

Installation, Operation and Owner's Manual

Sky **Sky T**

Direct Vent Gas Fireplaces

Product Information Sky T MKII





HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.



Une surface vitrée chaude peut causer des brûlures. Laisser refroidir la surface vitrée avant d'y toucher.

Ne permettez jamais á un enfant de toucher la surface vitrée.

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

Une barrière conçu pour réduire le risque de brûlure par le verre de visualisation chaude est fournie avec cet appareil et doit être installé pour la protection des enfants et autres personnes à risque.



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.



AVERTISSEMENT:

INCENDIE OU D'EXPLOSION

Le non-respect des avertissements de sécurité à la lettre pourrait entraîner de graves blessures , la mort ou des dommages matériels.

- Ne pas entreposer ni utilizer d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.
- QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ
 - Ne pas tenter d'allumer d'appareil.
 - Ne touchez á aucan interrupteur. Ne pas vous servir des téléphones se trouvant dans le bátiment ou vous trouvez.
 - · Quitter immédiatement le bâtiment.
 - · Appelez immédiatment votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur de gaz appelez le service des incindies.
- Installation et l'entretien doivent être effectués par un installateur qualifié, une agence de service ou le fournisseur de gaz.

INSTALLER: Leave this manual with the appliance. CONSUMER: Retain this manual for future reference. INSTALLATEUR: Laissez cette notice avec l'appareil. CONSOMMATEUR: Conservez cette notice pour consultation ultérieure.



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IMPORTANT SAFETY INFORMATION

CAUTION - HOT! HOT! HOT!

This appliance is a HEATING appliance and it does become very hot in operation.

UNDER ANY CIRCUMSTANCES, DO NOT PLACE any object, furniture, draperies or other item LESS THAN 36" (90 cm) IN FRONT OF THE GLASS OF THE FIREPLACE.

CHILDREN AND PETS

Radiant heat can heat surfaces such as the surround and trims of the fireplace to temperatures that, although approved safe, can be quite uncomfortable to touch - particularly for children and pets. Children and pets should always be supervised when in the room where the appliance is located. Remote control handset should be kept out of reach of children. In the presence of children, we STRONGLY RECOMMEND that you install in front of the fireplace: a fire screen or, to protect young toddlers, a "hearth gate".

HOT SURFACES

Be aware that, although safe, some combustible materials and finishes, even though installed at listed clearances may, over time, discolor, warp or show cracks. Convective heat will exit the unit and travel up the wall surface if not impeded. Protruding mantels and projections can help direct the heat away from the wall. AVOID placing heat sensitive items such as televisions, paintings, decorations, etc. above fireplaces or near the edge of protrusions unless appropriate.

Do not place furniture or other objects within 36" of the fireplace glass.

SAVE THESE INSTRUCTIONS

Make yourself fully aware of all the following instructions and the many features of the Element4 direct vent gas fireplace appliance.

INSTALLER: Leave this manual with the appliance.

OWNER: Keep this manual for future reference.

IMPORTANT SAFETY INFORMATION

WARNING

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

WARNING

This direct vent system appliance must be installed as an OEM installation in manufactured homes (USA only) or an aftermarket permanently located, or a mobile home, where not prohibited by local codes and must be installed in accordance with 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.

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

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this appliance.

WARNING: Glass Handling

The glass must only be removed by a qualified person. Gloves should be worn when removing the glass.

WARNING: Installation and Service

Installation and service must be performed by an authorized qualified installer, service agency or gas supplier.

Any alteration to the product that causes soot or carbon to form and results in damage is not the responsibility of the manufacturer.

ONLY a qualified person may open the door/remove the glass.

Do not modify or substitute any part of this appliance.

WARNING: Electrical Grounding

These direct vent appliances must be electrically grounded in accordance with the local codes or, in the absence of local codes, with National Electric code, ANSI/NFPA 70, or the Canadian Electric Code, CSA C22.1

WARNING: Gas Appliance

This appliance is only for use with the type of gas indicated on the rating plate. These appliances are not convertible for use with other gases unless a certified kit is used and the conversion is performed by an authorized qualified technician.

Applicable standards are ANSI Z21.50/CSA 2.22 (Vented Gas Fireplaces) and CAN/CGA 2.17-M91 (Gas-fired Appliances for Use at High Altitudes.) If your installation is at an elevation greater than 2000' in the US or 4500' in Canada, consult with the local authority having jurisdiction for gas product installations to determine their specific requirements for high altitude installations.

IMPORTANT SAFETY INFORMATION

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

TURN OFF the gas before servicing the appliance. It is recommended that a qualified service technician perform an appliance check-up/service once a year.

Any safety screen or guard removed for servicing MUST BE REPLACED before operating this appliance.

This unit MUST be used with a vent system as described in this installation manual. NO OTHER VENT SYSTEM OR COMPONENTS MAY BE USED.

THIS UNIT IS NOT FOR USE WITH SOLID FUEL, and must only be used with gas supply conditions as indicated on the rating label.

INSPECT the external vent cap on a regular basis to make sure that no debris, plants, trees, or shrubs are interfering with the air flow.

DO NOT USE this appliance if any part has been under water. Immediately call a qualified service technician to inspect the unit and to replace any part of the control system and any gas control that has been under water.

This appliance is for indoor use only.

NEVER OBSTRUCT the flow of ventilation air. Keep the front of the appliance CLEAR of all obstacles and materials for servicing and proper operation.

DO NOT use this appliance as a temporary source of heat during construction.

This appliance is a vented gas fireplace. It must not be used for any other purposes such as drying clothes, etc.

The glass panels MUST be in place and sealed before the unit can be placed into safe operation.

DO NOT OPERATE this appliance with the glass panels removed, cracked or broken. Replacement of the glass panels should be performed by a licensed or qualified service person. DO NOT strike or slam the glass panels.

The glass panels SHALL ONLY be replaced by units supplied by the manufacturer. NO SUBSTITUTE panels shall be used.

DO NOT USE abrasive cleaners on the panels. DO NOT ATTEMPT to clean the glass panels when they are hot.

If the pilot flame is extinguished either intentionally or unintentionally, no attempt should be made to re-light the gas until at least 3 minutes have elapsed.

Dimensions will appear as INCHES"/metric throughout this manual. For convenience, the inches are rounded to the nearest 1/16" when converted. If greater accuracy is required, use the metric dimensions.

KEY INSTALLATION POINTS



IMPORTANT INFORMATION



This page references the most important key installation points when installing any Element 4 fireplace. This page <u>DOES NOT</u> substitute for reading the entire manual.

☐ <i>RECORDS</i> The installer MUST record the serial number and venting configuration to use for any technical issues that may arise.
☐ <u>ELECTRICAL</u> An approved 120V AC wall receptacle is required. The receiver MUST be powered by the AC adapter. Four AA batteries may be used only for on-demand electrical requirement during power outage.
FIRE MEDIA When installing the fire media make sure to NEVER mix different types of media or use media purchased from another retailer. ALWAYS keep the second thermocouple AND pilot free from media.
☐ <u>AIR OUTLETS</u> The warm air outlets MUST be installed BEFORE the first light. The amount of square inches needed for the opening varies from model to model.
☐ ENCLOSING THE FIREPLACE ONLY a tested and approved non-combustible wallboard that is specified in the manual may be used when enclosing the fireplace.
☐ <i>FRAMING</i> The dimensions are different between metal and wood framing. Know which material you are using and know the framing requirements.
☐ <u>VENTING</u> The venting MUST follow the model specific graph shown in the manual. A restrictor may or may not need to be used based on venting run and rise.
☐ CONSTRUCTION DEBRIS REMEMBER that if the fireplace is installed before the site is finished, construction debris MUST be cleaned from the enclosure and around the unit prior to finishing and the test fire.
☐ GAS PRESSURES Gas pressures MUST be read with a manometer and confirmed with what is required in the installation manual.
☐ <u>FINISHING</u>

USER INFORMATION

WARMTH AND BEAUTY - HOW IT WORKS

The Element4 fireplaces are direct vent fireplaces and, as such, the intake and exhaust are both handled through the vent pipe. The fireplace also provides convection air to your room. The illustration shows one of the unique features of the Element4 fireplaces - its use of warm, convection air flow.

Other fireplaces have louvered metal boxes around them to keep temperatures under control. The Element4 fireplaces use your enclosing walls, or chase, to guide this warm air.

When the air within the chase is warmed by the fireplace, it exits through an *air outlet* that you have provided. This chase air is then replaced by room air which enters through the *Air Inlet* (provided by the fireplace design) and through the Wall Access Door. As the exiting warm air cools, it falls to the floor where it's drawn into the inlets and the cycle repeats.

The fireplace provides the *inlet* for room air as part of its design; you provide the warm air *outlet* as part of your design.

See the **ENCLOSING the FIREPLACE** section of this manual for more information.

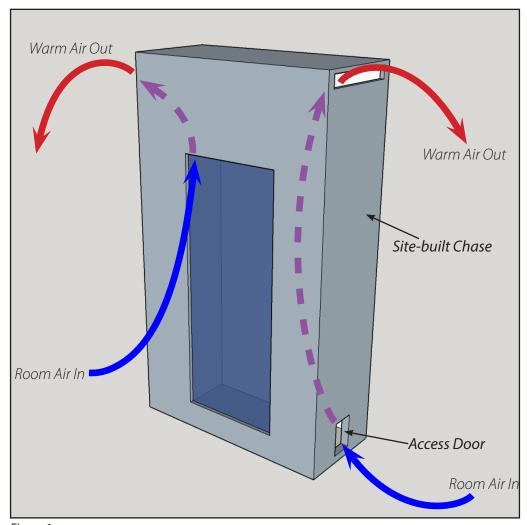


Figure 1

SPECIFICATIONS and DIMENSIONS

APPLIANCE RATINGS

Model		Sky Sky T	
Gas		Natural Gas	Propane
Input Maximum	Btu/hr	44,000	36,000
Input Minimum	Btu/hr	17,000	11,000
Inlet Pressure	in. w.c.	7	11
illiet i lessure	kpa	1.74	2.74
Manifold Pressure	in. w.c.	3.2	10.8
Marillold Pressure	kpa	0.79	2.68
Main Burner Injector Marking		1200 (x2)	280 (x2)
Pilot Injector Marking		31.2	27.1
New Efficiency		86%	ó

Figure 2

AC ADAPTER SPECIFICATIONS			
Input Voltage	120V AC		
Input Power	9 W		
Output Voltage	6V DC		
Output Current	500 mA		
Size	3.1"H x 2"W x 1.7"D		
Output Cord Length	6 Feet		
Agency Approvals	UL, CSA		

Figure 4



Figure 5: AC Adapter

DO NOT REMOVE		NE PAS	RETIRER	
DIRECT VENT GAS FIREPLACE - N use with solid fuel.	lot for		AZ À AÉRATIO ec un combusti	ON DIRECTE - Ne pas ble solide
This appliance is only for use with the type of gas indic- rating plate and may be installed in an aftermarket, pen- located, manufactured home (USA only) or mobile hom- not prohibited by local codes. See owner's manual for o appliance is not convertible for use with other gases, ur- ortfilled kit is used.	manently se where details. This	la plaque signi à emplacement si la législation pour les détail	stétique et peut être ins it fixe (USA uniquemer locale l'autorise. Con	avec le type de gaz indiqué sur stallé dans une habitation en dur, it) ou dans une résidence mobile suitez le manuel du propriétaire pas être modité pour une utilisa- run kit certifié.
For use only with Vent, Glass Panels and Ceramic Logs stones) certified and approved for use with this appliant		poutres (ou pi		ations, panneaux en verre et nt l'utilisation est autorisée avec
This appliance must be installed in accordance with loc if any; if none, follow ANSI Z223.1/NFPA 54, or CSA B1 appliance must be properly connected to a venting syst cordance with the manufacturer's installation instruction	149.1. The tem in ac-	défaut d'une te	ille législation, suivre A	rément à la législation locale. À NSI Z223.1/NFPA 54, ou CSA nt raccordé à un système de
The system must be installed by ba qualified installing a	agency.	ventilation, cor	formément aux instruc	tions d'installation du fabricant.
The second secon		Le système do	it être installé par un ir	stallateur qualifié.
Manufacturer/ Fabricant: Element4 B.V. Paxtonstraar 23 NL-8013 RP Zwolle	Approved	By / Approuv	.(1)	<u></u>
The Netherlands / Pays-Bas	Control N	o.: 4006611	Inter	tek
Tel / Tél : 0031 38 4209020	Conforms		ANS Z21.50a-20	108
Fax:0031 38 4209021	Certified t	o std.	CSA 2.22a-2008	- Vented Gas Fireplaces
Serial No. / N° de série:				
This appliance equipped only for altitu Cet appareil est équipé uniquement po		udes : 0-450	0 ft / 0-1370 m	
Fuel Type / Type de combustible			Natural Gas / Gaz naturel	Propane Gas / Gaz propane
(check one) / (cochez) Max. Input / Capacité d'entrée maxi (E Min. Input / Capacité d'entrée mini (B1 Gas Inlet Pressure (in w.c.) / Pression Manifold Pressure (in w.c.) / Pression Orfice Size / Taille de l'ouverture	TU/HR) d'entrée d		[]	[]
Clearances to combustible / Dégagement jusqu'au combustible :				
Back / Arrière : Top / Haut : Mantel / Linteau :		Côtés :	stible :	

Figure 3

This product was tested and listed to ANSI Z21.11.50a-2008 and CSA2.22a-2008 "Vented Gas Fireplaces" by Intertek Group. (Figure 3)

A sample listing label image is shown above. A *metal* listing label is attached to every Element4 fireplace and contains important certification information. The listing label must not be removed from the fireplace.

