# **Owner's Manual**

# **Operation and Maintenance**

**CAUTION!** Risk of Fire! DO NOT store instruction manuals inside fireplace cavity. High temperatures could cause a fire.

INSTALLER: Leave this manual with the appliance, not inside the appliance.

CONSUMER: Retain this manual for future reference. Do not store inside the appliance.

Contact your dealer with questions regarding installation, operation or service.

ECHELON-C SERIES

Models:
ECHEL36IN-C
ECHEL48IN-C
ECHEL48STIN-C
ECHEL60IN-C
ECHEL72IN-C

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280* in the United States, or the *Standard for Installation in Mobile Homes, CAN/CSA Z240 MH Series*, in Canada.

This appliance is only for use with the type(s) of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

#### **WARNING:**

FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

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



A 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.

Decorative barrier front must be ordered separately at time of appliance purchase.

Read this manual before operating this appliance.

Please retain this Owner's Manual for future reference.

Read the Installation Manual before making any installation or finishing changes.

# A. Congratulations

Congratulations on selecting a Majestic gas fireplace, an elegant and clean alternative to wood burning fireplaces. The Majestic gas fireplace you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new fireplace, you'll want to read and carefully follow all of the instructions contained in this owner's manual. Pay special attention to all cautions and warnings.

This owner's manual should be retained for future reference. We suggest that you keep it with your other important documents and product manuals.

The information contained in this owner's manual, unless noted otherwise, applies to all models and gas control systems.

Your new Majestic gas fireplace will give you years of durable use and trouble-free enjoyment. Welcome to the Majestic family of fireplace products!

# 

# **Listing Label Information/Location**

The model information regarding your specific fireplace can be found on the rating plate usually located in the control area of the fireplace.



# ▲ Safety Alert Key:

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

**Note:** The term "recommend" or "recommended" does not indicate a requirement. It is a best practice suggested by Hearth & Home Technologies<sup>®</sup>.

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<sup>→ =</sup> Contains updated information.

### **B.** Limited Warranty

# Hearth & Home Technologies LLC LIMITED WARRANTY

Hearth & Home Technologies LLC ("HHT") extends the following warranty for HHT gas, wood, pellet and electric hearth appliances (each a "Product" and collectively, the "Product(s)") and certain component parts set forth in the table below ("Component Part(s)") that are purchased from a HHT authorized dealer or distributor.

#### **WARRANTY COVERAGE:**

HHT warrants that the Products and their Component Parts will be free from defects in materials and workmanship for the applicable period of Warranty coverage set forth in the table below ("Warranty Period"). If a Product or Component Parts are found to be defective in materials or workmanship during the applicable Warranty Period, HHT will, at our discretion, repair the applicable Component Part(s), replace the applicable Component Part(s), or refund the purchase price of the applicable Product(s). The maximum amount recoverable under this Warranty is limited to the purchase price of the Product. This Warranty is transferable from the original purchaser to subsequent owners, but the Warranty Period will not be extended in duration or expanded in coverage for any such transfer. This Warranty is subject to conditions, exclusions, and limitations as described below.

#### **WARRANTY PERIOD:**

Warranty coverage begins at the date of installation. In the case of new home constructions, Warranty coverage begins six months after invoice of the final sale of the Product(s) by an independent, authorized HHT dealer or distributor. However, the Warranty coverage shall commence no later than 24 months following the date of Product shipment from HHT, regardless of the installation or purchase date.

Warranty Period		Period HHT Manufactured Appliances and Venting				
Component Parts	Labor	Gas	Pellet	Wood	Electric	Component Parts Covered by this Warranty
1 Year		x	x	x		All parts including handles, external enameled components and other material except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed
2 Years					х	All parts except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed
			x	x		Glass, Electrical components limited to heating element/igniters, Top feed auger assembly, Blowers, Junction Box, Remotes/Wall switches, linear actuator, power cord, vacuum switch, snap disc, wire harnesses and thermocouple
		х				Electrical components limited to modules, remotes/wall switches, valves, pilots, blowers, junction boxes, wire harnesses, transformers and lights (excluding light bulbs)
		Х		Х		Cement Refractory Panels, Glass Liner Panels
3 yea	ars		х			Firepots, burnpots, Harman mechanical feeders
5 yea	ars	x		x		Catalysts, Vented and Vent Free burners and logs
10 years	1 year	х				Burners, logs and metal/fiber refractory components of HHT manufactured fireplaces or stoves, venting due to poor workmanship
10 years 3 years			х	х		Castings, Medallions & Baffles, FlexBurn® System (engine, inner cover, access cover and fireback), Firebox and heat exchanger, HHT Chimney & Terminations, Manifolds
20 years 3 years		Х				Firebox and heat exchanger
				All pur	chased rep	placement parts and optional accessories
1 Year	None	Х	Х	Х	Х	All purchased replacement parts and optional accessories

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### B. Limited Warranty (continued)

#### **WARRANTY CONDITIONS:**

- Because HHT cannot control the quality of any Products sold by unauthorized sellers, this Warranty only covers Products that are purchased through an HHT authorized dealer or distributor unless otherwise prohibited by law; a list of HHT authorized dealers is available on the HHT branded websites.
- This Warranty is only valid while the applicable Product remains at the site of original installation.
- This Warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the applicable Product is authorized to sell applicable Product.
- Contact your installing distributor or dealer for Warranty service. If the installing dealer or distributor is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking Warranty service from a dealer other than the dealer from whom you originally purchased the applicable Product.
- No HHT consumer should bear cost of warranty service or costs incurred while servicing warranty claims (i.e., travel, gas, or mileage) when the service is performed within the terms of this Warranty. Check with your dealer or distributor in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this Warranty.

#### **WARRANTY EXCLUSIONS:**

This Warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under the Warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the Warranty Period are not covered. These parts
  include: paint, wood and pellet gaskets, firebricks, wood grates, flame guides, batteries and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to
  this noise are not covered by this Warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the applicable Product in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the applicable Product; (2) failure to install the applicable Product in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operation instructions; (7) installation or use of components not supplied with the applicable Product or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the applicable Product.
- Non-HHT venting components, hearth connections or other accessories used in conjunction with the applicable Product.
- · Any part of a pre-existing fireplace system in which an insert or a decorative gas applicable Product is installed.
- HHT's obligation under this Warranty does not extend to the Product's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper Product for the application. Consideration must be given to the Product location and configuration, environmental conditions, insulation and air tightness of the structure.

#### This warranty is void if:

- The applicable Product has been over-fired, operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, deformation/warping of interior cast iron structure or components, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The applicable Product is subjected to prolonged periods of dampness or condensation.
- There is any damage to the applicable Product due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

#### LIMITATIONS OF REMEDIES AND LIABILITY:

• EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. The owner's exclusive remedy and HHT's sole obligation under this Warranty or in contract, tort or otherwise, shall be limited to, at HHT's sole option, replacement of the Component Part(s), repair of the Component Part(s), or refund of the original purchase price of the applicable Product(s). In no event will HHT be liable for any incidental or consequential damages caused by defects in the applicable Product. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from State to State. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE FOR THE APPLICABLE PRODUCT. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

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# **Product Specific Information**

# A. Appliance Certification

MODEL: ECHEL48IN-C, ECHEL60IN-C,

**ECHEL72IN-C** 

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Direct Vent Heater

STANDARD: CSA / ANSI Z21.88-2019 • CSA 2.33-2019

This product is listed to ANSI standards for "Vented Gas Fireplace Heaters" and applicable sections of "Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles", and "Gas Fired Appliances for Use at High Altitudes". Also Certified for Installation in a Bedroom or a Bedsitting Room.

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

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

MODEL: ECHEL36IN-C, ECHEL36STIN-C, ECHEL48STIN-C

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Decorative Gas Appliances

STANDARD: CSA / ANSI Z21.50-2019 • CSA 2.22-2019

This product is listed to ANSI standards for "Vented Decorative Gas Appliances" (and "Gas Fired Appliances for Use at High Altitudes".) Also Certified for Installation in a Bedroom or a Bedsitting Room. for Installation in a Bedroom or a Bedsitting Room.

#### NOT INTENDED FOR USE AS A HEAT SOURCE.

This appliance is decorative in nature and not intended to be a source of heat.

#### NOT FOR USE WITH SOLID FUEL.

This appliance is not intended to burn solid fuel.

NOT FOR USE WITH THERMOSTAT.

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





### **B. Glass Specifications**

This appliance is equipped with 5 mm ceramic glass. Replace glass only with 5 mm ceramic glass. Please contact your dealer for replacement glass.

#### C. BTU Specifications

	<b>Models</b> (U.S. or Canada)			Orifice Size (DMS)
ECHEL36IN-C (NG)	(0-2000 FT)	30,000	17,500	#36
ECHEL36IN-C (Propane)	(0-2000 FT)	27,000	15,000	#52
ECHEL36STIN-C (NG)	(0-2000 FT)	30,000	17,500	#36
ECHEL36STIN-C (Propane)	(0-2000 FT)	27,000	15,000	#52
ECHEL48IN-C (NG)	(0-2000 FT)	40,000	21,000	.124
ECHEL48IN-C (Propane)	(0-2000 FT)	34,000	20,000	#50
ECHEL48STIN-C (NG)	(0-2000 FT)	40,000	21,000	.124
ECHEL48STIN-C (Propane)	(0-2000 FT)	34,000	20,000	#50
ECHEL60IN-C (NG)	(0-2000 FT)	50,000	28,000	#28
ECHEL60IN-C (Propane)	(0-2000 FT)	37,500	20,000	#49
ECHEL72IN-C (NG)	(0-2000 FT)	58,000	30,000	#23
ECHEL72IN-C (Propane)	(0-2000 FT)	45,000	25,000	#46

# **Important Safety and Operating Information**

# A. Appliance Safety

WARNING! DO NOT operate fireplace before reading and understanding operating instructions. Failure to operate fireplace according to operating instructions could cause fire or injury.



NEVER ALLOW CHILDREN TO TOUCH GLASS.

UNTIL COOLED.

- · Keep children away.
- CAREFULLY SUPERVISE children in same room as fireplace.
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.

# High temperatures may ignite clothing or other flammable materials.

 Clothing, furniture, draperies, and other flammable materials must not be placed on or near the appliance.

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. DO NOT operate the appliance with the barrier removed. If the barrier becomes damaged, the barrier must be replaced with the manufacturer's barrier for this appliance.

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

# **WARNING!** Choking Hazard! Keep media out of reach of children.

 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.

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

- Never leave children alone near a hot fireplace, whether operating or cooling down.
- Teach children to NEVER touch the fireplace.
- Consider not using the fireplace when children will be present.

Contact your dealer for more information, or visit: <u>www.hpba.org/Product-Info/Fireplace-Stove-Heater/Glass-Fronts-Safety</u>.

To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacations, trips, etc):

- · Remove batteries from remote controls.
- Turn off wall controls.

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

# **Clear Space**

**WARNING! DO NOT** place combustible objects in front of the fireplace or block fireplace openings. High temperatures could start a fire. See Figure 3.1.

Avoid placing candles and other heat-sensitive objects on mantel or hearth. Heat could damage these objects.

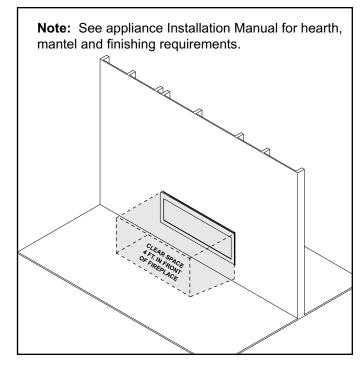


Figure 3.1 Clear Space Requirement - All Models

### **B. General Operating Parts**

Figure 3.2 references the general operating parts of the appliance and the section of this manual in which they are discussed. Heat management options are discussed in Section 3.I.

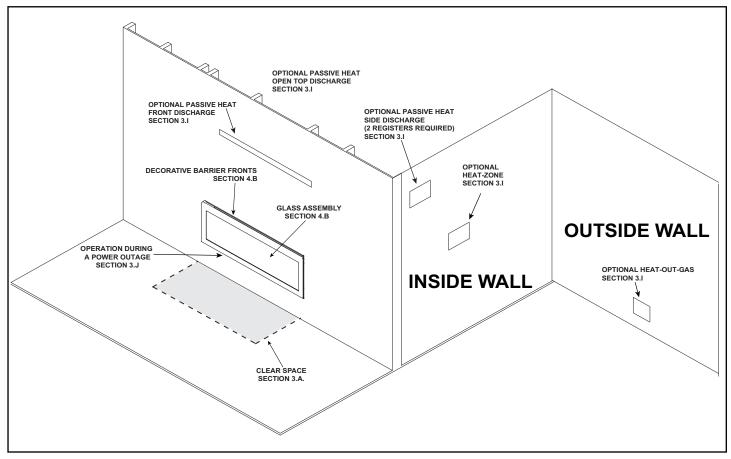


Figure 3.2 General Operating Parts

#### C. Fuel Specifications

**WARNING!** Risk of Fire or Explosion! Appliance must be set up for compatible gas type!

- This appliance is designed to operate on either natural gas or propane. Make sure the appliance is compatible with gas type selected for installation site.
- Conversions must be made by a qualified service technician using Hearth & Home Technologies specified and approved parts.

# D. Wall and Mantel Temperatures

#### **ANSI/CSA Standards**

The American National Standards Institute (ANSI) and Canadian Standards Association (CSA) write the safety and performance standards to which all gas fireplaces are tested. The following are the allowable temperatures around and on a gas fireplace per the ANSI/CSA standards:

### Combustible Mantel and Surfaces around a Fireplace

The allowable temperature rise above ambient is 117°F for all exposed combustible surfaces around the fireplace, including the mantel, when installed according to the installation instructions. Non-combustible surfaces and mantels do not have a maximum temperature limit; however the installation instructions must still be followed for any restrictions on placement of non-combustible materials on or around the fireplace.

Example: The mantel above a fireplace in a room that is 70  $^{\circ}$ F is allowed to reach but not exceed 187  $^{\circ}$ F (70  $^{\circ}$ F+117  $^{\circ}$ F = 187  $^{\circ}$ F).

#### E. Good Faith Wall Surface/TV Guidelines

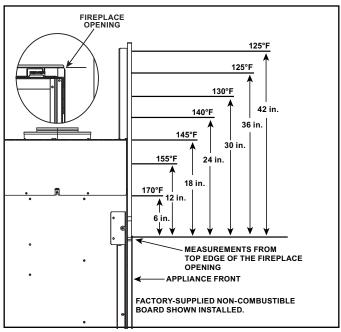
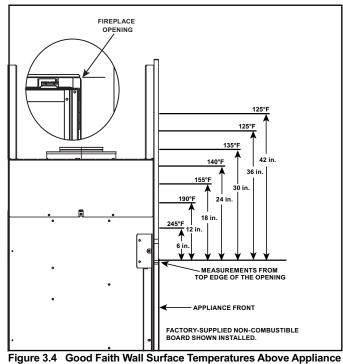


Figure 3.3 Good Faith Wall Surface Temperatures Above Appliance (ECHEL36IN-C/ECHEL36STIN-C/ECHEL48IN-C/ECHEL48STIN-C)



(ECHEL60IN-C/ECHEL72IN-C)

If installing a television (TV) above the appliance, see Section 3 of the appliance Owner's Manual.

**NOTICE:** Surface temperatures listed above are taken with a temperature measuring probe as prescribed by the test standard used for appliance certification. Temperatures on walls or mantels taken with an infrared thermometer may yield increased temperatures of up to 30 °F (17 °C) or more depending on the thermometer settings and material characteristics being measured. Use appropriate finishing materials that are able to withstand these conditions. For additional finishing guidelines, see Section 10 in the appliance installation manual.

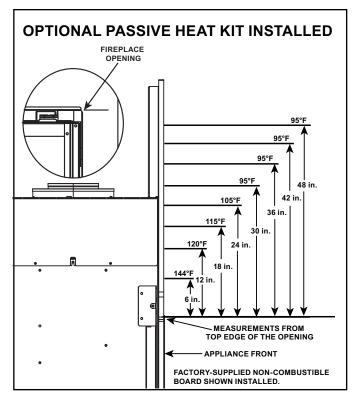
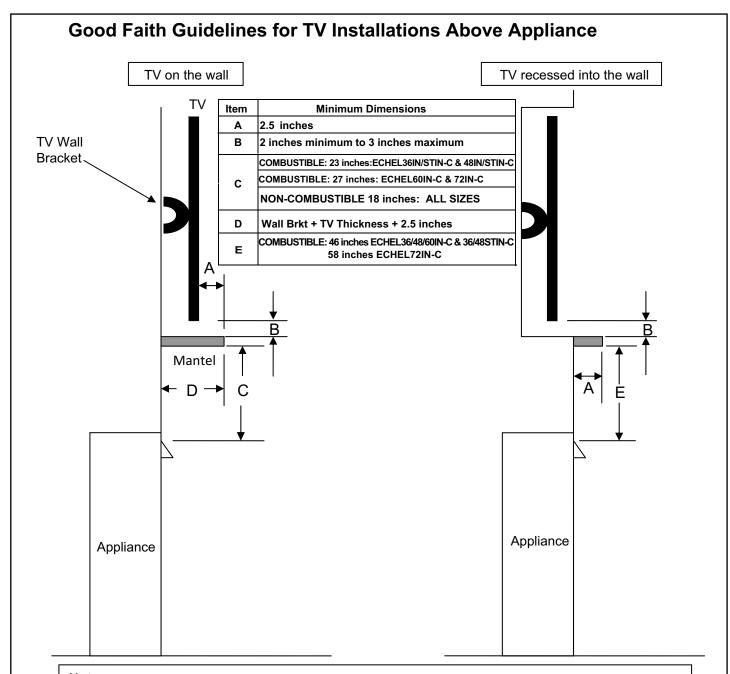


Figure 3.5 Good Faith Wall Surface Temperatures Above Appliance with Passive Heat Kit Installed



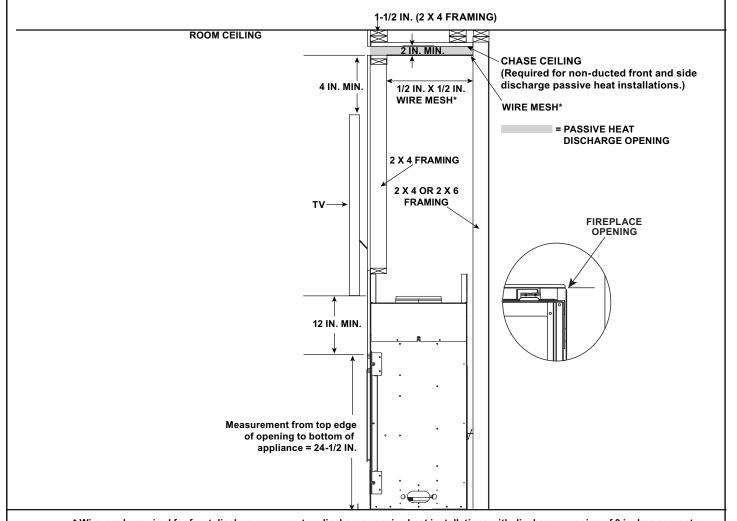
#### Notes:

- These are good faith recommended clearances only and not a guarantee of compliance with all TV manufacturers' maximim allowable operating temperatures.
- 2. Since every home has unique air flow characteristics and maximum allowable operating temperatures can vary from manufacturer to manufacturer and from model to model, actual TV temperatures should be validated at the time of each installation. TVs should not be used in situations where the actual TV temperature exceeds the manufacturers' maximum allowable operating temperatures identified in the TV's technical specifications. Contact the TV's manufacturer directly if you cannot locate this information or have questions regarding the information.
- 3. Mantel height and depth must conform to mantel requirements specified in the fireplace installation manual.
- 4. "C" and "E" dimensions taken from the top of the hood or fireplace opening.
- 5. Suggestions on how to further reduce TV temperatures:
  - a. Increase "A" dimension.
  - b. Increase "C" and "E" dimension, however, increasing "B" dimension beyond maximum recommended typically results in higher temperatures.

Figure 3.6 Good Faith TV Guidelines

### **Good Faith Guidelines for TV Installations** Above a ECHELON-C Fireplace with Passive Heat Option (Single-Sided Appliance Shown)

WARNING! Risk of Fire! Wire mesh required on bottom of discharge opening when discharge opening is greater than 3 inches. Secure wire mesh to top of framing.



<sup>\*</sup> Wire mesh required for front discharge or open top discharge passive heat installations with discharge opening of 3 inches or greater.

Figure 3.7 Good Faith TV Guidelines - Passive Heat Option

# F. Before Lighting Appliance

Before operating this fireplace for the first time, it is recommended that a qualified service technician:

- Verify all shipping materials have been removed from inside and/or underneath the firebox.
- Review proper placement of logs, ember material and/ or other decorative materials.
- · Check the wiring.
- · Check the air shutter adjustment.
- · Ensure that there are no gas leaks.
- Ensure that the glass is sealed and in the proper position and that the integral barrier is in place.

WARNING! Risk of Fire or Asphyxiation! DO NOT operate fireplace with fixed glass assembly removed.

### G. Lighting Instructions (IPI)

### FOR YOUR SAFETY READ BEFORE LIGHTING



WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance is equipped with an intermittent pilot ignition (IPI) device which automatically lights the burner. DO NOT try to light the burner by hand.
- B. BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

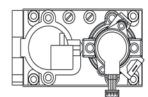
#### WHAT TO DO IF YOU SMELL GAS

- · DO NOT try to light any appliance.
- DO NOT touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
- · If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, DO NOT try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. DO NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### LIGHTING INSTRUCTIONS (IPI)

1. This appliance is equipped with an ignition device automatically lights the burner. DO NOT try to light the burner by hand.

> GAS VALVE



- 2. 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 located on the top of this label. If you do not smell gas, go to next step.
- 3. To light the burner: Equipped with wall switch: Turn ON/OFF switch to ON. Equipped with remote or wall control: Press ON or FLAME button. Equipped with thermostat: Set temperature to desired setting.
- 4. If the appliance does not light after three tries, call your service technician or gas supplier.

#### TO TURN OFF GAS TO APPLIANCE

- Equipped with wall switch: Turn ON/OFF switch to OFF. Equipped with remote or wall control: Press OFF button. Equipped with thermostat: Set temperature to lowest setting.
- 2. Service technician should turn off electric power to the control when performing





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.

DO NOT CONNECT LINE VOLTAGE (110/120 VAC OR 220/240 VAC) TO THE CON- Hot while in operation. DO NOT touch. Keep children, clothing, furniture, gasoline TROL VALVE.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

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

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

and other liquids having flammable vapors away.

DO NOT operate the appliance with fixed glass assembly removed, cracked or broken. Replacement of the fixed glass assembly should be done by a licensed or qualified service person.

#### NOT FOR USE WITH SOLID FUEL

For use with natural gas and propane. A conversion kit, as supplied by the manufacturer, shall be used to convert this appliance to the alternate fuel.

Also Certified for Installation in a Bedroom or a Bedsitting Room.

This appliance must be installed in accordance with local codes, if any; if none, follow the National Fuel Gas Code, ANSIZ223.1/ NFPA 54, or the National Gas and Propane Installation code, CSA B149.1.

For additional information on operating your Hearth & Home Technologies fireplace, please refer to www.hearthnhome.com.

593-913K

# H. Appliance Break-In

Follow the initial break-in procedure below to cure the materials used to manufacture the fireplace and the finishing materials around it.

- The fireplace should be run three to four hours continuously on high.
- Turn the fireplace off and allow it to cool completely.
- Remove fixed glass assembly. See Section 4.B.
- · Clean fixed glass assembly. See Section 4.B.
- Replace the fixed glass assembly and run continuously on high an additional 6-12 hours.

**Note:** Some IPI systems have a safety feature that automatically shuts down the fireplace after 9 hours of continuous operation without receiving a command from the remote control. If this occurs, restart the appliance.

#### NOTICE! Open windows for air circulation during fireplace break-in.

- · Some people may be sensitive to smoke and odors.
- · Smoke detectors may activate.

#### I. Heat Management

#### **Burn Rate**

The ECHELON-C models have a variable burn rate which is controlled by the remote control. Therefore the flame height is adjustable.

The flame height may be adjusted as desired by locating the flame option on the remote control and adjusting up or down to desired flame height.

### **Optional Heat Management System**

An optional heat management system, which allows the heat from the appliance to be redirected as desired, may be installed with this appliance. It may be either a Heat-Zone®-Gas, which diverts heat into an adjacent room, and/or a HEAT-OUT-GAS which will divert heat outside the home/building and/or a Passive Heat kit which disperses the heat into the same room as the fireplace.

Refer to Section 6 of the appliance installation manual to confirm which of the heat management systems may be installed together. All heat management systems must be installed by a qualified service technician at the time of appliance installation.

#### Optional Heat-Zone®-Gas Kit

The Heat-Zone-Gas heat management option is available for use with the ECHELON-C appliances and must be used in conjunction with the IFT-RC400 control. The Heat-Zone-Gas Kit draws heat from your fireplace and directs it to an adjacent room in your home, up to 20 feet away.

#### **Optional Heat-Out-Gas Kit**

The HEAT-OUT-GAS heat management option is available for use with the ECHELON-C appliances and is operated with a wall switch. The HEAT-OUT-GAS Kit draws heat from your fireplace and directs it outside, up to 25 feet away.

#### **Optional Passive Heat Kit**

The Passive Heat heat management option is available for use with the ECHELON-C appliances. The Passive Heat Kit allows the heat to be vented into the room through one front discharge, two side discharges or an open top discharge while the fireplace is in operation.

# J. Operation During A Power Outage

The IntelliFire Touch® intermittent pilot ignition system comes with a battery backup feature that enables the system to operate in a power outage. The system offers seamless transition from household AC power to battery backup. A factory-installed battery pack is located in the control cavity of the appliance. See Figure 3.9. Battery longevity and performance will be affected by long term exposure to the service temperatures of this appliance.

NOTICE: Batteries should only be used as a power source in the event of an emergency power outage. Batteries should not be used as a primary long-term power source. Batteries tend to corrode over time.

#### To Operate Fireplace Using Battery Power (DC):

- 1. Access the control cavity of the appliance. See Figure 3.8 for location. The decorative barrier front, bottom glass shield, insulation and component heat shield will need to be removed.
- 2. Locate the battery tray and insert four AA cell batteries. Battery polarity must be correct or module damage will occur. See Figure 3.9. A complete wiring diagram is included in the Electrical section of the appliance Installation Manual.
- 3. Reinstall the component heat shield, insulation, bottom glass shield and decorative barrier front.
- 4. Turn the appliance on according to the instructions below for the appropriate type of control:

Standard Wall Switch or Factory-Installed ON/OFF Switch:

Toggle the switch as you would under normal circumstances.

#### Wireless Remote:

- Remote receiver is integrated into the ignition module
- Use the remote to turn the appliance on.
- To preserve battery life, do not use the HI/LO flame or THERMOSTAT options.

**NOTICE:** Some functionality will be lost when using battery backup including fan, lights, or any other auxiliary functions that require household 110-120 VAC power.

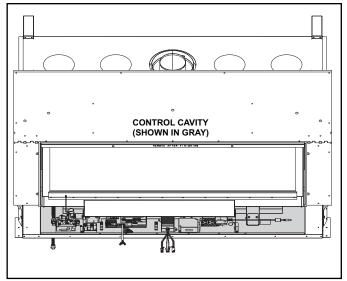
# To Return to Operation Using Electrical (AC) Power

#### Wall Switch

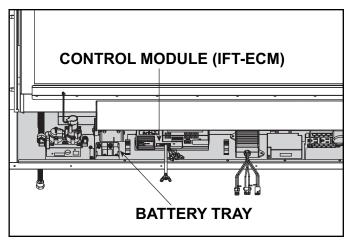
- Toggle the switch to OFF.
- Allow the appliance to cool down completely.
- Remove the batteries from the battery tray.
- Replace decorative barrier front on appliance.

#### Wireless Remote:

- · Use the remote to turn the appliance OFF.
- Allow the appliance to cool down completely.
- · Remove the batteries from the battery tray.
- Replace decorative barrier front on appliance.



3.8 Control Cavity Location



3.9 Battery Tray Location

# K. Detailed Component Operating Instructions - IntelliFire Touch® IFT-ECM Detailed Operating Instruction

This model is shipped from the factory equipped with the IFT-RC400 remote.

 The Electronic Control Module (IFT-ECM) has a three-position ON/OFF/REMOTE selector switch that must be set for proper operation. See Figure 3.10. When changing switch positions, it is important to pause in each position for 1-2 seconds.

#### **OFF Position:**

The appliance will not respond to any commands from a wired wall switch or IFT-RC400 remote control. The unit should be in the OFF position during service, fuel conversion, and to reset the IFT-ECM in the event the system goes into a LOCK-OUT mode as the result of a system error. When switched to the OFF position while the appliance is operating, the system will shut down.

#### ON Position:

The appliance will ignite and run continuously at the HI flame setting. No adjustment in flame height is possible.

#### Remote Position:

The remote position allows operation of the appliance from a wired wall switch or IFT-RC400 remote controls. The IFT-ECM switch must be in this position to pair the IFT-ECM with the IFT-ACM (if installed), and/or IFT-RC400 remote control. See the IFT-RC400 installation manual for detailed instructions on pairing the IFT-ECM with the remote controls. After successfully pairing a IFT-RC400, all installed accessories can be controlled by the IFT-RC400 (see IFT-RC400 user manual). The IFT-ECM has a safety feature that will automatically shut down the fireplace after 9 hours of continuous operation without receiving a command from the IFT-RC400.

The IFT-ECM has a safety feature that will automatically shut down the fireplace after 9 hours of continuous operation in the ON position, except when operated in active thermostat mode.

- If multiple control options are installed, the IFT-ECM will respond to the last command from the wired wall switch or IFT-RC400. The wired wall switch is NOT available if a Power Vent is used.
- The Pilot button on the IFT-ECM activates the Cold Climate function of the fireplace. This function lights the pilot flame ONLY to provide enough heat in the firebox to reduce condensation in cool, high humidity ambient conditions. To activate the Cold Climate

press and hold the Pilot button for one second and release. The IFT-ECM will flash two green LED blinks, beep twice and light and rectify the pilot flame when pressed to activate. To turn off Cold Climate, press and hold the Pilot button for one second and release. The IFT-ECM will flash one green LED blink, beep once and shut down the pilot flame. If remote controls are paired with the IFT-ECM, this feature can also be activated with the IFT-RC400.

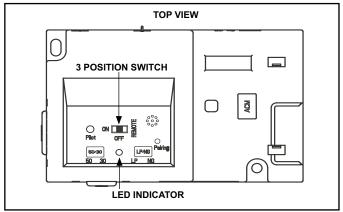


Figure 3.10 IFT-ECM



**DO NOT** cycle the ON/OFF/REM selector switch more than one time within a five minute period. Gas may accumulate in firebox. Call a qualified service technician.

### **Reset Switch Operation**

**CAUTION!** Risk of burns! Appliance surfaces are hot when operating and during cool down. Use care and wear gloves when opening the front and accessing components inside the appliance.

The control module (IFT-ECM) may lock out under certain conditions. When this occurs, the appliance will not ignite or repond to commands and is shut down. If the IFT-ECM is in the LOCK-OUT mode, it will be necessary to reset the control module.

For natural gas applications, the IFT-ECM has a soft lockout. This means the appliance will have to be restarted using the FLAME function on the remote control.

For propane applications, the appliance has a hard lockout and the IFT-ECM must be reset. This appliance has a reset switch located inside the control cavity for propane applications. See Figure 3.12 for approximate location.

#### To reset the IFT-ECM Control Module:

- Be aware the appliance may be HOT, use care in accessing the reset switch.
- Turn the appliance off at a wall switch location if so equipped.
- Wait five minutes to allow possible accumulated gas to

### For Propane Applications Only:

- Remove decorative barrier front from appliance.
- Remove bottom glass shield from appliance as shown in Figure 3.11.
- Locate reset switch inside the appliance. See Figure 3.12. Hold reset switch down for one second and release. A "beep" will signal module is reset.

### **Appliances with Wall Switch and Remote**

Turn wall switch back to "ON" position. main menu on remote control and restart fireplace. The fireplace will start as it would under normal circumstances.

#### **Appliances with Wall Switch Only:**

Turn wall switch back to "ON" position. The fireplace will ignite as it would under normal circumstances.

#### **Appliances with Remote Only:**

- · Turn fireplace back on using the main menu on the remote control. The fireplace will ignite as it would under normal circumstances.
- Reinstall bottom glass shield.
- Reinstall decorative barrier front on appliance.
- If the IFT-ECM re-enters the LOCK-OUT condition after this procedure, contact your dealer for service.

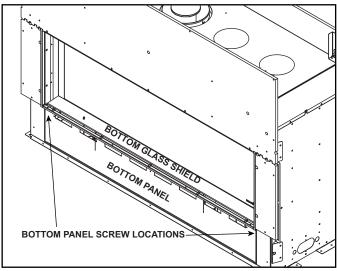
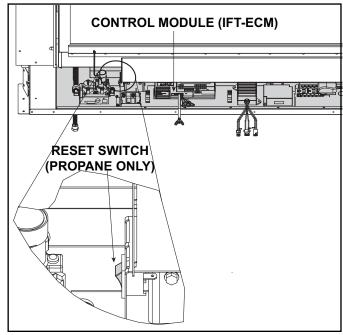


Figure 3.11 Bottom Panel Location



3.12 IFT-ECM and Reset Switch Location - Top View

# **Appliance ON/OFF:**

A wall control, thermostat or remote control may be used to control the ON/OFF function of the appliance. Follow instructions included with the installed control.

#### LED's

- This appliance is shipped standard with LED lights.
- The LED's must be used in conjunction with the IFT-RC400 remote control. The intensity of the these lights is controlled through the RC400 remote control.



# **Maintenance and Service**

IMPORTANT! Any safety screen, decorative barrier front or guard removed for servicing must be replaced prior to operating the fireplace.

