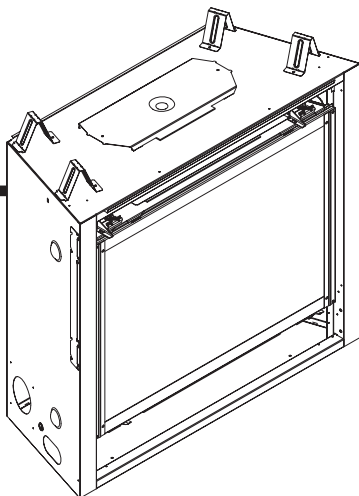


HEAT & GLO™

No one builds a better fire



Owner's Manual Installation and Operation

Models:

SL-550TR-E

SL-750TR-E

SL-950TR-E

SL-550TR-IPI-E

SL-750TR-IPI-E

SL-950TR-IPI-E

GAS-FIRED



CAUTION



DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

DO NOT
DISCARD

⚠ WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury, or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **What to do if you smell gas**
 - Do not try to light any appliance.
 - Do not touch any electrical switch. Do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

⚠ WARNING



HOT SURFACES!

Glass and other surfaces are hot during operation AND cool down.

Hot glass will cause burns.

- Do not touch glass until it is cooled
 - NEVER allow children to touch glass
 - Keep children away
 - CAREFULLY SUPERVISE children in same room as fireplace.
 - Alert children and adults to hazards of high temperatures.
- High temperatures may ignite clothing or other flammable materials.**
- Keep clothing, furniture, draperies and other flammable materials away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.

See Table of Contents for location of additional Commonwealth of Massachusetts requirements.

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the manufactured home construction and safety standard, *Title 24 CFR, Part 3280 or Standard for Installation in Mobile Homes, CAN/CSA Z240MH.*

This appliance is only for use with the type(s) of gas indicated on the rating plate.



Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies suggests NFI certified or factory trained professionals, or technicians supervised by an NFI certified professional.

1 Listing and Code Approvals

A. Appliance Certification

MODELS: SL-550TR-E, SL-750TR-E, SL-950TR-E
LABORATORY: Underwriters Laboratories, Inc. (UL)
TYPE: Direct Vent Gas Appliance Heater
STANDARD: ANSI Z21.88a-2007 • CSA 2.33a-2007

This product is listed to ANSI standards for “Vented Gas Appliance Heaters” and applicable sections of “Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles”, and “Gas Fired Appliances for Use at High Altitudes”.

NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE.
 This appliance is tested and approved as either supplemental room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.

B. Glass Specifications

Hearth & Home Technologies appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the Consumer Product Safety Commission (CPSC). The tempered glass has been tested and certified to the requirements of **ANSI Z97.1** and **CPSC 16 CFR 1202** (Safety Glazing Certification Council **SGCC# 1595** and **1597**. Architectural Testing, Inc. Reports **02-31919.01** and **02-31917.01**).

This statement is in compliance with **CPSC 16 CFR Section 1201.5** “Certification and labeling requirements” which refers to **15 U.S. Code (USC) 2063** stating “...Such certificate shall accompany the product or shall otherwise be furnished to any distributor or retailer to whom the product is delivered.”

Some local building codes require the use of tempered glass with permanent marking in such locations. Glass meeting this requirement is available from the factory. Please contact your dealer or distributor to order.

NOTE: This installation must conform with local codes. In the absence of local codes you must comply with the **National Fuel Gas Code, ANSI Z223.1-latest edition** in the U.S.A. and the **CAN/CGA B149 Installation Codes** in Canada.



Heat & Glo Quality Systems registered by SGS ICS

C. BTU Specifications

Models U.S. (0-2000 ft.) or Canada (2000-4500 ft.)		Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)
SL-550TR-E (NG) SL-550TR-IPI-E (NG)	U.S.	21,000	15,000	#44
	Canada	18,900	13,500	#45
SL-550TRLP-E (LP) SL-550TRLP-IPIE (LP)	U.S.	20,600	14,600	#55
	Canada	18,540	13,140	#56
SL-750TR-E (NG) SL-750TR-IPI-E (NG)	U.S.	24,300	16,900	#42
	Canada	21,870	15,210	#43
SL-750TRLP-E (LP) SL-750TRLP-IPIE (LP)	U.S.	23,400	17,600	#54
	Canada	21,060	15,840	#55
SL-950TR-E (NG) SL-950TR-IPI-E (NG)	U.S.	30,400	20,900	#37
	Canada	27,360	18,810	#38
SL-950TR-E (LP) SL-950TR-IPI-E (LP)	U.S.	30,800	23,000	#52
	Canada	27,720	20,700	#53

D. High Altitude Installations

U.L. Listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 feet in the U.S.A. and Canada.

