

**City of Portland, Maine - Building or Use Permit Application**

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 09-0808	Issue Date:	CBL: 386A B040001
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Location of Construction: 14 GARSOE DR	Owner Name: HAMMOND TOBY B ETAL JTS	Owner Address: PO BOX 488	Phone: 207-637-2715
Business Name:	Contractor Name: Barry Gammon Sr.	Contractor Address: 295 Boothby Road Limington	Phone: 2076372715
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	Zone:

Past Use: Single Family Home	Proposed Use: Single Family Home - Install Biasi Direct Vent Oil Burner	Permit Fee: \$110.00	Cost of Work: \$8,500.00	CEO District: 5
Proposed Project Description: Install Biasi Direct Vent Oil Burner		FIRE DEPT: <input type="checkbox"/> Approved <input checked="" type="checkbox"/> Denied <i>N/A</i>	INSPECTION: Use Group: <i>V</i> Type: <i>HVAC</i> <i>TMC 2003</i> Signature: <i>[Signature]</i>	

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

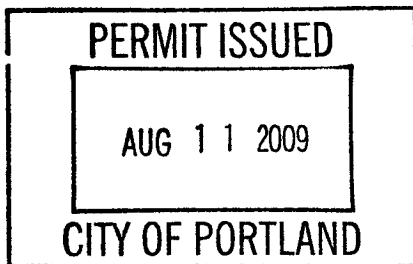
Action:  Approved  Approved w/Conditions  Denied

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Permit Taken By: lmd	Date Applied For: 07/29/2009	<b>Zoning Approval</b>
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- This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
- Building permits do not include plumbing, septic or electrical work.
- Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

<b>Special Zone or Reviews</b> <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan  Maj <input type="checkbox"/> Mjnor <input type="checkbox"/> MM <input type="checkbox"/> Date: <i>8/10/09</i>	<b>Zoning Appeal</b> <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied  Date: _____	<b>Historic Preservation</b> <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied  Date: <i>8/10/09</i>
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**CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

\_\_\_\_\_  
SIGNATURE OF APPLICANT ADDRESS DATE PHONE

\_\_\_\_\_  
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE

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<b>Business Name:</b>	<b>Contractor Name:</b> Barry Gammon Sr.	<b>Contractor Address:</b> 295 Boothby Road Limington	<b>Phone:</b> (207) 637-2715
<b>Lessee/Buyer's Name</b>	<b>Phone:</b>	<b>Permit Type:</b> HVAC	

<b>Proposed Use:</b> Single Family Home - Install Biasi Direct Vent Oil Burner	<b>Proposed Project Description:</b> Install Biasi Direct Vent Oil Burner
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<b>Dept:</b> Zoning	<b>Status:</b> Approved	<b>Reviewer:</b> Tammy Munson	<b>Approval Date:</b> 08/10/2009	<b>Note:</b>	<b>Ok to Issue:</b> <input checked="" type="checkbox"/>
<b>Dept:</b> Building	<b>Status:</b> Approved with Conditions	<b>Reviewer:</b> Tammy Munson	<b>Approval Date:</b> 08/10/2009	<b>Note:</b>	<b>Ok to Issue:</b> <input checked="" type="checkbox"/>
1) Installation shall comply with 2003 International Mechanical Code and State of Maine Oil and Solid Fuel Board Laws and Rules					



Strengthening a Remarkable City, Building a Community for  
PLANNING & DEVELOPMENT DEPARTMENT  
Housing & Neighborhood Services Division

Attn:

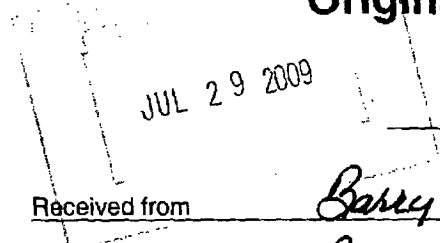
Lisa Danforth, Administrative Assistant  
lmd@portlandmaine.gov

389 Congress Street • Portland, Maine 04101-3509  
www.portlandmaine.gov • Ph (207) 874-8703 • Fx 874-8716 • TTY 874-8861



CITY OF PORTLAND, MAINE  
Department of Building Inspections

Original Receipt



July 29 20 09

Received from Barry Cannon, Sr.