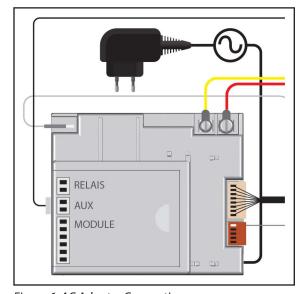


Figure 6: AC Adapter Connection

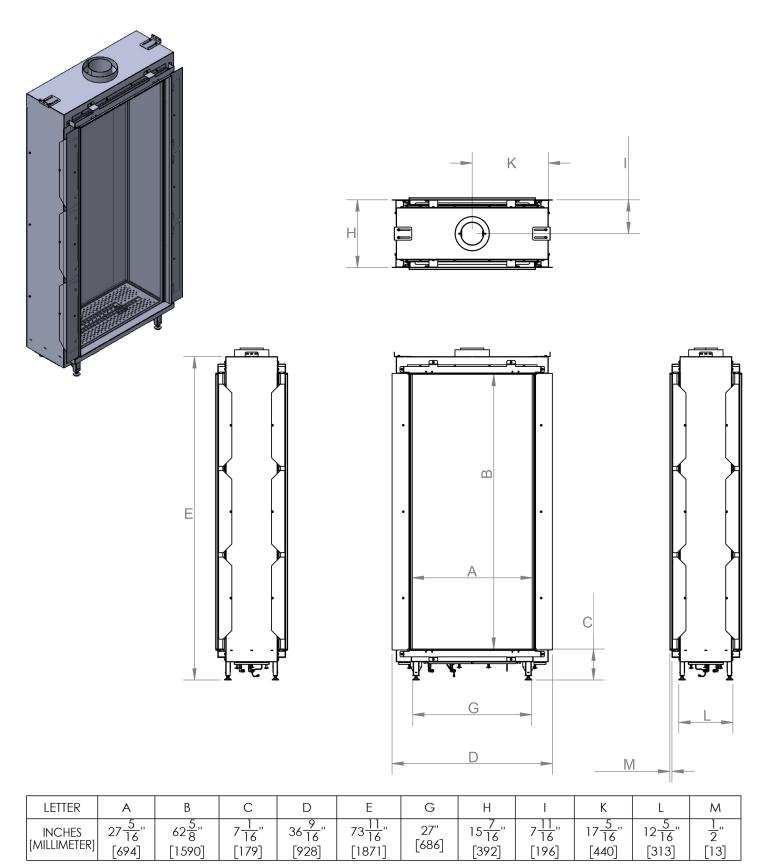
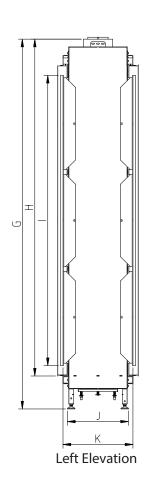
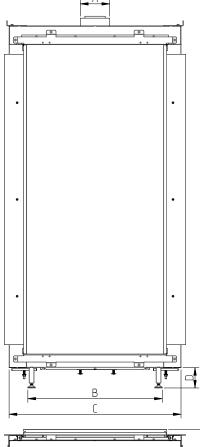


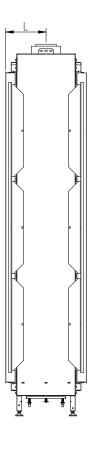
Figure 7

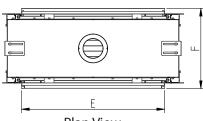
A DWG file is available for download at www.europeanhome.com for design specific dimensions not listed.

Front Elevation



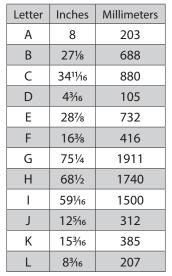






Right Elevation

Plan View



Unit Weight			
Pounds Kilograms			
489 221.8			

SKYT

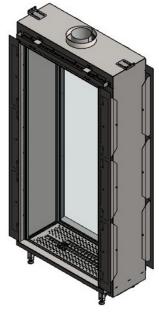
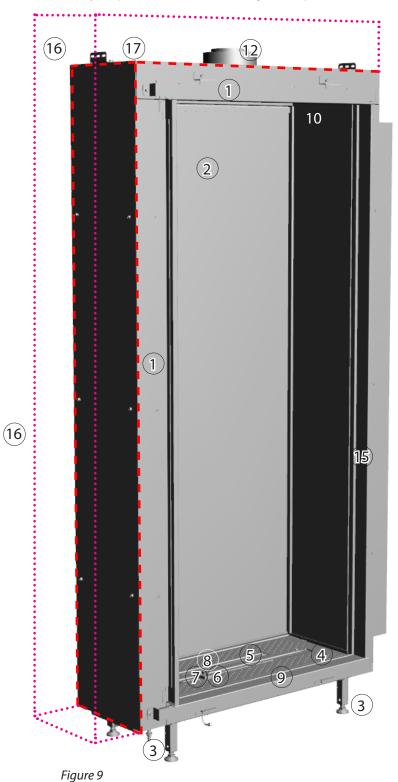


Figure 8

SPECIFICATIONS and DIMENSIONS

PARTS OF THE FIREPLACE

Parts of the Sky fireplace are shown following. These parts are also in the Sky T.





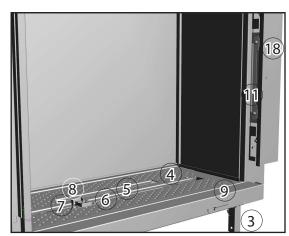


Figure 10

SPECIFICATIONS and DIMENSIONS

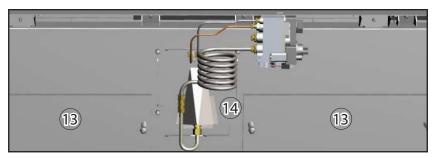


Figure 11: Fireplace from below.

	Table of Fireplace Parts				
1	Outer Frame Face- surrounds the glass panel(s) and limits the non-combustible wall board				
2	Exterior Glass Panel				
3	Support Feet - four adjustable feet allow the fireplace to be levelled				
4	Hearth Panel - supports various Fire Media				
5	Primary Burner - produces the front flame				
6	Secondary Burner - produces the rear flame; may be controlled separately				
7	Pilot Burner - the part of the safety circuit which lights the Main Burner				
8	2 nd Thermocouple - the part of the safety circuit which monitors the Main Burner				
9	Finish Trim - hides the Glass Clamps				
10	Room Air Inlet (hidden)				
11)	Glass Clamp - holds the Glass Panel in place (6 ea Sky, 12 ea Sky T)				
12	Vent Collar - accepts the 5" x 8" venting adapter (included)				
13	Relief Door - part of the safety system. Do NOT block the operation.				
14	Pilot Assembly				
15)	Side Trim - hides the Glass Clamps (2 ea Sky, 4 ea Sky T)				
16	NO MATERIAL zone				
17	Fireplace Limit				
(18)	Flange				

Figure 12

CLEARANCES

These are **NOT** zero-clearance fireplaces. All clearances to combustible AND non-combustible materials MUST be maintained as described in this manual.

LOCATING THE FIREPLACE

When selecting a location for the fireplace:

- Ensure that all minimum clearances to combustible AND noncombustible materials are met.
- · Provide adequate clearances for servicing.
- Consider venting dimensions (rise, run and number of elbows, etc.) when selecting the location for your fireplace.
- Locate the appliance out of traffic and away from furniture and draperies.
- Keep the location free of electrical, plumbing or other heating/air conditioning ducting.

PLACING THE FIREPLACE

The base upon which the appliance rests (Figure) must be sturdy, level and built to safely support at least 800 pounds (363 kilograms). The base may be the floor or a purpose-built raised platform, e.g. wood, metal. When placed on a platform, an 8" (203 mm) x 6" (152 mm) opening must be cut through the platform top. The lineset can be routed through this opening. Room air must be allowed to flow through the Wall Access Door then through this platform opening.



Figure 13

The feet on the appliance are designed to sit on a flat platform, however the appliance must not be installed on any combustible material other than wood. For example, carpet or linoleum bases are not permitted.

Do not place anything between the bottom of the firebox and the bottom of the feet.

ENSURE THAT THE LINESET (WHICH INCLUDES THE GAS VALVE, ELECTRICAL WIRING, AND GAS LINES) DOES NOT IMPEDE THE FULL OPERATION OF THE RELIEF DOORS. IT IS YOUR RESPONSIBILITY TO ENSURE THE SAFETY OF THESE CRITICAL COMPONENTS THROUGHOUT THE INSTALLATION PROCESS. REMOVE AND DISPOSE OF ALL WRAPS AND TIES.

MINIMUM CLEARANCE TO COMBUSTIBLES

- The appliance is approved with a minimum clearance to combustible materials of 26" (660 mm) to the top, 11" (280 mm) on all sides and 4" (100 mm) to the bottom. Any spacer or framing used closer than this dimension must be noncombustible (e.g. metal).
- The minimum distance from the bottom of the appliance to the room ceiling is 72" (1830 mm).
- When installing the venting, the following clearances to combustible materials MUST be maintained:
 - a. 3" (76 mm) above any horizontal venting
 - b. 1" (25 mm) to venting sides or below any horizontal venting
- Do not block or restrict the Air Inlet, located between the standoff frame and glass.

The minimum clearances (air spaces) to combustible materials must be maintained. It is of the greatest importance that the fireplace and vent system be installed only in accordance with these instructions.

Clearance to combustibles summary:

Back: 11" (280 mm)
Front: 11" (280 mm)
Sides: 11" (280 mm)
Top: 26" (660 mm)
Floor: 4" (100 mm)

The **Floor** dimension (above) is measured from the bottom of the firebox. When the adjustable feet are in their lowest position the required clearance to the floor is maintained.

CLEARANCES TO **COMBUSTIBLE** MATERIAL

Clearances to Combustibles		
Sides (Non-Glass Sides ONLY)	11"	
Тор	26"	
Bottom	4"	

Figure 14

CLEARANCES TO NON-COMBUSTIBLE MATERIAL

Clearances to Non-Combustibles		
Sides (Non-Glass Sides ONLY)	2"	
Тор	2"	
Bottom	4"	

Figure 15

No material of any kind is allowed between the bottom of the support feet and the bottom of the firebox (except for the lineset).

No material of any kind is allowed within 2" (50 mm) of the top of the fireplace.

No material of any kind is allowed within 2" (50 mm) of the metal sides the fireplace.

Facing material should be installed against the outer frame of the fireplace, with an 1/8" (3 mm) vertical or horizontal clearance TO THE FLANGE to allow for heat expansion.

Non-combustible materials may be installed to a zero clearance to the outer faces of the appliance outer frame face. However, they must not cover (or prevent the removal of) the glass panels or other fireplace parts.

The appliance must not be installed on any combustible material other than wood.

These clearances are the same for ALL Element 4 Fireplaces, regardless of model.

We recommend that the fireplace be set into its final location before building the enclosure.



Please refer to the "Reduced Clearance to Existing Combustible Wall" section for use of combustibles inside of the above clearances.

CLEARANCES

MANTELS

The graph below shows a range of allowable depths and heights for a combustible mantel installation.

As shown, the minimum allowable mantel height above the fireplace opening is 2"/50 mm with a 1"/25 mm deep mantel.

The maximum mantel depth is 12"/300 mm at a minimum height above the fireplace opening of 13"/330 mm.

All of the mantel height/depth combinations fall in between these extremes in accordance with the chart below.

Mantels made of *non-combustible* material are allowed inside these dimensions but they will be subjected to elevated temperatures and may become too hot to touch.

A typical completed installation with mantel is shown in the diagram below, on the right.

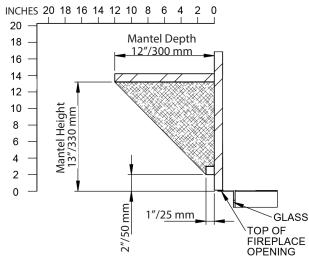


Figure 16

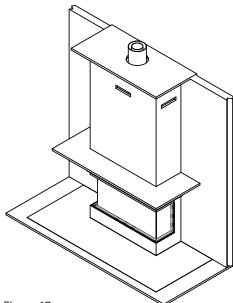


Figure 17

CLEARANCES

TYPICAL CLEARANCE DIAGRAMS

The total area of the air openings must be maintained. The location of the openings must allow for the free movement of air and must not allow excessive warm air to build up within the chase.

The top of the Warm Air Outlet must be no more than 1" (25 mm) down from the chase ceiling.

The minimum distance from the bottom of the appliance to the room ceiling is 72" (1830 mm).

