

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT



This is to certify that

UNIVERSITY OF NEW ENGLAND /Titan Mechanical Inc.

Located at

0 BISHOP ST

PERMIT ID: 2012-65618

CBL: 281 A003001

has permission to **Install Modine Gas Unit Heater in the bus shelter.**

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes 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 procured prior to occupancy.

Fire Prevention Officer



Code Enforcement Officer / Plan Reviewer

**THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
THERE IS A PENALTY FOR REMOVING THIS CARD**

BUILDING PERMIT INSPECTION PROCEDURES
Please call 874-8703 (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:

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.

City of Portland, Maine - Building or Use Permit

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

Permit No: 2012-65618	Date Applied For: 12/13/2012	CBL: 281 A003001
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Location of Construction: 0 BISHOP ST	Owner Name: UNIVERSITY OF NEW ENGLAN	Owner Address: 11 HILLS BEACH RD	Phone:
Business Name: University of New England	Contractor Name: Titan Mechanical Inc.	Contractor Address: 232 Riverside Industrial Pky Portland	Phone (207) 878-5223
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	

Proposed Use: Same: Intermodal lot with bus shelter	Proposed Project Description: Install Modine Gas Unit Heater in the bus shelter.
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Dept: Zoning **Status:** Approved **Reviewer:** Marge Schmuckal **Approval Date:** 12/13/2012
Note: **Ok to Issue:**

Dept: Building **Status:** Approved w/Conditions **Reviewer:** Jeanie Bourke **Approval Date:** 01/17/2013
Note: **Ok to Issue:**

- 1) The installation must comply with the State of Maine Gas Regulations.
- 2) 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.
- 3) The appliance and venting shall be installed in accordance with the UL listing, manufacturer's specifications and NFPA 211

Dept: Fire **Status:** Approved w/Conditions **Reviewer:** Chris Pirone **Approval Date:** 01/18/2013
Note: **Ok to Issue:**

- 1) Installation shall comply with City Code Chapter 10.
- 2) Fuel-fired boilers shall be protected in accordance with NFPA 101, Life Safety Code.
- 3) Installation shall comply with NFPA 211, Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances; NFPA 54, National Fuel Gas Code; NFPA 70, National Electrical Code; and the manufacturer's published instructions.

City of Portland, Maine - Building or Use Permit Application

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

Permit No: 2012-65618	Issue Date:	CBL: 281 A003001
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Business Name: University of New England	Contractor Name: Titan Mechanical Inc.	Contractor Address: 232 Riverside Industrial Pky Portland	Phone (207) 878-5223
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	Zone: IH R3
Past Use: Intermodal lot with bus shelter	Proposed Use: Same: Intermodal lot with bus shelter	Permit Fee: \$50.00	Cost of Work: \$3,000.00
Proposed Project Description: Install Modine Gas Unit Heater in the bus shelter		FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> N/A 11/18/13 Signature: <i>Cpt. L...</i>	INSPECTION: Use Group: B Type: <i>H/A/C</i> MUBEC 2009 Signature: <i>Jan B 1/12/13</i>
		PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.) Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Signature: Date:	

Permit Taken By: gg	Date Applied For: 12/13/2012	Zoning Approval	
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<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building permits do not include plumbing, septic or electrical work.</p> <p>3. 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..</p>	<p>Special Zone or Reviews</p> <p><input type="checkbox"/> Shoreland</p> <p><input type="checkbox"/> Wetland</p> <p><input type="checkbox"/> Flood Zone</p> <p><input type="checkbox"/> Subdivision</p> <p><input type="checkbox"/> Site Plan</p> <p>Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/></p> <p>Date: <i>12/13/12</i></p>	<p>Zoning Appeal</p> <p><input type="checkbox"/> Variance</p> <p><input type="checkbox"/> Miscellaneous</p> <p><input type="checkbox"/> Conditional Use</p> <p><input type="checkbox"/> Interpretation</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Denied</p> <p>Date:</p>	<p>Historic Preservation</p> <p><input checked="" type="checkbox"/> Not in District or Landmark</p> <p><input type="checkbox"/> Does Not Require Review</p> <p><input type="checkbox"/> Requires Review</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Approved w/Conditions</p> <p><input type="checkbox"/> Denied</p> <p>Date:</p>
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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.