When properly maintained, your fireplace will give you many years of trouble-free service. **Contact your dealer** to answer questions regarding proper operation, trouble-shooting and service for your appliance. Visit www.majesticproducts.com to locate a dealer. We recommend annual service by a qualified service technician.

# A. Maintenance: Frequency and Tasks

Task	Frequency	To be completed by	
Glass Cleaning	Seasonally		
Surrounds, Decorative Barrier Fronts	Annually	Homeowner	
Remote Control	Seasonally		
Venting and Termination Cap	Seasonally		
Gasket Seal and Glass Inspection	Annually		
Log Inspection	Annually		
Firebox Inspection	Annually		
Control Compartment & firebox Top	Annually	Qualified Service Technician	
Pilot and Burner Ignition & Operation	Annually		
Electrical Service and Repair	As needed		

#### B. Maintenance Tasks - Homeowner

Installation and repair should be done by a qualified service technician only. The appliance should be inspected before use and at least annually by a professional service person.

The following tasks may be performed annually by the homeowner. If you are uncomfortable performing any of the listed tasks, please call your dealer for a service appointment.

More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean. Any safety screen, guard, or barrier removed for servicing the appliance must be replaced prior to operating the appliance.

**CAUTION!** Risk of Burns! The fireplace shall be turned off and cooled before servicing.

### **Glass Cleaning**

Frequency: Seasonally

By: Homeowner

**Tools Needed**: Protective gloves, gas fireplace glass cleaner, drop cloth and a stable work surface.

CAUTION! Handle fixed glass assembly with care.

Glass is breakable.

• Avoid striking, scratching or slamming glass

- DO NOT use abrasive cleaners
- DO NOT clean glass while it is hot
- Prepare a work area large enough to accommodate fixed glass assembly and decorative barrier front by placing a drop cloth on a flat, stable surface.

**Note**: Fixed glass assembly and gasketing may have residue that can stain carpeting or floor surfaces.

 Remove decorative barrier front from fireplace and set aside on work surface.

#### **Removing Fixed Glass Assembly**

- Remove the decorative barrier front from fireplace and set aside on work surface.
- 2. Remove bottom glass shield.
- 3. Locate the glass spring latches that are on the upper edge of the glass frame of the appliance. See Figure 4.1.
- 4. Use both index fingers to release spring latches. See Figure 4.1.
- 5. Allow glass to tilt forward. Grasp glass on the upper return lip of glass frame and lift up and out. The glass should lift easily out of the bottom retaining lip.

#### **Cleaning Fixed Glass Assembly**

- Clean glass with a non-abrasive, non-ammonia based, commercially available gas fireplace glass cleaner.
  - Light deposits: Use a soft cloth with soap and water
  - Heavy deposits: Use commercial fireplace glass cleaner (consult with your dealer)

#### **Replacing Fixed Glass Assembly**

- 1. Locate retaining lip on lower front face of firebox.
- 2. Place glass assembly into retaining lip end. Tilt top of glass assembly toward fireplace.
- Carefully set fixed glass assembly in place on fireplace. Hold glass in place with one hand and secure glass latches with the other hand. Assure proper left and right placement of glass and engage all four spring latches.

Inspect and operate all glass latches to ensure they move freely and no obstructions are present.

- 4. Reinstall bottom glass shield.
- 5. Reinstall decorative barrier front.

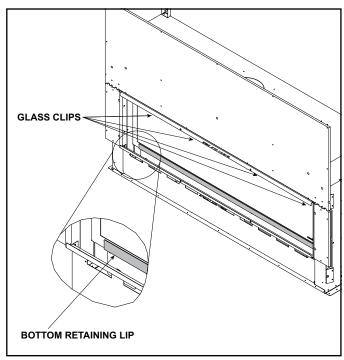


Figure 4.1 Fixed Glass Assembly

### Surrounds, Decorative Barrier Fronts

Frequency: Annually

By: Homeowner

Tools needed: Protective gloves, stable work surface

- · Assess condition of screen and replace as necessary.
- · Inspect for scratches, dents or other damage and repair as necessary.
- Check that air intake and discharge areas are not blocked.
- · Vacuum and dust surfaces.

#### Remote Control

Frequency: Seasonally

By: Homeowner

Tools needed: Replacement batteries and remote control instructions.

- Locate remote control transmitter and receiver.
- · Verify operation of remote. Refer to remote control operation instructions for proper calibration and setup procedure.
- · Place batteries as needed in remote transmitters and battery-powered receivers.
- · Place remote control out of reach of children.

If not using your fireplace for an extended period of time (summer months, vacations/trips, etc), to prevent unintended operation:

- Remove batteries from remote controls.
- · Unplug 6 volt adapter plug on IPI models.

# Venting and Termination Cap

Frequency: Seasonally

By: Homeowner

**Tools needed:** Protective gloves and safety glasses.

- Inspect exposed venting and termination cap for blockage or obstruction such as plants, bird nests, leaves, snow, debris, etc.
- · Verify termination cap clearance to subsequent construction (building additions, decks, fences, or sheds).
- · Inspect for corrosion or separation.
- · Verify caulking and sealing of vent components and termination cap remains intact.
- · Inspect draft shield to verify it is not damaged or missing.

# C. Maintenance Tasks - Qualified Service Technician

The following tasks must be performed by a qualified service technician.

### **Gasket Seal and Glass Assembly Inspection**

Frequency: Annually

By: Qualified Service Technician

**Tools needed:** Protective gloves, drop cloth and a stable work surface.

- · Inspect gasket seal and its condition.
- Inspect fixed glass assembly for scratches and nicks that can lead to breakage when exposed to heat.
- Confirm there is no damage to glass or glass frame.
   Replace as necessary.
- Verify that fixed glass assembly is properly retained and attachment components are intact and not damaged. Replace as necessary.

# Log Inspection

Frequency: Annually

**By:** Qualified Service Technician **Tools needed:** Protective gloves.

- Inspect for damaged or missing logs. Replace as necessary. Refer to Installation manual for log placement instructions.
- Verify correct log placement and no flame impingement causing sooting. Correct as necessary.

# **Firebox Inspection**

Frequency: Annually

By: Qualified Service Technician

**Tools needed:** Protective gloves, sandpaper, steel wool, cloths, mineral spirits, primer and touch-up paint.

- Inspect for paint condition, warped surfaces, corrosion or perforation. Sand and repaint as necessary.
- Replace fireplace if firebox has been perforated.

# **Control Compartment and Firebox Top**

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, vacuum cleaner, dust

cloths

- Vacuum and wipe out dust, cobwebs, debris or pet hair.
   Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided.
- · Remove all foreign objects.
- Verify unobstructed air circulation.

#### **Pilot and Burner Ignition and Operation**

Frequency: Annually

By: Qualified Service Technician

**Tools needed:** Protective gloves, vacuum cleaner, whisk broom, flashlight, voltmeter, indexed drill bit set, and a manometer.

- Inspect orifice for soot, dirt and corrosion. Verify orifice size is correct. See Service Parts List for proper orifice sizing.
- Verify air shutter setting is correct. See Installation Manual for required air shutter setting. Verify air shutter is clear of dust and debris.
- Verify burner is properly secured and aligned with pilot or igniter.
- Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.
- Inspect IPI flame sensing rod for soot, corrosion and deterioration. Polish with 320 grit Emery cloth and/or 3M™ Scotch-Brite Abrasive Hand Pad.
- Verify that there is not a short in flame sense circuit by checking continuity between pilot hood and flame sensing rod. Replace pilot as necessary.
- Verify manifold and inlet pressures. Adjust regulator as required.
- Check all accessible gas-carrying tubes, connections, pipes and other components for leaks.
- Inspect pilot flame pattern and strength. See Figure 4.2 for proper pilot flame pattern. Clean or replace orifice spud as necessary.
- Check for smooth lighting and ignition carryover to all ports. Verify that there is no ignition delay. Inspect and ensure the lighting of the main burner occurs within four seconds of the main gas valve opening.
- Inspect for lifting or other flame problems.
- Verify batteries have been removed from battery back-up IPI systems to prevent premature battery failure or leaking.

NOTE: Appearance of rock jig, pilot shield and media tray may vary between appliance models.



Figure 4.2 IPI Pilot Flame Patterns

# **Electrical Service and Repair**

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

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



# Frequently Asked Questions and Troubleshooting

# A. Frequently Asked Questions - Appliance

ISSUE	SOLUTIONS
Condensation on the glass	This is a result of gas combustion and temperature variations. Prior to appliance being turned on, the inside of the glass has cooled below the dew point producing a byproduct of combustion: water in the form of condensation. As the fireplace glass warms, the condensation will disappear.
	In the summer, the inside of your fireplace contains hot humid air from outdoors. When the air from outdoors contacts glass cooled below the dew point by your air conditioning, moisture in that air will condense.
Blue flames	This is a result of normal operation and the flames will begin to yellow as the fireplace is allowed to burn for 20 to 40 minutes.
Erratic flames	Verify that the glass assembly is correctly installed and that all glass latches are engaged over the tabs on the glass frame. Vent baffle/flue restrictor may be needed when long vertical vent runs are used. Refer to Installation Manual, Section 4 Vent Diagrams.
Odor from fireplace	When first operated, this fireplace may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing. Odor may also be released from finishing materials and adhesives used around the fireplace. These circumstances may require additional curing related to the installation environment.
Film on the glass	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3 to 4 hours of initial burning to remove deposits left by oils from the manufacturing process. A non-abrasive cleaner such as gas fireplace glass cleaner may be necessary. Contact your dealer.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the fireplace.
Is it normal to see the pilot flame burn continually?	In an intermittent pilot ignition system (IPI), the pilot flame should turn off when appliance is turned off. Some optional control systems available with IPI models may allow pilot flame to remain lit.
Power Outages (battery backup)	This appliance can be operated on battery power in the event of a power outage. To access the battery pack, the decorative barrier front, mesh and glass assembly must be removed. Refer to Section 3 for more details.
Wall above appliance feels hot to the touch.	No action necessary. This appliance ships with a non-combustible material attached. Specifications of the attached non-combustible material are listed in the Installer's Manual for this appliance.

Contact your dealer for additional information regarding operation and troubleshooting. Visit www.majesticproducts.com to locate a dealer.

# B. Frequently Asked Questions - IntelliFire Touch Controls (IFT-RC400)

Symptom	Possible Cause	Corrective Action	
The appliance does not respond to commands from the remote control	Batteries are depleted.	Verify batteries are new.	
display does not light up when screen is touched.	Batteries are incorrectly oriented.	Verify batteries are installed in correct orientation as shown on batteries receptacle.	
	Touchscreen has lost calibration.	Touchscreen needs to be re-calibrated. Call dealer to have screen re-calibrated.	
The display on remote lights up when screen is touched but it does not respond to commands.	Child Lock is ON.	Check child lock icon located at the top of the remote display. If ON, it will show as a 'locked' symbol. To unlock, remove battery compartment door, locate child lock switch and move to 'unlock' position. Verify child lock icon on screen is now displayed in 'unlock' position.	
The remote displays the following message on-screen: No dealer info available	Dealer information not programmed into remote.	Remote will still provide all available functions, and appliance is fully available for use. Call dealer to have them program.	
The remote displays the following message on-screen: Call "Dealer Name & Number" to schedule maintenance.	300 hours of use. Appliance is still fully functional.	The appliance has been burning for 300 hours and is due for a regular maintenance. Call dealer to have them perform maintenance.	
	Remote is placed at a very short distance or too far away from the appliance.	Try to keep the remote close to the appliance but not directly in front of it. The remote acts as the thermostat.	
The room temperature displayed	Remote is placed in the path of an air draft or vent.	Move the remote away from the direct path of air flow. The remote acts as the thermostat.	
on the remote is either slow or quick to respond while operating in thermostat mode.	Flame Modulation	The control system is designed to automatically adjust the flame intensity based on the difference between the desired room temperature, and actual temperature. In thermostat mode, the hearth appliance will start in HI flame, but as the actual temperature approaches the desired set temperature on the remote, the flame intensity will automatically decrease. Automatic flame modulation will result in more control of the temperature, and will cause the appliance to cycle OFF/ON less.	
The appliance turns OFF the flame after extended periods of operation	9 hour safety shutdown timer	This is normal behavior. The appliance has a safety timer that will automatically turn OFF the flame after nine hours of uninterrupted operation.	
The remote displays the following message on-screen: Fan will turn on within 3 minutes	Functioning as intended.	The appliance has a three minute delay timer before the fan is turned ON. This allows the air surrounding the appliance to be heated before being pushed into the room.	
The remote displays the following message on-screen: "Replace remote batteries."	Low batteries in remote.	Install new batteries in the remote.	
The remote is displaying an incorrect brand.	Remote was programmed incorrectly.	Call dealer to have them program the remote with correct branding. Remote is still fully functional and the appliance is unaffected.	
After turning flame ON using remote, the flame does not turn ON immediately and instead a two minute timer is displayed.	Power vent is installed on the appliance.	This is expected behavior and the two minute timer is called a pre-purge timer. The flame will turn ON at the expiration of the timer.	
The remote displays the following message on-screen:	No power to appliance.	Verify home circuit breaker is on and master reset is on (if equipped).	
"Remote Control Communication Error."	Power outage.	Install new batteries in battery backup.	
The remote displays the following message on -screen: Sorry your appliance did not start. Try again by pressing Flame On.	No power to appliance. No gas to appliance. Accumulation of air in gas line from extended period of appliance inactivity. Gas control system failure.	Verify that appliance has power and gas. Verify that the appliance accepts flame ON commands with an audible beep, and successfully turns flame on within 90 seconds. If this failure persists, contact dealer for service.	

# C. Troubleshooting

With proper installation, operation, and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service technician in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified service technician. Contact your dealer to arrange a service call by a qualified service technician.

#### IntelliFire Touch

#### **Error Codes:**

ECM LED Error Codes	Description
3 Red: 1 Green	IFT-RC400 error message: 'Appliance Safely Disabled', pilot sparks for 90 sec, no flame rectification.
2 Red: 1 Green	IFT-RC400 display: 'Error Pilot Flame', pilot valve solenoid not detected.
2 Red: 2 Green	Sparking feedback signal error, spark coil failure.
5 Red: 1 Green	IFT-RC400 display: 'Error Power Vent' (if installed).

See Troubleshooting matrix for more detail on Lock-out Error Codes, Possible Causes and Corrective Actions.

#### Troubleshooting:

Symptom	Possible Cause	Corrective Action
	Incorrect wiring.	Verify 'S' (White) sense wire and 'l' (orange) ignitor wire are connected to correct terminals on IFT-ECM.
Pilot won't light, module clicks but no spark 90 sec, 3 Red/1 Green Lock out.	Loose connections or electrical shorts in wiring.	Verify no loose connections or electrical shorts in wiring from module to pilot assembly. Verify wire insulation is not damaged. Verify wires are not grounding out to chassis, pilot burner, or any other metal object. Replace any damaged wires.
	Ignitor gap is too large.	Verify spark gap is approximately 0.095" (2.41 mm) to 0.135" (3.43 mm).
Pilot won't light, there is no noise	No AC power, AC/DC adaptor faulty, backup batteries (if being used) depleted, IFT-ECM slider switch in OFF position.	Verify IFT-ECM slider switch is in ON or REM position. Verify AC power available to junction box. Verify AC/DC adaptor is plugged into junction box and ECM. Verify AC/DC adaptor output voltage is between 5.7-6.3 Vdc. If battery pack is used, check battery pack voltage is >4.2 V (if not, replace batteries).
or spark.	Shorted or loose connection in system wiring or wiring harness.	Verify system wiring configuration. Remove and reinstall wiring harness that plugs into module. Check continuity of wires in valve wiring harness. Replace any damaged components.
	Poor or no system ground.	Verify black ground wire in valve harness is connected to metal chassis of fireplace.
Pilot won't light, there is no noise or spark, 2 Red/1 Green Lockout.	Pilot solenoid not detected.	Check if valve harness orange wire is connected to pilot solenoid valve. Check pilot solenoid resistance, nominal is 40 ohms. If open or shorted, replace valve. Check valve harness wire continuity, if open replace 6-pin harness.
Pilot won't light, there is no noise or spark, 2 Red/2 Green Lockout.	Spark coil failure.	Replace ECM.

# IntelliFire Touch - (continued)

Symptom	Possible Cause	Corrective Action
	No gas supply.	Verify incoming gas line ball valve is 'Open'. Verify inlet pressure is within requirement for gas type used. Contact gas supplier.
Pilot sparks but does not light, after 90 sec, 3 Red/1 Green Lockout	ECM has poor ground.	Verify wiring, check valve harness black wire is securely grounded to metal chassis.
	Gas valve defective.	Check pilot valve solenoid kick and hold voltages during ignition cycle. Kick V should be >1 V, hold V minimum 0.26 V. If voltages are OK, replace gas valve.
Pilot lights but main burner does not light. Pilot continues to spark for 90 sec then goes into 3 Red/1 Green Lockout.	No flame detected. Flame rectification issue.	Check if white sense lead is securely connected to 'S' terminal of IFT-ECM. Check resistance of sense lead between sense rod tip and connector to IFT-ECM, should be less than 1 ohm - if not, replace pilot assembly. Check system ground, ensure black valve harness wire is securely attached to metal chassis. Check wiring for damage. With system OFF, check resistance between tip of sense rod and pilot hood, should be resistance (>1 M-ohm).
	No flame detected or sense rod contamination.	With glass assembly installed, verify pilot flame is engulfing flame sense rod on pilot assembly. Verify inlet gas pressure is correct for gas type. Polish flame sense rod with fine steel wool to remove any contaminants that may have accumulated.
Pilot lights and rectifies, but main burner does not light.	Main valve solenoid.	Check if green wire in valve harness is connected to green main valve solenoid. Check main valve solenoid resistance, nominal is 60 ohms. If open or shorted, replace valve. Verify valve inlet pressure is correct for gas type.
Pilot and main do not light, ECM goes into 5 Red/1 Green Lockout.	Power Vent (PV) Failure.	Power Vent blower defective - check wiring to IFT-ACM, check if blower is working. Check if PV pressure switch is connected to brown and black wire in 6-pin valve wire harness. Check if pressure switch is closed (shorted) when PV blower is running. Refer to PV troubleshooting instructions.
	Shorted or loose connection in flame detection circuit.	Check if white sense lead is securely connected to 'S' terminal of IFT-ECM. Check resistance of sense lead between sense rod tip and connector to IFT-ECM, should be less than 1 ohm - if not, replace pilot assembly. Check system ground, ensure black valve harness wire is securely attached to metal chassis. Check wiring for damage. With system OFF, check resistance between tip of sense rod and pilot hood, should be resistance (>1 M-ohm).
Appliance lights and runs for a few minutes then shuts down and/or appliance cycle ON and OFF with less than 90 sec of ON time.	Poor flame rectification or contaminated sense rod.	With glass assembly installed, verify pilot flame is engulfing flame sense rod on pilot assembly. Verify inlet gas pressure is correct for gas type. Polish flame sense rod with fine steel wool to remove any contaminants that may have accumulated. Verify no soot deposits are in sense rod to pilot hood gap.
	Logs are set up wrong.	Remove and re-install logs per the log placement instructions.
	Damaged pilot assembly.	Verify the pilot assembly ceramic insulator around the flame sensing rod is not cracked, damaged or loose. Check resistance between tip of sense rod and IFT-ECM connector, should be less than 1 ohm. Replace pilot assembly if damage is detected.

# 6

# **Reference Materials**

#### A. Accessories

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

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

# Remote Controls, Wall Controls and Wall Switches

After a qualified service technician has installed the remote control, wall control or wall switch, follow the instructions supplied with the control installed to operate your fireplace:

For safety:

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

Contact your dealer if you have questions.

# **Heat Management Systems**

The optional heat management systems compatible with this product are discussed in Section 3.I.

After a qualified service technician has installed the heat management system, follow the instruction supplied with the kit for operation. Contact your dealer if you have questions.

#### Fire Art

Fire art accessories may be installed by a qualified service technician following the instructions included with the accessory.

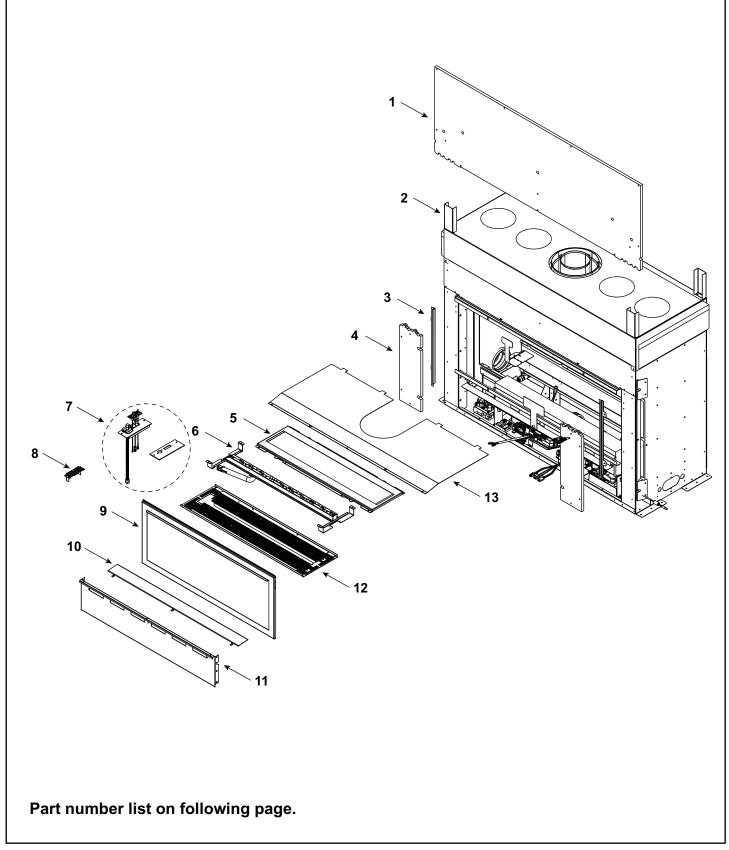
Optional accessories include driftwood logs and multiple media options. Contact your dealer for details.





Echelon 36" Gas Fireplace - DV

Beginning Manufacturing Date: Aug 2019 Ending Manufacturing Date: Active



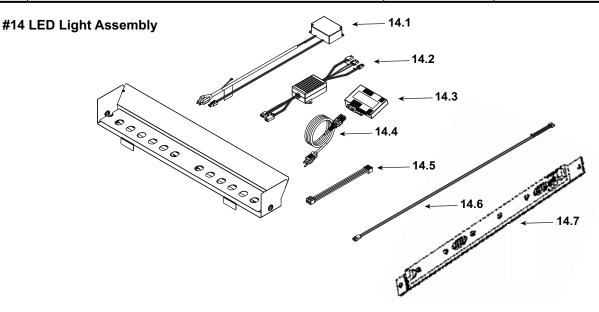


IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



Stocked at Depot

of distributor.				
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
1	Non-combustible Board, Top		SRV2312-460	
2	Standoff, Top	Qty 4 req	2602-283	
3	Side Trim	Qty 2 req	2300-281	
4	Non-combustible Board, Side Pkg of 2		2300-461	
5	Bottom Glass		2312-018	
6	Burner		2406-007	Υ
7	Pilot Assembly		See Following Page	
8	Shield, Pilot		2406-196	
9	Glass Assembly		GLA-36-MAJ	
10	Shield, Bottom Glass		2312-179	
11	Panel, Bottom		2312-147	
12	Rock Tray		2406-151	
13	Heat Shield		2600-150	



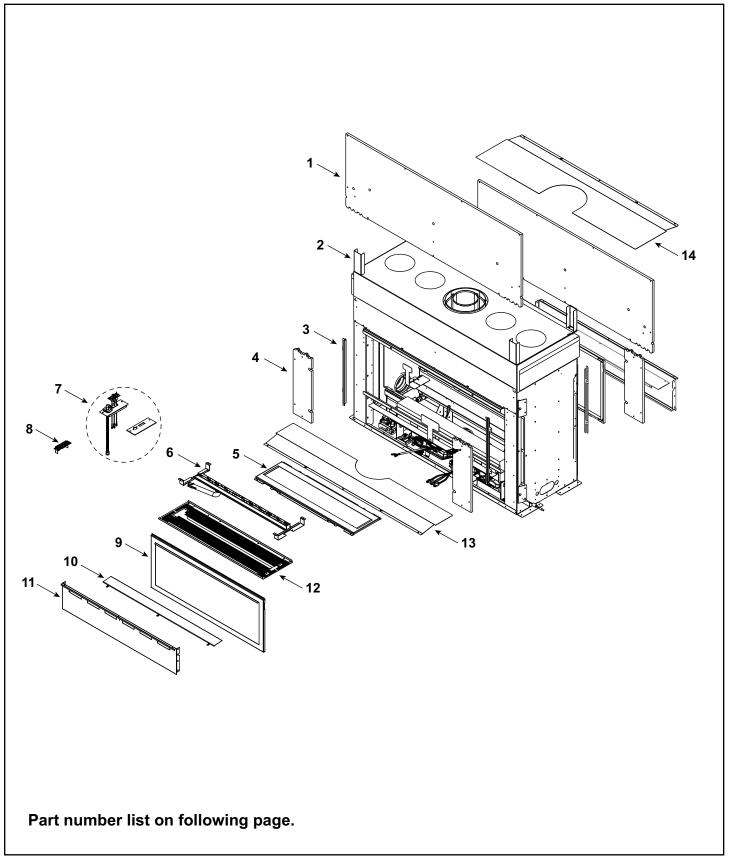
14	LED Light Assembly	ALK-36-C	
14.1	Power Supply, LED 40W	2326-113	Υ
14.2	LED Dimmer	2326-112	Υ
14.3	Module, B Type AC	SRV2326-150	Υ
14.4	Cable, B Type AC Module	SRV2326-152	Υ
14.5	LED Lightbar Connection	2300-753	Υ
14.6	Cable, Linear LED	2300-754	Υ
14.7	LED Board and Strip Assembly	SRV2300-062	Y

Additional service part numbers on following page.





# Echelon 36" See Through Gas Fireplace - DV





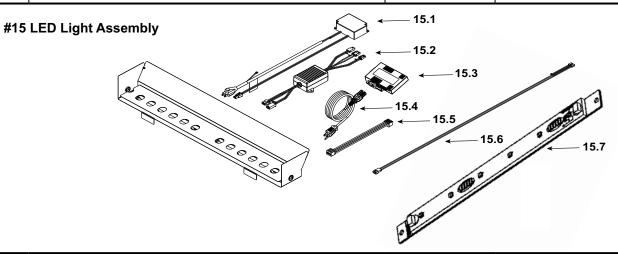


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# Stocked at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
1	Non-combustible Board, Top	Qty 2 req	SRV2312-460	
2	Standoff, Top	Qty 4 req	2602-283	
3	Side Trim	Qty 4 req	2300-281	
4	Non-combustible Board, Side Pkg of 2	Qty 2 req	2300-461	
5	Bottom Glass		2312-018	
6	Burner		2406-007	Υ
7	Pilot Assembly		See Following Page	
8	Shield, Pilot		2406-196	
9	Glass Assembly	Qty 2 req	GLA-36-MAJ	
10	Shield, Bottom Glass w/vent		2312-179	
10	Shield, Bottom Glass		2313-179	
11	Panel, Bottom w/vent		2312-147	
''	Panel, Bottom		2313-147	
12	Rock Tray		2407-059	
13	Heat Shield, Front		2601-150	
14	Heat Shield, Rear		2601-151	



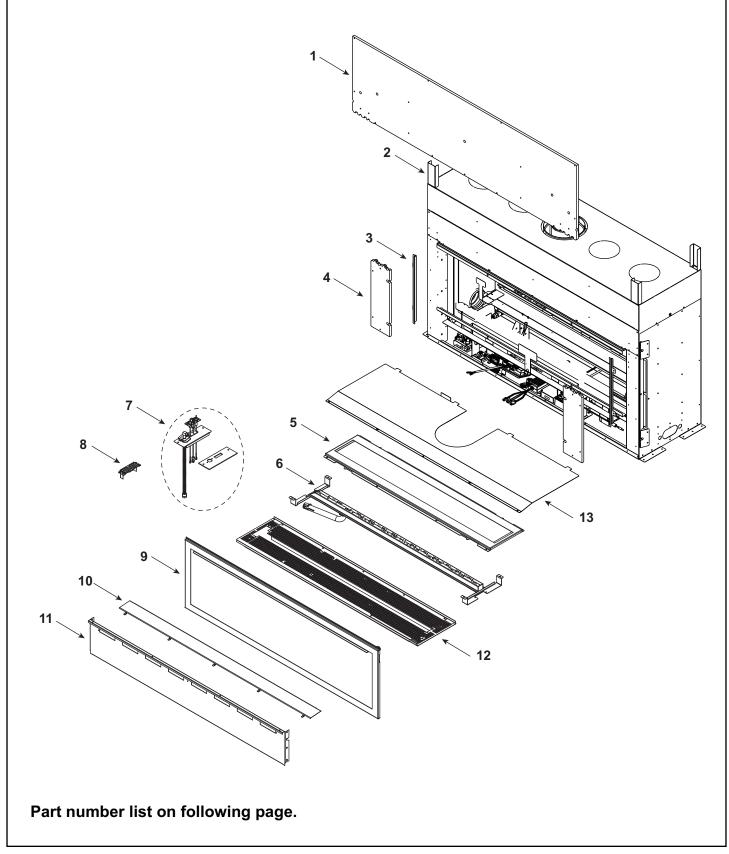
15	LED Light Assembly	ALK-36-C	
15.1	Power Supply, LED 40W	2326-113	Υ
15.2	LED Dimmer	2326-112	Υ
15.3	Module, B Type AC	SRV2326-150	Υ
15.4	Cable, B Type AC Module	SRV2326-152	Υ
15.5	LED Lightbar Connection	2300-753	Υ
15.6	Cable, Linear LED	2300-754	Υ
15.7	LED Board and Strip Assembly	SRV2300-062	Υ

Additional service part numbers on following page.



Echelon 48" Gas Fireplace - DV

Beginning Manufacturing Date: Aug 2019 Ending Manufacturing Date: Active



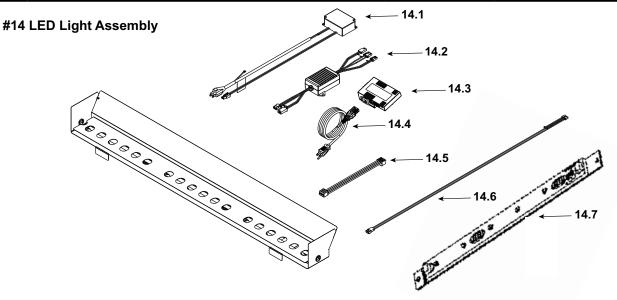


IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



# Stocked at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
1	Non-combustible Board, Top		SRV2300-460	
2	Standoff, Top	Qty 4 req	2602-283	
3	Side Trim	Qty 2 req	2300-281	
4	Non-combustible Board, Side Pkg of 2		2300-461	
5	Bottom Glass		2300-018	
6	Burner		2408-007	Υ
7	Pilot Assembly		See Following Page	
8	Shield, Pilot		2406-196	
9	Glass Assembly		GLA-48-MAJ	
10	Shield, Bottom Glass		2300-179	
11	Panel, Bottom		2300-147	
12	Rock Tray		2408-151	
13	Heat Shield		2602-150	



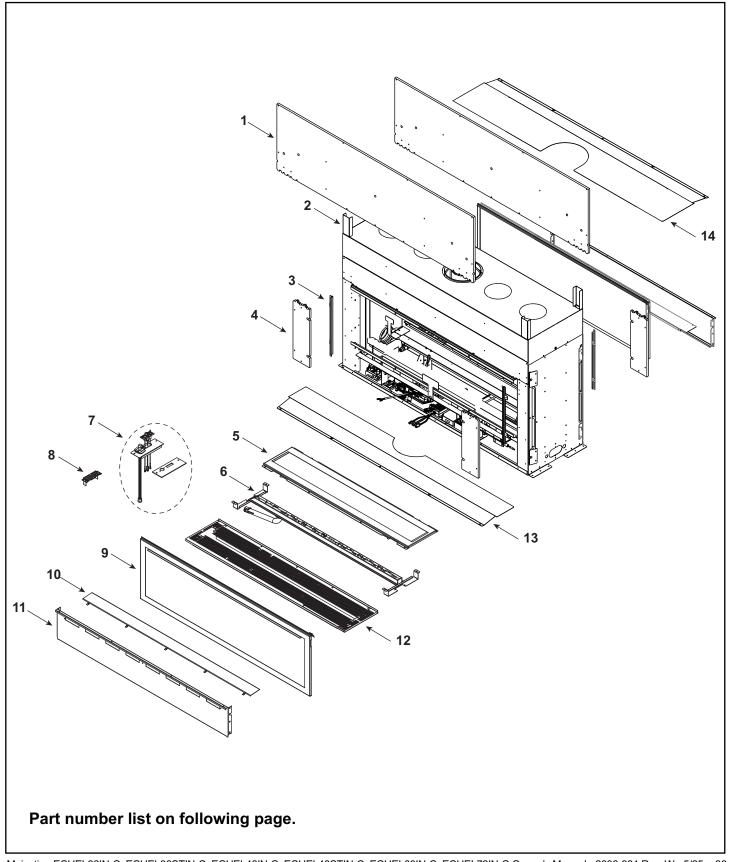
14	LED Light Assembly	ALK-48-C	
14.1	Power Supply, LED 40W	2326-113	Υ
14.2	LED Dimmer	2326-112	Υ
14.3	Module, B Type AC	SRV2326-150	Υ
14.4	Cable, B Type AC Module	SRV2326-152	Υ
14.5	LED Lightbar Connection	2300-753	Υ
14.6	Cable, Linear LED	2300-754	Υ
14.7	LED Board and Strip Assembly	SRV2300-062	Y

Additional service part numbers on following page.





