, (TTY: 207-626-8865). IF PROPOSAL IS ACCEPTED, PLEASE SIGN AND RETURN ONE COPY. DATE: SIGNATURE: (homeowner or lessee) SIGNATURE: \_ (contractor or authorized representative) ADDRESS: 172 Main St., South Portland, ME 04106 COMPANY: Downeast Energy

TELEPHONE: 799-5585

### **Original Receipt**

|   | 11.15 20 11                    |  |  |  |  |
|---|--------------------------------|--|--|--|--|
| Received from   |                                |  |  |  |  |
| Location of Work 136a   | Win                            |  |  |  |  |
| Cost of Construction \$   | Building Fee:                  |  |  |  |  |
| Permit Fee \$   | Site Fee:                      |  |  |  |  |
| Certificate of Occupancy Fee:   |                                |  |  |  |  |
|   | Total:                         |  |  |  |  |
| Building (IL) Plumbing (I5) E         Other / 46  | Electrical (I2) Site Plan (U2) |  |  |  |  |
| Check #:  | Total Collected s //0          |  |  |  |  |
| No work is to be started until permit issued.  Please keep original receipt for your records. |                                |  |  |  |  |

Taken by:

WHITE - Applicant's Copy YELLOW - Office Copy PINK - Permit Copy

# The BIASI B10 Boiler System



...the style of warmth





Quincy Hydronic Technology, Inc. • www.qhtinc.com



# THE BIASI B10

### IN THE ALPS, WINTERS ARE COLD AND FUEL IS EXPENSIVE.



I f necessity is the mother of invention, it's easy to understand the design evolution of the incredibly efficient BIASI B10 home heating system. Winters in the mountains of Northern Italy can be very cold. What's worse, heating fuel is three times more expensive than in the U.S.

The BIASI B10 Boiler is the heart of an ingenious engineering adaptation to a difficult situation—by a people known for innovative design and superior craftsmanship.

Add a bit of Yankee ingenuity (in the form of Hi-Pressure burners, electronic controls, indirect hot water heaters, and cabinet design technology) and the BIASI B10 has evolved into one of the most efficient home heating and hot water systems on either side of the Atlantic. Fortunately, it's also one of the most affordable.

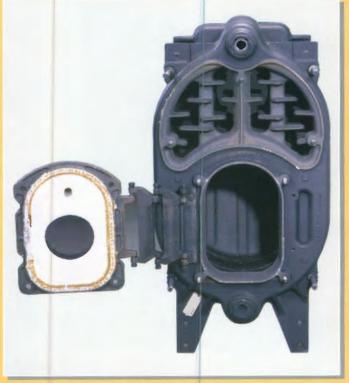
# THE ULTIMATE IN HYDRONIC SPACE HEATING TECHNOLOGY

he BIASI B10 is a rugged, high performance, oil/ gas fired, cast iron boiler engineered to deliver efficiencies as high as 87.3%; much higher than that of 'single pass' domestic boilers.

The BIASI B10 has a unique triple-pass heat exchanger that extracts the maximum amount of heat from the combustion gasses, resulting in very little wasted heat.

The B10 Boiler is virtually indestructible, constructed of GG20 cast iron, ASME rated at 58 psi, yet only weighs as little as 250 lbs. It uses very little water compared to conventional single pass boilers. So your zone is heated long before the large mass, single pass boiler gets up to circulation temperature. Its compact design makes it suitable for installation in small spaces.

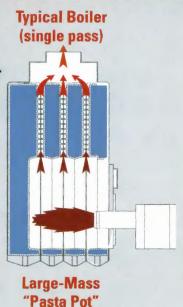
In short, the BIASI B10 offers home and building owners an affordable, versatile, long lasting heating system that provides super high combustion efficiencies and considerably lower fuel costs.



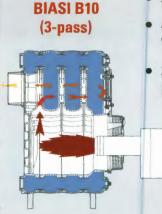
The Biasi B10 Boiler Block with Swing Door

### Single Pass Large Mass vs. Three-Pass Low Mass

- 550 lbs
- 17 Gallons of Water
- 450°-550° F
   Flue Temperature



Because B10's heat
exchanger path is
7.3 ft. versus 1.5 ft.
for a single-pass,
"pin-type" boiler,
our 3-pass boiler
heats more surface
area per gallon
burned with 50% less
heat loss up the chimney.



