City of Portland, Maine - Building or Use Permit Application

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

Permit No:	Issue Date:	CBL:
09-0261		014 N012001

Location of Construction:	Owner Name:	Owner Address:	Phone:
35 CONGRESS ST	CALVERT WILLIAM C & NANC	35 CONGRESS ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	TMC Heating & Cooling	533 First Crown Point Road Strafford	2074329005
Lessee/Buyer's Name	**Phone:**	**Permit Type:** HVAC	**Zone:** R-6

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
2 Unit see permit #080439	2 Unit - install a Buderus Logano G125BE US/CA Boiler	$120.00	$10,000.00	1

FIRE DEPT: ☐ Approved ☐ Denied

Signature:

INSPECTION: Use Group: R3 Type: HVAC IRC 2003

Signature: 04/05/09

Proposed Project Description:
install a Buderus Logano G125BE US/CA Boiler

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
Ldobson	04/01/2009

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 information may invalidate a building permit and stop all work..

PERMIT ISSUED
APR - 6 2009
CITY OF PORTLAND

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☑ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☑ Denied	☐ Denied
Date: 4/1/09	Date:	Date:

ok with conditions

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

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:

Location / CBL _____ Use of Building Res/Duplex Date 3/25/09

Name and address of owner of appliance Bill Calvert 35 Congress St Portland 04102

Installer's name and address Lincoln Libby 18 Pine Country Dr. Buxton 04093 Telephone 207-432-9005

Location of appliance:
- [x] Basement
- [ ] Floor
- [ ] Attic
- [ ] Roof

Type of Fuel:
- [ ] Gas
- [x] Oil
- [ ] Solid

Appliance Name: Buderus Boiler UL#726/296

U.L. Approved [x] Yes [ ] No

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

IF NO Explain: _____

The Type of License of Installer:
- [ ] Master Plumber # _____
- [ ] Solid Fuel # _____
- [x] Oil # MS10009364
- [ ] Gas # _____
- [ ] Other _____

Type of Chimney:
- [x] Masonry Lined
  Factory built _____
- [ ] Metal
  Factory Built U.L. Listing # _____
- [x] Direct Vent
  Type Fields ANSI UL# 221.47.

Type of Fuel Tank
- [x] Oil
- [ ] Gas

Size of Tank 275

Number of Tanks 1

Distance from Tank to Center of Flame 10 **feet.**

Cost of Work: $ 10,000

Permit Fee: $ 120

Approved

Fire: _____

Ele.: _____

Bldg.: _____

Approved with Conditions

- [ ] See attached letter or requirement

_____ Inspector's Signature

_____ Date Approved

Signature of Installer _____

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

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Permit No:	Date Applied For:	CBL:
09-0261	04/01/2009	014 N012001

Location of Construction:	Owner Name:	Owner Address:	Phone:
35 CONGRESS ST	CALVERT WILLIAM C & NANC	35 CONGRESS ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	TMC Heating & Cooling	533 First Crown Point Road Strafford	(207) 432-9005
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		HVAC	

Proposed Use:	Proposed Project Description:
2 Unit - install a Buderus Logano G125BE US/CA Boiler	install a Buderus Logano G125BE US/CA Boiler

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 04/01/2009

Note: **Ok to Issue:** ☑

1) This property shall remain a two family dwelling after completing all the conditions on permit #08-0439. Any change of use shall require a separate permit application for review and approval.

2) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tom Markley **Approval Date:** 04/06/2009