# Echelon 48" See Through Gas Fireplace - DV





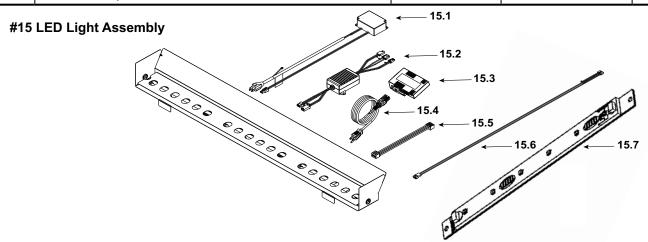


IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



# Stocked at Depot

	and determined the second seco			-
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
1	Non-combustible Board, Top	Qty 2 req	SRV2300-460	
2	Standoff, Top	Qty 4 req	2602-283	
3	Side Trim	Qty 4 req	2300-281	
4	Non-combustible Board, Side Pkg of 2	Qty 2 req	2300-461	
5	Bottom Glass		2300-018	
6	Burner		2408-007	Υ
7	Pilot Assembly		See Following Page	
8	Shield, Pilot		2406-196	
9	Glass Assembly	Qty 2 req	GLA-48-MAJ	
10	Shield, Bottom Glass w/vent		2300-179	
10	Shield, Bottom Glass		2301-179	
11	Panel, Bottom w/vent		2300-147	
11	Panel, Bottom		2301-147	
12	Rock Tray		2409-059	
13	Heat Shield, Front		2603-150	
14	Heat Shield, Rear		2603-151	



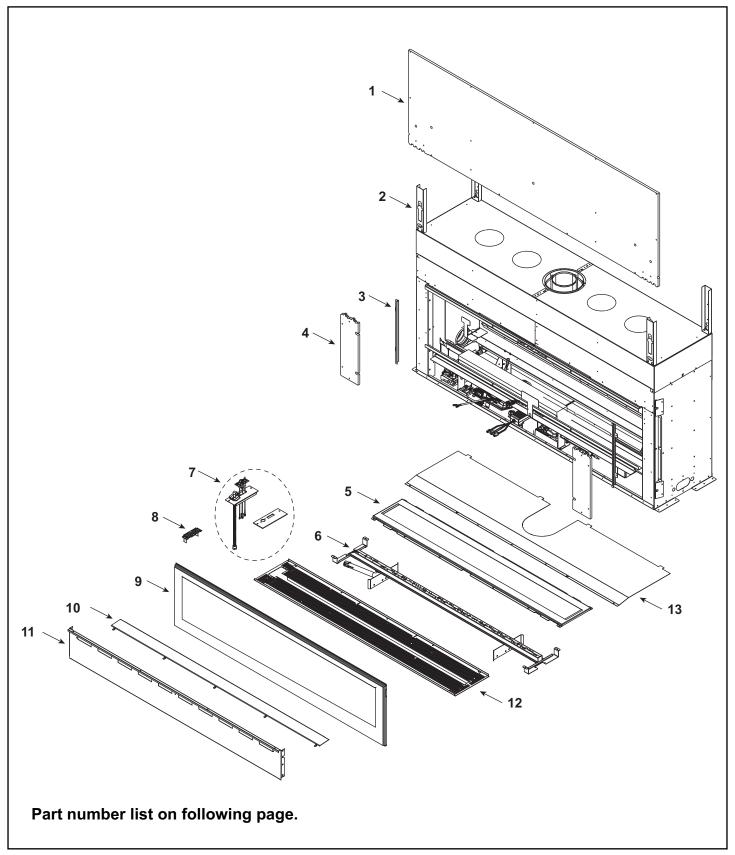
15	LED Light Assembly	ALK-	48-C	
15.1	Power Supply, LED 40W	2326	i-113	Υ
15.2	LED Dimmer	2326	-112	Υ
15.3	Module, B Type AC	SRV	2326-150	Υ
15.4	Cable, B Type AC Module	SRV	2326-152	Υ
15.5	LED Lightbar Connection	2300	-753	Υ
15.6	Cable, Linear LED	2300	-754	Υ
15.7	LED Board and Strip Assembly	SRV	2300-062	Υ

Additional service part numbers on following page.



Echelon 60" Gas Fireplace - DV

Beginning Manufacturing Date: Aug 2019 Ending Manufacturing Date: Active





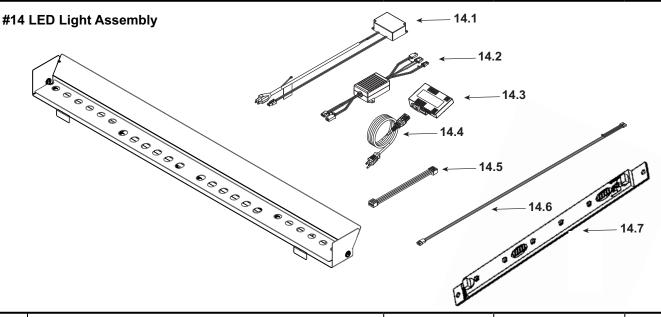


IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



# Stocked at Depot

or distribution			-
ITEM	DESCRIPTION	COMMENTS	PART NUMBER
1	Non-combustible Board, Top		SRV2321-460
2	Standoff, Top	Qty 4 req	2604-283
3	Side Trim	Qty 2 req	2300-281
4	Non-combustible Board, Side Pkg of 2		2300-461
5	Bottom Glass		2321-018
6	Burner		2410-007
7	Pilot Assembly		See Following Page
8	Shield, Pilot		2410-196
9	Glass Assembly		GLA-60-MAJ
10	Shield, Bottom Glass		2321-179
11	Panel, Bottom		2321-147
12	Rock Tray		2410-151
13	Heat Shield		2604-150



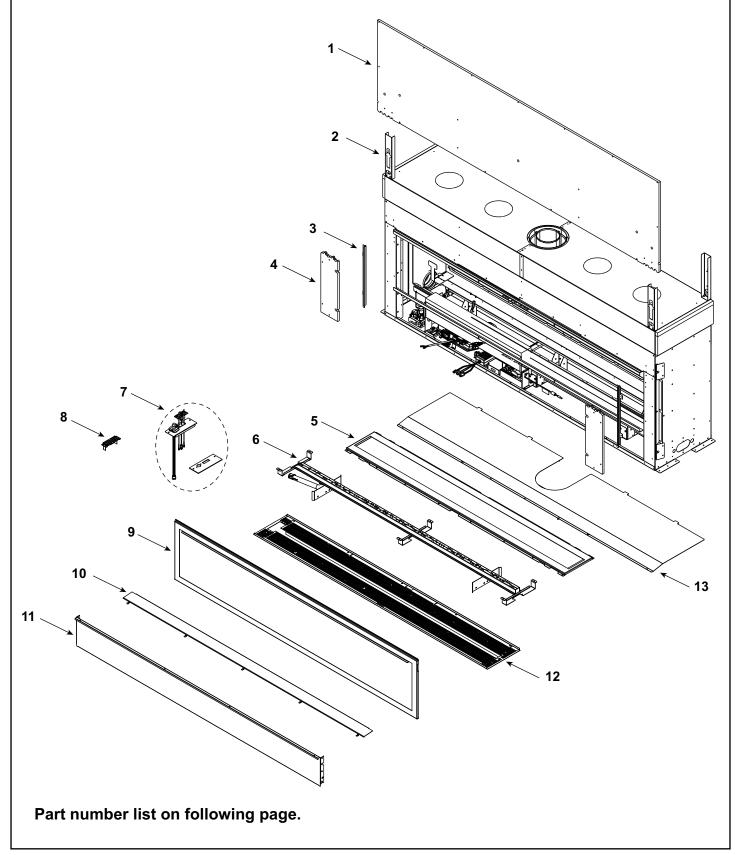
14	LED Light Assembly	ALK-60-C	
14.1	Power Supply, LED 40W	2326-113	Y
14.2	LED Dimmer	2326-112	Υ
14.3	Module, B Type AC	SRV2326-150	Y
14.4	Cable, B Type AC Module	SRV2326-152	Υ
14.5	LED Lightbar Connection	2300-753	Υ
14.6	Cable, Linear LED	2300-754	Υ
14.7	LED Board and Strip Assembly	SRV2300-062	Y

Additional service part numbers on following page.



Echelon 72" Gas Fireplace - DV

Beginning Manufacturing Date: Aug 2019 Ending Manufacturing Date: Active







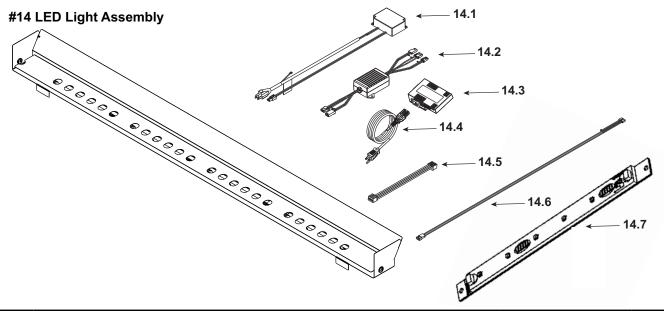
Beginning Manufacturing Date: Aug 2019 Ending Manufacturing Date: Active

IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



# Stocked at Depot

Or Glotin	of distributor.				
ITEM	DESCRIPTION	COMMENTS	PART NUMBER		
1	Non-combustible Board, Top		SRV2331-460		
2	Standoff, Top	Qty 4 req	2604-283		
3	Side Trim	Qty 2 req	2300-281		
4	Non-combustible Board, Side Pkg of 2		2300-461		
5	Bottom Glass		2331-018		
6	Burner		2411-007		
7	Pilot Assembly		See Following Page		
8	Shield, Pilot		2410-196		
9	Glass Assembly		GLA-72-MAJ		
10	Shield, Bottom Glass		2331-179		
11	Panel, Bottom		2331-147		
12	Rock Tray		2411-151		
13	Heat Shield		2606-150		



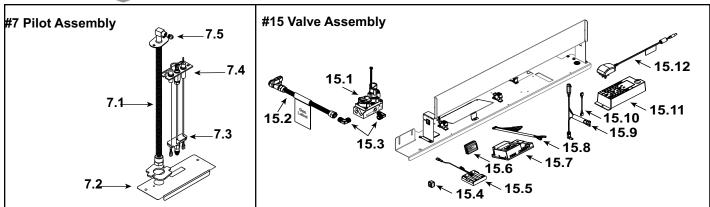
14	LED Light Assembly	ALK-72-C	
14.1	Power Supply, LED 40W	2326-113	Υ
14.2	LED Dimmer	2326-112	Υ
14.3	Module, B Type AC	SRV2326-150	Υ
14.4	Cable, B Type AC Module	SRV2326-152	Υ
14.5	LED Lightbar Connection	2300-753	Υ
14.6	Cable, Linear LED	2300-754	Υ
14.7	LED Board and Strip Assembly	SRV2300-062	Υ

Additional service part numbers on following page.

## ECHEL36, 36STIN, ECHEL48, 48STIN, ECHEL60, ECHEL72



Beginning Manufacturing Date: Aug 2019 Ending Manufacturing Date: Active



IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.

equesting service parts from your dealer or distributor.				at Depot
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
7.1	Bulkhead w/Flex tube		SRV2166-119	Υ
7.2	Plate, Flex and Pilot		2300-163	
7.3	3-Hole Grommet		SRV2118-420	
7.4	Pilot Assembly, NG		2406-012	Υ
7.4	Pilot Assembly, Propane	Convert 2406-012	with SRV593-527	Υ
	Orifice, NG #36C	ECHEL36IN-	582-836	Υ
	Orifice, Propane #52C	C/36STIN-C	SRV582-852	Υ
	Orifice, NG #.124	ECHEL48IN-	582-8124	Υ
7.5	Orifice, Propane #50C	C/48STIN-C	582-850	Υ
7.5	Orifice, NG #28C	FOUEL COIN C	582-828	Υ
	Orifice, Propane #49C	ECHEL60IN-C	SRV582-849	Υ
	Orifice, NG #23C	FOUEL ZOIN C	582-823	Υ
	Orifice, Propane #46C	ECHEL72IN-C	582-846	Υ
15.1	Valve, NG		SRV2166-302	Υ
15.1	Valve, Propane		2166-303	Υ
15.2	Flex Ball Valve Assembly		SRV2078-022	Υ
15.3	Elbow	Qty 2 req	SRV4021-045	
15.4	Reset Switch	Propane Only	SRV2206-298	Υ
15.5	Battery Pack**		SRV2326-134	Υ
15.6	Module, RF		SRV2326-120	Υ
15.7	Module, IFT Control		SRV2326-130	Υ
15.8	Wire Harness		SRV2326-132	Υ
15.9	Reset Switch Wire	Propane Only	SRV2326-135	Υ
15.10	Jumper Wire, 2.5 inch		SRV2155-033	Υ
15.11	lunction Poy	Pre LC6668884	SRV4021-013	Υ
15.11	Junction Box	Post LC6668884	SRV2326-013	Y
15.12	Transformer, 6 Volt Wall		SRV2326-131	Υ
	Component Insulation		2604-102	Y

<sup>\*\*</sup>Fuse for battery pack can be sourced locally, not a warranty item. Specs are 250v, 3A fuse, 3/4" long

## ECHEL36, 36STIN, ECHEL48, 48STIN, ECHEL60, ECHEL72



Beginning Manufacturing Date: Aug 2019 Ending Manufacturing Date: Active

IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers**. Provide model number and serial number when requesting service parts from your dealer or distributor.

Stocked at Depot

requestir	ng service parts from your dealer or distributor.		at Depot	
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
	Flue Restrictor		385-128	
	Fiber Glass Rope		060-455	
	Gasket Assembly	2300-080		
	Contains: Vent, Burner Neck, Seal Cap, Air Passage, Drawn Air Pass	2300-000		
	Qty 2 req	ECHEL36IN-C		
		ECHEL36STIN-C		
	Glass Latch Assembly Qty 4 req	ECHEL48IN-C	2146-413	Y
	Glass Later Assembly Qty 4 req	ECHEL60IN-C	2140-413	Ī
		ECHEL72IN-C		
	Qty 8 req	ECHEL48STIN-C		
	Heat Zone Collar Cover Plate		2310-107	
	Insulation Donut, Plug		2065-121	
		ECHEL36IN-C/36STIN-C	LOGS-DRTWOOD-36	
	Log Assembly (Optional)	ECHEL48IN-C/48STIN-C	LOGS-DRTWOOD-48	
	Log Assembly (Optional)	ECHEL60IN-C	LOGS-DRTWOOD-60	
		ECHEL72IN-C	LOGS-DRTWOOD-72	
		ECHEL36IN-C/36STIN-C	ALK-36-C	
	Link Wit Ambient	ECHEL48IN-C/48STIN-C	ALK-48-C	
	Light Kit, Ambient	ECHEL60IN-C	ALK-60-C	
		ECHEL72IN-C	ALK-72-C	
		ECHEL36IN-C	BGK-36	
		ECHEL48IN-C	BGK-48	
	Black Glass Kit (Includes Manual Bag Assembly for kit and Refractory Assembly)	ECHEL60IN-C	BGK-60	
	and Reliaciony Assembly)	ECHEL72IN-C	BGK-72	
		See Throughs	BGK-LINEARST	
	Back Retaining Clips	Pkg of 25	060-235-25	
	Side Retaining Clip	1 Per Side	2406-104	
	RC 400 Remote		SRV2326-110	Υ
	Touch Up Paint		TUP-GBK-12	
	Vinyl Siding Shield		TRAP-VSS	
	-			

Additional service part numbers on following page.





Beginning Manufacturing Date: Aug 2019 Ending Manufacturing Date: Active

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Stocked at Depot

or distric				ш зорог
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
	Media Options - ECHEL3	6IN / ECHEL36STIN		
	Media Kit, Bronze	3 Bags Max	GLASS-BZ	
	Media Kit, Onyx	3 Bags Max	GLASS-OY	
	Media Kit, Saphire	3 Bags Max	GLASS-SP	
	Media Kit, Diamond	3 Bags Max	GLASS-DM	
	Stones	2 Bags Max	STONES-NATURAL	
	Media Options - ECHEL4	8IN / ECHEL48STIN		
	Media Kit, Bronze	4 Bags Max	GLASS-BZ	
	Media Kit, Onyx	4 Bags Max	GLASS-OY	
	Media Kit, Saphire	4 Bags Max	GLASS-SP	
	Media Kit, Diamond	4 Bags Max	GLASS-DM	
	Stones	3 Bags Max	STONES-NATURAL	
	Media Options -	ECHEL60IN		
	Media Kit, Bronze	6 Bags Max	GLASS-BZ	
	Media Kit, Onyx	6 Bags Max	GLASS-OY	
	Media Kit, Saphire	6 Bags Max	GLASS-SP	
	Media Kit, Diamond	6 Bags Max	GLASS-DM	
	Stones	3 Bags Max	STONES-NATURAL	
	Media Options -	ECHEL72IN		
	Media Kit, Bronze	7 Bags Max	GLASS-BZ	
	Media Kit, Onyx	7 Bags Max	GLASS-OY	
	Media Kit, Saphire	7 Bags Max	GLASS-SP	
	Media Kit, Diamond	7 Bags Max	GLASS-DM	
	Stones	4 Bags Max	STONES-NATURAL	
		-		
	Conversion	n Kits		
	Conversion Kit NG		N/A	
		ECHEL36IN-C/36STIN-C	LPK-ECHEL36	Υ
		ECHEL48IN-C/48STIN-C	LPK-ECHEL48	Υ
	Conversion Kit Propane	ECHEL60IN-C	LPK-ECHEL60	Υ
		ECHEL72IN-C	LPK-ECHEL72	Υ
	Pilot Orifice, NG		SRV593-528	Υ
	Pilot Orifice, Propane		SRV593-527	Υ
	Regulator, NG		NGK-DXV-50	Υ
	Regulator, Propane		SRVLPK-DXV-50	Υ

#### C. Contact Information



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

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

- NOTES -			

## **NOTICE**

#### DO NOT DISCARD THIS MANUAL

Important operating and maintenance instructions included.

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



This product may be covered by one or more of the following patents: (United States) 7077122, 7074035, 7234932, 7322819, 7422011, 7726300, 8147240, 9625149 or other U.S. and foreign patents pending.

2000-945F

## **Installation Manual**

## **Installation and Appliance Setup**

**CAUTION!** Risk of Fire! DO NOT store instruction manuals inside fireplace cavity. High temperatures could cause a fire.

INSTALLER: Leave this manual with the appliance, not inside the appliance.

CONSUMER: Retain this manual for future reference. Do not store inside the appliance.

NOTICE: DO NOT discard this manual!

ECHELON-C
SERIES

Models:
ECHEL36IN-C
ECHEL48IN-C
ECHEL48STIN-C
ECHEL60IN-C
ECHEL72IN-C

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280* in the United States, or the *Standard for Installation in Mobile Homes, CAN/CSA Z240 MH Series.* in Canada.

This appliance is only for use with the type(s) of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

#### **A** 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.



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.

Decorative barrier front must be ordered separately at time of appliance purchase. See Section 3.A.

#### ▲ Safety Alert Key:

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

**Note:** The term "recommend" or "recommended" does not indicate a requirement. It is a best practice suggested by Hearth & Home Technologies<sup>®</sup>.

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#### **Installation Standard Work Checklist**

## **ATTENTION INSTALLER:**

### Follow this Standard Work Checklist

installation manual. <b>Customer:</b>	checklist is to be used by th	Date Ir	nstalled:	e instructions contained in this
Lot/Address:			on of Fireplace:	
Model (circle one):	ECHEL36IN-C ECHEL36STIN-C ECHEL60IN-C		/Distributor Phone	#
lead to a gies. Una	fire or explosion. Install Opproved components and ac	NLY components and acc	essories approved be place to overheat.	y to these instructions can y Hearth & Home Technolo-
Required factory in Standoffs bent up in Verified clearances Fireplace is leveled Verified clearance to	ase is insulated and sealed. Included non-combustible boat into installation position and is to combustibles. (Pg. 16-25 d and secured. (Pg. 45) o header. (Pg. 18-19) system(s) and/or power ver	ard is installed. (Pg 46) secured. (Pg. 43)	YES IF NO	), WHY?
Venting configurati Venting installed, lo (May need to or Firestops installed. Attic insulation shie Exterior wall/Roof Terminations instal	. (Section 5) eld installed. (Pg 42) flashing installed and sealed led and sealed. (Section 7)	th proper clearance.		
Electrical Section Unswitched power Switch wires prope	(110-120 VAC) provided to t	the appliance.	<b>=</b>	
	or fuel type.			
Verified all clearan Finishing done cor Bottom finishing te Mantels and wall p	rials not installed in non-com ces meet installation manual rectly using inside fit or over mplate and finishing guards rojections comply with instal	l requirements. lap fit method. removed.		
All packaging and p Refractories and m Glass assembly in Accessories install Decorative barrier Manual bag and al the appliance a Started appliance a Lights work in all s	front properly installed. (May I of its contents are removed nd given to party responsible and verified no gas leaks exi witched positions (if so equip	need to order separately. I from inside/under e for use and operation. st.		
<ul><li>Hearth &amp; Home Te</li><li>Photographing the</li><li>That this checklis</li><li>Comments: Further</li><li>action needed</li></ul>	hield is installed. (Pg. 56) echnologies recommends ne installation and copying the st remain visible at all times er description of the issues, unicated to party responsible	nis checklist for your file. on the appliance until the who is responsible (Install	installation is comple er/ Builder/ Other Tr	ete. ades, etc) and corrective
	lated information	(Builder / Gen. Contracto		(Date)

2608-982 Rev. F 4/23

## **Product Specific and Important Safety Information**

#### A. Appliance Certification

MODEL: ECHEL48IN-C, ECHEL60IN-C, ECHEL72IN-C

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Direct Vent Heater

STANDARD: CSA / ANSI Z21.88-2019 • CSA 2.33-2019

This product is listed to ANSI standards for "Vented Gas Fireplace Heaters" and applicable sections of "Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles", and "Gas Fired Appliances for Use at High Altitudes". Also Certified for Installation in a Bedroom or a Bedsitting Room.

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

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

MODEL: ECHEL36IN-C, ECHEL36STIN-C, ECHEL48STIN-C

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Decorative Gas Appliances

STANDARD: CSA / ANSI Z21.50-2019 • CSA 2.22-2019

This product is listed to ANSI standards for "Vented Decorative Gas Appliances" (and "Gas Fired Appliances for Use at High Altitudes".) Also Certified for Installation in a Bedroom or a Bedsitting Room. for Installation in a Bedroom or a Bedsitting Room.

#### NOT INTENDED FOR USE AS A HEAT SOURCE.

This appliance is decorative in nature and not intended to be a source of heat.

#### NOT FOR USE WITH SOLID FUEL.

This appliance is not intended to burn solid fuel.

NOT FOR USE WITH THERMOSTAT.

#### **B. Glass Specifications**

This appliance is equipped with 5 mm ceramic glass. Replace glass only with 5 mm ceramic glass. Please contact your dealer for replacement glass.

#### C. BTU Specifications

	<b>Models</b> (U.S. or Canada)		Minimum Input BTU/h	Orifice Size (DMS)
ECHEL36IN-C (NG)	(0-2000 FT)	30,000	17,500	#36
ECHEL36IN-C (Propane)	(0-2000 FT)	27,000	15,000	#52
ECHEL36STIN-C (NG)	(0-2000 FT)	30,000	17,500	#36
ECHEL36STIN-C (Propane)	(0-2000 FT)	27,000	15,000	#52
ECHEL48IN-C (NG)	(0-2000 FT)	40,000	21,000	.124
ECHEL48IN-C (Propane)	(0-2000 FT)	34,000	20,000	#50
ECHEL48STIN-C (NG)	(0-2000 FT)	40,000	21,000	.124
ECHEL48STIN-C (Propane)	(0-2000 FT)	34,000	20,000	#50
ECHEL60IN-C (NG)	(0-2000 FT)	50,000	28,000	#28
ECHEL60IN-C (Propane)	(0-2000 FT)	37,500	20,000	#49
ECHEL72IN-C (NG)	(0-2000 FT)	58,000	30,000	#23
ECHEL72IN-C (Propane)	(0-2000 FT)	45,000	25,000	#46

#### D. High Altitude Installations

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

When installing above 2000 feet elevation:

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

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

#### E. Non-Combustible Materials Specification

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.

Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 °C shall be considered non-combustible materials.

#### F. Combustible Materials Specification

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

#### G. Electrical Codes

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

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

#### H. California

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

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

#### I. Requirements for the Commonwealth of Massachusetts

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

#### **Installation of Carbon Monoxide Detectors**

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

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

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

#### **Approved Carbon Monoxide Detectors**

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

#### Signage

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

#### Inspection

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

#### **Exemptions**

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

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

#### MANUFACTURER REQUIREMENTS

#### **Gas Equipment Venting System Provided**

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

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

#### Gas Equipment Venting System NOT Provided

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

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

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

See Gas Connection section for additional Commonwealth of Massachusetts requirements.

## **2** Getting Started

#### A. Design and Installation Considerations

**WARNING!** Risk of Fire or Explosion! Read all instructions before starting the installation.

Majestic direct vent gas appliances are designed to operate with all combustion air siphoned from outside of the building and all exhaust gases expelled to the outside. No additional outside air source is required.

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

Before installing, determine the following:

- · Where the appliance is to be installed.
- The vent system configuration to be used. If Passive Heat will be installed, consider location of discharge opening in relation to venting and other construction materials.
- · Gas supply piping requirements.
- Provisions for optional heat management system(s).
- Electrical wiring requirements.
- · Framing and finishing details.
- Whether optional accessories—devices such as a fan, wall switch, or remote control—are desired.

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



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

#### B. Good Faith Wall Surface

The ECHELON-C models may be installed with or without optional heat management systems, including the Passive Heat kit. The installation of a heat management system will affect certain aspects of the appliance installation including framing dimensions and clearances to combustibles. Note that Figure 2.3 in this section refers to the wall surface temperatures when the Passive Heat kit is installed.

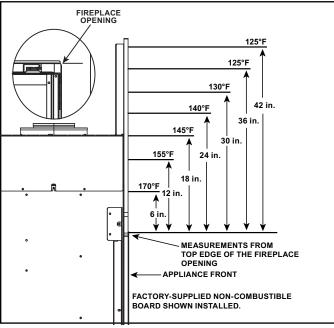


Figure 2.1 Good Faith Wall Surface Temperatures Above Appliance (ECHEL36IN-C/ECHEL36STIN-C, ECHEL48IN-C, ECHEL48STIN-C)

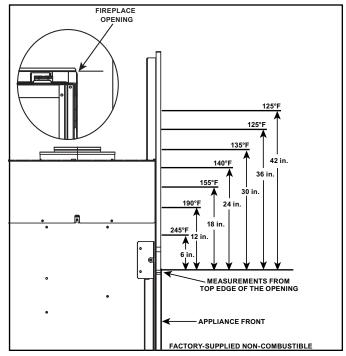


Figure 2.2 Good Faith Wall Surface Temperatures Above Appliance (ECHEL60IN-C, ECHEL72IN-C)

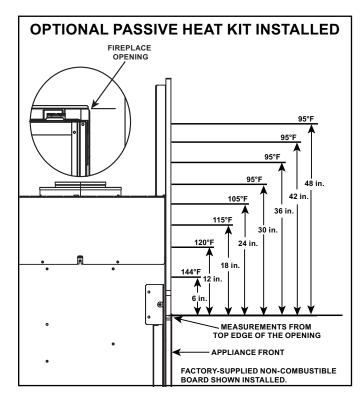
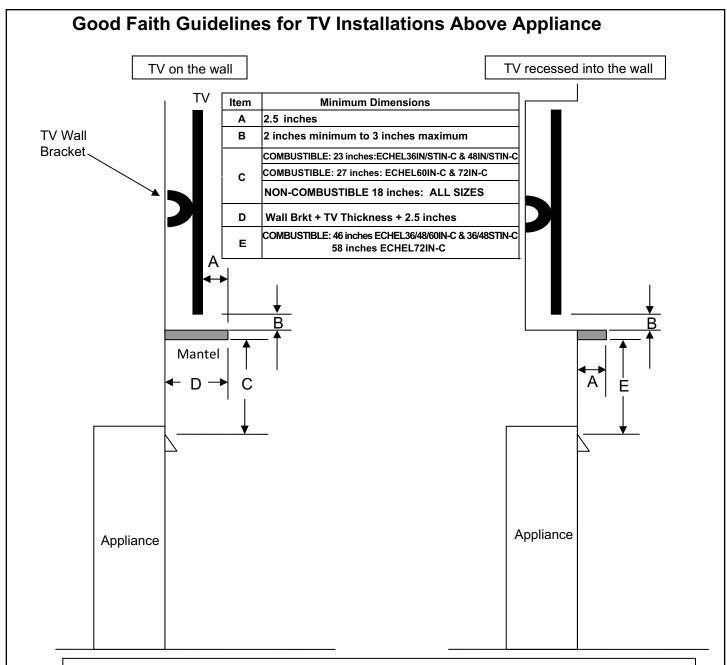


Figure 2.3 Good Faith Wall Surface Temperatures Above Appliance with Passive Heat Kit Installed

**NOTICE:** Surface temperatures listed above are taken with a temperature measuring probe as prescribed by the test standard used for appliance certification. Temperatures on walls or mantels taken with an infrared thermometer may yield increased temperatures of up to 30 °F (17 °C) or more depending on the thermometer settings and material characteristics being measured. Use appropriate finishing materials that are able to withstand these conditions. For additional finishing guidelines, see Section 10.

If installing a television (TV) above the appliance, see Figure 2.4. For installations with the Passive Heat kit, refer to Section 10, Figure 10.19.



#### Notes:

- These are good faith recommended clearances only and not a guarantee of compliance with all TV manufacturers' maximim allowable operating temperatures.
- 2. Since every home has unique air flow characteristics and maximum allowable operating temperatures can vary from manufacturer to manufacturer and from model to model, actual TV temperatures should be validated at the time of each installation. TVs should not be used in situations where the actual TV temperature exceeds the manufacturers' maximum allowable operating temperatures identified in the TV's technical specifications. Contact the TV's manufacturer directly if you cannot locate this information or have questions regarding the information.
- 3. Mantel height and depth must conform to mantel requirements specified in the fireplace installation manual.
- 4. "C" and "E" dimensions taken from the top of the hood or fireplace opening.
- 5. Suggestions on how to further reduce TV temperatures:
  - a. Increase "A" dimension.
  - Increase "C" and "E" dimension, however, increasing "B" dimension beyond maximum recommended typically results in higher temperatures.

Figure 2.4 Good Faith TV Guidelines

#### C. Tools and Supplies Needed

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

Hand Tools Tape measure
Level Framing material
Manometer Framing square

Voltmeter Electric drill and bits (1/4 in.)

Plumb line Safety glasses/Gloves Wrenches Reciprocating saw

1/4 in. nut driver

Non-corrosive leak check solution

1/2 - 3/4 in. length, #6 or #8 Self-drilling screws

Caulking material (300 °F minimum continuous exposure rating)

#### D. Inspect Appliance and Components

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

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

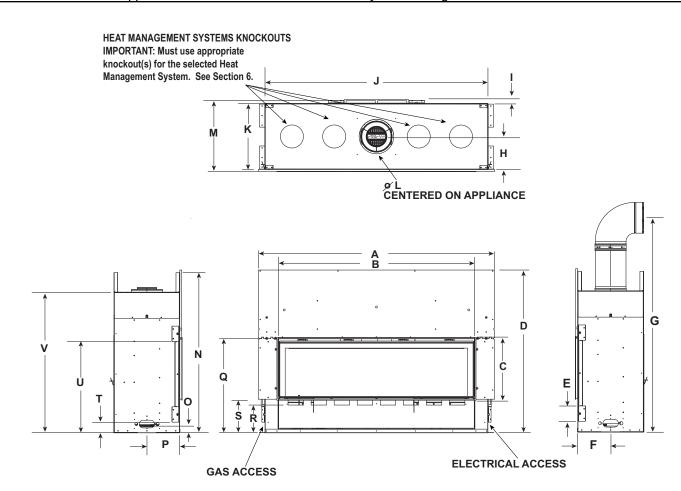
- Carefully remove the appliance and components from the packaging.
- The vent system components and decorative barrier fronts may be shipped in separate packages.
- If packaged separately, the media, refractory, non-combustible board and/or optional log kits must be installed.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.
- This product is factory-equipped with an IntelliFire Touch® remote control, which was paired to the appliance at the factory. This specific remote control needs to remain with the contents of the manual bag. Do not install batteries in the remote control until performing the final appliance setup and checklist.

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

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

### A. Appliance/Decorative Barrier Front Dimension Diagrams

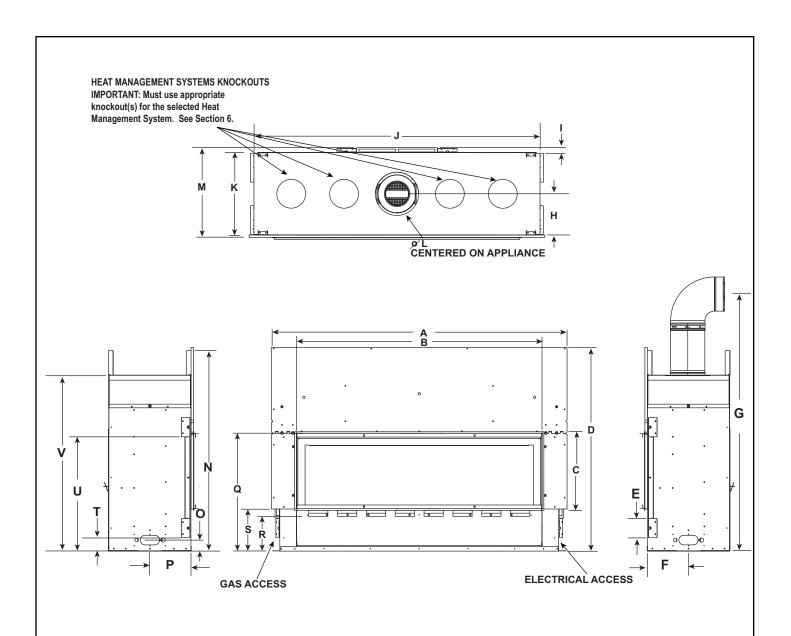
Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 5.



