

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND

BUILDING PERMIT

This is to certify that KEVIN ROCOUE

Located At 73 EMERY ST

Job ID: 2012-10-5091-HVAC

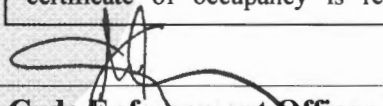
CBL: 057- A-001-001

has permission to Install a Burnham IN5 in basement Extior Vent
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



Code Enforcement Officer / Plan Reviewer

11/19/2012

**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 REQUIRED**

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
Jeff Levine

Job ID: 2012-10-5091-HVAC

Located At: 73 EMERY ST

CBL: 057- A-001-001

Conditions of Approval:

Fire

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*;
4. NFPA 54, *National Fuel Gas Code*;
5. NFPA 90A, *Standard for the Installation of Air-Conditioning and Ventilating Systems*;
6. NFPA 91, *Standard for Exhaust Systems for Air Conveying Vapors, Gases, Mists, and Noncombustible Particulate Solids*;
7. 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) 8716

Job No: 2012-10-5091-HVAC	Date Applied: 10/1/2012	CBL: 057- A-001-001	
Location of Construction: 73 EMERY ST	Owner Name: KEVIN ROCQUE	Owner Address: 31 NEW ISLAND AVENUE PEAKS ISLAND, ME 04108	Phone:
Business Name:	Contractor Name: Caron & Waltz	Contractor Address: 321 LINCOLN ST SOUTH PORTLAND MAINE 04106	Phone: 799-2228
Lessee/Buyer's Name:	Phone:	Permit Type: HVAC	Zone: R-6
Past Use: Three Family Dwelling	Proposed Use: Same: Three Family Dwelling - to install Burnham IN5 heating system	Cost of Work: \$10,000.00	CEO District:
		Fire Dept: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> N/A Signature: <i>Capt. Leone 10/18/12</i>	Inspection: Use Group: <i>2.3</i> Type: <i>SB</i> <i>HVAC</i> Signature: <i>[Signature]</i>
Proposed Project Description: Install a Burnham IN5 in basement Ext Vent		Pedestrian Activities District (P.A.D.)	

Permit Taken By: Lannie	Zoning Approval		
1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules. 2. Building Permits do not include plumbing, septic or electrical work. 3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan <input type="checkbox"/> Maj <input type="checkbox"/> Min <input type="checkbox"/> MM Date: <i>OK 10/1/12</i>	Zoning Appeal <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:	Historic Preservation - <i>within</i> - <input type="checkbox"/> Not in Dist 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 <i>Any exterior use requires</i> Date: <i>A separate review</i> <i>approval</i>
	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 appication 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

2012-10-5091

JOB 92834



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 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: R-6 Hist.

Location / CBL. 73 Emery Street STA1 Use of Building APT. HOUSE Date 9/25/12
 Name and address of owner of appliance KAREN PETERSON KEVIN ROLAND
31 NEW ISLAND AVENUE, PEAKS ISLAND, ME 07108
 Installer's name and address CAROL WALTZ
321 LINCOLN ST, S. PORTLAND, ME 07106 Telephone 799-2228

Location of appliance:

- Basement
- Floor
- Attic
- Roof

Type of Fuel:

- Gas
- Oil
- Solid

Appliance Name: BURNHAM INS

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 # PNT1913
- Other _____

Type of Chimney:

- Masonry Lined
Factory built TO BE LINED BY OTHERS

Metal
Factory Built U.L. Listing # _____

Direct Vent
Type _____ UL# _____

Type of Fuel Tank

- Oil NONE
- Gas

Size of Tank NA

Number of Tanks NA

Distance from Tank to Center of Flame NA feet.