When installing this appliance at an elevation above 2000 feet, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input rate should be reduced by 4% for each 1000 feet above a 2000 foot elevation in the U.S.A., or 10% for elevations between 2000 and 4500 feet in Canada. If the heating value of the gas has been reduced, these rules do not apply. To identify the proper orifice size, check with the local gas utility.

If installing this appliance at an elevation above 4500 feet (in Canada), check with local authorities.

WARNING

Do NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

E. Non-Combustible Materials Specification

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof. Materials that are reported as passing **ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C**, shall be considered non-combustible materials.

F. Combustible Materials Specification

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame proofed or not, or whether plastered or unplastered shall be considered combustible materials.

Note: The following requirements reference various Massachusetts and national codes not contained in this document.

G. Requirements for the Commonwealth of Massachusetts

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

Installation of Carbon Monoxide Detectors

At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

Signage

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "**GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS**".

Inspection

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

Exemptions

The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

- The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and
- Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

MANUFACTURER REQUIREMENTS

Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

Gas Equipment Venting System **NOT** Provided

When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

- The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and
- The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

See Gas Connection section for additional Commonwealth of Massachusetts requirements.

3 Framing and Clearances

NOTE:

- Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference.

WARNING

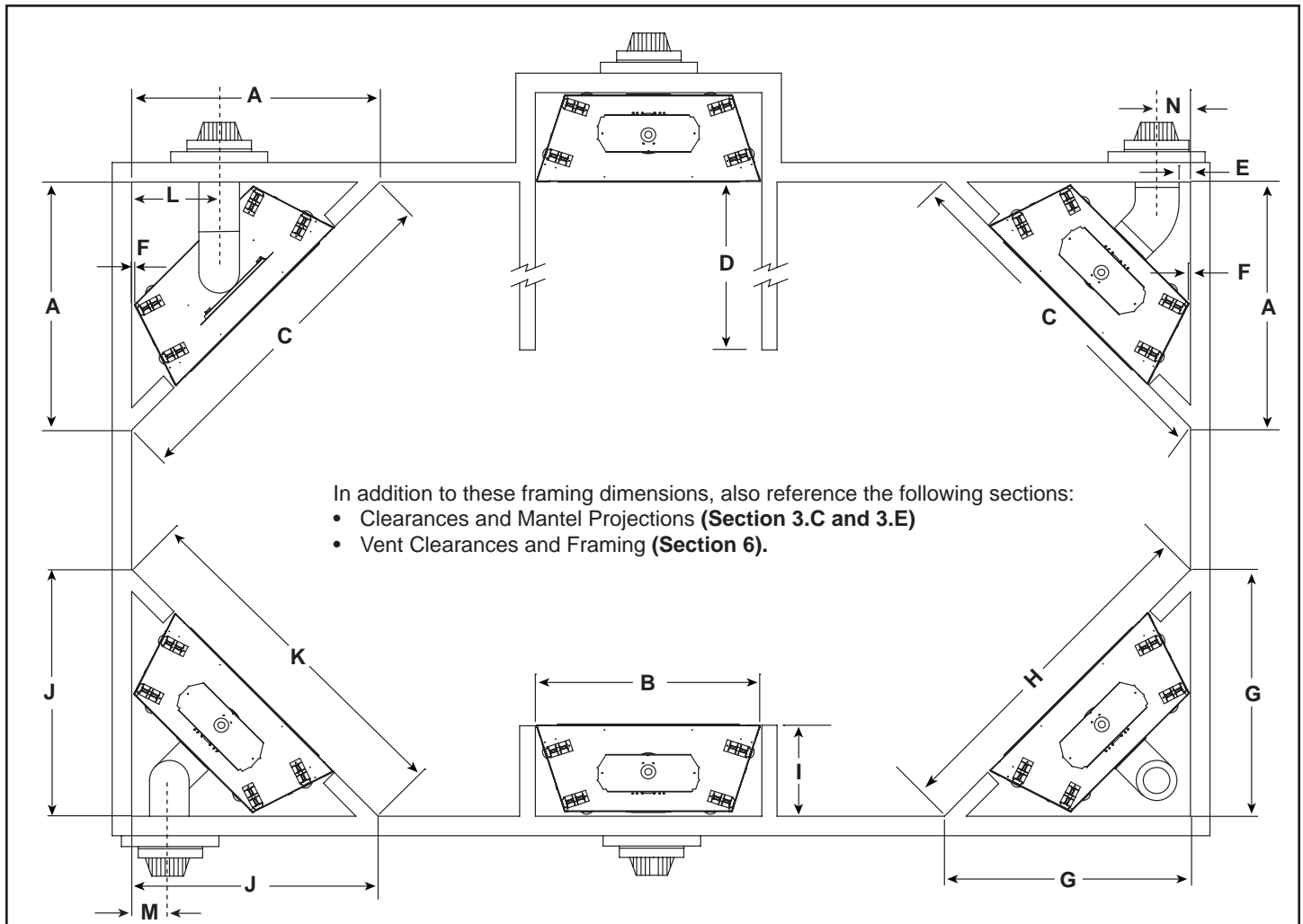


Fire Risk
Provide adequate clearance:
 • Around air openings
 • To combustibles
 • For service access
 Locate appliance away from traffic areas.

A. Selecting Appliance Location

When selecting a location for your appliance it is important to consider the required clearances to walls (see Figure 3.1).

NOTE: For actual appliance dimensions refer to Section 16.



In addition to these framing dimensions, also reference the following sections:
 • Clearances and Mantel Projections (**Section 3.C and 3.E**)
 • Vent Clearances and Framing (**Section 6**).


Models	A	B	C	D	E Min.	F Min.	G	H	I	J	K	L	M	N
SL-550TR-IP1-E	in. 42	37	59-1/2	See Section E for Alcove Installation	1	1/2	44	62-1/4	16-1/4	48-1/2	68-3/4	15-1/16	7-1/2	7-1/8
SL-550TR-E	mm 1067	940	1511		25	13	1118	1581	413	1232	1746	383	191	181
SL-750TR-IP1-E	in. 45-1/2	42	64-3/8		1	1/2	45-1/2	64-3/8	16-1/4	48-1/2	68-3/4	16-5/8	7-1/2	9
SL-750TR-E	mm 1156	1067	1635		25	13	1156	1635	413	1232	1746	422	191	229
SL-950TR-IP1-E	in. 50-1/2	49	71-1/2		1	1/2	50-1/2	71-1/2	16-1/4	50-1/2	71-1/2	19-1/2	9-1/4	11-5/8
SL-950TR-E	mm 1283	1245	1816		25	13	1283	1816	413	1283	1816	495	235	295

Figure 3.1 Appliance Locations

4 Termination Locations

A. Vent Termination Minimum Clearances


WARNING



Fire Risk.
Explosion Risk.
Inspect external vent cap regularly.

- Ensure no debris blocks cap.
- Combustible materials blocking cap may ignite.
- Restricted air flow affects burner operation.

WARNING

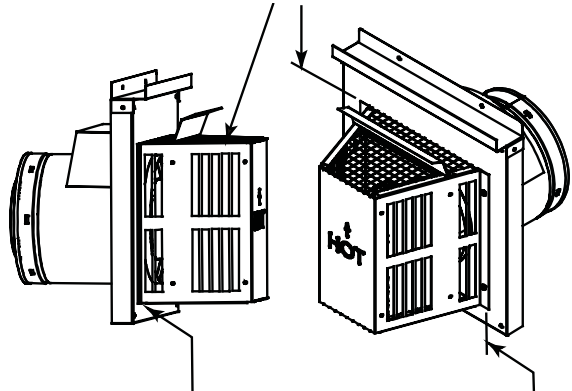


Fire Risk.
Explosion Risk.
Maintain vent clearance to combustibles as specified.

- Do not pack air space with insulation or other materials.

Failure to keep insulation or other materials away from vent pipe may cause fire.