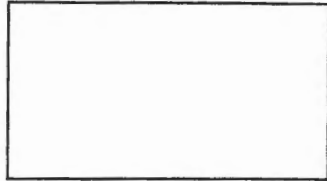
SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE



FILL IN AND SIGN WITH INK

2012 65618

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT



To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

251 A003

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 BISHOP ST. - PORTLAND, MAINE Use of Building BUS WAITING AREA Date 12-13-12

Name and address of owner of appliance UNIVERSITY OF NEW ENGLAND

Installer's name and address TITAN MECHANICAL INC

Telephone 878-5223

Location of appliance:

- Basement
- Floor/ceiling
- Attic
- Roof

Type of Fuel:

- Gas
- Oil
- Solid

Appliance Name: MORINE GAS UNIT HEATER

U.L. Approved Yes No

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 # _____
- Solid Fuel # _____
- Oil # _____
- Gas # PNT 1061
- Other _____

Type of Chimney:

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

Type of Fuel Tank

- Oil
- Gas

Size of Tank N/A

Number of Tanks N/A

Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$2,500.

Permit Fee: \$ _____

RECEIVED

DEC 13 2012

Dept. of Building Inspections
City of Portland Maine

Approved

Fire: _____

Ele.: _____

Bldg.: _____

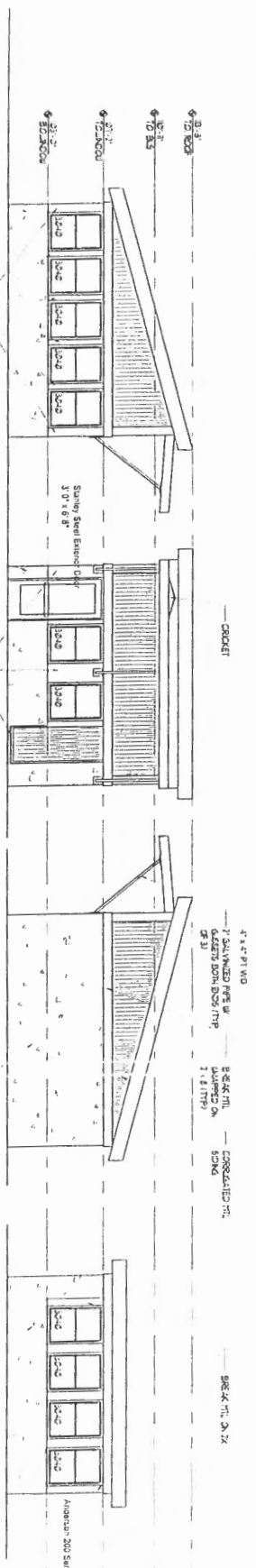
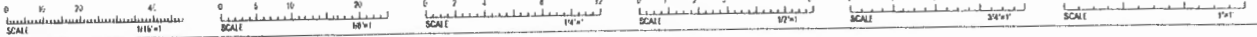
Approved with Conditions