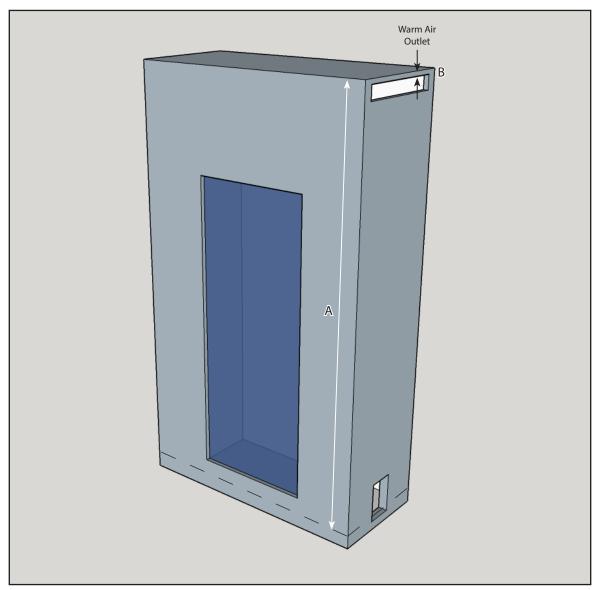


Figure 18

Minimum Distances			
Α	Room ceiling to appliance bottom	72" 1830 mm	
B Room ceiling to top of Warm Air Outlet		1" 25 mm	

Warm Air Outlet Area by Model				
Model	Square Inches	Square Centimeters		
Sky	50	322		
Sky T	50	322		

Figure 19

Figure 20

GAS and ELECTRIC

INSTALLING THE GAS LINE

In accordance with the latest edition of the National Fuel Gas Code, NFPA 54 (USA) or CAN/CSA-B149.1 (Canada,) correctly size and route the gas supply line from the supply regulator to the area where the appliance is to be installed.

Never use galvanized or plastic pipe unless it is rated for use with gas. Gas supply pipes must be designed, routed, constructed and made of materials that are in strict accordance with local codes and regulations. A qualified plumber or gas fitter should be hired to correctly size and route the gas supply line to the appliance in accordance with all applicable codes and regulations.

Installing a gas supply line from the fuel supply to the appliance involves numerous considerations of materials, protection, sizing, locations, controls, pressure, sediment trap, and other criteria. The sizing and/or installing of gas piping should only be performed by a qualified plumber or gasfitter.

The gas control inlet accepts a 3/8" NPT fitting.

The gas supply piping should have a separate gas shutoff valve and a capped, \%" pipe tapping upstream of the valve for the purpose of reading pressure. A service shutoff valve must be placed within six feet of the fireplace gas control valve.

The gas supply pressure at the gas control valve **must not exceed the Maximum Supply Pressure** as shown in the *Specifications and Dimensions* section of this manual.

The gas supply line must be properly connected and bled by a certified gasfitter or plumber.

The appliance and its main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of $\frac{1}{2}$ psi (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than $\frac{1}{2}$ psi (3.5 kPa).

Schedule 40 Black Iron Pipe				
	Natural Gas	Propane Gas		
Length (feet)	Inside Diameter (Inches)			
0 - 10	1/2	3/8		
10 - 40	1/2	1/2		
40 - 100	1/2	1/2		
100 - 150	3/4	1/2		
150 - 200	3/4	1/2		

ELECTRICAL REQUIREMENTS

Figure 21

The Element 4 fireplaces use a receiver and remote control for their burner operation. The remote control comes with two AAA batteries and the receiver is powered by a 120V AC adapter, included. The fireplace **MUST** be powered by the AC adapter for improved reliability and customer satisfaction.

The installer must provide an approved 120V AC receptacle to be placed within the six foot cord limit of the AC adapter.

The receiver **MUST** be powered by the AC adapter. Four (4) AA batteries may be used only for on-demand electrical requirement during a power outage. Remove batteries after use to avoid battery corrosion. Battery corrosion will damage the receiver.

17



WARNING

Electrical work must be performed by a qualified, licensed electrician.

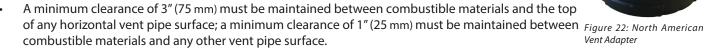
All wiring shall be in compliance with all local, city, and state codes.



CONFIGURING THE VENTING

The fireplaces in this manual are direct vent fireplaces that use a co-axial or "pipe within a pipe" venting system. The outer "pipe" or vent conducts fresh, outside air into the fireplace and the inner vent carries the exhaust outside. This system, which can run either horizontally through a side wall or vertically through the roof, produces an efficient system because conditioned building air is not used for combustion.

- Only the 5" x 8" direct vent components from the companies listed below (Figure 23) are approved for use with these fireplaces. Any of the 5" x 8" direct vent components suitable for the local condition are permitted. Please visit www.europeanhome.com/gr-support or via the QR code below for installation instructions.
- This fireplace is shipped with a North American venting adapter (Figure 22). It MUST attach to the vent collar of the fireplace.
- All venting measurements are taken from the top center of the vent collar on the top of the fireplace and all configurations must fall within the acceptable range of the venting charts.



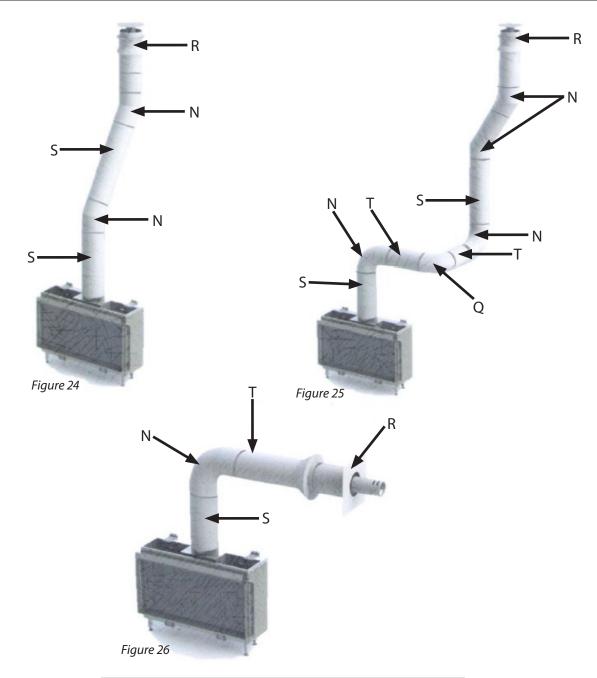


- The horizontal parts of the venting must be pitched up away from the fireplace. For every 12" (305 mm) of horizontal run, the venting must rise ¼" (6.5 mm) toward the termination. The venting must never run downward unless with the use of a power vent.
- Whenever venting passes through a wall, an approved heat shield or 'wall thimble' must be installed.
- A power vent system is available for venting that falls outside of the venting graphs. Refer to the appropriate power vent manual for any venting configuration which is outside of the vent graphs shown here.
- Your venting needs to be inspected annually, including any connected components, to ensure that the system is working as designed.
- In colder climate environments, the fireplace can be lowered to STANDY BY MODE (Pilot Flame only). This will help maintain a steady draft within the venting over a period of up to five days. See the "Operating the Fireplace" section.

Figure 23

Please visit www.europeanhome.com/technical-support/ for the power venting installation manuals





Vertical or Horizontal Vent Termination		
45 or 90 degree bends Vertical to Horizontal or vice versa	N	
45 and 90 degree bends Horizontal to Horizontal	Q	
Horizontal Pipe Section	Т	
Vertical Pipe Section	S	

Figure 27

CALCULATING THE TOTAL VERTICAL SECTION (TVS)

Calculate the Total Vertical Section by adding up all vertical upward sections in your specific vent design.

CALCULATING THE TOTAL HORIZONTAL SECTION (THS)

Calculate the Total Horizontal Section by adding up all horizontal sections in your specific vent design.

BEWARE OF ELBOWS

Elbows create resistance to the movement of air through your venting configuration and they must be included when determining your minimum and maximum vent lengths. There must be a minimum vertical rise of 20" (508mm) before any elbow.

Elbows are called either 'vertical' or 'horizontal' depending on their mounted position. The two types of elbows are:

TYPE N - 45° or 90° elbows which transition from vertical to horizontal and vice versa. This can be called an *upright* elbow.

TYPE Q - 45° or 90° elbows which transition from horizontal to horizontal. This can be called an *flat* elbow.

No more than four 90° elbows OR eight 45° elbows OR a combination totaling no more than 360° 'elbow degrees' are allowed. For example, a combination of two 90° elbows and two 45° elbows is allowed $(90^{\circ} + 90^{\circ} + 45^{\circ} + 45^{\circ})$ equals 270°) but a combination of three 90° elbows and three 45° elbows is not allowed (the total equals 405°.)

APPLYING THE RESULTS

The first (3) N elbows do not need to be included in venting calculations. For an elbow-degree count greater than 270°, the following applies:

- for either Type N elbow you must add 40" (1m) to your THS
- for a 90° Type Q elbow you must add 80" (2m) to your THS
- for each 45° Type Q elbow you must add 40" (1m) to your THS

venting possible, no restrictor needed venting possible, 35mm restrictor needed venting NOT possible

Figure 28

Once you have found your total vertical section (TVS) and your total horizontal section (THS) plot the intersection of these two numbers on the appropriate chart, below.

The intersecting block will have one of three entries; 0, 35, or X:

If your TVS and THS intersect at a block with an "0" the configuration is possible without a restrictor.

If your TVS and THS intersect at a block with an "35" the configuration is possible and a 35 mm restrictor must be used.

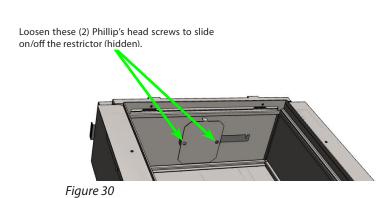
If your TVS and THS intersect at a block with an "X" the configuration is not possible.

INSTALLING A RESTRICTOR

Some vent configurations may require a restrictor plate be installed. The restrictor for this fireplace is installed on the inside top of the fireplace and is to be slid open or closed. Loosen the screws on either side and slide the restrictor as desired. Do not modify the restrictor(s). Please use the graph above to determine if you will need to use a restrictor.



Figure 29



VENTING

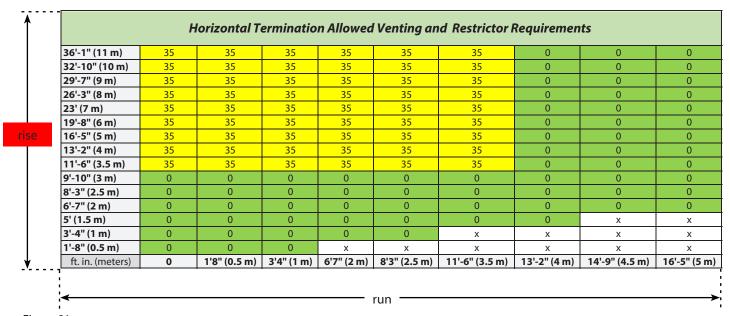


Figure 31

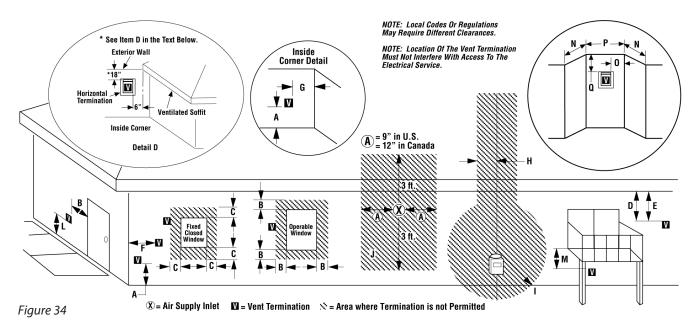
72'3" (22 m)	0	х	Х	Х	Х	X	X	X	X
68'11" (21 m)	35	35	0	Х	х	Х	Х	Х	х
65'8" (20 m)	35	35	0	0	х	Х	Х	Х	х
62'5" (19 m)	35	35	35	35	0	Х	Х	Х	х
60' (18 m)	35	35	35	35	35	0	0	х	х
55'10" (17 m)	35	35	35	35	35	35	35	0	0
52'6" (16 m)	35	35	35	35	35	35	35	35	0
49'3" (15 m)	35	35	35	35	35	35	35	35	0
46' (14 m)	35	35	35	35	35	35	35	35	0
42'8" (13 m)	35	35	35	35	35	35	35	35	0
39'5" (12 m)	35	35	35	35	35	35	35	35	0
36'2" (11 m)	35	35	35	35	35	35	35	35	0
32'10" (10 m)	35	35	35	35	35	35	35	35	0
29'7" (9 m)	35	35	35	35	35	35	35	35	0
26'3" (8 m)	35	35	35	35	35	35	35	35	0
23' (7 m)	35	35	35	35	35	0	0	0	0
19'8" (6 m)	35	35	35	35	35	0	0	0	0
16'5" (5 m)	35	35	35	35	35	0	0	0	0
13'2" (4 m)	35	35	35	35	35	0	0	0	0
11'6" (3.5 m)	35	35	35	35	35	0	0	0	0
9'10" (3 m)	0	0	0	0	0	0	0	0	0
8'3" (2.5 m)	0	0	0	0	0	0	0	0	X
6'7" (2 m)	0	0	0	0	0	0	0	X	Х
5' (1.5 m)	0	0	0	0	0	0	X	X	X
3'4" (1 m)	0	0	0	0	0	X	X	X	Х
ft. in. (meters)	0	1'8" (0.5 m)	3'4" (1 m)	6'7" (2 m)	8'3" (2.5 m)	11'-6" (3.5 m)	13'-2" (4 m)	14'-9" (4.5 m)	16'-5" (5 m

