Installation Manual

LT1

Direct Vent Zero Clearance
Gas Fireplace
natural gas   2500KN
propane gas   2500KP

Valor®

with **Heat**Shift™ System

Installer: Place model/serial number here.

⚠ **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.

⚠ **DANGER**

Hot glass will cause burns.

Do not touch glass until cooled.

Never allow children to touch glass.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and must be installed for the protection of children and other at-risk individuals.

4008705-06

This appliance may be installed in an after-market permanently located, manufactured (mobile) home where not prohibited by local codes. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

Massachusetts:

The piping and final gas connection must be performed by a licensed plumber or gas fitter in the State of Massachusetts. Also, see Carbon Monoxide Detector requirements page 62 in this manual.

⚠ WARNING

This product can expose you to chemicals including Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Note: Natural gas, in its original state, contains Benzene.

This manual contains instructions to install the **ENGINE ONLY.** A trim kit is **REQUIRED** to complete the installation. A barrier screen is provided with the trim kit. **Refer to the manual supplied with the trim for installation.**

This appliance is a domestic room-heating appliance. It must not be used for any other purposes such as drying clothes, etc.

This appliance is suitable for installation in a bedroom or bed sitting room.

Ce guide est disponible en français sur demande.

We recommend a US Certified National Fireplace Institute (NFI) specialist install our gas hearth products.

The information contained in this manual is believed to be correct at the time of printing. Miles Industries Ltd. reserves the right to change or modify any information or specifications without notice. Miles Industries Ltd. grants no warranty, implied or stated, for the installation or maintenance of your heater, and assumes no responsibility for any consequential damage(s).

Welcome to Valor®

This appliance has been professionally installed by:
Dealer Name: _____
Phone:_____

Please read this manual BEFORE installing and operating this appliance.
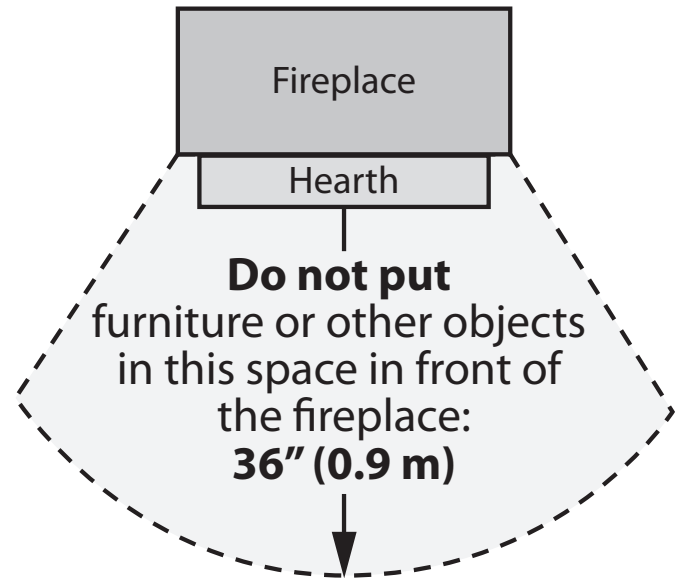
Fireplace Safety

This manual contains very important information about the safe installation and operation of the fireplace. Read and understand all instructions carefully before installing and operating the fireplace. Failure to follow these instructions may result in possible fire hazard and will void the warranty.

Replacement manuals are available by contacting the Valor Customer Service at 1-800-468-2567, or by visiting **valorfireplaces.com**.

⚠ WARNING: Extremely Hot!

Heat and flammability

• Some parts of the fireplace are extremely hot, particularly the glass windows. Use the barrier screens provided or a gate to reduce the risk of severe burns.

• The glass windows can exceed 500°F at full capacity.

• Always keep the appliance clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

• Be aware of hot wall surfaces! The walls directly above the fireplace can get very hot when the fireplace heats. Although safe, it may reach temperatures in excess of 200ºF (93°C) depending on choice of optional accessories. Do not touch!

• Be aware of hot hearth/floor surfaces! Any projections directly around the fireplace can get very hot when the fireplace heats. Although safe, they may reach temperatures in excess of 200ºF (93°C)depending on elevation of hearth. Be careful of touching these! Temperature of projection surfaces will be reduced when barrier screens are installed.

• Some materials or items, although safe, may discolor, shrink, warp, crack, peel, and so on because of the heat produced by the fireplace. Avoid placing candles, paintings, photos and other combustible objects sensitive to heat or furniture within 36 inches (0.9 m) around the fireplace.

• Due to its high temperatures, the appliance should be located out of traffic areas and away from furniture and draperies.

• Clothing or flammable material should not be placed on or near the appliance.


```
Fireplace
Hearth
Do not put
furniture or other objects
in this space in front of
the fireplace:
36" (0.9 m)
```

Barrier Screen and Safety

• A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

• Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.

• Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children, and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children, and other at-risk individuals out of the room and away from hot surfaces.

• Any safety screen, guard, or barrier removed for servicing an appliance must be replaced prior to operating the appliance.

Fireplace Safety

Glass windows

> ### ⚠ WARNING
>
> **Do not operate this appliance with the glass front removed, cracked, or broken.**
>
> **Do not strike or slam the glass front.**
>
> **Replacement of the glass front should be performed by a licensed or qualified service person.**

- The glass front assemblies must be in place and sealed before the unit can be placed into safe operation.

- The glass front assemblies must only be replaced as complete units, as supplied by the fireplace manufacturer. No substitute material may be used.

- Do not use abrasive cleaners on the glass front assemblies. Do not attempt to clean the glass when it is hot.

Venting

- This unit must be used with a vent system as described in this manual. No other vent system or components may be used.

- Never obstruct the flow of combustion and ventilation air. Keep the front of the appliance clear of all obstacles and materials for servicing and proper operation.

- This gas fireplace and vent assembly must be vented directly to the outside and must never be attached to a chimney serving a separate solid fuel burning appliance. Each gas appliance must use a separate vent system. Common vent systems are prohibited.

Intended use

- This appliance is designed and approved as a supplemental heater and provides the potential for most energy conservation when used while attended. The use of an alternate primary heat source is advisable.

- This unit is not for use with solid fuel.

- Do not use this heater as a temporary source of heat during construction.

Installation and Servicing

- Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning might be required due to excessive lint from carpeting, bedding material, et cetera. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean.

- Do not use this appliance is 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 that has been under water.
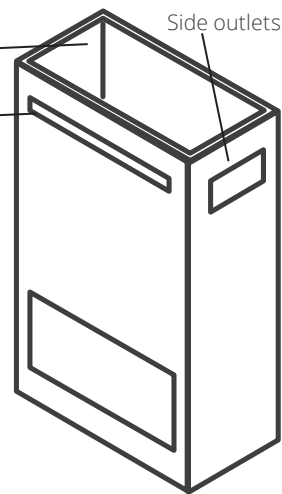
> ### ⚠ WARNING
>
> Ceiling outlet
> Side outlets
> Front outlet
>
> **HeatShift Duct Kit: Do not cover or place items in front of or above outlet(s)!**

Specifications

Approval & Codes

This appliance is certified to ANSI Z21.88/CSA 2.33 American National Standard / CSA Standard for Vented Gas Fireplace Heaters for use in Canada and USA, and to CGA 2.17-91 High Altitude Standard in Canada. This appliance is for direct vent installations.

This appliance complies with CSA P.4.1-15 Testing method for measuring annual fireplace efficiencies.

The installation must conform to local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 or the Natural Gas and Propane Installation Code CAN/CGA-B149.1. Only qualified licensed or trained personnel should install this appliance.

This appliance must be electrically grounded in accordance with local codes, or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 or the Canadian Electrical Code, CSA C22.1.

Ratings

Model	2500KN	2500KP
Gas	Natural	Propane
Altitude (Ft.)*	0-4,500 feet*	
Input Maximum (Btu/h)	34,000	34,000
Input Minimum (Btu/h)	20,000	22,000
Manifold Pressure (in w.c.)	3.2"	9.0"
Minimum Supply Pressure (in w.c.)	5"	11"
Maximum Supply Pressure (in w.c.)	10"	14"
Main Burner Injector Marking	DMS#32	DMS#50
Pilot Injector Marking	BL22N	BL14LP
Min. Rate By-Pass Screw	220	160

*High Altitude Installations

Input ratings are shown in BTU per hour and are certified without deration for elevations up to 4,500 feet (1,370 m) above sea level.

For elevations above 4,500 feet (1,370 m) in USA, installations must be in accordance with the current ANSI Z223.1 and/or local codes having jurisdiction. Heating value of gas in some areas is reduced to compensate for elevation—consult your local gas utility to confirm.

For installations at elevations above 4,500 feet (1,370 m) in Canada, please consult provincial and/or local authorities having jurisdiction.

Supply Gas

Heater engine 2500KN uses natural gas.

Heater engine 2500KP uses propane gas.

The supply pressure must be between the limits shown in the *Ratings* section.

The supply connection is 3/8" NPT male and located on the left hand side of the firebox. A shut-off valve (not supplied) is required on the supply line to isolate the unit during service. See *Gas Supply Installation* section for details.
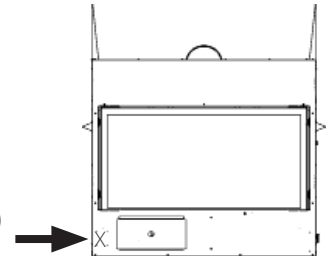
Conversion Kits

The 2500K are supplied as natural gas or propane gas and are field convertible between fuels. See instructions packaged with the conversion kits for further information.

Electrical

The 2500K are designed to run on battery power and do not require an electrical power source to operate as a heater. However, they require electrical power to operate the lights and optional GV60WIFI WiFi Kit.

> ## ⚠ WARNING
> **Electrical connection IS NOT ALLOWED when adapting appliance for outdoor use.**

HeatShift™System (Required)

The 2500K requires the installation of the HeatShift System, a convection system that redistributes the warm air flow away from the fireplace opening to a more desirable location using natural convection, without use of a fan.

The warm air flow may be relocated to a position higher up the wall, out the sidewalls, or even to another room. The result is much cooler wall temperatures above the fireplace opening for locating televisions, artwork, etc.

Refer to "Appendix D—HeatShift™System™" on page 72 for more information.

Outdoor Conversion Kit

The 2500K models are supplied standard for indoor applications and may be adapted for installation in specific "outdoor" applications protected from weather as defined in the GV60CKO outdoor conversion kit manual.

Kits & Accessories

Required Kits
Information accurate at the time of printing and subject to change without notice.

Fuel Beds (choose one)	
1500DGM	Murano Decorative Glass Kit
1505BLKV2	Birch Logs Kit
1505DWKV2	Driftwood Kit
1505SWKV2	Split Wood Kit
1514RSS	Rock and Shale Kit

Liners Panels (choose one)	
2515FBL	Fluted Black Liners
2525RGL	Reflective Glass Liners (requires 1725RGL-3 Glass Retainer Kit, included)
2560PBL	Plain Black Liners

Trims (choose one)		Barrier Screen
2530CIK	Clean Install Kit - Fine Mesh	4008320
2575LFB	Linear 1" Finishing Trim Black	4008495

HeatShift (choose one) See page 87 for details on all HeatShift accessories		OPTIONAL Accessories	EXTRA Liners
LDK1	48" Plenum	LDK2 - 48" Finishing frame	LDK6 Pair - 5" x 10' aluminum flex liners (Note: one pair is included with the appliance)
LDK3	Pair - 14" Plenums, including grilles		
LDK4	38" Plenum	LDK5 - 38" Finishing frame	
LDK7	Pair - Duct termination plates (wall valance discharge only)		
LDK9	30" Plenum	LDK10 - 30" Finishing frame	

Optional Accessories
Information accurate at the time of printing and subject to change without notice.

Gas Conversion Kits	
2500KNGK	Conversion to natural gas
2500KPGK	Conversion to propane gas

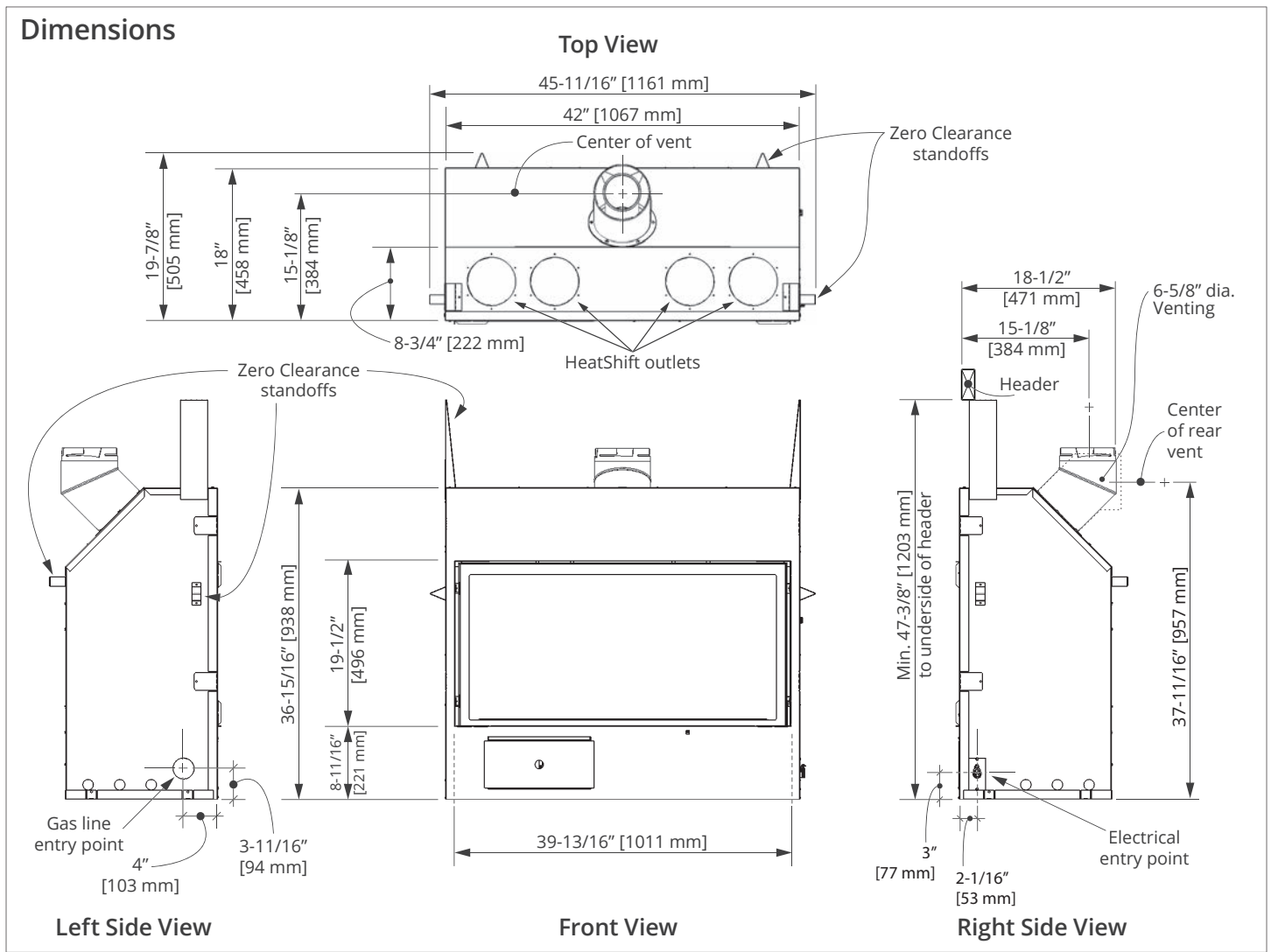| Other Accessories	
GV60CKO	Outdoor Fireplace Conversion Kit
1506DRK	Additional pebbles for Driftwood Kit
1270RBK	Remote Blower Kit (for use with LDK1 and LDK4 only)
GV60WIFI	WiFi Kit
Hearth Gate	Hearth gates such as Cardinal's VersaGate are available at retail stores carrying safety products for children.

⚠ **WARNING**
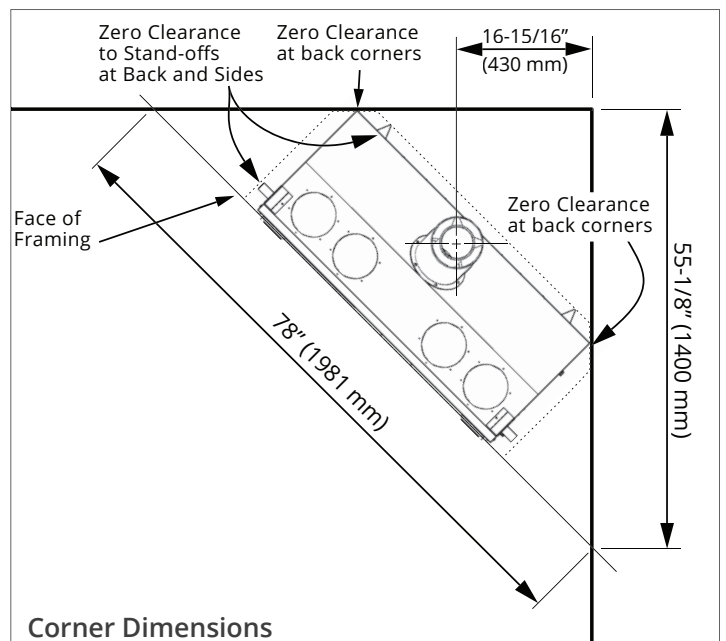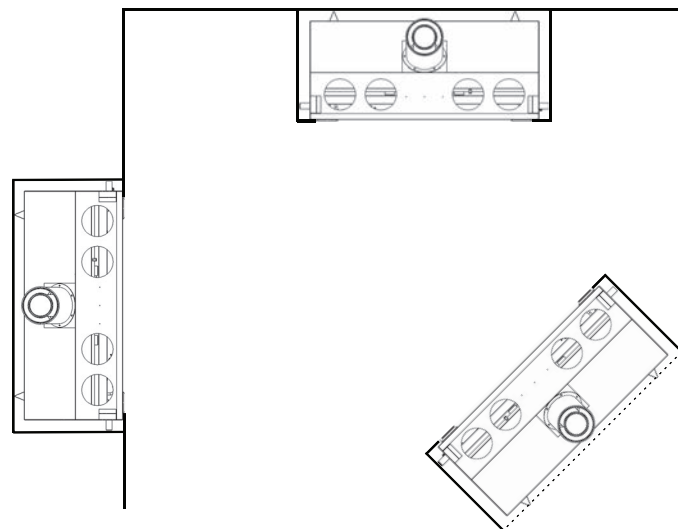**Electrical connection IS NOT ALLOWED when adapting appliance for outdoor use.**

⚠ **WARNING**
HeatShift System MUST be installed on this appliance!

Dimensions & Location

Dimensions

Top View

45-11/16" [1161 mm]
42" [1067 mm]
Center of vent
Zero Clearance standoffs
19-7/8" [505 mm]
18" [458 mm]
15-1/8" [384 mm]
8-3/4" [222 mm]
HeatShift outlets

Zero Clearance standoffs

18-1/2" [471 mm]
6-5/8" dia. Venting
15-1/8" [384 mm]
Header
Center of rear vent

36-15/16" [938 mm]
19-1/2" [496 mm]
8-11/16" [221 mm]

Min. 47-3/8" [1203 mm] to underside of header
37-11/16" [957 mm]

Gas line entry point
4" [103 mm]
3-11/16" [94 mm]

39-13/16" [1011 mm]

3" [77 mm]
2-1/16" [53 mm]
Electrical entry point

Left Side View   Front View   Right Side View

Location

Corner Dimensions

Zero Clearance to Stand-offs at Back and Sides
Zero Clearance at back corners
16-15/16" (430 mm)
Face of Framing
Zero Clearance at back corners
78" (1981 mm)
55-1/8" (1400 mm)

Installation Planning

> ⚠️ **Caution**
>
> Only qualified, license, or trained personnel should install this appliance.

1. YOU NEED TO KNOW FROM THE HOMEOWNER:
   - Height of appliance and shelf, if used;
   - Thickness and type of wall finish around appliance;
   - Trim used;
   - Optional accessories used (if any);
   - Venting configuration.
2. Unpack the appliance, removing all items packed inside and around it. Recycle the packaging.
3. Check that you have everything, using the Pack Content sheet. Also, check that you have:
   - Fuel bed (packed separately);
   - Liner panels (packed separately);
   - Remote Battery and Wall Switch Kit;
   - HeatShift System components;
   - Gas conversion kit (if necessary);
   - Venting accessories;
   - Non-combustible board;
   - Electrical accessories (if used).
4. Carefully read the Installer's Checklist included with the fireplace for the installation sequence.

> ⚠️ **WARNING**
>
> **HeatShift System MUST be installed on this appliance!**

Installation Planning

Note: This appliance may be installed in outdoor, weather protected environments as defined in the GV60CKO Outdoor Conversion Kit instruction manual.

1/2 inch thick non-combustible board –**NOT supplied**

Remote Handset Wall Holder

Mantel—See Mantel & Hearth Clearances

Surround Plate with Barrier Screen (required)

1" Trim 2575LFB accepts additional finish (maximum 1/2" thick) over non-combustible board and behind trim.

2530CIK installs **before** non-combustible board. Non-combustible board finishes up to perimeter of trim.

Wall Finish
Combustible wall finishes up to 1" thick are allowed over top of the non-combustible board. Combustible mantel are ok provided they conform to chart on page 11.

Required HeatShift plenum (LDK4 pictured)

Required HeatShift piping

Framing—See Framing Requirements

2500K heater

Remote Battery and Wall Switch Kit c/w 35-foot wire length (supplied)

Electrical junction box to connect power when using lighting or optional WiFi

Combustible Floor

Hearth: not required. If used, a combustible hearth **must be** minimum 4" below fireplace opening.

Combustible Framing Allowed Beneath Fireplace. When the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and recessed depth of the appliance.

⚠ **WARNING**

Some materials or items, although safe, may discolor, shrink, warp, crack, peel, and so on because of the heat produced by the fireplace. Avoid placing candles, paintings, photos, and other items sensitive to heat around the fireplace.

Installation Planning

Combustible Mantel—Left Side View

HeatShift pipes (4)

45° from outermost corner of trim

Combustible mantels/ projections must be kept behind this line

Vent

Non-combustible board as specified in this manual

Wall finish as specified in this manual (max. 1" [26 mm] thick if combustible)

Outermost corner of trim

10" [254 mm]

6" [152 mm]

38-3/16" [971 mm]

34-3/16" [869 mm]

Mantel Height (from Bottom of Unit)

28-3/16" [717 mm] (from Bottom of Unit to Top of Opening)

19-1/2" [496 mm] Fireplace opening

4" [102 mm] minimum to combustible hearth

8-11/16" [221 mm] To opening

Bottom of Unit

> ⚠️ **WARNING**
> **HeatShift System MUST be installed on this appliance!**

NON-COMBUSTIBLE Flush Hearth/Mantel Projections

Max. 6" [153 mm] non-combustible projection allowed top and bottom, at edge of trim.
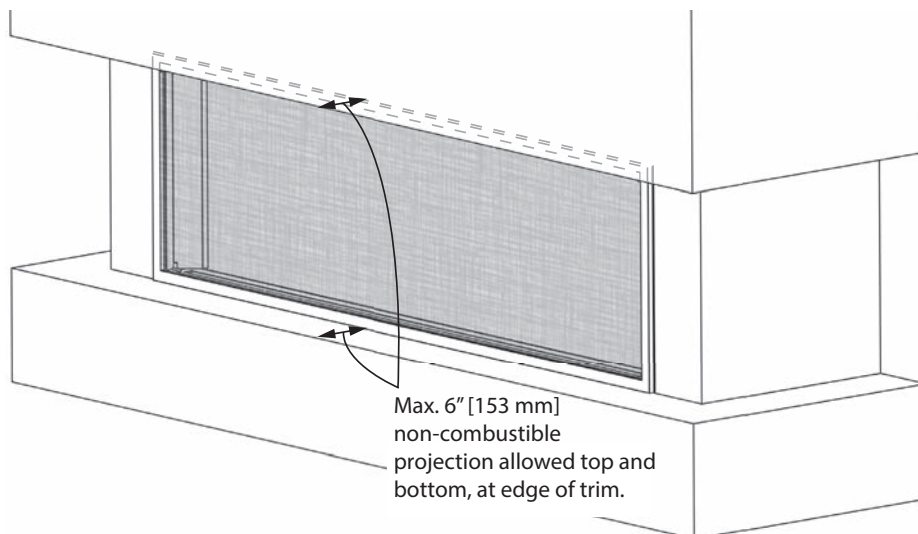
Combustible Sidewall / Mantel Leg—Top View

FIREPLACE

Face of
Finished
Wall

Fireplace Opening
39-11/16" [1009 mm]

Wall

Min. 4"
[102 mm]
to wall or
combustible
mantel leg
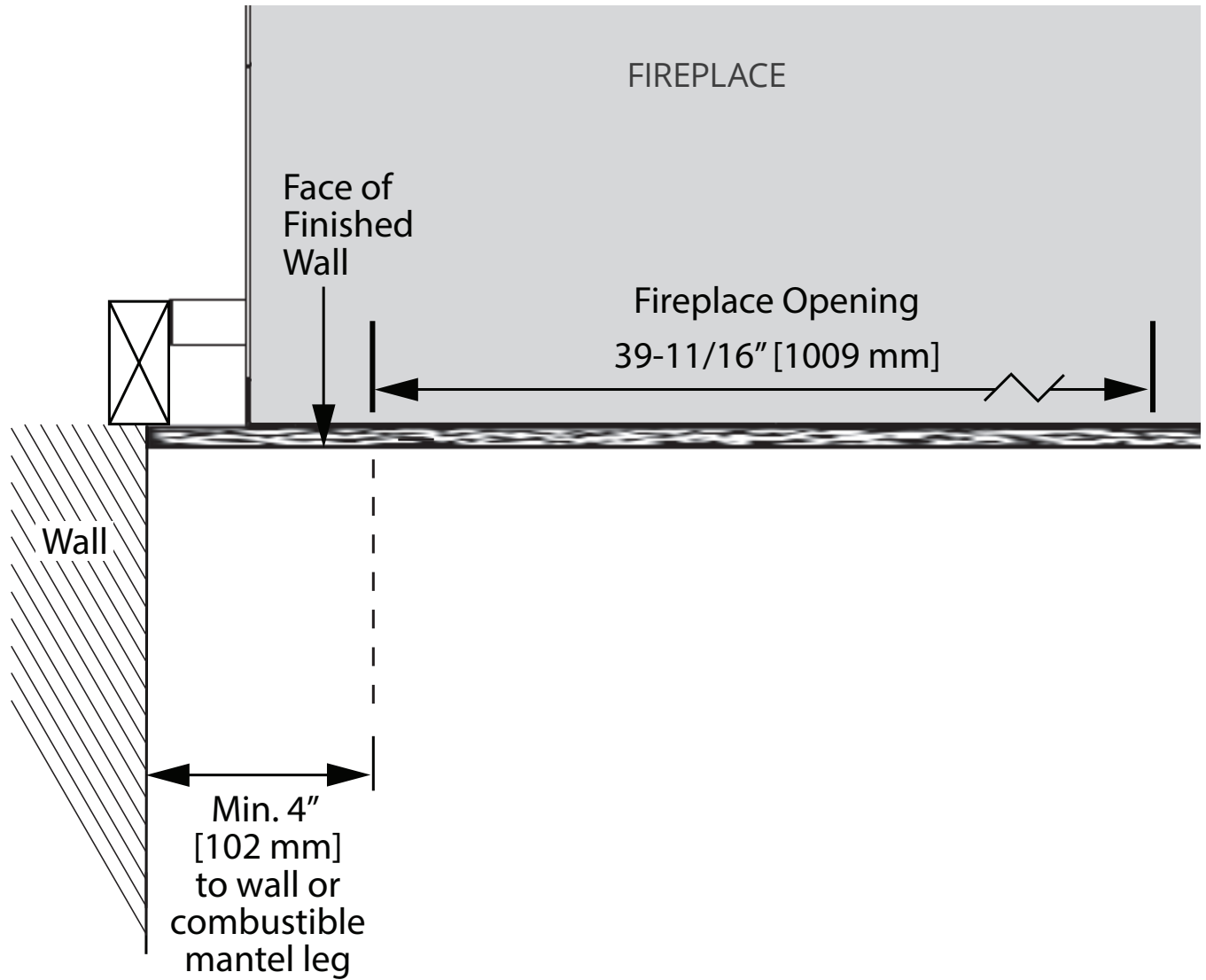
Installation Planning

Framing Dimensions

> ⚠ **WARNING**
>
> **HeatShift System MUST be installed on this appliance!**

NOTE: Height of cavity may be affected by vent configuration - see page 20.

1/2" thick non-combustible board required above, on each side and below engine opening (NOT supplied)

Between underside of header and bottom of firebox

NOTE: This unit requires a solid platform to support it. Combustible framing allowed beneath fireplace. When the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and recessed depth of the appliance

47-3/8" min

20" min

No hearth required. If using a hearth, see page 11.

45-3/4" min

Framing with Partial Shelf—Top Outlet

15-1/8"
[384 mm]

10-13/16"
[275 mm]
Max. from
back surface
of wall finish
to front
surface
of appliance
case w/no
vent offset

HeatShift collars
connected to a
pair of 5" [127 mm]
90 deg elbows.

1/2" [13 mm] thick
non-combustible
board

Min. 1"
[26 mm]
clearance to
combustibles
around vertical
vent pipe and
HeatShift pipes

19-3/16"
[488 mm]

Fireplace
Opening

19-1/2"
[495 mm]

47-3/8" [1204 mm] to underside of combustible cavity

8-11/16"
[221 mm]

Installation Planning

Material Specifications

Non-Combustible

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.

Combustible

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.

Non-Combustible Board

The LT1 Linear fireplace requires a 1/2" (13 mm) thick non-combustible board to be used as a wall surface immediately surrounding the unit's opening—see diagram for minimum coverage.

Extending the non-combustible board well beyond the minimum shown will help avoid cracking due to differential expansion of materials.

Pre-drill non-combustible board with oversized holes and do not over-tighten screws to avoid cracking due to heat expansion.

Standard gypsum wall board may be used beyond the perimeter of the non-combustible board.

Minimum Non-Combustible Board Dimensions

Minimum coverage area of non-combustible board.
Any **wall** finish applied to shaded area must be non-combustible.

Non-combustible board required thickness: 1/2 inch (13 mm)

Min. 48" (1219 mm)

Min. 47-3/8" (1203 mm)

LT1 fireplace outline (including stand-offs)

Joints preferred at corners to prevent cracking

Flush with bottom of unit; add extra cement board if overlapping framing.
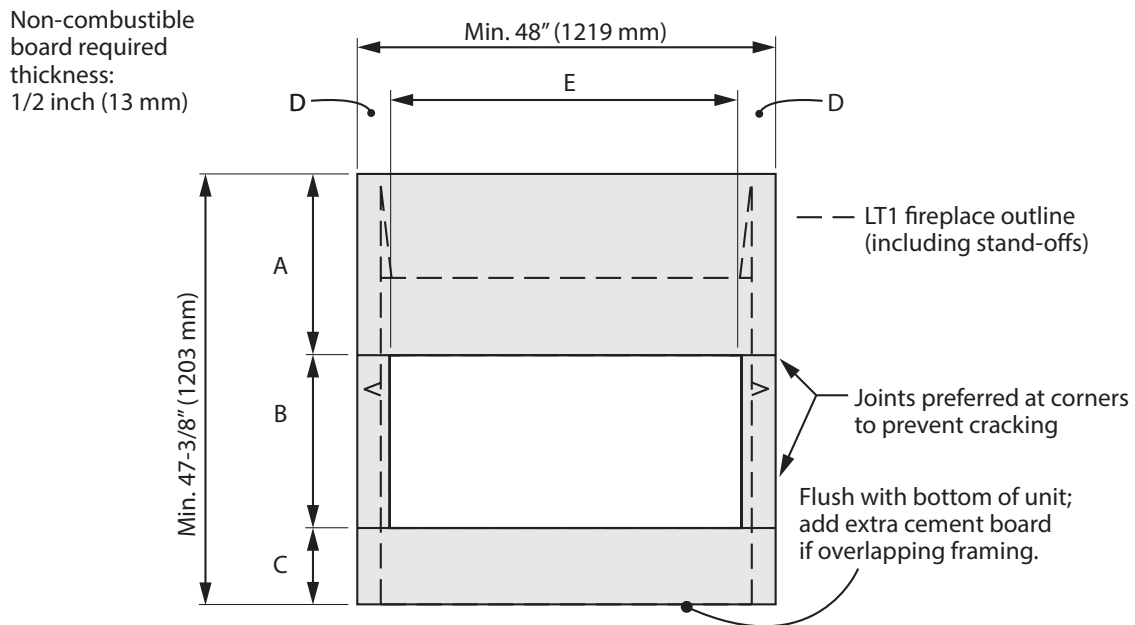
inches [mm]	With 2575 trim	With 2530CIK trim
A	Min. 20-1/2 [521]	Min. 20-1/8 [511]
B	19-1/2 [496]	21 [533]
C	Min. 8-11/16 [221]	Min. 8 [203]
D	Min. 4 [102]	Min. 3-3/8 [84]
E	Min. 39-7/8 [1011]	Min. 41-1/8 [1045]

Installation Planning

Finishing Over Non-Combustible Board

Additional material such as tile, etc., may be applied over top of the non-combustible board or you may choose to leave it finished clean with no tile, etc.

Be aware that a trim is always required. Finish **should not cover** the trims.

2575LFB Trim

Only the 2575LFB style trim will accept tile, etc. tucked behind it (up to 1/2" [13 mm] thick).

2530CIK Trim

2530CIK trim must be installed **BEFORE** non-combustible board. Non-combustible board and finishes are applied to the perimeter of the trim frame. Non-combustible board and finish **CANNOT** be tucked under this trim.