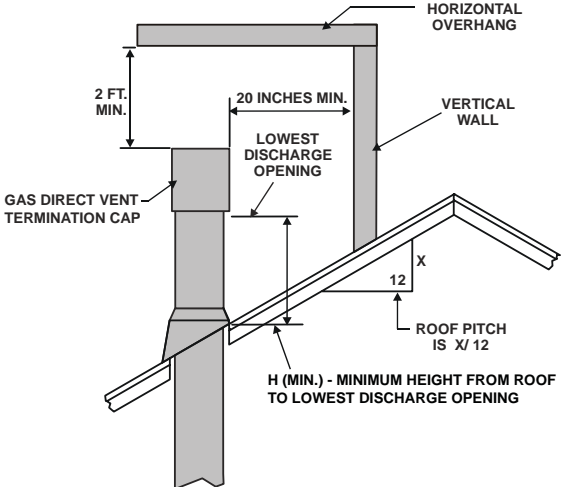
Measure vertical clearances from this surface.



Measure horizontal clearances from this surface.

(See Figure 4.4 for specific clearances)

Figure 4.1

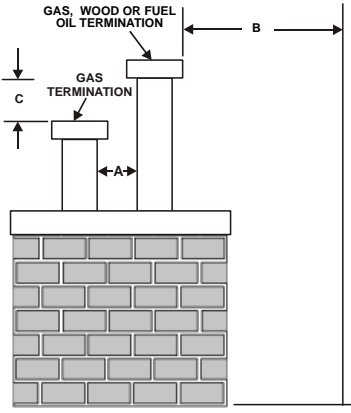


Roof Pitch	H (Min.) Ft.
Flat to 6/12.....	1.0*
Over 6/12 to 7/12.....	1.25*
Over 7/12 to 8/12.....	1.5*
Over 8/12 to 9/12.....	2.0*
Over 9/12 to 10/12.....	2.5
Over 10/12 to 11/12.....	3.25
Over 11/12 to 12/12.....	4.0
Over 12/12 to 14/12.....	5.0
Over 14/12 to 16/12.....	6.0
Over 16/12 to 18/12.....	7.0
Over 18/12 to 20/12.....	7.5
Over 20/12 to 21/12.....	8.0

* 3 foot minimum in snow regions

Figure 4.2 Minimum Height from Roof to Lowest Discharge Opening

Figure 4.2 specifies minimum vent heights for various pitched roofs.



	Gas Termination	Wood & Fuel Oil Termination	Comments
A	6 in.	20 in. min.	Horizontal distance between terminations
B	20 in.	24 in. min.	Distance to perpendicular wall
C	18 in.	18 in.	Vertical distance between terminations

Figure 4.3 Multiple Vertical Termination

6 Vent Clearances and Framing

A. Pipe Clearances to Combustibles

WARNING

Fire Risk.
Explosion Risk.

Maintain vent clearance to combustibles as specified.

- Do not pack air space with insulation or other materials.

Failure to keep insulation or other materials away from vent pipe may cause fire.

3 in. TOP CLEARANCE

1 in. CLEARANCE AROUND VERTICAL SECTIONS

1 in. SIDE AND BOTTOM CLEARANCE

Note: When using SL pipe, minimum clearances from the vent pipe to combustible materials at wall firestops are:

Top: 2-1/2 inches
Bottom: 1/2 inch
Sides: 1 inch

Figure 6.1 Pipe Clearances

Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm). The heat shield is designed to be used on a wall 4 in. to 7-1/4 in. (102 mm to 184 mm) thick. If wall thickness is less than 4 in. (102 mm) the existing heat shields must be field trimmed. If wall thickness is greater than 7-1/4 in. (184 mm) a DVP-HSM-B will be required.

HEAT SHIELD

7 in.

3 in. TOP CLEARANCE

HEAT SHIELD

WALL SHIELD FIRESTOP

WALL

1 in. CLEARANCE BOTTOM & SIDES

Figure 6.2 Horizontal Venting Clearances to Combustible Materials

B. Wall Penetration Framing

		A	B	C	D
SL-550TR-E	in.	36 1/2	24 3/8	35 1/2	23 3/8
	mm	927	619	902	594
SL-750TR-E	in.	41	27 7/8	40	26 7/8
	mm	1041	708	1016	683
SL-950TR-E	in.	44	31 7/8	43	30 7/8
	mm	1118	810	1092	784

* Shows center of vent framing hole for top or rear venting. The center of the hole is one (1) inch (25.4 mm) above the center of the horizontal vent pipe.

Figure 6.3 Exterior Wall Hole

Combustible Wall Penetration

Frame a hole in a combustible wall for an interior wall shield firestop, (Figure 6.2) whenever a wall is penetrated. Use same size framing materials as those used in the wall construction. The wall shield firestop maintains minimum clearances and prevents cold air infiltration.

