

City of Portland, Maine - Building or Use Permit Application

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

Permit No: 04-0319	Issue Date: APR 01 2004	CR#: 488 A006001
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Location of Construction: 64 Yale St	Owner Name: Mks Development Inc	Owner Address: 7 Terra Way	Phone:
Business Name:	Contractor Name: James M. Jackson	Contractor Address: Portland	Phone:
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	Zone:

Past Use: Single Family Home	Proposed Use: Single Family Home install Weil Mclain Direct vent Boiler	Permit Fee: \$66.00	Cost of Work: \$4,200.00	CEO District: 4
Proposed Project Description: install Weil Mclain Direct vent Boiler		FIRE DEPT: <input type="checkbox"/> Approved <input checked="" type="checkbox"/> Denied Signature: <i>[Signature]</i>	INSPECTION: Use Group: <i>[Signature]</i> Type: <i>Heating</i> Signature: <i>[Signature]</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: ldobson	Date Applied For: 03/29/2004	Zoning Approval
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<ol style="list-style-type: none"> 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. 	Special Zone or Reviews <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"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> Date: _____	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 <input 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: _____
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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.

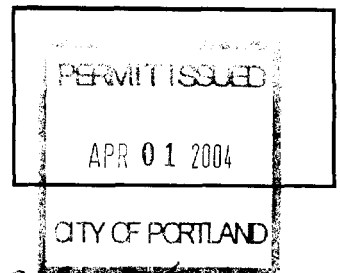
SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
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RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE	DATE	PHONE
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FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT



To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

009-0319

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:

438 A006
Location / CBL Valent Lot 7 Portland Use of Building single Date 3-29-04
Name and address of owner of appliance Chris Ballard

Installer's name and address Jim Jackson 30 Bolter St Portland
Telephone 831-1810

Location of appliance:

- Basement
- Attic
- Floor
- Roof

Type of Fuel:

- Gas
- Oil
- Solid

Appliance Name: Weld McLain

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 # 2731
- Solid Fuel # _____
- Oil # _____
- Gas # PNT 1604
- Other _____

Type of Chimney:

Masonry Lined
Factory built _____

Metal
Factory Built U.L. Listing # _____

Direct Vent
Type _____

Type of Fuel Tank

- Oil
- Gas

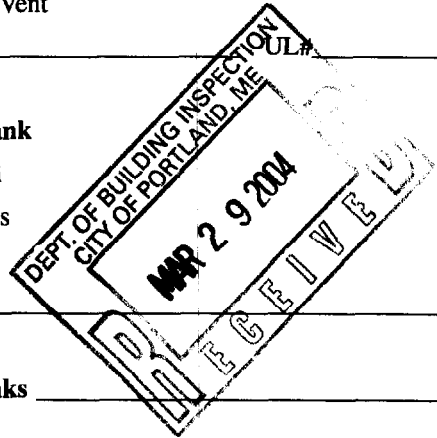
Size of Tank _____

Number of Tanks _____

Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$ 4,200

Permit Fee: \$ 166.00



Approved

Approved with Conditions

Fire: _____

See attached letter or requirement

Ele.: _____

Bldg.: _____

Inspector's Signature

Date Approved

Signature of Installer James Jackson

City of Portland, Maine - Building or Use Permit

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Proposed Use: Single Family Home install Weil Mclain Direct vent Boiler	Proposed Project Description: install Weil Mclain Direct vent Boiler
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Dept: Zoning **Status:** Approved **Reviewer:** Tammy Munson **Approval Date:** 04/01/2004
Note: **Ok to Issue:**

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 04/01/2004
Note: **Ok to Issue:**

1) Installation shall comply w/state gas regulations.

Comments:

3/29/2004-ldobson: Informed Mr Jackson we would need additional information for burner. Will fax over information this week.

