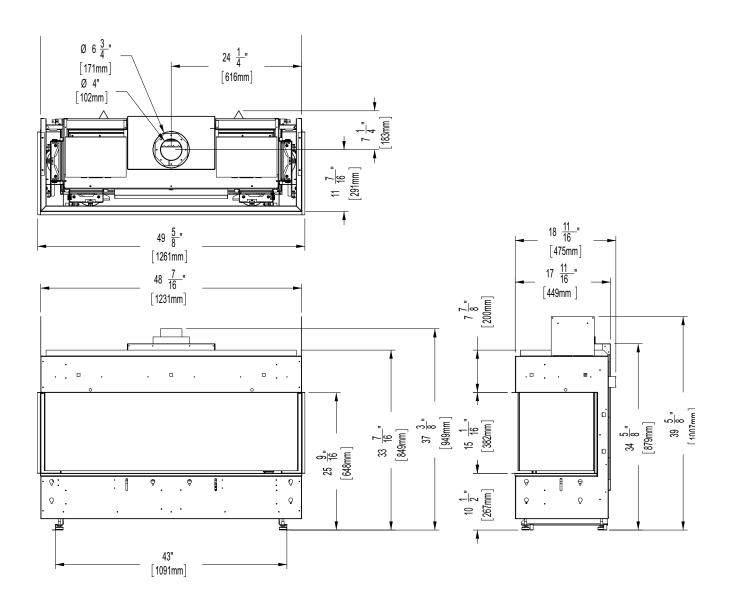


# **City Series CB40E Gas Fireplace**

Model	CB40E-NG	CB40E-LP	
Fuel Type	Natural Gas	Propane	
Minimum Supply Pressure	5" W.C. (1.25 kPa)	11" W.C. (2.73 kPa)	
Manifold Pressure - High	3.8" W.C. (0.94 kPa)	10.5" W.C. (2.62 kPa)	
Manifold Pressure - Low	1.1" W.C. (0.27 kPa)	2.9" W.C. (0.72 kPa)	
Orifice Size -Altitude 0-4500 ft.	#42 DMS	#53 DMS	
Minimum Input Altitude 0-4500 ft. (0-1372m)	15,500 BTU/h (4.54 kW)	15,500 BTU/h (4.54 kW)	
Maximum Input Altitude 0-4500 ft. (0-1372m)	28,500 BTU/h 28,500 BTU (8.33 kW) (8.33 kW		
Vent Sizing	4" Inner / 6-5/8" Outer	4" Inner / 6-5/8" Outer	





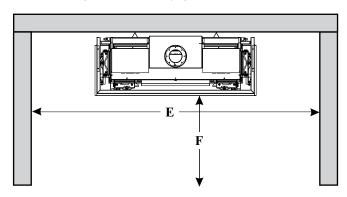


# **CLEARANCES CB40E (3 SIDED)**

Clearance: 3 sided	Dimension	Measured From:	
A: From Floor	25-9/16" (649mm)	Top of Fireplace Opening	
A₁: Mantel Height (min.)	**	Top of Fireplace Opening	
B: Sidewall (on one side)	8-1/2" (216mm)	Side of Fireplace Opening	
C: Enclosure Width (min.)	48-7/16" (1230mm)	Minimum inside dimensions	
D: Mantel Depth (max.)	**		
E: Alcove Width	84" (2134mm)	Side wall to side wall (min.)	
F: Alcove Depth	36" (914mm)	Front of Unit	
G: To Enclosure Ceiling (min/max)	0-3" (76mm)	From top of enclosure	
H: Convection Air outlet	120 sq. inches (min)	* Top/front or side of enclosure	
I: Enclosure Depth (min.)	19" (483mm)	Minimum inside dimensions	
J: Opening Height	15-1/16" (383mm)	Bottom/Top of Fireplace Opening	
K: To Ceiling (min) All 3 sides	1-1/2"	To Top of Ceiling	
L: Chase Enclosure (min.)	63" (1600mm)	From base of unit/floor	
Hearth	0"	No hearth required	
** See mantel clearances chart in this manual			

Flue Clearances to Combustibles			
Horizontal - Top	3"		
Horiztonal - Side	2"		
Horiztonal - Bottom	2"		
Vertical	2"		
Passing through wall/ floor/ceiling - when firestop is used.	1-1/2"		

<sup>\*</sup> A minimum of 120 square inches of open area, not lower than 3" from top of enclosure, required for all installations — this can be achieved by having an open area in front, each side, and/or above as shown in the four diagrams on the next page.



### Alcove



The **HeatWave** Duct Kit has different clearance and framing requirements, check the **HeatWave** manual for details.

