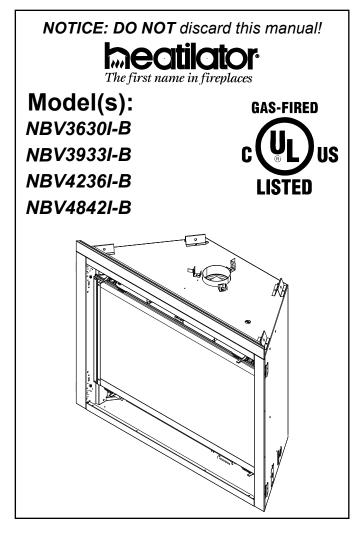
Installation Manual Installation and Appliance Setup

INSTALLER: Leave this manual with party responsible for use and operation. OWNER: Retain this manual for future reference.

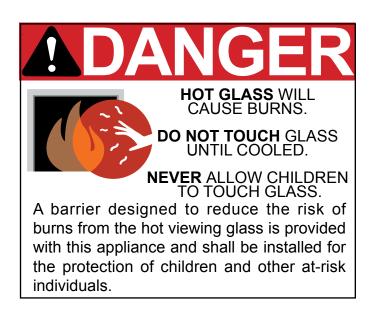


In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.

A CO detector shall be installed in the room where the appliance in installed.

WARNING: FIRE OR EXPLOSION HAZARD Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

- **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.
 - Leave the building immediately.
 - 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.



A Safety Alert Key:

- DANGER! Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- WARNING! Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- CAUTION! Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- NOTICE: Used to address practices not related to personal injury.

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 \rightarrow = Contains updated information.

Installation Standard Work Checklist

ATTENTION INSTALLER: Follow this Standard Work Checklist

This standard work checklist is to be used by the installer in conjunction with, not instead of, the instructions contained in this installation manual.

Customer: Lot/Address:			Date Inst Location Installer:	ace:		
Model (circle one):	NBV3630I-B NBV3933I-B	NBV4236I-B NBV4842I-B		Dealer/Distributor Phone # Serial #:		
	! Risk of Fire o e or explosion.	Explosion! Failure	e to install appl	iance aco	cording to these instructions could	
Appliance Install Verified that the chas Verified clearances to Fireplace is leveled a Venting/Chimney S Venting configuration Venting installed, loc Firestops installed. Attic insulation shield Exterior wall/Roof fla	o combustibles. (I and secured. (Pg. section 8 (Pg 23) a complies to vent ked and secured I installed.	Pg. 13-14) 22) diagrams. in place with proper c	clearance.	YES	IF NO, WHY?	
Terminations installed <u>Electrical</u> Section 9 Unswitched power (1 Switch wires properly <u>Gas</u> Section 10 (Pg Proper appliance for	9 (Pg 24-26) 10-120 VAC) pro / installed. 27-28) fuel type.	vided to the appliance	e.			
Was a conversion pe Leak check performe Verified proper air sh	ed and inlet press					
Finishing Section Combustible materia Verified all clearance Mantels and wall pro-	ls not installed in s meet installatio	n manual requiremen	ts.			
Glass assembly insta Accessories installed Decorative front prop Manual bag and all o	tective materials re neral wool, lava re alled and secured l properly. berly installed. f its contents are given to party re	emoved (inside & outside bock and vermiculite inside removed from inside/ sponsible for use and	stalled correctly.			
Hearth & Home Tec	hnologies recon	mends the followin	ia.			

Hearth & Home Technologies recommends the following:Photographing the installation and copying this checklist for your file.

• That this checklist remain visible at all times on the appliance until the installation is complete.

Comments: Further description of the issues, who is responsible (Installer/ Builder/ Other Trades, etc) and corrective action needed

Comments Communicated to party responsible	by	,	on
	(Builder / Gen. Contractor/)	(Installer)	er) (Date)
\rightarrow = Contains updated information.			2376-982 Rev. B 7/16



A. Appliance Certification

MODELS: NBV3630I-B, NBV3933I-B,

NBV4236I-B, NBV4842I-B

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Vented Gas Fireplaces

STANDARD: ANSI Z21.88-2017 • CSA 2.33-2017

This product is listed to ANSI standards for "Vented Gas Fireplaces."

May be installed in a sleeping room when the provisions for combustion, ventilation and dilution air are met per the requirements of **ANSI 223.1/NFPA 54 National Fuel Gas Code**. In Canada, installation in a sleeping room requires installation with a thermostat certified for use with this product. Consult your local authorities having jurisdiction.

NOTICE: 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.

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.

C. BTU Specifications

Models (U.S. or Cana	-	Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)
NBV3630I-B (NG)	(0-2000 FT)	20,000	14,000	.083 in.
NBV3630I-B (Propane)	(0-2000 FT)	17,000	14,000	.053 in.
NBV3933I-B (NG)	0-2000 FT)	22,000	15,000	#43
NBV3933I-B (Propane)	0-2000 FT)	22,000	15,000	#54
NBV4236I-B (NG)	0-2000 FT)	25,000	17,000	#42
NBV4236I-B (Propane)	0-2000 FT)	25,000	17,000	.058 in.
NBV4842I-B (NG)	0-2000 FT)	30,000	20,500	#37
NBV4842I-B (Propane)	0-2000 FT)	30,000	22,500	#52

D. High Altitude Installations

NOTICE: If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.

When installing above 2000 feet elevation:

- In the USA: Reduce input rate 4% for each 1000 feet above 2000 feet.
- In CANADA: Reduce input rate 10% for elevations between 2000 feet and 4500 feet. Above 4500 feet, consult local gas utility.

Check with your local gas utility to determine proper orifice size.

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 plastered or unplastered shall be considered combustible materials.

G. Electrical Codes

NOTICE: This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with **National Electric Code ANSI/NFPA 70-latest edition** or the **Canadian Electric Code CSA C22.1**.

 A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.

H. California

WARNING: This product and the fuels used to operate this product (liquid propane or natural gas), and the products of combustion of such fuels, can expose you to chemicals including benzene, which is known to the State of California to cause cancer and reproductive harm. For more information go to: www. P65Warnings.ca.gov.

A. Design and Installation Considerations

Heatilator B-type vent gas appliances are designed to operate with all exhaust gases expelled to the outside of the building, and combustion air pulled from the room.

Installation MUST comply with local, regional, state and national codes and regulations. Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction over restrictions, installation inspection and permits.

Before installing, determine the following:

- · Where the appliance is to be installed.
- The vent system configuration to be used.
- · Gas supply piping requirements.
- Electrical wiring requirements.
- · Framing and finishing details.

heart

FACTORY TRAINING

• Whether optional accessories—devices such as a fan, wall switch, or remote control—are desired.

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends HHT Factory Trained or NFI certified professionals.

ÍNATIONAL

FIREPLACE

INSTITUTE

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified

service technician, service agency or your dealer.

B. Tools and Supplies Needed

Fuel Your Fire

Before beginning the installation be sure that the following tools and building supplies are available.

Tape measure	Framing material
Pliers	Hammer
Phillips screwdriver	Manometer
Gloves	Framing square
Voltmeter	Electric drill and bits (1/4 in.)
Plumb line	Safety glasses
Level	Reciprocating saw
Flat blade screwdriv	er
Non-corrosive leak of	check solution
1/2 - 3/4 in. length, #	6 or #8 Self-drilling screws
Coulling motorial (2)	00 °F minimum continuous over

Caulking material (300 °F minimum continuous exposure rating)

One 1/4 in. female connection (for optional fan).

C. Inspect Appliance and Components

The following B-vent components are needed for installation.

- Fireplace Box
- Pipe Components
- Firestops
- Attic Insulation Shield
- Elbows
- Strapping
- Roof Flashing or Chase Top
- Termination Cap
- Storm Collar
- Carefully remove the appliance and components from the packaging.
- The vent system components and decorative doors and fronts may be shipped in separate packages.
- If packaged separately, the log set and appliance grate must be installed.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.
- Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.

WARNING! Risk of Fire or Explosion! Damaged parts could impair safe operation. DO NOT install damaged, incomplete or substitute components. Keep appliance dry.