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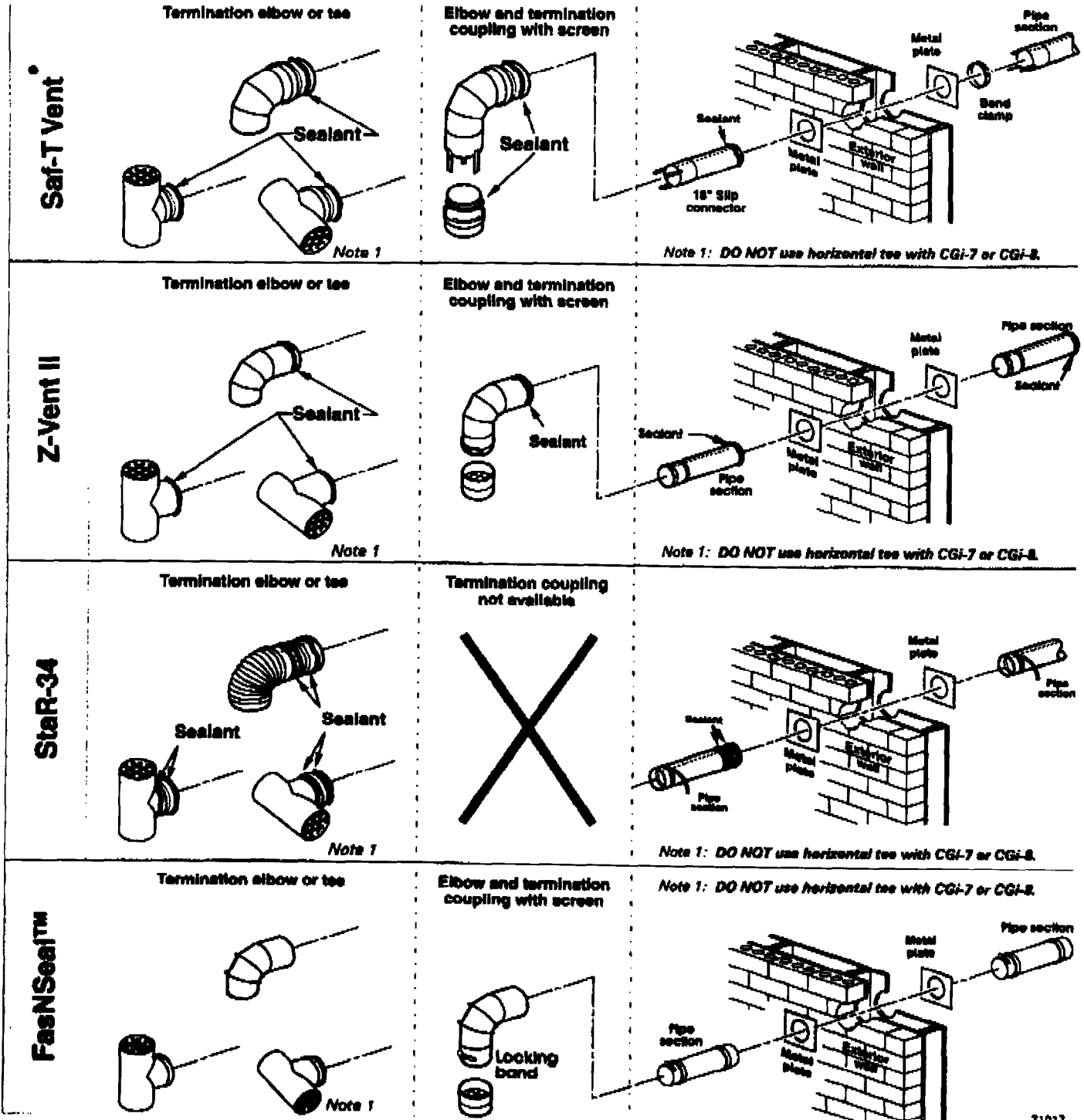
Boiler Manual

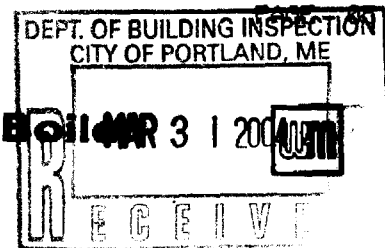
vertical or sidewall

WARNING

Using any termination other than one of those shown could cause nuisance outages and loss of heat, resulting in substantial property damage.