Figure 33

configuration allowed, no restrictor required configuration allowed, 35mm restrictor required

configuration NOT allowed

HORIZONTAL VENT TERMINATION CLEARANCES AND REQUIREMENTS



	US Installation**	Canadian Installation*
A = Clearance above grade, veranda, porch, deck, or balcony.	12 inches (30cm)**	12 inches (30cm)*
B = Clearance to window or door that may be opened.	6 inches (15cm) for appliances < 10,000 Btuh (3kW), 9 inches (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12 inches (30cm) for appliances > 50,000 Btuh (15kW)**	6 inches (15cm) for appliances < 10,000 Btuh (3kW), 12 inches (30cm) for appliances > 10,000 Btuh (3kW)
C = Clearance to permanently closed window	9 inches (229mm) recommended to prevent window condensation	12 inches (305mm) recommended to prevent window condensation
D = Vertical clearance to ventilated soffit located above the termination within a horizontal distance of 18 inches (458mm) from the center line of the termination	18 inches (458mm)	18 inches (458mm)
E = Clearance to unventilated soffit	12 inches (305mm)	12 inches (305mm)
F = Clearance to outside corner	5 inches (12.7cm) minimum	5 inches (12.7cm) minimum
G = Clearance to inside corner	2 inches (5.08cm) minimum - SV4.5HT-2	2 inches (5.08cm) minimum - SV4.5HT-2
H = Clearance to each inside of center line extended above meter/regulator assembly I = Clearance to service regulator vent outlet	3 feet (91cm) within a height of 15 feet above the meter/regulator assembly** 3 feet (91cm)**	3 feet (91cm) within a height of 15 feet above the meter/regulator assembly* 3 feet (91cm)*
J = Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance	6 inches (15cm) for appliances < 10,000 Btuh (3kW), 9 inches (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12 inches (30cm) for appliances > 50,000 Btuh (15kW)**	6 inches (15cm) for appliances < 10,000 Btuh (3kW), 12 inches (30cm) for appliances > 10,000 Btuh (3kW)
K = Clearance to a mechanical air supply inlet	3 feet (91cm) above if within 10 feet (3m) horizontally**	6 feet (1.83m)*
L = Clearance above paved sidewalk or paved diveway located on public property	7 feet (2.13m)‡	7 feet (2.13m)‡
M = Clearance under veranda, porch, deck or balcony	12 inches (30cm)‡	12 inches (30cm)*‡
N = Depth of Alcove (Maximum)	6 feet (1.83m)**	6 feet (1.83m)*
0 = Clearance to Termination (Alcove)	6 inches (15.2mm)**	6 inches (15.2mm)*
P = Width of Alcove (Minimum)	3 feet (91cm)*	3 feet (91cm)*
Q = Clearance to Combustible Above (Alcove)	18 inches (457mm)**	18 inches (457mm)*

^{*} In accordance with the current CSA-B149.1 National Gas And Propane Installation Code.

^{**} In accordance with the curent ANSI SZ223.1/NFPA 54 National Fuel Gas Codes.

[‡] A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.

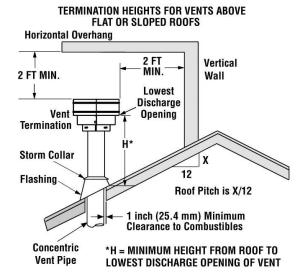
^{*‡} Only permitted if veranda, porch, deck or balcony is fully open on a minimum 2 sides beneath the floor:

VERTICAL TERMINATION CLEARANCES AND REQUIREMENTS

Important Note for Roof Terminations

These instructions should be used as a guideline and do not supersede local codes in any way. Install venting according to local codes, these instructions, the current National Fuel Gas Code (ANSI Z223.1 in the USA) or the current standard of CAN/CSA-B149.1 in Canada.

Vertical Vent Termination Clearances



The vent / air intake termination clearances above the high side of an angled roof is as shown in the following chart:

Figure 36

Termination Heights For Vents Above Flat Or Sloped Roofs Ref. NFPA 54 / ANSI Z223.1				
Roof Pitch	* Feet	* Meters		
Flat to 6/12	1.0	0.3		
6/12 to 7/12	1.25	0.38		
7/12 to 8/12	1.5	0.46		
8/12 to 9/12	2.0	0.61		
9/12 to 10/12	2.5	0.76		
10/12 to 11/12	3.25	0.99		
11/12 to 12/12	4.0	1.22		
12/12 to 14/12	5.0	1.52		
14/12 to 16/12	6.0	1.83		
16/12 to 18/12	7.0	2.13		
18/12 to 20/12	7.5	2.29		
20/12 to 21/12	8.0	2.44		

Figure 37: Termination Heights

A second termination may be no closer than 12"/305 mm.

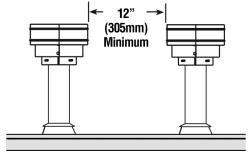


Figure 38: Multiple Termination Clearance

COMBUSTIBLE MATERIALS

Materials that can catch fire and burn are considered combustible. Any material that is made of, or faced with wood, wood pulp, paper, plastic or any other material that can catch fire and burn is considered combustible. Even though these materials may have been 'flame-proofed', made 'fire-resistant' or are 'fire-rated' they are considered combustible. **Standard and Type X drywall are combustible.**

NON-COMBUSTIBLE MATERIALS

A material is non-combustible when it cannot catch fire and burn. For example, materials made of stone, brick, concrete, tile, steel, plaster or glass are non-combustible.

The table below (Figure) shows a list of materials which are reported by their manufacturers to be non-combustible (in accordance with the ASTM E136 standard) AND approved for use around fireplaces.

Skamol Skamotec® 225 and the Promat PROMAFOUR® system are preferred products for enclosing fireplaces.

Product	Thickness
Skamol Skamotec® 225 Fireplace Building Board	1½" (38 mm)
Promat PROMAFOUR® System	½" (12 mm)
James Hardie Building Products HardieBacker® 500 ½" Cement Board	½" (12 mm)
James Hardie Building Products HardieBacker® ¼" Cement Board	¼" (6 mm)

Figure 39: * The listed brand names are trademarks of their respective companies.

Skamol Americas, Inc. (844) 475-2665 E-mail: skamotec225@skamol.com www.skamotec225.com

Promat Inc. (865) 681-0155 E-mail: sales@promat.us www.promat.us/en

James Hardie Building Products (888) 542-7343 www.jameshardie.com

BUILDING THE ENCLOSURE/FRAMING

A safe installation of your Element4 fireplace requires that three things be clearly understood.

- 1. Most important, these fireplaces are NOT zero-clearance fireplaces. Unlike zero-clearance fireplaces, there is not an outer metal box around the Element4 fireplaces which increases the framing dimensions.
- 2. Only the non-combustible wall around the glass, the platform (floor,) the mounting brackets and the venting may touch the fireplace.
- 3. The controls will be mounted to your enclosure and below the burner. The controls are at the end of a line set and are to be accessed via the Wall Access Door (included.) The controls must be located for ease of physical access (gas line, maintenance, etc.) as well as wireless signal (remote control) access. See the LOCATING THE CONTROLS and the MOUNTING THE CONTROLS sections. The Wall Access Door has a total opening of 25 in² (161 cm²) through which air must pass into the chase.

It may seem straightforward to build the 'rough opening', set the fireplace then attach the wall. However, *for most projects*, it will be easier to first set the fireplace in position then enclose it with Skamol Skamotec® or Promat PROMAFOUR® building board.

REDUCED CLEARANCE TO EXISTING COMBUSTIBLE WALLS

When retrofitting the fireplace against an existing wall it is often desirable to reduce the distance between the fireplace and the combustible wall. Normally, this distance is 11" (280 mm) but it may be reduced by shielding the existing finished wall with a 1" (25mm) air gap and a sheet of non-combustible material as shown on the following page.

IN ALL CASES:

- A reduced clearance "wall protection shield" is ONLY ALLOWED ON A VERTICAL WALL; IT IS NOT ALLOWED TO BE USED ON HORIZONTAL OR ANGLED SURFACES WITHIN THE NON-COMBUSTIBLE ZONE.
- The "wall protection shield" shall be placed no closer than 1" (25 mm) to the floor or any intersecting walls. Air MUST be allowed to continually circulate around all sides of the wall shield.
- A 1" (25 mm) air gap between the wall shield and the existing wall MUST be maintained.
- A 2" (50 mm) air gap between the wall shield and the fireplace MUST be maintained.

REDUCED CLEARANCE TO EXISTING COMBUSTIBLE WALLS

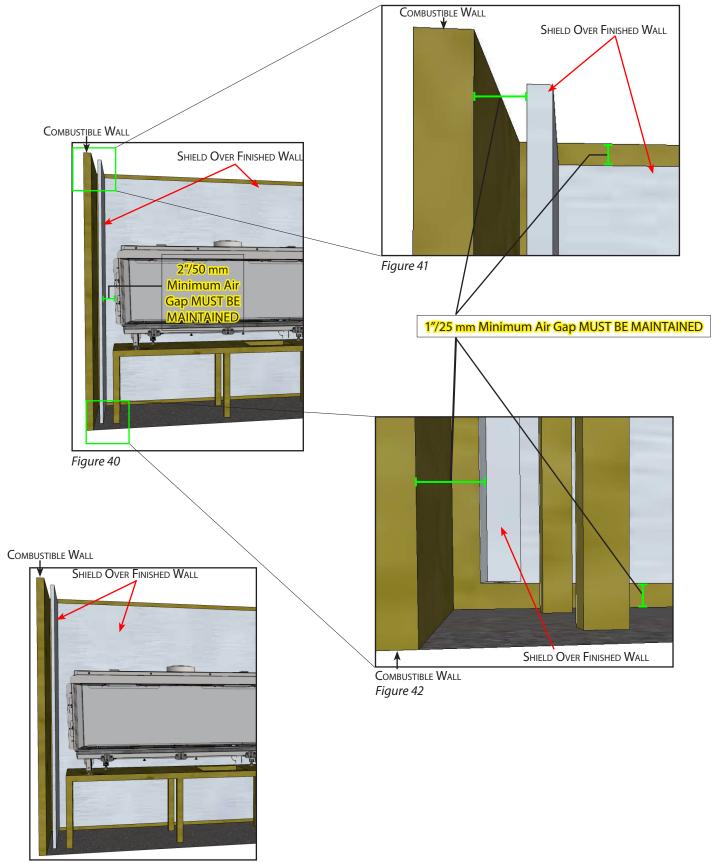
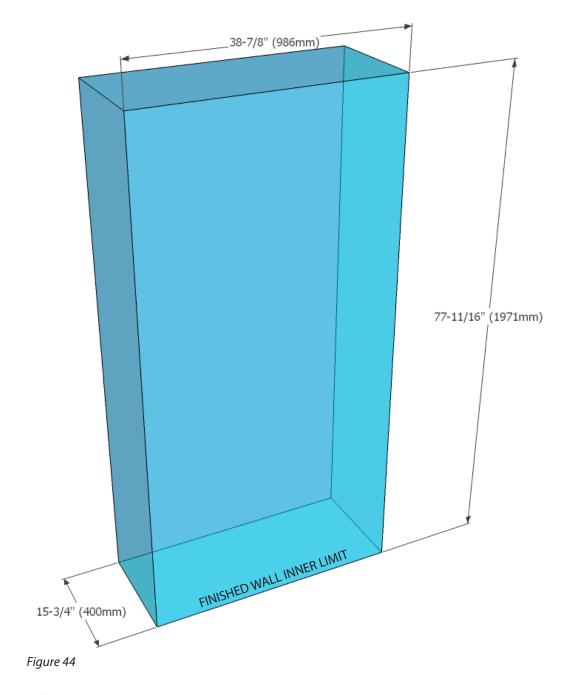


Figure 43

MINIMUM AREA REQUIRED FOR SKY MKII



When enclosing the Sky fireplace there is a minimum clear area which must be maintained. Nothing except the Sky may be within this area. When enclosed, the Sky is centered - left to right and front to back - within this minimum area, above. This minimum area MUST BE DEFINED BY NON-COMBUSTIBLE MATERIAL. The inside of the enclosing walls (including any necessary framing) may be no less than the distances shown above.

We recommend that the fireplace be set into its final location before building the enclosure.

MINIMUM AREA REQUIRED FOR SKY T MKII

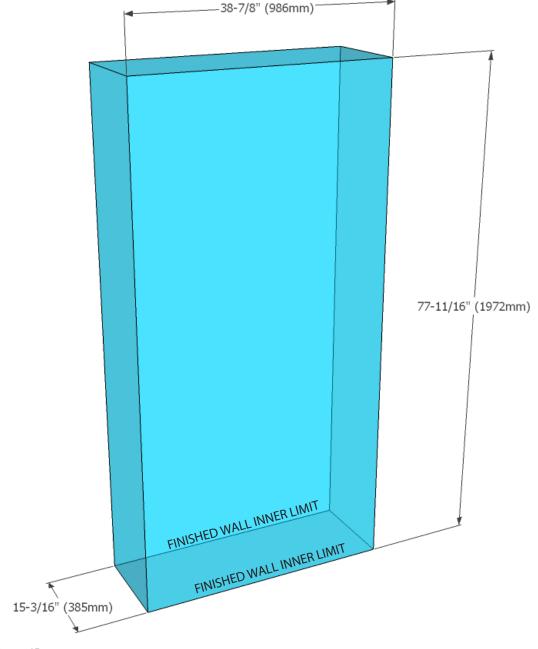


Figure 45

When enclosing the Sky T fireplace there is a minimum clear area which must be maintained. Nothing except the Sky T may be within this area. When enclosed, the Sky T is centered - left to right and front to back - within this minimum area, above. This minimum area *MUST BE DEFINED BY NON-COMBUSTIBLE MATERIAL*. The *inside* of the enclosing walls (including any necessary framing) may be no less than the distances shown above.