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance or vent system component.
- · Modification of the appliance or vent system.
- Installation other than as instructed by Hearth & Home Technologies.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

WARNING! Risk of Fire, Explosion or Electric Shock! DO NOT use this appliance if any part has been under water. Call a qualified service technician to inspect the appliance and to replace any part of the control system and/or gas control which has been under water.

D. Negative Pressure

WARNING! Asphyxiation Risk! Negative pressure can cause spillage of combustion fumes and soot. Fireplace needs to draft properly for safety.

Draft is the pressure difference needed to vent fireplaces successfully. Considerations for successful draft include:

- Preventing negative pressure
- Location of fireplace and chimney

Negative pressure results from the imbalance of air available for the fireplace to operate properly. Causes for this imbalance include:

- Exhaust fans (kitchen, bath, etc.)
- Range hoods
- Combustion air requirements for furnaces, water heaters and other combustion appliances
- Clothes dryers
- · Location of return-air to furnace or air conditioning
- Imbalances of the HVAC air handling system
- Upper level air leaks (recessed lighting, attic hatch opening, duct leaks)

To minimize the effects of negative air pressure, the following must be considered:

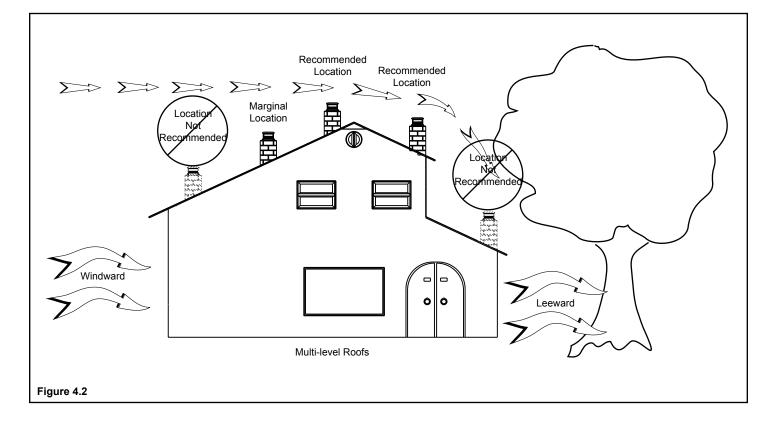
- Install the fresh air kit. Install the intake on the side of the house towards prevailing winds during the heating season.
- Ensure adequate outdoor air is supplied for combustion appliances and exhaust equipment.
- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the fireplace.

- Avoid installing the fireplace near doors, walkways or small isolated spaces.
- Recessed lighting should be of "sealed can" design; attic hatches weather stripped or sealed; and attic mounted ductwork and air handler joints and seams taped or sealed.
- Basement installations should be avoided due to stack effect. Stack effect creates negative pressure in lower levels. Hearth & Home Technologies recommends the use of direct vent fireplaces in basements.

Location of the fireplace and chimney will affect performance. As shown in Figure 4.2, the chimney should:

- Be installed through the warm space enclosed by the building envelope. This helps to produce more draft, especially during lighting and die-down of the fire.
- Penetrate the highest part of the roof. This minimizes the effects of wind turbulence.
- Be located away from trees, adjacent structures, uneven roof lines and other obstructions.

Offsets can restrict draft so their use should be minimized. Consider the fireplace location relative to floor and ceiling and attic joists.



Framing and Clearances

A. Appliance/Decorative Front Dimension Diagrams

Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 5.

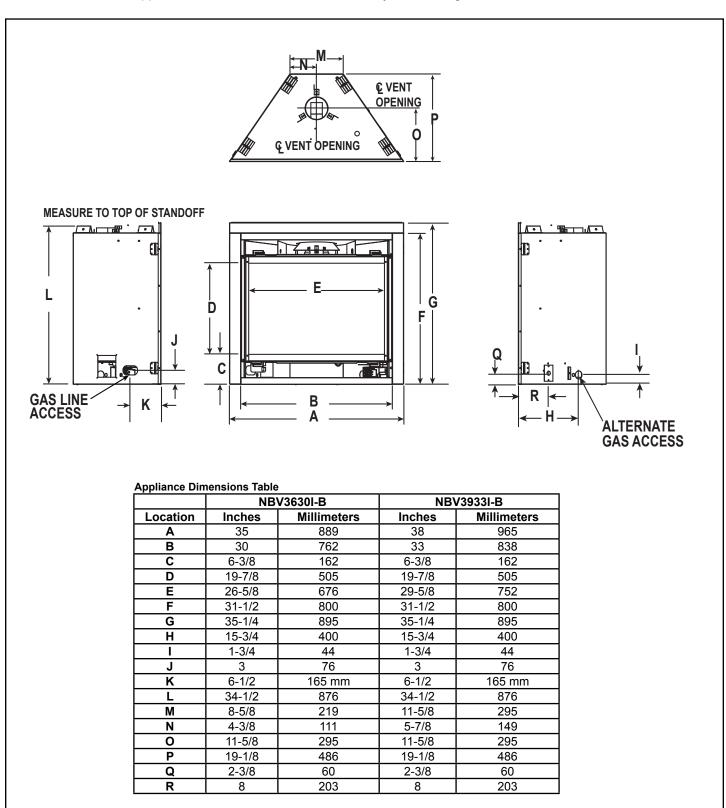
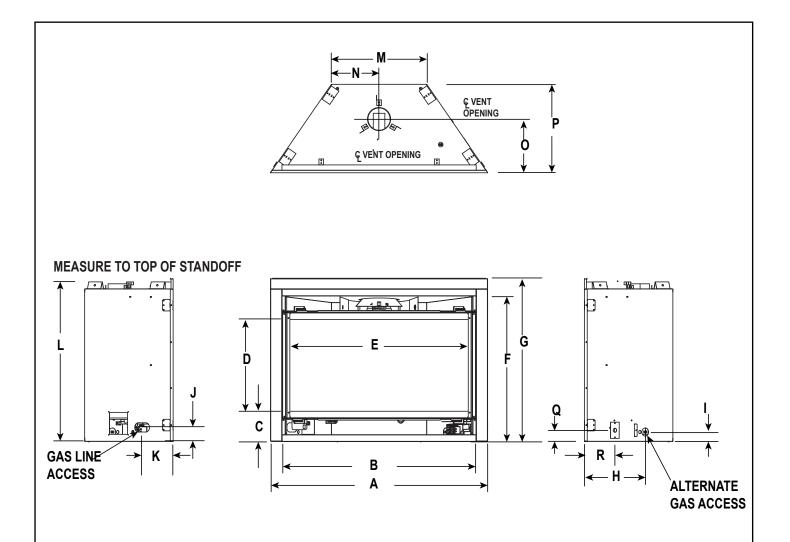


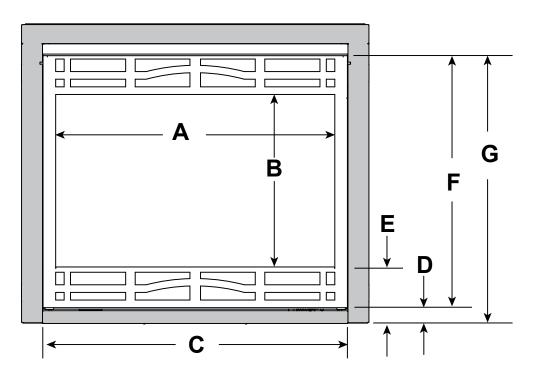
Figure 3.1 Appliance Dimensions - NBV3630I-B, NBV3933I-B



	NBV	4236I-B	NBV	4842I-B
Location	Inches	Millimeters	Inches	Millimeters
Α	41	1041	47	1194
В	36	916	42	1067
С	6-3/8	162	6-3/8	162
D	19-7/8	505	19-7/8	505
E	32-5/8	829	38-5/8	981
F	31-1/2	800	31-1/2	800
G	35-1/4	895	35-1/4	895
Н	15-3/4	400	15-3/4	400
I	1-3/4	44	1-3/4	44
J	3	76	3	76
K	6-1/2	165	6-1/2	165
L	34-1/2	876	34-1/2	876
М	14-5/8	372	20-5/8	524
N	7-3/8	187	10-3/8	264
0	11-5/8	295	11-5/8	295
Р	19-1/8	486	19-1/8	486
Q	2-3/8	60	2-3/8	60
R	8	203	8	203