Figure 15 Sidewall termination



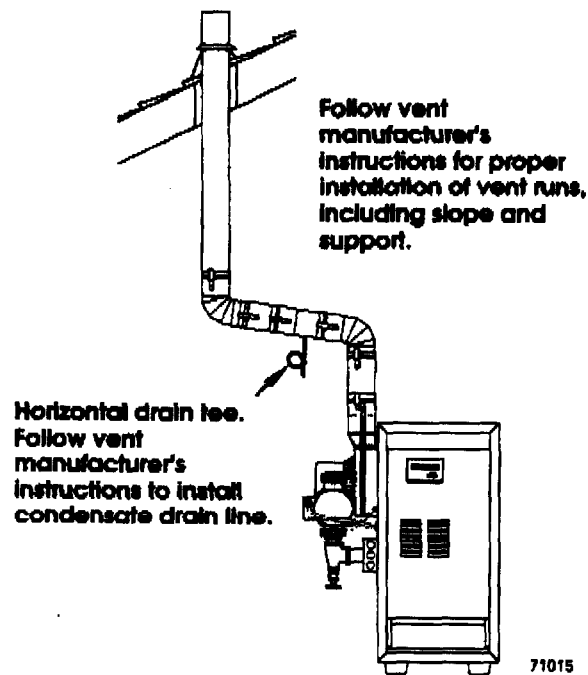


GOLD CGI Series 2 Gas-Fired Water Boiler

3f Venting — direct exhaust

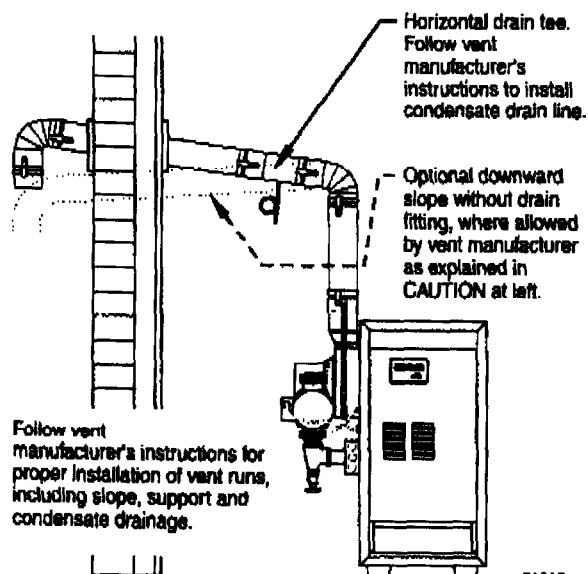
1. Do not mix types or manufacturers of vent materials.
2. Clean all joints before sealing. See vent manufacturer's instructions for cleaning and sealing joints. Use their specified sealant. Do not use screws.
3. Install vent pipe with seams on top of vent horizontal runs. Follow requirements in section 3e, page 17, for vent termination.
4. Maintain minimum 2" clearance from combustible materials to vent pipe.
5. **Vertical venting** — See **Figure 13**. Follow vent manufacturer's instructions for venting through roof.
 - Vent pipe must extend through roof flashing, jacket or thimble.
 - Vent may pass through floor, inside wall or concealed space when installed according to vent manufacturer's instructions.
6. **Sidewall venting** — See **Figures 14 and 15**. Vent must terminate at least one foot above anticipated snowline. Vent must be terminated only with:
 - Tee or elbow with integral screen. (Tee may be mounted either vertically or horizontally. **DO NOT** use horizontal tee with CGI-7 or CGI-8.)
 - Elbow and termination coupling with screen (not available for StaR-34).
7. Do not seal vent pipe (slip connector for Saf-T Vent) to inside or outside plate.
8. If passing through noncombustible wall, provide hole diameter large enough to insert the vent pipe (slip connector for Saf-T Vent).
9. Install horizontal drain tee as close as possible to boiler, in first horizontal run. See **Figure 13**.
10. Do not exceed the maximum vent system length given in **Table 4**, page 15.

Figure 13 Direct exhaust vertical venting



71015

Figure 14 Direct exhaust sidewall venting



71016

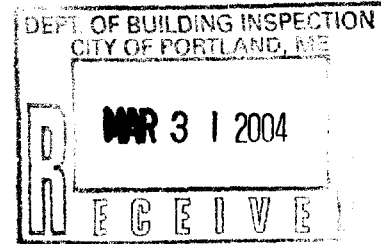
WARNING Condensate drain line — use only silicone tubing rated for at least 400 °F for the first 18" of condensate drain line, then other non-metallic tubing may be used. Using any other material could cause flue gas leakage, potentially resulting in severe personal injury, death or substantial property damage.

CAUTION On some installations, the condensate drain fitting may be omitted, provided:

- Vent manufacturer shows this option in their instructions.
- Vent is sloped toward termination as shown in dotted lines in **Figure 14**.
- The vent is installed per Weil-McLain and vent manufacturer's instructions.

Condensate drippage from such vents may accumulate on the ground below. Consider traffic in the area to avoid hazard due to ice accumulation.