Do Not Drill/Screw Areas

The face of the fireplace must not be drilled or screwed into as shown below. These areas house electrical and/or control elements of the fireplace that could be damaged and present risk of injury.
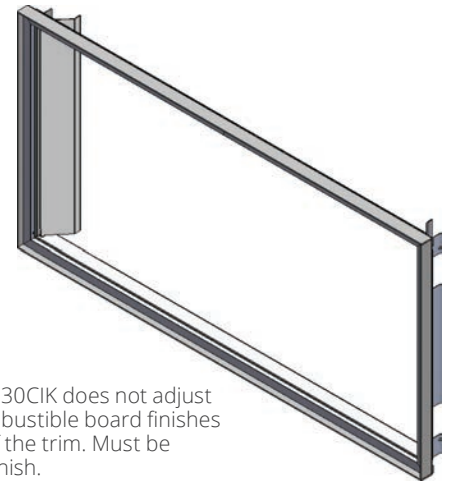
Clean Install Kit 2530CIK does not adjust forward. Non-combustible board finishes up to perimeter of the trim. Must be installed **before** finish.
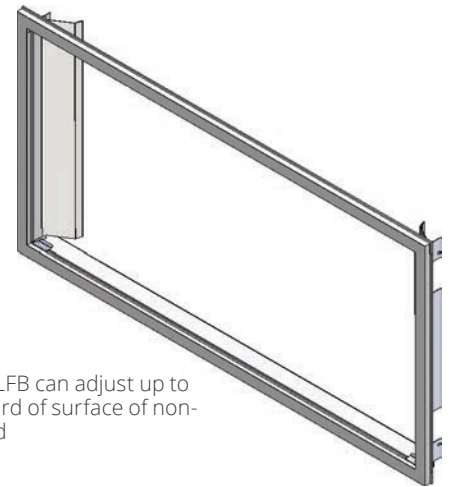
Narrow trim 2575LFB can adjust up to 1/2" [13 mm]forward of surface of non-combustible board

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⚠️ **WARNING**
Do not drill or screw in these areas!

17-1/2" [445 mm] Wide
8-3/4" [222 mm] High

3" [76 mm] Wide
5-1/2" [140 mm]High
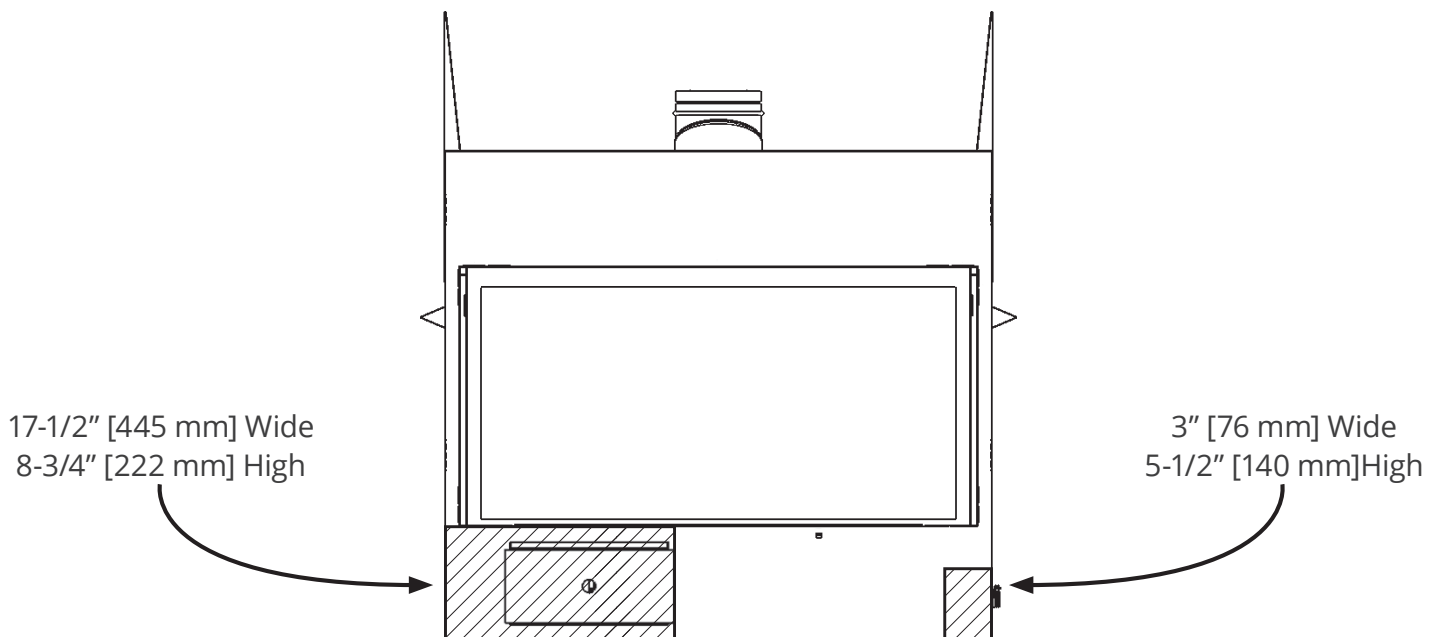
Installation Planning

Avoiding Cracking Wall Finishes

If a clean finish with no tile, etc. is desired, joints in the non-combustible board and the transition to gypsum board will require special attention if future cracking is to be controlled. Be aware that temperatures on the non-combustible wall surface above the appliance can exceed 200°F (93°C).

Below are some tips on how to best avoid any cracking:

• Allow materials to dry thoroughly before finishing the wall. Non-combustible board has the ability to absorb up to 30 percent of its weight in water and may shrink as much as 1/8" over a 48" length when drying from a saturated condition. Running the fireplace for an extended period before final finishing will help drive out moisture.

• Always pre-drill screw holes through non-combustible board and use screws with self-milling head.

• Always use mesh tape over joints.

• Always stagger joints in wall board.

• Behind joints, double up studs or use studs "on the flat" to add extra support to the joint. Adhesive on the backside of wall board behind any joints can help control differential movement.

• Use multiple, thinner coats of joint compound and allow to dry thoroughly between coats.

• Ensure framing materials are dry.

• After finishing the wall, introduce heat gradually to slowly dry any excess moisture rather than drying too fast.

• Avoid notching non-combustible board or tiles around corners of window opening and instead provide a joint that intersects the corner.

• Avoid using lage one-piece slab of material with a cut-out in the middle as a surround for the fireplace. Expansion above the opening will cause cracking at inside corners. Provide a joint that intersects the inside corner to avoid cracking.

Cracks

Provide joints either here or here

Venting
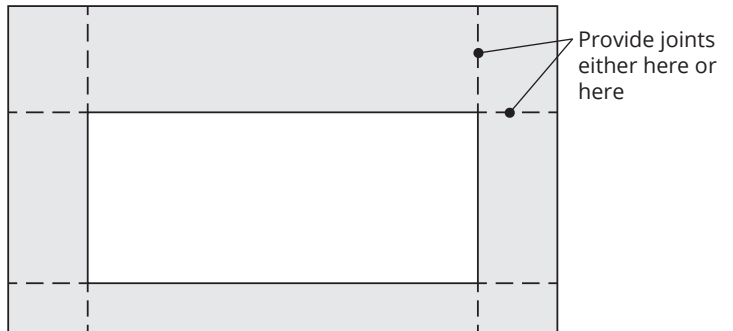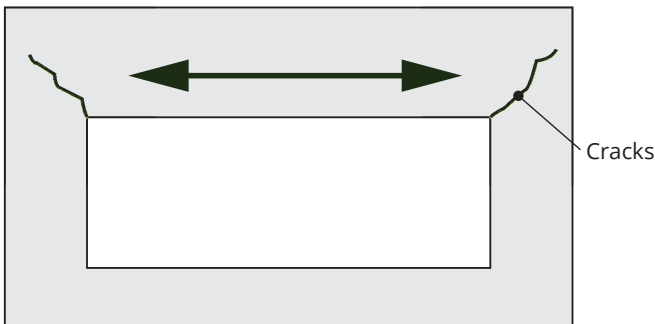
Top or Rear Outlet

This unit is supplied with a vent outlet which can be installed either as top facing or rear racing. See *Appliance Preparation* section for more information.

Vent Material

This unit is approved for installation using 4 x 6-5/8 inches co-axial direct vent pipe and accessories as listed in the *Approved Venting Components* section on pages 61–62 of this manual. Follow the installation instructions supplied with the individual venting accessories.

This unit may also be converted to co-linear (3" x 4") venting for use in solid-fuel burning fireplaces and chimneys using adapters and accessories—see list in the *Approved Venting Components* section on pages 61–62 of this manual.

Vent Sealing

Seal all outer coaxial pipe and elbow joints, including sectioned elbow joints, using high quality, high temperature 2 inch wide self-adhesive aluminum foil tape (Nashua-322-2 brand or similar). Wrap the tape completely around all joints and press firmly to seal.

A high temperature black silicone sealant may be used in the outer joints as a substitute to foil tape.

Ensure all the pipe joints have a minimum of 1 ¼ inch overlap.

Tape all **OUTER** joints (including all elbow joints)
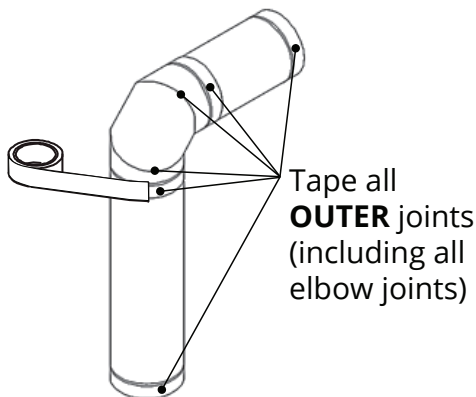
Wall Thickness

The appliance vent is suitable for penetrating a combustible wall assembly up to 8 inches in thickness. A non-combustible wall can be of any thickness up to the maximum horizontal run of vent pipe allowed for the particular installation.

Framing Vent in Combustible Walls & Ceilings

When penetrating through combustible walls and ceilings, frame a minimum of 10 in x 10 in opening and ensure that the insulation is kept clear of the vent pipe using either a wall thimble or an attic insulation shield. Follow the installation instructions supplied with the individual venting components.

Align the vent center to the center of the frame

10" (254 mm)

10" (254 mm)
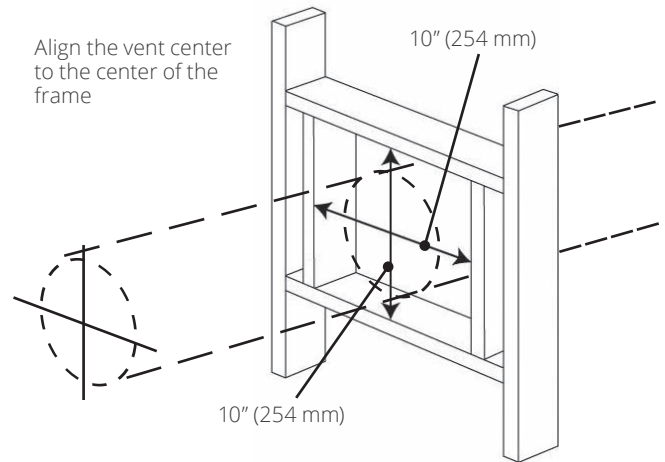
Important Installer Notice – Weather Sealing & Vapor Barriers

It is the installer's responsibility to ensure that vent installations through exterior walls are caulked and weatherproofed in such a manner as to:

- Prevent rain water from entering the wall from the weather side by adequately caulking the outer vent plate to the exterior wall surface.
- Prevent moisture inside the home from penetrating into the wall structure by ensuring the inside wall plate is adequately sealed to the inside vapor barrier.
- Prevent rain water and moisture from entering the walls by sealing the joints between the outer vent tube and the inner and outer wall plates.

We recommend the use of a high quality polyurethane sealant.

All horizontal pipe runs must be graded 1/4 inch per foot upwards in the direction of the exhaust flow. The final pipe length, when terminating through the wall may be graded downwards slightly to prevent water migration.

Typical Co-axial Venting Components

Note: Provide support for vertical pipe runs, particularly at offsets. Do not rely on the appliance for support of long vertical pipe runs. Horizontal pipe runs should be supported every 4 feet using strapping.

HORIZONTAL TERMINATION

2-PIECE WALL THIMBLE

PIPE LENGTH

VERTICAL TERMINATION

STORM COLLAR

FLASHING

ATTIC INSULATION SHIELD

ATTIC FIRESTOP

CEILING FIRESTOP

PIPE LENGTH

PIPE LENGTH

Rear Outlet

HORIZONTAL TERMINATION

2-PIECE WALL THIMBLE

90° ELBOW

PIPE LENGTH

PIPE LENGTH

Top Outlet

Top Outlet
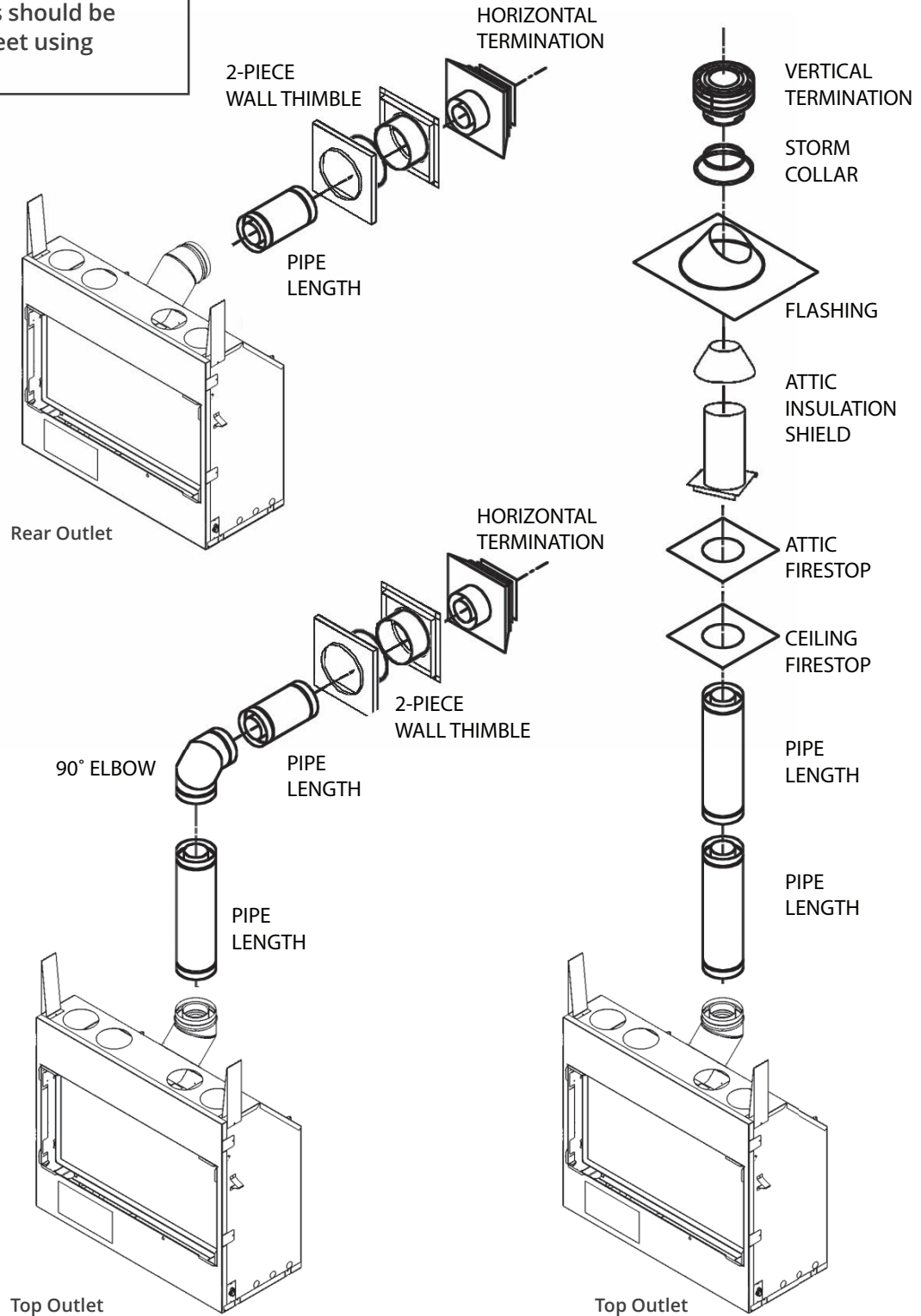
Venting

How to Read the Venting Chart

The chart below applies to co-axial roof or wall termination.

1. The total length of the vent pipe cannot exceed 40 feet.

2. The minimum vertical height with roof termination is 6 feet.

3. Any combination of rise and run can be used as long as they are within the allowable limits shown on the chart below.

4. A maximum of 4 x 90 degrees elbows—or equivalent (2 x 45 degrees = 90 degrees)—can be used. Excludes the 45 degrees take-off elbow shipped with the appliance.

5. Each 90 degrees elbow installed on the horizontal plane is equivalent to a 3 feet horizontal pipe; therefore, 3 feet must be subtracted from allowable horizontal run. (45 degrees elbow is equivalent to 18 inches horizontal pipe.)

6. All horizontal pipe runs must be graded 1/4 inch per foot upwards in the direction of the exhaust flow. The final pipe length, when terminating through the wall may be graded downwards slightly to prevent water migration.

7. A restrictor adjustment is required for most installations having a vertical rise—see next section.
   Note: The restrictor is shipped installed at the exhaust exit of the firebox.

Venting Chart

4 x 90° ELBOWS MAXIMUM (or equivalent)

3" min. above top of horizontal pipe

V3

1" min. all around vertical pipe

H2

1" min. around bottom & sides of horizontal pipe

V2

H1

V1

Max. 18" pipe if no vertical rise is used

45° elbow take-off supplied with unit

Example 1
V Value = V1 (2') + V2 (4') + V3 (2')= 8'
H Value = H1 (0') + H2 (3') = 3'
Restrictor position # 1 required
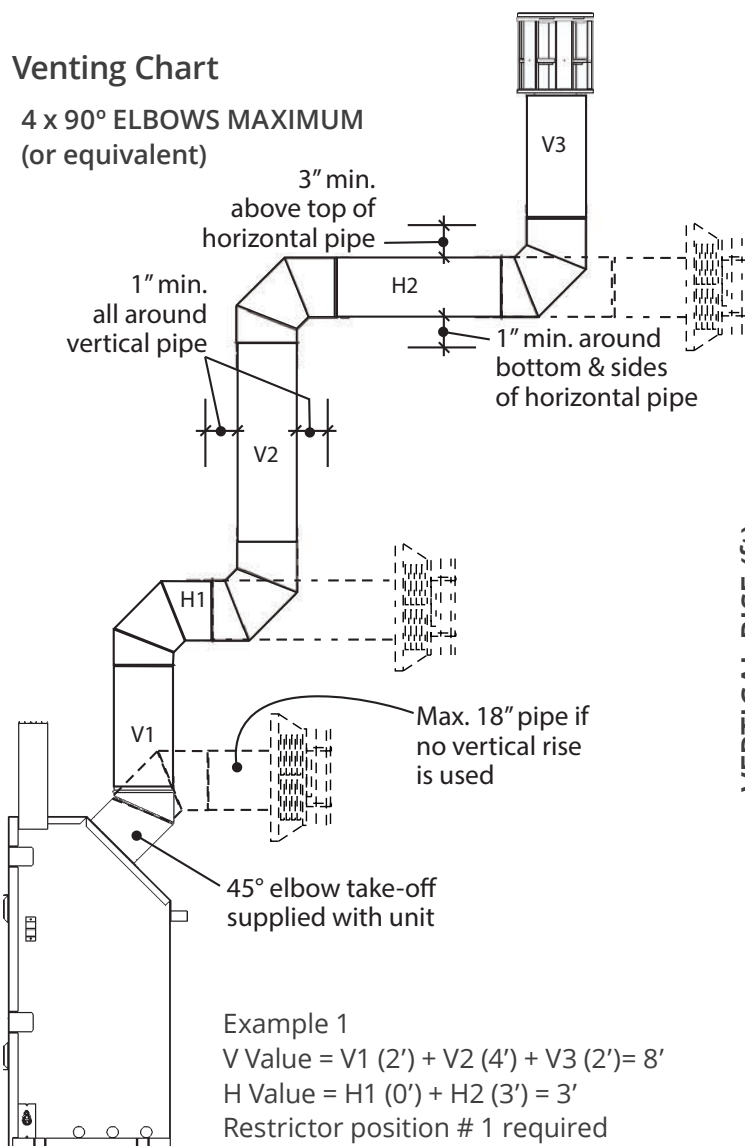
Allowable Co-Axial Vent Configurations with restrictor positions

NO INSTALLATION

Position #4

Positions #2/3

Example 1

Position #1

NO INSTALLATION

VERTICAL RISE (ft)

HORIZONTAL RUN (ft)

Venting
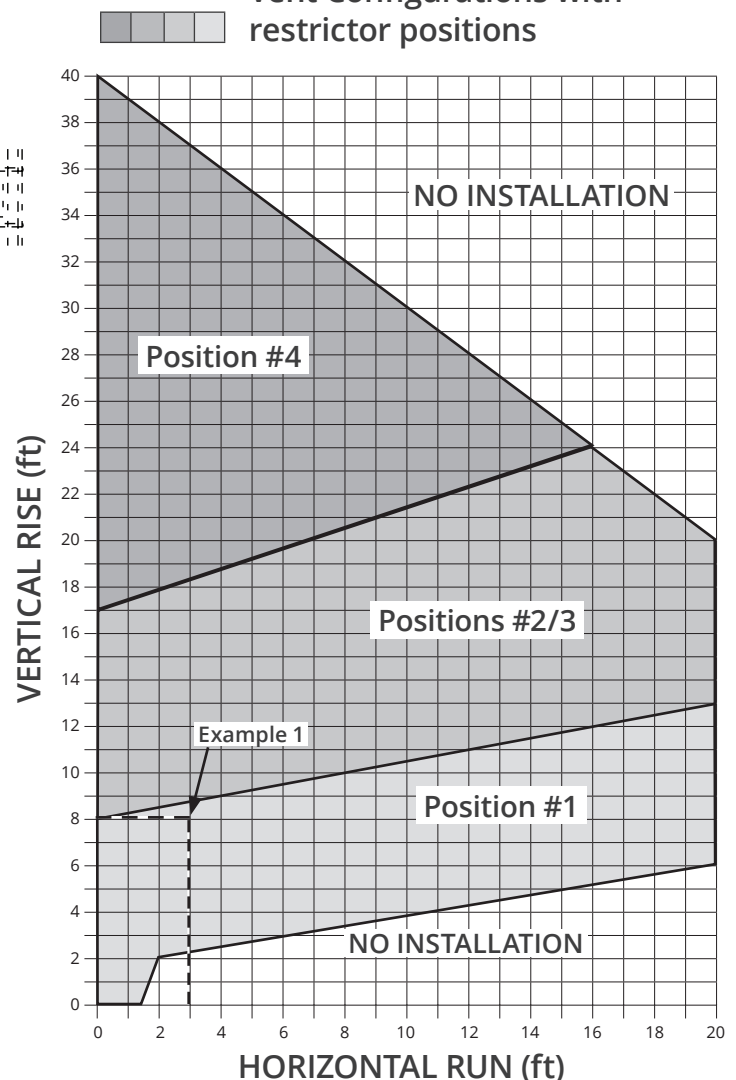
Restrictor Settings

The restrictors are located in the roof of the firebox hidden above the top liner panel. Adjust the restrictors before installation of the top liner panel. Should subsequent adjustment be required, you will need to remove the top liner panel—see page 43.

ALL INSTALLATIONS REQUIRE A RESTRICTOR for improved flame picture and performance. This unit is supplied with pre-fitted restrictors having four different positions or settings. The restrictors are shipped mounted at the maximum open position which is used for rear venting with no vertical rise. The level of restriction required depends on the vertical rise in the venting system and, to a lesser degree, the horizontal run and number of elbows.

The amount of restriction is based on laboratory tests. The ideal restrictor position may vary slightly, especially when the vent pipe length is near the limits of the acceptable configurations for each type of restrictor.

The chart on the previous page shows the vent restrictor required relative to the length of the vent pipe.

To set the restrictor position:

1. Establish the required position of the restrictor looking up the venting table on the previous page.
2. Release the screws (2) on each side of each of the restrictors already installed **on the firebox roof port**.
3. Slide the restrictor in the required position.
4. Tighten the screws.

Inside firebox—roof venting port
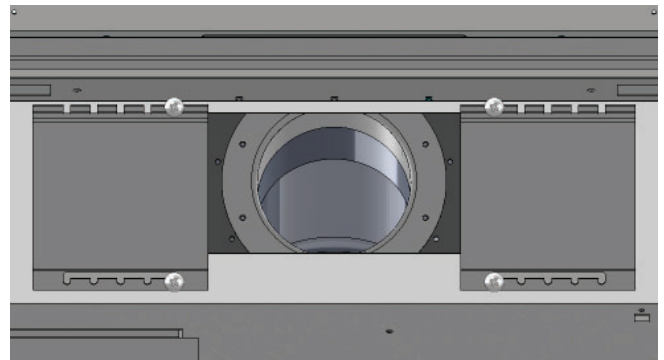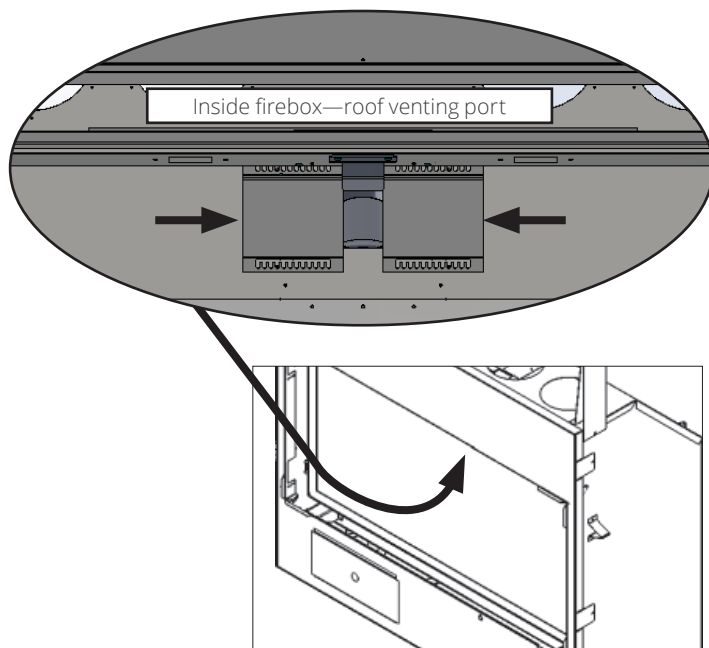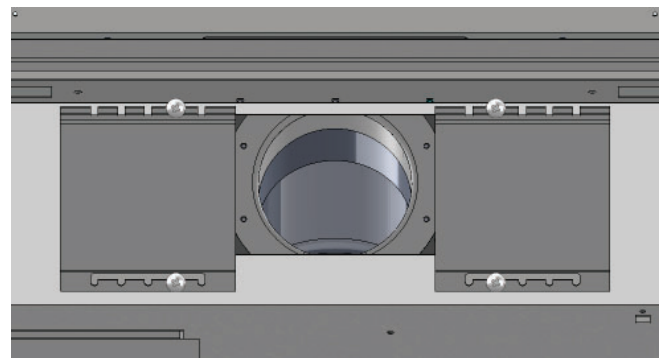
Position #1
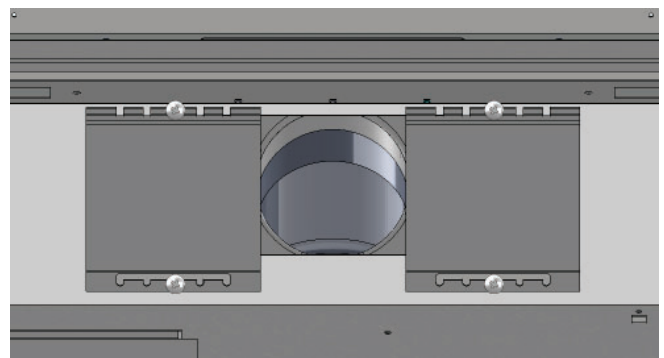
Position #2

Position #3

Position #4

Venting

Co-Axial
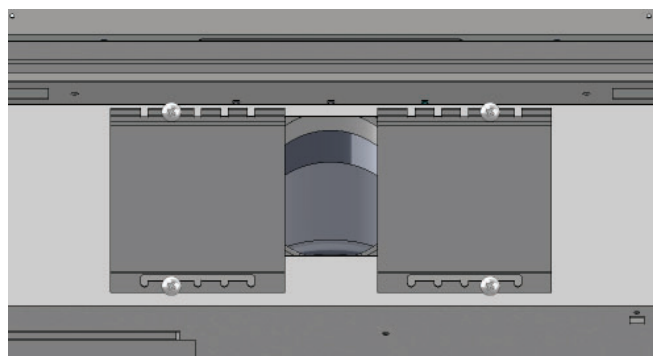
Horizontal Vent Termination Location

- The vent terminal must be located on an outside wall or through the roof.

- This direct vent appliance is designed to operate when an undisturbed airflow hits the outside vent terminal from any direction.

- The minimum clearances from this terminal that must be maintained when located on an outside wall are shown in figure below. Any reduction in these clearances could result in a disruption of the airflow or a safety hazard. Local codes or regulations may require greater clearances.

- The vent terminal must not be recessed into a wall or siding.

- The vent terminal should be positioned where any snowdrifts will not cover it.

- Sidewall vent terminations require a terminal guard such as 658TG or 845TG when accessible—within 7' of ground.

Inside corner detail

Alcove detail (open on one side) Normal ceiling/soffit clearances apply.

☑ = Vent terminal △ = Air supply inlet ▨ = Area where terminal is not permitted
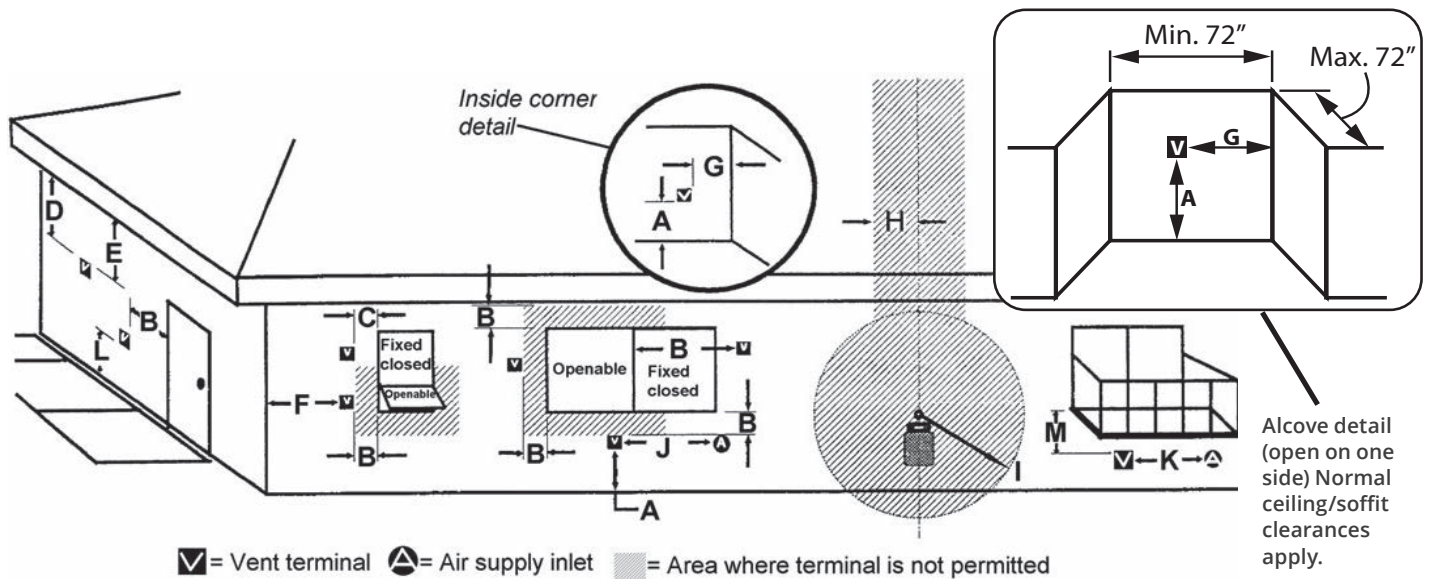
KEY	VENT TERMINAL LOCATIONS - MINIMUM DISTANCES	MINIMUM CLEARANCE	
		Inches	Cm
A	Clearance above grade, verandah, porch, deck or balcony	12	30
B	Clearance to window or door that may be opened	12	30
C	Clearance to permanently closed window (recommended to prevent condensation on window)	12	30
D	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (60 cm) from the center-line of the terminal	18	46
E	Clearance to unventilated soffit	12	30
F	Clearance to outside corner (measured from the center of vent)	12	30
G	Clearance to inside corner (measured from the center of vent)	12	30
H	Horizontal clearance to center-line of meter/regulator assembly located within 15 feet (4.6 m) below the terminal	36	90
I	Clearance to service regulator vent outlet	36	90
J	Clearance to non-mechanical air supply inlet to the building or the combustion air inlet to any other appliance	12	30
K	Clearance to a mechanical air supply inlet	72	180
L	Clearance above paved sidewalk or a paved driveway located on public property **Note:** *A vent must not terminate directly above a sidewalk or paved driveway, which is located between two single-family dwellings and serves both dwellings.* **THIS DOES NOT APPLY to direct vent, non-consdensing appliances in the Province of Ontario.**	84	210
M	Clearance under a verandah, porch, deck or balcony *Only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor*	12	30

Note: Local codes and regulations may require different clearances.

22

Venting

Vertical Vent Termination

Roof Pitch	Minimum "H" (feet)
Flat to 7/12	1'
Over 7/12 to 8/12	1.5'
Over 8/12 to 9/12	2'
Over 9/12 to 10/12	2.5'
Over 10/12 to 11/12	3.25'
Over 11/12 to 12/12	4'
Over 12/12 to 14/12	5'

Overhang should not extend beyond vent if within 48" [1220 mm] of termination cap

Horizontal overhang

Termination cap

Vertical wall

Min. 18" [458 mm]

Min. 24" [610 mm] (unvented soffit)
Min. 36" [915 mm] (vented soffit)

Storm collar

'H'

Roof flashing

Venting
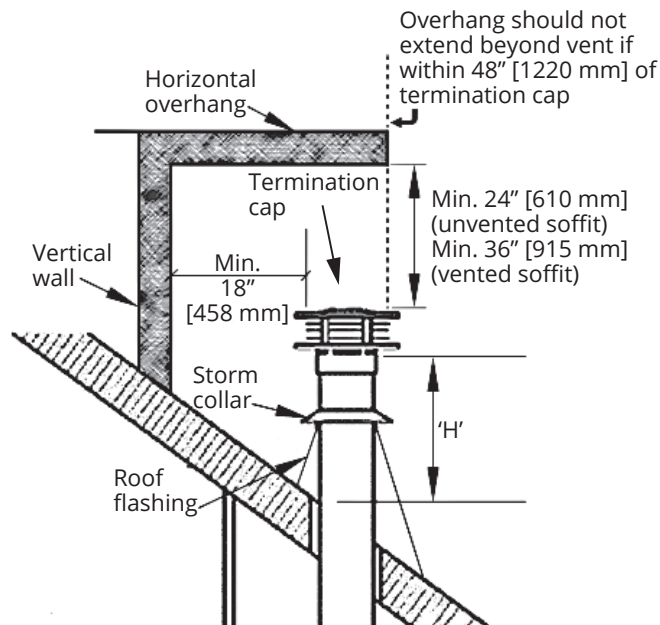
Co-Linear Conversion Installations

> **Note:** Co-linear portion of vent system may only be installed within a solid-fuel burning fireplace and chimney.