Location	ECHEL36IN-C		ECHEL48IN-C	
Location	Inches	Millimeters	Inches	Millimeters
Α	49-1/2	1257	61-1/2	1562
В	39-1/4	997	51-1/8	1299
С	15-5/8	397	15-5/8	397
D	42-1/2	1080	42-1/2	1080
E	4	102	4	102
F	8-9/16	218	8-9/16	218
G	63	1600	63	1600
Н	8-9/16	218	8-9/16	218
I	1	25	1	25
J	46-3/16	1173	58	1473
K	17-1/8	435	17-1/8	435

Location	ECHEL36IN-C		ECHEL48IN-C	
Location	Inches	Millimeters	Inches	Millimeters
L	8	203	8	203
М	18-5/8	473	18-5/8	473
N	41-3/4	1061	41-3/4	1061
0	2-3/8	60	2-3/8	60
Р	8-9/16	218	8-9/16	218
Q	24-1/2	622	24-1/2	622
R	7-1/4	184	7-1/4	184
S	8-7/8	225	8-7/8	225
Т	2-3/4	70	2-3/4	70
U	23-3/4	603	23-3/4	603
V	36-5/8	930	36-5/8	930

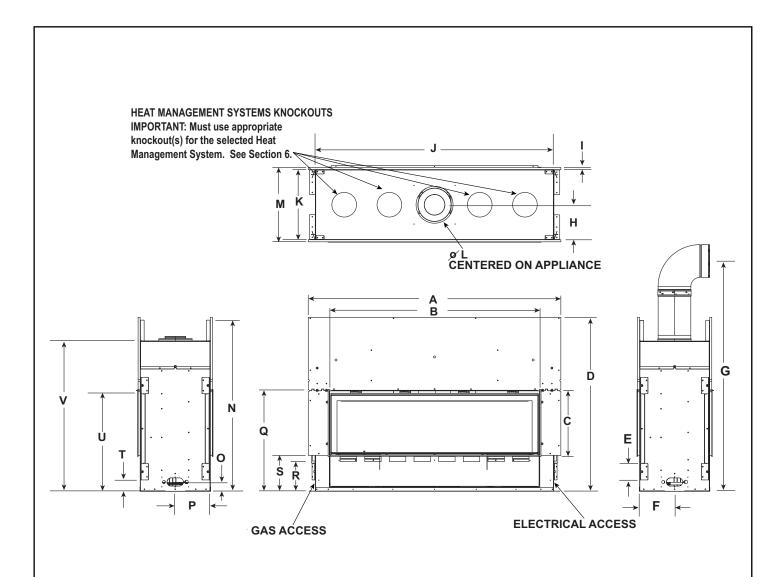
Figure 3.1 Appliance Dimensions - ECHEL36IN-C, ECHEL48IN-C



Location	ECHEL60IN-C		ECHEL72IN-C	
Location	Inches	Millimeters	Inches	Millimeters
Α	74	1880	86	2184
В	63-1/8	1603	75-1/8	1908
С	15-5/8	397	15-5/8	397
D	48-1/2	1232	48-1/2	1232
E	4	102	4	102
F	8-9/16	218	8-9/16	218
G	63	1600	75	1905
Н	8-9/16	218	8-9/16	218
Ī	1	25	1	25
J	70	1778	82	2083
K	17-1/8	435	17-1/8	435

Location	ECHI	EL60IN-C	ECHE	L72IN-C
Location	Inches	Millimeters	Inches	Millimeters
L	8	203	8	203
М	18-5/8	473	18-5/8	473
N	47-3/4	1213	47-3/4	1213
0	2-3/8	60	2-3/8	60
Р	8-9/16	218	8-9/16	218
Q	24-1/2	622	24-1/2	622
R	7-1/4	184	N/A	N/A
S	8-7/8	225	8-7/8	225
Т	2-3/4	70	2-3/4	70
U	23-3/4	603	23-3/4	603
V	36-5/8	930	36-5/8	930

Figure 3.2 Appliance Dimensions - ECHEL60IN-C, ECHEL72IN-C



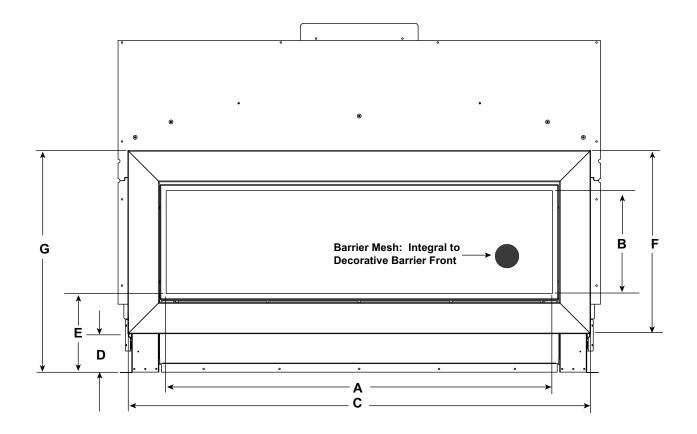
Location	ECHE	_36STIN-C	ECHEL	48STIN-C
Location	Inches	Millimeters	Inches	Millimeters
Α	50	1270	62	1575
В	39-1/4	997	51-1/8	1299
С	15-5/8	397	15-5/8	397
D	42-1/2	1080	42-1/2	1080
E	4	102	4	102
F	8-9/16	218	8-9/16	218
G	63	1600	63	1600
Н	8-9/16	218	8-9/16	218
I	1/2	13	1/2	13
J	46-3/16	1173	58	1473
K	17-1/8	435	17-1/8	435

Location	ECHE	L36STIN-C	ECHEL	48STIN-C
Location	Inches	Millimeters	Inches	Millimeters
L	8	203	8	203
М	18-1/8	460	18-1/8	460
N	41-3/4	1061	41-3/4	1061
0	2-3/8	60	2-3/8	60
Р	8-9/16	218	8-9/16	218
Q	24-1/2	622	24-1/2	622
R	7-1/4	184	7-1/4	184
S	8-7/8	225	8-7/8	225
Т	2-3/4	70	2-3/4	70
U	23-3/4	603	23-3/4	603
V	36-5/8	930	36-5/8	930

Figure 3.3 Appliance Dimensions - ECHEL36STIN-C, ECHEL48STIN-C

## PFF DECORATIVE FRONT

Note: See Section 10 for hearth, mantel and finishing requirements.

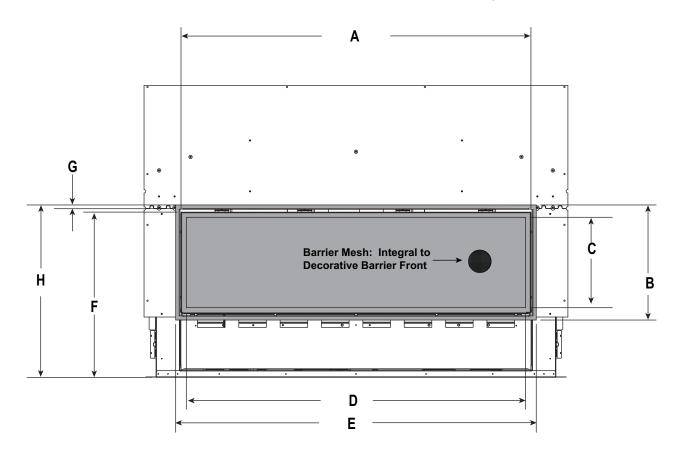


Location				L48IN-C .48STIN-C	ECHEL60IN-C		
	Inches	Millimeters	Inches Millimeters		Inches	Millimeters	
Α	37-1/4	946	49-1/4	1250	61-1/4	1556	
В	13-1/8	333	13-1/8	333	13-1/8	333	
С	47	1194	59	1498	71	1803	
D	4-15/16	126	4-15/16	126	4-15/16	126	
E	10-1/16	256	10-1/16	256	10-1/16	256	
F	23-3/8	594	23-3/8	594	23-3/8	594	
G	28-5/16	719	28-5/16	719	28-5/16	719	

The PFF decorative front has an installed depth of 3/4 in. (19 mm), measured from the front of the non-combustible finishing material to the front of the decorative front.

## CLEAN FACE TRIM DECORATIVE BARRIER FRONT Note: See Section 10 for

Note: See Section 10 for hearth, mantel and finishing requirements.



Location				L48IN-C 48STIN-C	ECHEL	_60IN-C	ECHEL72IN-C		
	Inches	Millimeters	Inches	Millimeters	Inches	Millimeters	Inches	Millimeters	
Α	39	991	51	1295	63	1600	75	1905	
В	16-3/4	425	16-3/4	425	16-3/4	425	16-3/4	425	
С	13-1/8	333	13-1/8	333	13-1/8	333	13-1/8	333	
D	37-3/16	945	49-3/16	1249	61-3/16	1554	73-3/16	1859	
E	40-5/16	1024	52-5/16	1329	64-5/16	1634	76-5/16	1938	
F	24	610	24	610	24	610	24	610	
G	5/8	16	5/8	16	5/8	16	5/8	16	
Н	25	635	25	635	25	635	25	635	

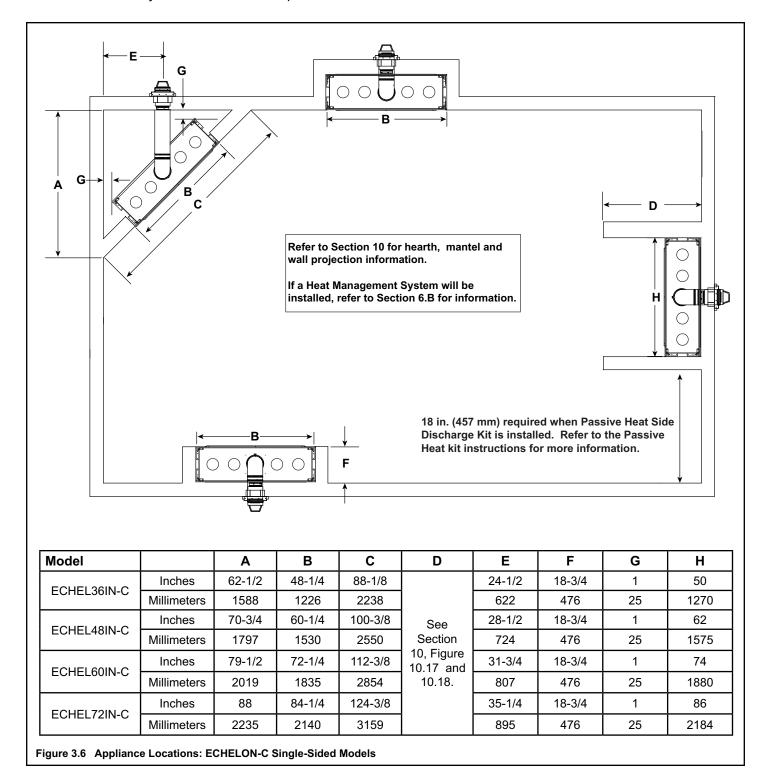
Figure 3.5 Clean Face Trim Front (Inside Fit) Decorative Barrier Front Dimensions

## B. Appliance Location and Clearances to Combustibles

When selecting a location for the appliance it is important to consider the required clearances to walls and allow sufficient clearance for heat management systems venting. See Figure 3.6 and Figure 3.7.

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

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



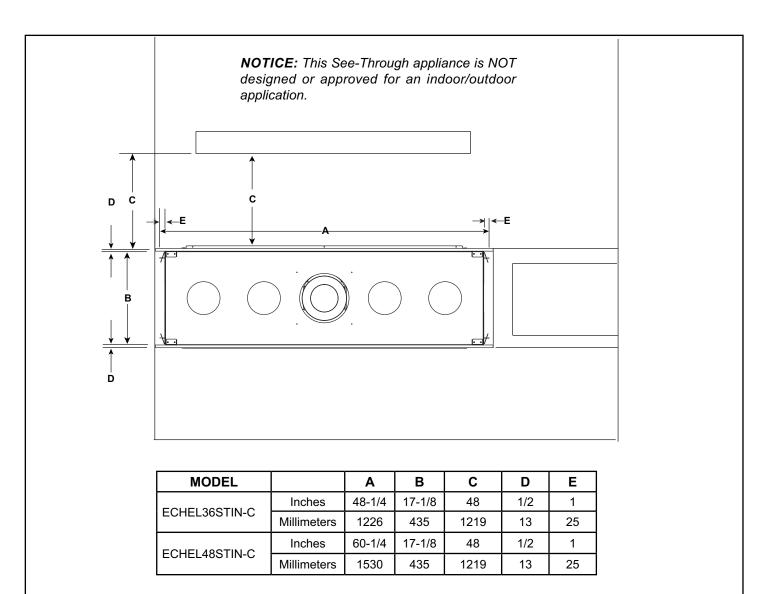
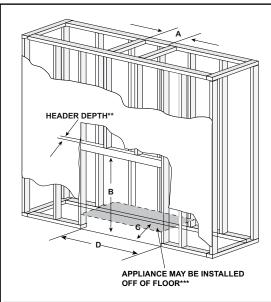
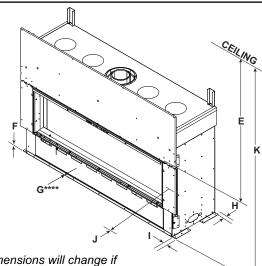


Figure 3.7 Appliance Locations: ECHELON-C See-Through Models





**NOTE:** E & K dimensions will change if Passive Heat option is installed. Reference the instructions included with the Passive Heat Kit for dimensions.

	MINIMUM FRAMING DIMENSIONS*											
	Α	В	С	D	E	F	G****	Н	I	J	K	
ECHEL36IN-C	Rough Opening (Vent Pipe)	Rough Opening (Height)	Rough Opening (Depth)	Rough Opening (Width)	Clearance to Ceiling	Combustible Floor	Combustible Flooring	Behind Appliance	Sides of Appliance	Front of Appliance	Clearance to Ceiling	
Inches	10	42	18-1/4	48-1/4	31	0	0	1	1	48	55-1/2	
Millimeters	254	1067	464	1226	787	0	0	25	25	1219	1410	

	MINIMUM FRAMING DIMENSIONS*											
	Α	В	С	D	E	F	G****	Н	ı	J	K	
ECHEL48IN-C	Rough Opening (Vent Pipe)	Rough Opening (Height)	Rough Opening (Depth)	Rough Opening (Width)	Clearance to Ceiling	Combustible Floor	Combustible Flooring	Behind Appliance	Sides of Appliance	Front of Appliance	Clearance to Ceiling	
Inches	10	42	18-1/4	60-1/4	31	0	0	1	1	48	55-1/2	
Millimeters	254	1067	464	1530	787	0	0	25	25	1219	1410	

	MINIMUM FRAMING DIMENSIONS*											
	Α	В	С	D	Е	F	G****	Н	I	J	K	
ECHEL60IN-C	Rough Opening (Vent Pipe)	Rough Opening (Height)	Rough Opening (Depth)	Rough Opening (Width)	Clearance to Ceiling	Combustible Floor	Combustible Flooring	Behind Appliance	Sides of Appliance	Front of Appliance	Clearance to Ceiling	
Inches	10	48	18-1/4	72-1/4	31	0	0	1	1	48	55-1/2	
Millimeters	254	1219	464	1835	787	0	0	25	25	1219	1410	

MINIMUM FRAMING DIMENSIONS*											
	Α	В	С	D	E	F	G****	Н	I	J	K
ECHEL72IN-C	Rough Opening (Vent Pipe)	Rough Opening (Height)	Rough Opening (Depth)	Rough Opening (Width)	Clearance to Ceiling	Combustible Floor	Combustible Flooring	Behind Appliance	Sides of Appliance	Front of Appliance	Clearance to Ceiling
Inches	10	48	18-1/4	84-1/4	31	0	0	1	1	48	55-1/2
Millimeters	254	1219	464	2140	787	0	0	25	25	1219	1410

<sup>\* =</sup> Adjust framing dimensions for interior sheathing (such as sheetrock)

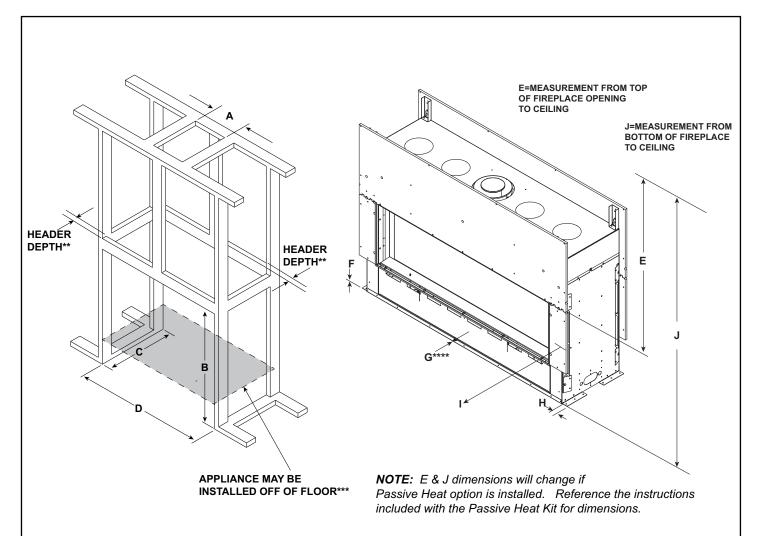
<sup>\*\*=</sup> If header depth exceeds 3-1/2 inches, notching may be required to maintain clearances to pipe.

<sup>\*\*\*=</sup> If appliance is installed off of floor, maintain required clearances to combustibles.

Construct platform in accordance with local building codes.

<sup>\*\*\*\* =</sup> For installations with vinyl flooring, see Section 3.E.

Figure 3.8 Clearances to Combustibles-ECHEL36IN-C, ECHEL48IN-C, ECHEL60IN-C, ECHEL72IN-C



MINIMUM FRAMING DIMENSIONS*											
		Α	В	С	D	E	F	G****	Н	I	J
		Rough Opening (Vent Pipe)	Rough Opening (Height)	Rough Opening (Depth)	Rough Opening (Width)	Clearance to Ceiling	Combustible Floor	Combustible Flooring	Sides of Appliance	Front or Rear of Appliance	Clearance to Ceiling
FOLIEL SCOTIN C	in.	10	42	17	48-1/4	31	0	0	1	48	55-1/2
ECHEL36STIN-C	mm	254	1067	432	1226	787	0	0	25	1219	1410
ECHEL48STIN-C	in.	10	42	17	60-1/4	31	0	0	1	48	55-1/2
ECHEL465TIN-C	mm	254	1067	432	1530	787	0	0	25	1219	1410

<sup>\* =</sup> Adjust framing dimensions for interior sheathing (such as sheetrock).

Figure 3.9 Clearances to Combustibles-ECHEL36STIN-C, ECHEL48STIN-C

<sup>\*\*=</sup> If header depth exceeds 3-1/2 inches, notching may be required to maintain clearances to pipe.

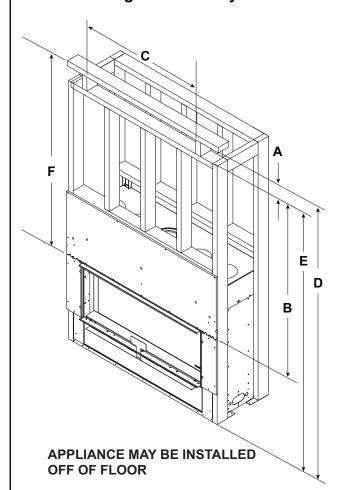
<sup>\*\*\*=</sup> If appliance is installed off of floor, maintain required clearances to combustibles.

Construct platform in accordance with local building codes.

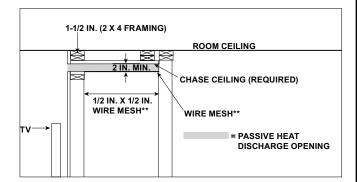
<sup>\*\*\*\*=</sup> For installations with vinyl flooring, see Section 3.E.

#### Framing Dimensions - Passive Heat Front Discharge Single-Sided or See-Through

#### Front Discharge: Air conveyed into the room through one front discharge slot.



#### **CHASE DETAIL**



**WARNING!** Risk of Fire! Wire mesh required on bottom of discharge opening when discharge opening is greater than 3 inches. Secure mesh to top of framing.

		FRONT DISCHA	RGE MINIMU	M FRAMIN	G DIMENSI	ONS		
		Α						
		TRIM KIT* (PH-TRIM)	NO TRIM KIT**	В	С	D	E	F
		Height of Discharge Opening	Minimum Height of Discharge Opening	Minimum Clearance to Framing	Width of Discharge Opening	Clearance to Top of Discharge Opening from Bottom of Appliance	Clearance from Bottom of Appliance to Bottom of Discharge Opening	Minimum Clearance Appliance Opening to Ceiling
ECHEL36IN-C	Inches	3-1/2	2	48	36-1/2	74-1/2	72-1/2	51-1/2
ECHEL36STIN-C	millimeters	89	51	1219	927	1892	1842	1308
ECHEL48IN-C	Inches	3-1/2	2	48	48-1/2	74-1/2	72-1/2	51-1/2
ECHEL48STIN-C	millimeters	89	51	1219	1232	1892	1842	1308
ECHEL60IN-C	Inches	3-1/2	2	48	60-1/2	74-1/2	72-1/2	51-1/2
ECHELOUIN-C	millimeters	89	51	1219	1537	1892	1842	1308
ECHEL72IN-C	Inches	3-1/2	2	67-1/2	72-1/2	94	92	51-1/2
EUNEL/ZIN-U	millimeters	89	51	1715	1842	2388	2337	1308

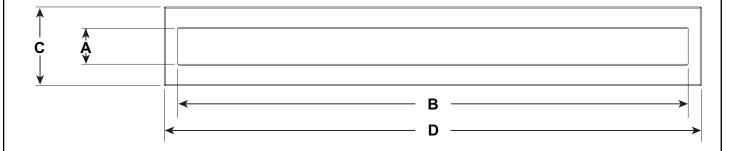
<sup>\*</sup> Measurement for Trim Kit = 3-1/2 in. + additional finishing material thickness. Figure 3.11 shows vent cover dimensions.

Figure 3.10 Passive Heat Front Discharge Framing Dimensions with Clean Face Finish or Trim Kit

<sup>\*\*</sup> Measurement for without trim kit = 2 in. + additional finishing material thickness. If discharge opening is greater than 3 inches, wire mesh is required.

## **Passive Heat Front Discharge Trim Kit**

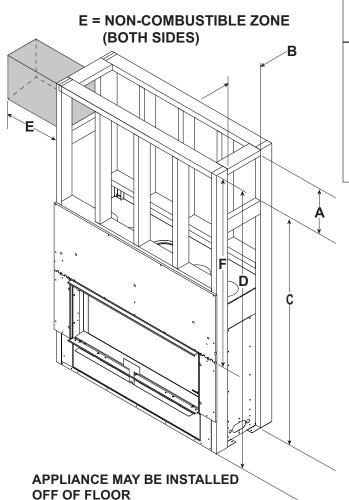
#### **Vent Cover Dimensions**

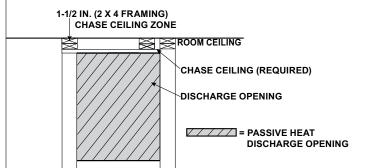


		PASSIVE HEA	T TRIM KIT DIM	ENSIONS	
		Α	В	С	D
		Inside Height	Inside Width	Outside Height	Outside Width
PH-FRTTRIM-36	Inches	2-9/16	36-1/2	5-5/8	38-3/8
PH-PKTTKIIVI-30	millimeters	65	927	143	975
PH-FRTTRIM-48	Inches	2-9/16	48-1/2	5-5/8	50-3/8
PH-PKTTKIIVI-40	millimeters	65	1232	143	1280
PH-FRTTRIM-60	Inches	2-9/16	60-1/2	5-5/8	62-3/8
PH-FRITRINI-60	millimeters	65	1537	143	1585
PH-FRTTRIM-72	Inches	2-9/16	72-1/2	5-5/8	74-3/8
FN-FKTTKIIVI-72	millimeters	65	1842	143	1889

Figure 3.11 Passive Heat Front Discharge - Vent Cover Dimensions

## Side Discharge: Air conveyed into the room through two discharge registers, one on each side of appliance.





**WARNING!** Risk of Fire! DO NOT place combustible objects or combustible materials in non-combustible zone. Appliance and combustible materials will overheat.

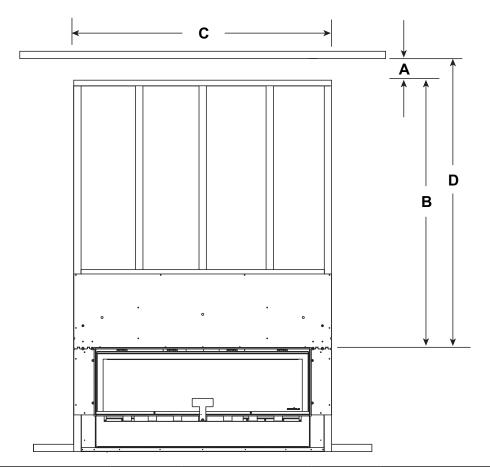
SIDE DISCHARGE FRAMING DIMENSIONS									
	Α	В	С	D	E	F			
		Height of Discharge Opening	Width of discharge Opening	Minimum Clearance Bottom of Appliance to Bottom of Discharge Opening	Minimum Clearance Bottom of Appliance to Ceiling	Minimum Clearance to Combustible Materials	Minimum Clearance Appliance Opening to Ceiling		
ECHEL36IN-C	Inches	12-1/4	8-3/4	62-3/4	76-1/2	18	52		
ECHEL36STIN-C	millimeters	311	222	1594	1943	457	1321		
ECHEL48IN-C	Inches	12-1/4	8-3/4	62-3/4	76-1/2	18	52		
ECHEL48STIN-C	millimeters	311	222	1594	1943	457	1321		
ECHELCOIN C	Inches	12-1/4	8-3/4	62-3/4	76-1/2	18	52		
ECHEL60IN-C	millimeters	311	222	1594	1943	457	1321		
ECHEL72IN-C	Inches	12-1/4	8-3/4	81-1/4	95	18	70-1/2		
ECHEL/ZIN-C	millimeters	311	222	2064	2413	457	1791		

Figure 3.12 Passive Heat Side Discharge Framing Dimensions

### Framing Dimensions - Passive Heat Open Top Discharge Single-Sided or See-Through

## Open Top Discharge: A minimum of 3 sides must be open allowing air to be conveyed into the room.

**WARNING!** Risk of Fire! Wire mesh required on bottom of discharge opening when discharge opening is greater than 3 inches. Secure mesh to top of framing.

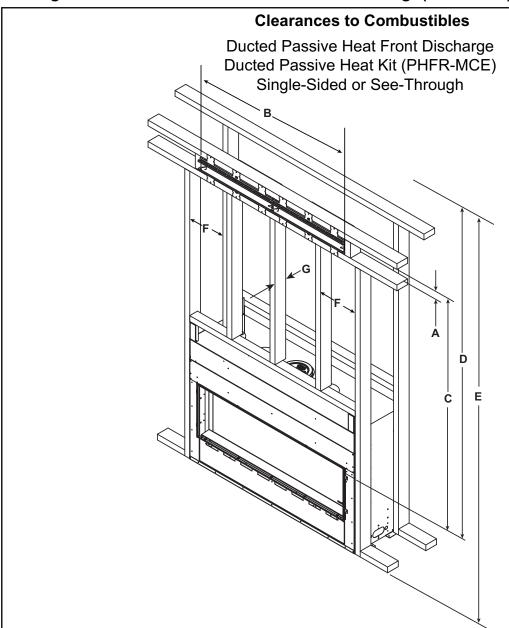


OPEN TOP DISCHARGE MINIMUM FRAMING DIMENSIONS									
	<b>A</b> *	В	С	D					
	Minimum Height of Discharge Opening	Clearance to Framing	Width of Discharge Opening	Minimum Clearance Appliance Opening to Ceiling					
ECHEL36IN-C/ECHEL36STIN-C	Inches	2	48	51-1/4	50				
ECHEL30IN-C/ECHEL303TIN-C	millimeters	51	1219	1302	1270				
ECHEL48IN-C/ECHEL48STIN-C	Inches	2	48	63-1/4	50				
ECHEL46IN-C/ECHEL463TIN-C	millimeters	51	1219	1607	1270				
	Inches	2	48	75-1/4	50				
ECHEL60IN-C	millimeters	51	1219	1911	1270				
ECHEL72IN-C	Inches	2	67-1/2	87-1/4	69-1/2				
EGITEL/ZIN-G	millimeters	51	1715	2216	1765				

<sup>\*</sup> Wire mesh required for front discharge or open top discharge passive heat installations with discharge opening of 3 inches or greater.

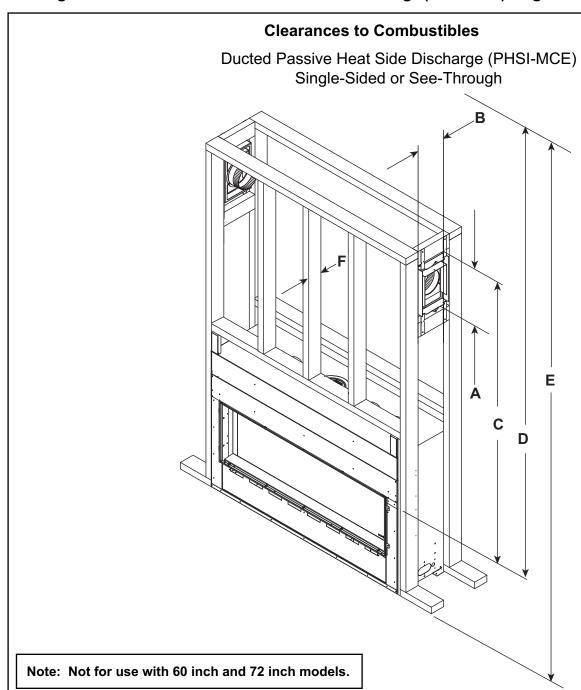
Figure 3.13 Passive Heat Minimum Framing Dimensions Open Top Discharge

## Framing Dimensions - Ducted Passive Heat Front Discharge (PHFR-MCE) Single-Sided or See-Through



MINIMUM FRAMING DIMENSIONS									
FRONT DISCHARGE									
MODEL	Ducted		Α	В	С	D	ш	F	G
	Passive Heat Kit		Height of Discharge Opening	Width of Discharge Opening	Clearance Opening to Framing	Clearance Opening to Ceiling	Clearance Bottom of Appliance to Ceiling	Framing	2 X 4 Studs
ECHEL36IN-C	PHFR-MCE-36	in.	6	38-3/4	50-1/2	53-1/2	78	16 inches (406 mm)	3-1/2
ECHEL36STIN-C		mm	152	984	1283	1359	1981		89
ECHEL48IN-C	PHFR-MCE-48	in.	6	50-7/8	50-1/2	53-1/2	78		3-1/2
ECHEL48STIN-C		mm	152	1292	1283	1359	1981		89
ECHEL60IN-C	PHFR-MCE-60	in.	6	62-3/4	50-1/2	53-1/2	78	on center	3-1/2
		mm	152	1594	1283	1359	1981		89
ECHEL72IN-C	PHFR-MCE-72	in.	6	74-3/4	50-1/2	72	96-1/2		3-1/2
		mm	152	1899	1283	1829	2451		89

Figure 3.14 Clearances to Combustibles - Ducted Passive Heat Front Discharge



MINIMUM FRAMING DIMENSIONS									
	SIDE DISCHARGE								
			Α	В	С	D	E	F	
MODEL	Ducted Passive Heat Kit		Height of Discharge Opening	Width of Discharge Opening	Clearance Opening to Framing	Clearance Opening to Ceiling	Clearance Bottom of Appliance to Ceiling	2 X 4 Studs	
ECHEL36IN-C ECHEL36STIN-C	PHSI-MCE	in.	16	10-3/16	50	52	76-1/2	3-1/2	
		mm	406	259	1270	1321	1943	89	
ECHEL48IN-C ECHEL48STIN-C		in.	16	10-3/16	50	52	76-1/2	3-1/2	
		mm	406	259	1270	1321	1943	89	

Figure 3.15 Clearances to Combustibles - Ducted Passive Heat Side Discharge

#### C. Constructing the Appliance Chase

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

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

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

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

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

NOTICE: Where required by code, install only sprinkler heads with a sprinkler activation temperature classified as Extra High.

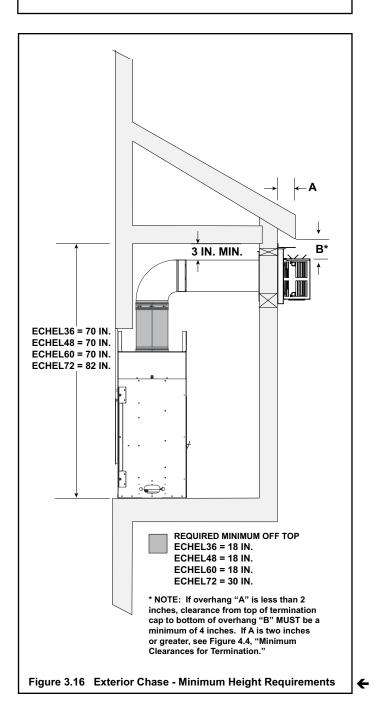
- Sprinklers inside of chase: Keep sprinkler head away from vent and chimney.
- Heat Management applications: Maintain 36 inches of clearance to openings from which heat is discharged such as convection slots, passive heat registers, heat zone registers, etc. Refer to Section 6.B for Heat Management options allowed for this appliance.