Boiler Manual



3e

Venting — direct exhaust — vent termination

WARNING

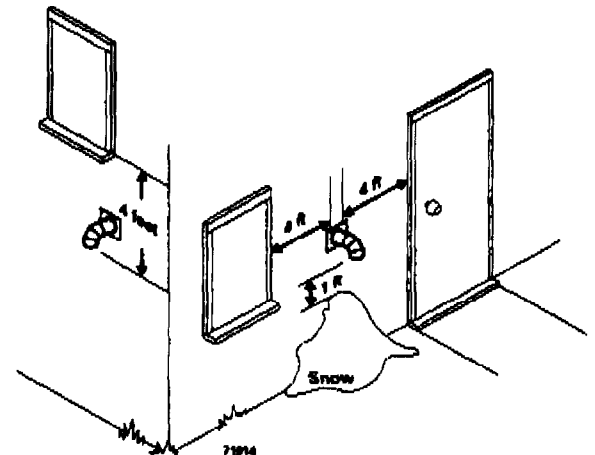
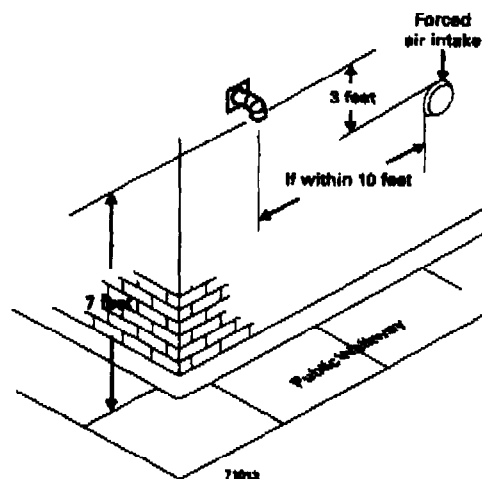
Follow instructions on this page when determining vent location to avoid possibility of severe personal injury, death or substantial property damage.

1. Locate the boiler and vent penetration through the wall so all requirements on this page and in Figure 12 will be met. Also follow vent manufacturer's instructions.
2. Gases will form white plume in winter. Plume could obstruct window view.
3. Prevailing winds could cause freezing of condensate and water/ice buildup on vent termination, building, plants or roof. Ice buildup on vent termination can cause boiler shutdown and building freezeup.
4. Winds over 31 mph can cause nuisance boiler shutdown if boiler is sidewall vented. This could result in loss of heat to building, causing freezeup.
5. Locate or guard vent termination to prevent condensate from damaging exterior surfaces.
6. Locate the vent termination well away from trees, shrubs, and decorative items.
7. Locate or guard vent to prevent accidental contact by people or pets.
8. Do not terminate vent in window well, stairwell, alcove, courtyard, or other recessed areas.
9. Do not wrap or insulate vent pipe or fittings.
10. Do not terminate vent above any door or window. Condensate can freeze, causing ice formations.
11. Do not connect:
 - Any other appliance to vent pipe.
 - Multiple boilers to a common vent pipe.
12. Canadian installations — See B149.1 or B149.2 Installation Code. Terminate vent no less than 6 feet from another combustion air inlet, 3 feet from any other building opening, and 3 feet from any gas service regulator.
13. See Figure 12, showing that the vent must terminate:
 - more than 4 feet below or to side of all doors or windows.
 - more than 1 foot above grade or anticipated snow line.
 - at least 7 feet above public walkway.
 - 3 feet above any forced air intake within 10 feet.
14. Vent must also terminate:
 - at least 6 feet away from adjacent walls.
 - no closer than 5 feet below roof overhang.
 - at least 4 feet horizontally (and in no case above or below unless a 4 foot horizontal distance is maintained) from electric meters, gas meters, regulators, relief valves, and other equipment.
15. Site conditions may dictate greater clearances.
16. Do not extend exposed vent pipe outside of building. Condensate could freeze and block vent pipe.

WARNING

A gas vent extending through an exterior wall shall not terminate adjacent to the wall or below building extensions such as eaves, parapets, balconies or decks. Failure to comply could result in severe personal injury, death or substantial property damage.