The appliance can be adapted to co-linear applications using an existing chimney. The appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance.

The appliance must be fully enclosed while maintaining clearances to combustibles detailed elsewhere in this manual.

Types of Installations

• Partial installation into an existing fireplace

• Installation into an adjacent chimney

See the following pages for each installation details.

Rules for Co-Linear Venting

• Maximum 40 feet vertical pipe

• Minimum 10 feet vertical

• Maximum offset 8 feet with liners at minimum 45 degrees from horizontal plane

• Restrictor: Set to Position 4 (see page 21).

> **Note:** Co-linear flexible aluminum venting should be professionally inspected periodically for corrosion and damage and replaced when necessary. If the installation does not allow for future inspection or replacement of the flexible aluminum venting, then stainless steel vent liners should be used.

Venting

Installation Partially Into Fireplace Cavity

Required accessories:

- Co-axial to co-linear adapter at appliance, Valor 1156CLA or equivalent;
- 2 lengths of 2-ply, flexible chimney liner approved for venting gas appliances:
  - 1 x 3-inch diameter for air inlet and
  - 1 x 4-inch diameter for exhaust;
- Co-linear termination kit 3 x 4 and flashing or co-linear to co-axial adapter and either high wind vertical vent terminal cap or a low profile vertical termination.

This appliance must be completely framed and maintain clearances to combustibles as shown in this manual.

Restrictor must be set to Position 4 (see page 21).

Installation Using 1156CLA

For installation of the adapter to the appliance, see the instructions supplied with the 1156CLA.

4" exhaust liner

3" intake liner

Co-linear adapter

3" min. bend radius for intake liner and 4" min. bend radius for exhaust liner

Approved co-linear termination or approved co-linear adapter and approved co-axial termination

Flashing

HeatShift liners x4 (plenum not pictured)

Framed wall (full height)

Clearances to combustible materials listed elsewhere in this manual apply

1 x 3" intake liner and 1 x 4" exhaust liner

1156 Co-linear adapter

Engine

8-5/8" [219 mm]

42" [1067 mm]

3" intake

4" exhaust collar on the centerline

36-15/16" [938 mm]

18" [458 mm]

FRONT

REAR

11-11/16"

9-3/8"

3" exhaust collar

4"

1-1/2"

4" exhaust collar adapter

25

Venting

Installation Into an Adjacent Chimney

Required accessories:

• Co-axial to co-linear adapter at chimney face, 46DVA-34CLAA or equivalent;

• 2 lengths of 2-ply, flexible chimney liner approved for venting gas appliances:

   • 1 x 3-inch diameter for air inlet and

   • 1 x 4-inch diameter for exhaust;

• Co-linear termination kit 3 x 4 and flashing or co-linear to co-axial adapter and either high wind vertical vent terminal cap or a low profile vertical termination.

Restrictor must be set to Position 4 (see page 21).

This appliance must be completely framed and maintain clearances to combustibles as shown in this manual.

Approved co-linear termination or approved co-linear adapter and approved co-axial termination

4" exhaust liner

3" intake liner

Flashing

Co-linear adapter

3" min. bend radius for intake liner and 4" min. bend radius for exhaust liner

46DVA-34CLAA (or 46DVA-GCL34) Co-linear adapter. **Co-axial clearances apply to adapter!**

HeatShift liners x4 (plenum not pictured)

Framed wall (full height)

Clearances to combustible materials listed elsewhere in this manual apply

1 x 3" intake liner and 1 x 4" exhaust liner

Engine

Venting

Installation Into an Adjacent Chimney

Required accessories:
- Co-axial to co-linear adapter at chimney face, 46DVA-GCL34 or equivalent;
- 2 lengths of 2-ply, flexible chimney liner approved for venting gas appliances:
    - 1 x 3-inch diameter for air inlet and
    - 1 x 4-inch diameter for exhaust;
- Co-linear termination kit 3 x 4 and flashing or co-linear to co-axial adapter and either high wind vertical vent terminal cap or a low profile vertical termination.

Restrictor must be set to Position 4 (see page 21).

This appliance must be completely framed and maintain clearances to combustibles as shown in this manual.

Approved co-linear termination or approved co-linear adapter and approved co-axial termination

4" exhaust liner 3" intake liner

Co-linear adapter

3" min. bend radius for intake liner and 4" min. bend radius for exhaust liner

Flashing

46DVA-GCL34 (or 46DVA-34CLAA) Co-linear adapter

HeatShift liners x4 (plenum not pictured)

Framed wall (full height)

Max. 6"

Clearances to combustible materials listed elsewhere in this manual apply

Engine

1 x 3" intake liner and 1 x 4" exhaust liner
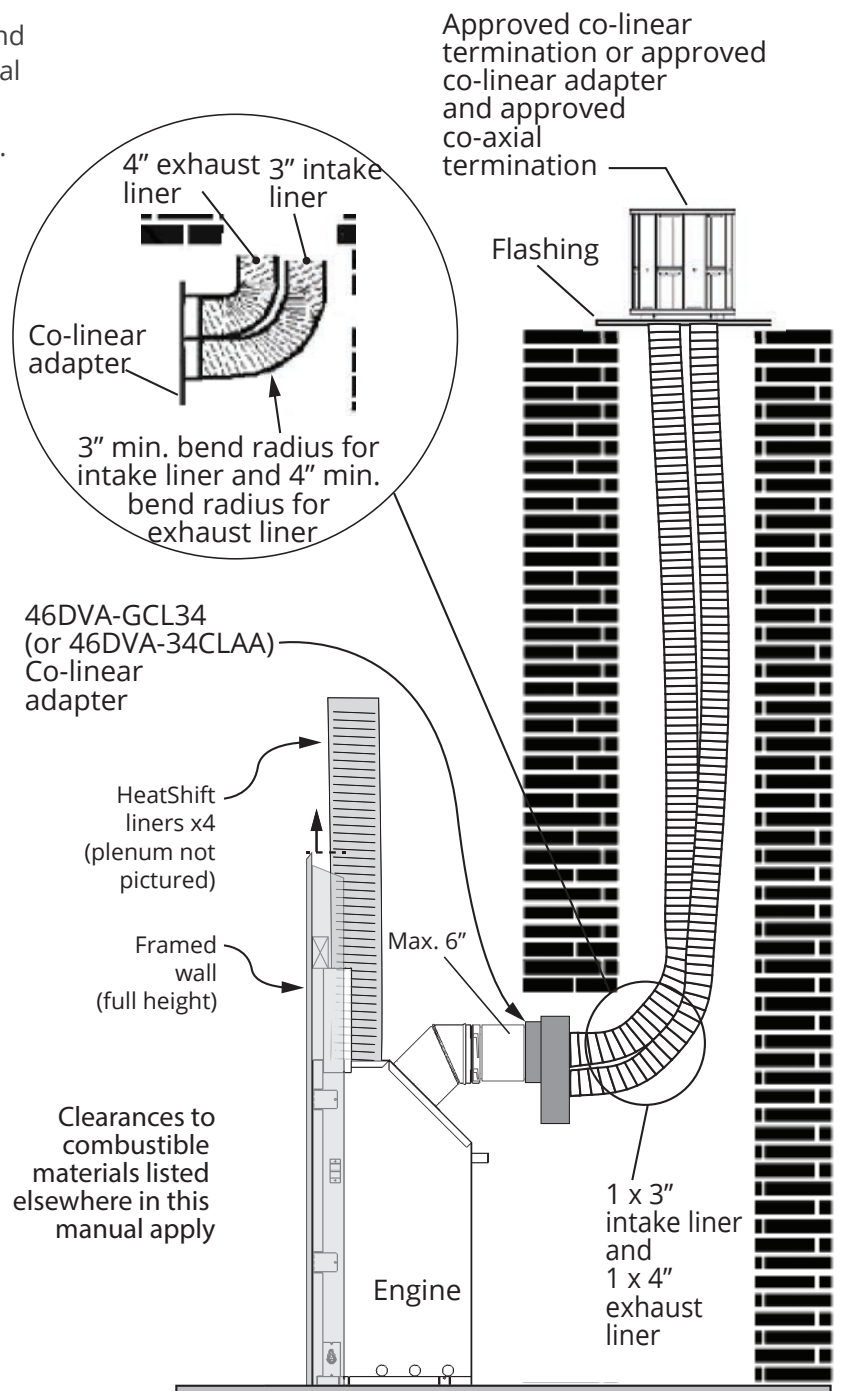
Co-Linear Conversion

Example of Co-linear Conversion Accessories

Examples of Co-axial to Co-linear Appliance Adapters

46DVA-GCL34   46DVA-34CLAA

Examples of Co-linear Terminal Configurations

10"

10"

7-5/8" dia.
collar

**3" Inlet & Exhaust
Collars. A 3" - 4"
adapter may be used
for exhaust liner.**
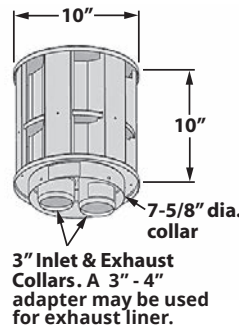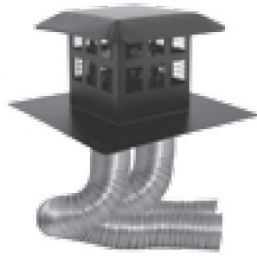
Co-Linear Terminal (typical)   Flashing Kit

18"

18"

18"   18"

18"   18"

12 ⅜"   9 ⅜"

3"   3"

4"   4"
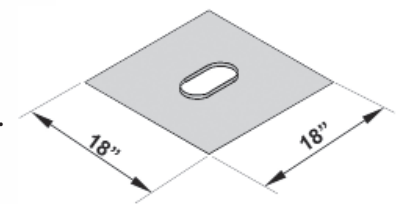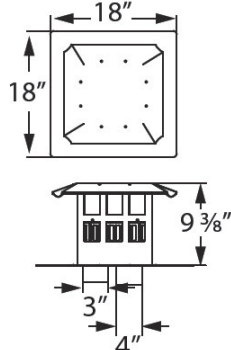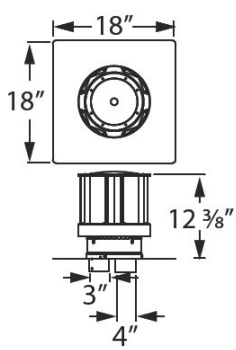
Co-linear Termination Kits

Alternate Co-linear to Co-axial Conversion at Terminal
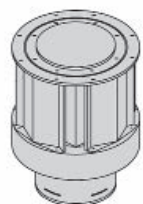
With...

Co-Linear to Co-
Axial Adapter
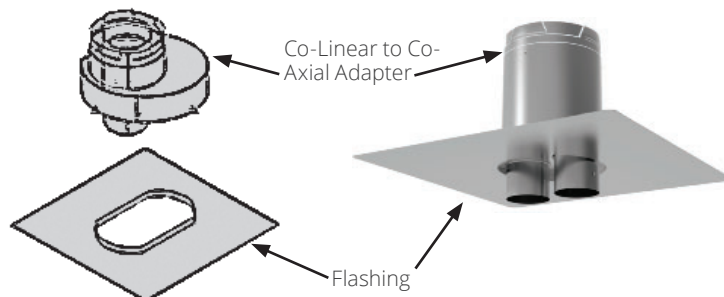
Co-axial Terminal Cap   Flashing

Installation

Unpack Appliance

Beware of sharp edges! Wear gloves!

1. Unpack the appliance and all material around it.
2. Unpack any loose items from around the appliance.
3. Remove vertical crating walls.
4. Unscrew the 4 tabs retaining the appliance to the pallet.
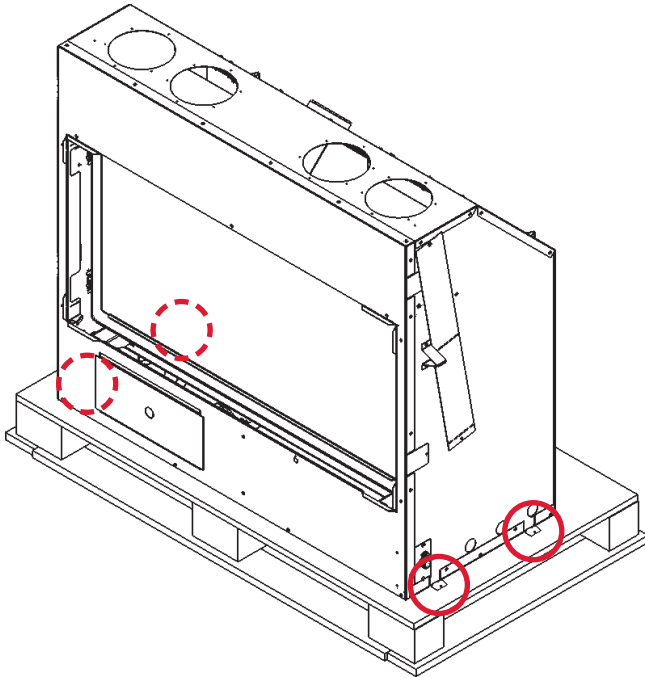
5. Bend the retaining tabs up, flush against the appliance (unless you plan to screw the unit to the cavity floor upon installation).
6. Remove the window and set aside in a safe place to avoid damage—see page 30.
7. Remove all items packed inside the appliance.
8. **Verify that you have all the components required for the installation using the Pack Content List, *including:***
   - unit vent elbow (in separate box within unit);
   - HeatShift system components;
   - approved non-combustible board (not included);
   - liners and fuel bed (in separate cartons);
   - trim kit with barrier screen;
   - other venting components and accessories;
   - electrical components.
9. Recycle or safely dispose of all removed packing materials.

Installation

> ## ⚠ WARNING
> **Risk of severe burns! Surfaces of the fireplace are very hot during operation. Ensure fireplace has cooled off before touching it.**

Remove the Window

The windows are attached to the firebox by 4 levers in the corners.

1. Locate window lever hook tool under the firebox.

Window lever locations

Window latch hook tool
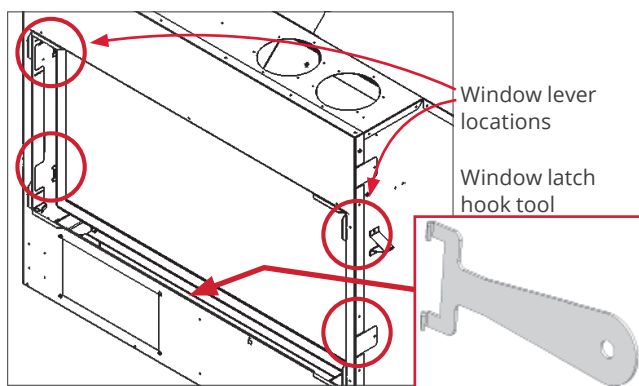
2. Using the window latch hook tool, pull the bottom levers towards you and unhook them from the window frame bracket, then repeat for the top levers while supporting the window with your hand.
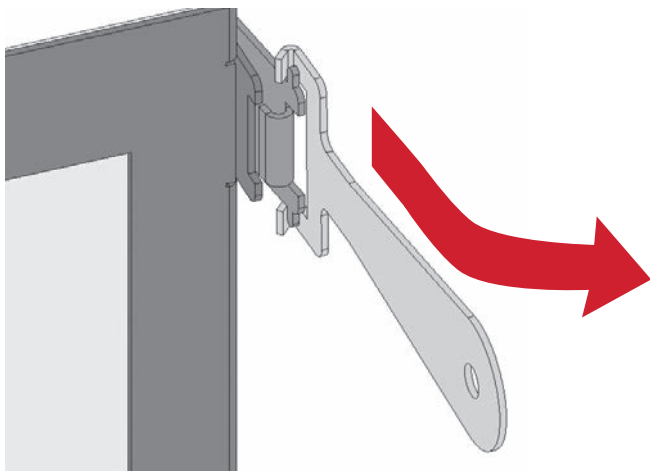
3. Gently pull the top of the window outward.
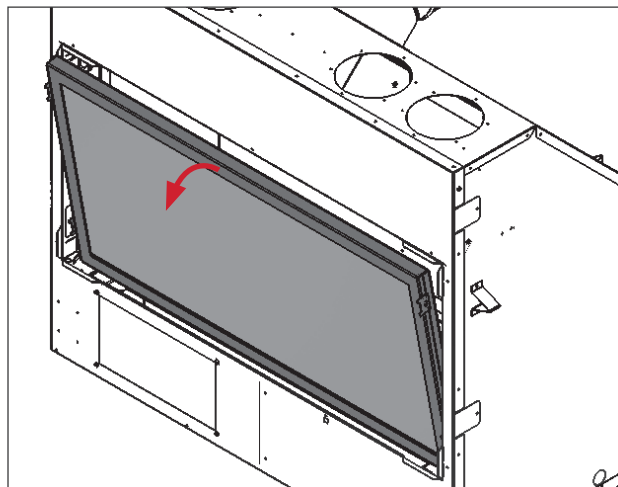
4. Lift the window off of its bottom supports and set it aside in a safe place to avoid damage.

Installation

Refit and Check Window

1. Place the window on its bottom supports (one at each end) and center the window. Ensure the window flange is at the bottom.

Bottom of window flange

Window frame

Bottom support
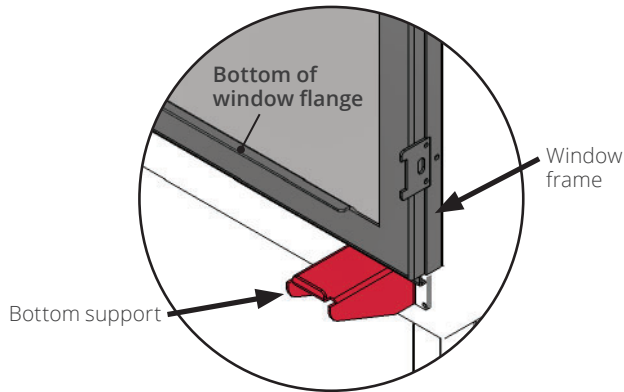
2. While holding the top of the window frame against the firebox, pull and hook the top side levers to their corresponding tabs on the window frame.
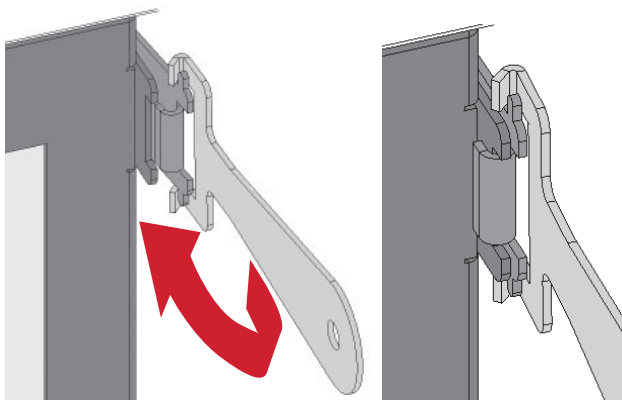
3. Hook the bottom side levers to their corresponding tabs on the window frame. All four levers should now be connected. Replace the tool under the fire-box.

4. Pull out top of window to test and ensure spring loaded levers work properly, and repeat at the bottom of the window.

5. Apply firm hand pressure around the window frame to ensure the window is sealed tight against the firebox.

6. **If the Hot Glass Warning plate has been removed from the front lower corner of the window, re-install it by sliding it between the glass and the frame as indicated.**

⚠ **WARNING**

The window unit must be correctly installed, fastened and sealed after servicing or serious bodily injury and/or damage to the appliance may result.

To ensure a safe operation:
- **Double-check that the bottom of the window frame is correctly installed on the bottom supports;**
- **Verify that all 4 levers are hooked properly to the window tabs then;**
- **Pull out the top of the window and release it to ensure the springs return it, and repeat at the bottom of the window;**
- **Ensure the window is sealed before operation.**

⚠ **WARNING**

Failure to install the window correctly can:
- **Leak carbon monoxide.**
- **Affect the performance of the fireplace.**
- **Damage components.**
- **Cause overheating resulting in dangerous conditions.**

Damage caused by incorrect window installation is not covered by the Valor Warranty.
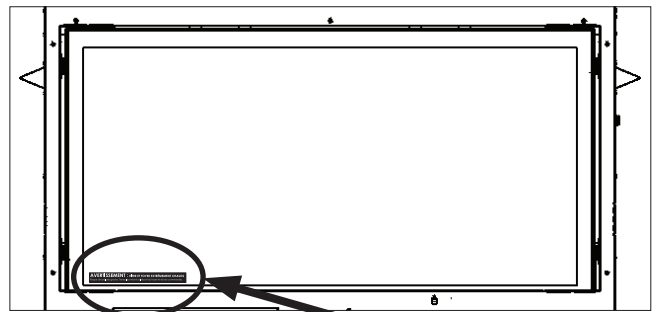
Hot Glass Warning Plate

Installation

Fit Standoffs

The two top standoffs are supplied hanging on each end of the firebox.
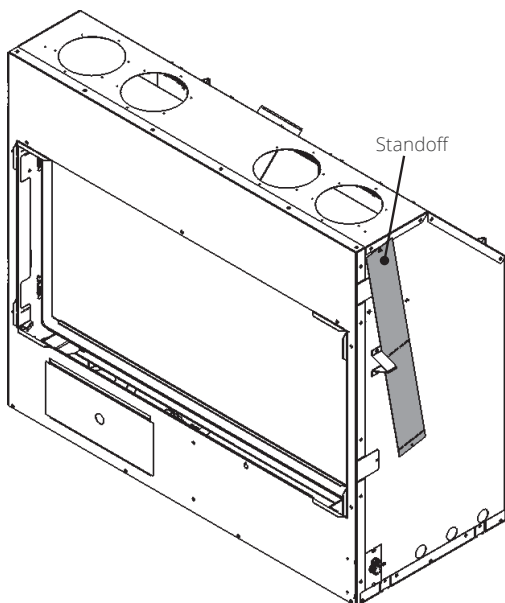
Standoff

1. Swivel the flat standoffs upright.
2. Bend the standoffs as shown along perforations.

Fold flat standoffs
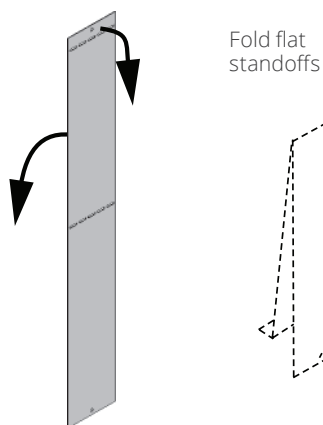
3. Fix the loose end to the top of the firebox.

Standoffs installed
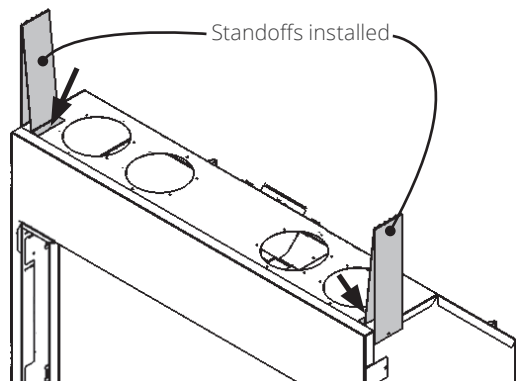
Install Vent Outlet

This unit is supplied with a vent outlet which must be field-installed into a rear or top vent configuration.

1. Remove the vent elbow from the box within the fireplace.
2. Install the vent as a rear or top outlet as needed (6 screws).

Installation as top outlet

Installation as rear outlet

Installation
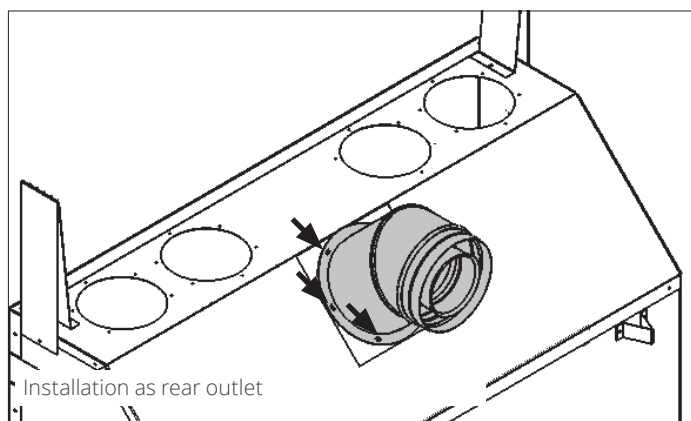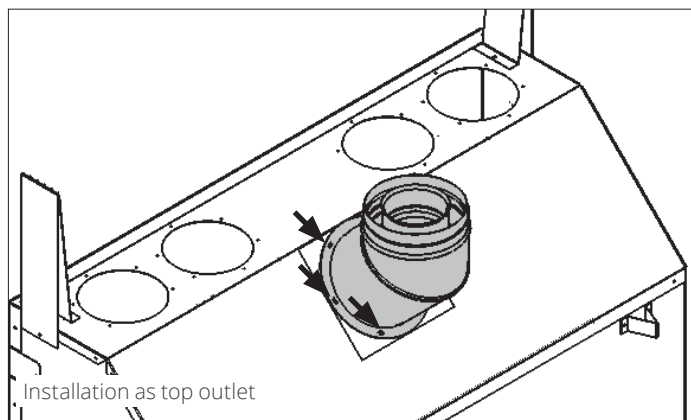
Appliance Preparation

Install HeatShift Take-Off Collars to Appliance

1. Install the collars on the holes on top of the appli-
   ance's case (6 screws each).

See "Appendix D—HeatShift™System" on page 72 for
more details regarding the installation.

> ⚠ **WARNING**
>
> **All FOUR (4) takeoffs MUST BE
> CONNECTED TO PLENUM(S).**
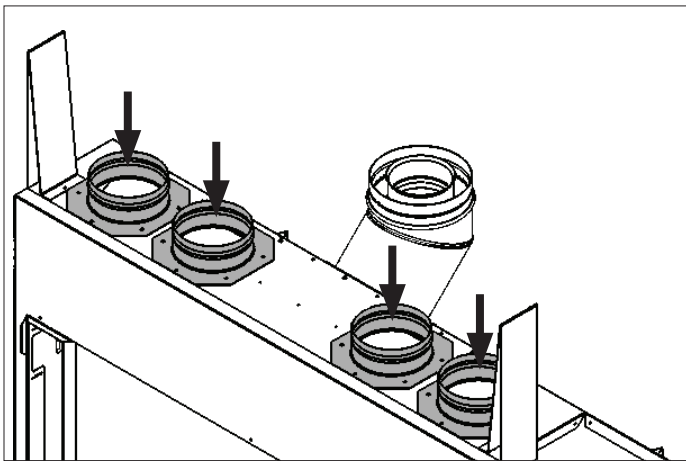
Fit Appliance into Framing

1. Taking great care not to cut your hands on the sheet
   metal edges, lift the appliance and place it in the
   framing. *Make sure that the unit is at the right height
   with consideration to the height of the hearth or com-
   bustible flooring.*

2. Fold out four front mounting tabs and recess the
   appliance in the framing as shown.

3. Fasten the unit to framing using 4 screws or nails at
   the mounting tabs.
   Note: The sheet metal front face of the appliance is
   flush with the framing studs.

flush

front face of appliance

mounting tabs (4)

Appliance flush to framing
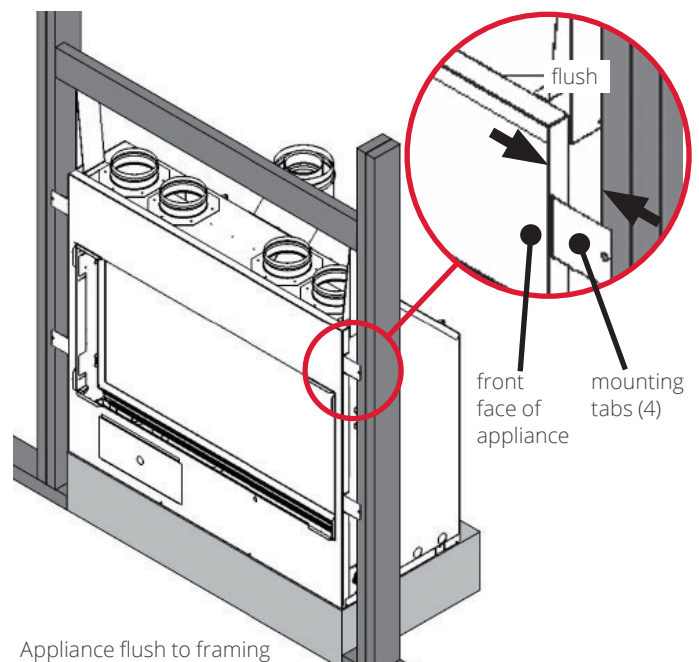
4. If desired and possible, screw the four floor mount-
   ing tabs to the floor.

Installation

Install Electrical Wiring

This section provides information to install the electric pre-wiring required for use with the decorative lighting, or the optional GV60WIFI WiFi Kit.

> ⚠ **WARNING**
>
> **All wiring must be done by a qualified electrician in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 or the Canadian Electrical Code, CSA C22.1.**

Electrical Requirements

Lighting: 120 VAC, 35 W per bulb (qty 2)

V-Module: 120 VAC, 210 W

GV60WIFI: 6 VDC (from receiver), less than 1 amp

General Requirements

The decorative lighting and optional GV60WIFI module are powered by the V-module included with the appliance. The V-module includes a three-prong plug to plug into a grounded receptacle installed within the fireplace enclosure by a qualified electrician.

The receptacle, housing, and strain relief are supplied and installed as part of the fireplace.

Notes

• We recommend connecting the electrical box to use the supplied decorative lighting and the time of fireplace installation. It is much easier to wire before wall finish is applied.

2-1/16"
[53 mm]

3"
[77 mm]
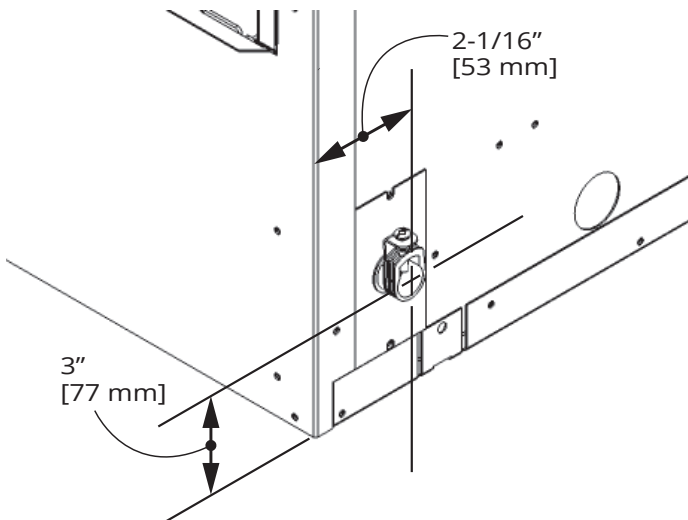
Right side view

• Wiring within the receptacle enclosure must have a minimum 90°C temperature rating.

• Wire nuts not included.

> ⚠ **WARNING**
>
> **Electrical connection IS NOT ALLOWED when adapting appliance for outdoor use.**

Installation

1. Disconnect/isolate power from the wiring being run to the fireplace.

2. Locate the electrical housing. It is behind the front panel of the fireplace in the bottom right corner.

Inner Cover

Receptacle

Grounding Stud

Strain Relief

Outer Cover
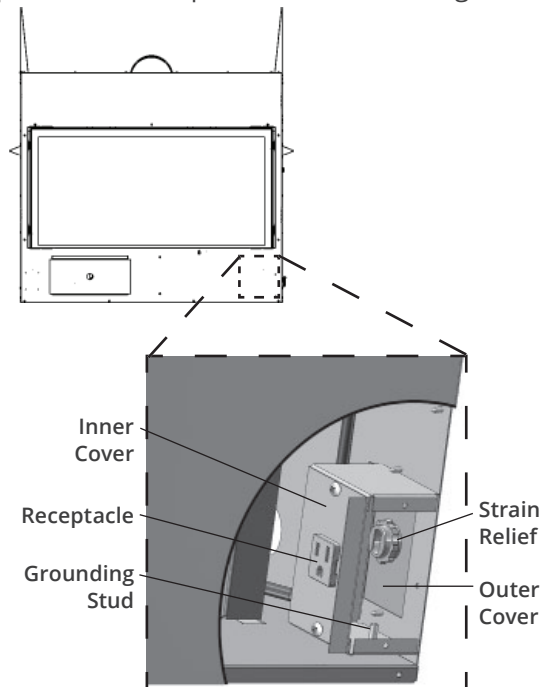
3. Remove the inner cover (2 screws).
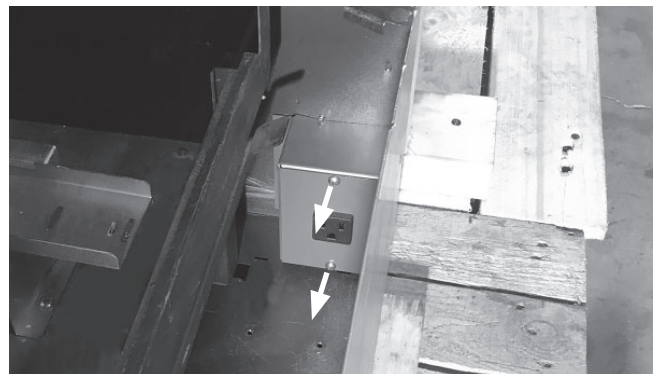
4. Pull the inner cover and receptacle (attached) out of the fireplace.
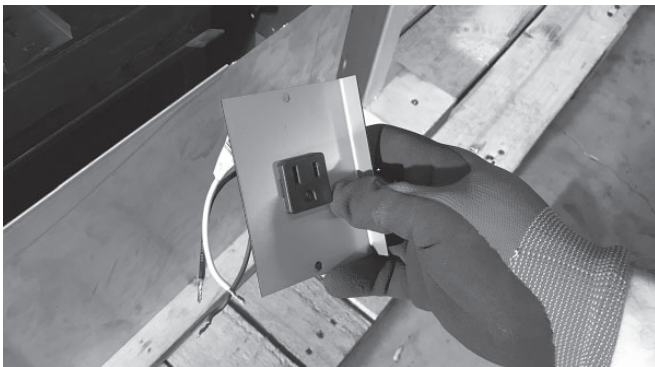
5. Thread the cable through the stud and the strain reflief in the fireplace case. **Do not tighten the clamp yet.** Pull as much wire through the case as you need to wire the receptacle outside the case.