Non-Combustible Wall Penetration

If the hole being penetrated is surrounded by noncombustible materials such as concrete, a hole with diameter one inch greater than the pipe is acceptable. Whenever a non-combustible wall is penetrated, the wall shield firestop is only required on one side and no heat shield is necessary. If your local inspector requires the wall shield firestop on both sides, then both wall shield firestops must have a heat shield attached to them.

9 Gas Information


A. Fuel Conversions


Before making gas connections ensure that appliance being installed is compatible with the available gas type.

Any natural or propane gas conversions necessary to meet the appliance and locality needs must be made by a qualified technician using Hearth & Home Technologies specified and approved parts.

B. Gas Pressures


Proper input pressures are required for optimum appliance performance. Gas line sizing requirements need to be made following NFPA51.


 **WARNING**




Fire Risk.
Explosion Hazard.
High pressure will damage valve.

- Disconnect gas supply piping BEFORE pressure testing gas line at test pressures above 1/2 psig.
- Close the manual shutoff valve BEFORE pressure testing gas line at test pressures equal to or less than 1/2 psig.




 **WARNING**



Verify inlet pressures.

- High pressure may cause overfire condition.
- Low pressure may cause explosion.
- Verify minimum pressures when other household gas appliances are operating.

Install regulator upstream of valve if line pressure is greater than 1/2 psig.



Pressure requirements for appliance are shown in the table below. Minimum pressures must be met when other household gas appliances are operating.

Pressure	Natural Gas	Propane
Minimum Inlet Pressure	5.0 inches w.c.	11.0 inches w.c.
Maximum Inlet Gas Pressure	14.0 inches w.c.	14.0 inches w.c.
Manifold Pressure	3.5 inches w.c.	10.0 inches w.c.

C. Gas Connection


NOTE: Have the gas supply line installed in accordance with local building codes, if any. If not, follow ANSI 223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.)


NOTE: A listed (and Commonwealth of Massachusetts approved) 1/2 inch (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 inch (13 mm) control valve inlet.

- If substituting for these components, please consult local codes for compliance.

Refer to **Reference Section 16** for location of gas line access in appliance.

NOTE: Gas line may be run from either side of the appliance provided the hole in the outer wrap does NOT exceed 2-1/2 inches in diameter and does not penetrate the firebox.

 **WARNING**





Gas Leak Risk

- Support control when attaching pipe to prevent bending gas line.

NOTE: The gap between supply piping and gas access hole may be caulked with high temperature caulk or stuffed with non-combustible, unfaced insulation to prevent cold air infiltration.


- Ensure that gas line does not come in contact with outer wrap of appliance. Follow local codes.
- Incoming gas line should be piped into the valve compartment and connected to the 1/2 inch connection on the manual shutoff valve.

 **WARNING**






Fire or Explosion Hazard

- Gas buildup during line purge may ignite.
- Purge should be performed by qualified technician.
- Ensure adequate ventilation.
- Ensure there are no ignition sources such as sparks or open flames.



- A small amount of air will be in the gas supply lines. When first lighting appliance it will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.

⚠ WARNING	
 	<p>CHECK FOR GAS LEAKS</p> <p>Explosion Risk Fire Risk Asphyxiation Risk</p> <ul style="list-style-type: none"> • Check all fittings and connections. • Do not use open flame. • After the gas line installation is complete, all connections must be tightened and checked for leaks with a commercially-available, non-corrosive leak check solution. Be sure to rinse off all leak check solution following testing. <p>Fittings and connections may have loosened during shipping and handling.</p>