Location of Work 14 GARSOE DRIVE

Cost of Construction \$ \_\_\_\_\_ Building Fee: \_\_\_\_\_

Permit Fee \$ \_\_\_\_\_ Site Fee: \_\_\_\_\_

Certificate of Occupancy Fee: \_\_\_\_\_

Total: \_\_\_\_\_

Building (IL) \_\_\_\_\_ Plumbing (IS)  Electrical (I2) \_\_\_\_\_ Site Plan (U2) \_\_\_\_\_

Other HYAV PLUMBING - 100.00  
HYAR 110.00

CBL: 386A-B-040

Check #: 1291 Total Collected \$ 210.00

No work is to be started until permit issued.  
Please keep original receipt for your records.

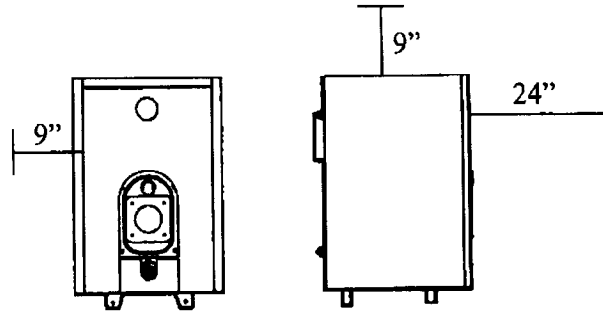
Taken by: L. Danforth

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

### 3. Boiler Location

The following are the minimum clearance to construction or combustible materials:

1. 9" from the top, sides, and rear of the boiler.
2. 18" from the flue pipe in any direction.
3. 24" from the front of the boiler.



### DANGER

The boiler must be located on a non-combustible floor. A smooth, level concrete floor is recommended. Locate the boiler as close as possible to the chimney. If boiler is installed on combustible flooring, consult local authorities for proper method of covering floor. The boiler must not be installed on carpeting.

**Caution: Do not store or use flammable materials, chemicals or flammable liquids, especially gasoline, in the vicinity of this heating appliance.**

If the boiler is to be installed in a "direct vent" configuration, please refer to the B10 Direct Vent Addendum supplied with the Direct Vent Kit.

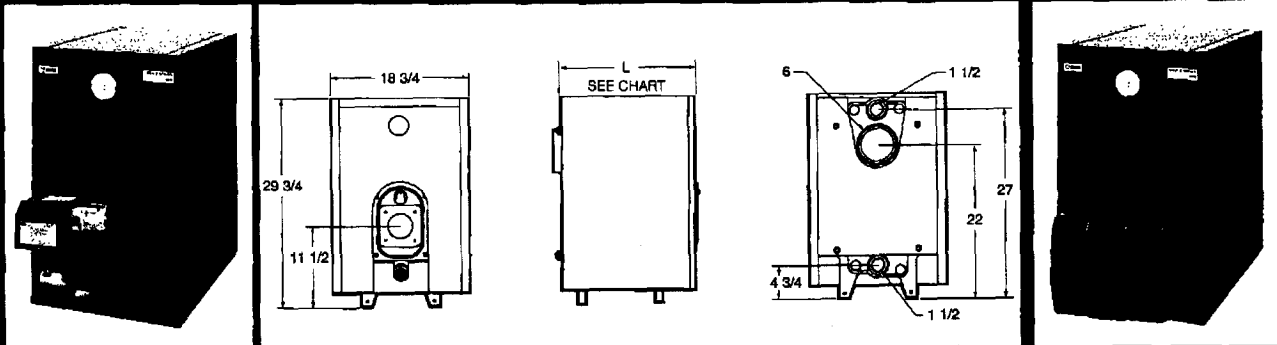
PROVISIONS FOR COMBUSTION AIR AND VENTILATION AIR MUST BE IN ACCORDANCE WITH SECTION 5.3, "AIR FOR COMBUSTION AND VENTILATION", OF THE NATIONAL FUEL GAS CODE, ANSI Z223.1, OR APPLICABLE PROVISIONS OF THE LOCAL BUILDING CODES. **DO NOT INSTALL THE BOILER UNTIL PROPER COMBUSTION AIR HAS BEEN ARRANGED.**

### WARNING

Boiler is certified as an indoor appliance. Do not install boiler outdoors or locate where it will be exposed to freezing temperatures