Chases should be constructed and insulated in the same manner as the thermal envelope of the home based on the code requirements for that climate zone to prevent air leakage and draft problems. The chase is an extension of the building thermal envelope.

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

Minimum height requirements for an exterior chase on a top-vented appliance are shown in Figure 3.16. Reference Figure 4.5 for additional clearances.

**Note:** Figure 3.8 and Figure 3.9 show the fireplace installed on the floor. However, this fireplace can be elevated off the floor provided that the fireplace is properly supported by framing materials and the ceiling clearances are maintained.



#### **D. Floor Protection**

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

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

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

#### **Elevated Hearth Systems**

Some hearth systems will elevate the appliance off the floor at a given dimension. The elevation will also have to be added to the following: Wall penetration referenced in Figure 5.2 (Wall penetration) and Rough Opening Height (header height) referenced in Figure 3.8 and 3.9.

**Note:** Finished floor thickness should also be considered when determining installation dimensions.

### E. Vinyl Flooring

Vinyl flooring is sensitive to heat. To avoid damage to the vinyl flooring, a 12 inch minimum x 12 inch minimum hearth is recommended when using vinyl flooring up to the wall. See Figure 3.17. If no hearth is used, it is recommended to provide a minimum of 30 inches of clearance in front of the appliance to the vinyl flooring OR the bottom of the appliance should be raised a minimum of 15 inches off of the floor to allow the vinyl flooring to be installed up to the wall.

**NOTICE:** Clearances that do not meet the minimum guidelines could result in damage or buckling to the vinyl flooring and is done at the installer's or homeowner's risk.

Hearth and Home Technologies does not recommend adhesive based vinyl flooring products due to thermal expansion during operation. Floating style flooring can be used, but will reach temperatures up to 110 °F (based on ambient temperature of 70 °F). Consult the manufacturer's flooring specifications to ensure compatibility.

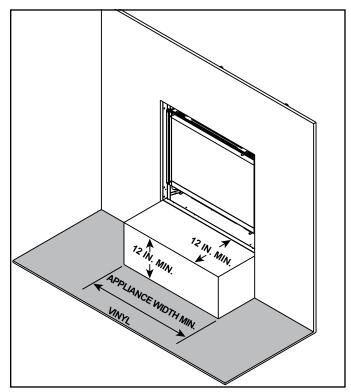


Figure 3.17 Vinyl Flooring Recommendations

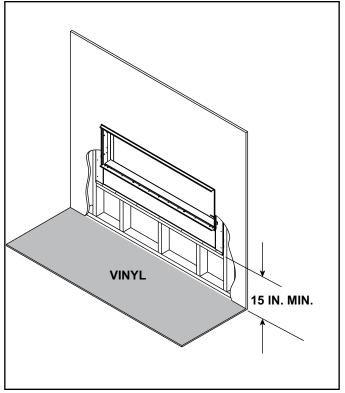


Figure 3.18 Vinyl Flooring Recommendations



## **Termination Location and Vent Information**

#### A. Approved Pipe

**WARNING!** Risk of Fire, Delayed Ignition or Asphyxiation. This appliance requires a separate vent. **DO NOT** vent to a pipe serving any other appliance.

This appliance is only approved for use with Hearth & Home Technologies DVP venting systems. Refer to Section 12.A for vent component information and dimensions. Only use listed decorative termination caps/shrouds with Hearth & Home Technologies approved venting systems. **DO NOT** mix pipe, fittings or joining methods from different manufacturers.

The pipe is tested to be run inside an enclosed wall. There is no requirement for inspection openings at each joint within the wall.

#### **B. Vent Termination Minimum Clearances**



#### WARNING

Fire Risk.

Maintain vent clearance to combustibles as specified.

 DO NOT pack air space with insulation or other materials.

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

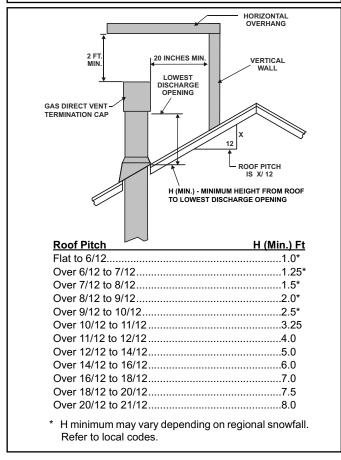


Figure 4.1 Minimum Height From Roof to Lowest Discharge Opening

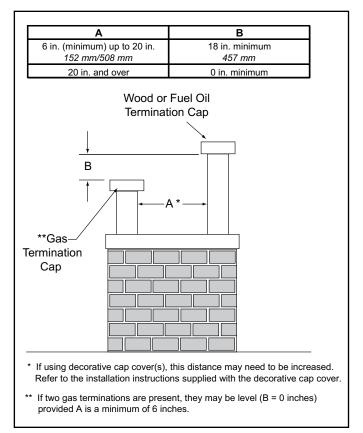


Figure 4.2 Staggered Termination Caps

**CAUTION!** Risk of Burns! Termination caps are HOT, consider proximity to doors, traffic areas or where people may pass or gather (sidewalk, deck, patio, etc.). Listed cap shields available. Contact your dealer.

- Local codes or regulations may require different clearances.
- Hearth & Home Technologies assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.
- · Vinyl protection kits are suggested for use with vinyl siding.
- Measure horizontal and vertical termination cap clearances as noted in Figure 4.3.

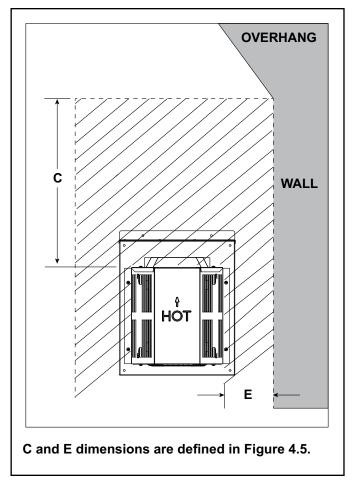
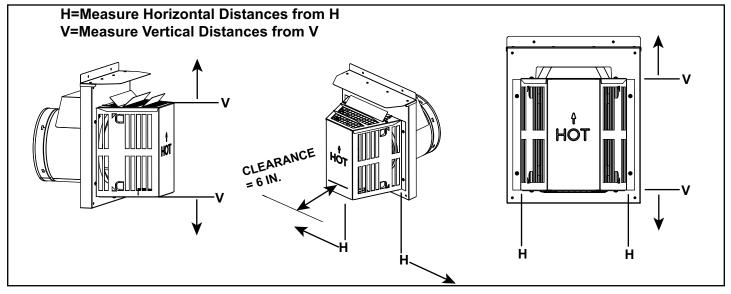


Figure 4.4 Measure Horizontal and Vertical Termination
Clearance to Trapezoid Portion of Cap



→ Figure 4.3

## 

**U.S.A.** Installations: In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code. **Canadian Installations:** In accordance with the current CSA B149.1, Natural Gas and Propane Installation Code.

		U.S.A.	CANADA						
Α	Clearance above grade, veranda, porch, deck, or balcony	12 in. (305 mm)	12 in. (305 mm)						
В	Clearance to window or door that may be opened, or to permanently closed window U.S.A.: = 12 in. min. (305 mm min.) CANADA: = 12 in. min. (305 mm min.)								
	Clearance below unventilated soffit	18 in. (457 mm)	18 in. (457 mm)						
С	Clearance below ventilated soffit	18 in. (457 mm)	18 in. (457 mm)						
	Clearance below any vinyl soffits and electrical service	30 in. (762 mm)	30 in. (762 mm)						
D	Clearance to outside corner	6 in. (152 mm)	6 in. (152 mm)						
E	Clearance to inside corner	6 in. (152 mm)	6 in. (152 mm)						
F	Not to be installed above a gas meter/regulator assembly within 3 feet horizontally from the center-line of the regulator	3 ft (914 mm)	3 ft (914 mm)						
G	Clearance to gas service regulator vent outlet	3 ft (914 mm)	3 ft (914 mm)						
Н	Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance termination (mechanical or non-mechanical)	9 in. (229 mm min.)	12 in. (305 mm min.)						
I	Clearance to a mechanical (powered) air supply inlet  ***(All mechanical air intakes within 10 feet of a horizontal termination cap must be a minimum of 3 feet below termination.)	3 ft (914 mm)***	6 ft (1.8 m)						
J	On <u>public</u> property: clearance above paved sidewalk or a paved driveway.	7 ft (2.1 m)	7 ft (2.1 m)**						
	**(A vent shall not terminate directly above a sidewalk or paved driveway which is locand serves both dwellings.)	ated between two sir	ngle family dwellings						
K	Clearance from sides of electrical service	6 in. (152 mm)	6 in. (152 mm)						
K	Location of the vent termination must not interfere with access to the electrical service.								
	Clearance above electrical service	12 in. (305 mm)	12 in. (305 mm)						
L	Location of the vent termination must not interfere with access to the electrical service.								
М	Clearance under veranda, porch, deck, balcony or overhang *(Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.)	18 in. (457 mm)	18 in. (457 mm)*						
	Vinyl or composite overhang	42 in. (1067 mm)	42 in. (1067 mm)						

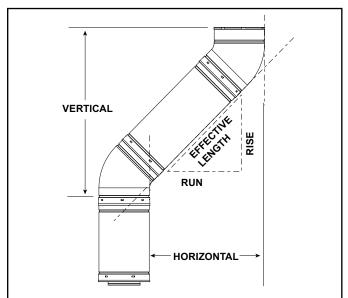
Figure 4.5 Minimum Clearances for Termination

### D. Use of Elbows

Diagonal runs have both vertical and horizontal vent aspects when calculating the effects. Use the rise for the vertical aspect and the run for the horizontal aspect. See Figure 4.6.

Two 45° elbows may be used in place of one 90° elbow. On 45° runs, one foot of diagonal is equal to 8-1/2 inch (216 mm) horizontal run and 8-1/2 inch (216 mm) vertical run. A length of straight pipe is allowed between two 45° elbows. See Figure 4.6.

Figure 4.7 shows the vertical and horizontal offsets for DVP elbows.



DVP	Effective Length		Rise/Run	
Pipe	Inches	Millimeters	Inches	Millimeters
DVP4	4	102	2-3/4	70
DVP6	6	152	4-1/4	108
DVP12	12	305	8-1/2	216
DVP24	24	610	17	432
DVP36	36	914	25-1/2	648
DVP48	48	1219	34	864
DVP6A	3 to 6	76 to 152	2-1/8-4-1/4	54-108
DVP12A	3 to 12	76 to 305	2-1/8-8-1/2	54-216

Figure 4.6

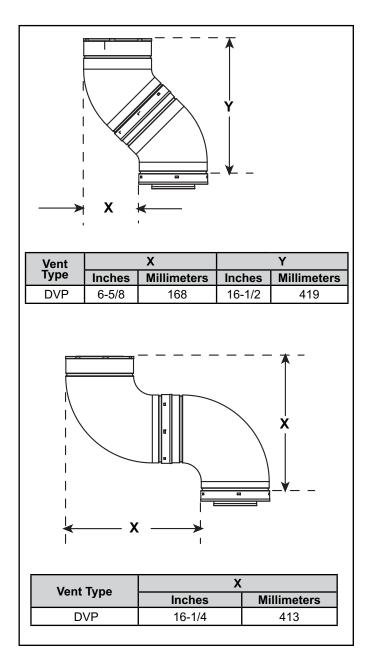
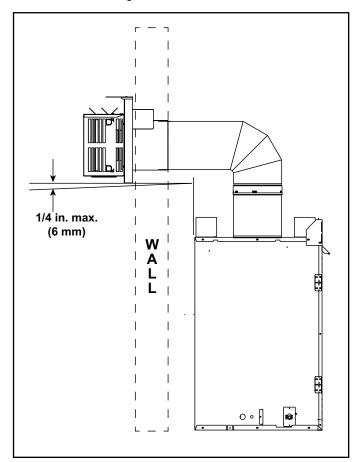


Figure 4.7 Vertical and Horizontal Offset for DVP Elbows

### E. Vent Diagrams

#### **General Rules:**

- SUBTRACT 3 ft from the total H measurement for each 90° elbow installed horizontally.
- SUBTRACT 1-1/2 ft from the total H measurement for each 45° elbow installed horizontally.
- A maximum of three 90° elbows (or six 45° elbows) may be used in any vent configuration. Some elbows may be installed horizontally. See Figure 4.12 and Figure 4.19.
- Elbows may be placed back to back anywhere in the system.
- Any 90° elbow may be replaced with two back to back 45° elbows.
- When penetrating a combustible wall, a wall shield firestop must be installed.
- When penetrating a combustible ceiling, a ceiling firestop must be installed.
- Horizontal runs of vent do not require vertical rise; horizontal runs may be level.
- Horizontal termination cap should have a 1/4 inch downward slant to allow any moisture in cap to be released. See Figure 4.8.



### → Figure 4.8

### **Measuring Standards:**

Vertical and horizontal measurements listed in the vent diagrams and clearances for termination were made using the following standards:

- Pipe measurements are shown using the effective length of pipe. See Section 12.A (Figure 12.1), for information on effective length of pipe components.
- Horizontal terminations are measured to the outside mounting surface (flange of termination cap). See Figure 4.9.
- Vertical terminations are measured to top of last section of pipe. See Figure 4.10.
- Horizontal pipe installed level with no rise.

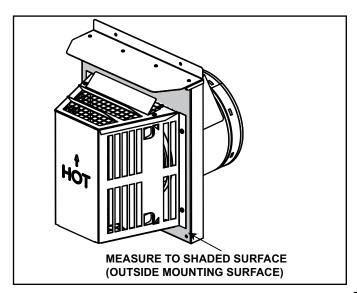


Figure 4.9 Measure to Outside Mounting Surface

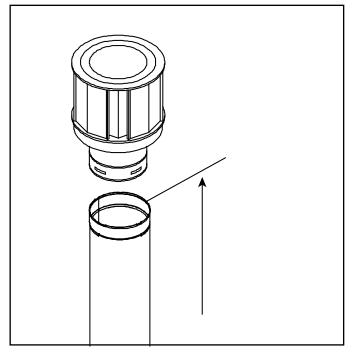


Figure 4.10 Measure to Top of Last Section of Pipe

### **A** WARNING



Fire Risk. Explosion Risk.

Do NOT pack insulation or other combustibles between ceiling firestops.

- ALWAYS maintain specified clearances around venting and firestop systems.
- · Install wall shield and ceiling firestops as specified.

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



### Top Vent - Horizontal Termination Venting with 1 elbow WARNING! Risk of Fire!

### DO NOT attach elbow directly to the appliance.

- The ECHEL36IN-C/ECHEL36STIN-C, ECHEL48IN-C/ECHEL48STIN-C and ECHEL60IN-C require a minimum of 18 inches of vertical venting before attaching any elbow to the appliance.
- The ECHEL72IN-C requires a minimum of 30 inches of vertical venting before attaching any elbow to the appliance.

ECHEL36IN-C, ECHEL48IN-C, ECHEL60IN-C			
V <sub>1</sub> Minimum		H₁ Maximum	
1-1/2 ft.	457 mm	1-1/2 ft.	457 mm
2-1/2 ft.	762 mm	6 ft.	1.8 m
3-1/2 ft.	1.1 m	9 ft.	2.7 m
5 ft.	1.5 m	12 ft.	3.7 m
6 ft.	1.8 m	15 ft.	4.6 m
7 ft.	2.1 m	18 ft.	5.5 m
8 ft.	2.4 m	21 ft.	6.4 m
9 ft.	2.7 m	24 ft.	7.3 m
i l			

 $V_1 + H_1 = 63 \text{ ft. (19.2 m) Maximum}$  $H^1 = 24 \text{ ft. (7.3 m) Maximum}$ 

	•
<b>Note</b> : Use DVP Series components only.	
- <u>F</u>	

ECHEL36STIN-C, ECHEL48STIN-C				
V <sub>1</sub> Minimum H <sub>1</sub> Maximum			I <sub>1</sub> Maximum	
1-1/2 ft.	457 mm	3 ft. 914 mm		
2-1/2 ft.	762 mm	6 ft.	1.8 m	
3-1/2 ft.	1.1 m	9 ft.	2.7 m	
5 ft.	1.5 m	12 ft.	3.7 m	
6 ft.	1.8 m	15 ft.	4.6 m	
7 ft.	2.1 m	18 ft.	5.5 m	
8 ft.	2.4 m	21 ft.	6.4 m	
9 ft.	2.7 m	24 ft.	7.3 m	
· · · · · · · · · · · · · · · · · · ·				

 $V_1 + H_1 = 63 \text{ ft. (19.2 m) Maximum}$  $H^1 = 24 \text{ ft. (7.3 m) Maximum}$ 

ECHEL72IN-C				
V <sub>1</sub> Mi	nimum	H₁ Max	cimum	
2-1/2 ft.	762 mm	1-1/2 ft.	457 mm	
3-1/2 ft.	1.1 m	6 ft.	1.8 m	
4-1/2 ft.	1.4 m	9 ft.	2.7 m	
6 ft.	1.8 m	12 ft.	3.7 m	
7 ft.	2.1 m	15 ft.	4.6 m	
8 ft.	2.4 m	18 ft.	5.5 m	
9 ft.	2.7 m	21 ft.	6.4 m	
10 ft.	3.0 m	24 ft.	7.3 m	

 $V_1 + H_1 = 63 \text{ ft. } (19.2 \text{ m}) \text{ Maximum}$  $H^1 = 24 \text{ ft. } (7.3 \text{ m}) \text{ Maximum}$ 

## Top Vent - Horizontal Termination Venting with 2 elbows

### WARNING! Risk of Fire!

### DO NOT attach elbow directly to the appliance.

- The ECHEL36IN-C/ECHEL36STIN-C, ECHEL48IN-C/ECHEL48STIN-C and ECHEL60IN-C require a minimum of 18 inches of vertical venting before attaching any elbow to the appliance.
- The ECHEL72IN-C requires a minimum of 30 inches of vertical venting before attaching any elbow to the appliance.

ECHEL36IN-C, ECHEL48IN-C, ECHEL60IN-C				
V₁ Mir	nimum	H <sub>1</sub> + H <sub>2</sub> Maximum		
1-1/2 ft.	457 mm	1-1/2 ft.	457 mm	
2-1/2 ft.	762 mm	6 ft.	1.8 m	
3-1/2 ft.	1.1 m	9 ft.	2.7 m	
5 ft.	1.5 m	12 ft.	3.7 m	
6 ft.	1.8 m	15 ft.	4.6 m	
7 ft.	2.1 m	18 ft.	5.5 m	
8 ft.	2.4 m	21 ft.	6.4 m	
9 ft.	2.7 m	24 ft.	7.3 m	

 $V_1 + H_1 + H_2 = 63$  ft. (19.2 m) Maximum  $H_1 + H_2 = 24$  ft. (7.3 m) Maximum **Note**: Use DVP Series components only.

ECHEL72IN-C				
V <sub>1</sub> Minimum H <sub>1</sub> + H <sub>2</sub> Maximum				
2-1/2 ft.	762 mm	1-1/2 ft.	457 mm	
3-1/2 ft.	1.1 m	6 ft.	1.8 m	
4-1/2 ft.	1.4 m	9 ft.	2.7 m	
6 ft.	1.8 m	12 ft.	3.7 m	
7 ft.	2.1 m	15 ft.	4.6 m	
8 ft.	2.4 m	18 ft.	5.5 m	
9 ft.	2.7 m	21 ft.	6.4 m	
10 ft.	3.0 m	24 ft.	7.3 m	

 $V_1 + H_1 + H_2 = 63$  ft. (19.2 m) Maximum  $H_1 + H_2 = 24$  ft. (7.3 m) Maximum

ECHEL36STIN-C, ECHEL48STIN-C				
V₁ Mir	nimum	H <sub>1</sub> + H <sub>2</sub> Maximum		
1-1/2 ft.	457 mm	3 ft.	914 mm	
2-1/2 ft.	762 mm	6 ft.	1.8 m	
3-1/2 ft.	1.1 m	9 ft.	2.7 m	
5 ft.	1.5 m	12 ft.	3.7 m	
6 ft.	1.8 m	15 ft.	4.6 m	
7 ft.	2.1 m	18 ft.	5.5 m	
8 ft.	2.4 m	21 ft.	6.4 m	
9 ft.	2.7 m	24 ft.	7.3 m	

 $V_1 + H_1 + H_2 = 63$  ft. (19.2 m) Maximum  $H_1 + H_2 = 24$  ft. (7.3 m) Maximum

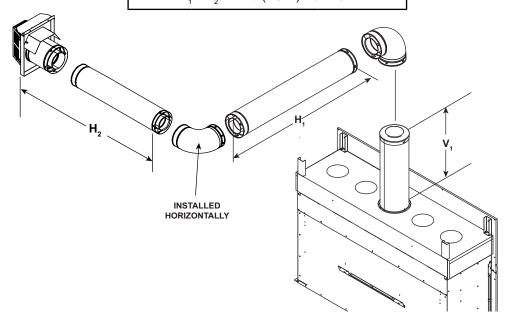


Figure 4.12

### Top Vent - Horizontal Termination Venting with 3 Elbows

### WARNING! Risk of Fire!

### DO NOT attach elbow directly to the appliance.

- The ECHEL36IN-C/ECHEL36STIN-C, ECHEL48IN-C/ECHEL48STIN-C and ECHEL60IN-C require a minimum of 18 inches of vertical venting before attaching any elbow to the appliance.
- The ECHEL72IN-C requires a minimum of 30 inches of vertical venting before attaching any elbow to the appliance.

ECHEL36IN-C, ECHEL48IN-C, ECHEL60IN-C				
V <sub>1</sub> + V <sub>2</sub> N	linimum	H <sub>1+</sub> H <sub>2</sub> Maximum		
1-1/2 ft.	457 mm	1-1/2 ft.	457 mm	
2-1/2 ft.	762 mm	6 ft.	1.8 m	
3-1/2 ft.	1.1 m	9 ft.	2.7 m	
5 ft.	1.5 m	12 ft.	3.7 m	
6 ft.	1.8 m	15 ft.	4.6 m	
7 ft.	2.1 m	18 ft.	5.5 m	
8 ft.	2.4 m	21 ft.	6.4 m	
9 ft.	2.7 m	24 ft.	7.3 m	

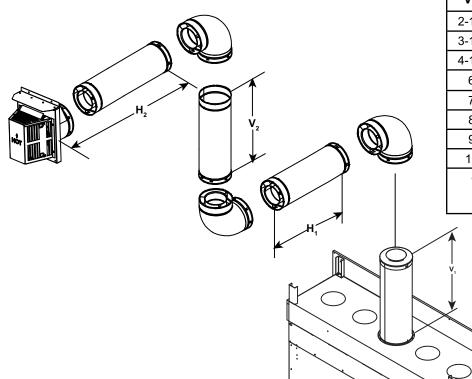
 $V_1 + V_2 + H_1 + H_2 = 63$  ft. (19.2 m) Maximum

 $H_1 + H_2 = 24 \text{ ft. } (7.3 \text{ m}) \text{ Maximum}$ 

Note: Use DVP Series
components only.

ECHEL36STIN-C, ECHEL48STIN-C				
V <sub>1</sub> + V <sub>2</sub> Minimum H <sub>1+</sub> H <sub>2</sub> Maximum				
1-1/2 ft.	457 mm	3 ft.	914 mm	
2-1/2 ft.	762 mm	6 ft.	1.8 m	
3-1/2 ft.	1.1 m	9 ft.	2.7 m	
5 ft.	1.5 m	12 ft.	3.7 m	
6 ft.	1.8 m	15 ft.	4.6 m	
7 ft.	2.1 m	18 ft.	5.5 m	
8 ft.	2.4 m	21 ft.	6.4 m	
9 ft.	2.7 m	24 ft.	7.3 m	

 $V_1 + V_2 + H_1 + H_2 = 63$  ft. (19.2 m) Maximum  $H_1 + H_2 = 24$  ft. (7.3 m) Maximum



ECHEL72IN-C				
V <sub>1</sub> + V <sub>2</sub> Minimum		H <sub>1</sub> + H	Maximum	
2-1/2 ft.	762 mm	1-1/2 ft.	457 mm	
3-1/2 ft.	1.1 m	6 ft.	1.8 m	
4-1/2 ft.	1.4 m	9 ft.	2.7 m	
6 ft.	1.8 m	12 ft.	3.7 m	
7 ft.	2.1 m	15 ft.	4.6 m	
8 ft.	2.4 m	18 ft.	5.5 m	
9 ft.	2.7 m	21 ft.	6.4 m	
10 ft.	3.0 m	24 ft.	7.3 m	

 $V_1 + V_2 + H_1 + H_2 = 63$  ft. (19.2 m) Maximum  $H_1 + H_2 = 24$  ft. (7.3 m) Maximum

## **Top Vent - Vertical Termination No Elbows**

V = 2-1/2 ft Min. (762 mm), 50 ft. Max. (15.2 m)

**Note:** If installing a vertical vent/termination off the top of the appliance, the optional exhaust restrictor may be needed.

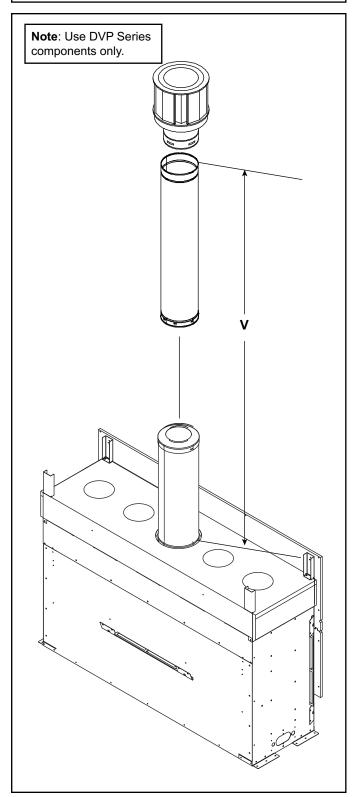


Figure 4.14 Vertical Vent Maximum

#### **Exhaust restrictor Instructions**

Exhaust restrictors are recommended for these vertically terminated products which have excessive draft. Exhaust restrictors will compensate for high draft, and restore visual flame height. If the vent configuration has a total vertical of 20-50 feet, the included exhaust restrictor may be needed.

### Exhaust restrictor: ECHEL36IN-C, ECHEL48IN-C, ECHEL60IN-C, ECHEL72IN-C

- 1. Locate the two pilot holes in the inside firebox chamber as shown in Figure 4.15.
- 2. Break the flue restrictor into two pieces. Do this by bending the part back and forth until it breaks. See Figure 4.16.
- 3. The setting for ECHEL36IN-C, ECHEL48IN-C, ECHEL60IN-C and ECHEL72IN-C is a 2.5 inch setting, or 2-2. Align the holes marked "2" on the numbered exhaust restrictor piece with the hole on the other exhaust restrictor piece. See Figure 4.17. Align the exhaust restrictor pieces with the pilot holes in the inner firebox chamber. Use two 1/2 inch self-piercing screws to secure vent restrictor to firebox heat shield.
- 4. In some applications, such as those where the fireplace is elevated off the floor, the exhaust restrictor may be painted, but painting is not required.

**NOTICE:** Before painting, contact your dealer for information on the appropriate high temperature paint.

### Exhaust restrictor: ECHEL36STIN-C, ECHEL48STIN-C

1. Break the flue restrictor into two pieces. Do this by bending the part back and forth until it breaks. See Figure 4.16.

**Note:** The ECHEL36STIN-C and ECHEL48STIN-C do not have pilot holes for the exhaust restrictor in the firebox chamber.

- 2. The setting for ECHEL36STIN-C and the ECHEL48STIN-C is a 2.5 inch setting, or 2-2. Align the holes marked "2" on the numbered exhaust restrictor piece with the hole on the other exhaust restrictor piece. See Figure 4.17. Center the exhaust restrictor on the vent and secure in place with two 1/2 inch self-piercing screws.
- 3. In some applications, such as those where the fireplace is elevated off the floor, the exhaust restrictor may be painted, but painting is not required.

**NOTICE:** Before painting, contact your dealer for information on the appropriate high temperature paint.

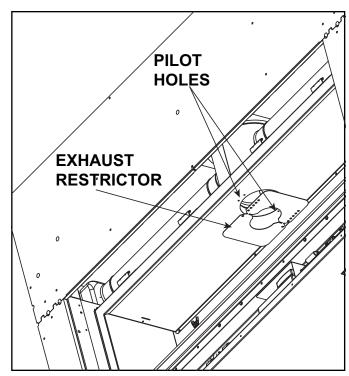


Figure 4.15 Exhaust Restrictor

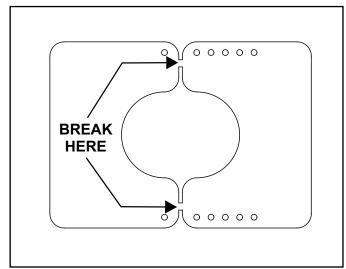


Figure 4.16 Break the Exhaust Restrictor

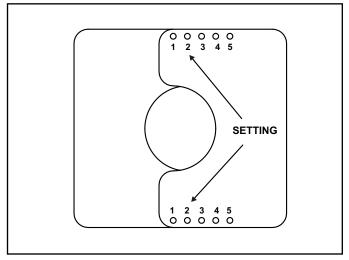


Figure 4.17 Set the Exhaust Restrictor

### Top Vent - Vertical Termination Venting with 2 elbows

### WARNING! Risk of Fire!

### DO NOT attach elbow directly to the appliance.

- The ECHEL36IN-C/ECHEL36STIN-C, ECHEL48IN-C/ECHEL48STIN-C and ECHEL60IN-C require a minimum of 18 inches of vertical venting before attaching any elbow to the appliance.
- The ECHEL72IN-C requires a minimum of 30 inches of vertical venting before attaching any elbow to the appliance.

ECHEL36IN-C, ECHEL48IN-C, ECHEL60IN-C ECHEL36STIN-C, ECHEL48STIN-C					
V <sub>1</sub> + V <sub>2</sub> N	V <sub>1</sub> + V <sub>2</sub> Minimum H Maximum				
1-1/2 ft.	457 mm	4 ft.	1.2 m		
2-1/2 ft.	762 mm	9 ft.	2.7 m		
3-1/2 ft.	I/2 ft. 1.1 m 12 ft. 3.7 m				
5 ft.	1.5 m	15 ft.	4.6 m		
6 ft.	1.8 m	18 ft.	5.5 m		
7 ft. 2.1 m 21 ft. 6.4 m					
8 ft. 2.4 m 23 ft. 7.0 m					
$V_1 + H_1 + V_2 = 63 \text{ ft. (19.2 m) Maximum}$ $H_{Total} = 23 \text{ ft. (7.1 m) Maximum}$					

**Note**: Use DVP Series components only.

ECHEL72IN-C				
V <sub>1</sub> + V <sub>2</sub> Minimum		H Maximum		
2-1/2 ft.	2-1/2 ft. 762 mm		1.2 m	
3-1/2 ft.	1.1 m	9 ft.	2.7 m	
4-1/2 ft.	1.4 m	12 ft.	3.7 m	
6 ft.	1.8 m	15 ft.	4.6 m	
7 ft.	2.1 m	18 ft.	5.5 m	
8 ft.	2.4 m	21 ft.	6.4 m	
9 ft.	9 ft. 2.7 m		7.0 m	
V + H + V = 63 ft (19.2 m) Maximum				

 $V_1 + H_1 + V_2 = 63 \text{ ft. (19.2 m) Maximum}$  $H_{Total} = 23 \text{ ft. (7.1 m) Maximum}$ 

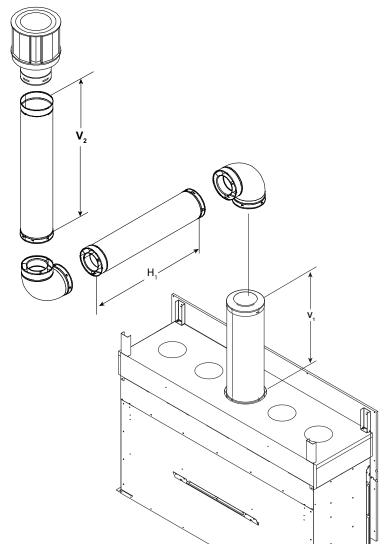


Figure 4.18

### Top Vent - Vertical Termination Venting with 3 elbows

### WARNING! Risk of Fire!

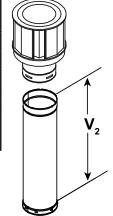
### DO NOT attach elbow directly to the appliance.

- The ECHEL36IN-C/ECHEL36STIN-C, ECHEL48IN-C/ECHEL48STIN-C and ECHEL60IN-C require a minimum of 18 inches of vertical venting before attaching any elbow to the appliance.
- The ECHEL72IN-C requires a minimum of 30 inches of vertical venting before attaching any elbow to the appliance.