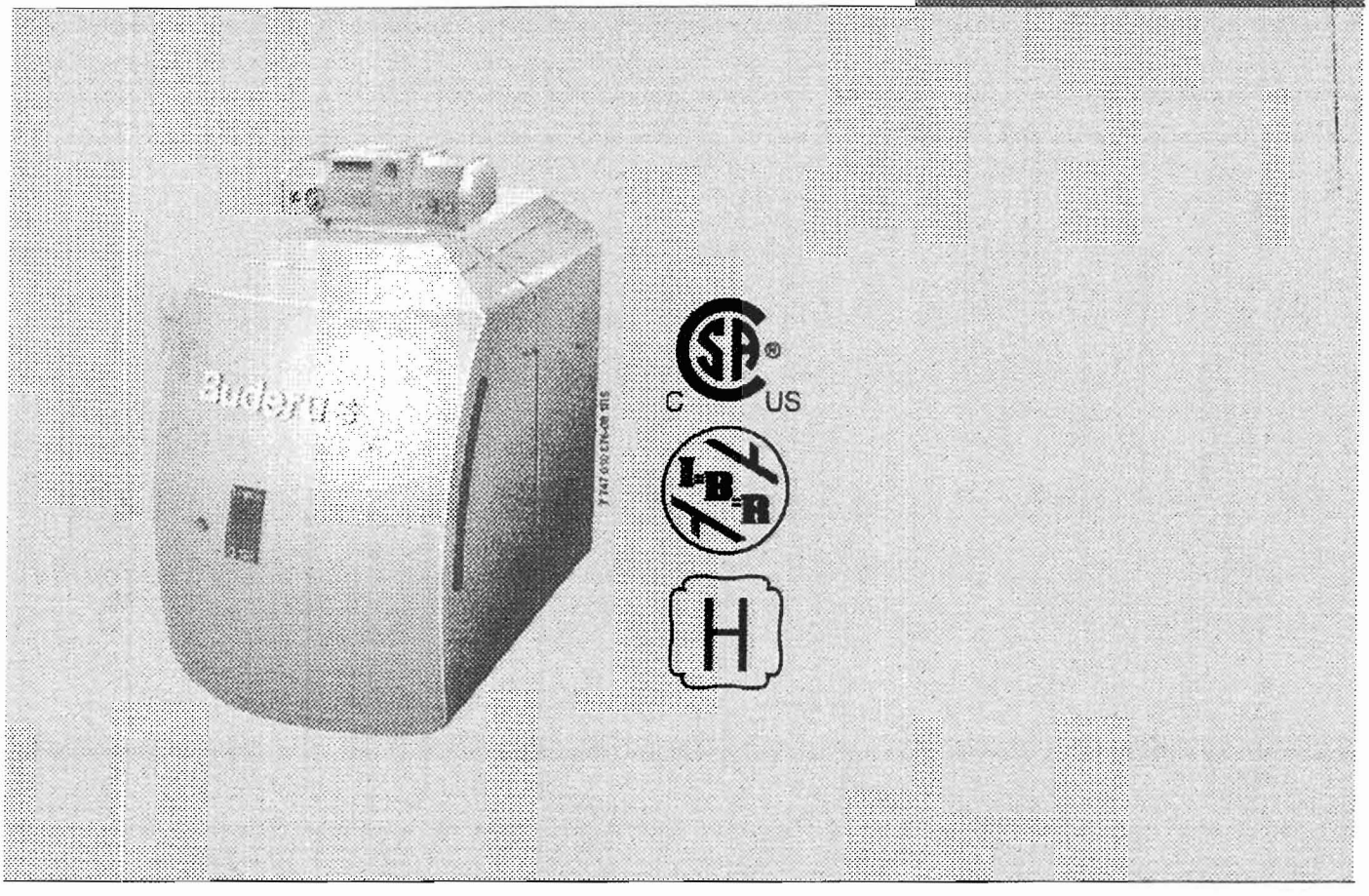
Note: **Ok to Issue:** ☑

1) Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approrval prior to work.

2) Installation shall comply with 2003 International Mechanical Code and State of Maine Oil and Solid Fuel Board Laws and Rules

Installation and Service Instructions

Low Emissions and High Efficiency Oil Boiler



Logano G125 BE US/CA

For trained and certified installers

Read carefully prior to installation, maintenance and service.

7 747 010 552 (05/2007) US/CA

Buderus

6 Placing the Boiler

This chapter discusses how to place the boiler in the boiler room.

CAUTION!

SYSTEM DAMAGE

due to freezing temperatures

- Place the boiler in a frost free room.

6.1 Clearances

Position the boiler while observing the clearances in (➔ Fig. 7). Access to the boiler is reduced when reducing these clearances.

The boiler foundation must be level and sufficiently strong.

The burner door is factory installed right swinging. You can reverse the door swing in the field.

	Distance	
A	Recommended	51 1/8"
	minimum	39 3/8"
B	Recommended	27 1/2"
	minimum	15 3/4"
C	Recommended	15 3/4"
	minimum	3 7/8"
L	see Chapter 3 „Technical Information"	

Table 10 Recommended and minimum clearances (Measurement in Inches)