# BIASI...The Style of Warmth

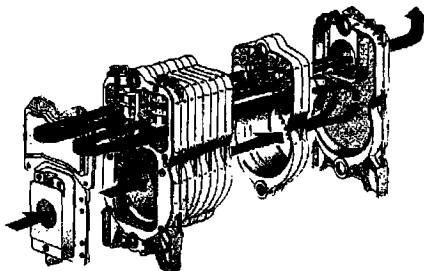
The B-10 boiler system has been heating residential buildings throughout the world for years. It has proven its fuel efficiency and durability in countries where fuel can cost up to four times as much as in the U.S. The same fuel saving technology is now available here in North America. With the three pass boiler design and low water content, heat is quickly supplied for your heating zones and hot water needs. Combined with an electronic optimizing control, you can achieve a fuel savings of up to 40% over conventional single pass boilers. You will also have peace of mind since the B-10 boiler package complies with ASME and UL standards and is IBR rated. The B-10 boiler system is the cost-competitive heat and hot water system of choice.



## The BIASI B-10 Residential Series

Boiler Model #	D.O.E. Heating Capacity	Gross Input Burner Capacity		Net I.B.R. Output (MBH)	AFUE Efficiency (%)	Water Content (Gals.)	Length (L) (Inches)	Weight (Lbs.)
		G.P.H.	MBH					
B-3	67	0.55	80	58	86.6	3.7	15.5	247
B-4	97	0.80	112	84	86.8	4.7	19.5	307
B-5	124	1.00	140	108	87.2	5.7	23.5	367
B-6	153	1.25	175	133	86.7	6.7	27.5	427
B-7	185	1.50	215	161	86.8	7.7	31.5	486
B-8	211	1.80	257	183	86.8	8.7	35.5	546
B-9	257	2.10	298	223	86.5	9.7	39.5	606

Maximum water working pressure: 58 PSI. (1) The burner input is based on oil with a heat value of 140,000 BTU/Gal.; (2) The net output ratings shown are based on piping and pick-up allowance of 1.15; (3) The efficiency ratings are based on a combustion condition of 12.5% CO<sub>2</sub>. Warranty: The BIASI B-10 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.



A 3-pass boiler design is the most efficient way to get the maximum amount of heat from the fuel, since it contains three times as much interior surface area (compared to a single-pass boiler) to extract heat from.

## Technical Advantages

- Gas or oil burner compatible
- Easy access swing door
- No flue required; can be direct vented outdoors
- Low water content boiler heats up faster with less fuel
- Efficient 3-pass heat exchanger boiler design
- GG20 cast-iron construction for superior heat retention and durability
- ASME, UL, and IBR listed
- 58 psi cast-iron construction



Exclusively distributed by:

**QHT**  
INCORPORATED

Quincy Hydronic Technology, Inc. • 1-800-501-7697 • E-mail: info@qhtinc.com



## General Description

The SS2 is a mechanical vent system designed and listed for use with natural draft oil and gas heating equipment. It is factory assembled and wired. The SS2 automatically vents the flue gases from heating equipment to the outdoors. By recirculating indoor air with a cooling fan, surrounding combustible materials remain at safe temperatures. After each burner cycle the SS2

will continue to operate for an adjustable period to purge the heater and vent of residual flue gases. The SS2 features a safety system consisting of a Fan Proving Switch and a High Limit Temperature Control. These devices monitor the SS2 performance and will interrupt the main burner if a vent system malfunction is detected.

## Application Table

Verify that the total BTU/hr. input of the heating appliance(s) falls within the proper category listed below. All BTU/hr. capacity ranges are based on a maximum of 50 equivalent feet. To determine equivalent feet, add the total length of straight vent

pipe plus 10 feet for each 90 degree elbow and 5 feet for each 45 degree elbow. Vent runs of over 15 linear feet should use an approved insulated vent connector to prevent problems related to condensation.

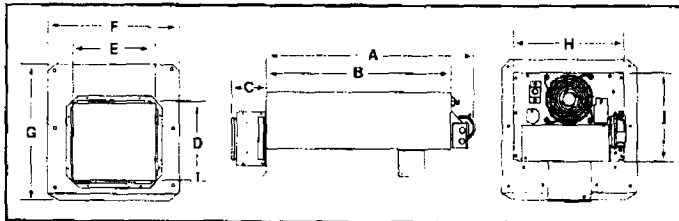
NOTE: BTU inputs less than 105,000 may require use of insulated vent pipe for linear runs exceeding 10 feet.