We recommend that the fireplace be set into its final location before building the enclosure.

The finished wall(s) must be at least $\frac{1}{2}$ "/12 mm thick or the fireplace trim will extend beyond the finished wall. The list below shows the thickness of the approved wall products.

Your choice of wall material depends largely on the intended finish. For example, a thinner wall product and a layer of stone may be thick enough to reach the trim edge. If a painted finish is desired then a wall at least ½"/12 mm thick will suffice.

Product	Thickness
Skamol Skamotec® 225 Fireplace Building Board	1½" (38 mm)
Promat PROMAFOUR® System	½" (12 mm)
James Hardie Building Products HardieBacker® 500 ½" Cement Board	½" (12 mm)
James Hardie Building Products HardieBacker® ¼" Cement Board	1⁄4" (6 mm)

Figure 46

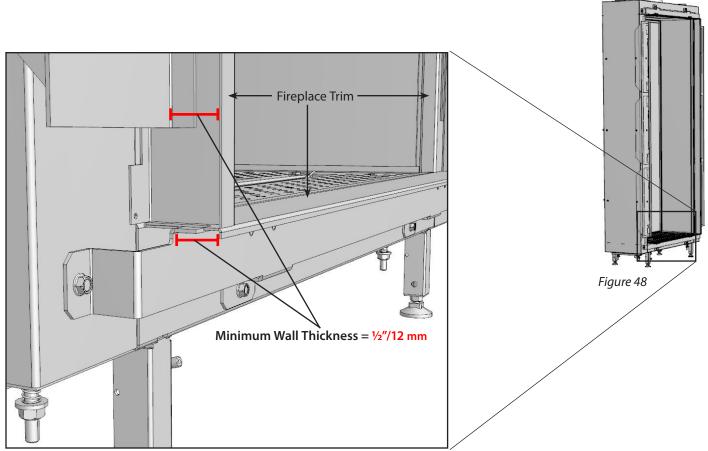


Figure 47

CONVECTION AIR OPENING

A convection air outlet is always required. The opening size of the convection air outlet varies by fireplace model. The **CLEARANCES** section shows the minimum total area required for the various models in this manual. The convection air outlet may take many forms and must always allow the free flow of warm air up through the chase and out into the room in which the fireplace is installed. Shown here are a number of ways to design the convection air outlet into your project (Figures 50 and 51).

Warm Air Outlet Area by Model				
Model	Square Inches	Square Centimeters		
Sky	50	322		
Sky T	50	322		

Figure 49

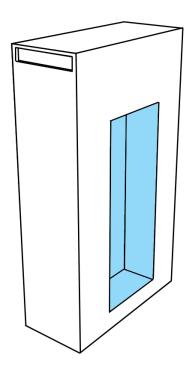


Figure 50: Sky/Sky T with End Wall Outlets

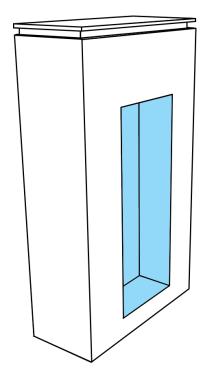


Figure 51: Sky/Sky T with Outlet in Reveal



DO NOT ALLOW THE FIREPLACE TO BEAR ANY WEIGHT



Dimensions A, B, and C must be equal throughout the installation.

Any support framing (NON-combustible framing ONLY) must be at least 2" (50 mm) away from any part of the fireplace. The entire weight of the non-combustible walls must be borne by a structure other than the fireplace.

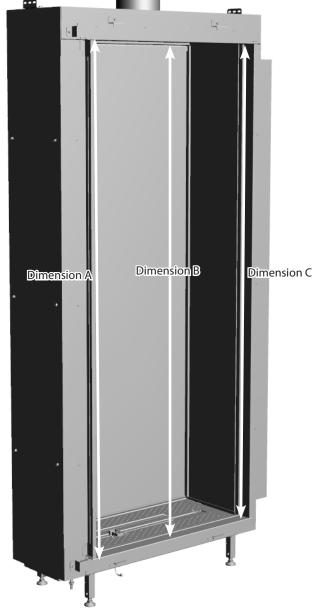


Figure 52

COLD CLIMATE INSULATION

For cold climate installations, it is especially important to insulate outside the chase cavity, between studs and under the floor on which appliance rests, if floor is above ground level. Gas line holes and other openings should be filled with approved firestop.

If the fireplace is being installed on a cement slab in cold climates, a sheet of plywood or a raised platform can be placed underneath to prevent cold transferring to the fireplace and into the room. It also helps to tape the venting for maximum air tightness and to caulk the firestops.

LOCATING THE CONTROLS

The control system for the Element4 fireplaces consist of three major components:

- · the receiver
- the remote
- the gas valve

The remote is the remote control by which you operate the fireplace. The receiver and the gas control are at one end of a line set which will extend approximately 50"/1270 mm from the *center* of the fireplace. The other end of the line set is connected to the firebox just left of center. As shipped, the line set is wrapped together and fixed beside the fireplace.

The Wall Access Door is provided with your fireplace and is designed to hold the receiver and gas control. When locating the Wall Access Door you must consider four types of access:

- 1. Air access. Room air must be allowed to flow freely through the door perforations, up through the site-built platform and above, through the enclosing fireplace chase.
- 2. Line set access. The line set is to be unwrapped which allows the controls to be then placed within approximately 50"/1270 mm from the center of the fireplace, as the cable runs.
- 3. Physical access. The gas valve/receiver must be readily accessible for maintenance, etc.
- 4. Wireless access. The signals from the remote must get to the receiver, inside the access door.

If the Access Door is not used its air access equivalent (25 square inches) as well as line set, physical and wireless access must be provided.

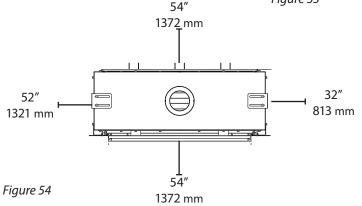
MOUNTING THE CONTROLS

Do not place the controls above the level of the burner. If the fireplace is to set directly on the floor, the controls must be placed outside the non-combustible zone or insulated from the heat from the fireplace.

The Wall Access Door ($11\frac{\pi}{286}$ mm high x $8\frac{\pi}{6}$ /214 mm wide outer frame) requires a rough opening of $9^{13}\frac{\pi}{6}$ /250 mm high x $6^{15}\frac{\pi}{175}$ mm wide. The door should be mounted with the hinge on the left side or with the hinge side down.

Wall Access Door Dimensions			
Outer Frame	Rough Opening		
111/4"/286 mm x 87/16"/214 mm	9 ¹³ /16"/250 mm x 6 ¹⁵ /16"/175 mm		

Figure 53



When measured at the level of the feet, the controls will reach no farther from the cabinet edge than shown at left. The drawing is not to scale.

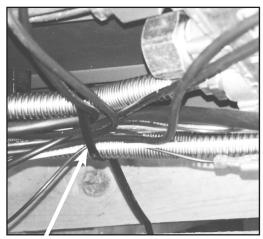


Figure 55

Carefully cut the black tie wraps which hold the line set to the bottom of the fireplace then carefully unwrap the line set. Lay the line set out towards the location of the Access Door. Do not kink the lineset and do not bend to a radius of less than 2"/50 mm.

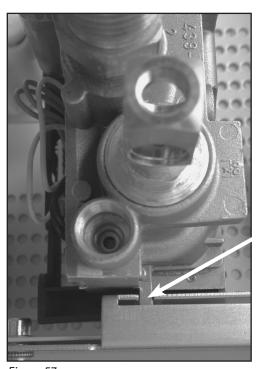


Figure 57
Fit the gas control tab into the bracket on the Access Door frame.

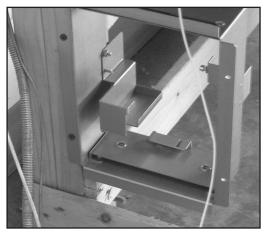


Figure 56

Remove the four bolts holding the white door/ frame cover to the frame. Separate the frame and cover then mount the Access Door frame to the rough opening as shown.

Replace the white door/frame cover onto the frame and secure it with the four bolts.

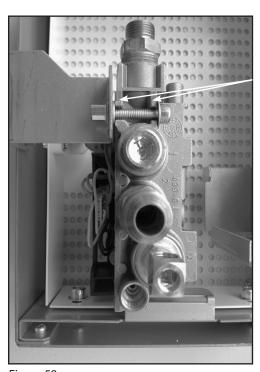


Figure 58
Tighten the bolt through the mounting bosses.



Figure 59

Set the receiver into the Wall Access Door bracket as shown and connect the AC adapter.

Wall Access Door with gas control and receiver mounted.

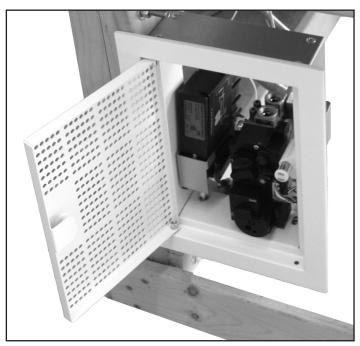


Figure 60

TEST FIRE

Prior to being placed into operation, the fireplace should be test-fired in stages to ensure that all components are in good working order. This fireplace has a 2nd thermocouple which senses the burner flame. **The system will turn itself off if the system does not sense the 2nd thermocouple output within 29 seconds after the valve opens.**

If 2nd thermocouple is still hot enough to produce electricity at the receiver thus preventing the fireplace from starting, the remote will flash "OFF" to signal this safety lock out. Allow time for the 2nd thermocouple to cool down before attempting a start. The system is ready to start when the flashing "OFF" becomes solid on the remote and pressing the ON/OFF button produces a response from the valve.

- 1. Start the fireplace with the hearth panel out and with the front glass off. Ensure that the pilot flame both heats the primary thermocouple and lights the burner. For safety, a post-purge delay is built into the system. Subsequent start attempts MUST NOT take place for at least thirty (30) seconds.
- 2. Start the fireplace with the hearth panel in place and with all of the glass panels fixed correctly in place. Ensure that the main burner flames engulf the 2nd thermocouple and the fireplace stays lit for at least 1 full minute. If the system turns itself off after 29 seconds install the required media (next section) and return here. Installing the fire media will help with the flame around the 2nd thermocouple. Subsequent start attempts MUST NOT take place for at least five (5) minutes.
- 3. Start the fireplace with the media installed. If the system turns itself off after 29 seconds, rearrange the media to produce a good flame at the 2nd thermocouple. This step may have to be repeated several times before the media is in the best place for consistent operation. A single, long beep indicates that the 2nd thermocouple is still too hot to start the ignition sequence. Allow time for the 2nd thermocouple to cool down. Once the system stays lit for at least one full minute, turn the fireplace off, fix the glass panels in place and operate the fireplace for at least 45 minutes to ensure the system works properly when heated.

LOG ARRANGEMENTS

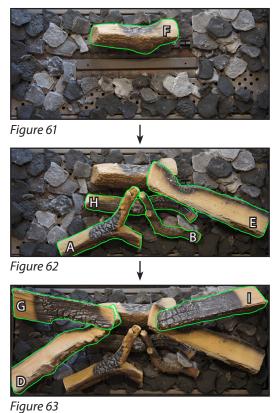
Ensure that the hearth panels are properly placed and sitting firmly on the base of the fire box. The pilot flame must be visible through the panel and the cut-out in the pilot shield. Scatter the bag of chips evenly on the hearth panel and burners. **Ensure that the area inside the pilot shield and the area around the 2**nd thermocouple remains clear of media.



What's in the box? (LSE 416 II)

- -(1) small bag of ash (optional use)
- -(8) logs
- -(2) pinecones
- -bags of black & grey chips

With the embers scattered across the burner and hearth panel, lay the logs in the following sequence...



rigure 0.



Figure 64

INSTALLING THE FIRE MEDIA

STONES/GLASS ARRANGEMENTS

Ensure that the hearth panel is sitting firmly on the base of the fire box and the shield is installed around the 2nd thermocouple. The center panel must be inserted in between the burner tubes. The pilot flame must be visible through the hearth panel and the pilot shield.

Evenly scatter the contents of the bag of stones/glass over the top of the hearth panel and burner. Ensure that none of the stones/glass enters the pilot area or restricts the operation of the 2nd thermocouple.

The arrangement is now complete. However, it is important to check that the pilot flame is still visible.

A shows the arrangement for stones; the arrangement for glass is similar.



Figure 65: actual burner pilot assembly and thermocouple location may vary depending on model. (grey stones shown here)

B shows the pilot area (below) clear of media (above).