Cost of Work: \$ 9,140.00

Permit Fee: \$ 120

RECEIVED
OCT 01 2012
Dept. of Building Inspections
City of Portland Maine

Approved

Approved with Conditions

Fire: _____

Ele.: _____

Bldg.: _____

See attached letter or requirement

Inspector's Signature _____

Date Approved _____

Signature of Installer [Signature]

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy

Independence Ratings & Specifications*



Boiler Number	Input MBH (1)	DOE Heating Capacity	I=B=R Rating (2)			AFUE				Approx Shipping Weight (Lbs.)	Minimum Chimney Requirements (Round) Dia. (In.) x Ht. (Ft.) (4) (5)
			Water MBH	Steam MBH	Steam Sq. Ft.	24V		EI			
						Water	Steam	Water	Steam		
IN3	62	51	44	38	158	81.0	80.0	83.1	81.9	350	4x15
IN4	105	87	76	65	271	81.3	80.0	83.1	82.0	420	5x15
IN5	140	115	100	86	358	81.6	80.3	83.1	82.0	485	6x15
IN6	175	144	125	108	450	81.8	80.6	83.2	82.1	555	6x15(5)
IN7	210	173	150	130	542	82.1	80.9	83.2	82.1	620	7x15
IN8	245	202	176	152	633	81.1	80.0	83.2	82.2	690	7x15(5)
IN9	280	231	201	174	725	81.4	80.3	83.2	82.2	760	8x15
		Gross Output MBH				Combustion Efficiency (%)					
							Water		Steam		
IN10(3)	315	260	226	195	812	83.5		82.5		815	8 x15(5)
IN11(3)	349	288	250	216	900	83.5		82.5		885	9x15
IN12	385	318	276	239	996	83.5		82.5		815	9x15

*LP available on IN3-IN9

1. Ratings shown are for installations at sea level and elevations up to 2,000 ft. For higher elevations, reduce ratings 4% for each 1,000 ft. above sea level
 2. Capacities, outputs, and ratings are based on steam combustion efficiency of 82.5%. Water combustion efficiency is 83.5%.
 3. For Canadian builds only; reduce input and output by 3%
 4. 15 ft. height is measured from top of drafthood to top of chimney.
 5. IN6, IN8, & IN10 - Canada only; Increase chimney diameter by 1"
- Working Pressure: 15 PSI Steam; 30 PSI water

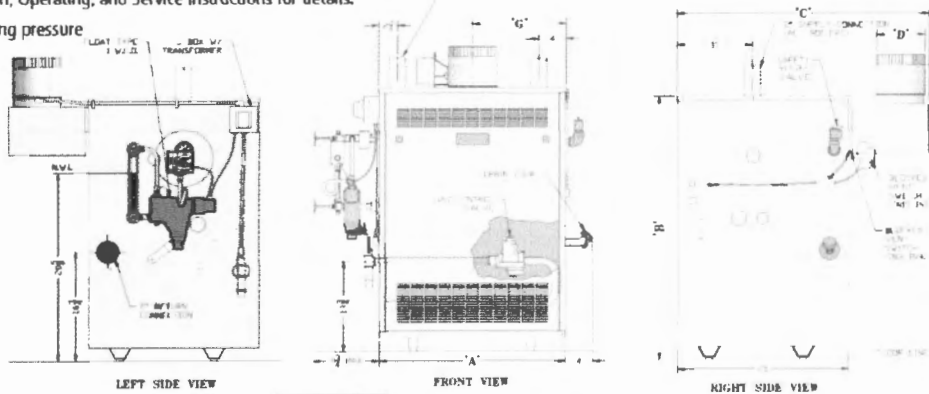
Independence PV Ratings & Specifications

Natural Gas, Packaged, Steam Only

Boiler Number	Input MBH	DOE Heating Capacity MBH (1)	I=B=R Net Ratings		Maximum Vent Length Equivalent Ft. (2) (3)	AFUE%	Approx Shipping Weight (LBS.)
			Steam MBH	Steam Sq. Ft.			
PIN3PV	62	52	39	163	45	83.2	355
PIN4PV	105	87	65	271	35	82.2	425
PIN5PV	140	116	87	363	35	82.2	490
PIN6PV	175	145	109	454	35	82.2	560

1. Capacities and ratings are based on steam combustion efficiency of 83.0%. (84.1% for PIN3PV)
2. The approved venting system for the Independence PV is 3" AL29-4C® stainless steel. Do not substitute other materials.
3. Vent pipe length is listed in equivalent feet. Any elbows or tees used can have specific values which must be subtracted from the total length to determine maximum length of straight pipe. Consult Installation, Operating, and Service Instructions for details.