Figure 3.2 Appliance Dimensions - NBV4236I-B, NBV4842I-B

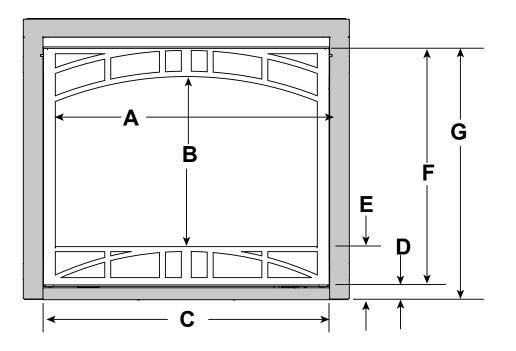
DEMI-B DECORATIVE FRONTS



		Α	В	С	D	E	F	G
	in.	26-7/8	20-3/8	29-7/8	1-7/8	6-3/4	30	31-7/8
DEMI30-B	mm	683	518	759	48	171	762	810
	in.	29-7/8	20-3/8	32-7/8	1-7/8	6-3/4	30	31-7/8
DEMI33-B	mm	759	518	835	48	171	762	810
	in.	32-7/8	20-3/8	35-7/8	1-7/8	6-3/4	30	31-7/8
DEMI36-B	mm	835	518	911	48	171	762	810
DEMI42-B	in.	38-7/8	20-3/8	41-7/8	1-7/8	6-3/4	30	31-7/8
DEIVII42-D	mm	987	518	1064	48	171	762	810

Figure 3.3 Decorative Front Dimensions - DEMI-B

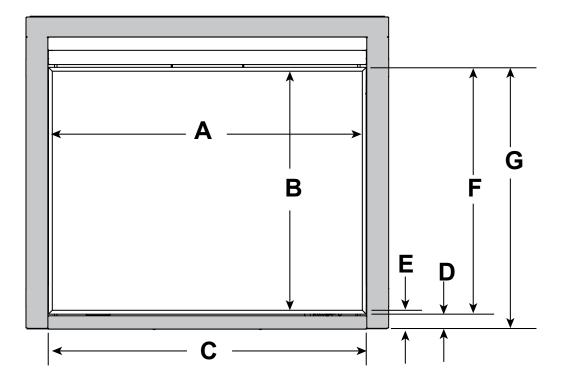
TRES-B DECORATIVE FRONTS



		Α	В	С	D	E	F	G
	in.	26-7/8	19-7/8	29-7/8	1-7/8	6-3/4	30	31-7/8
TRES30-B	mm	683	505	759	48	171	762	810
	in.	29-7/8	19-7/8	32-7/8	1-7/8	6-3/4	30	31-7/8
TRES33-B	mm	759	505	835	48	171	762	810
TRES36-B	in.	32-7/8	19-7/8	35-7/8	1-7/8	6-3/4	30	31-7/8
TRESSO-B	mm	835	505	911	48	171	762	810
	in.	38-7/8	19-7/8	41-7/8	1-7/8	6-3/4	30	31-7/8
TRES42-B	mm	987	505	1064	48	171	762	810

Figure 3.4 Decorative Front Dimensions - TRES-B

SIMON DECORATIVE FRONTS



		Α	В	С	D	E	F	G
0114 0000	in.	28-3/8	21	29-7/8	1-5/8	6-3/4	28	29-5/8
SIM-3630	mm	721	533	759	41	171	711	753
CIM 2022	in.	31-3/8	21	32-7/8	1-5/8	6-3/4	28	29-5/8
SIM-3933	mm	797	533	835	41	171	711	753
CIM 4000	in.	34-3/8	21	35-7/8	1-5/8	6-3/4	28	29-5/8
SIM-4236	mm	873	533	911	41	171	711	753
CIM 4942	in.	40-3/8	21	41-7/8	1-5/8	6-3/4	28	29-5/8
SIM-4842	mm	1026	533	1064	41	171	711	753

Figure 3.5 Decorative Front Dimensions - SIMON-B

B. Clearances to Combustibles

When selecting a location for the appliance it is important to consider the required clearances to walls (see Figure 3.6).

WARNING! Risk of Fire or Burns! Provide adequate clearance around air openings and for service access. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

mm

in.

mm

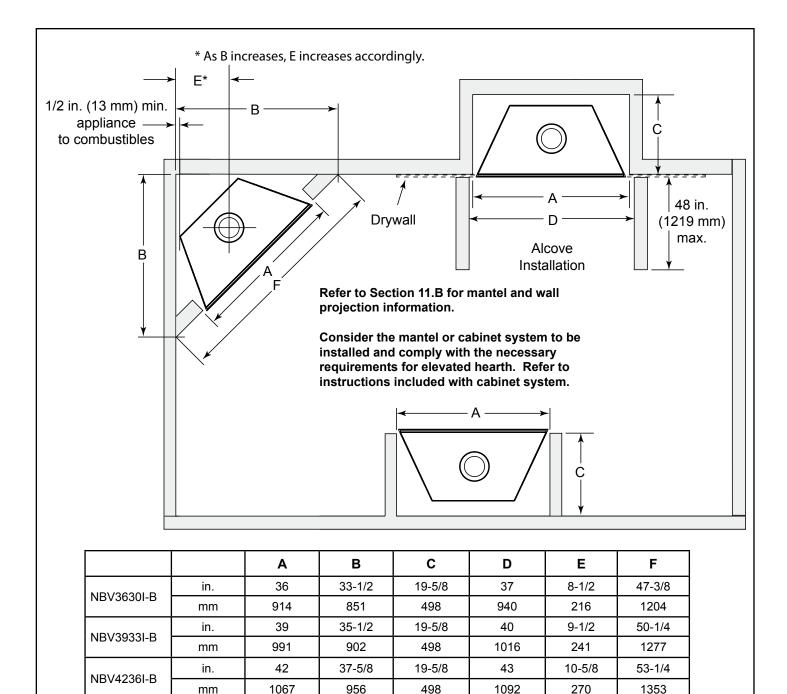
NBV4842IB

Figure 3.6 Appliance Locations

48

1219

NOTICE: 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.



19-5/8

498

49

1245

12-3/4

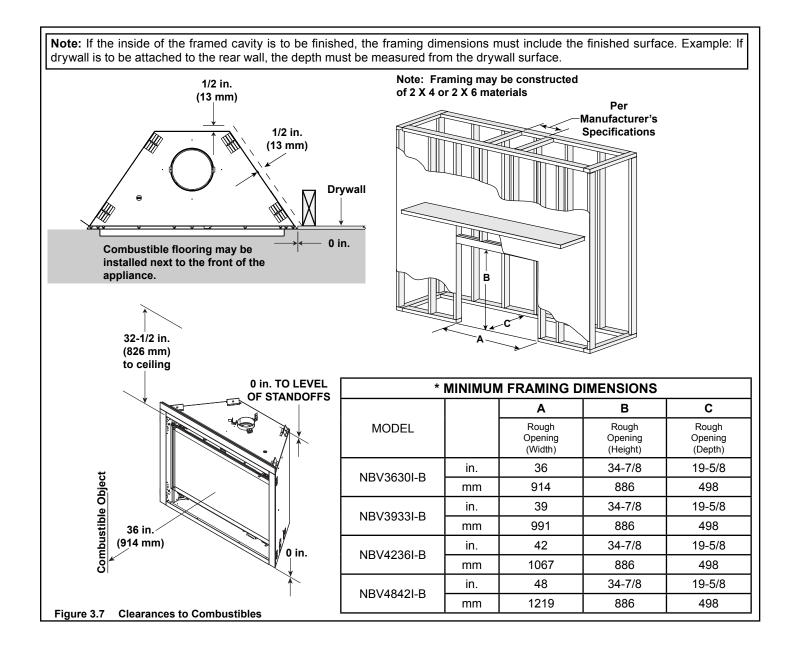
324

59-1/4

1505

41-7/8

1064



C. Constructing the Appliance Chase

A chase is a vertical box-like structure built to enclose the gas appliance and/or its vent system. In cooler climates the vent should be enclosed inside the chase.