ECHEL36IN-C, ECHEL48IN-C, ECHEL60IN-C ECHEL36STIN-C, ECHEL48STIN-C				
$V_1 + V_2$ Minimum $H_1 + H_2$ Maximum				
1-1/2 ft.	457 mm	4 ft.	1.2 m	
3 ft.	914 mm	9 ft.	2.7 m	
4 ft.	1.2 m	12 ft.	3.7 m	
5 ft.	1.5 m	15 ft.	4.6 m	
6 ft.	1.8 m	18 ft.	5.5 m	
7 ft.	2.1 m	21 ft.	6.4 m	
8 ft. 2.4 m 23 ft. 7.0 m				
$V_1 + V_2 + H_1 + H_2 = 63 \text{ ft. (19.2 m) Maximum}$				

 $H_1 + H_2 = 23 \text{ ft. } (7.1 \text{ m}) \text{ Maximum}$ 

**Note**: Use DVP Series components only.



ECHEL72IN-C				
$V_1 + V_2$ Minimum $H_{1+} H_2$ Maximum				
2-1/2 ft.	762 mm	4 ft.	1.2 m	
4 ft.	1.2 m	9 ft.	2.7 m	
5 ft.	1.5 m	12 ft.	3.7 m	
6 ft.	1.8 m	15 ft.	4.6 m	
7 ft.	2.1 m	18 ft.	5.5 m	
8 ft.	2.4 m	21 ft.	6.4 m	
9 ft.	2.7 m	23 ft.	7.0 m	

 $V_1 + V_2 + H_1 + H_2 = 63$  ft. (19.2 m) Maximum  $H_1 + H_2 = 23$  ft. (7.1 m) Maximum

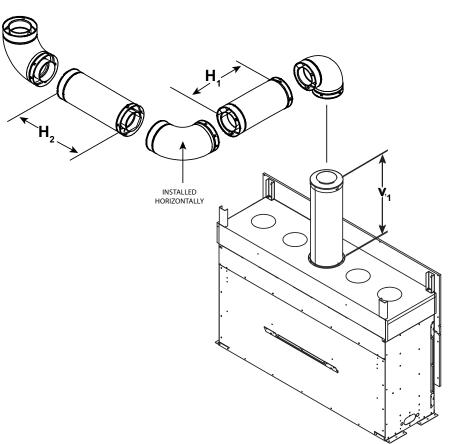


Figure 4.19



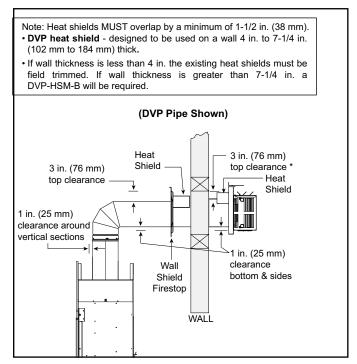
### **Vent Clearances and Vent Framing**

### A. Vent Clearances to Combustibles

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

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

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



→ Figure 5.1 Horizontal Venting Clearances To Combustible Materials

### **B. Wall Penetration Framing/Firestops**

### **Combustible Wall Penetration**

Whenever a combustible wall is penetrated, you must frame a hole for the wall shield firestop(s). The wall shield firestop maintains minimum clearances and prevents cold air infiltration.

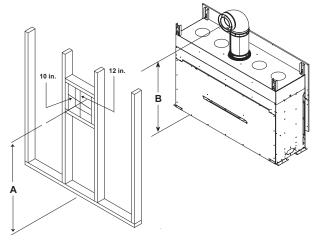
- The opening must be framed on all four sides using the same size framing materials as those used in the wall construction.
- SLP pipe A wall shield firestop must be placed on each side of an interior wall. A minimum 1-1/2 in. (38 mm) overlap of attached heat shields must be maintained.
- DVP pipe A wall shield firestop is required on one side only on interior walls. If your local inspector requires a wall shield firestop on both sides, then both wall shield firestops must have a heat shield (refer to Section 12.A.) attached to them.
- See Section 7.F. for information for regarding the installation of a horizontal termination cap.

#### Non-Combustible Wall Penetration

If the hole being penetrated is surrounded by non-combustible materials such as concrete, a hole with diameter one inch greater than the pipe is acceptable.

Whenever a non-combustible wall is penetrated, the wall shield firestop is only required on one side and no heat shield is necessary.

### DO NOT PACK VENT FRAMING HOLE WITH INSULATION OR OTHER MATERIAL.



MODEL	<b>A</b> *	В
ECHEL36IN-C ECHEL36STIN-C	64 in.	63 in.
ECHEL48IN-C ECHEL48STIN-C ECHEL60IN-C	1.63 m	1.60 m
FCHFL72IN-C	76 in.	75 in.
EGHEL/ZIN-G	1.93 m	1.90 m

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

**Note:** Measurements for ECHEL36IN-C/ECHEL48IN-C and ECHEL60IN-C were taken with an 18 inch vertical section of pipe directly off the top of appliance.

Measurements for ECHEL72-C were taken with an 30 inch vertical section of pipe directly off the top of appliance.

**Note:** Center of the horizontal vent pipe to the vertical measuring surface of a trap cap is 5 inches (127 mm).

Figure 5.2 Wall Penetration

### C. Ceiling Firestop/Floor Penetration Framing

WARNING! Risk of Fire! DO NOT pack insulation around the vent. Maintain clearances to vent to prevent overheating.

A ceiling firestop **MUST** be used between floors and attics.

- DVP pipe only Frame an opening 10 in. by 10 in. (254 mm by 254 mm) whenever the vent penetrates a ceiling/floor (see Figure 5.3).
- Frame the area with the same sized lumber as used in ceiling/floor joist.
- The ceiling firestop may be installed above or below the ceiling joists when installed with an attic insulation shield. It must be under joists between floors that are not insulated. Refer to Figure 5.4.
- · Secure with two fasteners on each side.

### D. Install Attic Insulation Shield

**WARNING!** Fire Risk. The use of an attic shield is required to prevent loose materials or insulation from contacting the vent causing overheating and a fire.

The International Fuel Gas Code requires an attic shield constructed of 26 gauge minimum steel that extends at least 2 in. (51 mm) above insulation.

- Attic insulation shields must meet specified clearances to combustible materials and be secured in place.
- An attic insulation shield kit is available from Hearth & Home Technologies. Contact your dealer to order. Install attic insulation shield according to instructions included with kit.

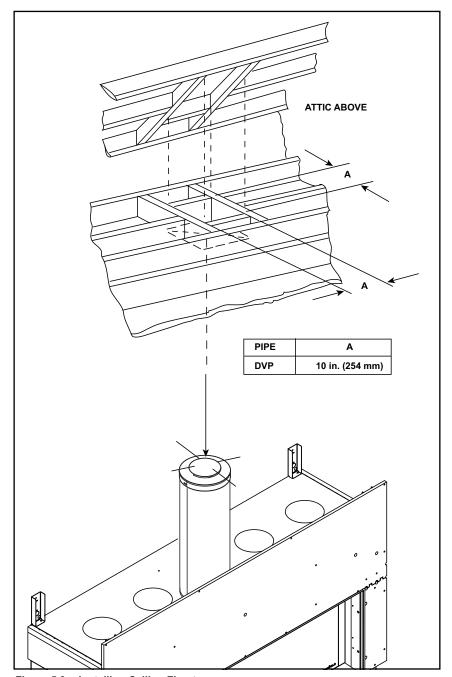
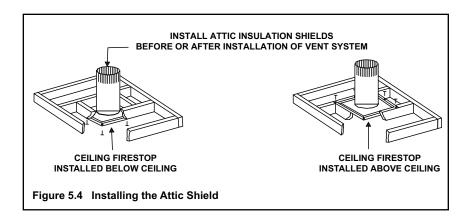


Figure 5.3 Installing Ceiling Firestop



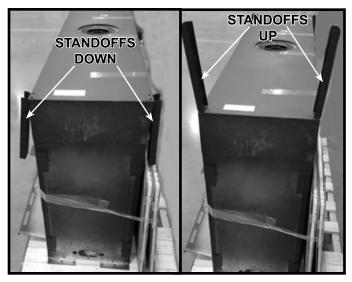


### **Appliance Preparation**

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

### A. Top Standoff Preparation

Rotate the four (4) top standoffs up into vertical position.
 60 and 72 only: Push the standoff support tab on each standoff toward the center of the appliance and fasten it in place using the supplied screw and pilot hole. See Figure 6.1.



**Standoff Shipping Position** 

**Standoff Installation Position** 

Figure 6.1 Standoffs Shown in Vertical Position (See-Through Appliance Shown)

2. Place a vent section on the starting collar.

**WARNING!** Risk of Fire! DO NOT attach elbow directly to the appliance.

- The ECHEL36IN-C/ECHEL36STIN-C, ECHEL48IN-C/ ECHEL48STIN-C and ECHEL60IN-C require a minimum of 18 inches of vertical venting before attaching any elbow to the appliance.
- The ECHEL72IN-C requires a minimum of 30 inches of vertical venting before attaching any elbow to the appliance.
- 4. Place the 1/8 inch thick, square fiberglass gasket over the initial vent section.
- 5. Place the fiberglass rope ring over the gasket. Ensure both the gasket and the rope ring are seated on the top of the appliance. See Figure 6.2 and Figure 6.3.

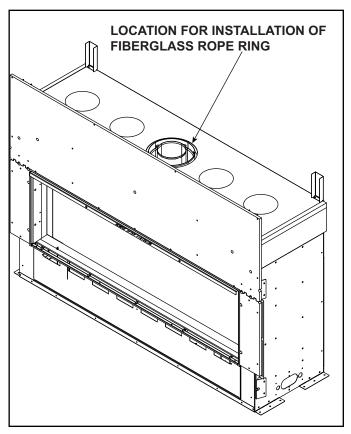


Figure 6.2 Location of Fiberglass Rope Ring

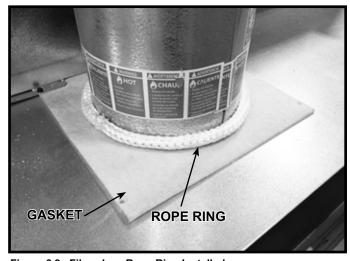


Figure 6.3 Fiberglass Rope Ring Installed

### **B. Prepare For Heat Management**

#### Introduction

An optional heat management system allows the heat from the appliance to be redirected as desired.

An optional heat management system must be installed by a qualified service technician at the time of the appliance installation. Follow the instructions shipped with the kit for installation and operation.

**NOTICE:** Additional clearances are required for heat management systems installations. Provisions must be made in advance to ensure fit within the framing.

- Determine the heat management system(s) that will be installed.
- Remove the appropriate knockout(s).
- Remove insulation plug(s).
- Center the duct collar around the exposed hole and attach it to the appliance. See Figure 6.4.

**Note**: Do this BEFORE final positioning of the appliance.

 Determine the location for the air register/fan housing assembly.

Reference the appropriate instructions included with the heat management system kit for the remaining installation steps.

Optional Heat Management Systems are:

- HEAT-ZONE®-GAS: The heat is diverted into an adjacent room.
- HEAT-OUT-GAS: The heat is diverted outside the home/building.
- Passive Heat (PH-MCE): The heat is vented into the room in which the appliance is installed through a discharge opening(s).
- Ducted Passive Heat (PHFR-MCE, PHSI-MCE) The heat is ducted into the room in which the appliance is installed through a discharge opening(s) using an insulated ducting system. PHSI-MCE side discharge available only for 36 and 48 inch sized appliances.

The ECHELON-C models may utilize two Heat Management Systems, but not all are compatible.

Approved combinations are:

- HEAT-OUT-GAS: May be used with one HEAT-ZONE-GAS or one of the Passive Heat options (PH-MCE, PHFR-MCE, PHSI-MCE).
- HEAT-ZONE-GAS: May be used with one HEAT-OUT-GAS, one of the Passive Heat options (PH-MCE, PHFR-MCE, PHSI-MCE), or one additional HEAT-ZONE-GAS.
- Passive Heat (PH-MCE, PHFR-MCE, PHSI-MCE): May be used with HEAT-ZONE-GAS or one HEAT-OUT-GAS. The dedicated knockouts must be used only as indicated in Figure 6.4.

**WARNING!** Risk of Fire! DO NOT block passive heat registers! Overheating of appliance and combustible materials will occur.

**WARNING!** Risk of Fire! DO NOT remove heat management seal plate unless a heat management System will be connected at that location. Overheating of appliance and combustible materials will occur.

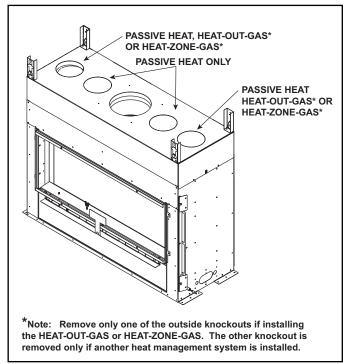


Figure 6.4

### Heat-Zone-Gas Adapter Kit (HZLIN-ADP)

The HZLIN-ADP adapter kit is required for use with the Heat-Zone-Gas Kit and is necessary when the optional Heat-Zone-Gas Kit is installed on the ECHELON-C models. See Figure 6.5.

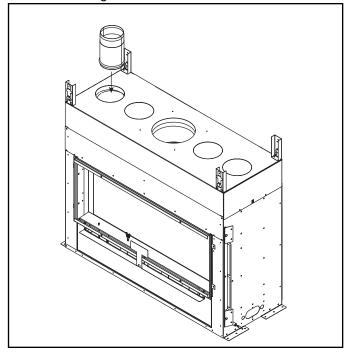


Figure 6.5 Heat-Zone-Gas Linear Adapter Collar

### C. Securing and Leveling the Appliance

### Setting the Fireplace into the Framing

The left and right nailing tabs were designed as a means to ensure the fireplace is mounted flush with the framing materials. See Figures 6.6-6.8.

- The shipping flanges protrude further out from the appliance than the side standoffs. The shipping flange may be bent upward or broken off in order to place the appliance into position in the framing.
- 2. Bend out all nailing tabs. The see-through model will have eight nailing tabs. The single-sided model will have four nailing tabs.
- Screw each nailing tab to the adjoining framing material. Ensure that the one inch air space clearance is maintained on the sides and back of the fireplace. See Figures 3.8-3.12 for framing and clearance details.

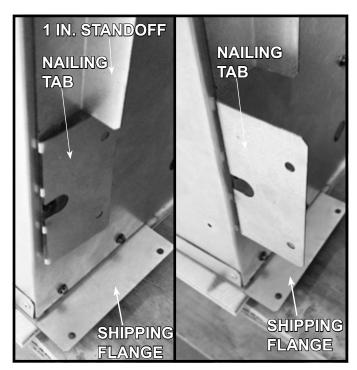


Figure 6.6 Nailing Tabs
Shipping Position

Figure 6.7 Nailing Tabs Installation Position

### Securing and Leveling the Appliance

### **A** WARNING



### Risk of Fire!

Prevent contact with:

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

**DO NOT remove standoffs or** notch the framing around the appliance standoffs.

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

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

The diagram shows how to properly position and secure the appliance. See Figure 6.8. Nailing tabs are provided to secure the appliance to the framing members.

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

Some figures in manual show the fireplace installed on the floor. However, this fireplace can be elevated off the floor provided that the fireplace is properly supported by framing materials and the ceiling clearances are maintained.

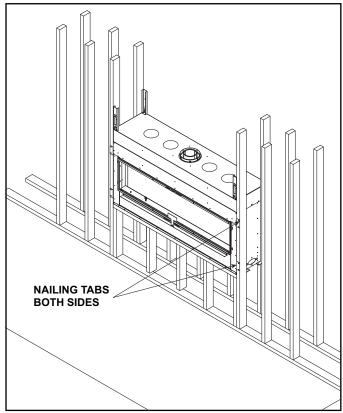


Figure 6.8 Proper Positioning and Securing of an Appliance

### D. Installing Non-Combustible Facing Material

### WARNING! Risk of Fire!

- · Follow these instructions exactly.
- Facing materials must be installed properly to prevent fire.
- No materials may be substituted without authorization by Hearth & Home Technologies.
- The required non-combustible material is shipped within a protective sleeve with the appliance. Remove the noncombustible facing pieces from the protective cardboard sleeve.
- Locate the smaller piece of non-combustible material.
   This piece is designed to snap apart into both left and right side pieces. Align center score mark with straight edge to snap apart material into two pieces.
- Install non-combustible facing material to the appliance using the 1-1/4 inch screws supplied in the manual bag assembly. There may be extra screws included.
- Attach top board to the framing members with regular sheetrock screws or nails. See Figure 6.9.
- Attach left and right side pieces to framing members with regular sheetrock screws or nails.
- Use a wet or dry towel or soft brush to remove dust or dirt from facing material.
- See Section 10 for finishing materials guidelines.

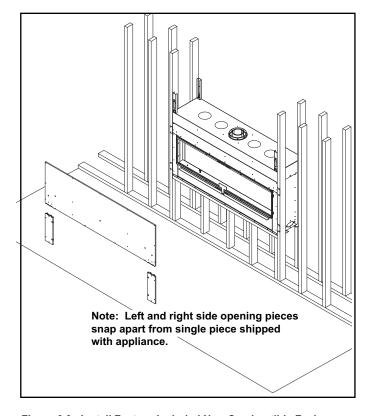


Figure 6.9 Install Factory-Included Non-Combustible Facing Material

## Venting

### A. Assemble Vent Sections (DVP Pipe Only)

**WARNING!** Risk of Fire or Explosion! Vent sections MUST be installed correctly. Improperly installed vent sections could leak or cause appliance to overheat.

### Attach Vent to the Firebox Assembly

**Note:** The end of the pipe sections with the lanced tabs will face toward the appliance.

Attach the first pipe section to the starting collar:

- · Lanced pipe end of the starting collar.
- · Inner pipe over inner collar.
- Push the pipe section until all lanced tabs snap in place.
- · Lightly tug on pipe to confirm it has locked.

Requirement for Commercial, Multi-family (Multi-level exceeding two stories), or High-Rise Applications

WARNING! Risk of Fire or Explosion! DO NOT break silicone seals on slip sections. Use care when removing termination cap from slip pipe. If slip section seals are broken during removal of the termination cap, vent could leak.

All outer pipe joints must be sealed using one of the methods below, including the slip section that connects directly to the horizontal termination cap.

- Apply a bead of silicone sealant (300 °F minimum continuous exposure rating) inside the female outer pipe joint prior to joining sections. See Figure 7.1 OR
  - Apply a bead of silicone sealant (300 °F minimum continuous exposure rating) to the outside of connecting joint after joining sections **OR**
  - Apply aluminum foil tape (300 °F minimum continuous exposure rating) to the outside of connecting joint after joining sections. On horizontal pipe runs, it is recommended that the tape seam is positioned on the bottom side of the vent pipe.
- Only outer pipes need to be sealed. All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner, unless otherwise stated.

### **Assemble Pipe Sections**

Per Figure 7.2:

- Start the inner pipe on the lanced end of section A into the flared end of section B.
- Start the outer pipe of section A over the outer pipe of section B.
- Once both vents sections are started, push firmly until all lanced tabs lock into place.
- Lightly tug on the pipe to confirm the tabs have locked.

It is acceptable to use screws no longer than 1/2 in. (13 mm) to hold outer pipe sections together. If predrilling holes, **DO NOT** penetrate inner pipe.

For 90° and 45° elbows that are changing the vent direction from horizontal to vertical, one screw minimum should be put in the outer flue at the horizontal elbow joint to prevent the elbow from rotating. Use screws no longer than 1/2 in. (13 mm). If predrilling screw holes, **DO NOT** penetrate inner pipe.

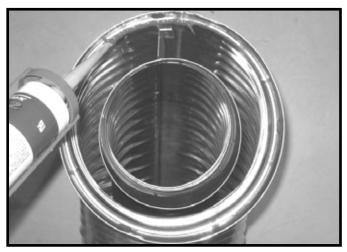
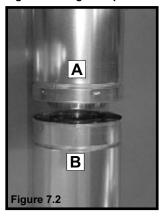
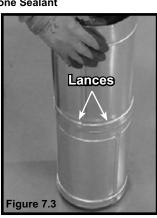
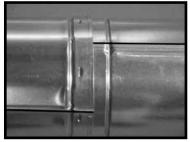


Figure 7.1 High Temperature Silicone Sealant





**Note:** Make sure that the seams are not aligned to prevent unintentional disconnection.



CORRECT

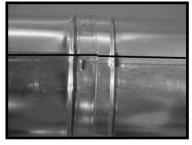


Figure 7.4 Seams INCORRECT

**NOTICE:** When installing a vent system with an HRC termination cap, all pipe system joints shall be sealed using a high temperature silicone sealant (300 °F minimum continuous exposure rating).

- Apply a bead of silicone sealant (300 °F minimum continuous exposure rating) inside the female outer pipe joint prior to joining sections.
- Only outer pipes are sealed, sealing the inner flue is not required.
- All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed.

### B. Assemble Slip Sections

- Slide the inner flue of the slip section into the inner flue of the pipe section and the outer flue of the slip section over the outer flue of the pipe section. See Figure 7.5.
- · Slide together to the desired length.

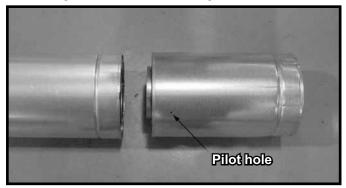


Figure 7.5 Slip Section Pilot Holes

- Maintain a 1-1/2 in. (38 mm) overlap between the slip section and the pipe section.
- Secure the pipe and slip section with two screws no longer than 1/2 in. (13 mm), using the pilot holes in the slip section. See Figure 7.6.

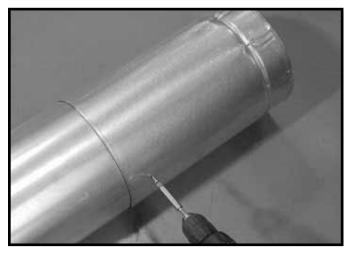


Figure 7.6 Screws into Slip Section

 Continue adding pipe as necessary following instructions in "Assembling Pipe Sections."

**NOTICE:** If slip section is too long, the inner and outer flues of the slip section can be cut to the desired length.

### C. Secure the Vent Sections

WARNING! Risk of Fire, Explosion or Asphyxiation! Improper support could allow vent to sag and separate. Use vent run supports and connect vent sections per installation instructions. DO NOT allow vent to sag below connection point to appliance.

- Vertical runs originating off the top of the appliance, with no offsets, must be supported every 8 feet (2.44 m) after the maximum allowed 25 feet (7.62 m) of unsupported rise.
- Vertical runs originating off the rear of the appliance, or after any elbow, must be supported every 8 feet (2.44 m).
- Horizontal runs must be supported every 5 feet (1.52 m).
- Vent supports or plumbers strap (spaced 120° apart) may be used to support vent sections. See Figures 7.7 and 7.8.
- Wall shield firestops may be used to provide horizontal support to vent sections.
- SLP ceiling firestops have tabs that may be used to provide vertical support.

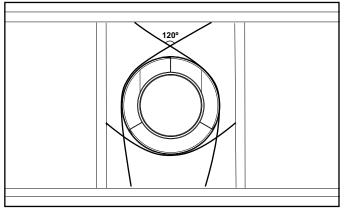


Figure 7.7 Securing Vertical Pipe Sections

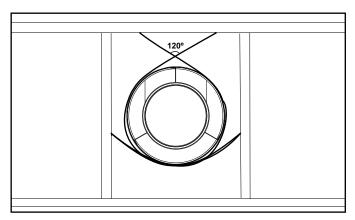


Figure 7.8 Securing Horizontal Pipe Sections

### D. Disassemble Vent Sections

- Rotate either section (see Figure 7.9) so the seams on both pipe sections are aligned as shown in Figure 7.10.
- Pull carefully to separate the pieces of pipe.

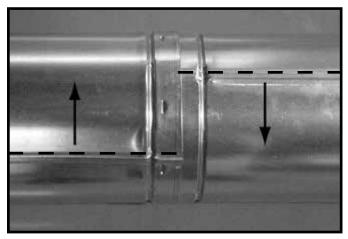


Figure 7.9 Rotate Seams for Disassembly

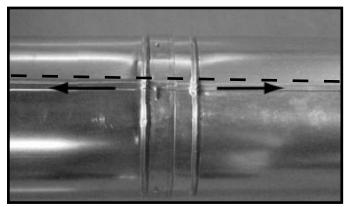


Figure 7.10 Align and Disassemble Vent Sections

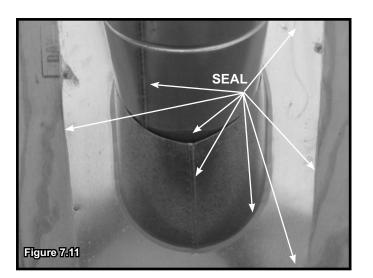
## E. Vertical Termination Requirements Install and Seal Metal Roof Flashing

- See minimum vent heights for various pitched roofs (Section 4, Figure 4.1) to determine the length of pipe to extend through the roof.
- Slide the roof flashing over the pipe sections extending through the roof as shown in Figure 7.11.
- Use an elastomeric or silicone sealant with a minimum of 150 °F temperature rating to seal the metal roof flashing.

**Note:** When installing a silicone or EPDM pipe flashing boot on a metal roof, it is recommended to put a bead of 100% silicone sealant where the boot contacts the vent pipe to prevent the entry of water. Follow the manufacturer's recommendations when installing the boot. Climate regions with frequent temperatures below - 50 °F (-45.6 °C) should use a silicone flashing boot.

**NOTICE:** Failure to properly seal the roof flashing and pipe seams could permit entry of water.

- Seal the gap between the roof flashing and the outside diameter of the pipe.
- Seal the perimeter of the flashing where it contacts the roof surface. See Figure 7.11.
- Seal the exposed pipe section seams that are located above the roof.



### **Assemble and Install Storm Collar**

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

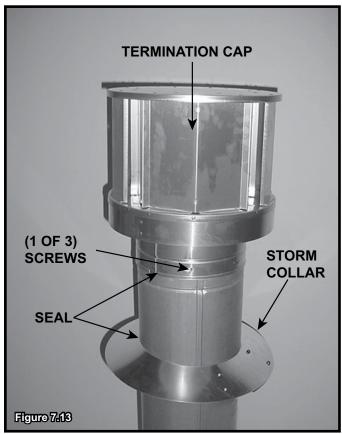
- Slide the storm collar onto the exposed pipe section and align brackets.
- Insert a bolt (provided) through the brackets and install nut. Do not completely tighten.



- Slide the assembled storm collar down the pipe section until it rests on the roof flashing. See Figure 7.12.
- Tighten nut and make sure the collar is tight against the pipe section.
- Seal around the top of the storm collar. See Figure 7.13.

### **Install Vertical Termination Cap**

- Attach the vertical termination cap by sliding the inner collar of the cap into the inner flue of the pipe section while placing the outer collar of the cap over the outer flue of the pipe section.
- Secure the cap by driving three self-tapping screws (supplied) through the pilot holes in the outer collar of the cap into the outer flue of the pipe. See Figure 7.13.



# F. Horizontal Termination Requirements Heat Shield Requirements for Horizontal Termination

**WARNING!** Risk of Fire! To prevent overheating and fire, heat shields must extend through the entire wall thickness.

- **DO NOT** remove the heat shields attached to the wall shield firestop and the horizontal termination cap (shown in Figure 7.14).
- Heat shields must overlap 1-1/2 in. (38 mm) minimum.

There are two sections of the heat shield. One section is factory-attached to the wall shield firestop. The other section is factory-attached to the cap. See Figure 7.14.

If the wall thickness does not allow the required 1-1/2 in. (38 mm) heat shield overlap when installed, an extended heat shield must be used.

- If the wall thickness is less than 4 in./102 mm (DVP) or 4-3/8 in./ 111 mm (SLP), the heat shields on the cap and wall shield firestop must be trimmed. A minimum 1-1/2 in. (38 mm) overlap MUST be maintained.
- Use an extended heat shield if the finished wall thickness is greater than 7-1/4 in. (184 mm).
- The extended heat shield may need to be cut to length maintaining sufficient length for a 1-1/2 in. (38 mm) overlap between heat shields.
- Attach the extended heat shield to either of the existing heat shields using the screws supplied with the extended heat shield. Refer to vent components diagrams in the back of this manual.
- Rest the small leg on the extended heat shield on top of the pipe section to properly space it from the pipe section.

**Important Notice:** Heat shields may <u>not</u> be field constructed.

## Install Horizontal Termination Cap (DVP and SLP Pipe)

**WARNING!** Risk of Fire! The telescoping flue section of the termination cap MUST be used when connecting vent.

• 1-1/2 (38 mm) minimum overlap of flue telescoping section is required.

Failure to maintain overlap could cause overheating and fire.

- Vent termination must not be recessed in the wall. Siding may be brought to the edge of the cap base.
- Flash and seal as appropriate for siding material at outside edges of cap.
- When installing a horizontal termination cap, follow the cap location guidelines as prescribed by current ANSI Z223.1 and CAN/CGA-B149 installation codes and refer to Section 4 of this manual.

**CAUTION!** Risk of Burns! Local codes may require installation of a cap shield to prevent anything or anyone from touching the hot cap.

**NOTICE:** For certain exposures which require superior resistance to wind-driven rain penetration, a flashing kit and HRC caps are available. When penetrating a brick wall, a brick extension kit is available for framing the brick.

**Note:** When using termination caps with factory-supplied heat shield attached, no additional wall shield firestop is required on the exterior side of a combustible wall.

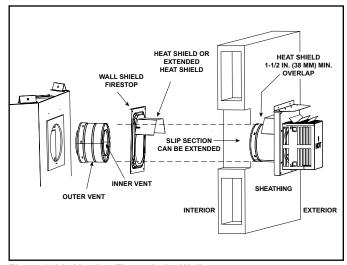


Figure 7.14 Venting Through the Wall

## 8

### **Electrical Information**

### A. General Information

**WARNING!** Risk of Shock! DO NOT wire 110-120 VAC to the ignition module or to the appliance wall switch. (IPI) Incorrect wiring will damage controls.

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

- Wire the appliance circuit using a minimum 14-2 AWG with ground to unswitched 110-120 VAC. This is required for proper operation of the appliance (IntelliFire® ignition).
- A 110-120 VAC circuit for this product must be protected with ground-fault circuit interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.
- Low voltage and 110-120 VAC voltage cannot be shared within the same wall box.
- In some instances, the spark ignition of the fireplace may cause intermittent, non-damaging, interference during the lighting sequence with a TV plugged into the same circuit. It is recommended that the fireplace and TV use different circuits to mitigate the interference potential. If interference is occurring on the same circuit, the use of surge protectors may help alleviate the interference.

### **Junction Box Installation**

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

- Remove bottom panel by removing two screws. Screw locations are shown in Figure 8.1. After removing two screws, gently lift the panel and pull forward, avoiding contact with the non-combustible board if possible.
- 2. Remove insulation.
- 3. Remove screws on left and right sides of component heat shield and lift it out of the control cavity. See Figure 8.2 for location of component heat shield screws.
- 4. Remove the one screw that secures the junction box to the control tray panel.

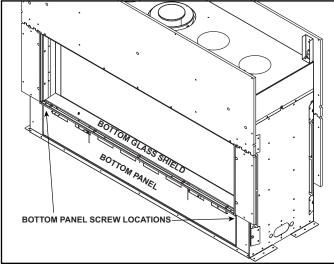


Figure 8.1 Bottom Panel Location

- 5. Route the wire through the strain relief in the outer wrap and up through the cutout located on the metal tray under the junction box.
- 6. Make the connection inside the junction box to the 110-120V wire. Connect green to the ground nut, black to black, and white to white.
- To reattach the junction box, insert one end of the junction box in the slot provided and securely screw the other end of the junction box to the control tray panel.
- 8. Reinstall component heat shield and insulation.

**CAUTION!** Risk of Overheating! Component heat shield MUST be installed before operating appliance. Electrical components will be damaged.

In the event that the junction box may need to be accessed or installed after finish methods have been applied, access is possible by removing the bottom glass shield.

### **Accessories Requirements**

 This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control. Use of a wall switch will limit the functionality of the remote. A power vent can not be used with a wall switch.

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

### **Electrical Service and Repair**

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

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

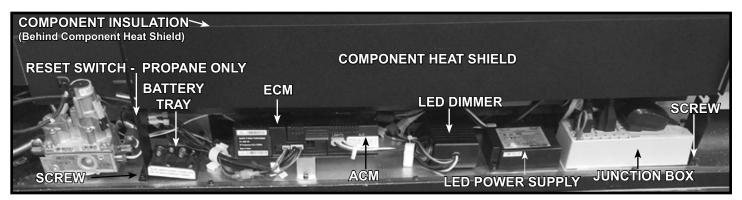


Figure 8.2 Valve Cavity (Lower Access Panel Removed)

### **B. Wiring Requirements**

### IntelliFire Touch® Ignition System Wiring

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

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

- Refer to Figure 8.3 IntelliFire Touch (IPI) Wiring Diagram.
- This appliance is equipped with an IntelliFire control valve which operates on a 6 volt system.

**NOTICE:** Batteries should only be used as a power source in the event of an emergency power outage. Batteries should not be used as a primary long-term power source. Batteries tend to corrode over time. When using batteries as a power source, the 6 volt transformer must be unplugged from the receptacle.

Do not store batteries in the battery pack when the appliance is powered by the 6 volt transformer connected to permanent electrical service.

### **Accessories Requirements**

This appliance ships standard with a remote control.

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

The junction box, control module, LED power supply and wall switch receiver can be accessed by removing the bottom glass shield and component heat shield. The decorative barrier front must be removed to access these components. See Figure 8.3.

**CAUTION!** Risk of Overheating! Component heat shield MUST be installed before operating appliance. Electrical components will be damaged.

**CAUTION!** Risk of Overheating! DO NOT remove component insulation from top of component heat shield. Electrical components will be damaged.