Low-Mass "Teapot" 307 lbs

4.7 Gallons of Water

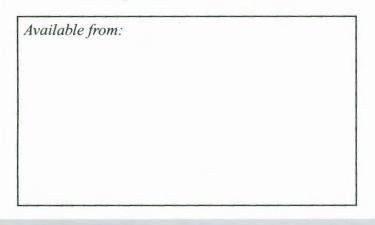
325°-350° F Flue Temperature

### Biasi B10...The Right Size for the Job.

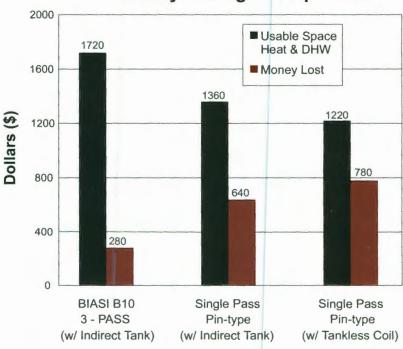
If you were heating water for a cup of tea, would you use a pasta pot or a teapot? Think of the tankless, large-mass, single pass boiler as a pasta pot and the BIASI B10, low-mass, 3-pass boiler as a teapot. Heating systems in today's houses only hold 5-8 gallons of water. Why burn all the fuel necessary to heat 17 gals. of boiler water in a 600 lb., single pass boiler? The low-mass BIASI B10 with it's 3-pass design and 4 gals. of water content will satisfy the call for heat before the single pass boiler has even warmed up. The single pass boiler has heated twice the amount of iron and four times the amount of water. All that excess heat goes "up the chimney" with your fuel dollars.

# Money Saved by Choosing the BIASI B10

For a Typical Home Using Conventional Baseboard Heating Elements and Consuming \$2000 of Fuel Per Year



#### **Money Savings Comparison**



**Boiler System** 



## HEATING SYSTEM

## ALL THE HEAT & HOT WATER YOU NEED...

AT A FRACTION OF THE COST



ur B10 Boiler, coupled with an indirect storage tank, will supply all the hot water you need; which means no more cold showers.

In the summer, the B10 boiler only needs to fire once or twice a day, because ample amounts of domestic hot water (DHW) are readily available in a 40-gallon indirect storage tank. Compare that to a single pass boiler, which may use a tankless coil holding less than 1/2 gallon of DHW. This requires the single pass boiler to maintain 160° F

temperature continuously (even in the summer) to sustain your hot water supply. With the BIASI B10 boiler and an indirect storage tank, you'll always be in hot water, and at a lower cost than a conventional boiler system or an electric water heater.

### BIASI B10-SERIES ADVANTAGES

- Lifetime Warranty
- Can reduce heat and hot water costs by half
- UL and CUL Listed
- BIASI B10 boilerblock is ASME rated for 58 psi
- GG20 flexible cast iron construction for superior durability
- Quiet Operation
- Multi-fuel capability (adapts easily to oil or gas burners)
- Direct vent listed oil or gas (no chimney needed)
- Uses the smallest possible volume of water (as little as 3 gallons)
- Low maintenance; easy to access, easy to clean
- Extra heavy insulation for low jacket and standby losses
- Compatible with all electronic control systems

#### **BIASI B10...The Right Size for the Job**

| Boiler<br>Model* | Heating<br>Capacity<br>(MBH) | AFUE<br>Efficiency<br>(%) | Water<br>Content<br>(Gals.) | Dimensions<br>L·W·H<br>(Inches) | Weight (Lbs.) |
|------------------|------------------------------|---------------------------|-----------------------------|---------------------------------|---------------|
| B-3              | 67                           | 86.7                      | 3.7                         | 15.5 × 19 × 30                  | 247           |
| B-4              | 97                           | 86.8                      | 4.7                         | 19.5 × 19 × 30                  | 307           |
| B-5              | 124                          | 87.3                      | 5.7                         | 23.5 ×19 ×30                    | 367           |
| B-6              | 153                          | 86.8                      | 6.7                         | 28.5 × 19 × 30                  | 427           |
| B-7              | 185                          | 86.9                      | 7.7                         | 33.5 × 19 × 30                  | 486           |
| B-8              | 211                          | 86.9                      | 8.7                         | 38.5 × 19 × 30                  | 546           |
| B-9              | 257                          | 86.6                      | 9.7                         | 42.5 ×19 ×30                    | 606           |

Maximum water working pressure: 58 PSI. The efficiency ratings are based on a combustion condition of 13% CO2. Warranty: The BIASI B10 boiler has a limited lifetime warranty. A copy is provided with each boiler or is available from your dealer. Built in accordance with the requirements of ASME boiler and pressure vessel code.