Steam only - 15 PSI working pressure



Dimensions

Boiler Model	A	B	C	D	E	F	G
IN3	14-1/2	40	33-3/4	4	40-1/4	4-3/4	7-1/4
IN4	17-3/4	40	34-3/4	5	40-1/4	4-3/4	8-7/8
IN5	21	40	35-3/4	6	40-1/4	5-1/4	10-1/2
IN6	24-1/4	40	35-3/4	6*	40-1/4	5-1/4*	12-1/8*
IN7	27-1/2	40	36-3/4	7	40-1/4	7-1/2	13-3/4
IN8	30-3/4	40	36-3/4	7*	40-1/4	7-1/2*	15-3/8*
IN9	34	40	37-3/4	8	40-1/4	7-1/2	17
IN10	37-1/4	45	38-3/4	8*	45-1/2	7-1/2	18-5/8
IN11	40-1/2	45	38-3/4	9	45-1/2	7-1/2	20-1/4
IN12	43-3/4	45	38-3/4	9	45-1/2	7-1/2	21-7/8
PIN3PV	14-1/2	45	N/A	3	N/A	N/A	4
PIN4PV	17-3/4	45	N/A	3	N/A	N/A	8-1/4
PIN5PV	21	45	N/A	3	N/A	N/A	9-1/4
PIN6PV	24-1/4	45	N/A	3	N/A	N/A	9-1/4

*Dimensions indicated are for USA only - For Canada, use dimension on next larger model.



www.usboiler.burnham.com

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Phone: 1-888-432-8887

I. Pre-Installation (continued)

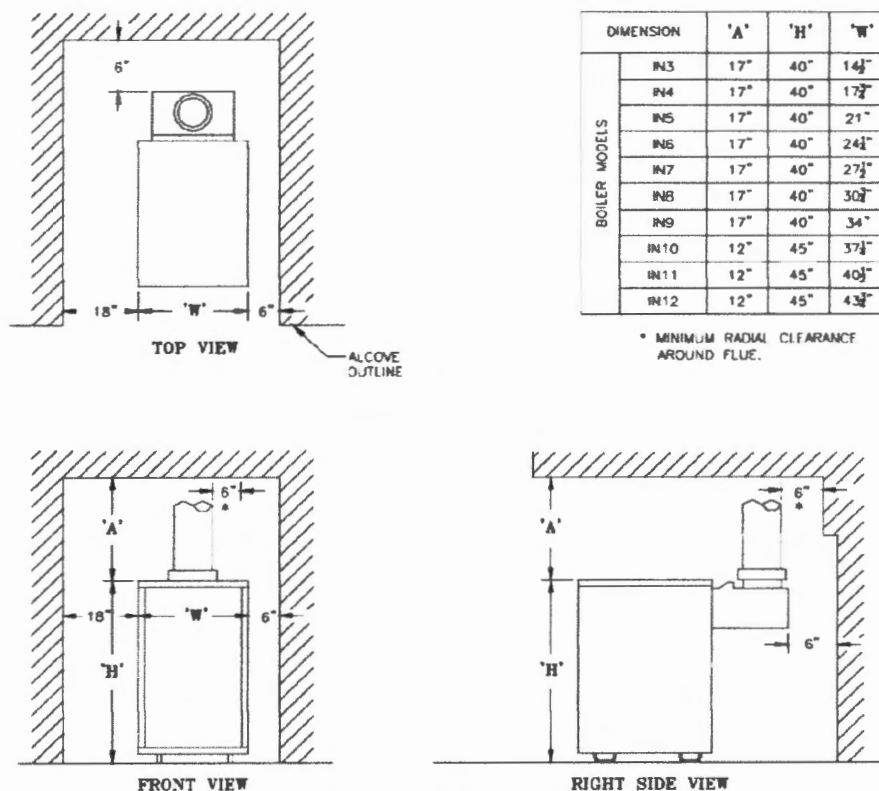


Figure 3: Clearance to Combustible Materials

5. For boiler located in an *unconfined space in a building of other than unusually tight construction*, adequate combustion and ventilation air is normally provided by fresh air infiltration through cracks around windows and doors.
6. For boiler located within *unconfined space in building of unusually tight construction* or within *confined space*, provide outdoor air through two permanent openings which communicate directly or by duct with the outdoors or spaces (crawl or attic) freely communicating with the outdoors. Locate one opening within 12 inches of top of space. Locate remaining opening within 12 inches of bottom of space. Minimum dimension of air opening is 3 inches. Size each opening per following:
 - a. Direct communication with outdoors. Minimum free area of 1 square inch per 4,000 Btu per hour input of all equipment in space.
 - b. Vertical ducts. Minimum free area of 1 square inch per 4,000 Btu per hour input of all equipment in space. Duct cross-sectional area shall be same as opening free area.
 - c. Horizontal ducts. Minimum free area of 1 square inch per 2,000 Btu per hour input of all equipment in space. Duct cross-sectional area shall be same as opening free area.