6. Strip wire and terminate grounded receptacle using wire nuts (not included). Place the connected receptacle back in the fireplace, and pull excess cable back through the strain relief.
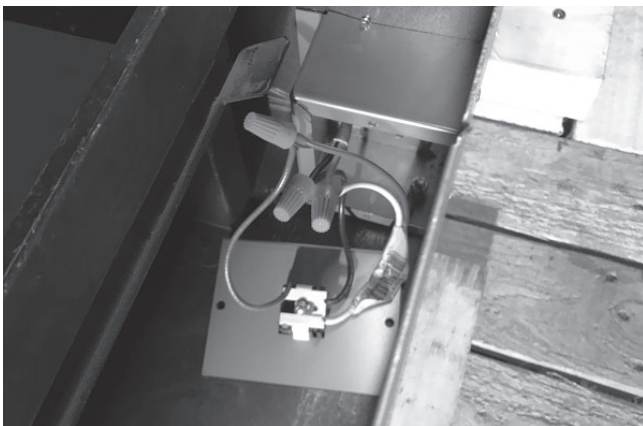
7. Place the inner cover and receptacle in position and secure with 2 screws.
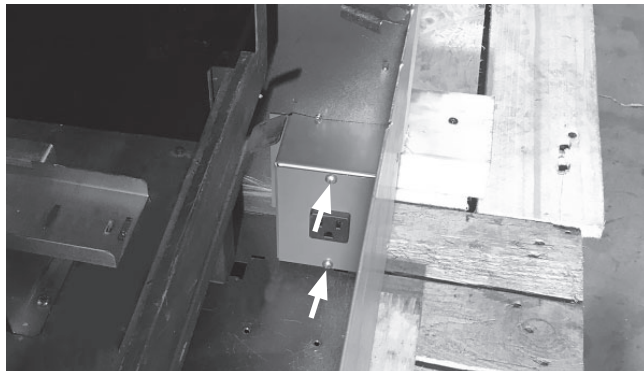
8. Leave desired cable slack in the electrical box, tighten the strain relief cable clamp outside the fireplace and secure any excess wire to framing.
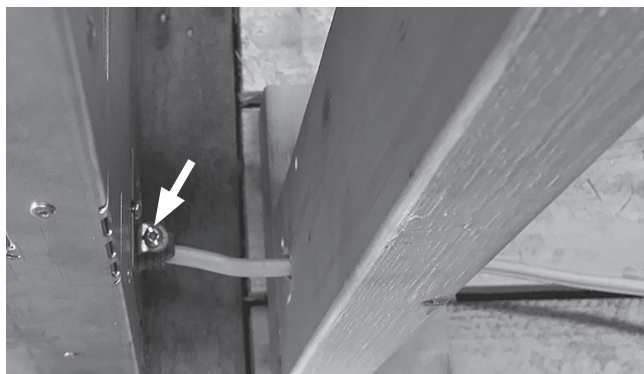
9. Plug the V-Module's AC plug into the power receptacle.
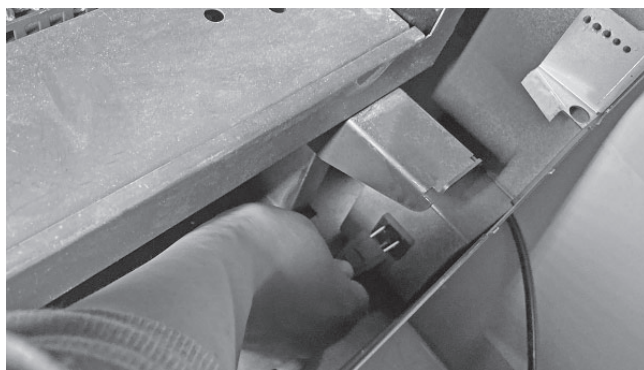
Installation

Set-up Gas Supply

The gas supply inlet connection is a 3/8" NPT male connector located on the left hand side of the firebox.

Gas line access hole 2-1/2" (64 mm) diam.

Front of the appliance

4" (102 mm)

3-11/16" (94 mm)

Left side view
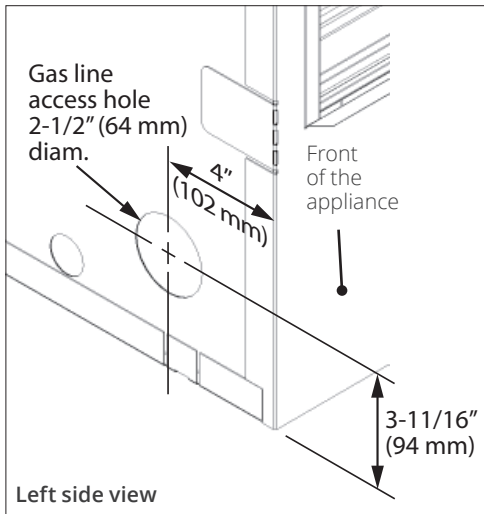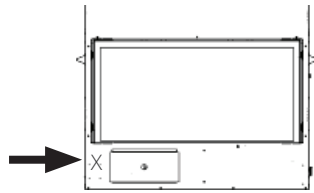
The unit is supplied with a stainless steel flex line to allow the appliance to be disconnected for service. An individual shut-off valve (not supplied) is required on the supply line ahead of the flex connector.

Use only new black iron or steel pipes, CSST, or copper tubing if acceptable—check local codes. Note that in USA, copper tubing must be internally tinned for protection against sulfur compounds.

Unions in gas lines should be of ground joint type.

The gas supply line must be sized and installed to provide a supply of gas sufficient to meet the maximum demand of the appliance without undue loss of pressure.

Sealant used must be resistant to the action of all gas constituents including LP gas. Sealant should be applied lightly to male threads to ensure excess sealant does not enter gas lines.

Pressure Test Supply Line

The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

Failure to either disconnect or isolate the appliance during pressure testing may result in regulator or valve damages and void the warranty. Consult your dealer in case of damages.

Window

Flexible connector supplied with unit

Control Valve

Appliance front outer casing transparent for clarity

Manifold Pressure Adjustment behind Plastic Cap

Receiver

Valve Assembly
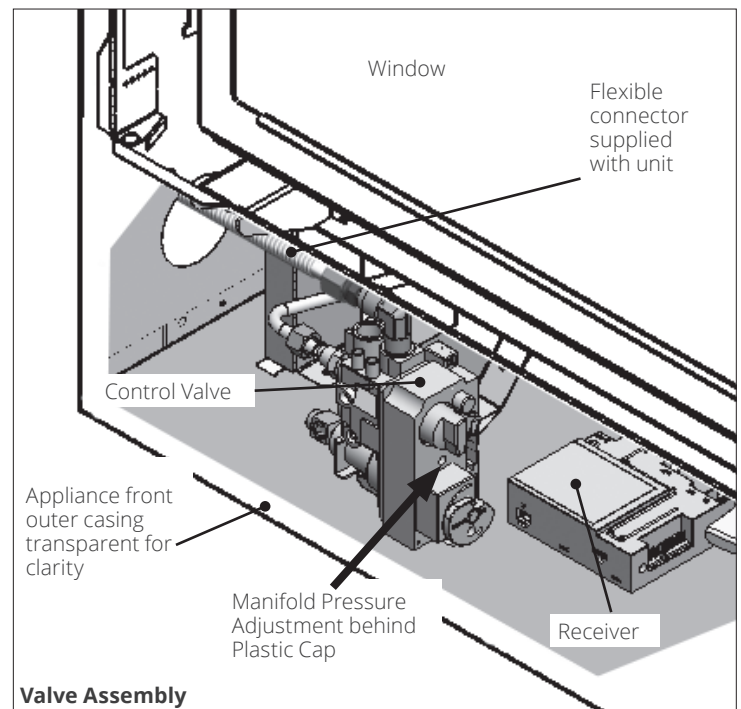
Installation

Pressure Test Points

The minimum supply pressure is given in the section "Specifications" on page 6.

All piping and connections must be tested for leaks after installation or servicing. All leaks must be corrected immediately.

When testing for leaks:

• Make sure that the appliance is turned off.

• Open the manual shut-off valve.

• Test for leaks by applying a liquid detergent or soap solution to all joints. Bubbles forming indicate a gas leak.

> ⚠ **WARNING**
>
> **Never use an open flame to check for leaks! Correct any leak detected immediately.**
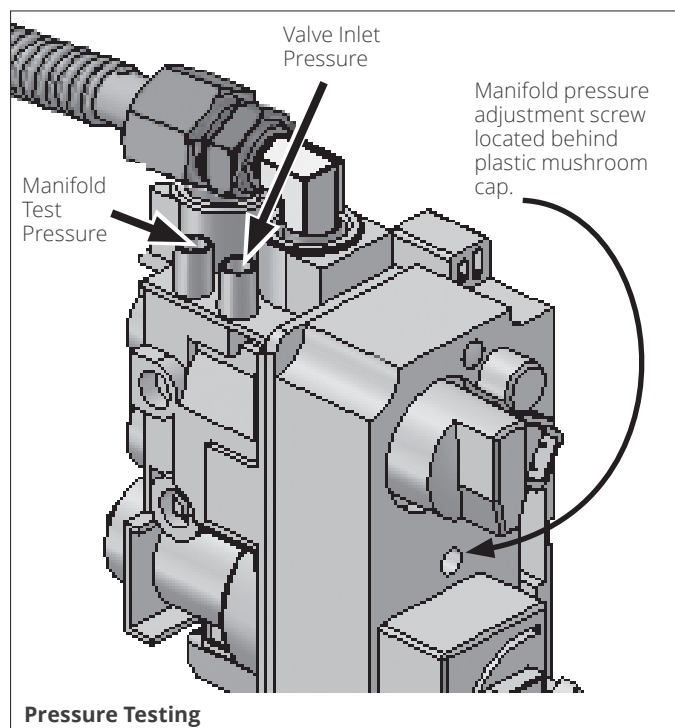
The pressure test tapping locations are shown in the figure at right. An internal regulator within the valve controls the burner manifold pressure. The correct pressure range is shown in the table in section "Specifications" on page 6. The pressure check should be made with the burner alight and at its highest setting. See "Appendix A—Lighting Instructions" on page 63 for full operating details.

Valve Inlet Pressure

Manifold pressure adjustment screw located behind plastic mushroom cap.

Manifold Test Pressure

Pressure Testing

Installation

Ceramic Liner Installation

The liners install in the manner outlined below **with the exception of the 2525RGL—Reflective Glass Liners**: see instructions supplied with the liners.

Unpack the liner panels carefully.

1. Inside the firebox, on the top of each side, release the screw of the side panel anchors just enough to allow them to rotate (one per side).
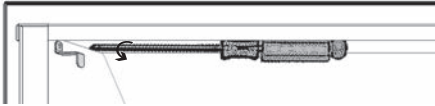
2. Place the rear panel into the firebox, left side first, and angled edge upward.

Front   Rear
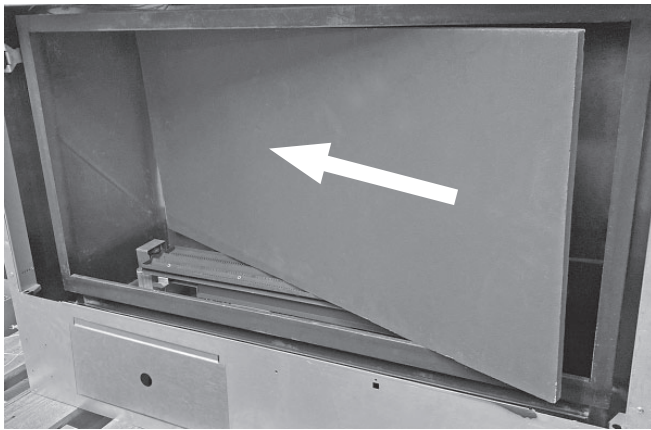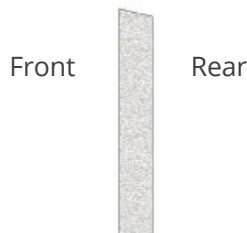
3. Rest the rear panel behind the three tabs on the support rail. Support the rear panel with your hand - it should not tip forward.
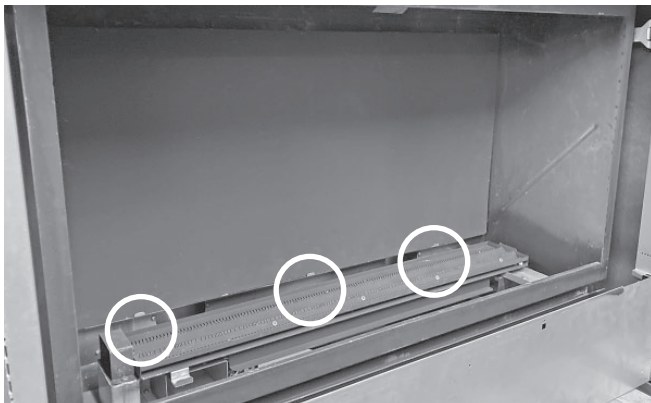
4. Place the right panel bottom first, then flatten to the wall from front to back. Rotate the anchor down once the panel is in place.
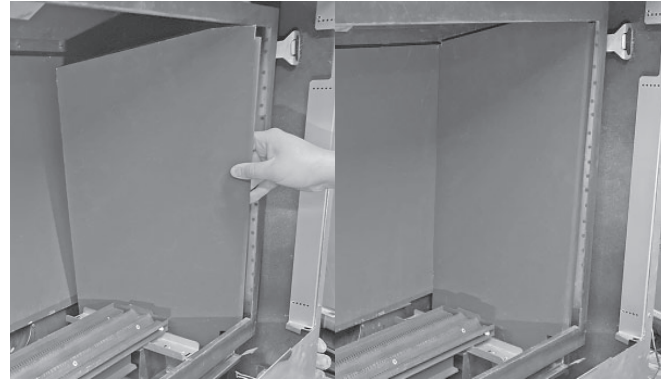
5. Place the left panel bottom first, then flatten to the wall from front to back. Rotate the anchor down once the panel is in place.
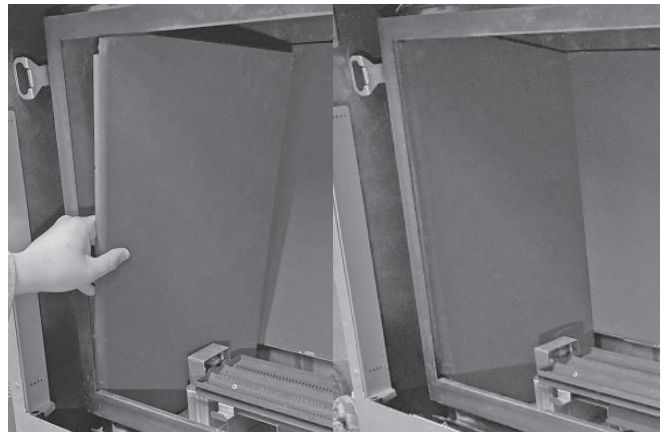
6. Remove the top center bracket (2 screws) and keep the screws.

7. Orient the left roof panel as shown. Insert the panel, first angling it in from the front then placing it on top of the rear and left panels.

Front	Top	Rear
	Bottom	
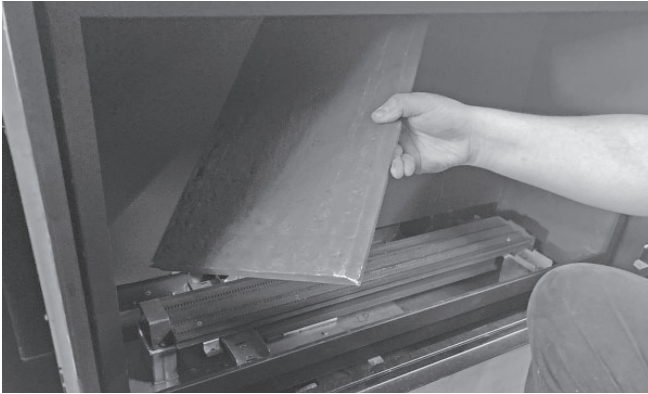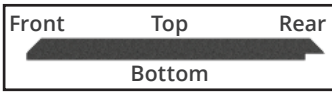
8. Insert the right panel over top of the left panel and then move it into place, so that it rests on top of the rear and right panels.

9. Tighten the left and right anchors at the tops of the side panels to hold them firmly in place.
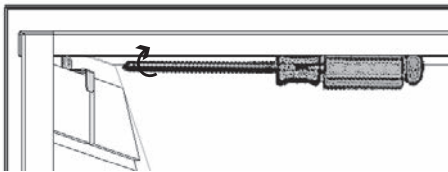
10. Replace the top center bracket to hold up the roof panels.
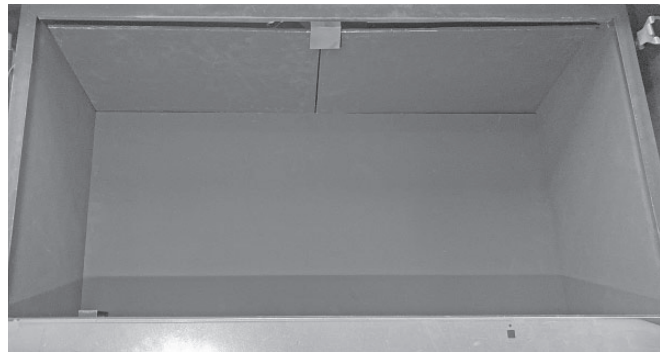
Installation

Birch Log Kit 1505BLKV2

Material required
• Black steel platform (supplied with appliance)
• Birch Log Kit containing:
  • 8 logs
  • 1 bag of mixed grey embers (6 cup bag)

Installation
1. Carefully unpack the kit, as the logs are fragile.
2. Install the steel platform around the burner as indicated. The openings in the platform should be underneath.
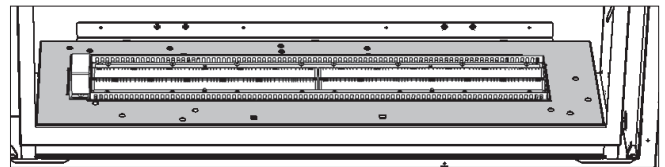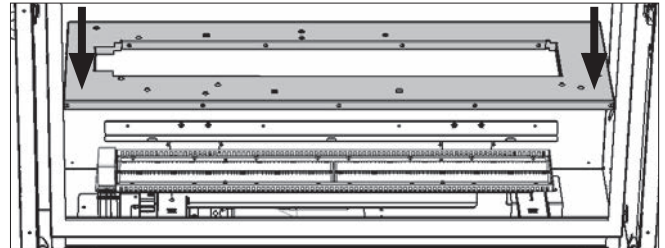
Installed platform

3. Place log L30 with the pin inserted in the hole as shown. Put the other end of the log gently on the pilot shield.
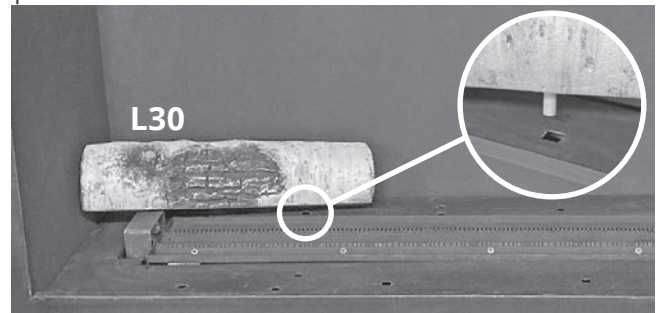
4. Place log L2 with the pin inserted in the hole in L30 as shown, across the burner to the front of the media platform.
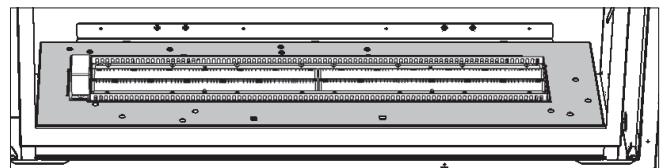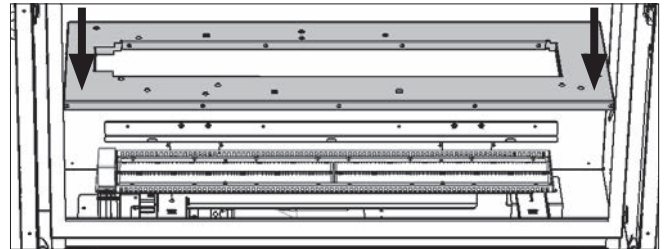

> ## Note:
> Use of this log set may increase the possibility of soot formation when air shutters are set to the minimum setting. Although LT1 units are fitted with a minimum air shutter stopper intended to prevent sooting with most log sets, it is possible some sooting may occur when using this log set and the air shutter is set to minimum position.
>
> Evaluate the flame picture carefully after the unit has warmed up for fifteen minutes, and avoid setting the air shutter to minimum when there is limited rise in the venting system or the flame appears overly luminous and lazy with smoke trailing off the flame tips.
>
> Refer to page 56 for the location and function of the air shutter adjustment lever.
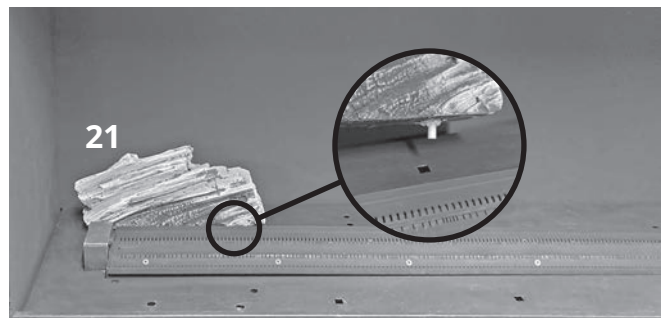
Installation

5. Place log L12 onto the corner of the burner as shown.
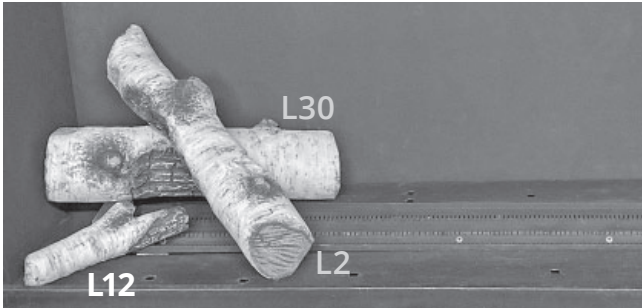
6. Place log L31 across the platform as shown with the pin inserted in the front hole as shown.
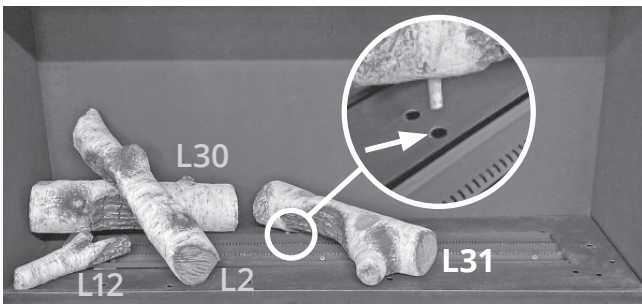
7. Place log L6 from the notch on top of L31 to the rear of the media platform.

8. Place log L1 from the notch on top of L31 and onto the front of the media platform.

9. Place log L32 with its bottom cutout around the corner of the burner (about 1/8" away from the burner).
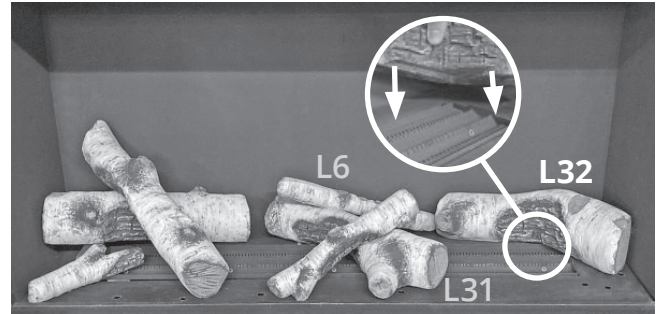
10. Place log L4 in the notch on top of L32 and across the burner.

11. Place (do not pour) embers by hand on the burner and media platform.

12. Place splinters to preference.

> ⚠ **WARNING**
> **Choking Hazard! Ensure that the fireplace area is clear of embers / splinters as these could be ingested by small children. Vacuum area after installation.**

IMPORTANT: Approved for use only with the ceramic embers and splinters provided with your Valor fireplace. The use of any other products may void your fireplace warranty.
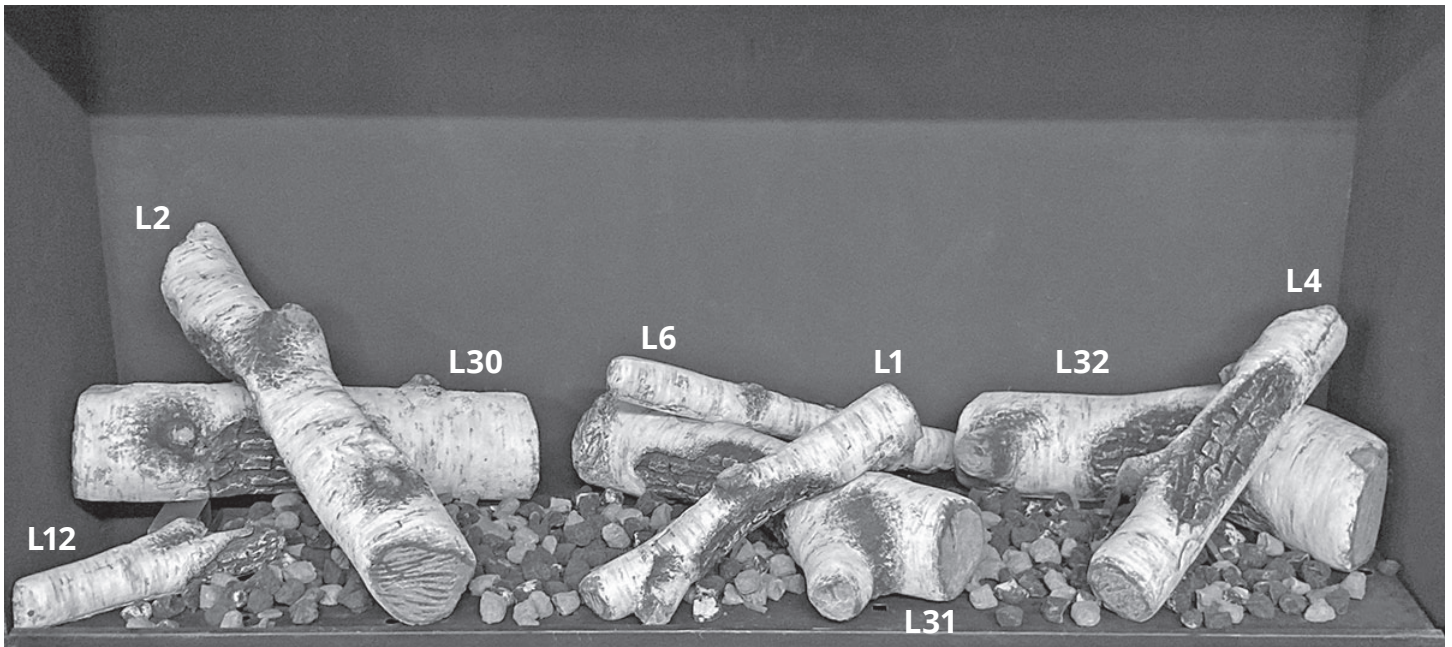
Installation

Driftwood Kit 1505DWKV2

Material required
• Black steel platform (supplied with appliance)
• Driftwood Kit containing:
  • 6 logs
  • 6 pebbles
  • 1 bag of vermiculite

L18

L33

L34

L16

L36

L35

Note:

Use of this log set may increase the possibility of soot formation when air shutters are set to the minimum setting. Although LT1 units are fitted with a minimum air shutter stopper intended to prevent sooting with most log sets, it is possible some sooting may occur when using this log set and the air shutter is set to minimum position.

Evaluate the flame picture carefully after the unit has warmed up for fifteen minutes, and avoid setting the air shutter to minimum when there is limited rise in the venting system or the flame appears overly luminous and lazy with smoke trailing off the flame tips.

Refer to page 56 for the location and function of the air shutter adjustment lever.

Installation

1. Carefully unpack the kit, as the logs are fragile.
2. Install the steel platform around the burner as indicated. The openings in the platform should be underneath.

Installed platform

3. Carefully spread some of the vermiculite on the surface of burner patting it gently with your hand to form a single layer to the approximate level of the top of the flange at the edge of the burner. Do not pour too much to avoid blocking the burner ports. **NOTE:** Ensure the area within the pilot shield is clear of vermiculite.

Pilot shield

Installation

4. Place log L34 with the pin in the hole as shown. The left end of the log should rest gently on the pilot shield.
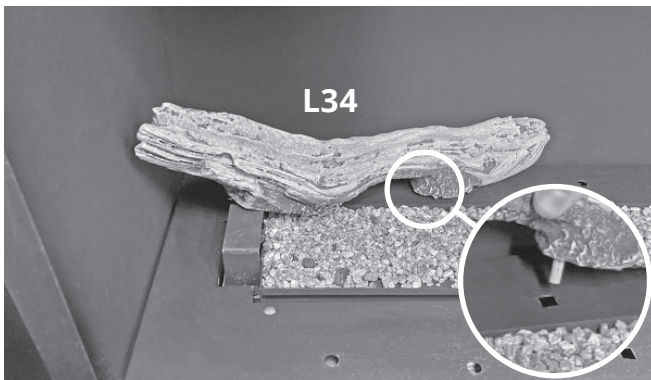
5. Place log L33 with the pin in the hole as shown, and rest gently on the pilot shield.
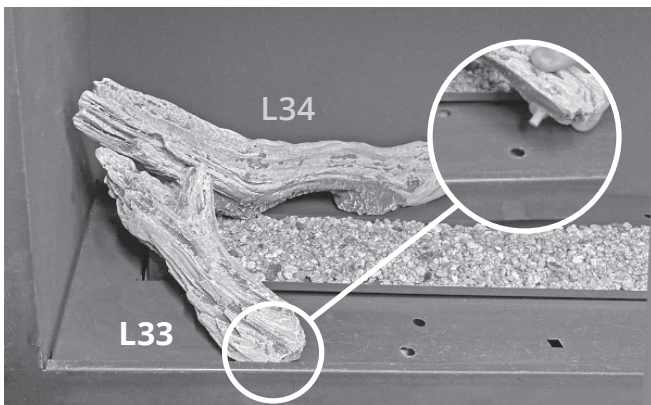
6. Place log L18 with the pin in the hole as shown, across the burner to the rear side. The rear leg of the log should just touch the burner.
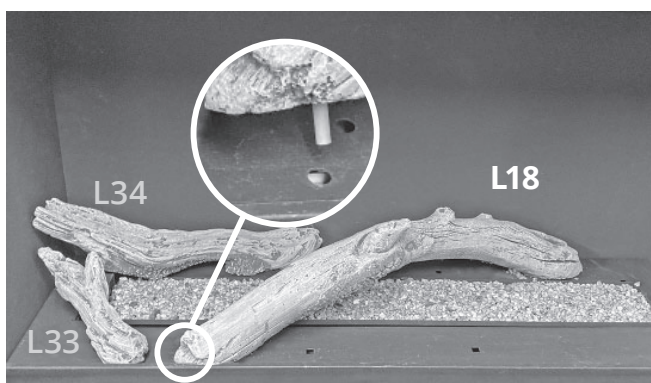
7. Place log L16 from the front side of the platform onto the natural curve in log 18 as shown.
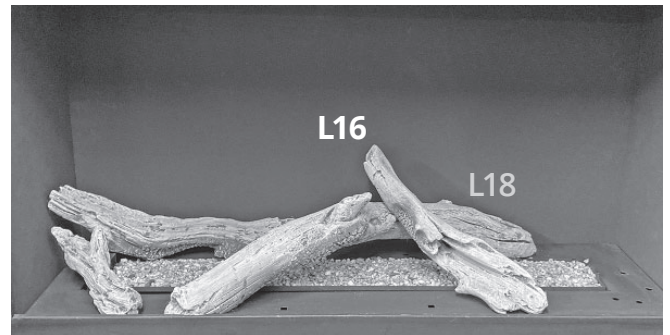
8. Place log L35 on the front of the platform as shown (it should not rest on the burner's edge).
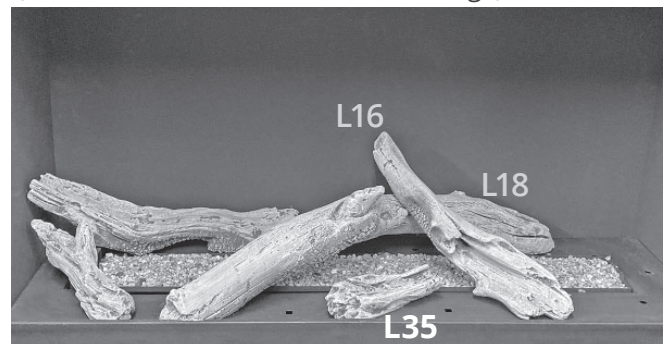
9. Place log L36 with the pin in the hole as shown.
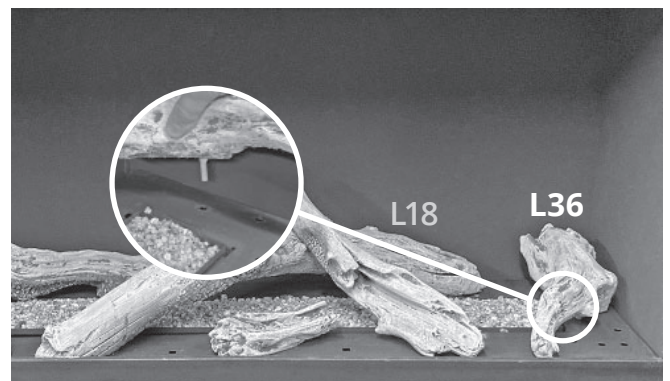
Installation

10. Place pebbles as desired. The two smallest pebbles can go directly on the burner.

11. Place by hand (do not pour) remaining vermiculite around logs on the platform.

IMPORTANT: Use only the vermiculite provided with your Valor fireplace The use of any other types of material may void your fireplace warranty.