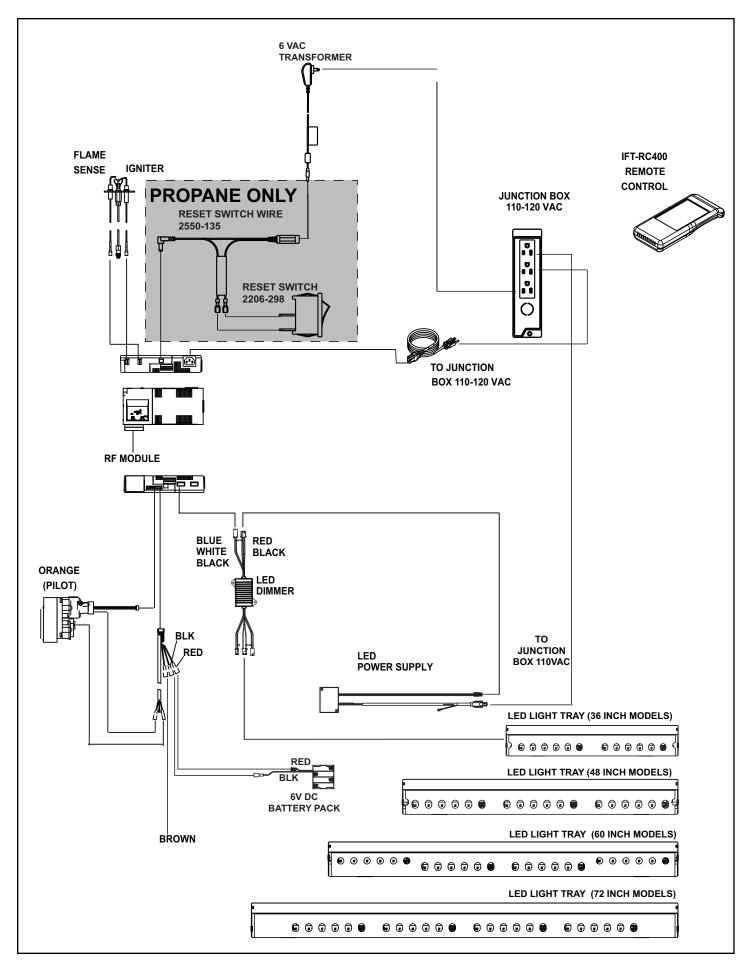


Figure 8.3 IntelliFire Touch Wiring Diagram

## 9

### **Gas Information**

### A. Fuel Conversion

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

### **B.** Gas Pressure

### **A** WARNING



Fire Risk.

Risk of Fire! Risk of Explosion!

Incorrect pressure will damage valve.



- Isolate gas supply piping BEFORE pressure testing gas line at test pressures above 1/2 psig.
- Close the manual shutoff valve BEFORE pressure testing gas line at test pressures equal to or less than 1/2 psig.
- Optimum appliance performance requires proper input pressures.
- Gas line sizing requirements will be determined in ANSI Z223.1 National Fuel Gas Code in the USA and CAN/ CGA B149 in Canada.
- Pressure requirements when in operation are:

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

- Verify inlet pressures. Verify minimum pressures when other household gas appliances are operating.
- Install regulator upstream of valve if line pressure is greater than 1/2 psig.
- Valve pressure taps are accessible by removing the decorative barrier front and the bottom glass shield.

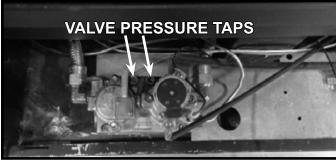


Figure 9.1 Valve Pressure Taps

**Note:** Have the gas supply line installed in accordance with local codes, if any. If not, follow ANSI Z223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter).

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

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

### C. Gas Service Access

**Note:** This appliance does include a manual gas shutoff valve that is located in the valve compartment. This manual gas shutoff valve is accessible for service by removing the decorative barrier front and the bottom glass shield. The valve is most accessible if it is located forward in the control cavity of the appliance.

Depending upon local code, an additional manual gas shutoff, in a readily accessible area may be required and located upstream from the appliance.

The bottom panel is removable if finishing material is not installed. See Figure 9.2.

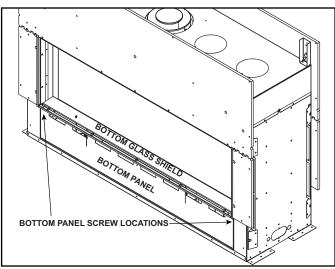


Figure 9.2 Bottom Glass Shield and Bottom Panel Location

If the finishing materials have been installed around the appliance opening, proceed as follows:

- 1. Remove bottom glass shield.
- 2. Remove screws on left and right sides of component heat shield and lift it out of the control cavity.

**CAUTION!** Risk of Overheating! Component heat shield MUST be installed before operating appliance. Electrical components will be damaged.

- 3. Unplug the 6V transformer from the junction box. This will turn the power off to the appliance.
- 4. Turn the gas shutoff handle to the "OFF" position to shut off the gas supply.

If additional access is needed, proceed as follows:

- Remove glass assembly from appliance by unlatching the top spring latches from the glass frame and lifting glass frame assembly out of the bottom bracket.
- 6. Remove interior media and refractory from the appliance if already installed.
- 7. Remove the media tray. It is attached to the interior firebox bottom with ten screws. See Figure 9.3.
- 8. Remove the two screws that attach the pilot to the burner.
- Remove the four screws securing the burner to the firebox sides and disengage burner from orifice. Remove burner. See Figure 9.3.
- Remove the eight screws that secure the glass window.
   Remove the glass window. Handle with care. See Figure 9.4.
- 11. Remove light tray from appliance by lifting up and out through the bottom glass opening.

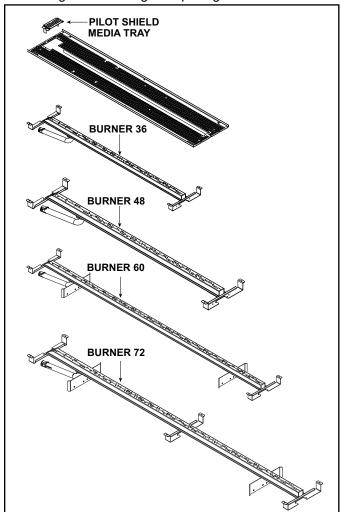


Figure 9.3 Media Tray with Burner and Pilot Shield

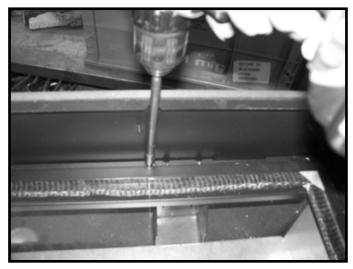


Figure 9.4 Gas and Electrical Access - Remove Glass Window

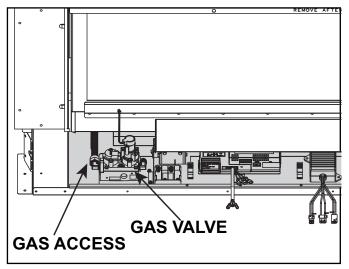


Figure 9.5 Gas Fitting Access with Bottom Glass Shield Removed

### D. Gas Connection

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

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

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

- · A small amount of air will be in the gas supply lines.
- · Ensure adequate ventilation.
- Ensure there are no ignition sources such as sparks or open flames.

Light the appliance. It will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.

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

### E. High Altitude Installations

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

When installing above 2000 feet elevation:

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

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

### F. Air Shutter Setting

**WARNING!** Risk of Explosion or Delayed Ignition! Improperly adjusted air shutter could cause soot buildup.

**NOTICE:** If sooting occurs, provide more air by opening the air shutter.

Air shutter settings may be adjusted by a qualified installer at the time of installation. The air shutter is set at the factory for minimum vertical vent run. Adjust air shutter for longer vertical runs. See Figure 9.6.

Air shutter settings should be adjusted by a qualified service technician at the time of installation. The air shutter is set at the factory for a typical horizontal termination through a 2 X 6 wall. See Figure 4.11 Top Vent - Horizontal Termination With One Elbow.

- Refer to Gas Service Access instructions in Section 9.C to access the air shutter.
- · Loosen the 1/4 in. screw.
- · Twist shutter to adjust.
- Shutter may be open for longer horizontal vent runs.
- Do not close the air shutter more than 1/16 in. for NG or 1/4 in. for propane.
- · Tighten the screw.

### **Shutter Setting Verification / Flame Appearance**

- After 15 minutes, the flames will be a yellow/blue mix.
   The front flames may be blue at this time.
- After 30 minutes, the flames should be yellow with some blue flames near the burner ports.
- After 1 hour, the flame will be at its maximum maturity.

**NOTICE:** Flames should not appear orange or stretch to the top of the firebox. If flames are dark orange with dark, smoky tips, provide more primary air to the burner by opening the air shutter accordingly.

#### Air Shutter Settings

ECHEL36IN-C ECHEL36STIN-C ECHEL48IN-C ECHEL48STIN-C	NG	Propane
NO REFRACTORY OR GLASS REFRACTORY KIT	Standard Opening= 3/16 in.	Standard Opening= Full Open
LOG KIT	1/4 in.	Full Open

ECHEL60IN-C	NG	Propane
NO REFRACTORY OR	Standard	Standard
GLASS REFRACTORY	Opening=	Opening=
KIT	Full Open	Full Open
LOG KIT	Full Open	Full Open

ECHEL72IN-C	NG	Propane
NO REFRACTORY OR	Standard	Standard
GLASS REFRACTORY	Opening=	Opening=
KIT	Full Open	Full Open
LOG KIT	Full Open	Full Open

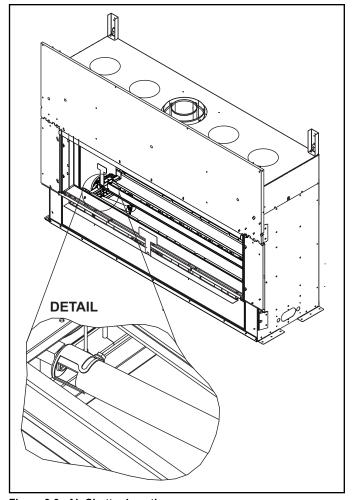


Figure 9.6 Air Shutter Location

### A. Facing Material

### **A** WARNING

### **Risk of Fire!**

**DO NOT** apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Materials overlapping into non-combustible zones could ignite and will interfere with air flow through decorative barrier fronts.

- Metal front of appliance may be covered with noncombustible materials only.
- Facing and/or finishing materials must not interfere with air flow through decorative barrier fronts, removal of decorative barrier fronts or access for service.
- Facing and/or finishing materials must never overhang into the glass opening.
- Observe all clearances when applying combustible materials.
- Seal gaps between the finished wall and appliance top and sides using a 300 °F minimum sealant. Refer to Figure 10.1.

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

Materials with higher temperature ratings may be required in areas around the fireplace opening. Comply with all specifications in this manual.

If using vinyl flooring, refer to Section 3.E.

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

### **Splatter Guard**

The splatter guard is a piece of corrugated material used to protect the appliance during the installation process before finishing work on the whole hearth is complete. A splatter guard is factory-installed on ECHELON-C models. Splatter guards must be removed before appliance is fired.

**WARNING!** Risk of Fire! Remove the splatter guard before lighting the appliance. Shut off gas to the appliance when the splatter guard is in place to prevent accidental operation.

### **Finishing Instructions**

It is important to follow the framing and finishing instructions to ensure proper placement of fireplace into the surrounding framing/finishing materials.

Wall sheathing materials 1/2 in. thick are specified in this installation manual to properly align with the factory-included non-combustible material.

**WARNING!** Risk of Fire! Factory-included non-combustible board MUST be installed. DO NOT remove or cover it with combustible material, such as:

- Drywall (gypsum board)
- Plywood
- Materials that do not meet the ASTM E 136 Non-combustibility standard (below).

Removal of installed, non-combustible board and/or use of materials not meeting the ASTM E 136 standard could cause fire.

### **Non-Combustible Materials Specification**

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.

Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 °C.

**WARNING!** Risk of Fire! Maintain specified air space clearances to combustibles. Inadequate air space could cause overheating and fire.

### **Finishing Materials**

**NOTICE:** The maximum finishing material not only includes the decorative finish materials (marble, tile, slate, etc) but also the thin set, lath, and adhesive used to attach the decorative finish material.

NOTICE: Hearth & Home Technologies recommends using multiple pieces of decorative finish material around the opening of the appliance to reduce the chances of the material cracking. A single piece of decorative finish material (such as marble or granite) is more susceptible to cracking due to uneven heating and cooling which causes temperature differentials within the material itself. The use of multiple pieces will reduce the temperature differentials in each piece and reduce the likelihood of cracks. In addition to using multiple pieces of decorative finish material, the installation of the Passive Heat optional heat management system will also reduce the chances of cracking.

### **B.** Drywall Installation

#### Introduction

If the desired finished fireplace installation does not utilize non-combustible finishing materials (such as tile, marble, stone, etc.), special attention must be paid to the installation of drywall/gypsum wallboard to the side joints of the non-combustible board to minimize potential development of cracking and paint discoloration. Hearth and Home Technologies has tested the following methods and materials and therefore recommends the following steps for the best drywall performance.

### **Attaching Non-Combustible Board**

When finishing the wall around the fireplace, it is critical that wall sheathing be fastened properly. Wall sheathing fasteners, such as screws or nails, are not permitted in some locations. See Figure 10.1.

It is acceptable to pre-drill holes and use self-tapped screws in the factory-included non-combustible board which may be used to lathe (a backer for tile, marble, etc.). Screws being installed through the installed non-combustible board should be self-tapping type with a maximum length of 2 inches. See Figure 10.1.

When installing finish material on the lower cover panel, DO NOT drill or install screws longer than 3/4 of an inch. Screws longer than 3/4 of an inch could penetrate the lower cover panel causing damage to components or penetrate the gas line. See Figure 10.1.

WARNING! Risk of Fire! DO NOT use screws longer than two inches when attaching finishing materials to installed non-combustible material. Screws longer than two inches will compromise clearance and could cause overheating and fire.

WARNING! Risk of Fire, Explosion or Asphyxiation! DO NOT use screws more than 3/4 of an inch long on lower cover panel. Longer screws may penetrate gas line or damage valve or electrical components.

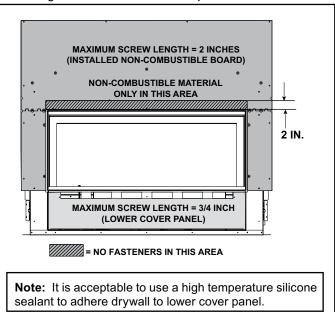


Figure 10.1 Screw Length Requirements

The appliance is designed to mate with 1/2 in. wall sheathing materials such as drywall, plywood, wood composites, or non-combustible materials.

To ensure good adhesion of drywall compounds and tape, thoroughly clean the non-combustible board and surrounding drywall to remove dust. The non-combustible board may be primed with a high-quality PVA primer.

### Filling and Finishing Seams

- Step 1: Fill all gaps and joints between the non-combustible board pieces and the drywall with a general purpose chemically setting joint compound such as Durabond® 45 Joint Compound manufactured by USG (Sheetrock® brand), recommended by Hearth & Home Technologies. Use a drywall knife to firmly press the joint compound into all gaps. See Figure 10.1. Allow these joints to dry.
- Step 2: All joints are to be taped with fiberglass mesh tape 1 7/8" minimum width, and embedded with Setting-Type joint compound, such as with Durabond® Joint Compound manufactured by USG (Sheetrock® brand), or equivalent. Allow these joints to dry.
- 3. Step 3: Depending on the technique used in steps 1 and 2, two to three finishing coats are required to provide a smooth and durable finish. Hearth and Home Technologies recommends a lightweight or allpurpose compound. Allow each coat to properly cure. Allow the finishing coat(s) to cure for 24 hours before operating appliance.

WARNING! Risk of Fire! DO NOT apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Materials overlapping into non-combustible zones could ignite and will interfere with air flow through decorative barrier fronts.

**WARNING!** Risk of Fire! DO NOT install drywall or other combustible materials directly onto the installed non-combustible board. Overlapping materials could ignite.

### **Painting**

If desired finishing includes a painted wall, a high-quality 100% acrylic latex paint with a high-quality latex primer base coat are recommended around the appliance to limit discoloration. Oil-based or standard acrylic paints may be more prone to discoloration due to heat exposure.

### **Drywall Joint-Crack Prevention and Repair**

Drywall joints around the fireplace will be affected by exposure to elevated temperatures, along with other environmental, structural factors due to new construction, and methods used to install and finish the drywall. If a crack does emerge adjacent to the fireplace, it can be permanently repaired by filling it with a paintable latex caulk, followed by repainting.

Some movement of the screws used to secure the noncombustible board to the appliance/surround framing is expected. If a blemish begins to show over a screw head, sand the surface to remove the blemish and repaint.

**WARNING!** Risk of Fire! Maintain specified air space clearances to combustibles. Inadequate air space could cause overheating and fire.

WARNING! Risk of Fire! Maintain specified air space clearances to combustibles. Failure to comply with these instructions may cause a fire or cause the appliance to overheat.

**NOTICE:** The location of the Passive Heat discharge opening could allow for venting and other construction materials to be visible. It is acceptable to paint the vent pipe and other construction materials using a high temperature paint with a minimum of 300 °F continuous exposure rating. Hearth & Home Technologies recommends using black touch up paint (part number TUP-GBK-12) available from your Hearth & Home Technologies dealer.

### **Facing Material**

- Facing and/or finishing materials must not interfere with air flow through decorative barrier fronts.
- Facing and/or finishing materials must never overhang into the glass opening.
- Observe all clearances when applying combustible materials.

### Finishing - Hearth

See Inside Fit or Overlap Method sections to determine the necessary requirements for installation of a noncombustible hearth for this model. Only hearths made of non-combustible materials are allowed. Decorative facing material thickness is measured from the face of the installed non-combustible board. See Figure 10.2 and Figure 10.3.

The fronts for this appliance are compatible with non-combustible materials. See Figure 10.2 and Figure 10.3.

Refer to Section 1.E and 1.F of this manual for definitions and qualifications of non-combustible and combustible materials.

Specific requirements for each method of installation are described in this section.

Installation of finishing materials can be accomplished by either the "overlap" or "inside-fit" method, depending on what type of decorative barrier front is to be installed. See Figure 10.2 and 10.3. Overlap fit decorative barrier fronts include the Quattro and Loft Forge. The Clean Face Trim Front (CFT) can be either an inside fit or an overlap fit. See Table 1.

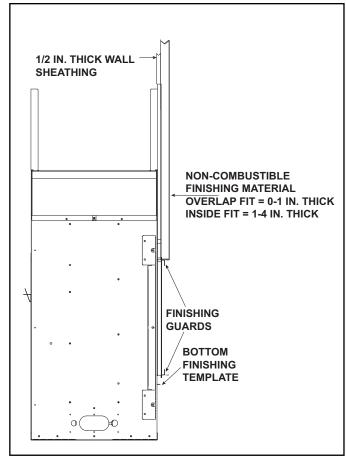


Figure 10.2 Finishing and Facing Materials - Single-Sided Models

Decorative Barrier Front	Finishing Method	Material Thickness	Trim Ring
	leside Cit	4.4 in abox	Included & Not Used (Option #1)
Clean Face Trim (CFT)	Inside Fit	t 1-4 inches	Included & Used (Option #2)
	Overlap Fit	0-1 inch	Included & Used
Picture Frame Front (PFF)	Overlap Fit	0-1 inch	Not included
Picture Frame Front (PFF)	Inside Fit	1-4 inches	Not included

Table 1

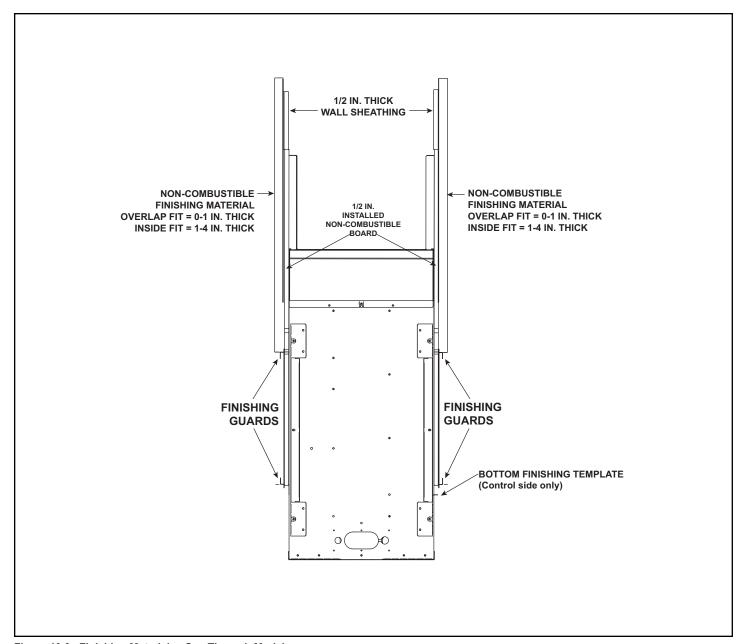


Figure 10.3 Finishing Materials - See-Through Models

### C. Decorative Barrier Fronts

**WARNING!** Risk of Burns! A decorative barrier front is required for this model. **DO NOT** operate this appliance without a decorative barrier front in place.

Only decorative barrier fronts certified for use with this appliance model may be used. Contact your dealer for a list of decorative barrier fronts that may be used.

**Note:** See appliance Owner's Manual for TV mounting guidelines.

The decorative barrier fronts approved for use with this appliance have been designed to be installed by two methods: Overlap Fit or Inside Fit. Before beginning the installation, it is important to determine which method will be used.

### Clean Face Trim Front (CFT)

### Overlap Fit (0-1 Inch Thick Finishing Method)

**Non-Combustible Finish Materials** 

**WARNING!** Risk of Fire! DO NOT apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Overlapping materials could ignite.

**Note:** When a Clean Face Trim decorative barrier front is installed, the rectangular holes in bottom access panel will be covered.

**NOTICE:** This one inch maximum not only includes the decorative finish materials (marble, tile, slate, etc) but also the thin set, lath and adhesive used to attach the decorative finish material.

- Remove bottom finishing template from bottom access panel. Verify that factory-installed finishing guards are installed to ensure finishing material does not extend into the fireplace opening. See Figure 10.2 and 10.3.
- The non-combustible finish material, 0-1 inch thick, should be installed up to the fireplace opening on all four sides, including the bottom access panel, covering the eight rectangular holes. Refer to Figure 10.4 for minimum finished opening dimensions.

**WARNING!** Risk of Fire! DO NOT apply finishing material beyond the finishing guard. Appliance will overheat if finishing material extends into appliance opening.

**NOTICE:** Decorative barrier front will not fit properly if finishing material is applied beyond the finishing guard.

4. Follow Overlap Fit section of the instructions provided with decorative barrier front.

Decorative Barrier Front	Finishing Method	Material Thickness	Trim Ring
Clean Face Trim (CFT)	Overlap Fit	0-1 inch	Included & Used

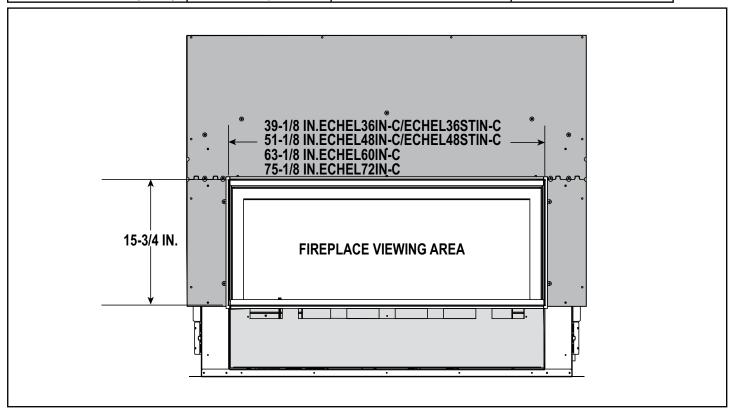


Figure 10.4 Minimum Finished Opening Dimensions - Clean Face Trim Front Method

## Clean Face Trim Front (CFT)

## **Inside Fit (1-4 Inches Thick Finishing Method)**

#### **Non-Combustible Finish Materials**

**WARNING!** Risk of Fire! DO NOT apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Overlapping materials could ignite.

**Note:** When a Clean Face Trim decorative barrier front is installed, the rectangular holes in bottom access panel will be covered.

**NOTICE:** This four inch maximum not only includes the decorative finish materials (marble, tile, slate, etc) but also the thin set, lath and adhesive used to attach the decorative finish material.

There are two options for this method of finishing:

CFT Finishing Method	Trim Ring
Inside Fit	Included & Not Used (Option #1)
	Included & Used (Option #2)

#### Without Decorative Trim Ring: (Option #1)

**Note:** You will not use the trim ring, which is shipped with the CFT front, for this application.

- Remove bottom finishing template from bottom access panel. Verify that factory-installed finishing guards are installed to ensure finishing material does not extend into the fireplace opening. See Figures 10.2 and 10.3.
- The non-combustible finish material, 1-4 inches thick, should be installed up to the fireplace opening on all four sides, including the bottom access panel, covering the eight rectangular holes. Refer to Figure 10.4.

**WARNING!** Risk of Fire! DO NOT apply finishing material beyond the finishing guard. Appliance will overheat if finishing material extends into appliance opening.

**NOTICE:** Decorative barrier front will not fit properly if finishing material is applied beyond the finishing guard.

3. Follow Inside Fit section of the instructions provided with decorative barrier front.

#### With Decorative Trim Ring: (Option #2)

The trim ring, which is included with the CFT front, will be installed and used as a finishing template. It will be left exposed.

- 1. Remove finishing template from bottom access panel.
- 2. Remove top and bottom finishing guards.
- Install trim ring (included with CFT decorative barrier front). Push trim ring completely into the opening.
- 4. Place trim ring into position and install the four shoulder bolts through the trim ring as shown in Figure 10.6. Install the screw as shown in Figure 10.5.

Finishing materials may be installed up to the trim ring but must not extend beyond it. See Figure 10.7.

**NOTICE:** It is recommended that high temperature silicone sealant (500° F minimum continuous exposure rating) be used to adhere the trim ring to the finishing material.

**WARNING!** Risk of Fire! DO NOT apply finishing material beyond the trim ring. Appliance will overheat if finishing material extends into appliance opening.



Figure 10.5 Install Trim Ring

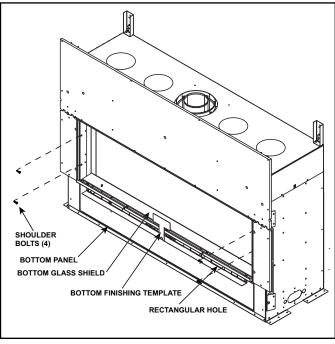


Figure 10.6 Install Shoulder Bolts

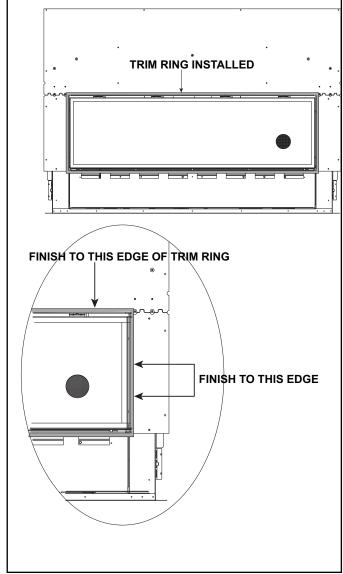


Figure 10.7 Non-Combustible Finish Material Diagram for 1-4 Inch Thick Inside Fit Method Using Trim Ring (Option #2)

## Finishing - Raised Hearth in Front of Appliance

A non-combustible hearth may be installed in front of the appliance only if the inside fit finishing method with CFT doors is used.

1. Non-combustible hearth material may be placed up to the bottom edge of the trim ring. The hearth may be a maximum of twelve inches in depth.

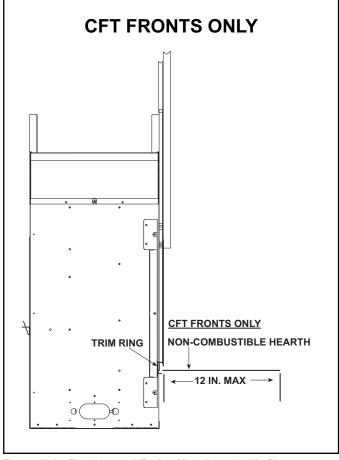


Figure 10.8 Finishing and Facing Materials - Inside Fit CFT Decorative Barrier Front Only

## **Picture Frame Front (PFF)**

## Overlap Fit (0-1 Inch Thick Finishing Material Only)

#### Non-Combustible Finish Materials

Decorative Front	Finishing Method	Material Thickness	Trim Ring
Picture Frame Front (PFF)	Overlap Fit	0-1 inch	Not included
Picture Frame Front (PFF)	Inside Fit	0-4	Not included

**WARNING!** Risk of Fire! DO NOT apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Overlapping materials could ignite.

**NOTICE:** If one inch maximum finishing material thickness is exceeded, the decorative barrier front will not fit. This one inch maximum not only includes the decorative finish materials (marble, tile, slate, etc) but also the thin set, lath and adhesive used to attach the decorative finish material.

#### 0-1 Inch Thickness Overlap Fit Method

The non-combustible finishing material, 0-1 inch thick, should be installed up to the fireplace opening on the top bottom and sides.

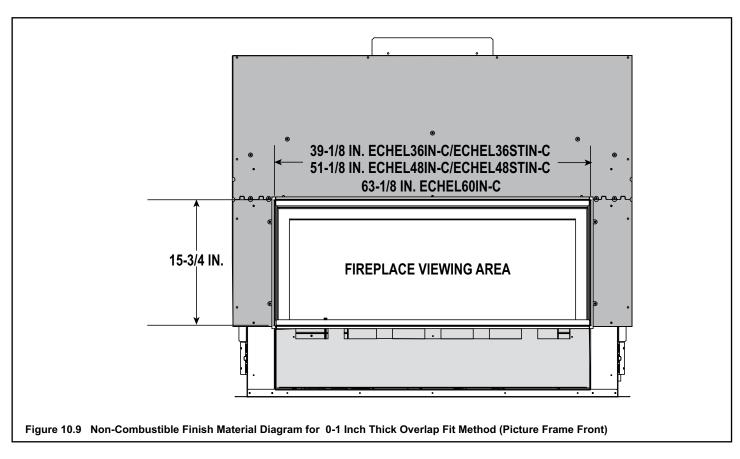
Use the factory-installed top finishing guard to ensure the finishing material does not extend into the fireplace opening.

See Figure 10.9 for minimum finished opening dimensions.

**WARNING!** Risk of Fire! DO NOT apply finishing material beyond the top finishing guard and the bottom finishing template. Appliance will overheat if finishing material extends into appliance opening.

1. Follow instructions provided with decorative front for installation.

**NOTICE:** Decorative front will not fit properly if finishing material is applied beyond the finishing guard.

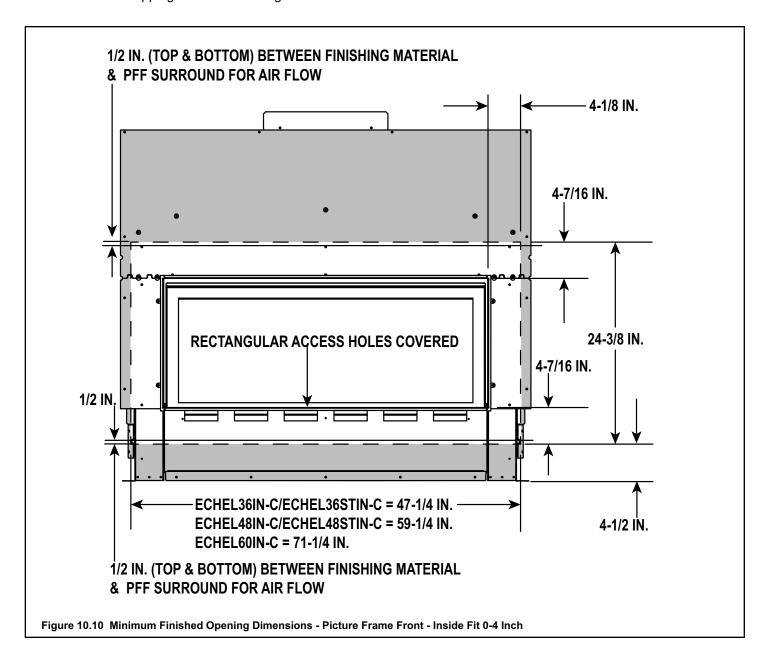


#### 0-4 Inch Thickness-Inside Fit Method

#### 0-4 Inches Finishing (Inside Fit):

See Figure 10.10 the required measurements to ensure the proper fit of the PFF. The top and bottom will have a 1/2 inch space from the PFF to the finished wall above and below it. This is required to prevent the appliance from overheating.

**WARNING!** Risk of Fire! DO NOT apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Overlapping materials could ignite.



## D. Mantel and Wall Projections

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

If the Passive Heat kit will be installed, see Figure 10.18 for details regarding clearances to combustibles in addition to the requirements for Combustible and Non-Combustible Mantel diagrams and the Mantel Leg/Wall Projection diagrams (Figure 10.11-Figure 10.17).

Note: For non-combustible fireplace finish material (marble, stone, etc) specifications refer to Section 10.A.

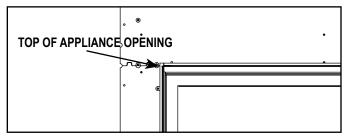


Figure 10.11 Location of Appliance Opening

Note: Minimum distance from top edge opening to ceiling can be found in the Framing and Clearances section 3.B.