- See attached letter or requirement

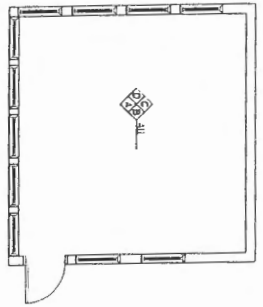
Inspector's Signature

Date Approved

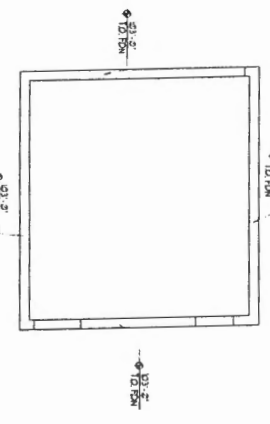
Signature of Installer Thomas A Smith



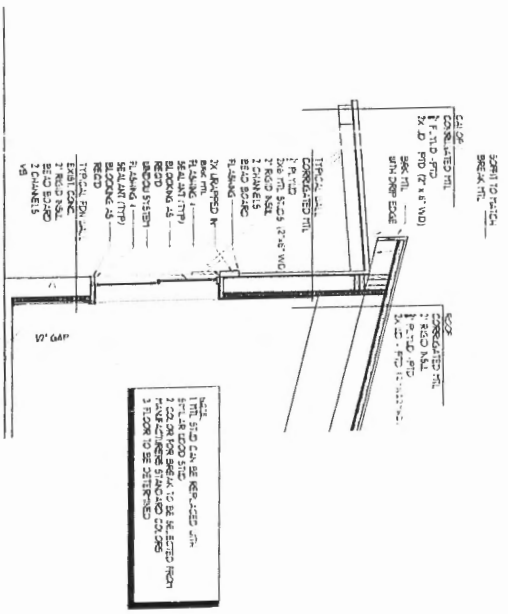
2 ELEVATIONS
SCALE: 1/8\"/>



4 FLOOR PLAN
SCALE: 1/8\"/>



3 X FOUNDATION
SCALE: 1/8\"/>



1 WALL SECTION
SCALE: 1/8\"/>

NOTE: THIS SHEET IS A REDUCED SCALE PRINT. ALL DIMENSIONS SHOWN ON THIS SHEET SHALL BE TAKEN FROM THE FULL SCALE DRAWING. DIMENSIONS ON THIS SHEET SHALL BE TAKEN FROM THE FULL SCALE DRAWING.

REVISIONS

No.	Description	Date

BUS SHELTER

UNIVERSITY OF
NEW ENGLAND
PORTLAND, MAINE

62 NEWBURY STREET
PORTLAND, ME 04101
Tel: 603.753.1000
Fax: 603.753.1001
www.portcityarch.com

LEGEND

① - Duplex Receptacles - Tamper Resistant
18" APART Finish Floor (AFF) ON CENTER (O.C.)

3/4" Gas Pipe
4" Exhaust Vent + Make up Air

M - Motion Sensor LT
Switch - 48" AFF. O.C.

□ - 3 Lamp Suspension
Fixture w/ 2 upramps; and
T-down lamp
Suspension cable hung