⚠ **WARNING**

Choking Hazard! Ensure that the fireplace area is clear of vermiculite pieces as these could be ingested by small children. Vacuum area after installation.
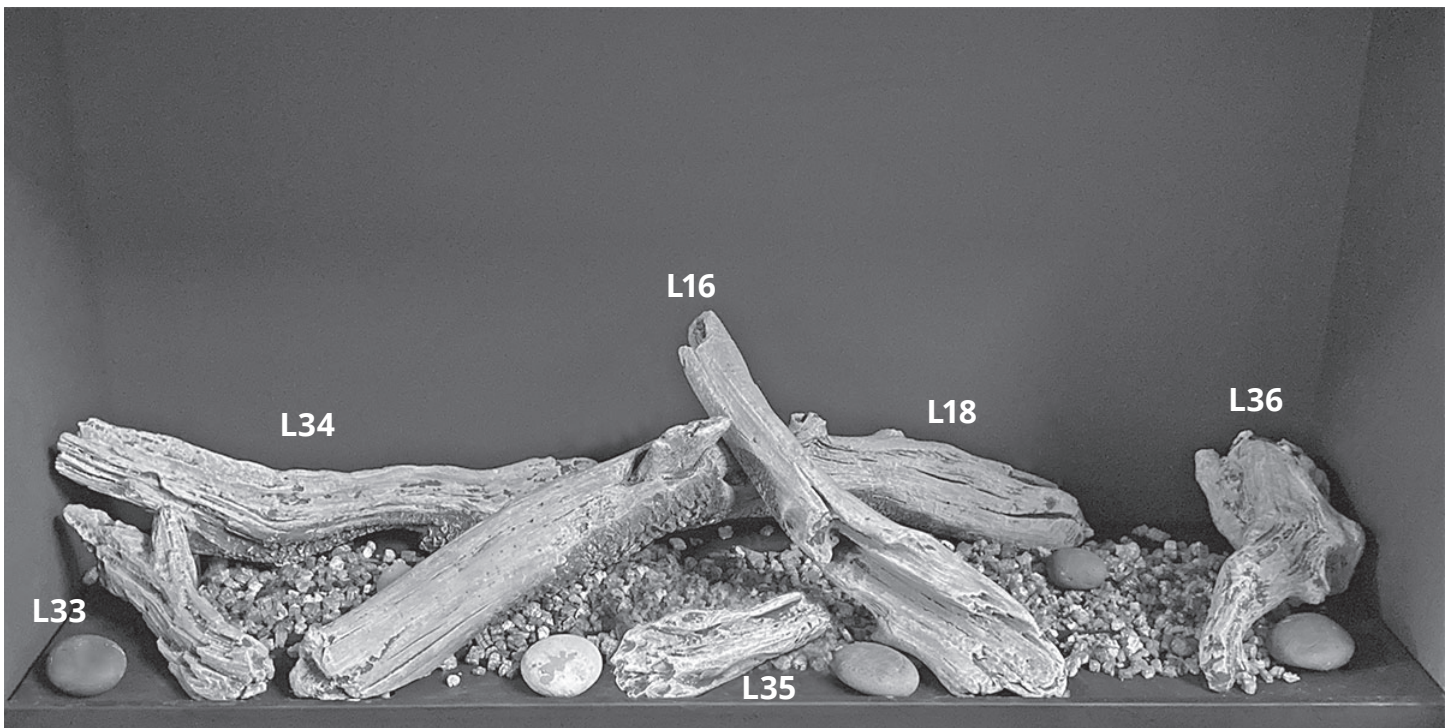
Installation

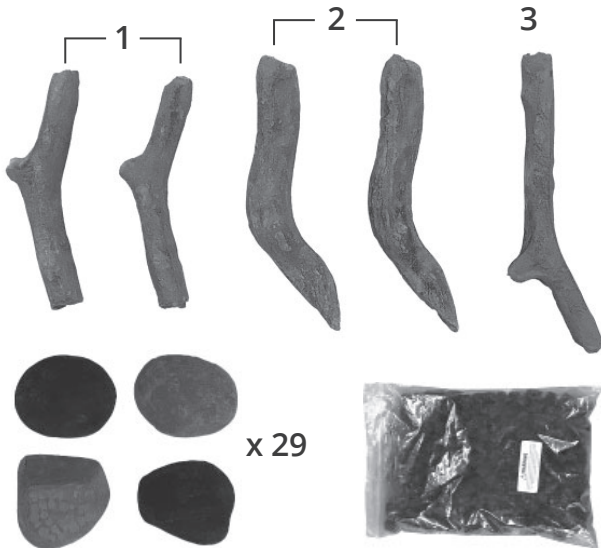## Split Wood Kit 1505SWKV2

Material required

• Black steel platform (supplied with appliance)

• Split Wood Kit, which contains:
    • 9 logs (numbered)
    • 1 bag of gray/black embers

> ## Note:
>
> Use of this log set may increase the possibility of soot formation when air shutters are set to the minimum setting. Although LT1 units are fitted with a minimum air shutter stopper intended to prevent sooting with most log sets, it is possible some sooting may occur when using this log set and the air shutter is set to minimum position.
>
> Evaluate the flame picture carefully after the unit has warmed up for fifteen minutes, and avoid setting the air shutter to minimum when there is limited rise in the venting system or the flame appears overly luminous and lazy with smoke trailing off the flame tips.
>
> Refer to page 56 for the location and function of the air shutter adjustment lever.

### Installation

1. Carefully unpack the kit, as the logs are fragile.
2. Install the steel platform around the burner as indicated. The openings in the platform should be underneath.

Installed platform

3. Place log 21 as shown with the pin in the hole, set back about 1/4" from the burner.

4. Place log 22 from on top of log 21, across the burner to the front platform.
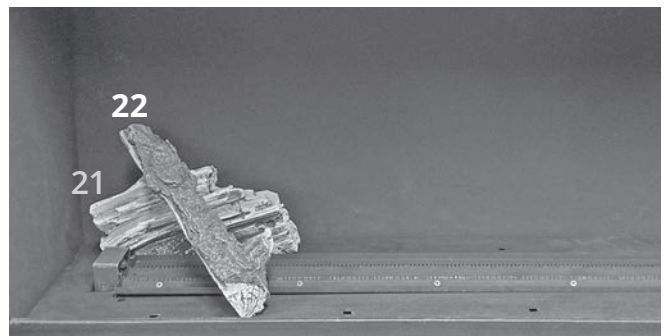
Installation

5. Place log 20 as shown, on top of the pilot shield.
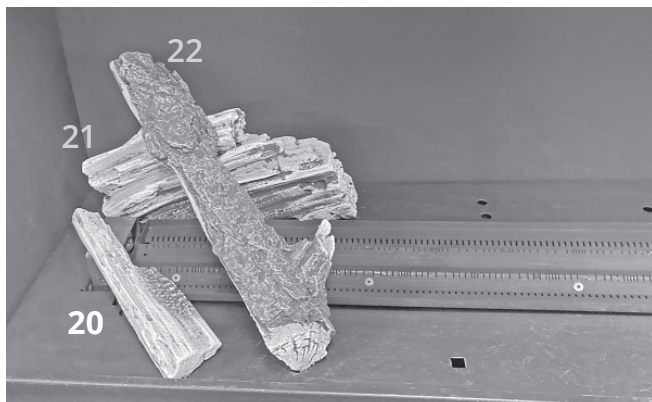
6. Place log 25 with the pin in the front platform.
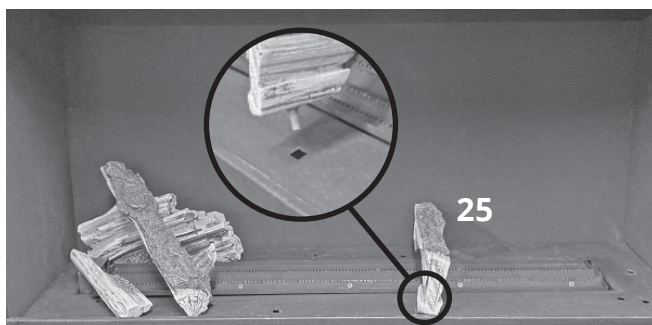
7. Place log 26 as shown, from on top of log 25 to the platform. Insert the pin into the hole closer to the burner.
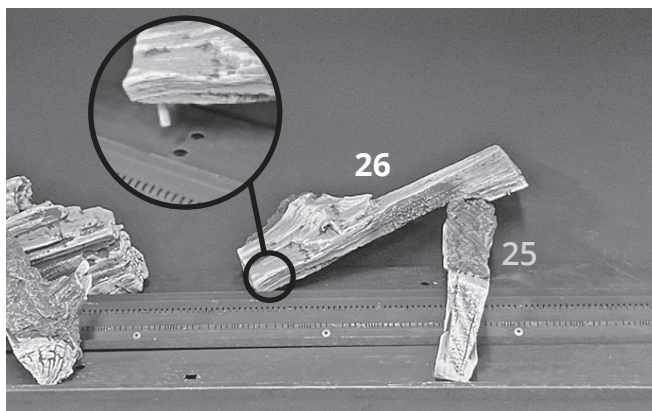
8. Place log 23 from the front platform to the top of 26.
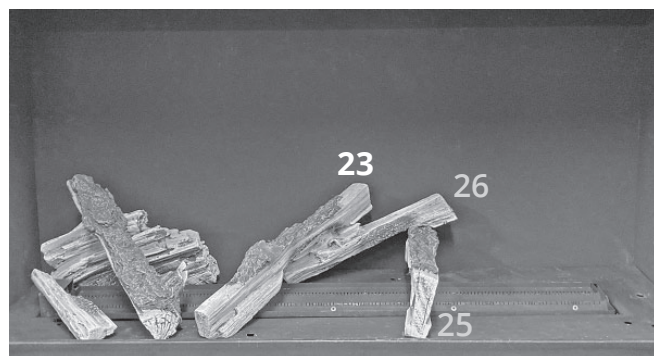
9. Place log 24 into the notch on top of 23.
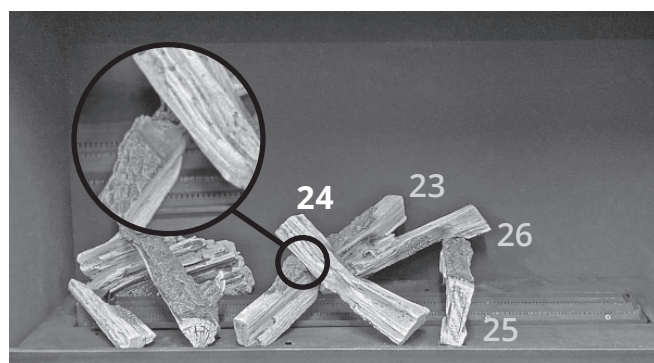
10. Place log 28 as shown. There is a cutout that fits over the right rear corner of the burner - the log should be placed 1/8" away from the burner, not directly against it.
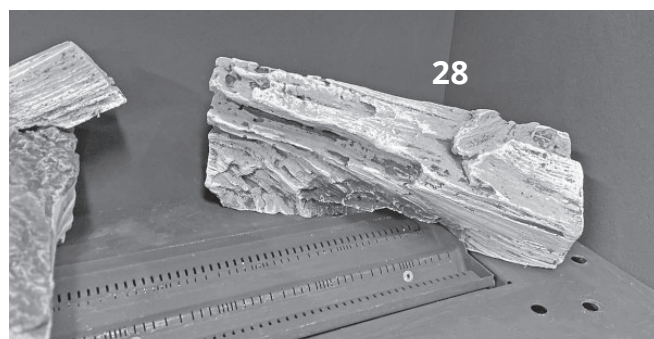
11. Place log 27 on top of log 28 to the front of the platform.

12. Place by hand (do not pour) embers among the logs.

IMPORTANT: Approved for use only with the ceramic embers provided with your Valor fireplace. The use of any other products may void your fireplace warranty.

⚠ **WARNING**

Choking Hazard! Ensure that the fireplace area is clear of embers / splinters as these could be ingested by small children. Vacuum area after installation.
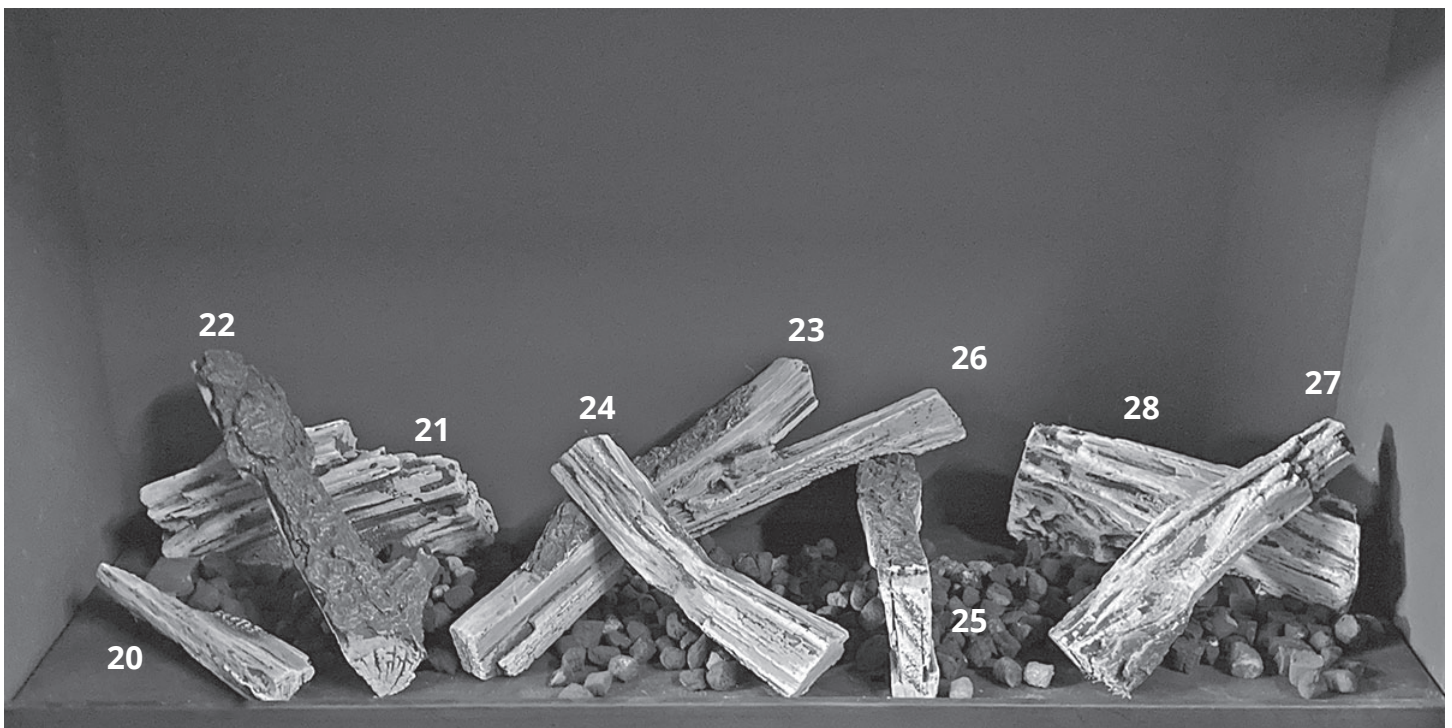
Installation

Decorative Glass Murano 1500DGM

Material required
• Steel platform (supplied with appliance)
• Decorative Glass Murano Glass kit, which contains:
   • 1 glass platform
   • 1 bag of clear 1/2" fireglass

Installation
Carefully unpack the kit.

1. Install the steel platform around the burner as indicated. The openings in the platform should be underneath. The edge of the burner protrudes above the platform.
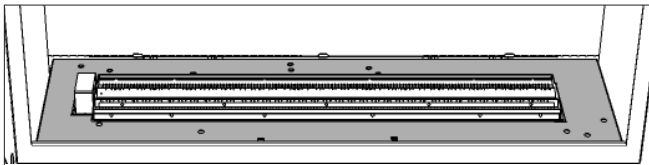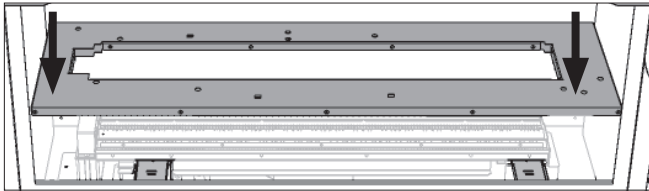

Installed platform

2. Install the glass plate on the platform, the textured side underneath and the smooth side on top. The plate is flush with the edge of the burner.
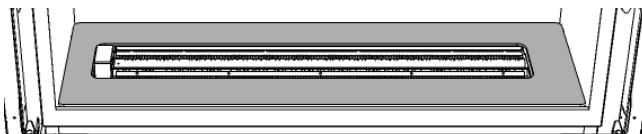
Installed glass plate

3. Carefully spread the fireglass on the surface of burner patting it gently with your hand to form a single layer to the approximate level of the top edge of the flange around the burner. Do not place too much to avoid blocking the burner ports.
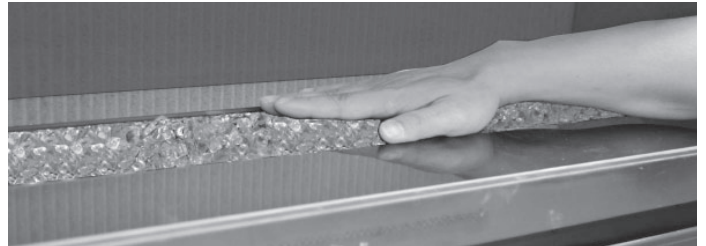
4. Some fireglass may be added on the platform to cover the edge of the burner and in the space in front and behind the pilot shield.
   NOTE: Ensure the area *within* the pilot shield is clear of fireglass.

Pilot shield
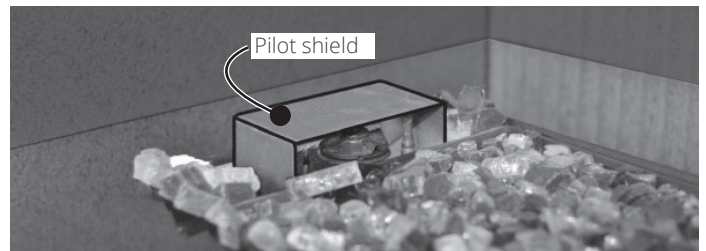
IMPORTANT: Approved for use only with the fireglass provided with your Valor fireplace or the tempered crushed fireglass brands *American Fireglass™* or *firegear*. The use of any other fireglass products may void your fireplace warranty.

⚠ **WARNING**

Choking Hazard! Ensure that the fireplace area is clear of fireglass particles as these could be ingested by small children. Vacuum area after installation.

49

Installation

Rocks & Shale Set 1514RSS

Material required
• Black steel platform (supplied with appliance)
• Rock & Shale Set, which contains:
  - 5 twigs
  - 29 rocks (assorted colors)
  - 1 bag of 3/4" grey/black shale
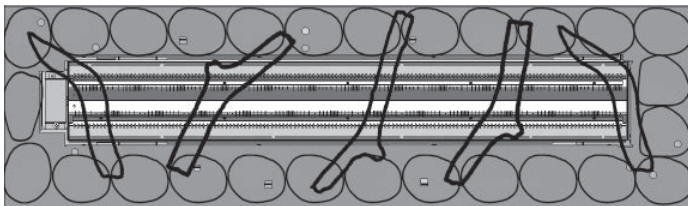
x 29

Overview

Installation
1. Carefully unpack the kit, as the logs are fragile.
2. Install the steel platform around the burner as indicated. The openings in the platform should be underneath.
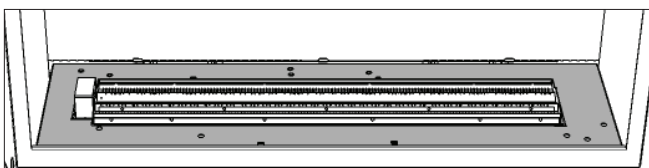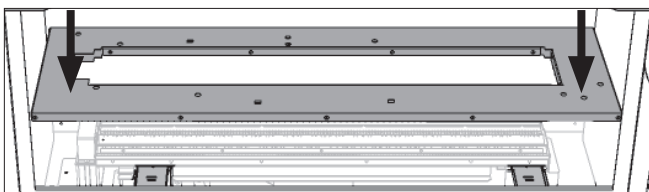
Installed platform

3. Place the rocks around the burner, on the media platform.
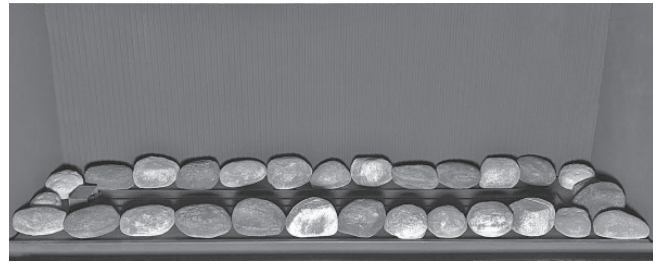
4. Place the first twig #2 as shown, from on top of the rear rocks, across the burner, to the media platform. It should not rest directly on the burner.
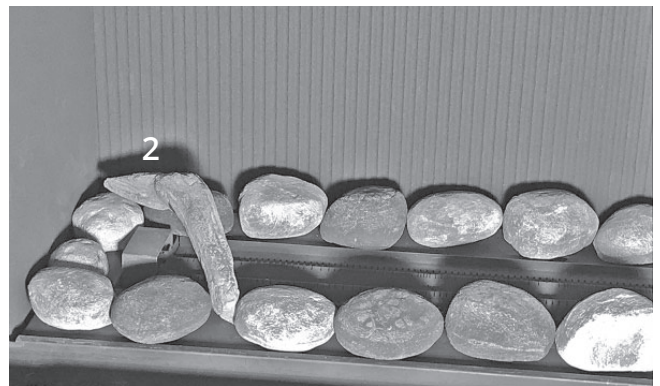
> **IMPORTANT:** All twigs installed in this kit should be resting on the rocks, not the burner, as much as possible.

5. Place the first twig #1 as shown. Do not place it directly on the burner.
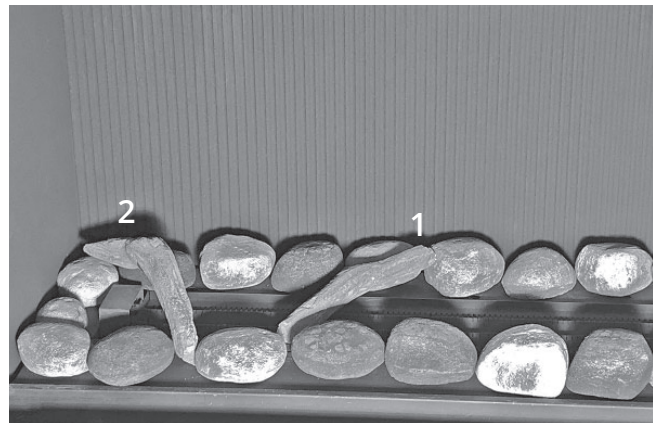
Installation

6. Place twig #3 as shown. Do not place it directly on the burner.
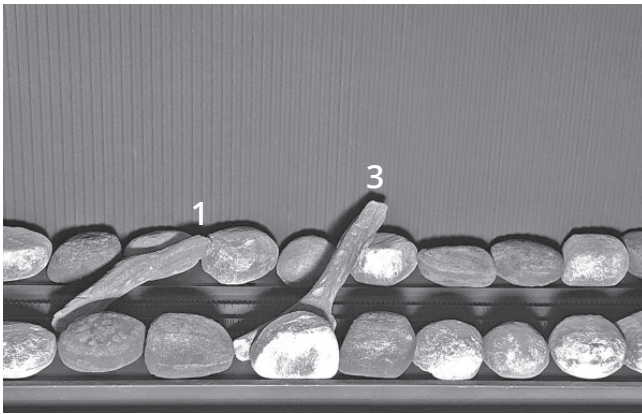
7. Place the second twig #1 as shown. Do not place it directly on the burner.
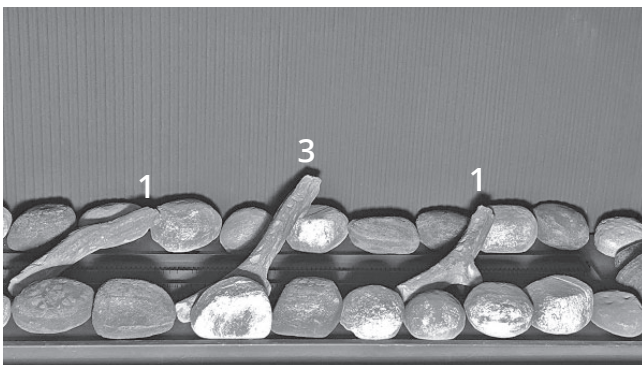
8. Place the second twig #2 as shown. Do not place it directly on the burner.
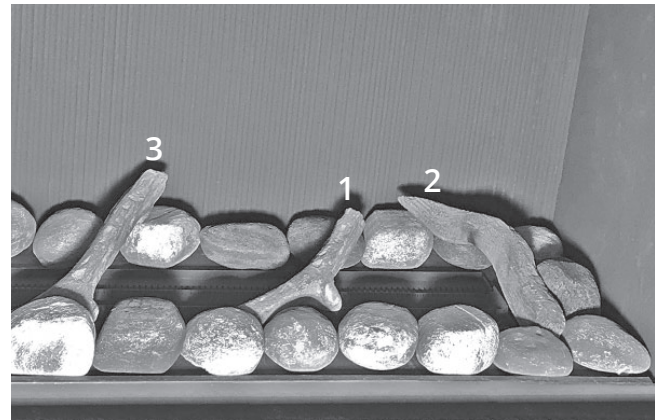
9. Place (do not pour) the shale directly onto the burner.

IMPORTANT: Use only the ceramic rocks, twigs and shale provided with your Valor fireplace The use of any other types of rocks, twigs or shale may void your fireplace warranty.

⚠ **WARNING**

Choking Hazard! Ensure that the fireplace area is clear of shale pieces as these could be ingested by small children. Vacuum area after installation.
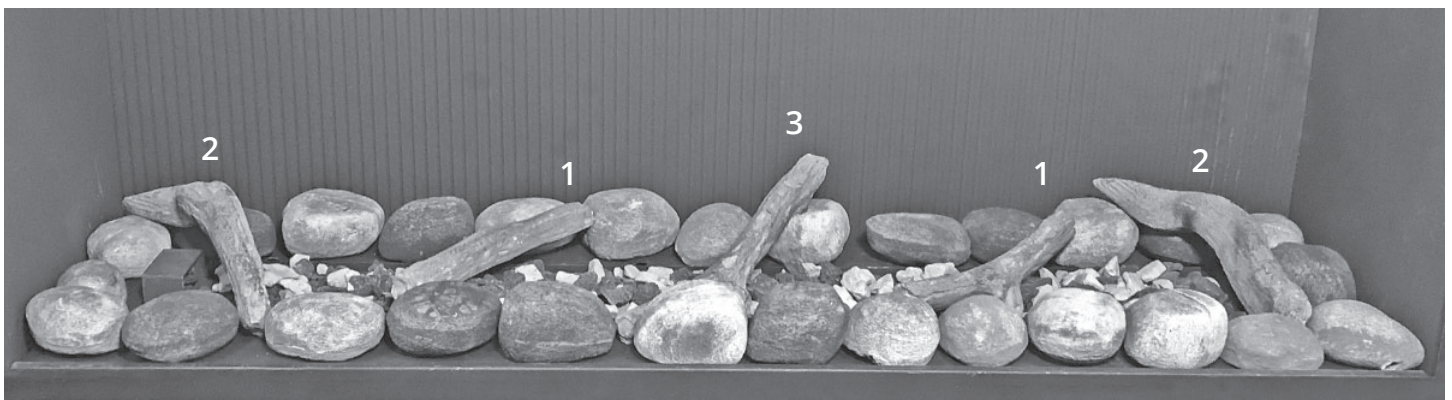
Rocks & shale fuel bed installed

Installation

Install Remote Battery and Wall Switch Kit (required)

The Remote Battery and Wall Switch Kit is provided with this appliance. It connects to the receiver in the fireplace.

The receiver is located under the firebox, left of the control valve. It is maintained in position with **Velcro** strips.

1. Pull out the receiver from its location to connect the battery holder and wall switch.

2. Feed the 'white connector end' of the harness assembly through side holes in fireplace liner body to receiver. Ensure sufficient harness length to allow for removal of receiver. Note - coil up any extra harness at fireplace end.

3. Connect switch to auxillary 5-pin junction and power connection to jack.
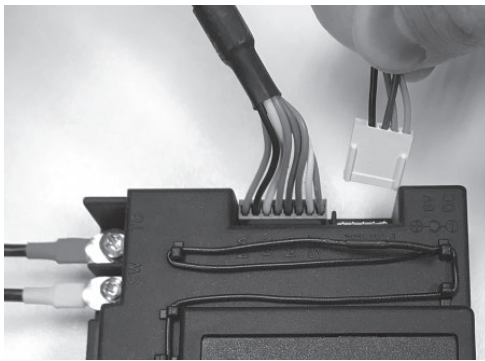
IMPORTANT: The connection can only be done one way.
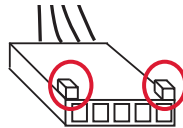
Do not force it or damage the pins on the receiver box!

⚠ Caution

DO NOT PUT BATTERIES IN THE BATTERY HOLDER until the wires are connected to the burner control unit as short-circuit could result in the destruction of the electrical components.

Do not run the switch wire over the top of the firebox. Route the wire so it does not contact the firebox.
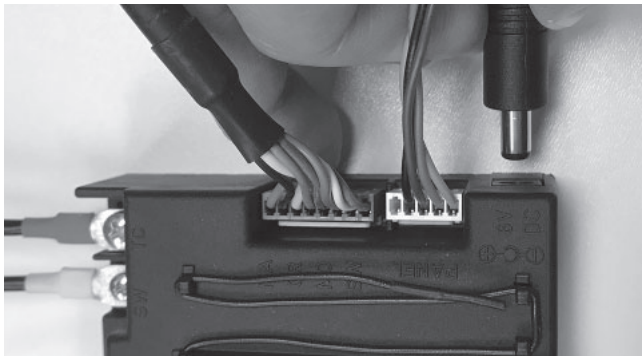
4. Run harness assembly to mounted position of junction box, securing harness to framing using insulated staples (not included)

5. Feed harness assembly through a restrain on rear of junction box, feeding through until harness sheath is pinched by retainer and providing sufficent length to make connection to rear of switch and battery holder.

Harness assembly sheath

Harness restrain
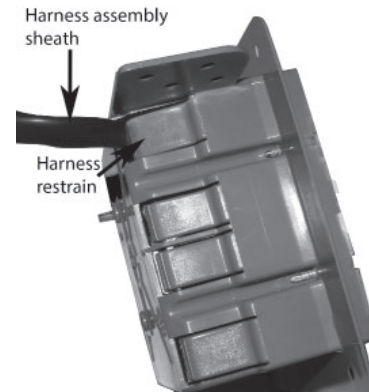
6. Secure junction box to the mounting surface using appropriate fasteners (not included).

7. Align molex connection on switch cable of harness assembly and connect to switch.
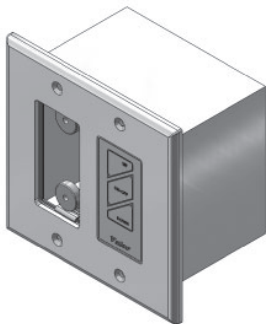
8. Mount switch plate to junction box with 2 long screws provided. Note: switch position left or right to suit homeowner wishes.
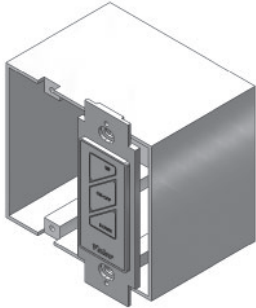
9. Locate and secure magnet plate using 2 'long' screws provided
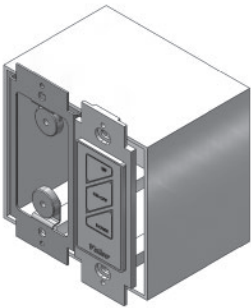
10. Place and secure cover plate to box using 4 screws provided

> ⚠ **Caution**
>
> **DO NOT USE a screwdriver or other metallic object to remove the batteries from the battery holder or the handset! This could cause a short circuit to the receiver.**
>
> **To avoid short-circuit to the receiver, position the antenna so that it DOES NOT TOUCH the ignition wire.**

11. Feed cable tie through the 2 side slots of battery cover assembly.

12. Position battery holder to rear face and secure together with cable tie. Note: clearance is required for battery snap connection.

Cable tie

Side slot

Snap connector

Rear view

Front view
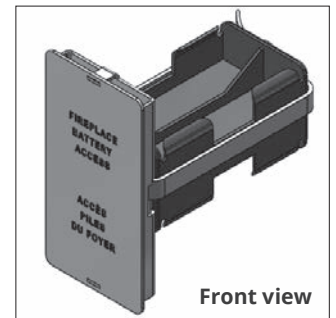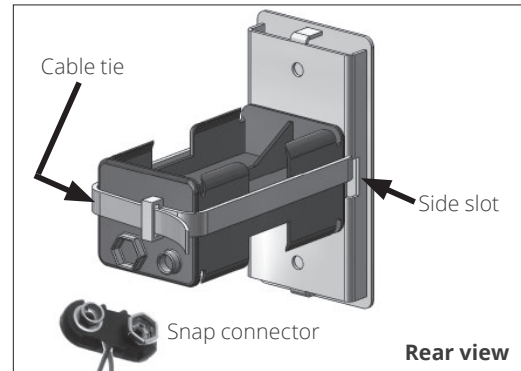
13. Make the snap connection, load 4 AA alkaline batteries into holder (included with fireplace) then feed back into junction box assembly.
    Note: Do not put batteries in the receiver, only in the battery holder by the wall switch.
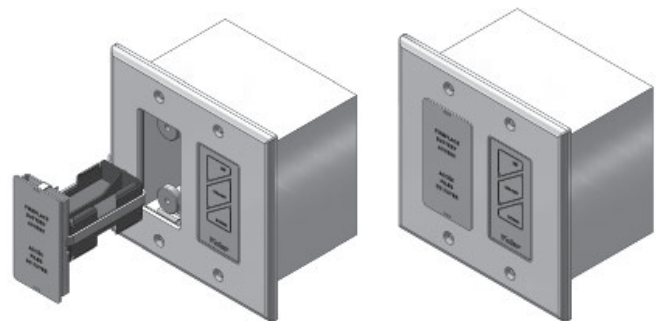
14. Test the operation of the wall switch—see ""Appendix C—Wall Switch Operation" on page 71.