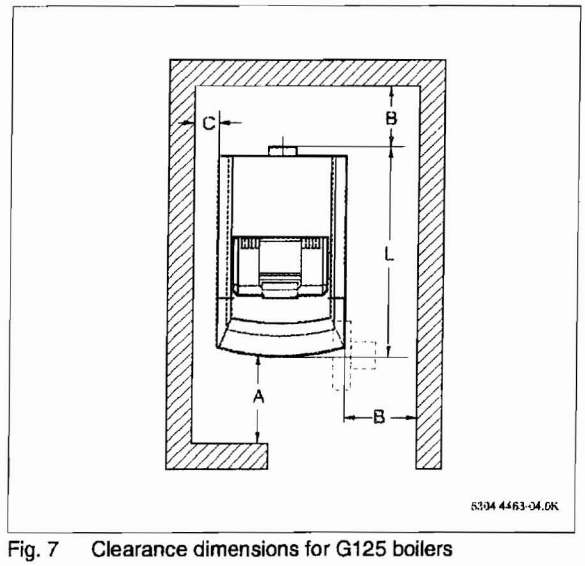


Fig. 7 Clearance dimensions for G125 boilers

NOTICE

Smaller clearances must abide with state and local code. The boiler is approved for 6" side clearances. A minimum distance of 18" to combustible materials must be maintained per NFPA 31.

Floor material must comply with NFPA 31.

NOTICE

Observe required distances to other components such as water piping, venting and other components.

7.1.2 Horizontal Venting

Venting system: Side wall			
Comment	Draft	Combustion air	Max. Vent length
Sealed vent	Positive	Outside air only	20 ft.

The maximum length of the direct vent system is 20 ft. of linear pipe including 3 x 90° elbows. With 4 elbows the maximum pipe length is 10 ft.

The following two direct vent terminations are approved with the G125 BE, and are available for purchase from your Buderus supplier.

Both exhaust terminations are approved for use with two different exhaust vent pipe options.

- **Option 1:**
  Flexible, insulated 4" stainless steel oil vent. The insulated oil vent is rated for 1" clearance to combustibles. Wrap the adapters with 3" of ceramic wool covered with foil tape or sheet metal to maintain 1" clearance. For installation instructions ➔ Chapter „7.1.2.6 Installation of Insulated Flexible Oil Vent", page 26.
- **Option 2:**
  Standard, 26 gauge galvanized 4" vent pipe. Maintain 18" clearance to combustibles with galvanized vent pipe (➔ Chapter „7.1.2.7 Installation of Galvanized Vent Pipe", page 27).

NOTICE

Horizontal vent systems operate under positive pressure, which requires all seams to be sealed. Use high temperature silicone (500°F rated, G.E. 106 or equivalent) to seal any joints, screw penetrations, or combustion test holes, and seal at each pipe connection and all joints on adjustable elbows. Refer to 7.1.2.2 for details.

NOTICE

Installations in Canada less than 7 ft. above ground are required to have a cage/screen over the termination to prevent injury from touching hot surfaces.