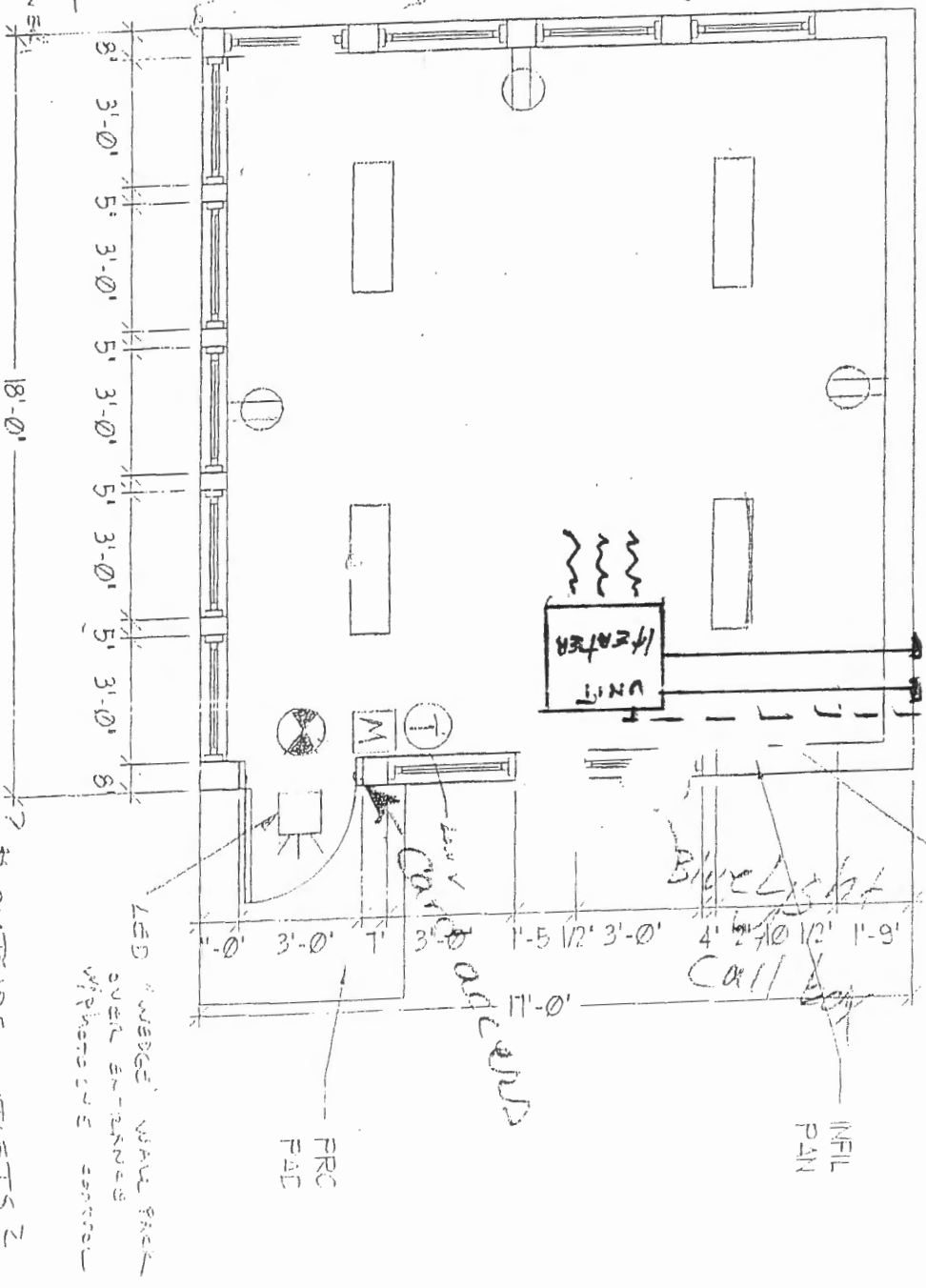
⊙ - ADD LED EXIT
SIGN

⏏ - Dual Head Emergency
LIGHT

⊞ - GAS
55000 (120
VOLT) (SEE VENT)
Front-Fired Burner
Toward middle of room,
Toward main entry controls
Toward main entry controls