Figure 12 Vent termination minimum clearances



DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME

FasNSeal® Special Gas Vent

The First SILICONE FREE Vent System for Category II, III, & IV Heating Appliances

TYPICAL OF A SYSTEM
ELEVATION VIEW

Engineering Services
are provided.
Call 1.800.766.3473 or
engineering@protechinfo.com

PART LIST		
ITEM	QTY	PART #
1	1	300428
2	1	100149
3	1	100228
4	1	100183
5	5	100083
6	1	100068
7	1	100258
8	1	100334
9	1	300336
10	1	300488
11	1	300489

FEATURES	BENEFITS
<ul style="list-style-type: none"> AL29-4C® superferritic stainless steel 	<ul style="list-style-type: none"> Recognized by the AGA as the material of choice. Excellent corrosion resistance and structural strength.
<ul style="list-style-type: none"> Precision TIG-welded butt seam 	<ul style="list-style-type: none"> Seams on vent lengths & components are smooth both inside and out. Gas & water-tight.
<ul style="list-style-type: none"> Factory built-in, replaceable gaskets 	<ul style="list-style-type: none"> System can be taken apart and reassembled quickly. No silicone, no cure time, no mess. Installs in half the time.
<ul style="list-style-type: none"> Factory built-in locking band 	<ul style="list-style-type: none"> Line up seams to line up clamps for easy installation. No cumbersome tabs. No external clamps to lose.
<ul style="list-style-type: none"> Wall Thimble with built-in Adjustable Vent Length 	<ul style="list-style-type: none"> Wall Thimble allows for built-in horizontal adjustability. No need to cut pipe.
<ul style="list-style-type: none"> Standard Adjustable Vent Length 	<ul style="list-style-type: none"> Provides 2" - 14" of vertical or horizontal adjustment for easy system pitching.
<ul style="list-style-type: none"> Proven track record 	<ul style="list-style-type: none"> Tested and listed by Underwriters Laboratories, Inc. to UL 1738 & ULC-S636. Tested and approved by heating equipment manufacturers. 15 year warranty.

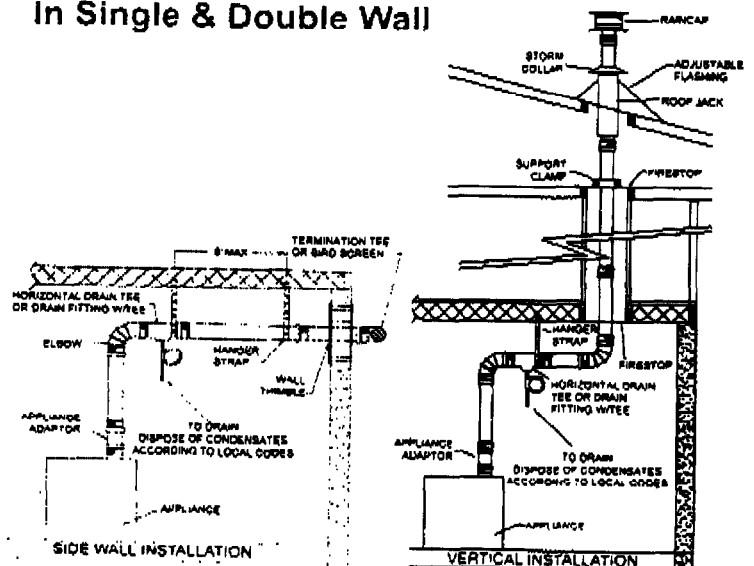
<p>EPTSE ProTech Systems, Inc. 400 South Pearl St. Albany, NY 12202 1.800.766.3473 sales@protechinfo.com www.protechinfo.com</p>	12" FasNSeal W2 SAMPLE	
	YOUR COMPANY:	
	Drawing No. Sample .ldw	
	DRAWN BY: B. McLEAN	3/13/2003
SCALE: 1/40	REV	
SHEET: 2 OF 6		

FasNSeal® is a Heating Contractor's Dream Come True. Simply slide FasNSeal® parts together, tighten their FasClamps and fire up the appliance immediately. You get a clean and professional job that is done NOW!

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In Single & Double Wall

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FasNSeal®

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Material Selection and Experience Counts