Installation

Radio Frequency

918.0 MHz for USA and Canada.

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.
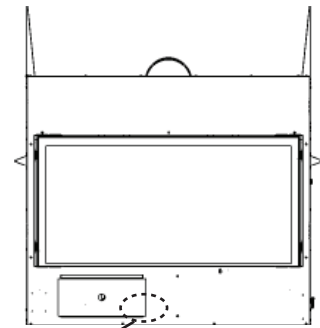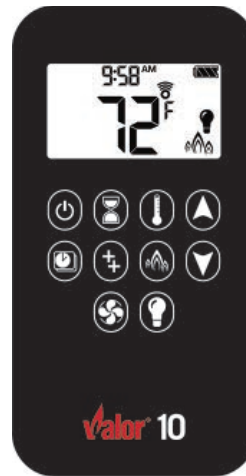
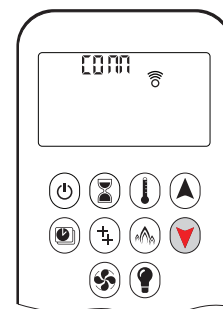Receiver on base of unit behind gas valve
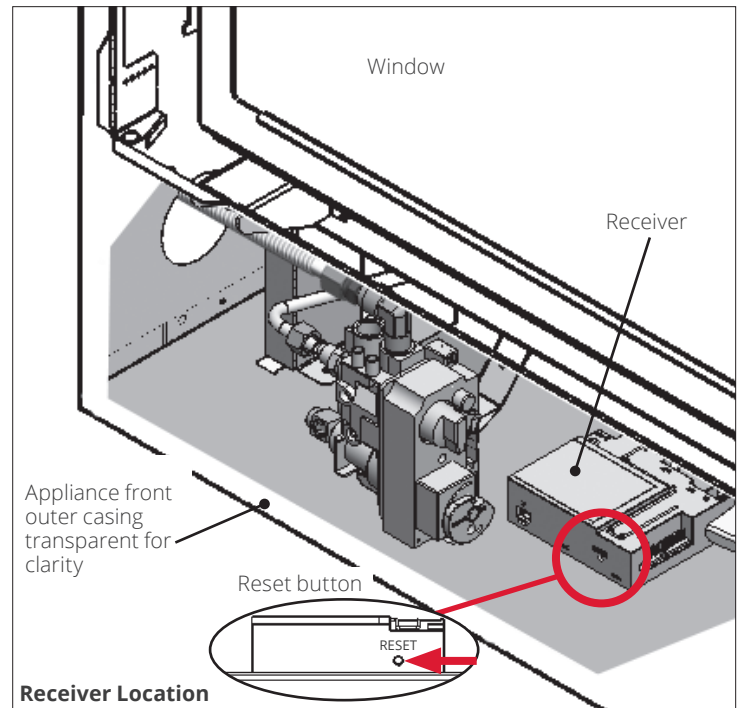
Remote Control Initial Pairing

The receiver and the handset of the remote control system must be initially paired before the first use. (Note that batteries must already be installed in the wall mounted battery holder)

1. Insert two 1.5 V AAA **alkaline** batteries in the handset.
2. Locate the Reset button on the front side of the receiver (you may need to pull the receiver from the *Velcro*).
3. With a thin object, press and hold the receiver's RESET button until you hear one short and one long beeps. After the second beep, release the reset button.
4. Within the subsequent 20 seconds, press and hold the ▼ button on the remote handset for 2-3 seconds. ⌂⌂⌂ will be displayed on the handset during the pairing sequence. You will hear two short beeps confirming the pairing is done.

If you hear one long beep, the pairing sequence has failed or the wiring is incorrect.

This is a one time pairing only and is not required when changing the batteries of the handset or battery holder. The remote control system is now ready to use.

Replace receiver onto *Velcro* if removed.

Window

Receiver

Appliance front outer casing transparent for clarity

Reset button

RESET

Receiver Location

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Installation

Install Remote Control Handset Wall Holder

The remote control kit for this fireplace comes complete with a wall-mounted holder. This holder is not required in all installations but is provided as an optional feature for those customers who wish to mount the remote handset to the wall.

To install the holder to the wall, find a convenient location and use the hardware provided with the kit. Cover the screws with the included caps to finish the mounting.

Once mounted, the holder is magnetic - simply place the remote gently into the holder.

IMPORTANT: The location of the remote control handset is important to assure proper temperature regulation. To obtain a constant temperature, we recommend that the handset should be **between 3 and 15 feet away from the appliance but not directly above it**. We also advise that the handset should be located away from any other heat source and not in direct sunlight as this may affect the temperature sensor located in the remote handset.

Installation

Checking Operation

Turn the fireplace flame up and down using the remote control to confirm that the full range of inputs is achieved—see the remote control operation instructions in "Appendix B—Remote Control Operation" on page 64.

Adjusting Aeration

Light the fire and allow the unit to warm up for 10–15 minutes to evaluate the flame picture. The burner is equipped with an adjustable shutter to control primary aeration. The shutter is factory-set to an aeration gap which will give optimum performance for the vast majority of installations.

Depending of the fuel bed used, altitude and other considerations, the flame picture may be improved by adjusting the aeration. The need for adjustment should be determined only by operating the appliance with the fuel bed, panels and window installed and evaluating the flame picture after a 15-minute warm-up.

Increasing aeration will cause the flames to appear more transparent and blue showing more ceramic effects glow.

Decreasing aeration will cause the flames to appear more yellow or orange showing less ceramic effects glow.

Too little aeration may result in black carbon forming on logs or roof panel and dropping into the firebox.

Locating Aeration Control

Aeration control location
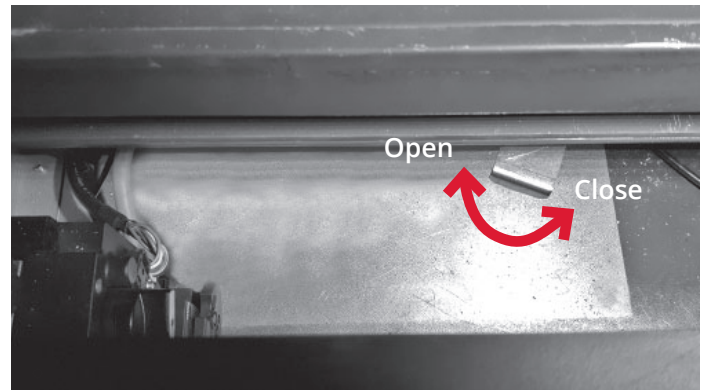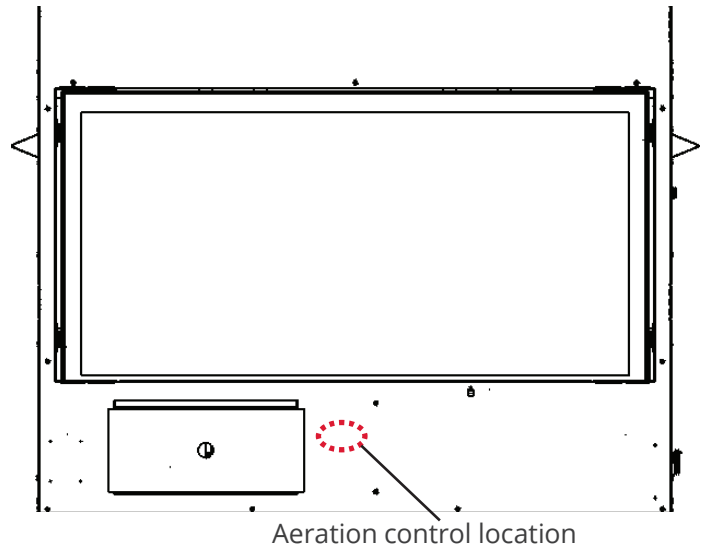
Top view—Air shutter lever located under the firebox behind the front panel
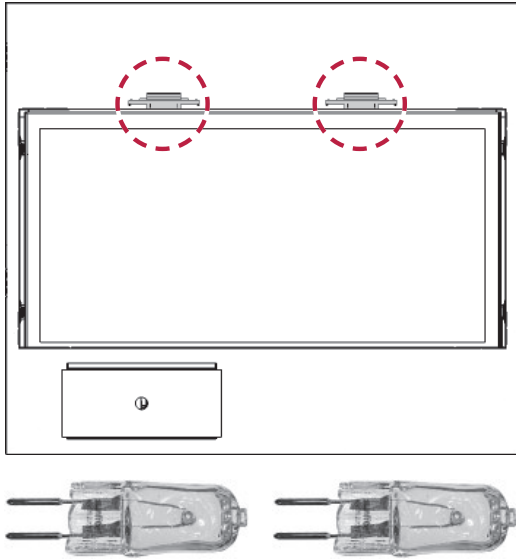

⚠ **WARNING**

Ensure electrical power is disconnected from the fireplace before commencing work.

Installation

This appliance comes with built-in decorative lighting (see page 66 for use instructions). If a bulb is burned out upon installation, it can be replaced. The light bulbs are housed inside two shields, behind the front cover and above the front window as shown.

Two G6.35 35W halogen bulbs are required for replacement. Always replace both bulbs at once. Do not use bulbs rated more than 50W.

> ⚠ **WARNING**
>
> **The lightbulbs in this appliance get very hot when turned on, regardless of whether the fireplace's main flame is on. Ensure both the lights and fireplace have a one hour cool down time after either has been active to avoid serious injury.**

> ⚠ **WARNING**
>
> **DO NOT access lamps from inside the firebox!**

Note: The front cover and convection baffle are shown removed for clarity in these instructions. It is not necessary to remove the front cover or convection baffle to carry out these steps. Removing the window is not necessary, but may make accessing the lights easier. See page 30 for details on how to remove the window.

Checking Decorative Lighting

> 💡 **Wear gloves when changing these bulbs. Most bulb manufacturers recommend no skin contact as oil from skin can shorten the bulbs' lifespan.**

1. Slide both light shields back and out of their retaining clips (left side first, then right).
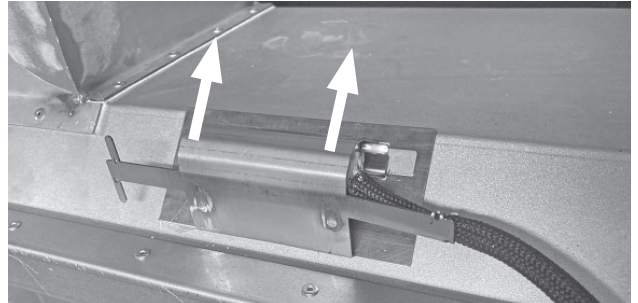
2. Remove both old bulbs by pulling them straight out of the light shields.

3. Insert 2 new G6.35 35W halogen bulbs into the ceramic receptacles in the light shields of the wiring harness.
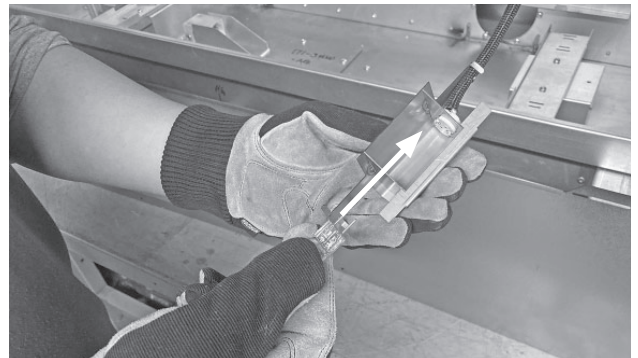
4. Test lighting using the remote control. (see page 66 for details)

5. Firmly slide the light shields down into the clips.
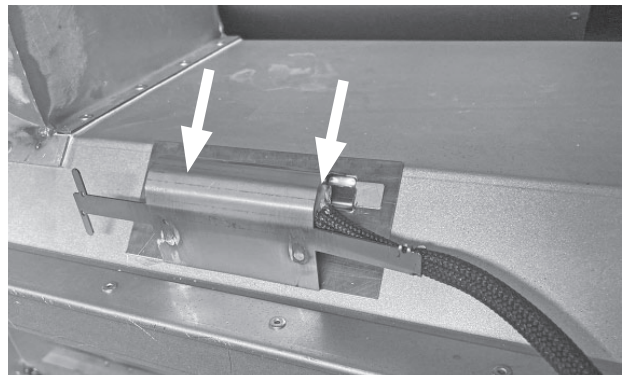
6. Restore power to the fireplace.

7. Reinstall window if it was removed (see page 31 for details).

Installation

Install Trim and Barrier Screen

Install the trim chosen by the customer for their fireplace. Install as well the barrier screen which is provided with the trim.
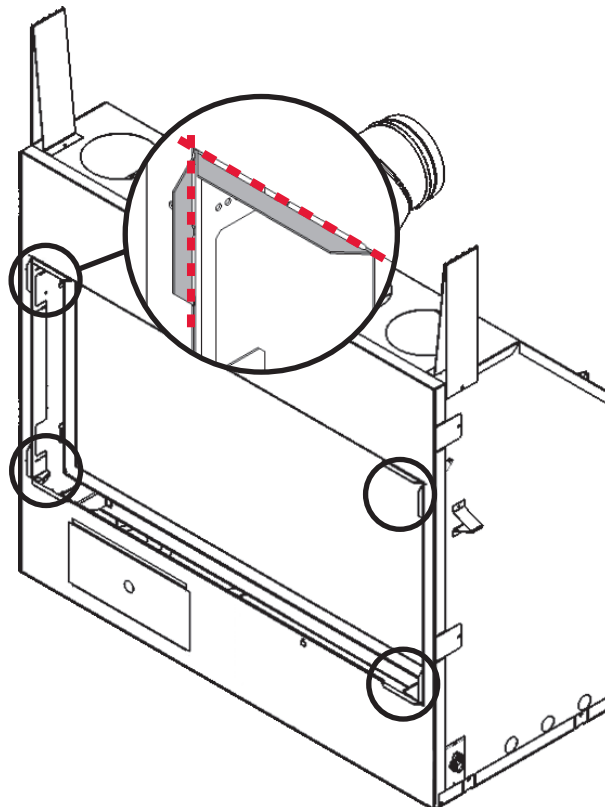
Show the customer how to remove the barrier screen and other parts to access the controls.

Follow the instructions provided with the trim and leave those instructions behind for the customer's further reference.
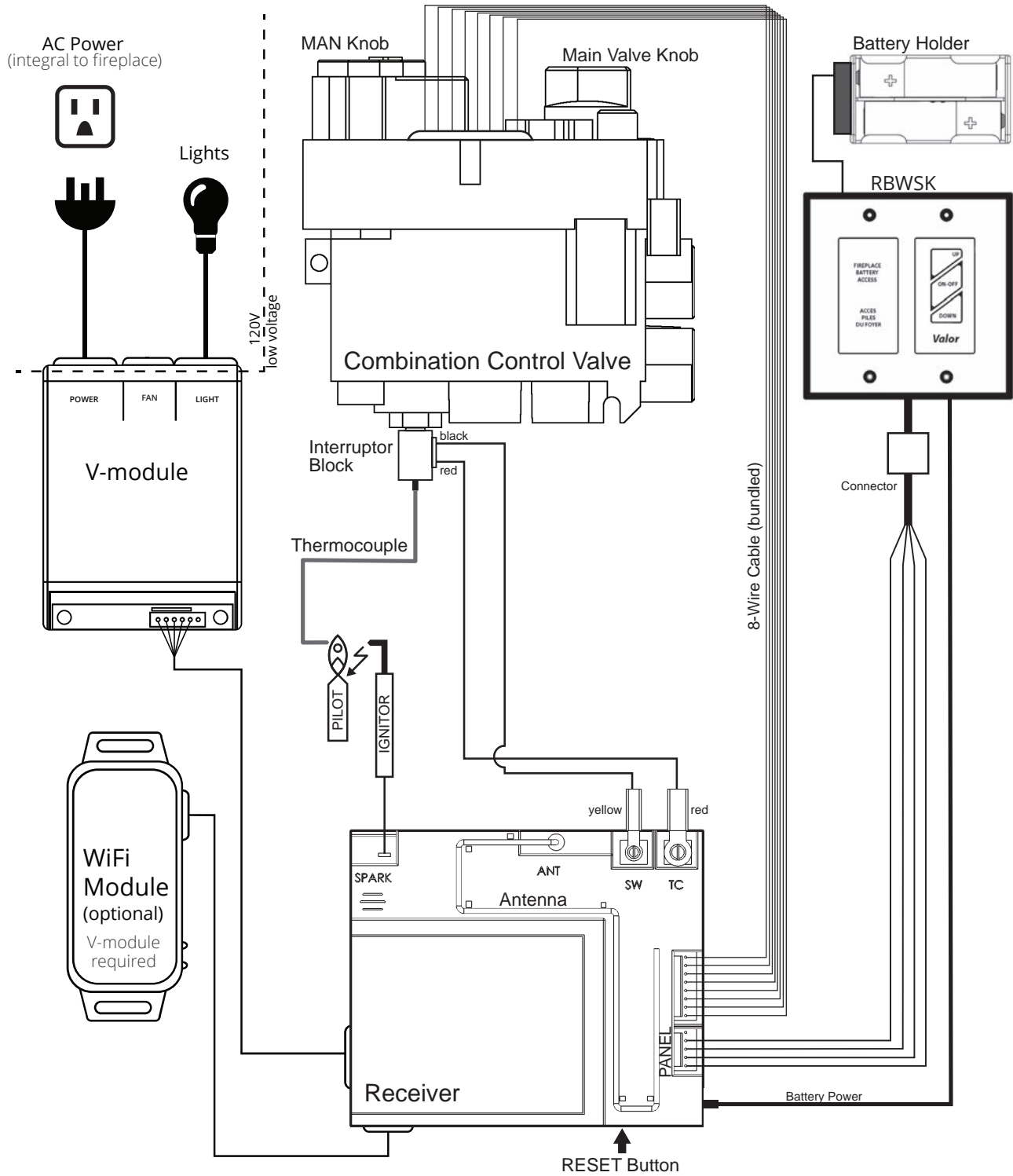
2530CIK—Clean Installation Kit ONLY

If you are installing the 2530CIK Clean Installation Kit, you need to do it **BEFORE the non-combustible board**.

Break off tabs from each corner of the fireplace's front opening (8 tabs, 2 at each corner). Bend tabs back and forth to break them, or cut them with tin snips as indicated in the kit's installation instructions.

Wiring Diagram

GV60 Wiring Diagram

AC Power
(integral to fireplace)

Lights

120V low voltage

V-module

POWER | FAN | LIGHT

MAN Knob

Main Valve Knob

Combination Control Valve

Interruptor Block

black
red

Thermocouple

PILOT

IGNITOR

WiFi Module
(optional)
V-module required

SPARK

ANT

Antenna

SW

TC

yellow | red

Receiver

PANEL

RESET Button

Battery Holder

RBWSK

FIREPLACE BATTERY ACCESS

ACCES PILES DU FOYER

UP
ON-OFF
DOWN

Valor

8-Wire Cable (bundled)

Connector

Battery Power

⚠ **WARNING**

Electrical connection IS NOT ALLOWED when adapting appliance for outdoor use.

Approved Venting Components

Venting Parts Description	DURA-VENT	SELKIRK	ICC EXCEL DIRECT	AMERIVENT	MILES INDUSTRIES	BDM
Termination Caps — Horizontal						
Standard Co-axial	46DVA-HC	4DT-AHC	TM-4HT	4DHC round	658DVK2	DVR6-HC
Deluxe Co-axial	—	—	TM-4RHT	4DHCS square	—	DVR6-HCP
High Wind Co-axial	46DVA-HC	—	TM-DHT	—	—	—
Termination Caps — Vertical						
Standard Co-axial	46DVA-VC	4DT-VT	—	4DVC / 4DH-1313 / —	—	DVR6-VCH / DVR6-VCSB
High Wind Co-axial	46DVA-VCH	—	TM-4SVT	—	—	—
Extended Co-axial	46DVA-VCE	—	—	—	—	—
Co-linear	46DVA-CL34 / 46DVA-CL34P	4DT-34IK35 (3x4 kit)	TM-IVT	HCL-99-43 / HCL-913-43 / HCL-1313-43 / DVIK43	559CLT	942034 / 940034B / 940034HWS / 940034RD
Snorkel, 14" Rise	46DVA-SNK14	4DT-ST14	TM-4ST14	4D14S	—	DVR6-SNK14
Snorkel, 36" Rise	46DVA-SNK36	4DT-ST36	TM-4ST36	4D36S	—	DVR6-SNK36
Vent Adapters						
Co-axial-to-Co-linear Adapter	46DVA-GCL34 / 46DVA-34CLAA	ADT-AAC	TM-4CAA	4DCAB43	1156CLA	DVR6-A34
Co-linear-to-Co-axial Adapter	46DVA-CT / 46DVA-34CLTA	ADT-CTB	TM-CTA	4DCAT43	—	DVF34-A6
Aluminum Flexible Liner						
3" or 4" diameter	NOTE: 2-ply liner approved to CAN/ULC S635 suitable for venting gas appliances. As manufactured by Z-Flex, Flexmasters or others.					
3" or 4" diameter	2280 Series	AF3-35L	TM-ALK43 / TM-ALT43	—	—	952703 / 952704
Adjustable Pipe Length and Pipe Extensions 4" x 6-5/8"						
Galvanized or Black	46DVA-08A / 46DVA-08AB (3" to 7")	—	—	4D7A or 4D7AB (3" to 5")	—	DVR6-08A / DVR6-08AB
Galvanized or Black	46DVA-16A / 46DVA-16AB (3" to 14-1/2")	ADT-AJ12 / ADT-AJ12B (4" to 10")	TC-4DLS1 / TC-4DLS1B	4D12A or 4D12AB (3" to 10")	—	DVR6-16A / DVR6-16AB
Galvanized or Black	46DVA-17TA / 46DVA-17TAB (11" to 17")	ADT-TL14 / ADT-TL14B (14" to 22")	TC-4DLS2 / TC-4DLS2B (1-7/8" – 21")	4D16A or 4D16AB (3" to 14")	—	—
Galvanized or Black	46DVA-24TA / 46DVA-24TAB (17" to 24")	ADT-TL38 / ADT-TL38B (38" to 70")	TC-4DLA30 / TC-4DLA30B (16.5" – 29")	4D26A or 4D26AB (3" to 24")	—	—
Coaxial Flex	46DVA-36FF / 46DVA-60FF / 46DVA-120FF	—	—	—	—	—
DV Elbows						
30° Galvanized	46DVA-E30	—	—	—	—	—
45° Galvanized	46DVA-E45 (swivel)	4DT-EL45	TE-4DE45	4D45L	—	DVR6-E45
45° Black	46DVA-E45B (swivel)	4DT-EL45(B)	TE-4DE45B	4D45LB	—	DVR6-E45B
60° Galvanized	46DVA-E60	—	—	—	—	—
90° Galvanized	46DVA-E90 (swivel)	4DT-EL90	TE-4DE90	4D90L	—	DVR6-E90
90° Black	46DAV-E90B (swivel)	4DT-EL90(B)	TE-4DE90B	4D90LB	—	DVR6-E90B

Approved Venting Components

Venting Parts Description			DURA-VENT	SELKIRK	ICC EXCEL DIRECT	AMERIVENT	MILES INDUSTRIES	BDM
Pipes 4" x 6 5/8" (ID x OD)	6" long	Galvanized	46DVA-06	4DT-06	TC-4DL6	—	—	DVR6-06
		Black	46DVA-06B	4DT-06(B)	TC-4DL6B			DVR6-06B
	7" long	Galvanized	—	—	—	4D7	—	—
		Black				4D7B		
	9" long	Galvanized	46DVA-09	4DT-09	TC-4DL9	—	—	DVR6-09
		Black	46DVA-09B	4DT-09(B)	TC-4DL9B			DVR6-09B
	12" long	Galvanized	46DVA-12	4DT-12	TC-4DL1	4D12	—	DVR6-12
		Black	46DVA-12B	4DT-12(B)	TC-4DL1B	4D12B		DVR6-12B
	18" long	Galvanized	46DVA-18	4DT-18	—	—	—	DVR6-18
		Black	46DVA-18B	4DT-18(B)				DVR6-18B
	24" long	Galvanized	46DVA-24	4DT-24	TC-4DL2	4D2	—	DVR6-24
		Black	46DVA-24B	4DT-24(B)	TC-4DL2B	4D2B		DVR6-24B
	36" long	Galvanized	46DVA-36	4DT-36	TC-4DL3	4D3	—	DVR6-36
		Black	46DVA-36B	4DT-36(B)	TC-4DL3B	4D3B		DVR6-36B
	48" long	Galvanized	46DVA-48	4DT-48	TC-4DL4	4D4	—	DVR6-48
		Black	46DVA-48B	4DT-48(B)	TC-4DL4B	4D4B		DVR6-48B
Flashings	Roof Flashing 0/12-6/12		46DVA-F6	4DT-AF6	TF-4FA	4DF (0/12-5/12)	—	DVR6-AF012
	Roof Flashing 7/12-12/12		46DVA-F12	4DT-AF12	TF-4FB	4DF12 (6/12-12/12)	—	DVR6-AF712
	Flat Roof Flashing		46DVA-FF	—	TF-4F	—	—	DVR6-TCF
	Masonry Flashing		—	—	TF-4MF	—	559FSK	—
	New Siding Flashing		—	—	—	—	658NSFK	—
Various Venting System Parts	Wall Thimble		46DVA-WT	4DT-WT1	TM-4WT	4DWT	—	DVR6-WTU
	Storm Collar		46DVA-SC	4DT-SC	TM-SC	4DSC	—	DVT68-SC
	Decorative Plate		46DVA-DC	—	TM-4TR TM-4TP	4DFPB	—	DVR6-DC
	Support Box	Cathedral Ceiling	46DVA-CS	4DT-CCS	TM-4SS	4DRSB	—	DVR6-CS
		Regular Ceiling	—	4DT-CS	—	—	—	—
	Ceiling Firestop		46DVA-FS	4DT-FS	TM-4RDS TM-CS	4DFSP	—	DVR6-CFS
	Attic Radiation Shield / Firestop		46DVA-IS	4DT-AIS	TM-4AS	4DAIS12 (12") 4DAIS36 (36")	—	DVR6-AIS
	Wall Strap		46DVA-WS	4DT-WSB	TM-WS	4DWS	—	DVR6-WS
	Vinyl Siding Standoff		46DVA-VSS	4DT-VSS (before siding) 4DT-VSSB (after siding)	TM-VSS	4DHVS	—	DVR6-VSS
	Elbow Strap / Offset Support		46DVA-ES	4DT-OS	TM-OS	—	—	DVR6-ES
	Terminal Guard		46DVA-WG	—	TM-HTS TM-RHTS	—	845TG 658TG	DVR6-SHRD

Notes:
1. Follow instructions supplied with each manufacturer's components.
2. Unless otherwise specified, all the parts and assemblies from the above table are to be used with 4" x 6-5/8" pipes.
3. **Do not mix components from different vent manufacturers.**

Commonwealth of Massachusetts

State of Massachusetts Carbon Monoxide Detector/Vent Terminal Signage Requirements

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:

1. 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.

a. 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.

b. 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.

2. 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.

3. 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".

4. 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.

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

1. 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

2. 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.

(c) 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:

1. Detailed instructions for the installation of the venting system design or the venting system components; and

2. A complete parts list for the venting system design or venting system.

(d) MANUFACTURER REQUIREMENTS - 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:

1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and

2. 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.

(e) 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.
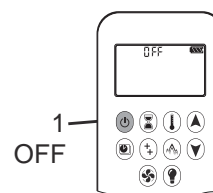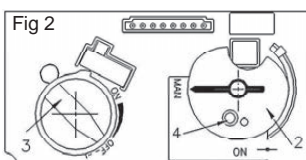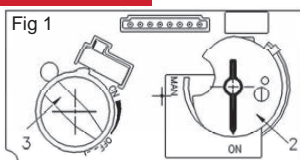
Appendix A—Lighting Instructions

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above

2. TO CLEAR ANY GAS, turn main valve off by pressing the ⏻ button on remote handset (1). Wait five (5) minutes to clear out any gas, then smell for gas, including near the floor. If you smell gas,STOP! follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.

3. AUTOMATIC IGNITION: MAN-knob (2) in ON position. Ensure Flame Adjustment knob (3) is set to lowest setting (Fig. 1). Locate the pilot (Fig. 3.) inside the firebox.

On the remote control handset, press the ⏻ button; a short acoustic signal confirms the start has begun. Further short acoustic signals indicate the ignition process is in progress When the pilot is lit, the Flame Adjustment knob (3) will automatically rotate to the highest setting. Press the ▼ button on the remote control handset to reduce the flame height.

4. MANUAL IGNITION: MAN-knob (2) in MAN position (Fig. 2). With the window off, locate the pilot (Fig. 3) inside the firebox. Set Flame Adjustment knob (3) to the lowest setting. Push down the metallic core (4) with a pen or similar instrument; this will establish the pilot gas flow. Light gas at the pilot (5) with a match. Continue holding down metal core (4) for about 10 seconds; after release, pilot should remain lit. If the pilot will not stay lit after several tries, turn the gas control knob (3) to OFF and call your local service technician or gas supplier. Reinstall the window and set the MAN-knob (2) to ON; turn Flame Adjustment knob (3) up or down manually or use the ▲ and ▼ buttons on the remote control handset to adjust the flame height.
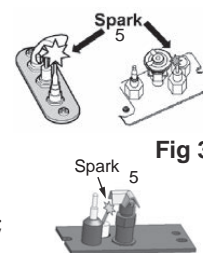
TO TURN OFF GAS TO APPLIANCE

AUTOMATIC SHUT-OFF (using the remote control handset):

Press and hold the ▼ button on the remote control handset to shut-off the main burner gas flow.

Press the ⏻ button on remote handset to shut-off the appliance, including pilot flame.

Appendix B—Remote Control Operation

Initial Pairing

Before the remote control can be used with the fireplace, it must be paired. See "Remote Control Initial Pairing" on page 54.

Main Display

Child Proof — Time — Signal Indicator — Thermostatic Mode — Battery Status — Countdown Timer — Fan (not available) — °F or °C — Light — Program Mode — Eco Mode — Temperature — Auxiliary Feature (not used)
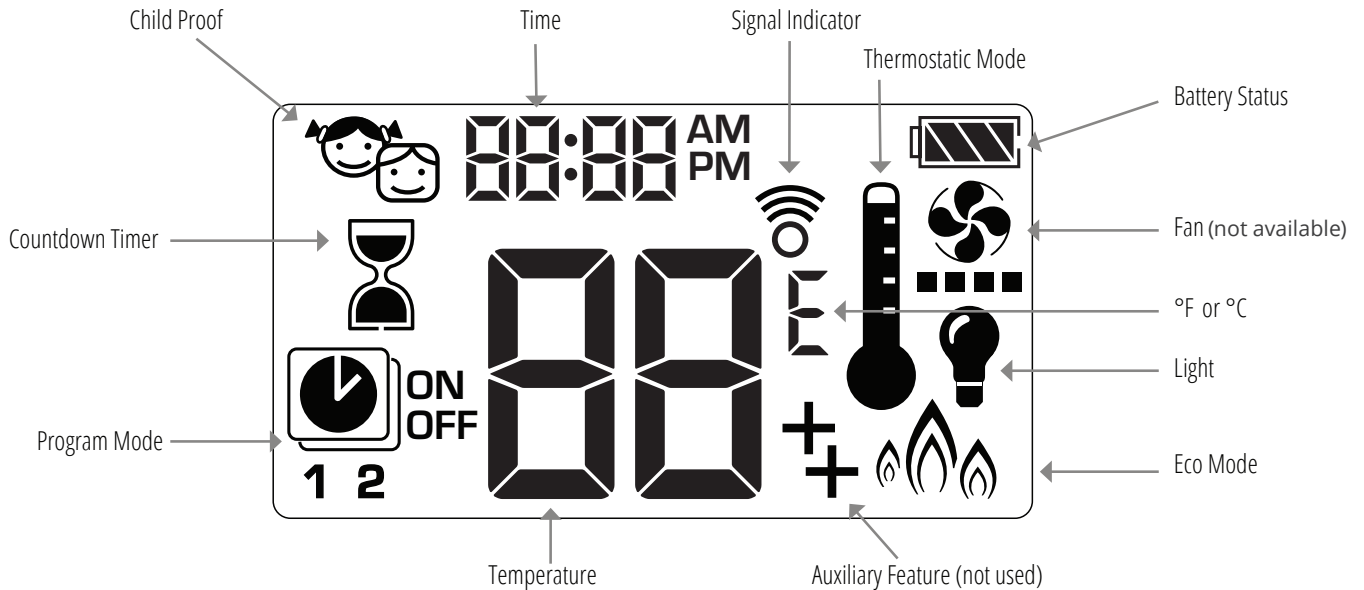
To Turn On Fire

> 🔅 **NOTE:** When pilot ignition is confirmed, motor automatically turns to maximum flame height.

One-Button lighting (default): ⏻
Two-Button lighting: ⏻ + ▲ simultaneously

Press and hold for 4 seconds, until 8 short beeps and a blinking series of lines confirms the start sequence has begun. Release button.

Main gas flows once pilot ignition is confirmed.

Handset automatically goes into manual mode after main burner ignition.

Standby Mode (Pilot Flame)

Press and hold ▼ to set appliance to pilot flame.
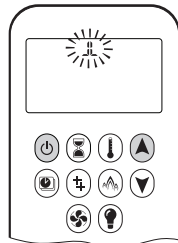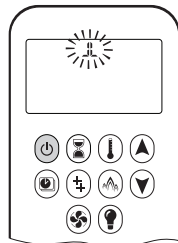
> ⚠ **CAUTION:** If the pilot does not stay lit after several tries call your local service technician or gas supplier.

To Turn Off Fire

Press ⏻ to turn OFF.

Note: There is a 2 minute delay after switching off before the next ignition is possible.
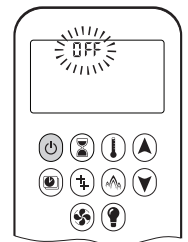
> ⚠ **CAUTION:** Always check the fire and pilot visually to ensure they are off.