⊕ - LOW
VOLTAGE THERMOSTAT
WITH VENT, LOCALS CONTROL
MOUNTED 54" AFF, O.C.,
TO CONTROL FAN-POWERED HEAT

NOTE: SURFACE CONDUIT METHODS,
TYPICAL

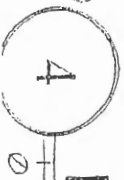


100% 24 HOUR
SIMPLE PHASE PAUSE

Low Voltage
Control
Valve

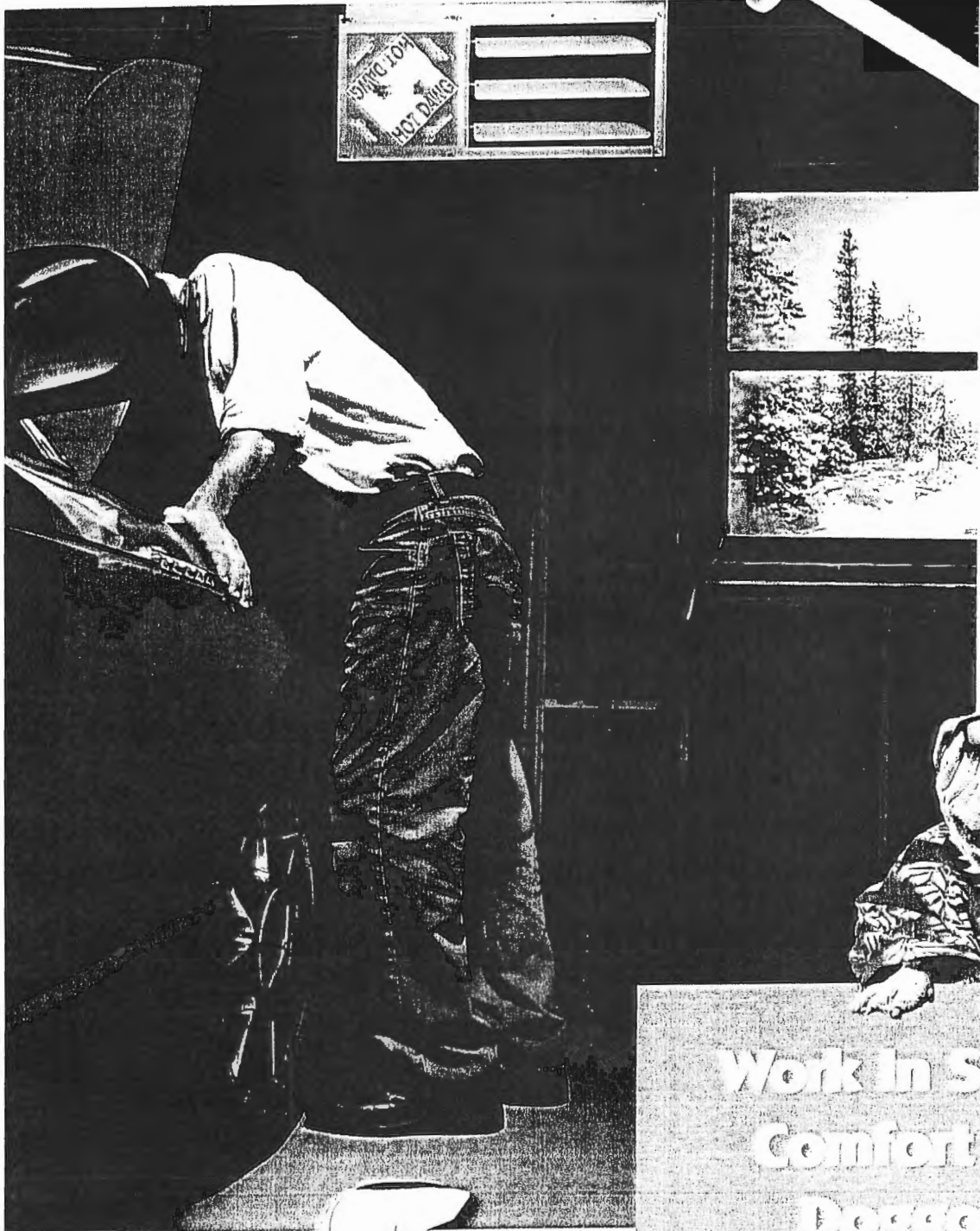
FRONT
PAD

4 FLOOR PLAN



4'