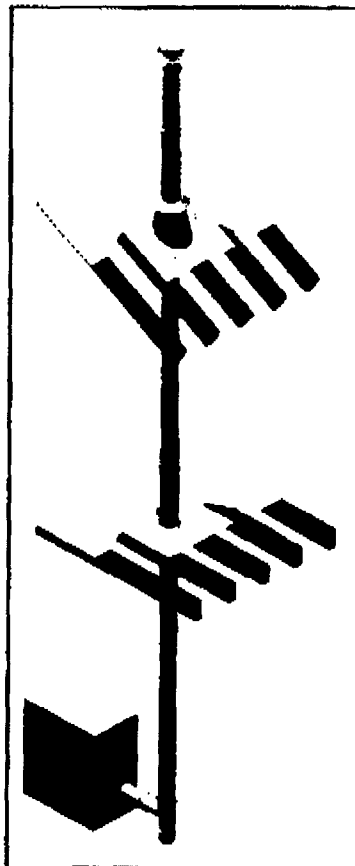
FasNSeal® is manufactured from **AL29-4C®**, a superferritic stainless steel designed for extreme resistance to chloride ion pitting, crevice corrosion and stress corrosion cracking, as well as general corrosion in oxidizing and moderately reducing environments. **AL29-4C®** is an ideal choice for resisting deleterious effects of corrosive condensates created by partially or fully condensing natural gas and propane fired heating appliances.

CLEARANCE TO COMBUSTIBLES						
Max Flue Gas Temperature	Enclosed			Unenclosed		
	Hor		Vert	Hor	Vert	
3" & 4"	370 F / 188 C	Sides: 8" / 203.2mm Top: 12" / 304.8mm		4" / 101.6mm	1" / 25.4mm	
	380 F / 195 C	Bottom: 4" / 101.6mm		4" / 101.6mm	3" / 76.2mm	
5" to 16"	370 F / 188 C	Noncombustible enclosure			3" / 76.2mm	3" / 76.2mm
	380 F / 195 C				3" / 76.2mm	3" / 76.2mm

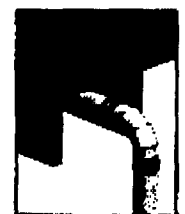
The Canadian Gas Research Institute found that test results proved **AL29-4C®** to be one of two "most corrosion resistant alloys of twenty candidate stainless steels evaluated for resistance to chloride-induced corrosion in condensing and partially condensing gas-fired appliances". **AL29-4C®** is patented and manufactured by Allegheny Ludlum Corp. **FasNSeal®** has been tested and is listed by Underwriters Laboratories, Inc. to UL 1738 and ULC-S636-95.

ProTech Systems' own experience with AL29-4C® dates back to 1986, when **VENTINOX®VG** for gas appliances was introduced as the first chimney lining system made from this alloy. **VENTINOX®** provides safe venting in thousands of American homes today and features a lifetime warranty.

MATERIAL THICKNESS AL29-4C®	
3"-7" (76.2mm-177.8mm)	.018" (.4mm)
8"-12" (203.2mm-304.8mm)	.019" (.5mm)
14"-16" (355.6mm-406.4mm)	.024" (.6mm)



FasNSeal® Vertical Installation



FasNSeal® Applications

FasNSeal® is a Special Gas Vent and Gas Vent Connector, made from **AL29-4C®** stainless steel and designed for use on natural gas or propane-fired appliances listed as Category II, III and IV or in Canada Type BH Gas Vent Systems having a maximum flue gas temperature of 550 degrees F and maximum positive pressure of 15" water column. **FasNSeal®** provides horizontal or vertical venting for high efficiency gas boilers, furnaces, booster heaters, pool heaters, water heaters, unit heaters or tankless water heaters. **FasNSeal®** may also be used as a vent for Category I, natural gas or propane-fired heaters. **FasNSeal®** must be sized according to the heating appliance manufacturers instructions, NFPA 211, NFPA 54 and any other relevant local building codes and regulations (see installation instructions for details!).

PROTECH SYSTEMS, INC.

ProTech Systems, Inc. is a leading manufacturer of stainless steel chimney liners and vent connectors. Our FasNSeal® connectors are designed for extreme resistance to chloride ion pitting, crevice corrosion and stress corrosion cracking, as well as general corrosion in oxidizing and moderately reducing environments.

VENTINOX® is a leading manufacturer of stainless steel chimney liners. Our Ventinox® VG for gas appliances was introduced as the first chimney lining system made from this alloy.

ProTech Systems, Inc. has been manufacturing stainless steel chimney liners and vent connectors for over 20 years. Our FasNSeal® connectors are designed for extreme resistance to chloride ion pitting, crevice corrosion and stress corrosion cracking, as well as general corrosion in oxidizing and moderately reducing environments.

ProTech Systems, Inc. is a leading manufacturer of stainless steel chimney liners and vent connectors. Our FasNSeal® connectors are designed for extreme resistance to chloride ion pitting, crevice corrosion and stress corrosion cracking, as well as general corrosion in oxidizing and moderately reducing environments.