NOTICE: Treatment of ceiling firestops and wall shield firestops and construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Therefore, you MUST check local building codes to determine the requirements to these steps.

NOTICE: When installing a sprinkler head in a fireplace chase, it is recommended to use a sprinkler head with a sprinkler activation temperature classified as Extra High. Keep sprinkler head away from vent and chimney.

Chases should be constructed in the manner of all outside walls of the home to prevent cold air drafting problems. The chase should not break the outside building envelope in any manner.

Walls, ceiling, base plate and cantilever floor of the chase should be insulated. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, in regions where cold air infiltration may be an issue, the inside surfaces may be sheetrocked and taped (or an equivalent method may be used) to achieve maximum air tightness.

To further prevent drafts, the wall shield and ceiling firestops should be caulked with caulk with a minimum of 300 °F continuous exposure rating to seal gaps. Gas line holes and other openings should be caulked with caulk with a minimum of 300 °F continuous exposure rating or stuffed with unfaced insulation. If the appliance is being installed on a cement surface, a layer of plywood may be placed underneath to prevent conducting cold up into the room.

NOTICE: Install appliance on hard metal or wood surfaces extending full width and depth. **DO NOT** install directly on carpeting, vinyl, tile or any combustible material other than wood.

WARNING! Risk of Fire! Maintain specified air space clearances to appliance and vent pipe:

- Insulation and other materials must be secured to prevent accidental contact.
- The chase must be properly blocked to prevent blown insulation or other combustibles from entering and making contact with fireplace or chimney.
- Failure to maintain airspace may cause overheating and a fire.

D. Hearth Extension/Floor Protection

Elevated Hearth Systems

Some hearth systems will elevate the appliance off the floor at a given dimension. The elevation will also have to be added to the rough opening height (header height) referenced in Figure 3.7. Note: Finished floor thickness should also be considered when determining installation dimensions.



A. Vent Termination Minimum Clearances

A WARNING

Fire 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 could cause overheating and fire.

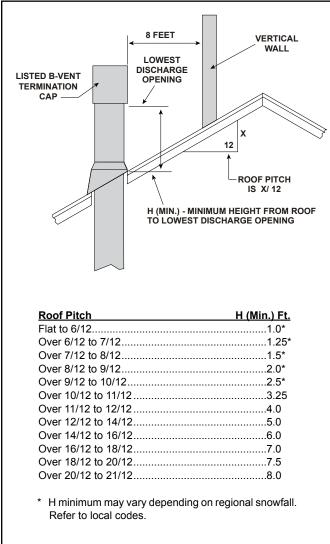
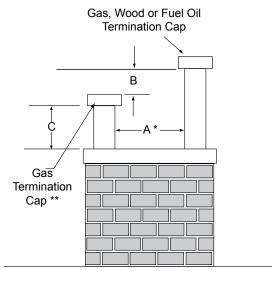


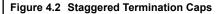
Figure 4.1	Minimum Height From Roof to Lowest Discharge
	Opening

Α	В
6 in. (minimum) up to 20 in.	18 in. minimum
152 mm/508 mm	457 mm
20 in. and over	0 in. minimum

C = 8 in. (203 mm) recommended



- If using decorative cap cover(s), this distance may need to be increased. Refer to the installation instructions supplied with the decorative cap cover.
- ** In a staggered installation with both gas and wood or fuel oil terminations, the wood or fuel oil termination cap must be higher than the gas termination cap.





A. Vent Guidelines

WARNING! Fire Risk/Asphyxiation! This appliance requires the specified pipe for operation. Incorrect pipe may cause spillage, condensation and overheating.

These models require the following size B-vent double wall vent pipe.

Model	Pipe Size	
NBV3630I-B/NBV3933I-B	5 in. (127 mm)	
NBV4236I-B/NBV4842I-B	5 in. (127 mm)	

• Follow pipe manufacturer's installation guidelines when installing the appliance.

WARNING! Fire Risk/Explosion/Asphyxiation! DO NOT connect this gas appliance to a chimney flue serving a separate solid-fuel or gas burning appliance.

- · Vent this appliance directly outside.
- Use separate vent system for this appliance.

May impair safe operation of this appliance or other appliances connected to the flue.

B. Vent System Configuration

CAUTION! Risk of Fire! ALL vent configuration specifications MUST be followed. This product is tested and listed to these specifications. Appliance performance will suffer if specifications are not followed.

Rise to Run Ratio = 2:1

Maximum Total Horizontal Run = 30 Feet

Minimum Total Vertical Rise =12 Feet

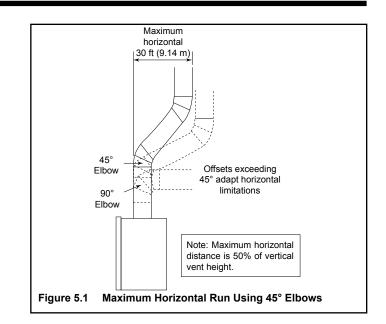
Maximum Total Vertical Rise = 60 Feet

Maximum Number of Elbows: Four 90° or Eight 45°

WARNING! Risk of Fire or Explosion! Insulation and other combustibles must not infringe on clearances.

- ALWAYS maintain specified clearances around venting and firestop systems.
- Install firestops as specified.

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



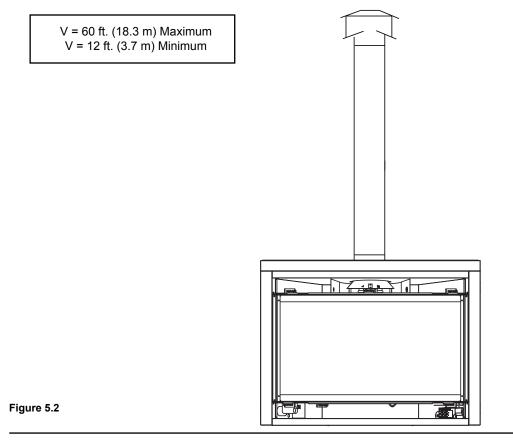
C. Vent Diagrams

To replace the first 90° starter elbow with two 45° elbows, refer to Figure 5.1. All other 90° elbows can be replaced with two 45° elbows.

General Rules:

- · The vent system must terminate vertically.
- · Vent this appliance directly outside.
- Use a separate vent system for this appliance.
- · Rise to run ratio not to exceed 2:1.
- Maximum total horizontal run is 30 feet (9.1 m).
- Maximum total vertical rise is 60 feet (18.3 m).

No Elbow



Two Elbows

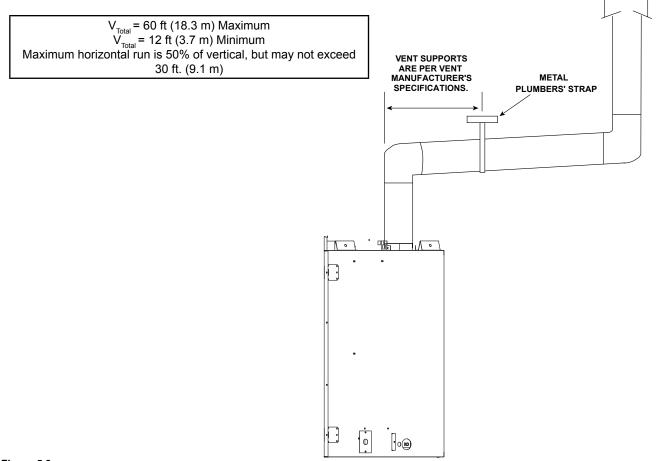
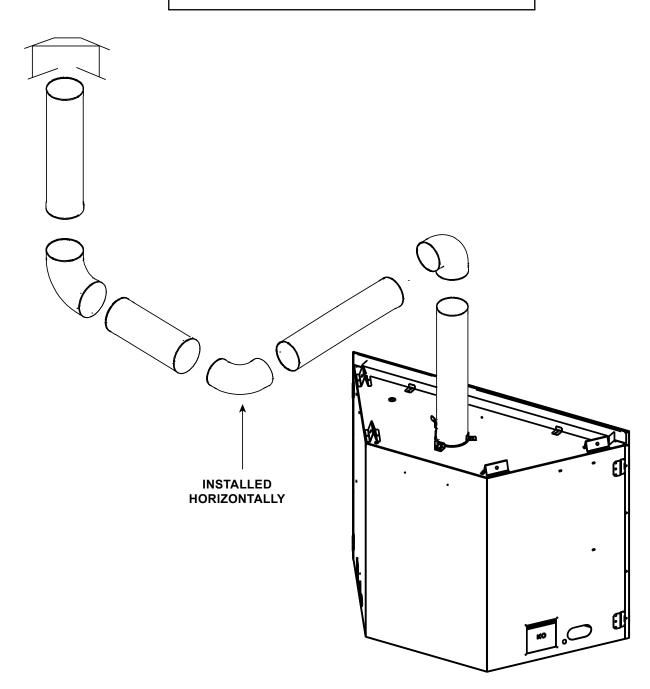