### **Caution Requirements**

The top, back and sides of the fireplace are defined by standoffs. The metal ends of the standoff may **NOT** be recessed into combustible construction.

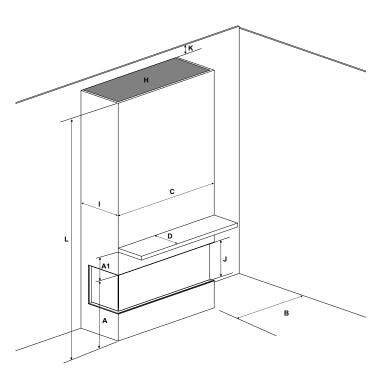
### WARNING

### Fire hazard is an extreme risk

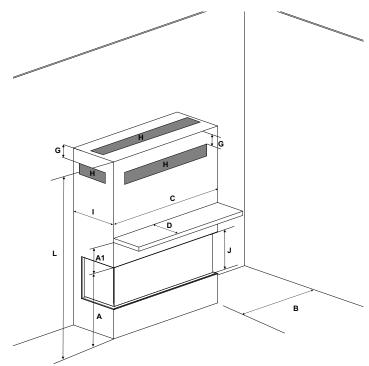
if these clearances (air space) to combustible materials are not adhered to. It is of greatest importance that this fireplace and vent system be installed only in accordance with these instructions.



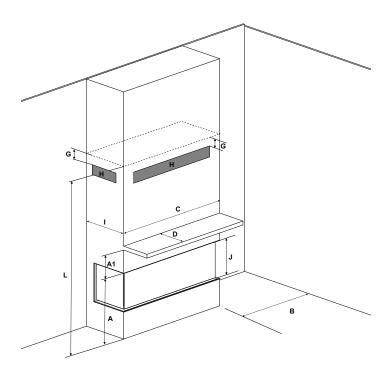
# **CLEARANCES CB40E (3 SIDED)**



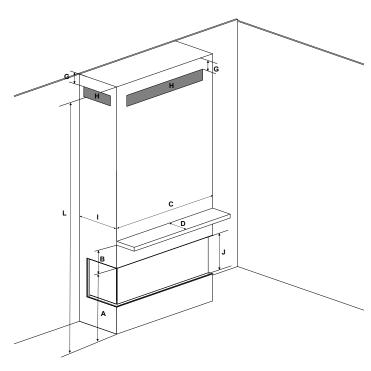
Floor to ceiling with top opening



Low framing with vents in front/sides or top



Full framing with low vents in front or sides



Full framing with vents in front or sides

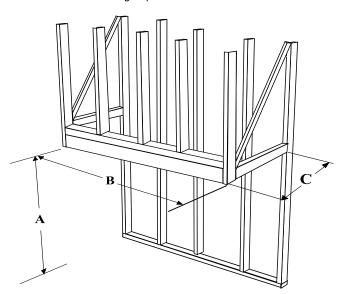


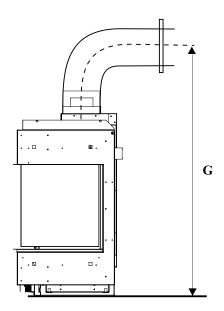
# FRAMING DIMENSIONS CB40E (3 SIDED)

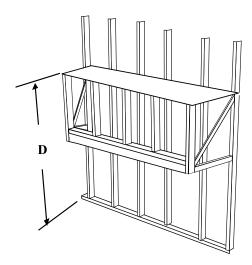
NOTE: Framing may be constructed of combustible material (ie. 2x4) and does not require steel studs. Two (2) optional steel stud kits may also be purchased. These kits may be used in place of the conventional wood framing as shown below. It comes as a compact kit (flush to the appliance on all sides) or an extended kit. The extended kit protrudes beyond each side of the appliance as shown on the front cover of this manual. There is also an optional hearth kit which may be purchased as shown on the front cover of this manual. These kits are highly recommended as it was designed specifically for the product to facilitate ease of installation. See instructions in this manual for details.

Framing Dimensions	Description	CB40E
Α	Framing Height	37-3/8" (949mm)
В	Framing Width	48-1/2" (1232mm)
С	Framing Depth	19" (483mm)
D	Minimum Height to Combustibles	63"(1600mm)
G	Vent Centerline Height	56-1/4" (1429mm)
1	Gas Connection Opening Height	2" (51mm)
J	Gas Connection Height	4 " (106mm)
K	Gas Connection Inset	13" (330mm)
L	Gas Connection Opening Width	3-1/2" (89mm)

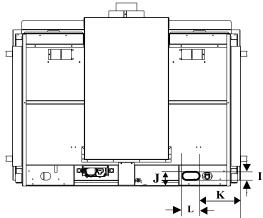
**Note:** A combined minimum of 120 square inches of open area is required for the convection air outlet to cool the enclosure. Ensure clearances for Convection Air Outlets are met. See clearances CB40E (3 sided) in this manual as there are different methods as to how this can be achieved. **Note:** Only basic framing dimensions are shown. The framing may also extend beyond the appliance on either side and also extend out front if a hearth is desired. See clearance/finishing requirements for details







**Note**: This appliance must be installed on a solid surface such as a plywood floor which must be the full width and depth of the appliance.