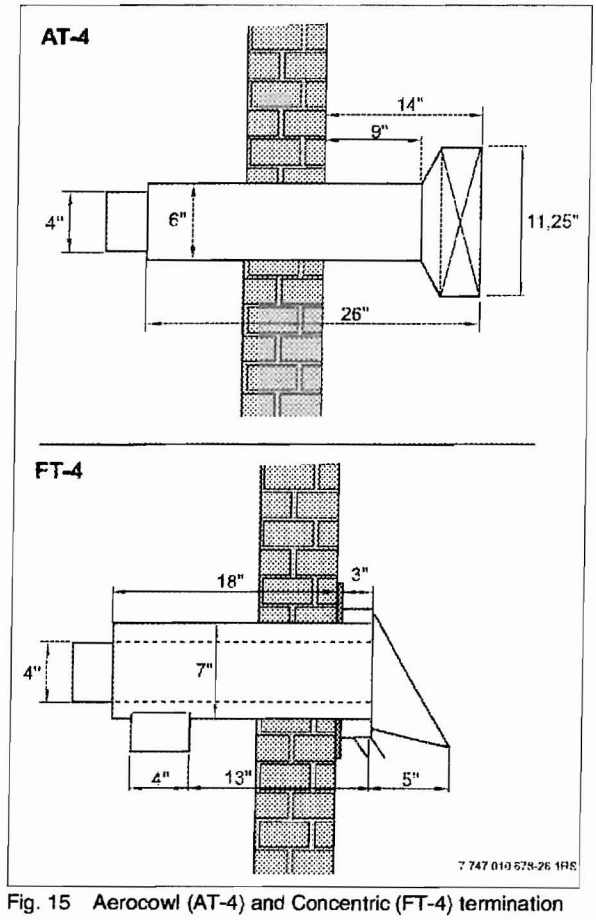


Fig. 15 Aerocowl (AT-4) and Concentric (FT-4) termination

7.1.2.1 Location of Exhaust Wall Termination

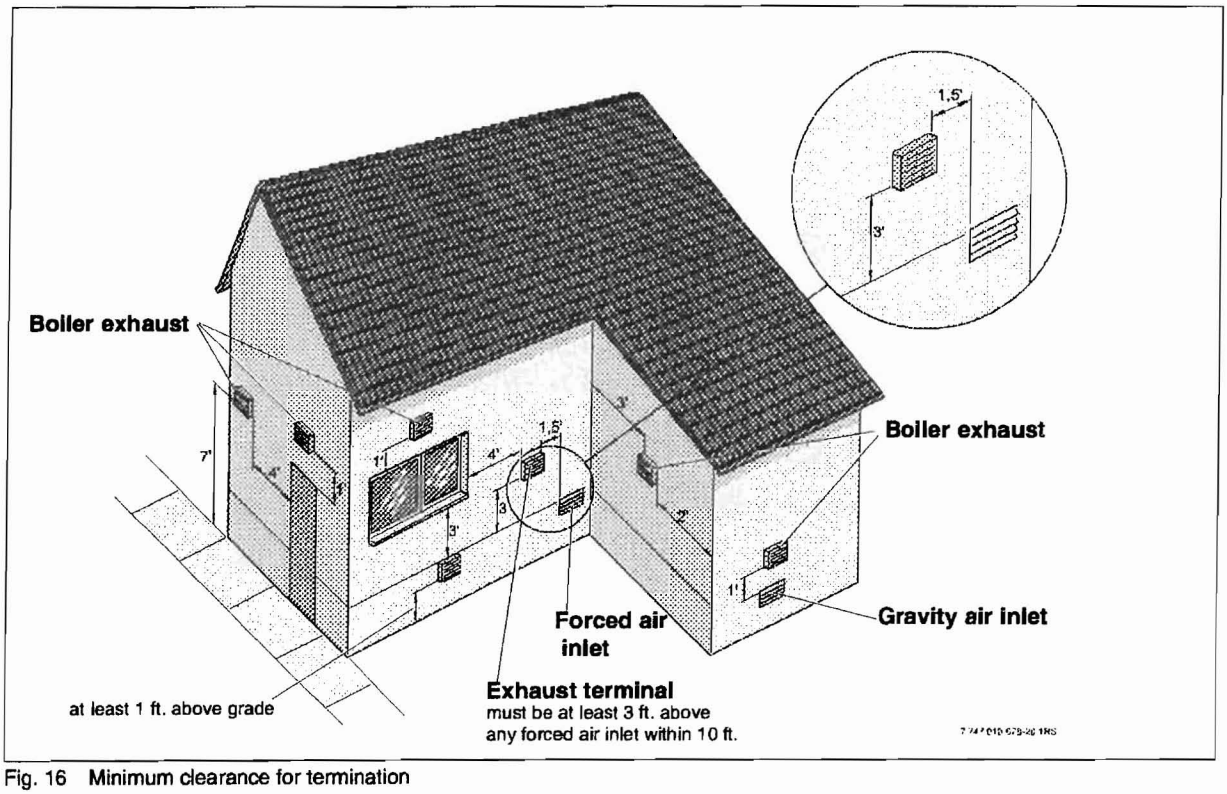


Fig. 16 Minimum clearance for termination

The location of the wall termination is one of the most important aspects of a direct-vent installation. In addition to the minimum clearances of terminations shown in Fig. 16, observe the following rules:

1. **Both the intake and exhaust terminations must be located on the same outside wall in order to balance wind pressure effects.**
2. **Wall terminations shall not be facing the direction of prevailing winds.**
3. The exhaust terminal must be located such that flue gases will be freely dispersed without reentering the building.
4. Exhaust terminal shall be at least 2 ft. from adjacent buildings, and flue gases shall not be able to enter adjacent buildings.
5. The exhaust terminal shall be at least 7 ft. above grade when above public walkways. Ensure that freezing condensate does not lead to hazardous conditions on walkways.
6. The exhaust terminal shall never be located underneath porches or crawl spaces, alcoves, or other building features that prevent dispersing flue gases.
7. The exhaust terminal shall never be located less than 3 ft. from inside building corners, and never less than 2 ft. from outside corners.
8. The exhaust terminal shall be located at least 3 ft. above any forced air inlet within 10 ft. horizontally.
9. The exhaust terminal shall never be less than 4 ft. below, 1 ft. above, or 4 ft. horizontally from any door, window, or gravity air inlet into the building.
10. The exhaust terminal shall be at least 1 ft. above grade and snow line, and where it is not susceptible to blockage from debris, leaves or falling snow or ice.
11. A ½" wire-mesh screen at the exhaust terminal must be maintained in good working order.
12. The exhaust terminal shall terminate at least 3 ft. from any other building opening, oil tank vent or oil tank fill inlet, and 6 ft. from any gas service regulator vent outlet.
13. Select the point of wall penetration maintaining a minimum slope of ¼" per foot toward the termination on the last horizontal pipe section. The wall termination assembly must also slope ¼" per foot toward the outside to drain possible condensate from the venting system.