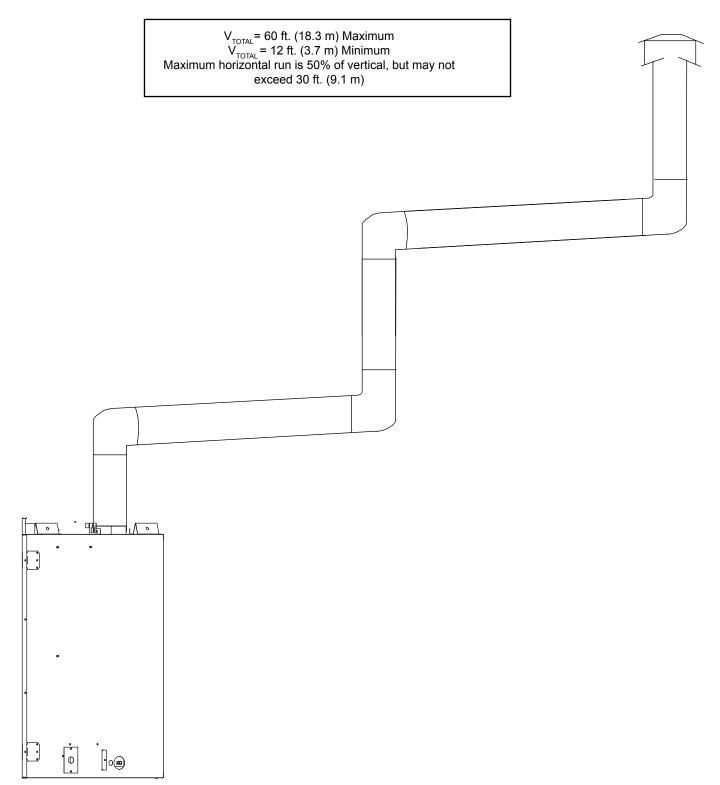
Figure 5.3

Three Elbows

V_{TOTAL} = 60 ft. (18.3 m) Maximum V_{TOTAL} = 12 ft. (3.7 m) Minimum Maximum horizontal run is 50% of vertical, but may not exceed 30 ft. (9.1 m)



Top Vent - Vertical Termination - (continued) Four Elbows



A. Pipe Clearances to Combustibles

Vent clearances are per vent manufacturer's specifications. The vent MUST be Listed B-Vent pipe.

WARNING! Risk of Fire! MAINTAIN AIR space clearance to vent. DO NOT pack insulation or other combustibles:

- Between ceiling firestops
- · Between wall shield firestops
- · Around vent system

Failure to keep insulation or other material away from vent pipe may cause overheating and fire.

B. Wall and Ceiling Penetration Framing

For a wall or ceiling penetration consult B-vent pipe manufacturer's instructions to provide adequate clearances. Use same size framing materials as those used in the wall or ceiling construction. Firestop spacers must be used in wall and ceiling penetrations per the B-Vent pipe manufacturer's specifications and national, regional and local codes.

Note: MUST terminate vertically.

C. Vertical Penetration Framing

WARNING! Fire Risk. DO NOT allow loose materials or insulation to touch vent. Hearth & Home Technologies requires the use of an attic shield.

The National Fuel Gas Code ANSI Z223.1 and NFPA 54 requires an attic shield constructed of 26 gauge minimum metal that extends at least 2 in. (51 mm) above insulation.

Attic shields must meet specified clearance and be secured in place.

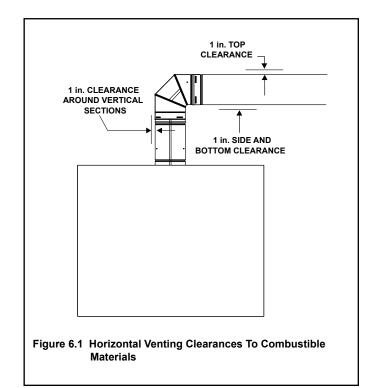
Use B-vent manufacturer's firestops to provide adequate clearances.

D. Pipe Clearances to Combustibles

WARNING! Risk of Fire! Maintain air space clearance to vent. **DO NOT** pack insulation or other combustibles:

- · Between ceiling firestops
- · Between wall shield firestops
- · Around vent system

Failure to keep insulation or other material away from vent pipe could cause overheating and fire.



A. Installing Outside Air Kit Damper Assembly

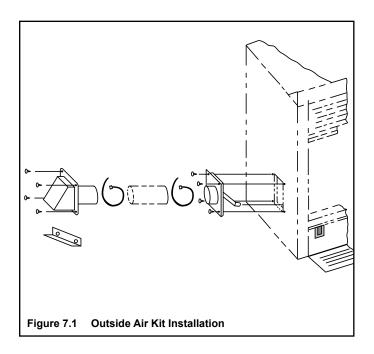
CAUTION! Risk of Cuts/Abrasions/Flying Debris. Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

WARNING! Risk of Fire/Asphyxiation. DO NOT draw outside combustion air from:

- Wall, floor or ceiling cavity.
- Enclosed space such as an attic or garage.
- Close proximity to exhaust vents or chimneys.

Fumes or odor may result.

- The outside air kit can only be installed on the left side of the appliance.
- Refer to the installation instructions provided with the kit.



B. Gas and Electrical Connections

If applicable, ensure that gas and electrical connections are installed at this time. Refer to Section 9 (Gas Information) and Section 8 (Electrical Information).

C. Securing and Leveling the Appliance

WARNING! Risk of Fire! Prevent contact with:

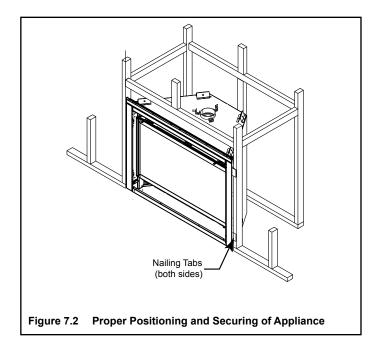
- Sagging or loose insulation
- Insulation backing or plastic
- Framing and other combustible materials

Block openings into the chase to prevent entry of blownin insulation. Make sure insulation and other materials are secured.

DO NOT notch the framing around the appliance standoffs.

Failure to maintain air space clearance could cause overheating and fire.

- Bend out nailing tabs on each side.
- Place the appliance into position.
- · Keep nailing tabs flush with the framing.
- · Level the appliance from side to side and front to back.
- Shim the appliance as necessary. It is acceptable to use wood shims underneath the appliance.
- Secure the appliance to the framing by using nails or screws through the nailing tabs.
- Optional: Secure the appliance to the floor by inserting two screws through the pilot holes at the bottom of the appliance.





A. Assemble Vent Sections

This B-Vent appliance requires 5 in. B-vent double-wall pipe. Follow the pipe manufacturer's installation guidelines when installing the appliance. This will ensure proper operation and prevent safety hazards.