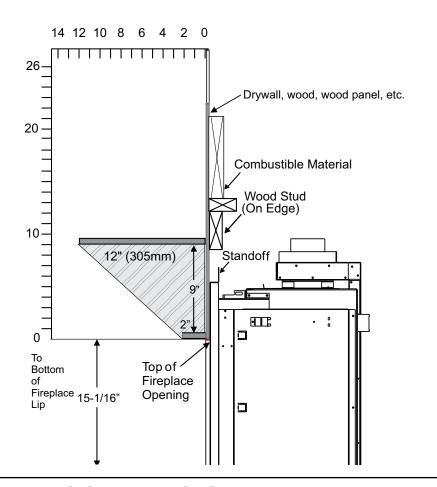




# **MANTEL CLEARANCES CB40E (3 SIDED)**

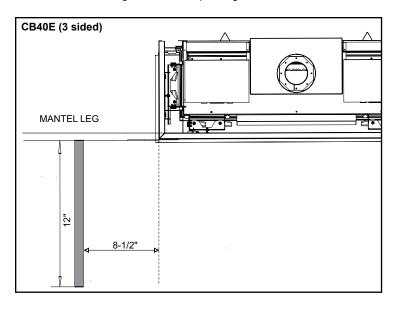
Due to the extreme heat this fireplace emits, the mantel clearances are critical. Combustible mantel clearances from top of front facing are shown in the diagram on the right.

Note: Ensure the paint that is used on the mantel and the facing is "high quality" or the paint may discolour.



# **MANTEL LEG CLEARANCES**

Combustible mantel leg clearances as per diagram:





# **VENTING INTRODUCTION**

The CB40E uses the "balanced flue" technology Co-Axial system. The inner liner vents products of combustion to the outside while the outer liner draws outside combustion air into the combustion chamber thereby eliminating the need to use heated room air for combustion and losing warm room air up the chimney.

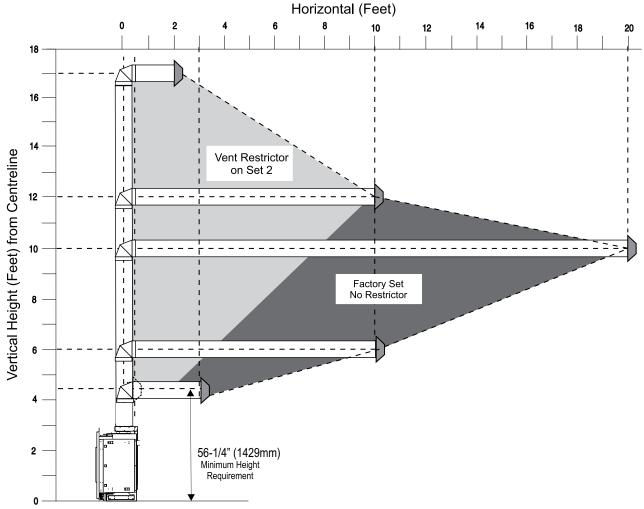
Note: These flue pipes must not be connected to any other appliance.

The gas appliance and vent system must be vented directly to the outside of the building, and never be attached to a chimney serving a separate solid fuel or gas burning appliance. Each direct vent gas appliance must use it's own separate vent system. Common vent systems are prohibited.

# VENTING ARRANGEMENT FOR HORIZONTAL TERMINATIONS

The diagram shows all allowable combinations of vertical runs with horizontal terminations, using one 90° (two 45° elbows equal one 90° elbow).

Note: Must use optional rigid pipe adapter (Part# 510-994) when using Rigid Pipe Venting Systems)



### **VENT RESTRICTOR SETTING:**

Vent restrictor factory set at Set 0.

Refer to the "Vent Restrictor Position" section for details on how to change the vent restrictor from the factory setting of Set 0 to Set 2 if required. NOTE: A minimum of 1' (305mm) vertical off the top of the unit is required before any horizontal runs can start.

Note: For horizontal terminations the Regency Direct Vent Flex System may be used for installations with a maximum continuous vent length of up to 10 feet. If longer runs are required, rigid pipe must be used.