The SS2 Vent System may only be used on Flame Retention Head Burners.

MODEL	Flame Retention Oil Burner	Fan Assisted Natural & LP Gas	Atmospheric Natural & LP Gas	Max. Equivalent Feet
SS2	70,000-168,000*	Use SS2G	Use SS2G	50
SS2G	Not For Use On Oil Burners	40,000--150,000 BTU/hr	40,000--125,000 BTU/hr	50

\*Maximum capacity based on 13% CO<sub>2</sub> and Max. 500°F inlet temperature. Consult factory for details.

## Dimensions



A	B	C	D	E	F	G	H	I
34-1/4"	28-1/2"	5-1/2"	7-3/4"	8"	12-1/2"	13-1/4"	10-1/2"	8-1/2"

Optional Burner Motor Post Purge Kit (Part No. 950-2043) includes oil solenoid and relay so burner motor blower operates during the SS2 post purge cycle.

## You Can Count On Tjernlund Venting Products With Confidence



Since 1938, Tjernlund has built a solid reputation throughout North America for innovative products and venting solutions. Through four generations of family ownership, your complete satisfaction continues to be our primary focus.

The SS2 is available from:



## TJERNLUND PRODUCTS, INC.

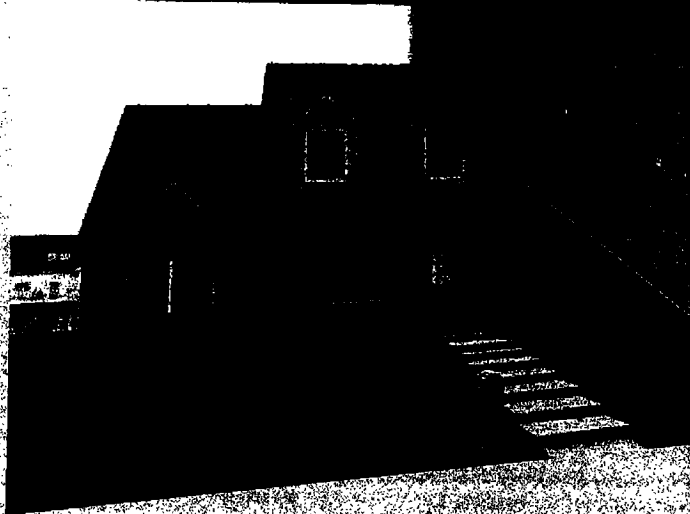
1601 Ninth Street White Bear Lake, MN 55110-6794  
 Phone: 651.426.2993 800.255.4208 Fax: 651.426.9547  
 Visit our web site: [www.tjernlund.com](http://www.tjernlund.com)

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**THE NEXT  
GENERATION  
IN SIDEWALL VENTING**



# Side Wall Venting System for Oil and Gas Heating Equipment



**A breakthrough in reliable  
performance, ease of installation and  
care-free maintenance ... at an affordable price.**