7.1.2.2 Installation of Aerocowl exhaust termination (Part No. AT-4)

- Follow guidelines in section 7.1.2.1 regarding the relative position of the exhaust and terminal.
- Follow manufacturer's installation guidelines of the AT-4.

This system consists of a 4" air intake hood, a 5" x 4" reducer and a 26½" long, insulated Aerocowl exhaust termination. This termination has a zero clearance rating to combustibles. **Do not install** the vacuum relief damper ("not needed").

- Cut a 6" round opening in the outside wall at the selected location. Apply silicone caulking to the backside of the outer face plate and secure it to the outside wall.
- Insert the Aerocowl termination from the outside up to the outer wall stop. Ensure slope of ¼" per foot to outside.
- Slide inner plate on the termination up to the inside wall, tighten the gear clamp and secure the inner plate to the wall.
- For Aerocowl AT-4 installations in Canada less than 7 ft. above ground, install a cage/screen over the termination to prevent injury from touching hot surfaces.

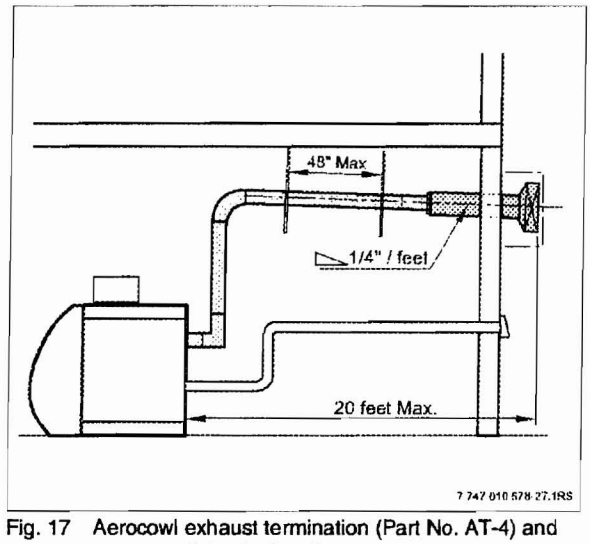


Fig. 17 Aerocowl exhaust termination (Part No. AT-4) and separate air intake hood

7.1.2.3 Installation of the concentric Fields termination (FT-4)

- Follow manufacturer's installation guidelines of the FT-4.

This system consists of a 5" x 4" reducer and a zero clearance concentric combination intake/exhaust termination with a 4" provision for fresh air intake piping. **Do not install** the vacuum relief damper ("not needed").

- Cut a round 7" diameter opening in the outside wall at the selected location.
- Remove the 4" air intake collar from the termination assembly.
- Apply silicone caulking to the back side of the wall face plate. Insert the concentric termination from the outside.
- Ensure slope of ¼" per foot to outside. Secure the face plate to the outside wall.
- Reinstall the 4" collar.

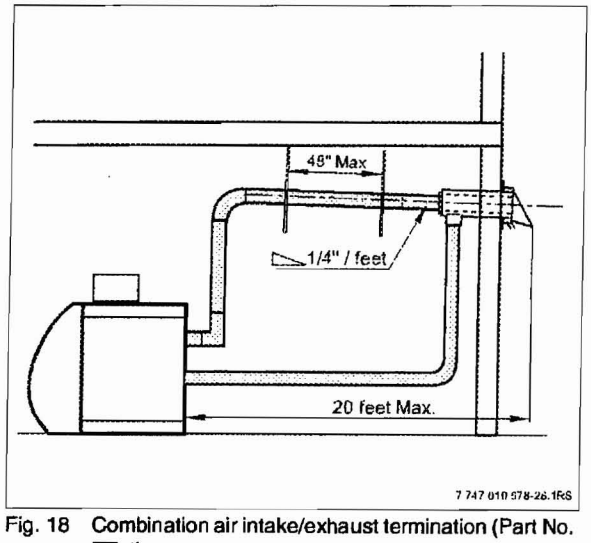


Fig. 18 Combination air intake/exhaust termination (Part No. FT-4)