#### **Combustible Mantels**

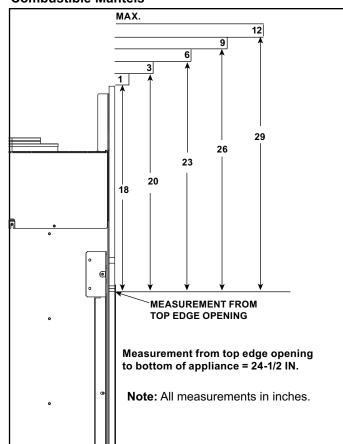


Figure 10.12 Minimum Vertical and Maximum Horizontal Dimensions of Combustibles - ECHEL36IN-C, ECHEL36STIN-C, ECHEL48IN-C and ECHEL48STIN-C

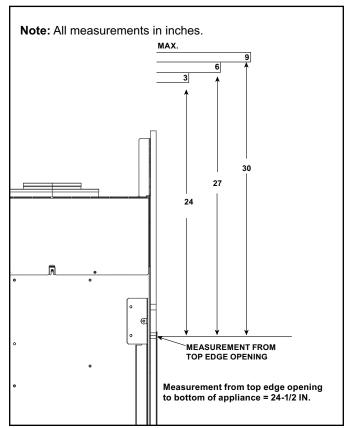


Figure 10.13 Minimum Vertical and Maximum Horizontal Dimensions of Combustibles - ECHEL60IN-C and ECHEL72IN-C

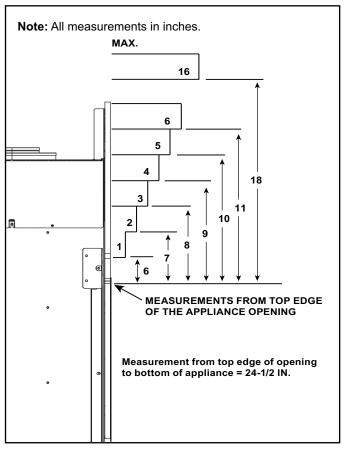


Figure 10.14 Minimum Vertical and Maximum Horizontal Dimensions of Combustibles - Passive Heat Kit Installed (All Sizes)

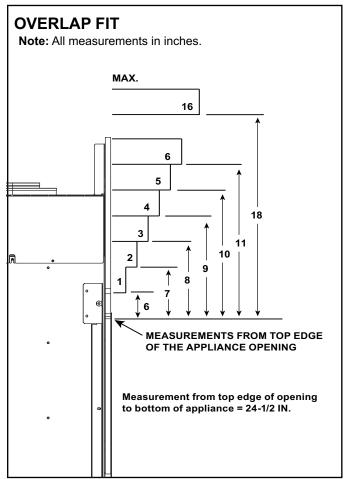


Figure 10.15 Minimum Vertical and Maximum Horizontal Dimensions of Non-Combustibles - Overlap Fit

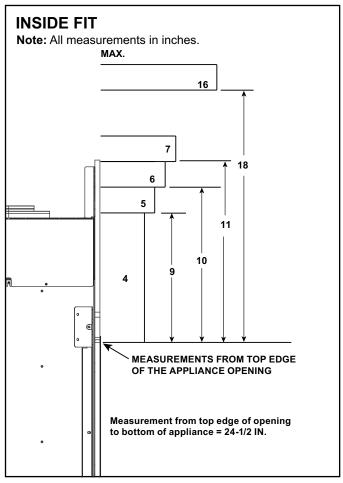


Figure 10.16 Minimum Vertical and Maximum Horizontal Dimensions of Non-Combustibles - Inside Fit Finishing

#### Mantel Legs Or Wall Projections Extending Past The Face Of The Fireplace (Combustible or Non-Combustible)

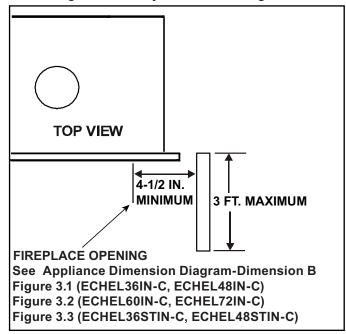


Figure 10.17 Mantel Leg or Wall Projections (Acceptable on both sides of opening)

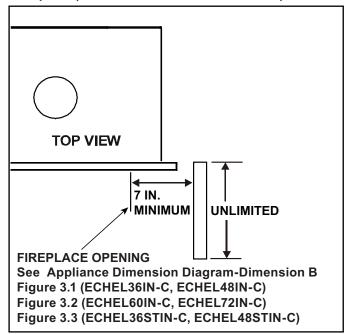


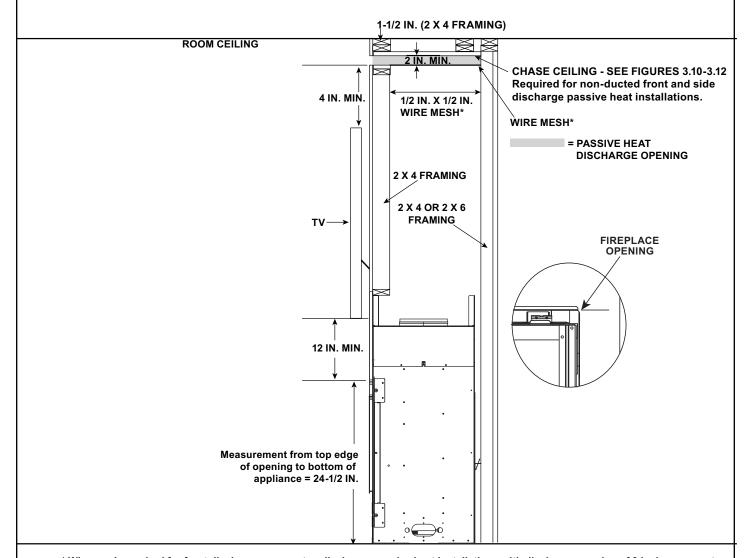
Figure 10.18 Mantel Leg or Wall Projections (Acceptable on both sides of opening)

#### Clearances with Passive Heat Optional Heat Management System

Figure 10.19 shows the required clearances for appliance, ceiling finishing material and framing members. Ensure all clearances are maintained.

## Good Faith Guidelines for TV Installations Above a ECHELON-C Fireplace with Passive Heat Option (Single-Sided Appliance Shown)

**WARNING!** Risk of Fire! Wire mesh required on bottom of discharge opening when discharge opening is greater than 3 inches. Secure wire mesh to top of framing.



<sup>\*</sup> Wire mesh required for front discharge or open top discharge passive heat installations with discharge opening of 3 inches or greater.

Figure 10.19 Clearances with Passive Heat Optional Heat Management System Installed

## A. Fixed Glass Assembly Removal and Replacement

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

- DO NOT strike, slam or scratch glass.
- DO NOT operate fireplace with glass removed, cracked, broken or scratched.
- Replace as a complete assembly.

## **Removing Fixed Glass Assembly**

- Remove the decorative barrier front from fireplace and set aside on work surface.
- 2. Remove bottom glass shield. See Figure 11.2.
- 3. Locate the glass latches that are on the upper edge of the glass frame of the appliance. See Figure 11.1.
- 4. Use both index fingers to release the glass clips.
- 5. Allow glass to tilt forward. Grasp glass on the upper return lip of glass frame and lift up and out. The glass should lift easily out of the bottom retaining lip.

#### **Replacing Fixed Glass Assembly**

- 1. Locate retaining lip on lower front face of firebox.
- 2. Place glass assembly into retaining lip end. Tilt top of glass assembly toward fireplace.
- 3. Assure proper left to right placement of glass and engage all four spring latches.
- Replace bottom glass shield and decorative barrier front.

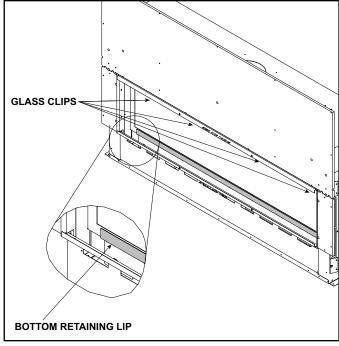


Figure 11.1 Fixed Glass Assembly

## B. Remove the Shipping Materials/Install Bottom Glass Shield

Remove shipping materials from inside or underneath the firebox. Verify all components are with the fireplace. Unwrap the bottom glass shield and replace in the same location as shown in Figure 11.2.

**Note:** The return bend on the bottom glass shield will slide between the firebox glass and the firebox glass frame. Firm pressure may be required to engage the bottom glass shield into the firebox glass assembly.

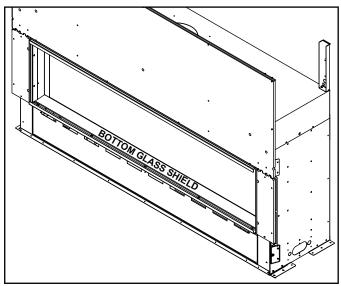


Figure 11.2 Bottom Glass Shield Location

**CAUTION!** Risk of Overheating! DO NOT remove component insulation from top of component heat shield. Electrical components will be damaged.

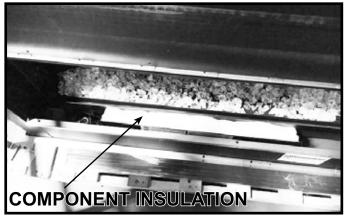


Figure 11.3 Component Insulation Location

#### C. Clean the Appliance

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

#### **Optional Passive Heat Kit Installations Only:**

**WARNING!** Risk of Fire! Remove all debris and objects from firebox top and appliance top before operating the appliance.

Inspect for and remove all debris that may have accumulated or objects that may have been placed on the firebox top and appliance top during the installation process. All debris and objects must be removed prior to operation of the appliance. Firebox top and appliance top are shown in Figure 11.4.

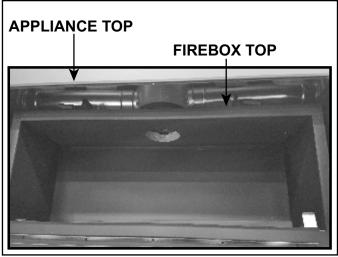


Figure 11.4

## D. Install Glass Refractory (Optional)

An optional glass refractory kit is available for use with the ECHELON models. Install the kit per instructions included.

## E. Install Log Set or Stones (Optional)

An optional log set and/or stones kit is available for use with the ECHELON models. Install the accessories per instructions included with kit.

#### F. Install Media (Included)

A media kit is included for use with the ECHELON models. Install glass media as instructed. Use the chart below to determine the amount of media to use for the model size being installed. Three additional color options are available for use with Echelon.

**WARNING! Choking Hazard!** Keep media out of reach of children.

MODEL	MEDIA-MAX. # OF BAGS
ECHEL36IN-C/ECHEL36STIN-C	3
ECHEL48IN-C/ECHEL48STIN-C	4
ECHEL60IN-C	6
ECHEL72IN-C	7

**NOTICE: DO NOT EXCEED MAXIMUM AMOUNT OF MEDIA.** Place media as instructed. Flame performance could be impacted. Sooting could occur.

#### Cleaning the Media

During shipment of the media, dust and debris can accumulate. It is recommended that the media be rinsed thoroughly with water to remove dust and small particles. An easy method to clean the media is to place the media into a pail and rinse thoroughly. Spread the media out over paper towels and allow the media to dry before installing them into the fireplace.

#### **INSTALLATION**

**CAUTION!** Risk of Burns! The fireplace should be turned off and cooled before media is installed.

**Note:** If both the media and logs will be installed, the logs must be installed first.

1. Set aside a handful of media which will be used later to conceal the pilot end of the burner.

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

2. The media placement jig, shown in Figure 1, MUST be used any time media are placed on the burner to ensure that there is no media in the burner lighting area. Verify that the media placement jig is correctly installed in place in the appliance. See Figure 1.

## **A** WARNING

fall into area in front of pilot.

Delayed Ignition Risk



- · Place media according to instructions.
- Do NOT place media in area in front of pilot
- Do NOT place media in a position that they may
- Do NOT place media in a position that pieces may fall between the media tray and back of firebox.
- Do NOT use any media other than the Hearth & Home Technologies-supplied options for this fireplace model.
- Do NOT exceed one layer of media on base pan.
   Fireplace will not function properly.
   Delayed ignition may occur.

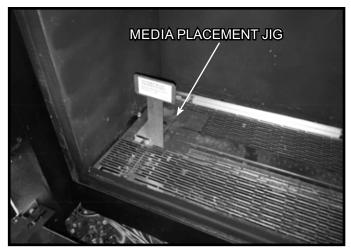


Figure 1 Media Placement Jig Location

- The media placement jig must remain in place while media is placed on the media tray and around the pilot bracket.
- Place an even layer of media around the media tray as shown in Figure 2. DO NOT place media on media placement jig.

## **A** WARNING

Risk of Asphyxiation or Fumes.



- Place media according to instructions.
- Do NOT place media in area between glass and firebox
- Do NOT place media in a position that they may fall into area between glass and firebox.
- Do NOT use any media other than the media supplied with this fireplace.

Fireplace will not function properly. Gas leak may occur.

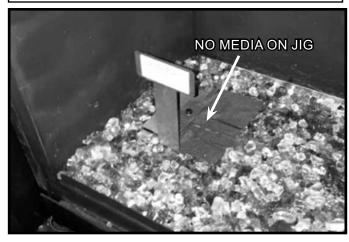


Figure 2. Media Placement Jig in Place

 Remove the screw, noted in Figure 3, from the media placement jig and carefully lift the jig out of the appliance.
 DO NOT allow any pieces of media to fall into the area in front of the pilot.

**WARNING!** Risk of Explosion! DO NOT place media directly in front of the pilot assembly. Delayed ignition could occur.

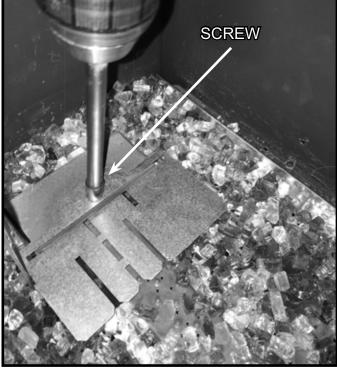


Figure 3. Remove Media Placement Jig

 Place the media set aside in Step 1 over the pilot shield and areas shown in Figure 4 uncovered by removing the media placement jig. See Figure 4. DO NOT allow any media in the 1 inch area shown in Figure 5.

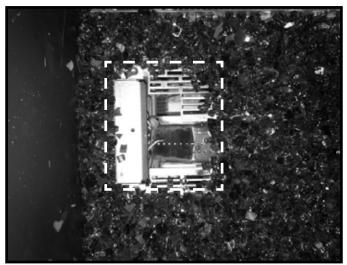


Figure 4. Media Installed with Media Placement Jig Removed

7. Check the pilot area to ensure there is no media in between the end of the burner and the pilot. Performance issues will occur if media is present.

**WARNING!** Risk of Explosion! DO NOT place media between end of burner and pilot. Delayed ignition could occur.

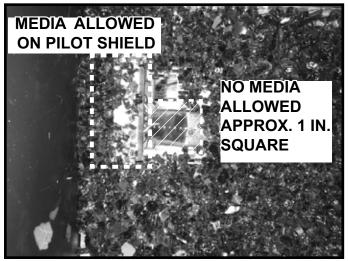


Figure 5. Pilot Shield Media installation.

 DO NOT allow media to fall between the media tray and the back of the firebox. Remove any fallen media before proceeding. See Figure 6.

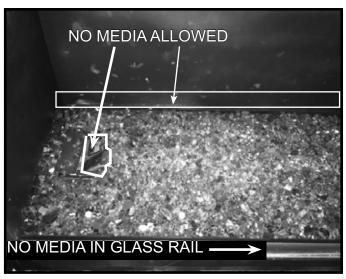


Figure 6. Media Installed

 ECHEL60IN-C and ECHEL72IN-C ONLY:
 DO NOT place media in front of opening on right side of the burner (60 and 72 only). Flame appearance will be affected. See Figure 7.

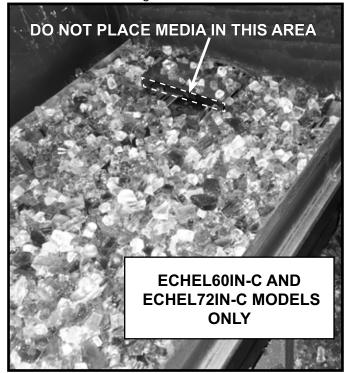


Figure 7. Media Placement Restriction Area

- 10. Check between the pilot and burner and remove any media that has fallen into this area.
- 11. Turn the appliance on to verify that the pilot and the burner light properly.
- 12. Remove any glass media that may have fallen in the bottom glass rail. Glass will not install properly if media is present in glass rail. See Figure 6.
- 13. Reinstall glass assembly.
- 14. Install bottom glass shield between glass and glass frame. See Figure 8.
- 15. Reinstall mesh front.

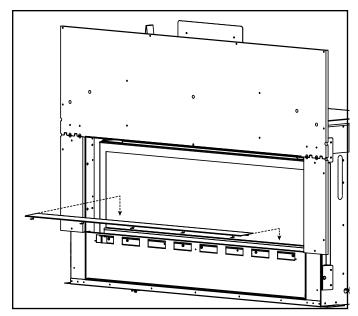


Figure 8. Install Bottom Glass Shield

#### **TROUBLESHOOTING**

After the initial start up burn, it may be necessary to adjust the media placement to achieve the best flame appearance. While flame height variation is normal, there may appear to be higher peaks in some areas and low flame peaks in other areas.

If the flame height appears to be excessively high in some spots, applying more media to these areas on top of the burner will help even out the flames. Spreading the media as evenly as possible is the most effective way to achieve optimal flame appearance and the most even flame heights. One or more test burns may be required to watch the flames mature and see how even they look before making adjustments.

## G. IntelliFire Touch® Control System Setup

- Detailed instructions for electrical wiring and connections are provided in Section 8.
- Determine if this appliance is equipped with a Module Reset Switch. See Section 8. Verify this switch is in the ON position.
- Verify that the 3-Position switch on the IFT-ECM is switched to the REMOTE position. Detailed Operating Instructions for the IFT-ECM are provided in Section 3.K of the Owner's Manual.

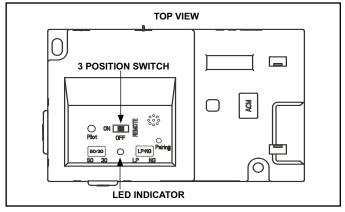


Figure 11.4 IFT-ECM

This appliance is factory-equipped with an IntelliFire Touch remote control. The remote was paired to the fireplace and tested at the factory. It does not need to be paired again, unless an accessory kit will be added at the time of installation. If no additional accessory will be added, simply follow steps one through seven below.

- 1. If installed, remove batteries from remote.
- 2. Verify that the new appliance has power and secure electrical connections.
- 3. Adjust the ECM selector switch to 'REMOTE' mode.
- 4. Switch the master reset switch to 'ON' (if equipped).
- 5. Wait to verify LED indicator on the ECM stops flashing.
- 6. Install batteries in the RC400 remote.
- 7. The RC400 remote will automatically pair to the appliance as pre-set at the factory.

#### **H. Install Decorative Barrier Front**

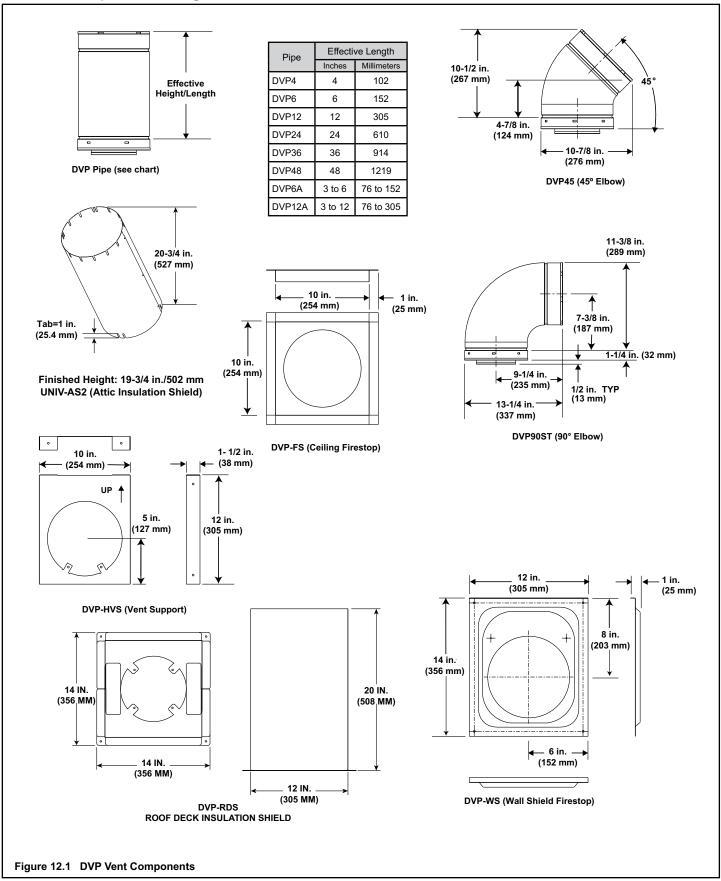
**WARNING!** Risk of Fire! Install ONLY decorative barrier fronts approved by Hearth & Home Technologies. Unapproved decorative barrier fronts could cause fireplace to overheat.

IMPORTANT! This fireplace requires an installed decorative barrier front to prevent direct contact with the hot viewing glass. DO NOT operate the fireplace with the barrier removed.

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

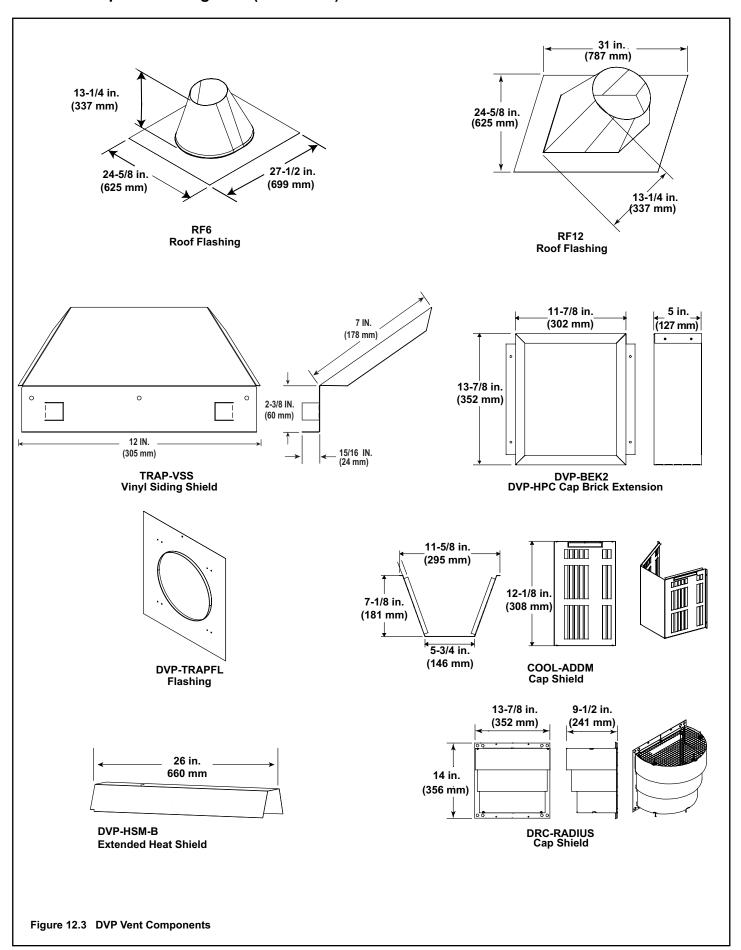
For more information refer to the instructions supplied with your decorative barrier front.

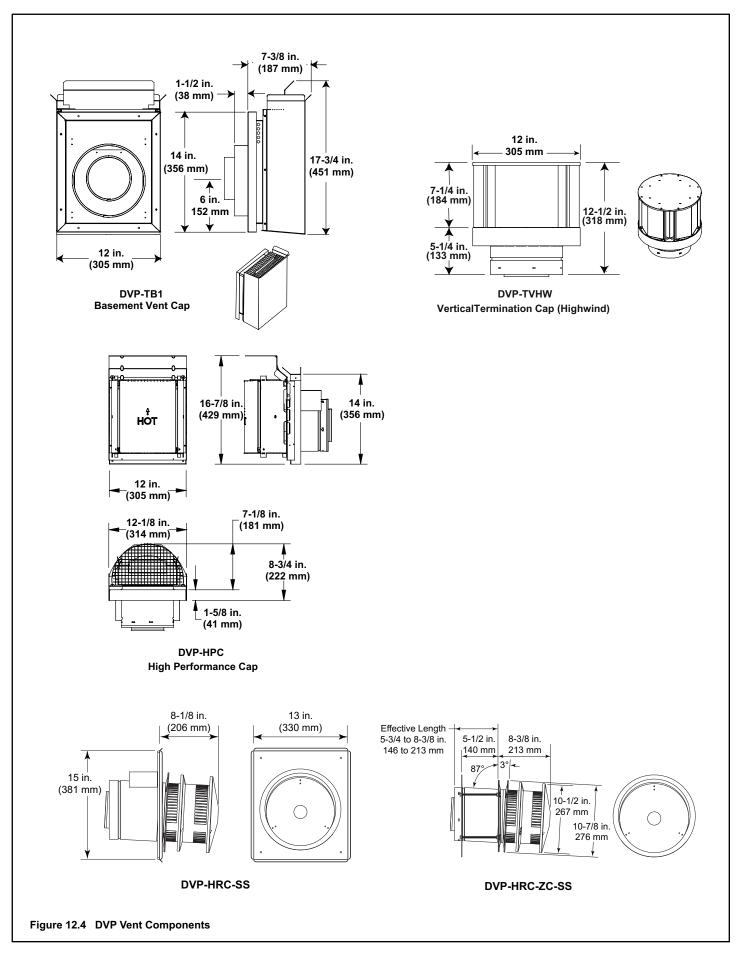
## A. Vent Components Diagrams



A. Vent Components Diagrams (continued) Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm). The heat shield is designed to be used on a wall 4 in. to 7-1/4 in. (102 mm to 184 mm) thick. If wall thickness is less than 4 in. (102 mm) the existing heat shields must be field trimmed. If wall thickness is greater than 7-1/4 in. (184 mm) a DVP-HSM-B will be required. 8 IN. (203 mm) 12 IN. (305 mm) Heat Shield 15 IN. \* Center of the horizontal vent pipe to (384 mm) the vertical measuring surface. \*5 IN. (127 mm) (356 mm) Minimum Maximum Term Cap HOT **Effective Length Effective Length** 3-1/8 in. 4-5/8 in. Trap1 79 mm 117 mm 5-3/8 in. 9-3/8 in. Max Trap2 137 mm 238 mm Effective **DVP-TRAP** Length **Horizontal Termination Cap DVP-TRAP2 DVP-TRAP1 DVP-TRAPK2 DVP-TRAPK1 DVP-HPC2 DVP-HPC1** Can adjust 4-1/8 in. (6-3/8 to 10-1/2) Can adjust 2-1/8 in. (4-1/4 to 6-3/8)

Figure 12.2 DVP Vent Components





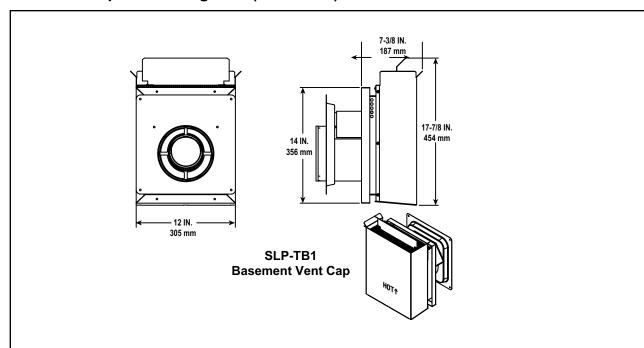


Figure 12.5 Vent Components

## **DECORATIVE TERMINATIONS/SHROUDS**

Only use listed decorative termination caps/shrouds with Hearth & Home Technologies approved venting systems.

This applies to both DVP and SLP venting systems.

## **Decorative Terminations Caps/Shrouds**

**DTO134** 

**DTO146** 

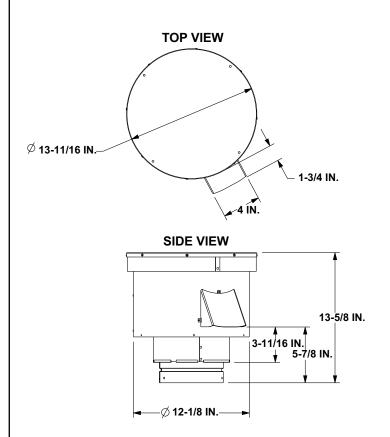
**DTS134** 

**DTS146** 

LDS33

LDS46

LDS-BV



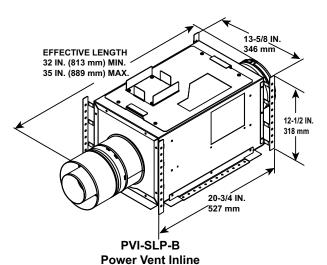
Required Wire Harness and PVV-SLEEVE		
Lengths Available	Part Number	
10 ft. PV Wire Harness	PVI-WH10	
20 ft. PV Wire Harness	PVI-WH20	
40 ft. PV Wire Harness	PVI-WH40	
60 ft. PV Wire Harness	PVI-WH60	
80 ft. PV Wire Harness	PVI-WH80	
100 ft. PV Wire Harness	PVI-WH100	
Description	Part Number	
12 in. Wire Harness Sleeve	PVV-SLEEVE-12	
48 in. Wire Harness Sleeve	PVV-SLEEVE-48	

PVV-SLP Vertical Power Vent

**Note:** A wire harness is required to power the PVV-SLP and connect it to the appliance. It is ordered separately from the PVV-SLP. Contact your dealer to order.

**Note:** The PVV-SLEEVE-12 and/or PVV-SLEEVE-48 is required to be installed with the PVV-SLP. It is ordered separately from the PVV-SLP. Contact your dealer to order.

Figure 12.6 PVV-SLP Vent Components



**Note:** SLP-LPC, SL-2DVP and DVP-2SL components must be accompanied by a PVI-SLP-B.

Optional Wire Harness		
DESCRIPTION	PART NUMBER	
10 FT PV Wire Harness	PVI-WH10	
20 FT PV Wire Harness	PVI-WH20	
40 FT PV Wire Harness	PVI-WH40	
60 FT PV Wire Harness	PVI-WH60	
80 FT PV Wire Harness	PVI-WH80	
100 FT PV Wire Harness	PVI-WH100	

**Note:** Wire harnesses required to power the PVI-SLP-B connect to the appliance and are ordered separately from PVI-SLP-B. Contact your dealer to order.

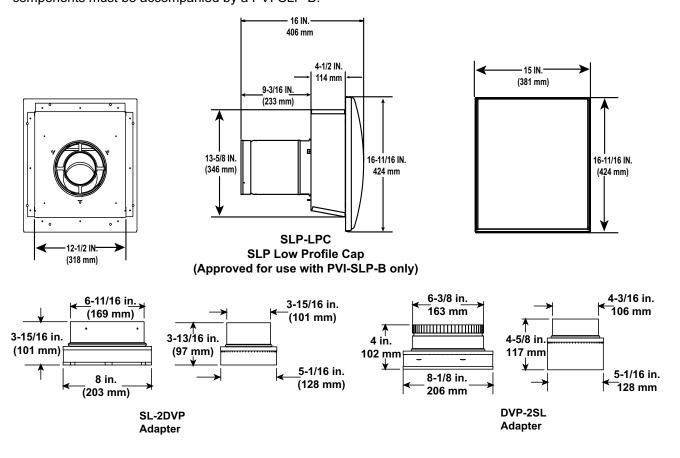
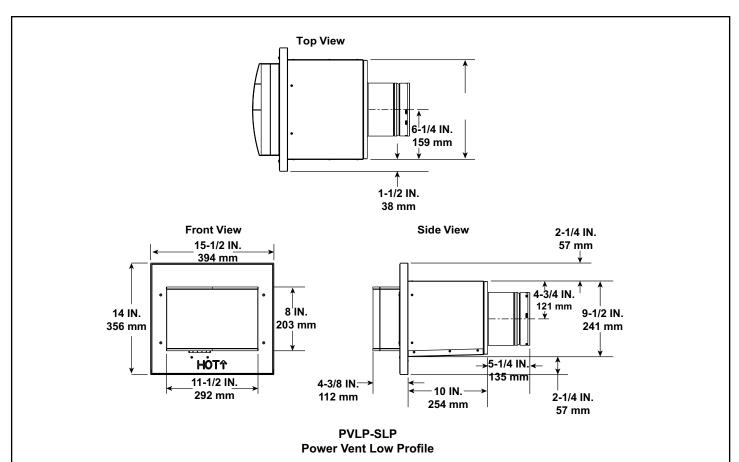
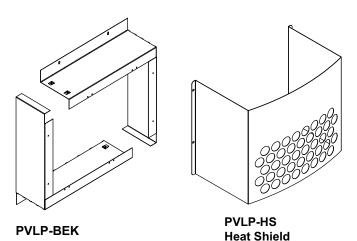


Figure 12.5 PVI-SLP-B Vent Components



**Note:** Wire harnesses required to power the PVLP-SLP connect to the appliance and are ordered separately from PVLP-SLP. Contact your dealer to order.

Note: A PVLP-HS heat shield is available and sold separately. Use if the PVLP-SLP is installed in a high traffic area.



Required Wire Harness		
DESCRIPTION	PART NUMBER	
10 FT PV Wire Harness	PVI-WH10	
20 FT PV Wire Harness	PVI-WH20	
40 FT PV Wire Harness	PVI-WH40	
60 FT PV Wire Harness	PVI-WH60	
80 FT PV Wire Harness	PVI-WH80	
100 FT PV Wire Harness	PVI-WH100	

Figure 12.6 PVLP-SLP Vent Components

**Brick Kit** 

#### **B.** Accessories

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

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

# Remote Controls, Wall Controls and Wall Switches

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

For safety:

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

See your dealer if you have questions.

## **Optional Heat Management Systems Kits**

After a qualified service technician has installed the heat management system, follow the instructions supplied with the kit for operation. Contact your dealer if you have questions.

**Note:** Optional heat management systems kit must be installed while the top of the appliance is accessible.

 Preparation for installation of Heat-Zone-Gas, HEAT-OUT-GAS or Passive Heat is discussed in Section 6.B.

Majestic, a brand of Hearth & Home Technologies 7571 215<sup>th</sup> Street West, Lakeville, MN 55044 www.majesticproducts.com

Please contact your Majestic dealer with any questions or concerns.

For the location of your nearest Majestic dealer,

please visit www.majesticproducts.com.