Alternate method for boiler located within confined space. Use indoor air if two permanent openings communicate directly with additional space(s) of sufficient volume such that combined volume of all spaces meet criteria for unconfined space. Size each opening for minimum free area of 1 square inch per 1,000 Btu per hour input of all equipment in spaces, but not less than 100 square inches.

7. Ventilation Duct Louvers and Grilles. Equip outside openings with louvers to prevent entrance of rain and snow, and screens to prevent entrance of insects and rodents. Louvers and grilles must be fixed in open position or interlocked with equipment to open automatically before burner operation. Screens must not be smaller than $\frac{1}{4}$ inch mesh.

Consider the blocking effect of louvers, grilles and screens when calculating the opening size to provide the required free area. If free area of louver or grille is not known, assume wood louvers have 20-25 percent free area and metal louvers and grilles have 60-75 percent free area.

- H. Do not install boiler where gasoline or other flammable vapors or liquids, or sources of hydrocarbons (i.e. bleaches, cleaners, chemicals, sprays, paint removers, fabric softeners, etc.) are used or stored.

VII. Venting

WARNING

This boiler needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

Read, understand and follow combustion air instruction restrictions contained in the Pre-Installation instructions of this manual.

Do not operate boiler where gasoline or other flammable vapors or liquids, or sources of hydrocarbons (i.e. bleaches, cleaners, chemicals, sprays, paint removers, fabric softeners, etc.) are used, stored and/or present in the air.

A. Install vent system in accordance with local building codes; or local authority having jurisdiction; or *National Fuel Gas Code*, ANSI Z223.1/NFPA 54, Part 7, Venting of Equipment and/or CAN/CSA B149.1 Installation Codes. Install any of the following for this Independence Series Category I, draft hood equipped appliance:

1. Type B or Type L gas vent. Install in accordance with listing and manufacturer's instructions.
2. Masonry or metal chimney. Build and install in accordance with local building codes; or local authority having jurisdiction; or *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel Burning Appliances*, ANSI/NFPA 211 and/or *National Building Code of Canada*.

Masonry chimney must be lined with approved clay flue lining or listed chimney lining system except as provided in ANSI Z223.1/NFPA 54, Paragraph 7.5.4(a): *Exception: Where permitted by the authority having jurisdiction, existing chimneys shall be permitted to have their use continued when an appliance is replaced by an appliance of similar type, input rating, and efficiency.*

3. Single wall metal vent. Allowed by ANSI Z223.1/NFPA 54 under very restrictive conditions.

B. Inspect chimney and remove any obstructions or restrictions. Clean chimney if previously used for solid or liquid fuel-burning appliances or fireplaces.

DANGER

Inspect existing chimney before installing boiler. Failure to clean or replace perforated pipe or tile lining will cause severe injury or death.

C. Boiler Equipped With Vent Damper

1. Open Vent Damper Carton and remove Installation Instructions. Read Installation Instructions thoroughly before proceeding.

CAUTION

Do not use one vent damper to control two heating appliances.

Provide adequate clearance for servicing - 6" minimum clearance between damper and combustible construction.

NOTICE

DO NOT force the vent damper over the rolled bead on the draft hood collar. The vent damper should rest on the rolled bead.

Please refer to the specifications, installation instructions and trouble shooting guide packed in the vent damper carton for complete detailed installation instructions.

2. Vent damper should be same size as draft hood outlet. See Figure 1. Unpack vent damper carefully - **DO NOT FORCE CLOSED!** Forcing vent damper may damage gear train and void warranty. Vent damper assembly includes pre-wired connection harness with polarized plug for use on all 24V standing pilot or intermittent ignition (EI) control systems.
3. Mount vent damper assembly on draft hood without modification to either (Refer to instructions packed with vent damper for specific instructions). Vent damper position indicator to be visible to users.
4. USA - Do not install Non-listed vent damper or other obstruction in vent pipe.
Canada - Do not install Non-listed vent damper or other obstruction in vent pipe.