# Affordable, trouble-free side wall venting has arrived

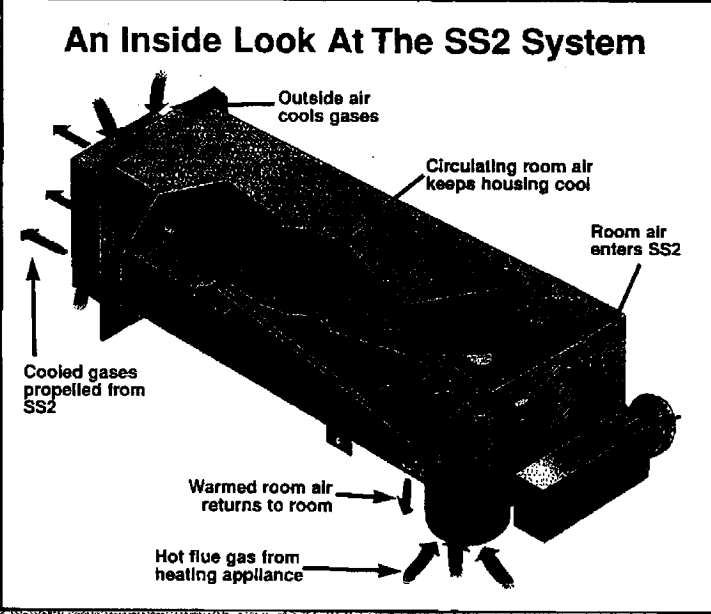
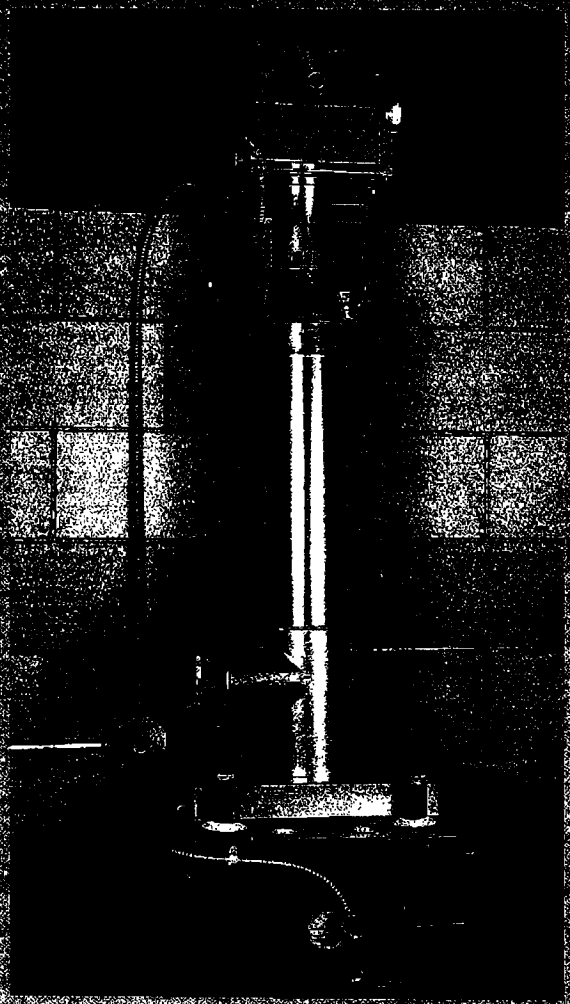
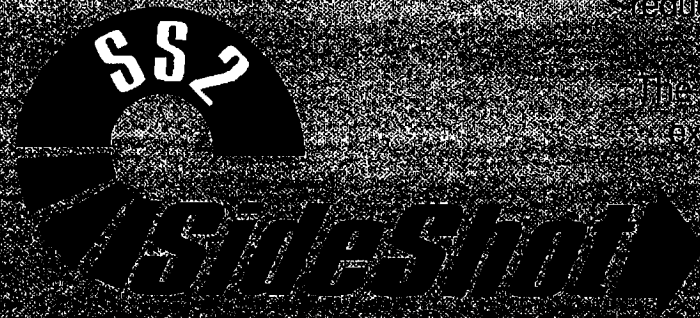
**V**enting for heating appliances doesn't have to go through the roof, either does the cost. In over one million installations, Thermund side wall vent systems have proven superior to other venting alternatives in performance and safety. And they also initially reduce heating installation costs.

The SS2's innovative design is the result of an extensive research and development program involving heating contractors and end users. One of the problems addressed but not solved by other side wall venting systems is the level of condensation that can occur in the vent pipe. The SS2's design prevents this by insulating the vent pipe and ensuring that it stays above the dew point of the vent gases.

## Specify the SS2 for:

New single family and multi-family homes  
Replacement and related chimneys

Existing single family and multi-family homes  
Existing electric, oil or gas furnaces  
Water heaters  
Boilers  
Stoves  
Water heaters  
Boilers  
Stoves



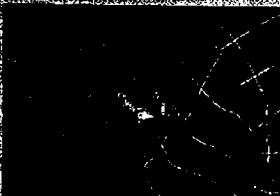


### Eliminates Chimney

Save costly installation or repair of chase and chimney by side wall venting. Also, eliminating chase increases living space.

### Easy, One-Person Installation

There's no pre-installation assembly required. To minimize weight during installation, the entire mechanical/electrical portion of the SS2 slides out of the housing, then easily slides back to complete installation after housing has been installed. Wiring panel is conveniently located on back of unit.