Flame Height Adjustment

To increase flame height, press and hold ▲.

To decrease flame height, press and hold ▼. You may hold the button down until the fire is set to pilot flame only.
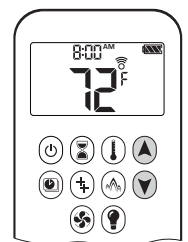
Appendix B—Remote Control Operation

Designated Low Fire and High Fire

To go to low fire, double-click ⏷, "LO" is displayed.

Note: Flame goes to high fire first before going to low fire.
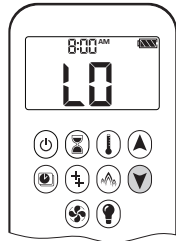
To go to high fire, double-click ⏶, "HI" is displayed.
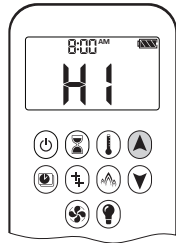
Choosing 1-Button or 2-Button Ignition

On the remote control handset, you can choose a 1-button or 2-button ignition. You can also choose to activate or deactivate some of the functions. By default, the handset is set to a 1-button ignition.

To change from 1-button to 2-button ignition, remove the batteries, wait 10 seconds, reinsert batteries, and immediately when the display flashes, press and hold the ⏻ button for 10 seconds. **ON** is displayed and **1** is flashing. When change is complete, **1** changes to **2**.

To change from 2-button to 1-button ignition, proceed the same as above. **ON** is displayed and **2** is flashing. When change is complete, **2** changes to **1**.

Deactivating or Activating Functions

These functions are active by default, but can be deactivated at any time:

• Child Proof
• Program Mode
• Thermostatic Mode
• Eco Mode
• Circulating Fan Operation
• Countdown Timer

To deactivate functions:

1. Install batteries. All icons are displayed and flashing.
2. While the icons are flashing, press the relevant function button and hold for 10 seconds.
3. The function icon will flash until deactivation is complete. Deactivation is complete when the function icon and two horizontal bars (➖ ➖) are displayed.

Note: If a deactivated button is pressed, there is no function, and the two horizontal bars are displayed.

To activate functions:

1. Install batteries. All icons are displayed and flashing.
2. While the icons are flashing, press the relevant function button and hold for 10 seconds.
3. The function icon will continue to flash until activation is complete, and then turn solid. Activation is complete when the function icon is displayed.

Setting Celsius or Fahrenheit

To change between °C and °F, press and hold ⏻ + ⧗ simultaneously.

Note : °C = 24-hour clock
°F = 12-hour clock
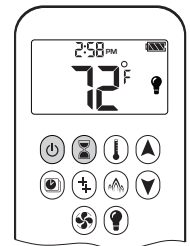
Setting the Time

1. Press ⏶ + ⏷ simultaneously. **Day** flashes.
2. Press ⏶ + ⏷ to select a number to correspond with the day of the week.

   • 1 = Monday
   • 2 = Tuesday
   • 3 = Wednesday
   • 4 = Thursday
   • 5 = Friday
   • 6 = Saturday
   • 7= Sunday

3. Press ⏶ + ⏷ simultaneously. **Hour** flashes.
4. To select hour press ⏶ or ⏷.
5. Press ⏶ + ⏷ simultaneously. **Minutes** flash.
6. To select minutes press ⏶ or ⏷.
7. To confirm, press ⏶ + ⏷ simultaneously or wait.
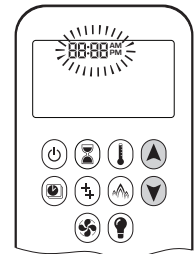
Appendix B—Remote Control Operation

Child Proof

Your handset can be set to lock out all commands to the fireplace, except OFF.

To turn Child Proof ON:

1. Press and hold ⏻ + ▼ simultaneously.
2. 👫 is displayed. Child Proof is now active.

To turn Child Proof OFF:

1. Press and hold ⏻ + ▼ simultaneously.
2. 👫 disappears. Child Proof is now inactive, and the handset has full function.

Countdown Timer

You can set your fireplace to automatically turn off at the end of a timer.

To set a Countdown Timer:

1. Press and hold ⧖ until ⧖ is displayed.
   Hour flashes.
2. Press ▲ or ▼ to select Hour.
3. To confirm, press ⧖.
   Minutes flash.
4. Press ▲ or ▼ to select Minutes.
5. To confirm, press ⧖ or wait.
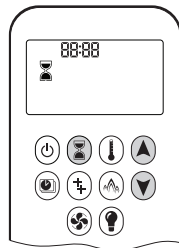
To turn off a Countdown Timer:

1. Press ⧖, and the ⧖ countdown disappears.

Note: The Countdown Timer only works in Manual, Thermostatic, and Eco modes. Maximum countdown time is 9 hours and 50 minutes.

Light/Dimmer Operation

On:
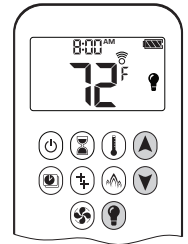
Press 💡, 💡 is displayed. Light is on at preset level.

Off:

Press 💡, 💡 disappears. Light turns off.

Setting:

1. Press and hold 💡 until 💡 flashes.
2. To adjust light between 20-100% press ▲ or ▼.
3. To confirm setting either press 💡 or wait.
   💡 is displayed.

Note: The light works independently of the pilot flame. If you want the light on but no flame, press 💡 button.
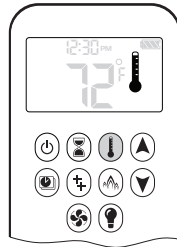
66

Appendix B—Remote Control Operation

Modes of Operation

🌡 Thermostatic Mode

The room temperature is measured and compared to the set temperature. The flame height is automatically adjusted to achieve the set temperature.

🕐 Program Mode

The temperature is controlled by Programs 1 and 2, each of which can be set to go on and off at specific times, at a set temperature.

᭗ Eco Mode

Flame height modulates between high and low. If the room temperature is lower than the set temperature, the flame height stays on high for a longer period of time. If the room temperature is higher than the set temperature, the flame height stays on low for a longer period of time. One cycle lasts approximately 20 minutes.

💡 If any of the above modes (Thermostatic, Program, or Eco) are engaged by the MyFire app over WiFi, the handset will display **APP**.

Manual Mode

The on/off status of the fireplace, as well as flame height, are manually controlled by the user.

Thermostatic Mode

On:

Press 🌡 . 🌡 is displayed. Preset temperature displays briefly, followed by the room temperature.

Setting Desired Temperature:

1. Press and hold 🌡 until 🌡 is displayed and set temperature flashes.
2. To adjust set temperature, press ▲ or ▼.
3. To confirm, press 🌡 or wait.

Off:

1. Press 🌡 .
2. Press ▲ or ▼ to go to Manual Mode.
3. Press 🕐 to go to Program Mode.
4. Press ᭗ to go to Eco Mode.

Program Mode

On:

Press 🕐 .
🕐 , **1** or **2**, **ON** or **OFF** are displayed.

Off:

1. Press 🕐 , ▲ , or ▼ to go to Manual Mode.
2. Press 🌡 to go to Thermostatic Mode.
3. Press ᭗ to go to Eco Mode.

Note: The set temperature for Thermostatic Mode is the temperature for the ON time in Program Mode. Changing the Thermostatic Mode set temperature also changes the ON time temperature in Program Mode.

Default Settings:

• ON TIME (Thermostatic) TEMPERATURE: 70°F / 21°C

• OFF TIME TEMPERATURE: "➤ ➤" (pilot flame only)

Appendix B—Remote Control Operation

Temperature Setting:

1. Press and hold [icon] until [icon] flashes. **ON** and set temperature (set in Thermostatic Mode) is displayed.

2. To continue, press [icon] or wait. [icon], **OFF** displayed, temperature flashes.

3. Select off temperature by pressing [icon] or [icon].

4. To confirm, press [icon].
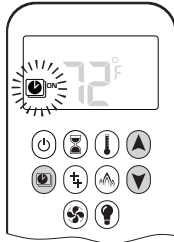
Note: The on (Thermostatic) and off set temperatures are the same for each day.

Day Setting:

1. **ALL** flashes. Press [icon] or [icon] to choose between:

   - **ALL =** same settings ON-OFF every day

   - **SA:SU =** same settings ON-OFF Saturday and Sunday

   - **1, 2, 3, 4, 5, 6, 7 =** daily timer—unique ON-OFF settings for a single day of the week, for multiple days of the week or for every day of the week.

2. To confirm, press [icon].
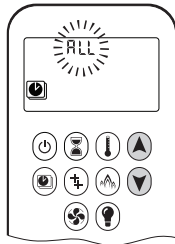
ALL Selected (same settings every day)

On Time Setting (PROGRAM 1)

1. [icon], **1**, **ON** are displayed. **ALL** is displayed briefly. Hour flashes.

2. To select hour, press [icon] or [icon].

3. To confirm, press [icon]. [icon], **1**, **ON** are displayed. **ALL** displayed briefly. Minutes flash.

4. To select minutes, press [icon] or [icon].

5. To confirm, press [icon].

Off Time Setting (PROGRAM 1)
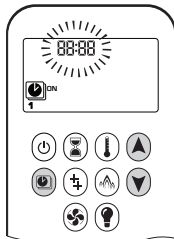
1. [icon], **1**, **OFF** are displayed. **ALL** is displayed briefly. Hour flashes.

2. To select hour, press [icon] or [icon].

3. To confirm, press [icon]. [icon], **1**, **OFF** are displayed. **ALL** displayed briefly. Minutes flash.

4. To select minutes, press [icon] or [icon].

5. To confirm, press [icon].
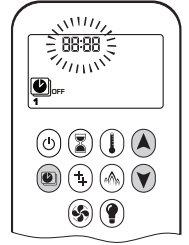
Note: Either continue to PROGRAM 2 and set ON and OFF times or stop programming at this point, and PROGRAM 2 remains deactivated.

Note: PROGRAM 1 and 2 use the same ON (Thermostatic) and OFF temperatures. Once a new ON (Thermostatic) and/or OFF temperature has been set, that temperature becomes the new default setting.
Note: ON and OFF times programmed for PROGRAM 1 and PROGRAM 2 become the new default times.

The batteries must be removed to clear the PROGRAM 1 and PROGRAM 2 ON and OFF times and temperatures.

SA:SU (same settings Saturday and Sunday) or 1, 2, 3, 4, 5, 6, 7 (different settings on different days)

• Set on time and off time using the same procedure as "**ALL** Selected" above.

• Waiting to finish setting.

Eco Mode

On:

Press [icon] button to enter Eco Mode. [icon] is displayed.

Flame height modulates between high and low every 20 minutes.

Off:

Press [icon] button to exit Eco Mode. [icon] disappears.

Appendix B—Remote Control Operation

Low Battery Indication

> ⚠ **CAUTION:** Do not use a screwdriver or other metallic object to remove the batteries from the battery holder or the handset. This could cause a short circuit.

Handset

The battery icon will show when the battery needs to be replaced. Replace with two 1.5 V AAA alkaline batteries.

Receiver

Frequent beeps for 3 seconds when the motor turns indicate the batteries in the battery holder need to be replaced. Replace with four 1.5 V AA alkaline batteries.

Automatic Shut Off

Countdown Timer

At the end of countdown time period, the fire turns off. The Countdown Timer only works in Manual, Thermostatic, and Eco Modes. Maximum countdown time is 9 hours and 50 minutes.

Low Battery Receiver

With low battery power in the battery holder, the system shuts off the fire completely. (This will not happen if the power is completely interrupted.)

Seven Day Shut Off

The system shuts off the fire completely if there is no change in flame height for 7 days.

Automatic Turn Down
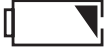
3 Hour No Communication Function

The valve will turn to pilot flame if there is no communication between the handset and receiver for a 3-hour period. The fire will continue to function normally when communication is restored.

Appendix B—Remote Control Operation

Error Codes

In the event of an error condition with the handset or fireplace, the handset will display an error code.

Failure Code	Message on Handset	Duration of Display	Symptom	Possible Cause
F04	F04	4 sec	• No pilot flame within 30 sec • **Note:** after 3 failed ignition sequences, F06 shown	• No gas supply • Air in pilot supply line • No spark • Reversed polarity in thermocouple wiring
F06	F06	4 sec	• 3 failed ignition sequences in 5 minutes • Fire is not responding, no pilot flame	• No gas supply • Air in pilot supply line • No spark • Reversed polarity in thermocouple wiring • Incorrect pilot orifice if valve has been converted from LPG to NG or vice versa
F07	Low battery symbol	Permanent	• Battery icon flashes on handset display	• Low battery in handset
F09	F09	4 sec	• Fire is not responding • No electronic control of fire	• Down arrow button ⊽ was not pressed during pairing • Receiver and handset are not synced
F46	F46	4 sec	• Fire is not responding • Intermittent response • No electronic control of fire	• No or bad connection between receiver and handset • No power at receiver (batteries low) • Low communication range (mains adapter faulty, handset not communicating with receiver)

Appendix C—Wall Switch Operation

The Wall Switch can be used to control your fireplace. You can turn the pilot on or off and you can increase or decrease the flame height.

Note that the thermostat and programming functions are not available with the wall switch.

Turning Appliance ON and OFF

Press ON-OFF button once to light pilot. Press again to shut off pilot.

Adjusting Flame Height

Press and hold large flame 🔥 button to gradually increase flame height.
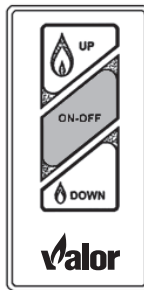
Press and hold small flame 🔥 button to gradually decrease flame height.
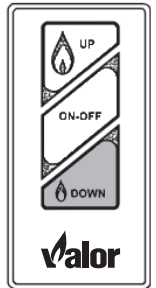
Appendix D—HeatShift™System

HeatShift™ System

Planning Installation: LT1, LT1A and LT2 with HeatShift™

Instructions for use with the following **Valor Heater Models: 2500K, 2500KA and 2700K only**

Application

The HeatShift™ system redistributes the warm air flow away from the fireplace opening to a more desirable location using natural convection without use of a fan.

Plenums LKD1, LDK3, LDK4 or LDK9: the warm air flow is relocated to a position higher up the wall, out the sidewalls, or even to an adjacent room.

Termination Plates LDK7: the warm air flow is discharged through a gap (min. 2-1/2" [64 mm]) between the wall above the fireplace and the ceiling. **LDK7's discharge opening must be located in the same room as the fireplace.**

The result is much cooler wall temperatures above the fireplace opening for locating televisions, artwork, etc.

As a further option, the warm airflow may be extracted away from the duct kit plenum **(LDK1 and LDK4 ONLY)** by connecting a 1270RBK Remote Blower Kit to the duct kit plenum.

Any kit, LDK1, LDK3, LDK4, LDK7 or LDK9 may be used with compatible model fireplace LT1 or LT2. These kits are compatible with the listed fireplaces only.

Note: These instructions are to be used in conjunction with instructions regarding fireplace installation in this manual.

Approvals

The LDK1, LDK3, LDK4, LDK7 and LDK9 duct kits are CSA approved for use only with Valor Series fireplaces listed above—DO NOT use with any other models.

This HeatShift system may also be used to reduce wall surface temperatures on approved outdoor installations.

5" [127 mm] diameter duct used with this kit must be metal and meet requirements of UL-181 Class 1 Air Duct. Flexible aluminum duct is acceptable provided it meets the UL-181 Class 1 requirements.

⚠️ **WARNING**

DO NOT cover or place objects in front of or on top of air outlet(s). AVOID locating outlet within 7 feet [2.2 m] above floor level as discharge temperatures are hot!

⚠️ **WARNING**

When placing discharge close to ceilings, staining or streaking may occur on light colored ceilings due to any dust, etc. in air flow; placing plenum(s) lower on the wall will help reduce the possibility of staining or streaking.

Appendix D—HeatShift™System

Kits

There are 5 kits to choose from:

- LDK1— Plenum, 48" [1220 mm]
- LDK3— Plenums (2), includes grilles, 14" [356 mm]
- LDK4— Plenum, 38" [966 mm]
- LDK7— Duct Termination Plates (2)—for wall valance discharge ONLY
- LDK9— Plenum, 30" [762 mm]

Kits Contents

LDK1
48" x 2"
1220 x
51 mm

4 take-off collars included

LDK4
38" x 2"
966 x 51 mm

4 take-off collars included

LDK3
2 - 14" x 6"
256 x 153 mm

4 take-off collars included

15-3/4" (400 mm)

7-3/4" (197 mm)

2 - 14" x 6" [256 x 153 mm] grilles included, white

LDK7
2 Duct termination plates

4 take-off collars included

LDK9
30" x 2"
762 x 51 mm

(4) 5" Ø take-off collars included
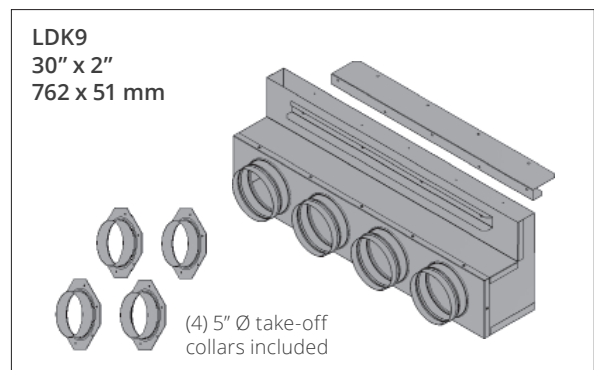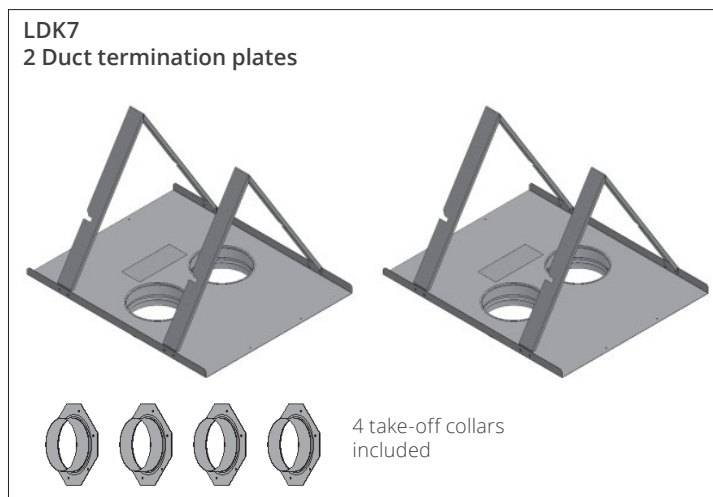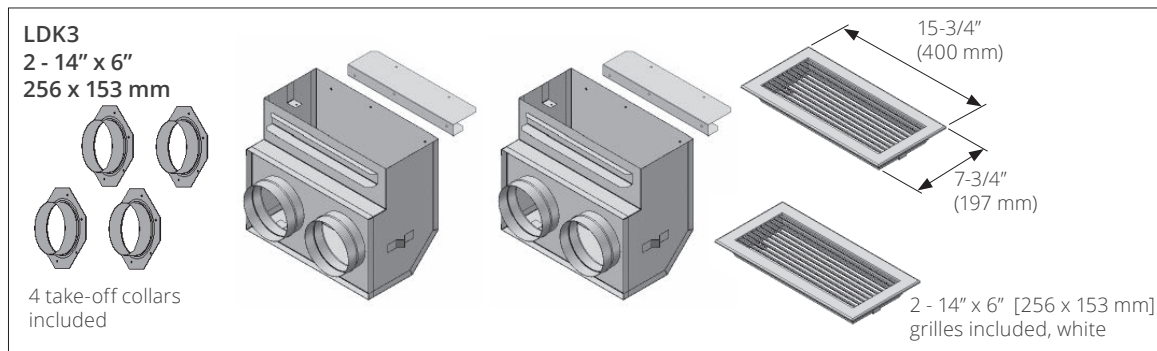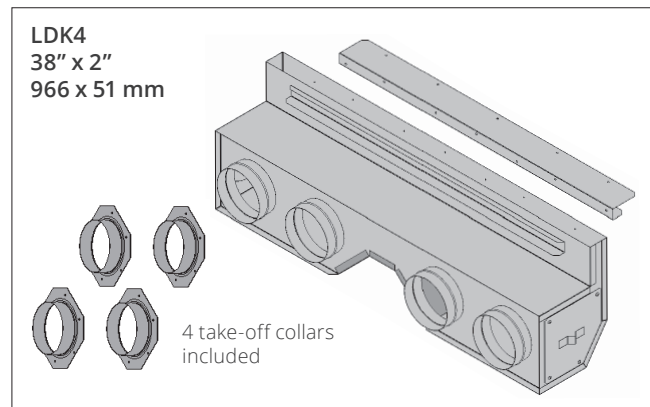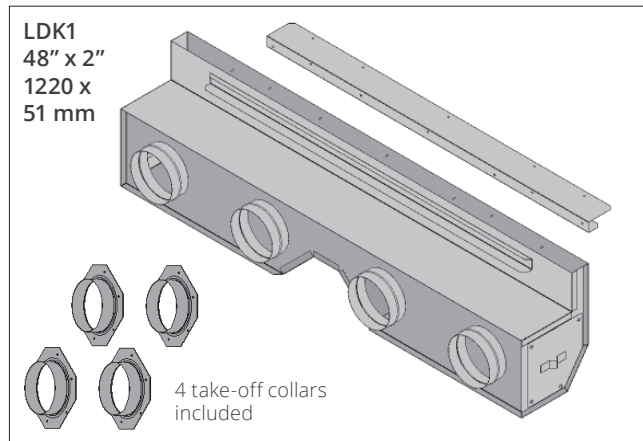
Appendix D—HeatShift™System

Optional accessories

- LDK2—48" [1220 mm] Finishing Frame, to use with LDK1
- LDK5—38" [966 mm] Finishing Frame, to use with LDK4
- LDK6— 5" [127 mm] dia Aluminum 2-ply Flex Kit—
  2 x 10'–0" [3048 mm] lengths, may be cut to required length
- LDK10—30" [732 mm] Finishing Frame, to use with LDK9

Kits Contents

49-5/8"
(1261 mm)

3-5/8"
(92 mm)

LDK2 (supplied separately)
48" [1220 mm] frame, white

39-5/8"
(1007 mm)

3-5/8"
(92 mm)

LDK5 (supplied separately)
38" [966 mm] frame, white

LDK6
2 - 10' x 5" (aluminum flex)
3048 x 127 mm

31-11/16"
(805 mm)

3-11/16"
(94 mm)

LDK10 (supplied separately)
30" [732 mm] frame, white
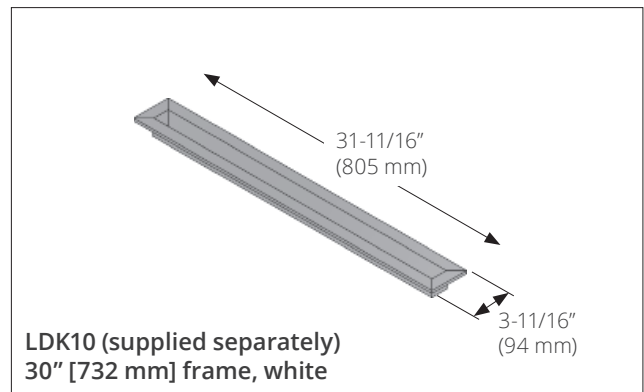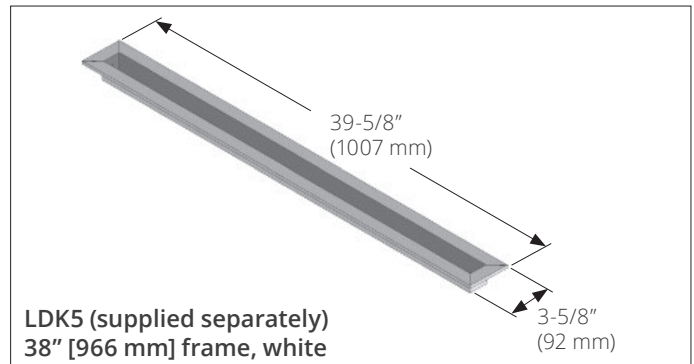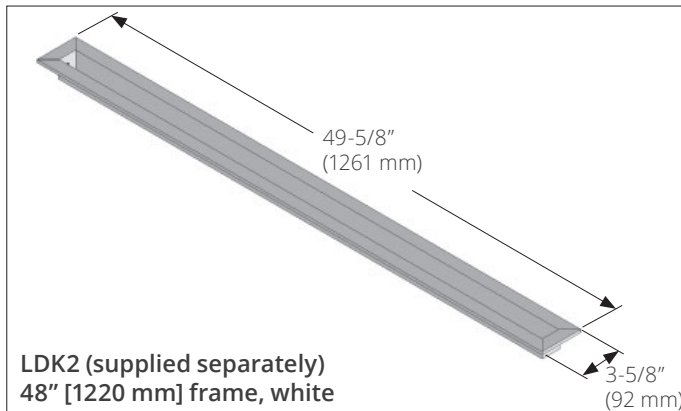
Note: One set of LDK6 kit contents
are included with this appliance.

Appendix D—HeatShift™System

Suggested Configurations (top view)
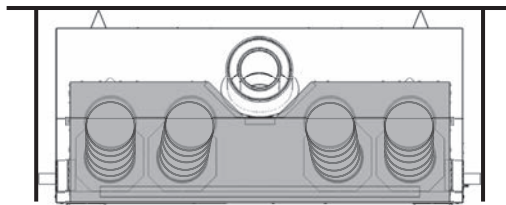
Front wall outlet using LDK1, LDK4 (shown) or LDK9
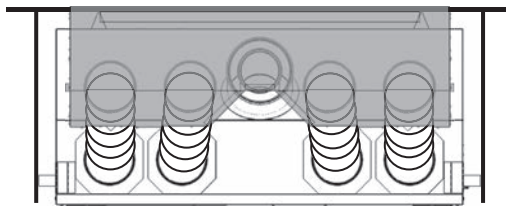
Rear wall outlet using LDK1, LDK4 (shown) or LKD9
Note: Fireplace vent may conflict with plenum.
Offset vent around plenum.
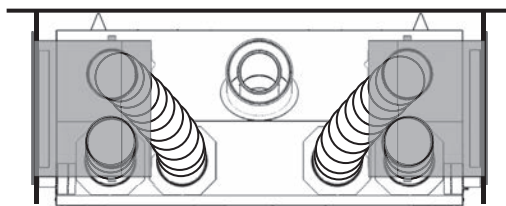
Side wall outlets using LDK3
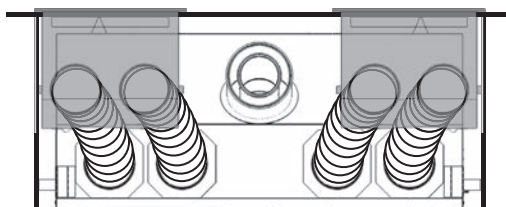
Rear wall outlets using LDK3
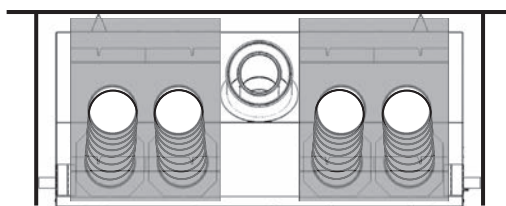
Top outlet using LDK7
Note: When using LDK7, the discharge
opening must be located in the same room
as the fireplace.

Corner installations
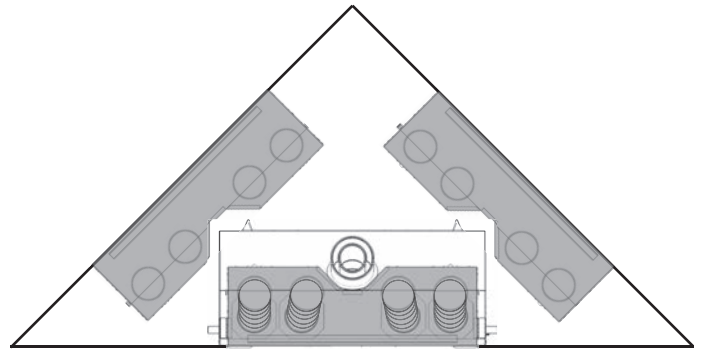
⚠ **WARNING**

The plenum duct kits are approved for horizontal discharge ONLY. The termination duct plates (LDK7) are approved for vertical upward discharge ONLY. DO NOT install plenum or termination plates in floor or ceiling. DO NOT COVER OR PLACE objects in front of or on top of air outlet(s). AVOID locating outlet within 7 feet [2.2 m] of the floor level as discharge air temperatures are hot!

DO NOT DISCHARGE THROUGH EXTERIOR WALLS!

NOTE This duct kit may be used for outdoor installations to reduce wall temperatures above the unt. The discharge grilles must be located under the weatherproof enclosure described in the GV60CKO Outdoor Fireplace Conversion Kit instructions.

Appendix D—HeatShift™System

Overview (applies to LKD1, LDK3, LDK4 and LDK9 kits)

Ceiling

Min. 2-1/2"
[64 mm]
clearance
to ceiling

Flexible or rigid,
5" [127 mm]
diameter
UL-181, Class 1
Air Duct (4)
(use LDK6 kit
or equivalent)

Min. 1" [26 mm]
clearance to
combustibles
around pipe

Min. 30" [762 mm]
Max. 12'-0" [3,658 mm]
See table for offsets

8-3/4"
[222 mm]

19-1/2" [496 mm]

36-15/16" [938 mm]

8-11/16"
[221 mm]

LT1 pictured

76
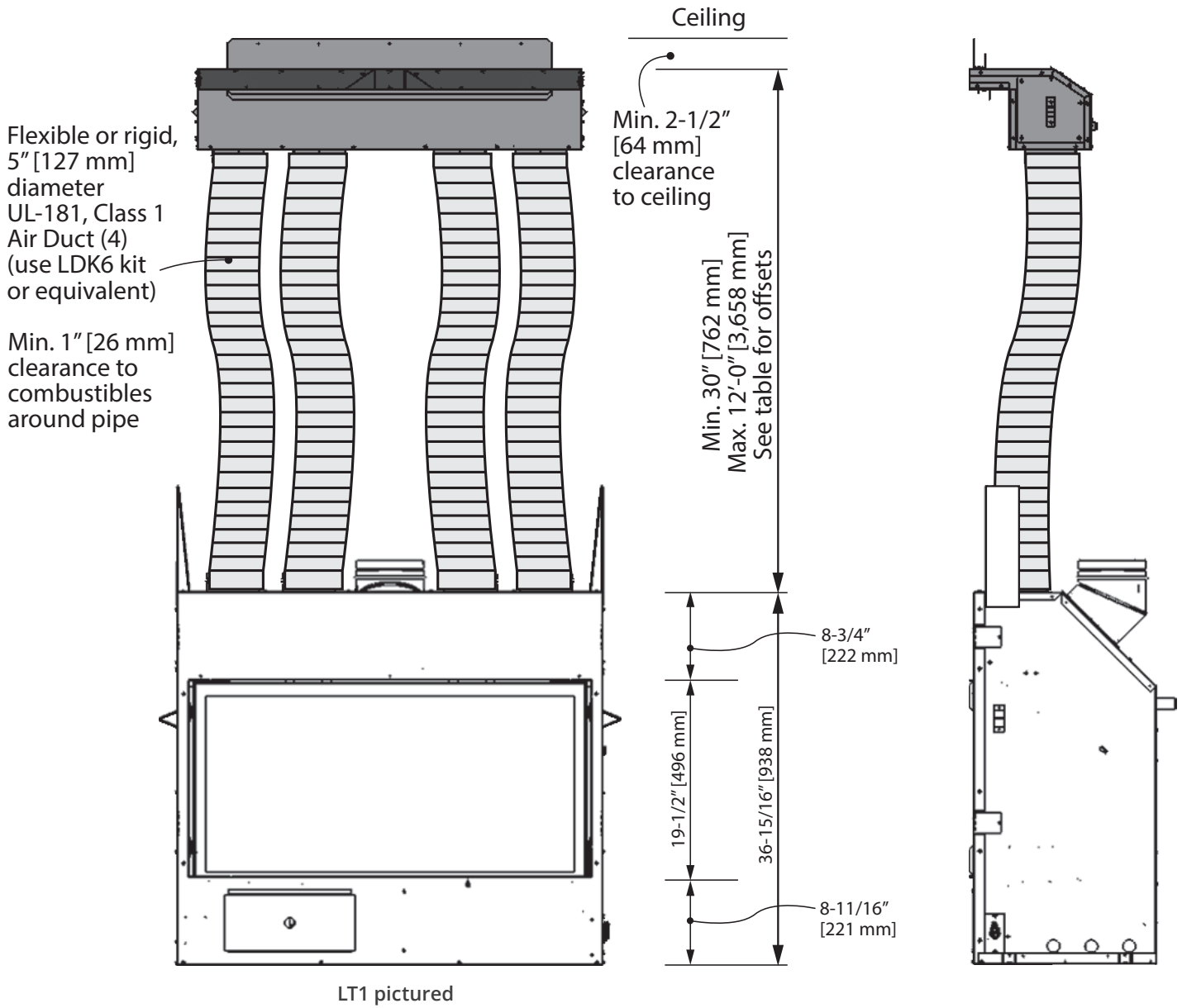
Appendix D—HeatShift™System

Overview (applies to LDK7)

NOTE Discharge opening must be located in the same room as fireplace when using LDK7.