VII. Venting (continued)

D. Install Vent Connector from draft hood or vent damper to chimney. See Figure 30.

1. Do not connect into same leg of chimney serving an open fireplace.
2. Vent pipe to chimney must not be smaller than outlet on draft hood or vent damper. Type B is recommended, but single-wall vent pipe may be used. Arrange venting system so boiler is served by vent damper device.
3. Where two or more appliances vent into a common vent, the area of the common vent should be at least equal to the area of the largest vent plus 50% of the area in the additional vent(s). Do not connect the vent of this appliance into any portion of mechanical draft systems operating under positive pressure.
4. Horizontal run should be as short as possible. The maximum length of an uninsulated horizontal run must not exceed 75% of the height of the chimney.
5. Vent pipe should have the greatest possible initial rise above draft hood consistent with headroom available and required clearance from adjacent combustible building structure. Vent pipe should be installed above bottom of chimney to prevent blockage.
6. Vent pipe should slope upward from draft hood to chimney not less than one inch in four feet. No portion of vent pipe should run downward or have dips or sags. Vent pipe must be securely supported.
7. Vent pipe must be inserted into but not beyond inside wall of chimney liner. Seal tight between vent pipe and chimney.

E. If an Existing Boiler is Removed:

When an existing boiler is removed from a common venting system, the common venting system is likely to be too large for proper venting of the appliances remaining connected to it.

At the time of removal of an existing boiler, the following steps shall be followed with each appliance remaining connected to the common venting system placed in operation, while the other appliances remaining connected to the common venting system are not in operation:

1. Seal any unused openings in the common venting system.
2. Visually inspect the venting system for proper size and horizontal pitch and determine there is no blockage or restriction, leakage, corrosion, and other deficiencies which could cause an unsafe condition.
3. Insofar as is practical, close all building doors and windows and all doors between the space in which the appliances remaining connected to the common venting system are located and other spaces of the building. Turn on clothes dryers and any appliance not connected to the common venting system. Turn on any exhaust fans, such as range-hoods and bathroom exhausts, so they will operate at maximum speed. Do not operate a summer exhaust fan. Close fireplace dampers.
4. Place in operation the appliance being inspected. Follow the Lighting (or Operating) Instructions. Adjust thermostat so appliance will operate continuously.
5. Test for spillage at the draft hood relief opening after 5 minutes of main burner operation. Use the flame of a match or candle, or smoke from a cigarette, cigar or pipe.
6. After it has been determined that each appliance remaining connected to the common venting system properly vents when tested as outlined above, return doors, windows, exhaust fans, fireplace dampers and any other gas-burning appliance to their previous condition of use.
7. Any improper operation of the common venting system should be corrected so the installation conforms with the *National Fuel Gas Code, NFPA 54/ANSI Z223.1*. When resizing any portion of the common venting system, the common venting system should be resized to approach the minimum size as determined using the appropriate tables in Part 11 in the *National Fuel Gas Code, NFPA 54/ANSI Z223.1*.

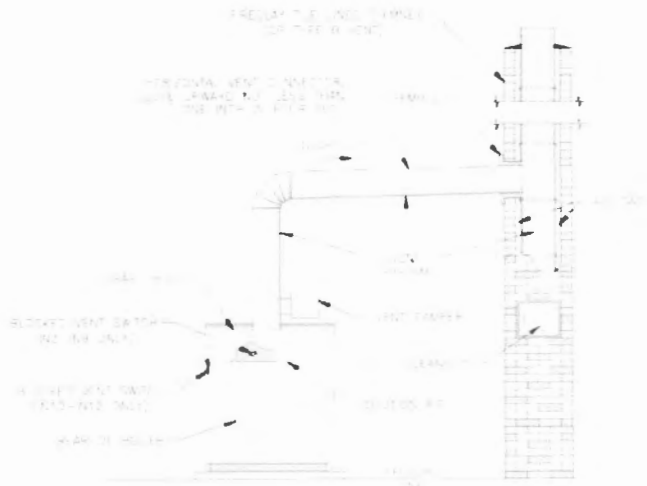


Figure 30: Typical Vent Installation