1. Cut opening in exterior wall.



2. Unscrew and slide out mechanical/electrical portion.

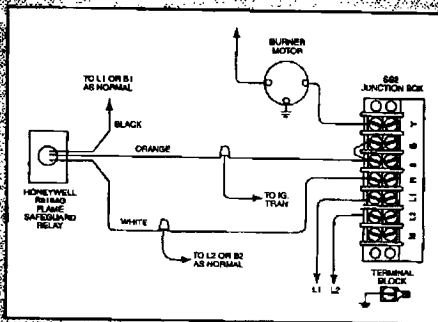


3. Install lightweight housing.



4. Slide mechanical/electrical portion back into housing and secure.

5. Wire burner circuit of SS2 terminal panel (diagram for wiring shown).



### Zero Clearance

The SS2 may be installed in direct contact with combustible surfaces for increased flexibility to terminate above grade. Requires only an 8 1/2" x 10 1/2" opening through the wall.

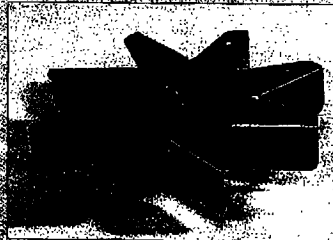
### Indoor Draft Adjustment

Precise draft is achieved by simply turning knob located on back of unit.



### No Annual Maintenance

"Self-cleaning" impeller blades and sealed motor bearings make the SS2 virtually maintenance-free. If service is necessary, all parts are accessible from indoors.



Specially designed centrifugal impeller blades have no exposed corners where particulates can build up to cause reduced performance and out-of-balance condition.

### Two-Way Safety Protection

SS2's controls make side wall venting safer than a chimney.

- 1. Pressure switch — monitors draft and detects flue outlet blockages.
- 2. High limit — interrupts burner if the SS2 housing exceeds safe temperatures.



### Patented High Velocity Exhaust

All gases from heating appliances are propelled from the SS2 wall beyond the exhaust hood to prevent staining of building exterior.



### Weather Protected Operating Components

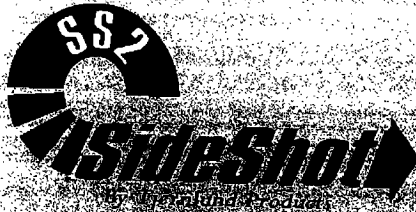
All mechanical and electrical parts are easily accessible from inside, where they belong, away from potentially damaging cold or wet weather.

### Whisper Quiet

The SS2 doesn't touch joists or subfloor. Special vibration absorbing wall-mounting bracket reduces operating noise to a minimum.

### Energy Efficient

Consumes less electricity than a 50 watt light bulb. To conserve energy and maximize comfort, room air is drawn into the SS2 for cooling, then recirculated back into the room.



## General Description

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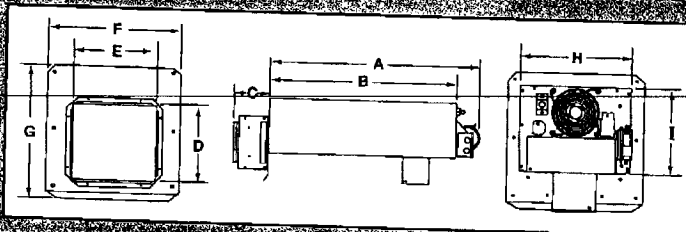
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The SS2 Vent System may only be used on Flame Retention Head Burners

MODEL	Flame Retention Oil Burner	Fan Assisted Natural & LP Gas	Atmospheric Natural & LP Gas	Max. Equivalent Feet
SS2	70,000-168,000*	Use SS2G	Use SS2G	50
SS2G	Not For Use On Oil Burners	40,000-150,000 BTU/hr	40,000-125,000 BTU/hr	50

\*Maximum capacity based on 100' and Max. 50' equivalent feet. See application notes.

## Dimensions



A	B	C	D	E	F	G	H	I
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## TJERNLUND PRODUCTS, INC.

1607 North Street, White Bear Lake, MN 55118-6794  
 Phone: 651-426-2994, 800-255-4208 Fax: 651-426-9547  
 Visit our web site: www.tjernlund.com