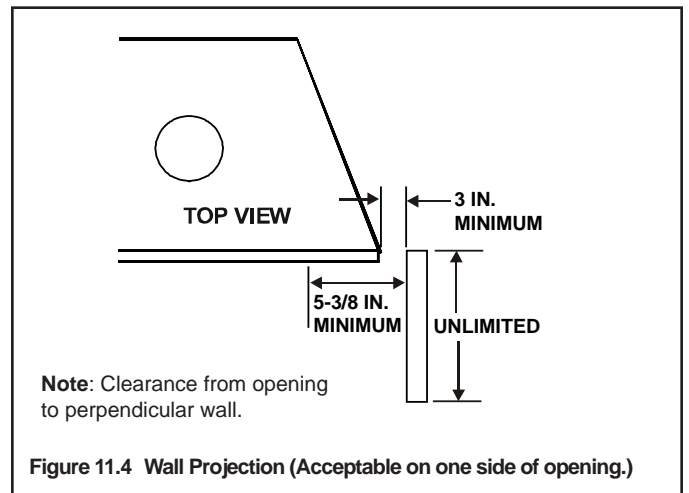
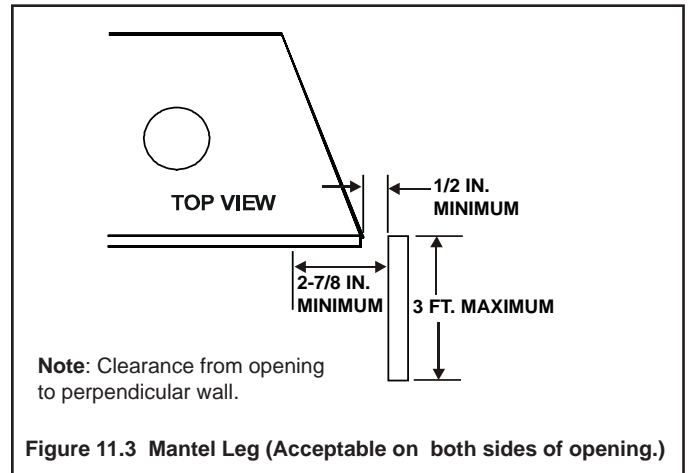
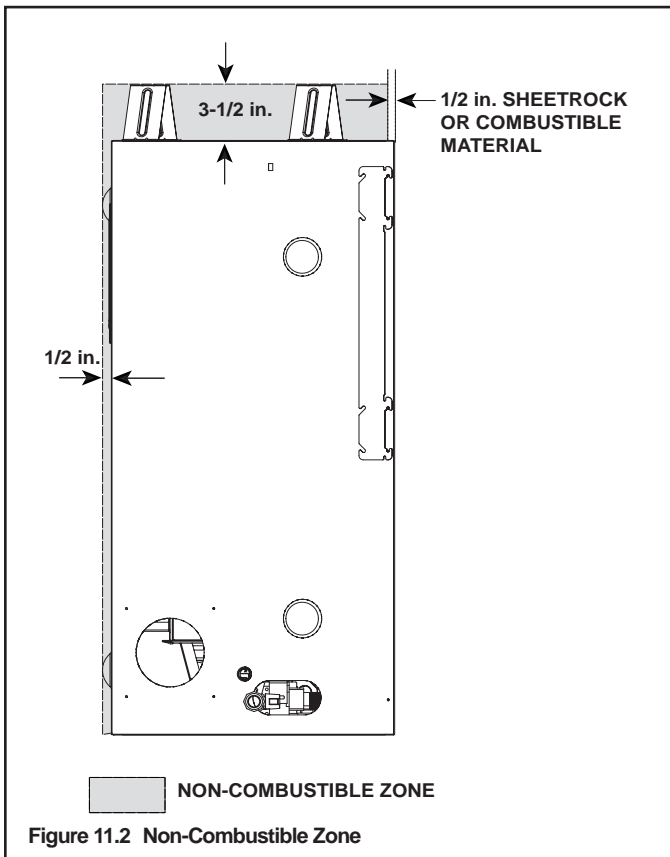
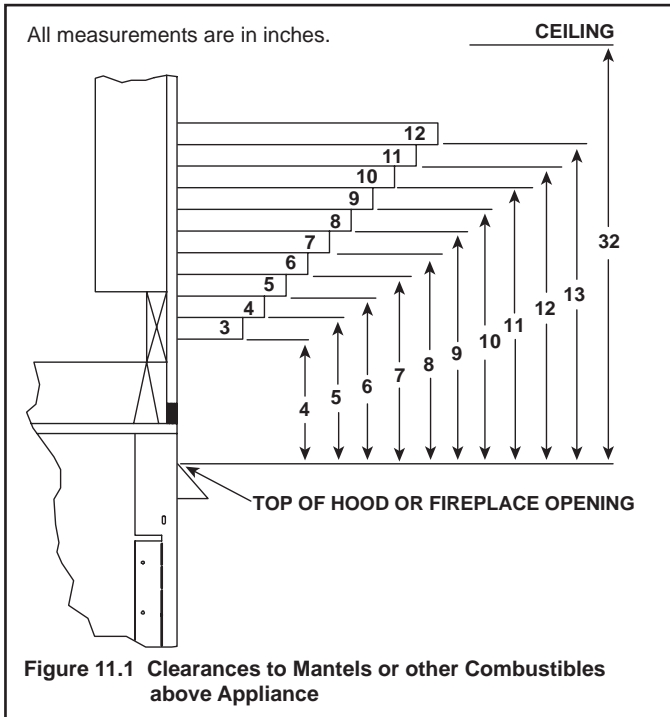
⚠ WARNING	
	<p>Fire hazard. Do NOT change the valve settings.</p> <ul style="list-style-type: none"> • This valve has been preset at the factory. • Changing valve settings may result in fire hazard or bodily injury.