WARNING! Risk of Fire/Exhaust Fumes! Assemble pipe sections per B-vent manufacturer's instructions. Use support tabs for screws. Pipe may separate if not properly joined.

B. Attaching Vent to Firebox

Three tabs extend from appliance collar shield. Attach tabs to first section of B-vent pipe using self-tapping 1/4 in. screws. See Figure 8.1.

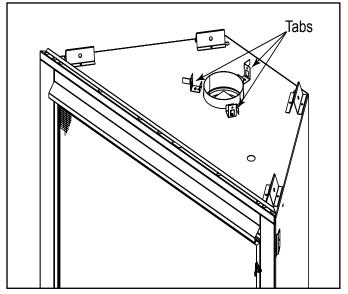


Figure 8.1

C. Securing Vent Sections

Secure vent sections with vent supports following B-vent manufacturer's instructions.

WARNING! Risk of Fire or Explosion! Use vent run supports per vent manufacturer's installation instructions.

- Connect vent sections per vent manufacturer's installation instructions.
- Maintain all clearances to combustibles. Maintain specified slope (if required).
- · Improper support may allow vent to sag or separate.

D. Install Attic Insulation Shield

WARNING! Fire Risk. DO NOT allow loose materials or insulation to touch vent. Hearth & Home Technologies requires the use of an attic shield.

The National Fuel Gas Code ANSI Z223.1 and NFPA 54 requires an attic shield constructed of 26 gauge minimum metal that extends at least 2 in. (51 mm) above insulation.

Attic shields must meet vent manufacturer's specified clearance and be secured in place per vent manufacturer's instructions.

Electrical Information

A. General Information

WARNING! Risk of Shock or Explosion! DO NOT wire 110-120 VAC to the valve or to the appliance wall switch. Incorrect wiring will damage controls.

NOTICE: This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with **National Electric Code ANSI/NFPA 70-latest edition** or the **Canadian Electric Code CSA C22.1**.

- Wire the appliance junction box to unswitched 110-120 VAC. This is required for proper operation of the appliance (Intellifire ignition).
- A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.
- Low voltage and 110-120 VAC voltage cannot be shared within the same wall box.

Junction Box Installation

If the box is being wired from the **INSIDE** of the appliance:

- Remove the screw attaching the junction box/receptacle to the outer shell, rotate the junction box inward to disengage it from the outer shell (see Figure 9.1).
- Pull the electrical wires from outside the appliance through the opening into the valve compartment and secure wires with a Romex connector. See Figure 9.1.
- Make all necessary wire connections to the junction box/ receptacle and reattach the junction box/receptacle to the outer shell.

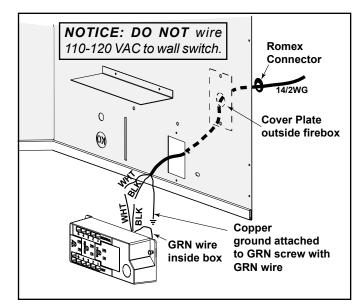


Figure 9.1 Junction Box Detail

Accessories Requirements

• This appliance may be used with a wall switch or a remote control.

Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

Electrical Service and Repair

WARNING! Risk of Shock! Label all wires prior to disconnection when servicing controls. Wiring errors could cause improper and dangerous operation. Verify proper operation after servicing.

WARNING! Risk of Shock! Replace damaged wire with type 105° C rated wire. Wire must have high temperature insulation.

B. Wiring Requirements

Intellifire Ignition System Wiring

• Wire the appliance junction box to 110-120 VAC for proper operation of the appliance.

WARNING! Risk of Shock or Explosion! DO NOT wire IPI controlled appliance junction box to a switched circuit. Incorrect wiring will override IPI safety lockout.

- Refer to Figure 9.2, Intellifire Pilot Ignition (IPI) Wiring Diagram.
- This appliance is equipped with an Intellifire control valve which operates on a 3 volt system.
- Plug the 3 volt AC transformer into the appliance junction box to supply power to the unit OR install two D cell batteries (not included) into the battery pack before use.

NOTICE: Batteries should not be placed in the battery pack while using the transformer. Remove batteries before using the transformer, and unplug the transformer before installing the batteries. Battery polarity must be correct or module damage will occur.

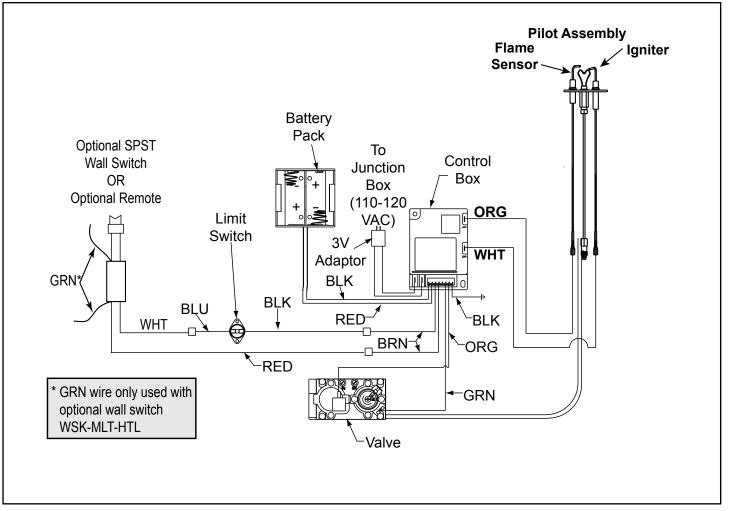


Figure 9.2 Intellifire Pilot Ignition (IPI) Wiring Diagram

Wall Switch Installation for Fan (Optional)

If the box is being wired to a wall mounted switch for use with a fan. See Figure 9.3:

- The power supply for the appliance must be brought into a switch box.
- The power can then be supplied from the switch box to the appliance using a minimum of 14-3 with ground wire.
- At the switch box connect the black (hot) wire and red (switch leg) wire to the wall switch as shown.
- At the appliance connect the black (hot), white (neutral) and green (ground) wires to the junction box as shown.
- Add a 1/4 in. insulated female connector to the red (switch leg) wire, route it through the knockout in the face of the junction box, and connect to the top fan switch connector (1/4 in. male) as shown.

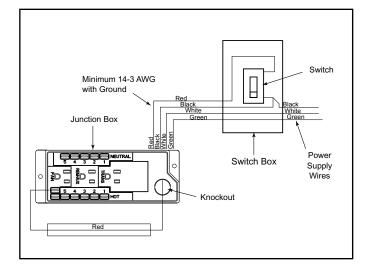


Figure 9.3 Junction Box Wired to Wall Switch or BC10



A. Fuel Conversion

- Make sure the appliance is compatible with available gas types.
- Conversions must be made by a qualified service technician using Hearth & Home Technologies specified and approved parts.

B. Gas Pressure

- Optimum appliance performance requires proper input pressures.
- Gas line sizing requirements will be determined in ANSI Z223.1 National Fuel Gas Code in the USA and CAN/ CGA B149 in Canada.
- Pressure requirements are:

Gas Pressure	Natural Gas	Propane
Minimum inlet pressure	5.0 in. w.c.	11.0 in. w.c.
Maximum inlet pressure	10.0 in. w.c.	13.0 in. w.c.
Manifold pressure	3.5 in. w.c.	10.0 in. w.c.

WARNING! Risk of Fire or Explosion! High pressure will damage valve. Low pressure could cause explosion.

- Verify inlet pressures. Verify minimum pressures when other household gas appliances are operating.
- Install regulator upstream of valve if line pressure is greater than 1/2 psig.



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.

Note: Have the gas supply line installed in accordance with local codes, if any. If not, follow ANSI Z223.1. 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 in. (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 in. (13 mm) control valve inlet.

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

C. Gas Connection

- Reference Section 3 for location of gas line access in appliance.
- Gas line may be run through knockout(s) provided.
- The gap between supply piping and gas access hole may be caulked with caulk with a minimum of 300 °F continuous exposure rating or stuffed with noncombustible, unfaced insulation to prevent cold air infiltration.
- Ensure that gas line does not come in contact with outer wrap of the appliance. Follow local codes.
- Pipe incoming gas line into valve compartment.
- Connect incoming gas line to the 1/2 in. (13 mm) connection on manual shutoff valve.