C shows the 2nd thermocouple area (below) clear of media (above).

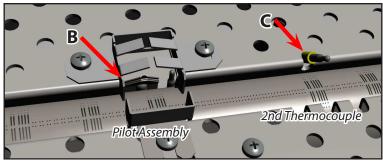


Figure 66

To see how to arrange media in an Element4 fireplace please visit the link below.

WWW.EUROPEANHOME.COM/RESOURCES/VIDEOS/



SCREEN INSTALLATION

SKY				
Upper Tabs	2			
Lower Tabs	6			
Magnets	10			
Long Screen	1			

Figure 67

SKY T	
Upper Tabs	4
Lower Tabs	12
Magnets	20
Long Screen	2

Figure 68



Place 3 magnets along each piece of vertical trim. As seen at left, place 1 magnet in each corner and 1 in the middle on each vertical trim.



Another view of the magnet location on the trim.

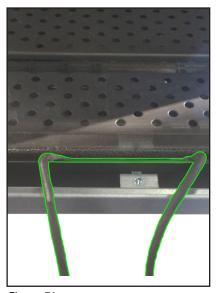


Figure 71
A completed screen installation for the Sky. Repeat the steps in this guide to install another screen on a Sky T.

BEFORE THE FIRST FIRE

- 1. Make certain that all construction materials have been removed from inside and around the fireplace and the fireplace has been cleaned of any construction dust. Clean the glass BEFORE and AFTER the first fire.
- 2. Confirm that the gas valve is properly connected and bled by a certified gas technician or plumber.
- 3. Check the gas supply for leaks and proper pressure. Refer to the table in "Appliance Ratings" section.
- 4. Check that the venting is unobstructed and in proper working condition.

5. PROPERLY PLACE, CLAMP, AND SEAL THE GLASS PANELS.

- 6. Ensure the receiver is powered with an AC Adapter OR Batteries, NOT BOTH.
- 7. Place the two (2) AAA batteries into the remote control and confirm that it will communicate with the receiver by pressing the *ON/OFF* button. If necessary pair the remote and receiver (see below).
- 8. Follow USING THE REMOTE CONTROL ELECTRONIC IGNITION SEQUENCE to setup and use remote.

PAIRING THE REMOTE AND RECEIVER (System Reset)

- 1. Press and hold the receiver reset button using a small, long tool until you hear the second of two beeps. After the second beep release the reset button.
- 2. Press and hold the button on the remote until you hear the second of two beeps. Release the button.

If you hear one long beep, this indicates the pairing sequence has failed or the wiring is incorrect. Re-synch the remote.



RESET BUTTON

Figure 72

GAS VALVE KNOBS

PRESSURE REGULATOR **SCREW**

After removing the black plastic plug, turn the screw counterclockwise to lower the pressure and clockwise to raise the pressure. This adjustment is required for fuel conversions.

MANUAL KNOB IN
ON POSITION



Fiaure 73

MAIN VALVE KNOB IN ON POSITION

This knob is AUTOMATIC and will turn to OFF when the fireplace is turned off and to ON when the fireplace is turned on.

Note! For normal operation the MANUAL knob on the gas valve cannot be in the **MAN** position; it must be fully in the **ON** position.

10 BUTTON REMOTE CONTROL

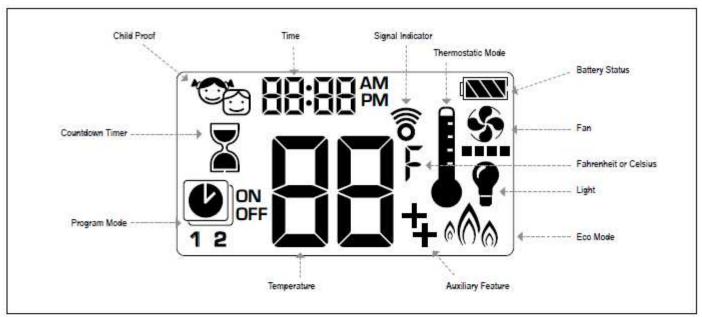


Figure 74

SETTING FAHRENHEIT or CELSIUS



To change between °C and °F, press (6) and (3) buttons simultaneously.

NOTE: Choosing °F results in a 12 hour clock. Choosing °C results in a 24 hour clock.

CHILD PROOF



ON:

To activate press (b) and (v) buttons simultaneously. adisplayed and the handset is rendered inoperable, except for the off function.

OFF:

To deactivate press (b) and (v) buttons simultaneously. a disappears.

SETTING the TIME

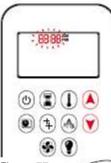


Figure 77

- 1. Press (A) and (V) buttons simultaneously. Day flashes.
- 2. Press A or V button to select a number to correspond with the day of the week (e.g. !=Monday, 2=Tuesday, 3=Wednesday, 4=Thursday, 5=Friday, € = Saturday, 1= Sunday).

 3. Press ▲ and ♥ buttons simultane-
- ously. Hour flashes.
- To select hour press ♠ or ♥ button.
- 5. Press A and V buttons simultaneously. Minutes flash.
- 6. To select minutes press ▲ or ♥ but-
- 7. To confirm press A and V buttons simultaneously or wait.

MANUAL MODE (HANDSET)

NOTICE

BEFORE OPERATING

- 1. Make sure MANUAL knob on the GV60 valve is in the ON, full counterclockwise position.
- Place the ON/OFF switch (if equipped) in the I (ON) position.

TO TURN ON FIRE

WARNING

When pilot ignition is confirmed, motor turns automatically to maximum flame height.



Handset One-Button Operation (Default Setting)

- Press

 button until two short beeps and a blinking series of lines confirms the start sequence has begun; release button.
- Main gas flows once pilot ignition is confirmed.
- Handset automatically goes into Manual Mode after main burner ignition.

Figure 78

NOTICE

Change from one-button to two-button ignition operation by pressing and holding (a) button for 10 sec. immediately after installing batteries. **ON** is displayed and **1** is flashing. When change is complete **1** will change to **2**.



Handset Two-Button Operation

- Press

 and

 button simultaneously until two short beeps and a blinking series of lines confirms the start sequence has begun; release buttons.
- Main gas flows once pilot ignition is confirmed.
- Handset automatically goes into Manual Mode after main burner ignition.

нопсе

Change from two-button to one-button ignition operation by pressing and holding 0 button for 10 sec. immediately after installing batteries. **ON** is displayed and **2** is flashing. When change is complete **2** will change to **1**.

▲ WARNING

If the pilot does not stay lit after several tries, turn the main valve knob to OFF and follow the instructions "TURN OFF GAS TO APPLIANCE" (page 19).

STANDBY MODE (PILOT FLAME)

Handset

Press and hold button to set appliance to pilot flame.

TO TURN OFF FIRE



Handset

Press button to turn off.

NOTE: There is a 5 sec delay before the next ignition is possible.

FLAME HEIGHT ADJUSTMENT

Handset

- To increase flame height press and hold button.

DESIGNATED LOW FIRE and HIGH FIRE

NOTE: Backlight must be on for high fire and low fire double-click operation.



 To go to low fire, double-click button. L
 is displayed.

NOTE: Flame goes to high fire first before going to low fire.

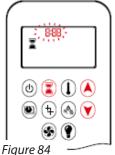


 To go to high fire, double-click button. H is displayed.

▲ WARNING

If the appliance will not operate, follow the instructions "TURN OFF GAS TO APPLIANCE" (page 19).

COUNTDOWN TIMER



ON/SETTING:

- To select hour press ♠ or ♥ button.
- To confirm press button. Minutes flash
- To select minutes press ♠ or ♥ button.
- To confirm press (2) button or wait.

OFF:

Press

button,

and countdown time disappear.

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

MODES of OPERATION



Thermostatic Mode

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

Figure 85



Program Mode

Programs 1 and 2, each can be programmed to go on and off at specific times at a set temperature.

Figure 87



MA Eco Mode

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

THERMOSTATIC MODE



ON: Pres

Press () button. I displayed, preset temperature displayed briefly, and then room temperature displayed.

OFF:

- 1. Press (I) button.
- Press (a) or (v) button to enter Manual Mode.
- Press button to enter Program Mode.
- 4. Press A button to enter Eco Mode.



Figure 92

SETTING:

- Press () button and hold until (displayed, temperature flashes.
- To adjust set temperature press or button.
- 3. To confirm press (1) button or wait.

PROGRAM MODE



ON-

Press @ button. . t or 2, ON or OFF displayed.

Figure 86



OFF

- Press button to enter Eco Mode.

Figure 88

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

Default settings:

ON TIME (Thermostatic) TEMPERATURE: 21 °C (70 °F) OFF TIME TEMPERATURE: "--" (pilot flame only)



TEMPERATURE SETTING:

- Press button and hold until flashes. ON and set temperature (setting in Thermostatic Mode) displayed.
- To continue press button or wait.
 OFF displayed, temperature flashes.
- Select off temperature by pressing the (A) or (▼) button.
- To confirm press button.

Figure 91

NOTE: The on (Thermostatic) and off set temperatures are the same for each day.



DAY SETTING:

- To confirm press button.

RLL selected



ON TIME SETTING (PROGRAM 1):

- 1, ON displayed, RLL is displayed shortly, and hour flashes.
- To select hour press ♠ or ♥ button.
- To confirm press button. , 1,
 ON displayed, RLL displayed shortly, and minutes flash.
- To select minutes press ♠ or ♥ button.
- 11. To confirm press @ button.



OFF TIME SETTING (PROGRAM 1):

- 12. 1, OFF displayed, RLL is displayed shortly, and hour flashes.
- To select hour, press A or V button.
- To confirm press button. 1,
 OFF displayed, RLL displayed shortly, and minutes flash.
- To select minutes press or button.
- 16. To confirm press @ button.

Figure 96

NOTE: Either continue to PROGRAM 2 and set on and off times or stop programming at this point, and PROGRAM 2 remains deactivated.

NOTE: PROGRAM 1 and 2 use the same on (Thermostatic) and off temperatures for RLL, SRSU and Daily Timer (1, 2, 3, 4, 5, 5, 1). Once a new on (Thermostatic) and/or off temperature has been set, that temperature becomes the new default setting.

NOTE: If Rtt., SRSU or Daily Timer are programmed for PRO-GRAM 1 and PROGRAM 2 on and off times, these become the new default times. The batteries must be removed to clear the PROGRAM 1 and PROGRAM 2 on and off times and temperatures.

5RSU or Daily Timer (1, 2, 3, 4, 5, 6, 1) selected

- Set on time and off time using same procedure as "RLL selected" (above).
- 5R5t: Set on time and off time for both Saturday and Sunday.
- Daily Timer: Unique on and off times may be set for a single day of the week, for multiple days of the week, or for every day of the week.
- · Wait to finish setting.

AUXILIARY FEATURE

Upon ignition burner 1 is on and burner 2 is in the last setting.



ON:

To switch a burner on, press the 🕏 button. ‡ displayed.

OFF:

To switch the burner off, press the \$\pm\$ button. \$\pm\$ disappears.

AUTOMATIC TURN DOWN

3 Hour No Communication Function

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

Receiver Overheating

(only if module is connected)

 Valve turns to pilot flame if the temperature in the receiver is higher than 140°F (60°C). The main burner turns back on (manually or in Thermostatic Mode) only when the temperature is below 140°F (60°C).

AUTOMATIC SHUT OFF

Countdown Timer

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

Low Battery Receiver

 With low battery power in the receiver the system shuts off the fire completely. This will not happen if the power supply is interrupted.

On-Demand Pilot

- This green feature eliminates gas energy consumption during extended appliance inactivity. When the appliance is inactive for an extended period of time the system automatically extinguishes the pilot. This feature helps the consumer realize cost benefits by automatically eliminating energy consumption during non-heating months and limited use.
- The programmed length of inactivity to activate the system is specified by the appliance manufacturer and cannot be altered in the field.

2nd Thermocouple Shut Off

 2nd thermocouple Option: The system shuts off the fire if the main burner does not completely ignite approximately 20 seconds after ignition or after pushing button.

NOTE: Before the next ignition there is a 2 minute waiting period. If the thermocouple is then still too hot, you will hear a long beep.



LED MODE

LED Mode can only be used for Club and Summum Series fireplaces. Press the button to turn on, dim, and turn off LED burner function. To change LED color (Club Series only) you must use the ProControl App.

GENERAL NOTES

NOTICE

Wiring of valve and receiver must be completed before starting ignition. Failure to do so could damage the electronics.

Batteries - Remote

· Low battery indicator on remotes.

Batteries - Receiver

- Low battery indication: frequent beeps for 3 seconds when motor turns.
- Instead of batteries, the included AC adapter should be used for improved reliability and customer satisfaction.

WARNING

- Old or dead batteries should be removed immediately. If left in the unit the batteries can overheat, leak, and/or explode.
- Do NOT expose batteries (including during storage) to direct sunlight, excessive heat, fire, moisture, or severe impact. Each of these conditions can cause the batteries to overheat, leak, and/or explode.
- New and old batteries and different brands of batteries should not be used together. Mixing of various batteries can cause the batteries to overheat, leak, and/or explode.

Software Version

Press and buttons simultaneously. Software version is displayed.

Remote Model Number

Press and v buttons simultaneously. Remote model number is displayed.