Ceiling

Wall

Min. 2-1/2"
[64 mm]
opening

Flexible or rigid,
5" [127 mm]
diameter
UL-181, Class 1
Air Duct (4)
(use LDK6 kit
or equivalent)

Min. 1" [26 mm]
clearance to
combustibles
around pipe

Min. 30" [762 mm]
Max. 12'-0" [3,658 mm]
See table for offsets

8-3/4"
[222 mm]

19-1/2" [496 mm]

36-15/16" [938 mm]

8-11/16"
[221 mm]
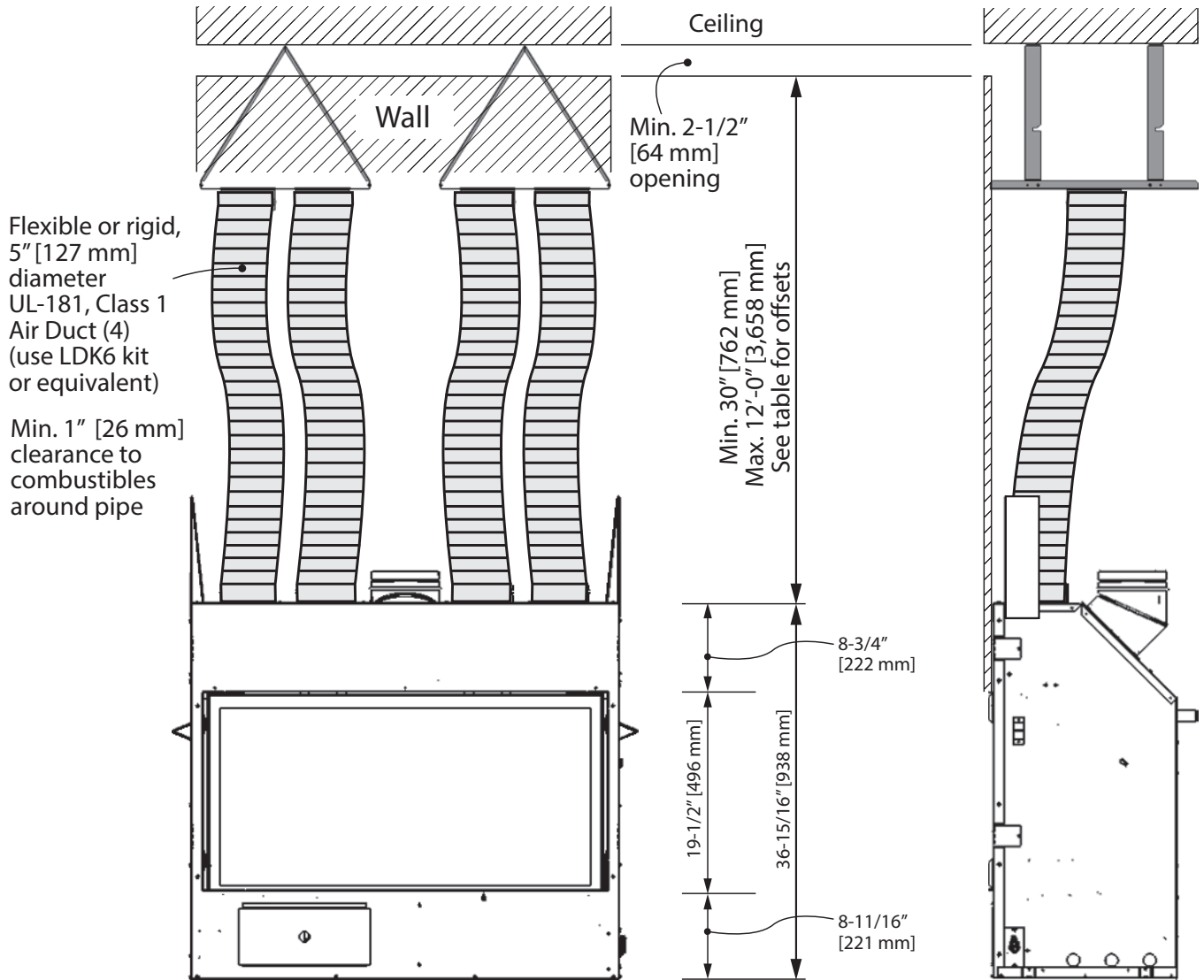
Appendix D—HeatShift™System

Y Vertical Rise	X Max. Allowable Horizontal Offset
30" 762 mm	24" 610 mm
36" 914 mm	36" 914 mm
42" 1067 mm	48" 1219 mm
48" 1219 mm	60" 1524 mm
54" 1372 mm	72" 1829 mm
60" 1524 mm	84" 2134 mm
66" 1676 mm	96" 2438 mm
12'-0" 3.7 m	96" Max.

With Plenum

LDK 1, LDK 3 or LDK 4

Ceiling

8"

Min. 2-1/2" [64 mm] clearance to ceiling

Min. bend radius 5" [127 mm]

Support horizontal sections of pipe using strapping every 24" [610 mm]

Min. 1" [26 mm] clearance to combustibles around pipes

Vertical Rise 'Y' (Min. 30" [762 mm], Max. 12'-0" [3.7 m])

4
12

DO NOT RUN pipe horizontal. Minimum slope 4:12

Min. bend radius 5" [127 mm]

Top of fireplace

Maximum allowable Horizontal Offset 'X'
(offset for take-off that's furthest away)

With Plates

Min. 2-1/2" [64 mm] opening required at ceiling Ceiling

Min. 14" [356 mm]

LDK 7 - Duct Termination Plates

Min. bend radius 5" [127 mm]

Support horizontal sections of pipe using strapping every 24"

Min. 1" [26 mm] clearance to combustibles around pipes

Vertical Rise 'Y' (Min. 30" [762 mm], Max. 12'-0" [3.7 m])

4
12

DO NOT RUN pipe horizontal. Minimum slope 4:12

Min. bend radius 5" [127 mm]

Top of fireplace

Appendix D—HeatShift™System

LDK 1

3-5/8″ [92 mm]

11-1/2″ [292 mm]

7-7/8″ [200 mm]

Top View

48″[1220 mm] LDK 1

3″[76 mm]

12″ [305 mm] 14″[356 mm] 12″ [305 mm]

5″[127 mm] dia. collars (4)

1/2″ [13 mm] standoff

Front View

1/2″ [13 mm] wallboard

11-1/2″[292 mm]

mounting bracket

1/2″[13 mm] standoffs

2″ [51 mm]

mounting bracket and 1/2″ [13 mm] standoff

8″ [203 mm]

4″ [102 mm] 8″ [203 mm]

6″ [153 mm] openings each end for optional 1270RBK connection

Right Side View

LDK 4

3-5/8″ [92 mm]

11-1/2″ [292 mm]

7-7/8″ [200 mm]

Top View

38″ [965 mm] LDK 4

3″ [76 mm]

5″[127 mm] dia. collars (4)

4″ [102 mm] 8″ [203 mm] 14″ [356 mm] 8″ [203 mm] 4″ [102 mm]

1/2″[13 mm] standoff

Front View

1/2″[13 mm] wallboard

11-1/2″[292 mm]

mounting bracket

1/2″[13 mm] standoffs

2″ [51 mm]

mounting bracket

8″ [203 mm]

4″ [102 mm] 8″ [203 mm]

6″ [153 mm] openings each end for optional 1270RBK connection

Right Side View

Appendix D—HeatShift™System

LDK 3

14" [356 mm]

3" [76 mm]

6" [153 mm]

5" [127 mm] dia. collars (2)

7" [178 mm]

1/2" [13 mm] standoff

Front View

1/2" [13 mm] wallboard

11-1/2" [292 mm]

mounting bracket and 1-1/2" [38 mm] standoff

1/2" [13 mm] standoffs

8" [203 mm]

mounting bracket and 1/2" [13 mm] standoff

Right Side View

LDK 9

3" [76 mm]

9-1/2" [242 mm]

6-1/2" [165 mm]

Top View

30" [762 mm] LDK 9

3" [76 mm]

5" [127 mm] dia. collars (4)

4-3/8" [111 mm] 7-1/16" [180 mm] 7-1/16" [180 mm] 7-1/16" [180 mm] 4-3/8" [111 mm]

Front View

1/2" [13 mm] wallboard

9-1/2" [242 mm]

mounting bracket

2" [51 mm]

6" [153 mm]

mounting bracket

4" [102 mm] 6" [153 mm]

Right Side View

Appendix D—HeatShift™System

LDK7 Plates Dimensions

19-1/2" [496 mm]

9-3/4" [248 mm]

9-3/4" [248 mm]

16" [407 mm]

Top View

Perimeter of plates may be trimmed to suit installation

Warning Label

Stand-offs (fold down for shipping)

2-1/2" [64 mm]

13-1/2" [343 mm]

Stand-offs

Appendix D—HeatShift™System

Rough Frame Openings

LDK 4 = 39" [991 mm]

Steel studs

4" [102 mm]

5" [127 mm]

Framing on edge

Top of plenum support

LDK 1 = 13" [330 mm]
LDK 4 = 11" [280 mm]

LDK 1 & LDK 4

LDK 3 = 15" [381 mm]

8" [203 mm]

Min. 1" [26 mm] below finished ceiling

Framing on edge

LDK 3

LDK9 Minimum 31" [788 mm]

Steel studs

4" [102 mm]

Framing on edge

LDK 9

⚠️ **Important**
Framing above and below plenum opening for LDK1, LDK4, and LDK9 must be steel framing.
Wood framing acceptable for LDK3.

Appendix D—HeatShift™System

Framing and Clearances—Plenums, front view

Rough Frame Opening
LDK 1 = 49" [1245 mm]
LDK 4 = 39" [991 mm]
LDK 3 = 15" [381 mm]
LDK 9 = 31" [788 mm]

Steel studs

Rough Frame Opening

LDK 1 = 4" [102 mm]

LDK 4 = 4" [102 mm]

LDK 3 = 8" [204 mm]

LDK 9 = 4" [102 mm]

5"

Framing on edge

2 x 4 on edge

See detail

Min. 1/2" [13 mm] clearance to combustibles at ends

Steel studs

See appliance's installation manual for minimum combustible cavity dimensions Note - Min. cavity dimensions may be dictated by LDK plenum when installing across corners.

LT1 pictured

⚠ **Important**
Framing above and below plenum opening for LDK1, LDK4, and LDK9 must be steel framing.
Wood framing acceptable for LDK3.

Appendix D—HeatShift™System

Framing and Clearances—Plenums, side view

LDK 1 & 4

Steel studs

4" [102 mm]

Framing "on edge"

Min. 2-1/2" [64 mm] clearance to ceiling

3" [76 mm] min. clearance to combustibles (top)

Ceiling 1/2" [13mm]

1/2" [13 mm] min. clearance to combustibles rear & sides

5-1/2" [140 mm]

5" [127 mm]

Plenum support (wood) Maintain 1" [26 mm] clearance to pipes

1" [26 mm] min. clearance to combustibles all around pipes

LDK 3

Wood studs

8" [203 mm]

Framing "on edge"

Min. 2-1/2" [64 mm] clearance to ceiling

1-1/2" [38 mm] min. clearance to combustibles (top)

Ceiling

1/2" [13 mm] min. clearance to combustibles rear & sides

1/2" [13 mm]

2" [51 mm] min. clearance to combustibles

1" [26 mm] min. clearance to combustibles all around pipes

LDK 9

Steel studs

4" [102 mm]

Framing "on edge"

Min. 2-1/2" [64 mm] clearance to ceiling

3" [76 mm] min. clearance to combustibles (top)

Ceiling 1/2" [13 mm]

1/2" [13 mm] min. clearance to combustibles rear & sides

Strap to rear wall or stud

Non-combustible plumber's strap (or similar)

1" [26 mm] min. clearance to combustibles all around pipes

> ⚠ **Important**
> Framing above and below plenum opening for LDK1, LDK4, and LDK9 must be steel framing.
> Wood framing acceptable for LDK3.

Appendix D—HeatShift™System

Wall Valance Discharge Opening using LDK7—Duct Termination Plates

Minimum length of opening, front and sides
LT1 - 1500 = 40" [1016 mm]
LT2 - 1700 = 50" [1270 mm]

Continuous ceiling required within cavity

Plate stand-off

2-1/2" [64 mm] min.

Ceiling

See clearances to combustibles next page

4"

Note: Staining or streaking may occur on light colored ceilings due to any dust, etc. in air flow. Maximizing the opening size will help reduce any staining or streaking.

14" [356 mm] min.

Wall finish required to form plenum above duct termination plates

2 x 4 on edge to support plates as necessary - maintain 1" clearance to pipes

LDK 7 - Duct Termination Plates (2) for horizontal installation ONLY!

Min. 1" [26 mm] clearance around pipes

Combustible wall construction

Vertical vent can pass between duct termination plates

Top of stand-offs

See installation manual packed with appliance for minimum combustible cavity dimensions

Non-combustible cement board

85

Appendix D—HeatShift™System

LDK7 Clearances to Combustibles

Perimeter of plates may be trimmed to suit installation

Stand-off

4" [102 mm]

4" [102 mm]

4" [102 mm]

Stand-off

4" [102 mm]

19-1/2" [496 mm]

16" [407 mm]

Top View

Non-combustible zone above plates

4" [102 mm]

4" [102 mm]

Stand-offs

13-1/2" [343 mm]

Front View

4" [102 mm]

4" [102 mm]

Combustible framing allowed below plates

5" [127 mm] dia. pipes - maintain 1" clearance to combustible materials

13-1/2" [343 mm]

Right Side View
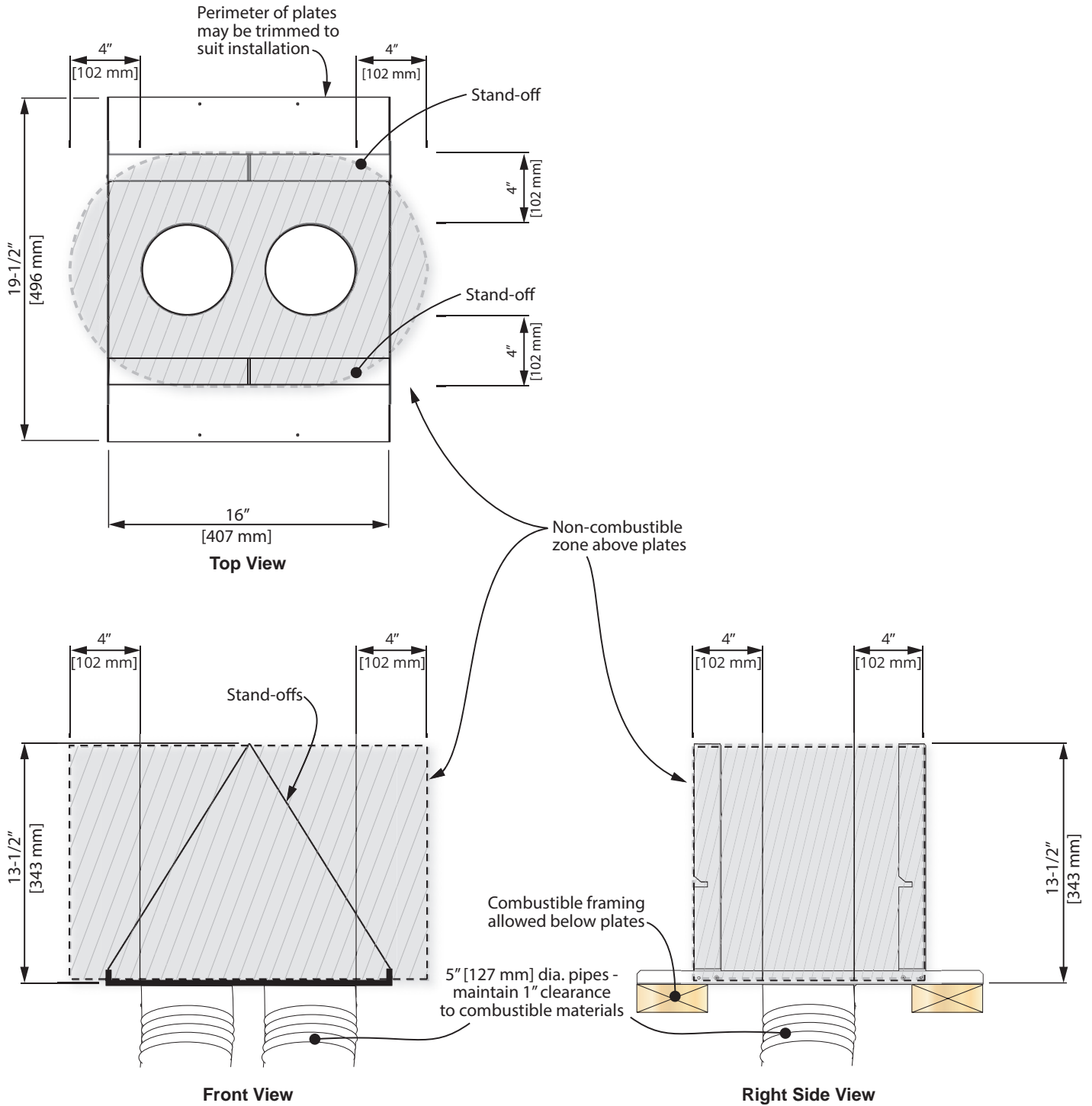
Appendix D—HeatShift™System

LDK Duct Kit LDK 1, LDK 4 with optional 1270RBK Remote Blower Kit

(not approved with outdoor installations)

Universal take-off supplied with 1270RBK kit. Can mount to either end of plenum. Maximum 1 x 1270RBK kit per plenum.

LDK1 or LDK4 plenum*

*LDK9 cannot be installed with1270RBK

5" [127 mm] dia. piping

1270RBK fan unit - see diagram for possible mounting positions. May be positioned higher or lower than LDK plenum position.
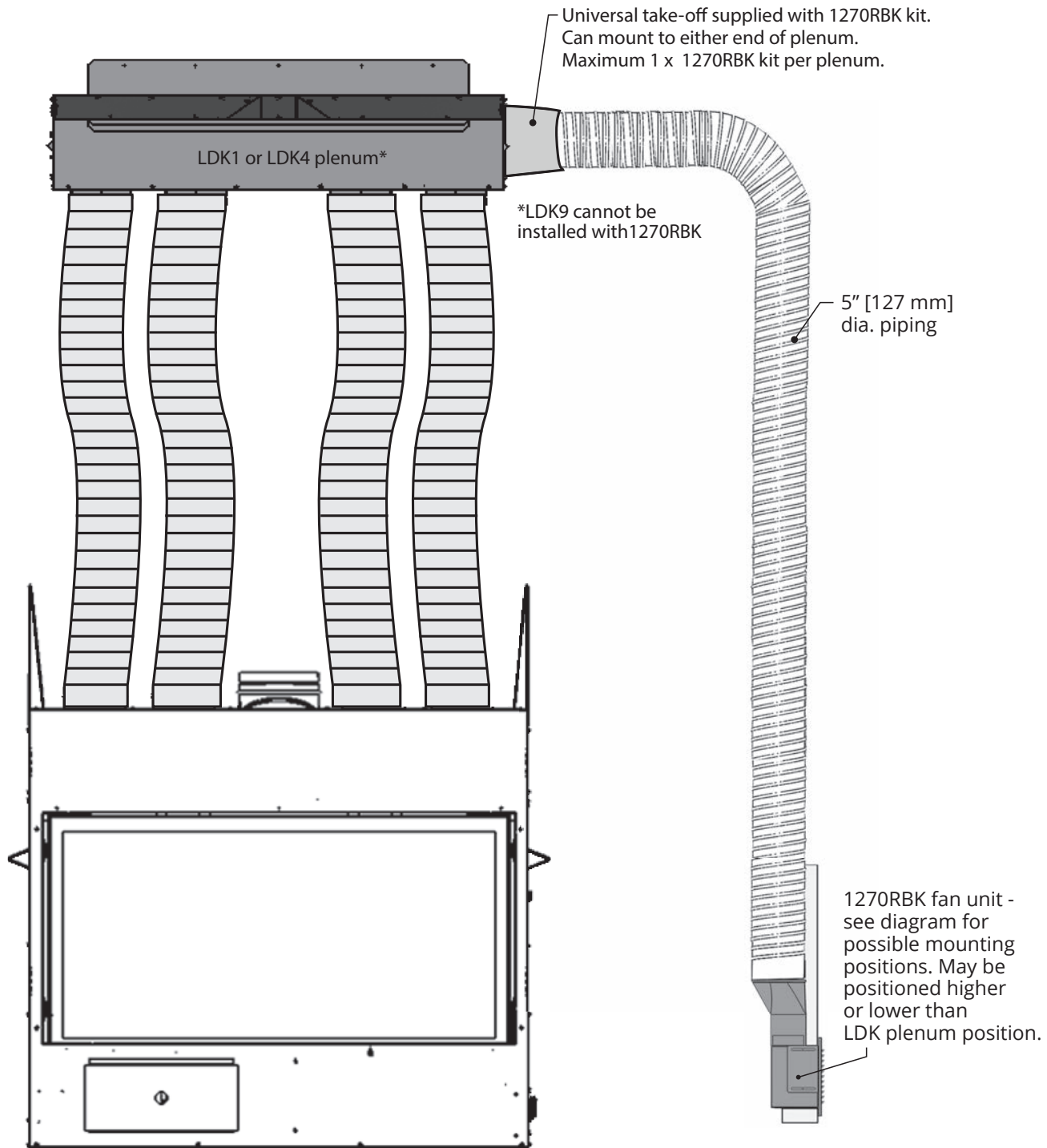
LT1 pictured

Appendix D—HeatShift™System

Install Plenum Kits (LDK1, LDK3, LDK4 & LDK9) —see next page for LDK7 Duct Termination Plates

1. Frame a rough opening at the desired location—see earlier sections of this manual for allowable plenum positions and rough frame opening sizes.

2. Install top mounting bracket(s) to the plenum using screws provided (use the short sheet metal screws provided otherwise the screw tails (ends) will interfere with the finishing frame when installed).
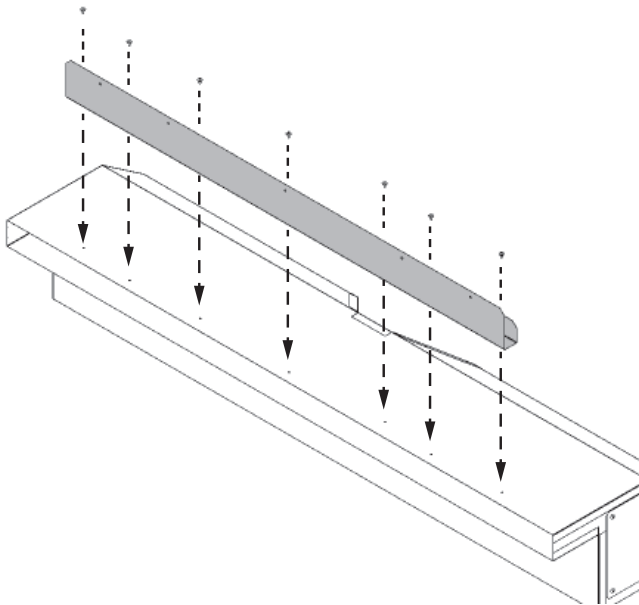
3. Install the plenum(s) into the rough frame opening maintaining minimum clearances to combustibles as listed—see Rough Frame Openings. Fix the plenum to the framing using nails or screws through the top mounting bracket. **Note that the mounting brackets are not intended to carry the weight of the plenum and pipes. Provide support to the underside of the plenum and ensure the plenum is level and its outlet is not distorted—see Framing and Clearances.** Use metal strapping (all-round, not supplied) as required to further secure the plenum to framing.

4. Attach one section of UL-181, Class 1 approved air duct to each of the collars and secure it with gear clamps provided. **DO NOT SPLICE DUCTS!**

5. Attach the top of the pipe sections to the plenum securing them with the gear clamps provided. An upward slope must be maintained in horizontal sections of pipes for proper convection. Use straps as necessary to maintain the pipes positions. Support horizontal sections every 24 inches [610 mm].

6. Paint the inside surfaces of the plenum using high-temperature flat black spray paint for installations where the inside of the plenums may be visible. **Note:** The flanges of the white finishing frame (when used) will insert approximately 1-1/4" [32 mm] into the plenum covering the shiny sheet metal.

Install the finishing frame or louver to the plenum after the wall finish is completed:
LDK1, LDK4, LDK9: Use the LDK2, LDK5 or LDK10 depending of the length of the plenum.
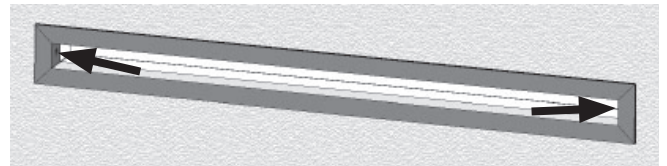
LDK3: Use the grilles provided with the kit.
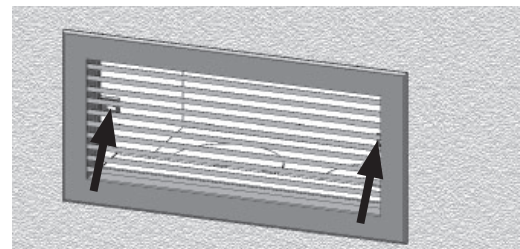
Note: The frame/louver are finished white but may be painted another color if desired; use high temperature paint (250°F/120°C). You may also finish up to the perimeter of the plenum opening with your material of choice and not use the frame or louver. Do not finish over any of the opening in the plenum outlet.

7. Continue with the fireplace installation.

Appendix D—HeatShift™ System

Install Duct Termination Plates (LDK7) —see previous page for LDK1, LDK3, LDK4 & LDK9 Plenum kits

1. Frame a rough opening and platform at the desired location—see earlier sections of this manual for allowable duct termination plates positions and rough frame opening sizes.

2. On each duct termination plate, rotate both stand-offs to the vertical position and secure in place using screws provided.

2 stand-offs per plate
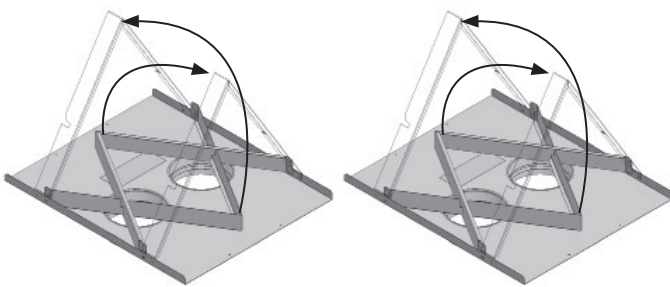
3. Install the termination plates into the framing ensuring collars/pipes on underside of plates maintain 1 inch [26 mm] clearance to combustibles and clearance to combustible above the plates are maintained as listed in Wall Valence Discharge Opening. The termination plates perimeter may be trimmed as necessary to accommodate framing. Secure the termination plate to framing using screws or nails to avoid movement.

4. Attach one section of UL-181, Class 1 approved air duct to each of the collars and secure it with gear clamps provided. **DO NOT SPLICE DUCTS!**

5. Attach the top of the pipe sections to the duct termination plates securing them with the gear clamps provided. An upward slope must be maintained in horizontal sections of pipes for proper convection. Use straps as necessary to maintain the pipes positions. Support horizontal sections every 24 inches [610 mm].

6. Continue with the fireplace installation.

Repair Parts List

	Description	Part no.
LDK1	48" Quad Hot Air Plenum Kit [1220 mm]	
	48" x 2" quad plenum [1220 x 51 mm]	4005476
	5" take-off collars (4) [127 mm]	4005478
	Top mounting bracket/standoffs	4007211
	#8 slotted drive screws 1/4" (7) [6 mm]	798601
LDK2	48" Outlet Frame Kit for LDK1 [1220 mm]	
	Aux Frame-SPL 48" x 2" white [1220 x 51 mm]	4005612
LDK3	14" Double Hot Air Plenums Kit [356 mm]	
	14" x 6" double plenums (2) [356 x 153 mm]	4005464
	5" take-off collars (4) [127 mm]	4005478
	DABL-00-C-SPL 14" x 6" Grilles white (2) [356 x 153 mm]	4005614
	Top mounting bracket/standoffs (2)	4005566
	#8 slotted drive screws 1/4" (6) [6 mm]	798601
LDK4	38" Quad Hot Air Plenum Kit [965 mm]	
	38" x 2" quad plenum [965 x 51 mm]	4005477
	5" take-off collars (4) [127 mm]	4005478
	Top mounting bracket/standoffs	4007213
	#8 slotted drive screws 1/4" (7) [6 mm]	798601
LDK5	38" Outlet Frame Kit for LDK4 [965 mm]	
	Aux Frame-SPL 38" x 2" white [965 x 51 mm]	4005613
LDK6	5" Aluminum 2-ply Flex Kit [127 mm]	
	5" dia 10' (uncompressed) aluminum chimney liners (2) [127 mm x 3 m]	4005635
	4.5" - 6.5" ss gear clamps (8) [114 - 165 mm]	4005642
LDK7	Duct Termination Plates	
	Plate and collar assembly (2)	4006747
	5" take-off collars (4) [127 mm]	4005478
	Screws 8 x 3/8 tap PN HD PH (12)	100A757
LDK9	30" Quad Hot Air Plenum Kit [762 mm]	
	30" x 2" quad plenum [762 x 51 mm]	4007903
	5" take-off collars (4) [127 mm]	4005478
	Top mounting bracket/standoff	4007601
	#8 slotted drive screws 1/4" (5) [6 mm]	798601
LDK10	30" Outlet Frame Kit for LDK9 [762 mm]	
	Aux Frame-SPL 30" x 2" white [762 x 51 mm]	4007951

Appendix E—Spare Parts

	Description	Part Number
1	45 degree flanged elbow	4000945V
2	Elbow gasket	4002999
3	Top stand-offs (2)	4005408
4	Restrictor plates (2)	4009364
5	Liner panels anchors (2)	4001283
6	Window latch assembly (4)	4010800
8	Top panel support	4002963
9	Power receptacle	4006368
10	Strain relief	4006548
11	Electrical box cover - inner	4007971
12	Electrical box access plate - outer	4007973
13	Window assembly	4008193
14	Hot glass warning plate	4003093
15	Black steel platform	4004885AH
16	Burner	4007084AH
17	Platform supports (2)	4002908
18	Burner end location bracket	4002903
19	Burner module assembly (natural gas)	4008702
	Burner module assembly (propane gas)	4008703
20	Pilot shield	4003018AH
21	Pilot complete assembly (natural gas)	4008484
	Pilot complete assembly (propane gas)	4008485
22	Thermocouple assembly	4008490
23	Pilot injector BL22 (natural gas)	4008493
24	Pilot injector BL14 (propane gas)	4008494
25	Pilot tube	4008486
26	Pilot gasket	4000715
27	Pilot stand	4006907
28	Burner mount	4007223
30	Air shutter stopper	4008005
31	Orifice/aeration block	4007702
32	Gas orifice #32 (natural gas)	4007000-32
	Gas orifice #50 (propane gas)	4007000-50
33	Brass socket head pipe plug	4008003
34	Block/pipe connector	4006689
35	Air shutter	4007748
36	Aeration lever	4007225
37	Burner module plate	4006916
38	Gaskets module plate, long (2)	3000400

	Description	Part Number
39	Gaskets module plate, short (2)	3000399
40	Valve to elbow pipe assembly	4006923
41	Pipe s/s flex	4000345
42	Thermocouple interrupter	4001037
43	GV60 valve assembly (natural gas)	4008700
	GV60 valve assembly (propane gas)	4008701
44	Valve mount	4002905
45	Yellow cable to interrupter	4002096
46	Red cable to interrupter	4001035
49	Wire harness GV60	4001187
50	Receiver (Valor 10 two way)	4005597
51	Handset wall holder	4004459
52	Valor 10 Handset	4007548
53	Remote battery & Wall switch kit	RBWSK
54	Junction box	4005527
55	Cover plate & 4 screws	4005526
56	Battery holder	4006553
57	Cable tie	4005524
58	Harness assembly	4005523
59	Plate with magnets	4005391
60	Long screws (2)	4001444
61	Wall switch with 2 screws	4005522
62	Battery cover assembly	4005390
63	Access hatch	4008599
64	GV60 Valve Repair Kit (not included)	4004544
65	Liner panels - complete set	
	Fluted Black Liners	2515FBL
	Reflective Glass Liners	2525RGL
	Plain Black Liners	2560PBL
66	Rear panel	
	Fluted Black	4008757
	Reflective Glass (3)	4008479
	Plain Black	4008342
67	LH side panel	
	Fluted Black	4008345
	Reflective Glass	4008477
	Plain Black	4008345

Appendix E—Spare Parts

	Description	Part Number
68	RH side panel`	
	Fluted Black	4008344
	Reflective Glass	4008478
	Plain Black	4008344
69	Top panel	
	Fluted Black (2)	
	Reflective Glass (2)	4008343
	Plain Black (2)	
70	Birch Log Kit	1505BLKV2
	Log L1	4007371
	Log L2	4007372
	Log L4	4007374
	Log L6	4007376
	Log L12	4007382
	Log L30	4008758
	Log L31	4008759
	Log L32	4008760
71	Mixed grey embers (bagged)	4007782
72	Drift Wood Kit	1505DWKV2
	Log L16	4007986
	Log L18	4007988
	Log L33	4008737
	Log L34	4008738
	Log L35	4008739
	Log L36	4008740
73	Brown beach pebble	4003082
74	Grey beach pebble	4003083
75	Beige beach pebble	4003087
76	White beach pebble	4003084
77	Black beach pebble	4003085
78	Small grey beach pebble	4003086
79	Vermiculite (bagged)	4002940

	Description	Part Number
80	Split Wood Kit	1505SWKV2
	Log 20	4008743
	Log 21	4008744
	Log 22	4008745
	Log 23	4008746
	Log 24	4008747
	Log 25	4008748
	Log 26	4008749
	Log 27	4008750
	Log 28	4008751
81	Mixed grey embers (bagged)	4007782
82	Light wiring harness (replacement, not included)	4009263
83	G6.35 35W halogen bulbs (2)	4009220
84	HeatShift liner kit	LDK6
85	5" x 10' aluminum chimney liner (2)	4005635
86	4.5"-6.5" stainless steel gear clamp (8)	4005642
87	Cable, V-module to receiver 1000 mm	4002531
88	V-Module - Relay box	4002530
89	Power cord assembly	4006350
90	Window latch hook pull	4009219
91	Murano decorative glass kit	1500DGM
92	Glass panel	4002869
93	Bag - 1/2" clear fireglass	4004521
94	Rock and Shale kit	1514RSS
95	LH Twig short	4001827S
96	RH Twig	4001828
97	LH Twig	4001827
98	Bag - 3/4" Grey/black shale (1 lb)	4004792
99	Grey rock (6)	4002338
100	Dark grey rock (4)	4002339
101	Grey rock (4)	4002340
102	Dark grey rock (6)	4002341
103	Grey matte pitted rock (1)	4002650
104	Grey matte rock (2)	4002652
105	Grey matte rock (2)	4002654
106	Grey gloss rock (1)	4002657
107	Warm grey gloss pitted rock (2)	4002659
108	Grey glass pitted rock (1)	4002660

Appendix E—Spare Parts

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70

1505BLKV2

L30   L2   L31   L6   L32   71
L4
L12   L1

84

LDK6

85

86

72

1505DWKV2

L18
L34   L33
L16   73
74
75
76
77
78
79
L35   L36

91

1500DGM   92

93

80

1505SWKV2

28   22   26
20
81
21   24   27   25   23

94

1514RSS

95   96   97

99-108   98

x 29

82

83