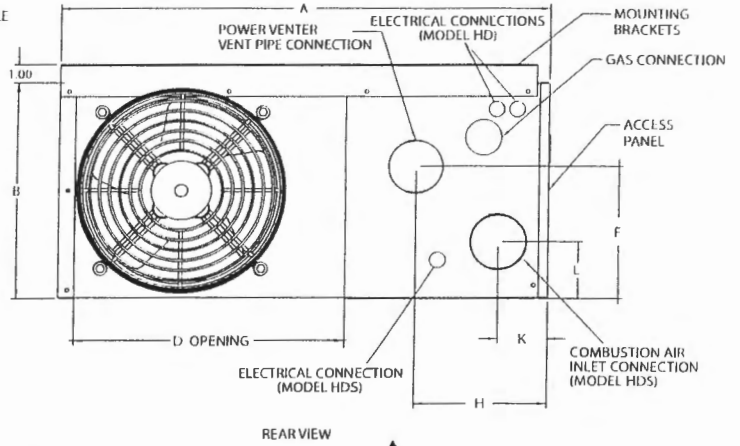
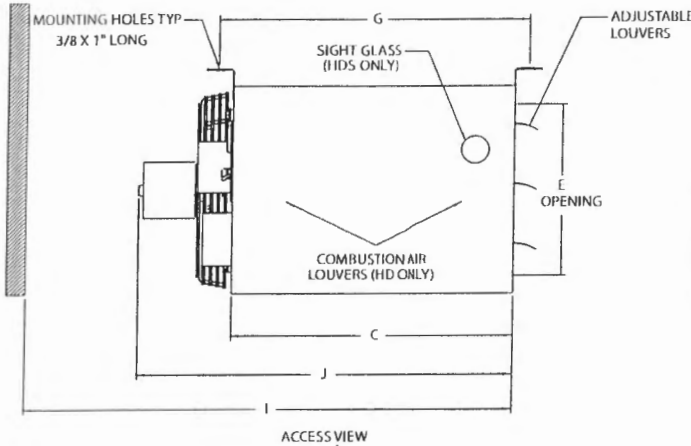
SCALE: 1/4" = 1'-0"



Work in Shirt-Sleeve
Comfort When It's
Doggone Cold



Power Efficient and Size Range Compliance Gas-Fired Unit Heater Specifications



Performance

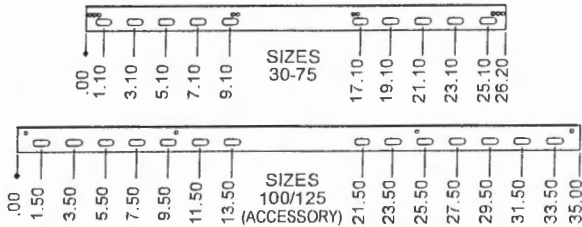
Model Size	30	45	60	75	100	125	
Btu/Hr Input	30,000	45,000	60,000	75,000	100,000	125,000	
Btu/Hr Output	24,000	36,000	48,000	60,000	80,000	100,000	
Entering Airflow (CFM)	505	720	990	1,160	1,490	1,980	
Outlet Velocity	523	749	653	769	565	747	
Air Temp. Rise (°F)	44	46	45	48	50	47	
Mounting Height (Max ft.)	10	10	12	14	12	16	
Heat Throw (ft.)	25	27	36	38	42	56	
Motor Data	Horsepower	1/15	1/15	1/12	1/12	1/8	
	RPM	1,550	1,550	1,625	1,625	1,050	
	Type	S.P.	S.P.	P.S.C.	P.S.C.	S.P.	P.S.C.
	Amps	2.4	2.4	1.2	1.2	2.7	2.2
Unit Total Amps	3.7	3.7	2.5	2.5	4.7	4.2	

Dimensions (inches)

Model Size	30	45	60	75	100/125
A	26.8	26.8	26.8	26.8	35.5
B	12.2	12.2	16.0	18.0	20.5
C	16.5	16.5	16.5	16.5	22.0
D	14.9	14.9	14.9	14.9	22.5
E	10.1	10.1	15.9	15.9	18.4
F	7.25	7.25	10.75	10.75	14.0
G	18.5	18.5	18.5	18.5	24.0
H	7.6	7.6	7.835	7.835	8.4
Gas Connection	1/2	1/2	1/2	1/2	1/2
I	34.5	34.5	34.5	34.5	43.0
J	22	22	25	25	31.0
K (HDS only)	2.74	2.74	3.15	3.15	3.87
L (HDS only)	3.19	3.19	5.55	5.55	10.73
Vent Connector Size (in.)	3	3	3/4*	3/4*	4
Combustion Air Inlet Connector Size (Model HDS only) (in.)	3	3	4	4	4
Fan Diameter	10	10	14	14	18.0
Approx. Shipping Weight (lbs.)	55	60	80	85	125

Mounting

1" - angle, mounting brackets are slotted to accommodate joists on 16" or 24" centerlines.