Deactivate Functions

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

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

NOTE: Deactivation remains in effect after change of batteries.

Activate Functions

- 1. Install batteries. All icons are displayed and flashing.
- 2. To activate a function, press the relevant button and hold for
- 3. The function icon will continue to flash until activation is complete. Activation is complete when the function icon is displayed.

The following Functions can be Deactivated/Activated

- CHILD PROOF (To activate press (b) and (v) buttons simultaneously. (c) displayed and the remote is rendered inoperable (except for off function).
- PROGRAM MODE
- THERMOSTATIC MODE (also deactivates Program Mode)
- ECO MODE
- LIGHT/DIMMER OPERATION
- CIRCULATING FAN OPERATION
- AUXILIARY FEATURE
- COUNTDOWN TIMER

Automatic Turndown.

- 1. In Manual/Temperature/Timer modes, the valve will turn to pilot flame if there is no change in flame height for a six hour period. In Temperature or Timer mode, if the ambient room temperature changes, the flame height will adjust automatically to maintain set temperature and the fire will continue to function normally. The valve will turn to pilot flame if the set temperature and the ambient room temperature remain the same over a six hour period.
- 2. The valve turns to pilot flame if the temperature in the receiver is higher than 140° F/60°C. The burners comes back on only when the temperature is below 140° F/60°C.

Automatic Shut Off.

- 1. With low battery power in the receiver, the system shuts off the fire completely. This does not happen if the power supply is interrupted.
- 2. The system shuts off the fire completely if there is no change in flame height for 5 days.
- 3. The system shuts off the fire if the main burner does not completely ignite approximately 20 seconds after ignition or after pushing the 🛦 button.

THE FIRST FIRE

When the fireplace is first heated, an odor may be given off by the hot metal. This is normal and is a result of the 'burn off' of the lubricants and sealants used when manufacturing the fireplace. We recommend that you open the nearby windows for extra ventilation and then operate the fireplace for at least four hours.

When the glass is cold, some condensation may appear on the glass after lighting the fireplace. This is normal and the condensation will disappear as the glass warms.

During this first fire, examine the flame for appearance and quality. Examine the burner media for sooting. The flame pattern should be similar to that show below (Figure ____). Flames may appear blue and will turn yellow after 15 to 20 minutes.

After this burn-off period, turn off the fireplace and let it cool <u>completely</u> to room temperature and clean both sides of the glass and the interior panels as described in the MAINTENANCE section.

Since it is a metal fireplace, the heat-up and cool-down cycles may produce some noises caused by the expansion and contraction of these metals. The premium materials and build quality of your fireplace will keep these sounds to a minimum.



Figure 97

To see an Element4 fireplace starting and running normally please visit the link below.

WWW.EUROPEANHOME.COM/RESOURCES/VIDEOS/



REMOVING AND CLEANING THE GLASS

OVERVIEW

The glass panel(s) are held in place by six gasketed clamps (three on either side with two bolts each) and a rope gasket at the upper edge of the glass. These instructions require two technicians and will show you how to remove and install the glass panel(s).

Please read these instructions completely before proceeding.

TOOLS REQUIRED

- No. 2 Phillips screwdriver (not included)
- Gloves (not included)
- 2 Suction Cups

REMOVING THE GLASS

Step 1.

Remove all of the trim pieces (magnetically attached) from the fireplace. The Sky T has two glass panels, therefore, twice the number of trim pieces. There is no top trim on either fireplace. The trim pieces are held firmly in place with magnets and will simply lift out. The bottom (horizontal) trim pieces are at the lower edge of the glass panels and the side (vertical pieces) are where the glass meets the wall.

Step 2.

The glass panel is held in place by gasketed glass clamps on the left and right ends and a rope gasket along the top edge. Remove the retaining bolt(s) holding the glass clamps and then remove the clamps. Gently pull the rope gasket from its channel.

Step 3.

Securely attach two vacuum glass clamps to the glass approximately 3/3 the way up from the bottom end and lift the glass up into the clearance notch.

With the glass panel raised into the upper rail, swing the lower edge of the glass panel out towards the room and gently lower the glass towards the floor until it clears the fireplace.

Step 4.

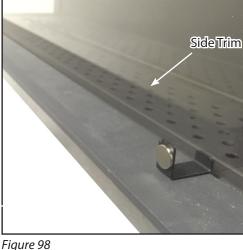
Repeat Steps 2 and 3 for the other glass panel, if present.

PROPERLY PLACE, CLAMP AND SEAL THE GLASS PANEL(S) **BEFORE LIGHTING THE FIRE!**

To see how to remove the glass from an Element4 fireplace please visit the link below.

WWW.EUROPEANHOME.COM/RESOURCES/VIDEOS/





Bottom Trim



Figure 99

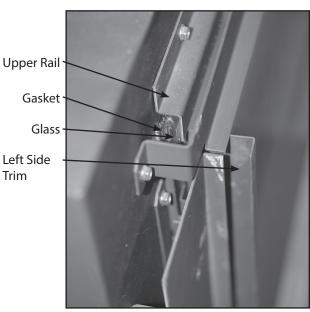


Figure 100

Trim

CLEANING THE GLASS

Burning natural gas (NG) or propane (LP) in this fireplace will always result in some of the gas components being deposited on the glass. Hydrogen sulfides and mercaptans, which are present in the burning gas, condense onto the relatively cooler glass surface and cause white film to build up over time.

The amount of this white film is influenced by a number of factors such as; the configuration of the system venting, thermal efficiency of the fireplace design, the humidity of combustion air, frequency of fireplace use, burner performance and, the fireplace design itself.

Do not use normal household (usually ammonia-based) glass cleaners to clean the glass as these cleaners can leave a permanent stain. Only a gas fireplace glass cleaner should be used. Products such as Stove Bright® Gas Appliance Glass Cleaner by Forrest Technical Coatings, Imperial Gas Fireplace Glass Cleaner by Imperial Manufacturing Group and GFC™ Gas Fireplace Glass Cleaner by A.W. Perkins Co. are designed for this purpose.

Follow the instructions for use and **do not clean the glass when** it is hot! If the glass becomes coated with deposits which cannot be removed it must be replaced.

The fireplace glass should be cleaned before the fireplace is first lit and then after the fireplace has been through its four hour burn-in cycle. This will reduce potential build up on your glass.

INSTALLING THE GLASS

The glass panel(s) should be installed in reverse order of their removal.

Step 1.

Securely attach two vacuum glass clamps to the glass approximately 2/3 the way up from the bottom end and lift the glass up into the clearance notch. Set the glass clamps into place and hold them loosely into place with a retaining bolt. DO NOT tighten the retaining bolts yet.

Step 2.

Ensure that the glass is flat against the firebox gasket and centered on the firebox.

Step 3.

Center the rope gasket on top of the gasket channel (in front of the upper edge of the glass.) While holding the center in place, gently stretch the gasket while pushing it into the gasket channel, left and right. Press the gasket down into the length of the gasket channel.

Step 4.

Hand tighten the bolts onto the glass clamps. Tighten the bolts ¼ turn further.

Step 5.

While ensuring that the glass panels are tight and square to each another, tighten the retaining bolt(s) on each clamp NO MORE THAN ½ TURN.

PROPERLY PLACE, CLAMP AND SEAL THE GLASS PANEL(S) BEFORE LIGHTING THE FIRE!

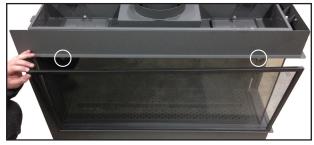


Figure 101



Figure 102

WARNING

Installation and maintenance must be performed by an authorized qualified installer, service agency or gas supplier.

TURN OFF THE GAS before servicing the appliance. It is recommended that a qualified service technician perform an appliance check-up/service once a year.

Any safety screen or guard removed for servicing MUST BE REPLACED before operating this appliance.

DO NOT USE this appliance if any part has been under water. Immediately call a qualified service technician to inspect the unit and to replace any part of the control system and any gas valve that has been under water.

Any alteration to the product that causes soot or carbon to form and results in damage is not the responsibility of the manufacturer.

Inspect the external vent cap on a regular basis to make sure that no debris, plants, trees, or shrubs are interfering with the air flow.

BURNER MAINTENANCE

The flames from the burner should be visually checked. The flame should have a blue base and yellow tops and be candle-like in appearance.

PILOT MAINTENANCE

The pilot flame must be visually checked. The pilot flame must always be present when the appliance is in operation and should appear as shown in Figure 106 (with hearth panel removed.)

The pilot has two distinct flames, one engulfing the thermocouple on its left, the other reaching across to the burner.

The area around the pilot should be inspected for cleanliness. Lint or foreign material must be removed with a brush or vacuum.

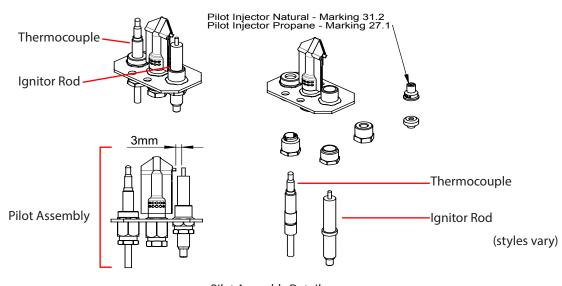


Figure 103 Pilot Assembly Detail



Figure 104

THERMOCOUPLE MAINTENANCE

The Element4 fireplaces have two thermocouples; one next to the pilot and one opposite the pilot side of the burner. The completeness and operation of both must be checked. A qualified installer must confirm that both thermocouples are in place and not damaged. While checking the thermocouple, please ensure that the ignitor rod is not cracked as well.

VENT MAINTENANCE

The following venting system inspection by a qualified service technician is recommended every six months:

- Inspect for excessive condensation, e.g. water droplets forming in the inner lining and subsequently dripping out of the joints. This can cause corrosion in the system.
- 2. Check for corrosion in areas exposed to the elements. Where rust spots or holes have appeared, these must be immediately replaced.
- 3. Ensure that there is no foreign material in the vents. Survey by removing the cap and shining a light down the vent.
- Check all joints and pipes to make sure that nothing has been disturbed or loosened.

REPLACEMENT PARTS

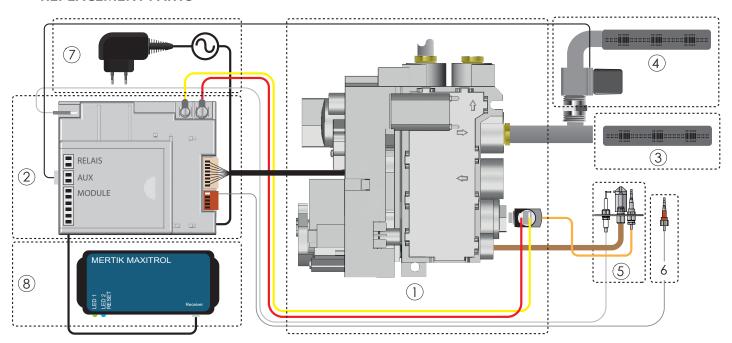


Figure 105



Item	Description	Quantity (Required)	Part Number (Each)
1	Gas valve	1	E4-GS-GV-01
2	Receiver (Control Module)	1	Befor 1/2020 E4-GS-CM-Wifi-03 After 1/2020 E4-GS-CM-Wifi-04
3	Main Burner		
4	2nd Burner		
5	Piolot Assembly	1	E4PGS-PABT-01
6	Second Thermocouple	1	E4-GS-2TC-01
7	6 Volt Adaptor	1	AC Adaptor-03
8	Wifi-Box (Optional)	1	E4-GS-Con-Wifi-01
9	10 Button Remote	1	Repl-E4-GS-RC-10B

Figure 107

WARRANTY

European Home Warranty Element4 Gas Fireplace

European Home warrants these gas fireplaces against defects in materials and workmanship for a period of TWO (2) YEARS from the date of original retail purchase. Glass is expressly NOT covered by this warranty.

If a defect exists, European Home will, at its option, either (1) provide needed components using new or refurbished replacement parts or (2) exchange the product with one which is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product. A replacement product/part assumes the remaining warranty of the original product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes the property of European Home. All warranty claims must be submitted through the dealer from which you purchased the product. Check with your dealer in advance for any costs to you when arranging a warranty call. Shipping and/or delivery charges for parts are not covered by this warranty.

Nothing in the above shall be deemed to imply that this warranty shall apply to work which has been abused or neglected or shows evidence of changes or modifications by others with or without permit, damages caused by the acts of God, building settlement or moving, fire or vandalism. In addition, installation of this product that varies from the requirements stated in the instruction manual will void the warranty.

PRODUCT INSTALLATION RECORD

Installer	Please comp	lete this f	orm

Customer: Please retain this information.