WARNING! Risk of Fire or Explosion! Support control when attaching pipe to prevent bending gas line.

A small amount of air will be in the gas supply lines.

WARNING! Risk of Fire or Explosion! Gas build-up during line purge could ignite.

- Purge should be performed by qualified service technician.
- · Ensure adequate ventilation.
- Ensure there are no ignition sources such as sparks or open flames.

Light the 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! Risk of Fire, Explosion or Asphyxiation! Check all fittings and connections with a non-corrosive commercially available leak-check solution. **DO NOT** use open flame. Fittings and connections could have loosened during shipping and handling.

WARNING! Risk of Fire! DO NOT change valve settings. This valve has been preset at the factory.

D. High Altitude Installations

NOTICE: If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.

When installing above 2000 feet elevation:

- In the USA: Reduce input rate 4% for each 1000 feet above 2000 feet.
- In CANADA: Input ratings are certified without a reduction of input rate for elevations up to 4500 feet (1370 m)above sea level. Please consult provincial and/ or local authorities having jurisdiction for installations at elevations above 4500 feet (1370 m).

Check with your local gas utility to determine proper orifice size.

E. Air Shutter Setting

Air shutter setting should be adjusted by a qualified installer at the time of installation.

- The air shutter is set at the factory for minimum vertical vent run.
- Adjust air shutter for longer vertical runs. See Figure 10.1.
- Turn the thumbscrew to open or close the air shutter. It may be necessary to use a pliers or crescent wrench to adjust the shutter. See chart below for correct shutter settings. The shutter measurement is taken from the bottom of the tub to the bottom of the thumbscrew. See Figure 10.1.

Note: Adjust air shutter after flame has reached full maturity (approximately 20-40 minutes).

CAUTION! Risk of Burns! Components are HOT. Wear protective gloves when adjusting shutter.

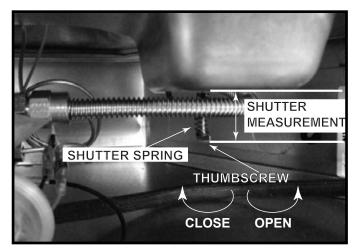


Figure 10.1 Adjusting Air Shutter

Note: The air shutter is equipped with a compression spring that helps to maintain the shutter position during transportation. It may be necessary to relieve this spring pressure on the thumb screw to adjust the shutter.

Air Shutter Settings (Factory Set to Minimum Vent Run)

MODEL	GAS TYPE	E SHUTTER MEASUREMENT	
NBV3630I-B	NG	1-3/8 IN.	
	PROPANE	1-3/8 IN.	
NBV3933I-B	NG	1-3/8 IN.	
	PROPANE	1-1/4 IN.	
NBV4236I-B	NG	1-1/4 IN.	
	PROPANE	1 IN.	
NBV4842I-B	NG	1-1/8 IN.	
	PROPANE	1-1/8 IN.	

Note: All vent runs may need to be evaluated for ideal shutter settings. Shutter distances may vary due to vent run, fuel quality, and elevation.



A. Facing Material

- Metal front faces may be covered with non-combustible materials only.
- Facing and/or finishing materials must not interfere with air flow through louvers, operation of louvers or doors, or access for service.
- Facing and/or finishing materials must never overhang into the glass opening.
- See Section 11.C for combustible and non-combustible finishing material thickness requirements.
- Observe all clearances when applying combustible materials.
- Seal joints between the finished wall and appliance top and sides using a 300 °F minimum sealant.

WARNING! Risk of Fire! DO NOT apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Overlapping materials could ignite and will interfere with proper operation of doors and louvers.

NOTICE: Surface temperatures around the appliance will become warm while the appliance is in operation. Ensure finishing materials used for all surfaces (floor, walls, mantels, etc.) will withstand temperatures up to 190°F.

B. Mantel and Wall Projections

WARNING! Risk of Fire! Comply with all minimum clearances as specified. Framing closer than the minimums listed must be constructed entirely of non-combustible materials (i.e., steel studs, concrete board, etc.).

Note: Mantel measurement is taken from top of the opening, NOT the top of the fireplace.

Combustible Mantels

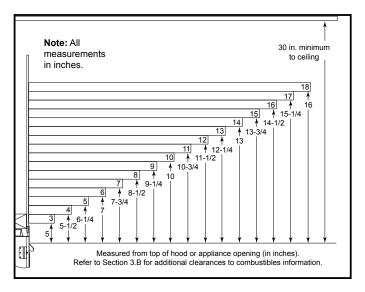


Figure 11.1 Minimum Vertical and Maximum Horizontal Dimensions of Combustibles

Combustible or Non-Combustible Mantel Legs or Wall Projections

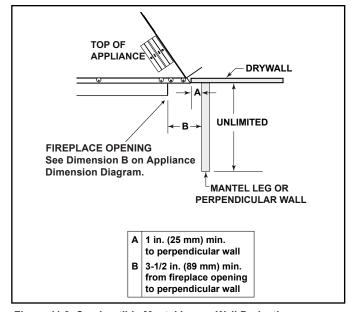


Figure 11.2 Combustible Mantel Leg or Wall Projections (Acceptable on both sides of opening)

C. Decorative Front Dimensions for Finishing

Only decorative fronts certified for use with this appliance model may be used. Contact your dealer for a list of decorative fronts that may be used. The finishing material thicknesses allowed are noted below.

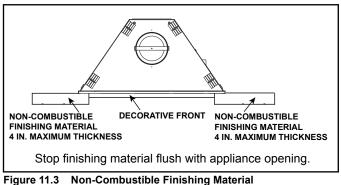


Figure 11.3 Non-Combustible Finishing Material (Sides and Top of Appliance)

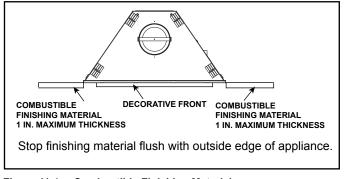


Figure 11.4 Combustible Finishing Material (Sides of appliance only. See Figure 11.1 for Combustible Mantel Clearances)



A. Remove Fixed Glass Assembly

WARNING! Risk of Asphyxiation! Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.

- DO NOT strike, slam or scratch glass.
- **DO NOT** operate fireplace with glass removed, cracked, broken or scratched.
- Replace as a complete assembly.
 - Pull the four (two upper and two lower) glass assembly latches out of the groove on the glass frame. Refer to Figure 12.1.
 - Remove the glass assembly from the appliance.

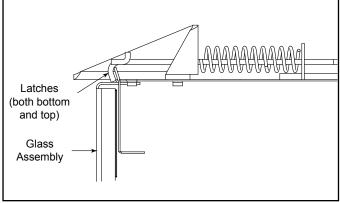


Figure 12.1 Fixed Glass Assembly

B. Remove the Shipping Materials

Remove the shrink film, corrugated top cap, bottom cap and column protectors from the appliance. The appliance should look as shown in Figure 12.2.

Remove shipping materials from inside or underneath the firebox.

- The splatter guard is a piece of corrugated material used to protect the appliance during the installation process before finishing work on the whole hearth is complete. Splatter guards may be factory installed or accompany the door of the unit, depending on the fireplace model. Splatter guards must be removed before appliance is fired.
- It is permissible to use metal tape to temporarily secure the splatter guard in place.

WARNING! Risk of Fire! Close the ball valve before installing the splatter guard to prevent accidental lighting. Remove the splatter guard before lighting the appliance.



Figure 12.2 Appliance Unwrapped

C. Clean the Appliance

Clean/vacuum any sawdust that may have accumulated inside the firebox or underneath in the control cavity.

D. Install Optional Refractory Kit

An optional refractory kit is available for the NBV models. Contact your dealer to order the kit. Install according to instructions included with kit.