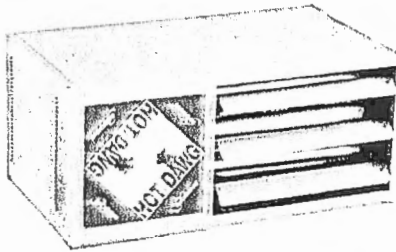
* 3" for Model HD, 4" for Model HDS

Clearances

Unit Side	Clearance To Combustible Materials	Recommended Service Clearance
Top and Bottom	1"	1"
Access Side	1"	18"
Non-Access Side	1"	1"
Rear	18"	18"
Vent Connector	4"	4"

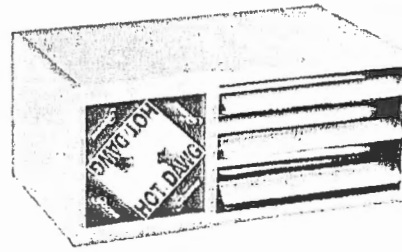
Control Options

Control Description	Control Code No.	Service Voltage	Thermostat Voltage	Type of Gas	Model Size
Single-Stage, Direct Spark Ignition, 100% Shut-Off with Continuous Retry - Utilizes a single-stage combination gas control with ignition control. Gas is lit with a direct spark igniter on call for heat.	11	115V	24V	natural	30-125
	21	115V	24V	propane	30-125
Two-Stage, Direct Spark Ignition, 100% Shut-Off with Continuous Retry - Utilizes a two-stage combination gas control with built-in ignition control. Firing rate is 100% and 50% of full rated input. Gas is lit with a direct spark igniter on call for heat.	12	115V	24V	natural	75-125
	22	115V	24V	propane	75-125



Hot Dawg™ Model HD power-exhausted, gas-fired unit heater

- Hush-puppy quiet operation.
- Uses natural or propane gas.
- Certified for residential, commercial and industrial use.
- Low-profile design and neutral color to blend in with decor.
- Lightweight, easily installs 1" from ceiling with only 2 angle brackets (included on sizes 30-75, accessory for 100, 125).
- Install quickly and easily with field wiring connections and knockouts for quick access to gas and electricity.
- Standard power exhaust simplifies side-wall or roof venting with small-diameter vent pipe.
- Right or left hand controls available on all 30-75 units. Gas, electrical and flue connections can be changed by simply flipping the Hot Dawg over.
- Permanently-lubricated motor for trouble-free dependability.
- Full 10-year warranty on heat exchanger.
- Also available with a blower. Contact Modine for further information.



Hot Dawg™ Model HDS separated-combustion, gas-fired unit heater

Same features as Model HD, except adds these features:

- The separated combustion Hot Dawg draws its combustion air from outside the work space, ensuring the unit always has plenty of fresh, clean air to breathe.
- The fresh-air supply reduces common concerns about dusty, dirty or humid applications, providing greater durability and reduced maintenance.
- Drawing combustion air from the outside increases overall heating efficiency.
- External gas connections.



For The Heat You Need, Just Unleash A Hot Dawg!

Unit	Btu / Hour	Typical Application
HD/HDS 30	30,000	1 to 1-1/2 Car Garage
HD/HDS 45	45,000	2 to 2-1/2 Car Garage
HD/HDS 60	60,000	3 to 3-1/2 Car Garage
HD/HDS 75,100,125	75,000-125,000	Large Garage

Sizing data for sample only. Consult a qualified installer for the actual requirements for your building.

40452

Hot Dawg® - Chasing Away
The Cold In Any Space,
New Or Old

You don't have to go far to find a Hot Dawg.
For the location of your nearest Hot Dawg source,
fetch your phone and call:

800-828-4328 (HEAT)

or visit us online at www.modine.com/hotdawg



Low-Profile, Gas-Fired
Residential Garage Heaters

Commercial Products Group

Modine Manufacturing Company

1500 DeKoven Avenue

Racine, WI 53403-2552

Phone: 1.800.828.4328 (HEAT)

www.modine.com/hotdawg

MODINE

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