Model (check one)	SKY 🔾	SKY T 🔾	
Purchased From			
Date of Purchase			
Installed By			
Date of Installation			
Fireplace Serial Number			
Fuel Type			
Total Venting Horizontal			
Total Venting Vertical			

APPENDIX ONE

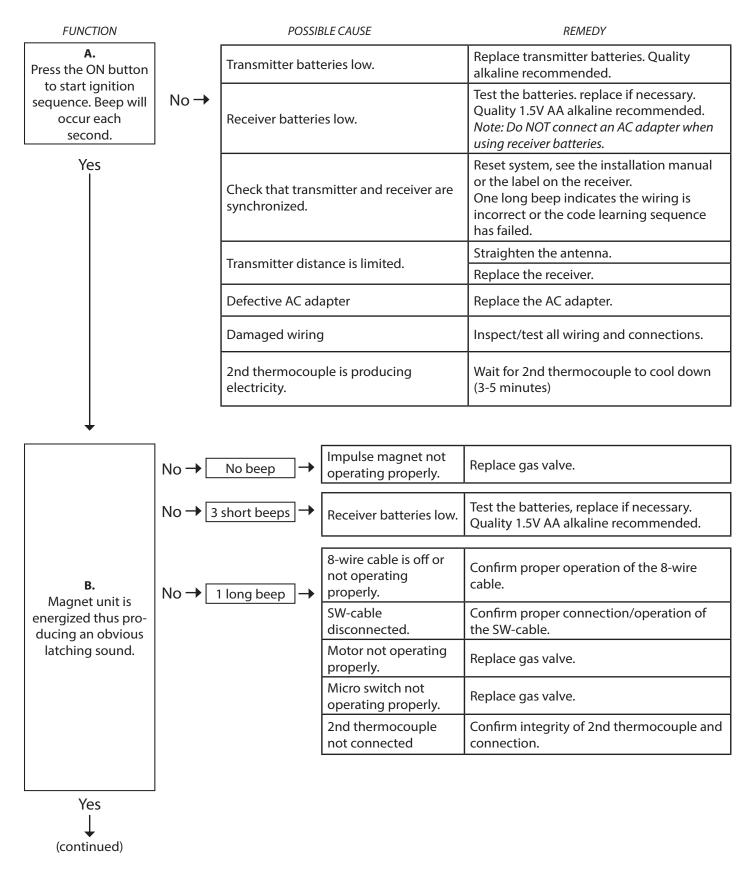
MASSACHUSETTS CERTIFICATION

This appliance is approved for installation in the Commonwealth of Massachusetts. The Board of State Examiners of Plumbers and Gas Fitters has issued approval number G1-0515-495 for this appliance.

The following must be observed when installing the Element4 fireplaces within the Commonwealth of Massachusetts:

- (a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:
- 1. INSTALLATION OF CARBON MONOXIDE DETECTORS. At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gasfitter 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 gasfitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors
 - a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level
 - b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.
- 2. APPROVED CARBON MONOXIDE DETECTORS. Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.
- 3. SIGNAGE. A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half ($\frac{1}{2}$) inch in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".
- 4. INSPECTION. The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.
 - (b) EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:
- 1. The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and
- 2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.
- (c) MANUFACTURER REQUIREMENTS GAS EQUIPMENT VENTING SYSTEM PROVIDED. When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:
 - 1. Detailed instructions for the installation of the venting system design or the venting system components; and
 - 2. A complete parts list for the venting system design or venting system.
- (d) MANUFACTURER REQUIREMENTS GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED. When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:
- 1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and
- 2. The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.
- (e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

TROUBLESHOOTING FLOW CHART



FUNCTION		POSSIBLE CAUSE		REMEDY	
			Check connection between ignition cable and ignitor rod.		
			Check ignite	or rod spark gap.	
	No →	Ignition components not operating properly.	Check ignito	or rod.	
		operating property.	Check ignition	on cable for damage.	
			Increase dist parts.	tance between ignition cable and all metal	
C. Spark will occur each second.	No→	Ignition sequence stops af	ter one spark	Remove ground bolt (T20 Torx) and clean ground lug.	
		Ignition sequence stops, no	o pilot flame.	Reset system, see the installation manual or the label on the receiver.	
	No →	No reaction to remote con		Do not coil the ignition cable.	
		command.		Shorten the ignition cable, if possible.	
	No→	Ignition sequence stops, no Transmitter command is po		Test the batteries, replace if necessary. Quality 1.5V AA alkaline recommended.	
Yes	1				
D. Pilot lit.	No→	TC- and SW-cable reversed.		Check cable connection between receiver and interrupter block.	
T HOC HC.]	Magnet unit not operating properly.		Replace gas valve.	
Yes		Short between interrupter and SW cable.		Check interrupter block connection.	
		No gas (magnet unit drops after 30 secon audible count.)		Check gas supply.	
		Spark not lighting the pilot.		Check spark is crossing pilot orifice.	
		Cracked ignitor rod (spark he seen)	ard but not	Ensure that ignitor rod does not move within ceramic shield. Check that ceramic shield or ignition wire is not defective.	
	,				
E.		Short between interrupter ble cable.	ock and TC-	Check connection to interrupter block.	
pilot is lit.		Electronic measuring amplific	er defective.	Replace the receiver.	
Yes (continued)	,				

FUNCTION		POSSIBLE CAUSE	REMEDY
	No→	Resistance in thermocouple circuit too high.	Check thermocouple circuit.
	Magnet unit drops (audible sound)	Not enough heat on thermocouple.	Check position of pilot to thermocouple. Check the stability and intensity of pilot flame. Ensure the proper restrictor is installed. Ensure that the pilot flame is properly adjusted. Possible cold start. Wait one minute and retry.
F.		Low voltage from thermocouple.	Replace thermocouple. Do not over tighten - hand tight plus ¼ turn <i>maximum</i> .
Motor turns to main gas and pilot stays lit.		No gas (magnet unit drops after 30 second audible count.)	Check gas supply.
	No → [Broken receiver	Ensure powered/unpowered receiver allows manual operation.
		Ignition sequence stops. No reaction to remote control command.	Reset system, see the installation manual or the label on the receiver. Do not coil the ignition cable.
		"140" models <i>ONLY:</i> Pilot flame under hearth panel not establishing.	Remove glass and hearth panel then check for proper pilot operation. If pilot establishes with panel off then install panel and glass and adjust pilot flame (hi/lo) for best operation.
Yes	•		
+			
G. Main burner is lit.	No→	Manual knob is in the "MAN" position.	Turn the control knob to "ON" position, a positive latch is required.
Yes	J	Pilot flame is too low.	Confirm correct gas pressure. Increase pilot flame if necessary.
(continued)			

FUNCTION POSSIBLE CAUSE REMEDY Too much draft at System pilot flame (poor Check venting installation. Use 'drops out' No → flame impingement restrictor as required. - all flames of primary immediately thermocouple.) go out Inspect pilot assembly for correct Pilot assembly out of operation and thermocouple order. impingement. The system shuts off the fire and pilot if 5 day shut off. there is no change in the flame height for 5 days. Main burner Ensure 2nd thermocouple is heated by a robust flame. The fireplace media may 2nd thermocouple is remains lit No → **→** while flames not heated. be interfering with proper flame. Check 2nd thermocouple wiring. are lowered. The system shuts off the fire when the (Main valve H. main burner flame is not sensed within knob is Main burner stays 29 seconds of ignition or not sensed turned via lit. after pressing the *large flame* button. motor.) 2nd thermocouple shut *Note:* If the system fails to light due off. to the 2nd thermocouple voltage not being sensed a two minute lockout period begins. This lockout time allows the gas to dissipate. In Manual/Temperature/Timer modes the valve turns down to pilot only if the System goes to pilot flame flame height does not change for a 6 No → hour period. only. In Temperature/Timer modes if 6 hours of no motor the ambient room temperature changes, the flame height will adjust movement. automatically to maintain the set temperature and the fire will continue to function normally. The valve will turn to pilot flame if the set temperature Yes and the ambient temperature remain the same over a 6 hour period. Test the batteries, replace if necessary. I. Receiver batteries low. Quality 1.5V AA alkaline recommended. Magnet unit drops Yes→ while motor turns. Ensure magnet unit is operating Test the receiver output to the magnet unit. normally. Receiver makes 3

beeps.

Remote/Receiver Combinations

FIREPLACE/ REMOTE SYSTEMS		EH PART #	MAXITROL PART #	DESCRIPTION
	Remote Control:	Repl-E4-GS-RC-01	G6R-H3T2FW	Maxitrol 4 Button Remote Control
Old Style (4-Buttons)	Receiver:	Repl-E4-GS-CM-01	G6R-R3AUT	Maxitrol Receiver Works with 4-button remote
	Gas Valve:	Repl-E4-GS-GV-01	GV60M1-C5B1KL-0003	Maxitrol Gas Valve

	Remote Control:		B6R-H9TL3W	Maxitrol Esave 8 Button Remote for use with Esave receiver
Esave MKII (8 Buttons)	Receiver:	Repl-E4-GS-CMESAVE-01	B6R-R9UT	Maxitrol Receiver for use with Esave Receiver only
	Gas Valve:	Repl-E4-GS-GV-01	GV60M1-C5B1KL-0003	Maxitrol Gas Valve

Improved Performance WiFi	Remote Control:	E4-GS-RC-Wifi	B6R-H9TL3P B6R-H9TL3PW	Maxitrol Esave 8 Button Remote supports Wifi
Receiver (29 secs)	Receiver:	E4-GS-CM-Wifi-02	B6R-R9PT2	Maxitrol Receiver supports Wifi
	Gas Valve:	Repl-E4-GS-GV-01	GV60M1-C5B1KL-0003	Maxitrol Gas Valve

FUNCTION		POSSIBLE CAUSE		REMEDY	
		Exhaust is contaminating the fresh air.		Inspect venting for damage and/or incorrect installation.	
J. Flames become thin, blue, wispy	Yes→	Flow of fresh air and/or exhaust is blocked.		Ensure that vent configuration is within the vent chart requirements.	
then go out.	162			Check termination for blockage and/or appropriate type.	
No		LP gas being used with NG orifice(s).	Ensure the gas type is correct for the installed orifices.	
Ţ					
K.		The air shutter is closed when usin LP gas.		hen using LP gas the air shutter must be fully pen. See conversion instructions.	
Flames are very yellow with dark,	Yes→	Flow of fresh air and/or exhaust is		nsure that vent configuration is within the ent chart requirements.	
sooty tips.		blocked.		neck termination for blockage and/or opropriate type.	
No					
L.		Air leak in the firebox.		heck unit for leaks at glass corners or at laskets.	
Flames are very busy and blowing in an abnormal direc-				Theck unit for positive relief door seal.	
tion.	Yes→			heck venting for complete integrity.	
No					
M. Flames are stable	Yes→	Too much primary air. Reduce the primary air opening until flames have blue base and yellow upper two-thirds.			
but too small and blue.					
No ↓	I				
NORMAL OPERATION					

APPENDIX THREE

CONNECTING TO A SMART HOME SYSTEM (Smart Home System Cable)

GENERAL NOTES

The fireplace may be operated through an external source such as a smart home (home automation) system by using the 5-pin connector on the receiver.

A required 39" (990 mm) cable, with connector, is available (p/n E4-SA-SHSC-02). The overall cable length should not exceed 26' (7925 mm.)

Signal relays (gold contacts) or opto-couplers are recommended but not supplied. The E4-SA-SHSC-02 cable must be connected to the three smart home system contacts as shown below.



WARNING



You MUST ensure that the fireplace is in a safe and ready condition before attempting to operate it from a remote location.

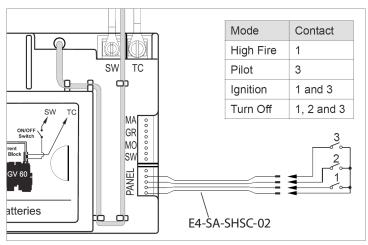


Figure 108

SEQUENCE OF OPERATION

- To start ignition, close contacts 1 and 3 simultaneously for 1 second.
- To set the valve to High Fire, close contact 1.

 To set the valve to Pilot, close contact 3. In each case, the contacts need to be closed for 12 seconds to turn the motor from one end-stop to the other end stop.
- To set the valve to the Off position, close contacts 1, 2, and 3 simultaneously for 1 second.

Modes of Operation

 Mode 1 - the external source provides "ON" and "OFF" operation only. The remote control provides all other functions.

Note: Even if the fire is switched on by the external source, the remote control, in the thermostatic mode, controls the room temperature. The room temperature setting of the remote control will remain the same for the next ON-cycle of the external source as long as the temperature setting of the remote control has not been changed. If the remote control is in manual mode, it will go to High Fire in the next cycle of external operation.

• Mode 2 - The remote control must be set to the manual mode if the external source is to control the room temperature. If the handset is placed in the thermostatic mode it will override the external source.

Note:

Frequent ON and OFF cycles will limit life expectancy of the valve and will increase battery consumption. The fireplace should be powered by the AC adapter for improved reliability and customer satisfaction.

APPENDIX FOUR

OPTIONAL BLACK GLASS INSTALLATION

Sky/Sky T Black Enamel Panel Installation

- 1. Remove fireplace trim and exterior glass following instructions shown previously in the manual (pg 45)
- 2. Remove fire media from hearth tray so as it is not in the way.
- 3. Using provided suction cups, remove side panels from unit by lifting up and then swinging out the bottom of the panel first then once it is cleared from the bottom channel it should slide out enough to remove it. If you have a Sky the same step is for the back panel of the unit.
- 4. Replace the removed panels with the black enamel panels by inserting the top of the panel in the channel first and then rotating the panel upright to bring the bottom of the panel into the bottom channel. Do this with both side panels and then the back panel if you have a Sky unit.
- 5. Replace the fire media on the hearth tray
- 6. Replace the glass and fireplace trim.

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