<p>HIGH ALTITUDE INSTALLATIONS</p> <p>U.L. Listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 feet in the U.S.A. and Canada.</p> <p>When installing this appliance at an elevation above 2000 feet, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input rate should be reduced by 4% for each 1000 feet above a 2000 foot elevation in the U.S.A., or 10% for elevations between 2000 and 4500 feet in Canada. If the heating value of the gas has been reduced, these rules do not apply. To identify the proper orifice size, check with the local gas utility.</p> <p>If installing this appliance at an elevation above 4500 feet (in Canada), check with local authorities.</p>
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11 Finishing


A. Mantel Projections

Figure 11.1 shows the minimum vertical and corresponding maximum horizontal dimensions of appliance mantels or other combustible projections above the top front edge of the appliance.



B. Facing Material

⚠ WARNING




Fire Risk.
Do NOT obstruct air inlet or outlet grilles.
Do NOT modify grilles.

- Modifying or covering grilles could cause temperature rise and fire hazard.

Finishing materials must not interfere with:


- Air flow through grilles or louvers.
- Operation of louvers or doors.
- Access for service.

⚠ WARNING

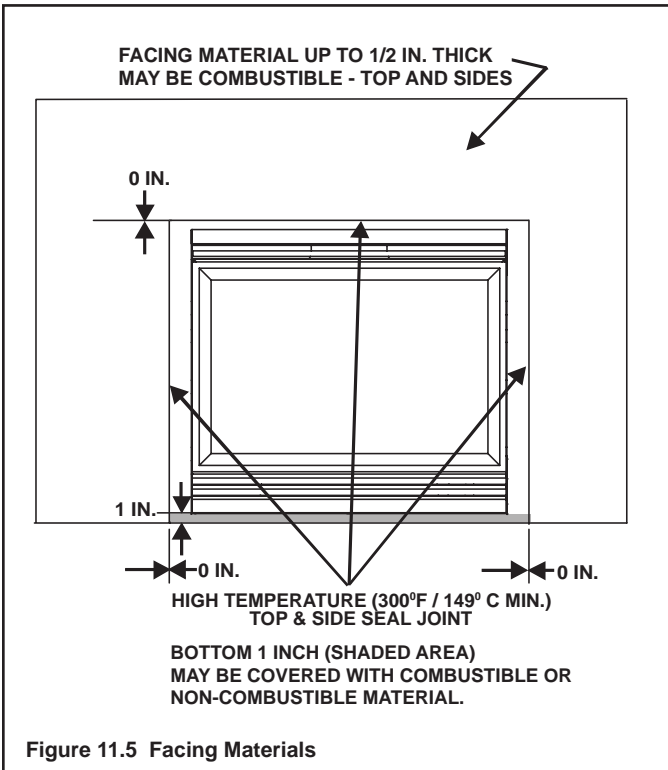


Risk of Fire

- Non-combustible clearances **MUST** be maintained.
- Sheetrock, wood or other combustibles must **NOT** be used as sheathing or facing in the non-combustible zone.



- See **Section 11** for proper clearances.
- See **Section 1** for combustible/non-combustible definitions.



⚠ WARNING



Fire Risk.

Finish all edges and fronts to clearances and specifications listed in manual.

- Black metal appliance front may be covered with noncombustible material only.
- Do NOT overlap combustible materials onto appliance front. The appliance front may only be covered with noncombustible materials. The bottom one inch of the appliance front is exempt and may be covered with either non-combustible or combustible materials.
- Install combustible materials only up to specified clearances on top, front and side.
- Seal joints between the finished wall and appliance top and sides using only a 300° F minimum sealant.

Figure 11.5 Facing Materials