E. Install the Log Assembly

LOG PLACEMENT INSTRUCTIONS

Log Set Assembly: SRV2380-070 SRV2381-070 SRV2382-070 SRV2383-070 Models: NDV3630I-B, NDV3630IL-B, NDV3933I-B, NDV3933IL-B, NDV4236I-B, NDV4236IL-B, NDV4842I-B, NDV4842IL-B NBV3630I-B, NBV3933I-B, NBV4236I-B, NBV4842I-B

See Table 1 for corresponding log set and individual logs for each size Novus model.

SIZE	3630	3933	4236	4842
ASSEMBLY	SRV2380-070	SRV2381-070	SRV2382-070	SRV2383-070
LOG 1	SRV2380-071	SRV2380-071	SRV2382-071	SRV2383-071
LOG 2	SRV2380-072	SRV2381-072	SRV2381-072	SRV2383-072
LOG 3	SRV2380-073	SRV2381-073	SRV2381-073	SRV2383-073
LOG 4	SRV2380-074	SRV2380-074	SRV2382-074	SRV2382-074
LOG 5	SRV2380-075	SRV2380-075	SRV2380-075	SRV2383-075

Table 1.

CAUTION: Logs are fragile, handle with care.

The log set is shipped from the factory with three logs already in place on the hearth pan. See Figure 1. In case of damage, the log will need to be removed from the base pan. See Figure 2 for locations of fasteners for each log.

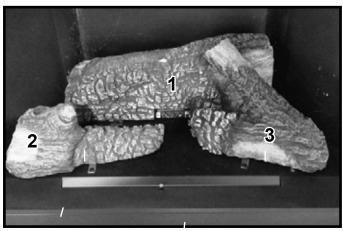


Figure 1. Log Set Shown as Shipped



Figure 3. Locations of Flat Spots for Log #4

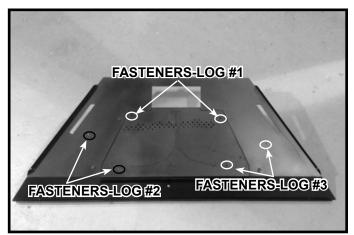


Figure 2. Log Fastener Locations on Base Pan

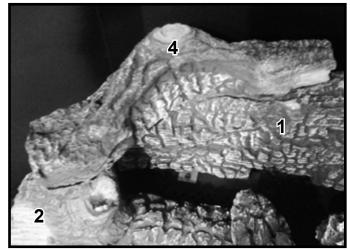
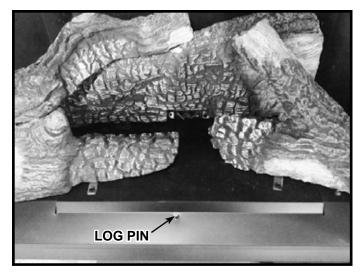


Figure 4. Log #4 in Position

LOG #4: Place Log #4 into position by setting the left end of Log #4 into the flat spot on Log #2 and then resting the right end, or nose, of Log #4 on the flat spot on Log #1. Figure 3 shows locations of flat spots. Figure 4 shows Log #4 installed.



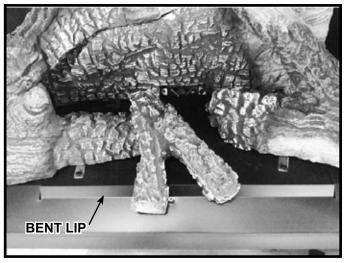


Figure 5. Log Pin Location

Figure 6. Log #5 in Position

Log #5: Place Log #5 into position. The forked end of Log #5 is positioned toward the front of the appliance, with the two slots on the back side resting on the bent lip of the hearth pan. See Figure 6. Slide Log #5 toward the right until it contacts the log pin as shown in Figure 6.

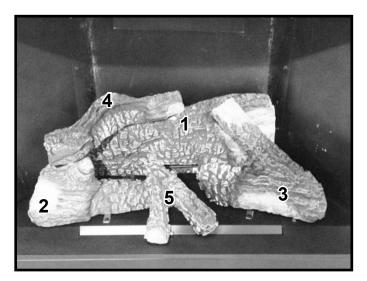


Figure 7. Log Set Installed

2382-935

F. Place the Mineral Wool

WARNING! Risk of Explosion! Follow mineral wool placement instructions. DO NOT place mineral wool on or near rear burner ports. Replace mineral wool material annually. Improperly placed mineral wool interferes with proper burner operation.

Note: It may be helpful to temporarily remove Log #5 to place the mineral wool. If removed, replace log according to log placement instructions.

- Mineral wool is shipped with this gas appliance.
- Place a small amount of 1/2 in. diameter pieces (dimesize) mineral wool on the burner pan as shown in Figure 12.3. The mineral wool may be placed loosely over the front burner port holes in the burner pan. Do NOT press them onto or into the burner port holes. This will provide the "glowing embers" look.
- It is not necessary to use the entire bag. Save the remaining mineral wool for future use. It is permissible to place a small amount of mineral wool or lava rock over screw heads that are used to fasten the rear logs.

A WARNING

RISK OF EXPLOSION!

- Place lava rock, mineral wool and vermiculite according to instructions.
- Do NOT place lava rock, mineral wool or vermiculite on burner top.
- Do NOT place lava rock, mineral wool or vermiculite in a position that they may fall into pilot area.
- Improperly placed lava rock, mineral wool or vermiculite interferes with proper burner operation.

Delayed ignition could occur.

- Use ONLY Hearth & Home Technologies-approved lava rock, mineral wool or vermiculite.
- Some models may not require use of entire contents of bag.

G. Place the Lava Rock

Place the lava rock and mineral wool in an even layer just heavy enough to cover the metal surface. Stay within the zone indicated in Figure 12.3. It is not necessary to use the entire bag. Save the remaining amount for future use.

H. Place the Vermiculite

Spread vermiculite in a light, even pattern on top of lava rock. Stay within the zone indicated in Figure 11.3. It is not necessary to use the entire bag. Save the remaining amount for future use.

I. Install Fixed Glass Assembly

WARNING! Risk of Asphyxiation! Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.

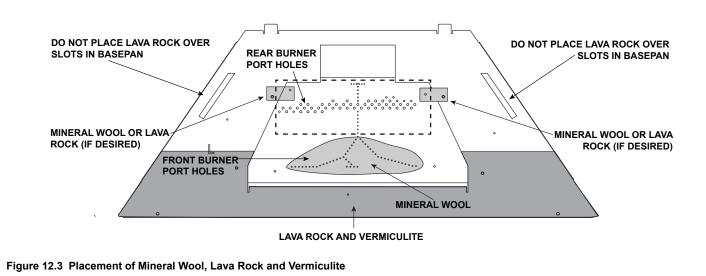
- DO NOT strike, slam or scratch glass.
- **DO NOT** operate fireplace with glass removed, cracked, broken or scratched.
- Replace as a complete assembly.
- Set the glass panel on the lower two glass assembly latches, ensuring the glass panel is centered in the opening.
- Replace glass latches.

J. Install Decorative Front

WARNING! Risk of Fire! Install ONLY doors or fronts approved by Hearth & Home Technologies. Unapproved doors or fronts could cause fireplace to overheat.

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



For more information refer to the instructions supplied with your decorative front.

Heatilator • NBV3630I-B, NBV3933I-B, NBV4236I-B, NBV4842I-B Installation Manual • 2376-980 Rev. M • 5/19



A. Accessories

Install approved accessories per instructions included with accessories. Contact your dealer for a list of approved accessories.

WARNING! Risk of Fire and Electric Shock! Use ONLY Hearth & Home Technologies-approved optional accessories with this appliance. Using non-listed accessories could result in a safety hazard and will void the warranty.

Remote Controls, Wall Controls and Wall

Switches

Follow the instructions supplied with the control installed to operate your fireplace:

For safety:

- Install a switch lock or a wall/remote control with child protection lockout feature.
- · Keep remote controls out of reach of children.

See your dealer if you have questions.

Optional Fan

Follow the instructions supplied with the fan kit to operate your fan. See your dealer if you have questions.

Heatilator, a brand of Hearth & Home Technologies 7571 215th Street West, Lakeville, MN 55044 www.heatilator.com

Please contact your Heatilator dealer with any questions or concerns. For the location of your nearest Heatilator dealer, please visit www.heatilator.com.

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