- · Maintain clearances to combustibles as listed in "Clearances" section
- Horizontal vent must be supported every 3 feet.
- · Firestops are required at each floor level and whenever passing through a wall.
- A vent guard should be used whenever the termination is lower than the specified minimum or as per local codes.
- Flex system can only be used up to 10 feet otherwise rigid venting must be used.



# **HORIZONTAL TERMINATIONS**

# **RIGID PIPE 4" X 6-5/8"**

The diagrams below shows examples of horizontal termination arrangements using one, two, or three 90° elbows (two 45° elbows equal one 90° elbow)

- 1. A maximum of three 90° elbows are permitted.
- 2. Minimum distance between elbows is 1 ft. (305mm).
- Maintain clearances to combustibles as listed in the "Clearances" section.
- Horizontal vent must be supported every 3 feet.
- · Firestops are required at each floor level and whenever passing through a wall.
- Must use optional rigid pipe adaptor (Part# 510-994. when using rigid pipe vent systems.
- · A vent guard should be used whenever the termination is lower than the specified minimum or as per local codes.
- · Flex system can only be used up to 10 feet otherwise rigid venting must be used.

# HORIZONTAL VENTING WITH TWO (2) 90° ELBOWS

### One 90° elbow = Two 45° elbows.

Option	٧	H + H1			
A)	1' Min.	2' Max.	With these options, maximum total pipe length		
B)	2' Min.	4' Max.	is 30 feet with minimum		
C)	3' Min.	5' Max.	of 6 feet total vertical and maximum 8 feet total		
D)	4' Min.	6' Max.	horizontal.		
E)	5' Min.	7' Max.	Please note minimum		
F)	6' Min.	8' Max.	foot between 90° elbows		
Restrictor Set 0 - Factory Setting		is required.			

# H1 V

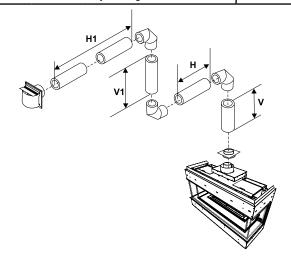
## HORIZONTAL VENTING WITH THREE (3) 90° ELBOWS

One 90° elbow = Two 45° elbows.

Option	V	Н	V + V1	H + H1
A)	1' Min.	1' Max.	2' Min.	2' Max.
B)	1' Min.	2' Max.	3' Min.	3' Max.
C)	2' Min.	2' Max.	5' Min.	4' Max.
D)	3' Min.	2' Max.	7' Min.	5' Max.
E)	4' Min.	3 Max.	9' Min.	6' Max.
F)	5' Min.	4' Max.	10' Min.	7' Max.
G)	6' Min.	5' Max.	11' Min.	8' Max.
H)	7' Min.	6' Max.	12' Min.	9' Max.
Restrictor Set 0 - Factory Setting				

With these options, max. total pipe length is 30 feet with min. of 12 feet total vertical and max. 9 feet total horizontal.

Please note min. 1 foot between 90° elbows is required.





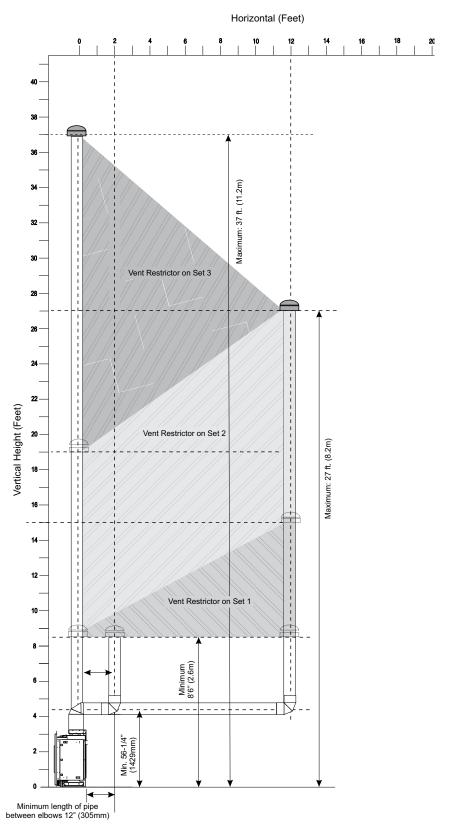
# VENTING ARRANGEMENT FOR VERTICAL TERMINATIONS

Vertical Venting with straight Vertical venting and or with a max. of two (2) 90° Elbows (1 - 90° = 2 - 45°)

The shaded area in the diagram shows all allowable combinations of straight vertical and offset to vertical terminations, using two 90° elbows, with **Rigid Pipe Venting Systems**.

Two 45° elbows equal to one 90° elbow.

- · Vent must be supported at offsets.
- · Minimum distance between elbows is 1 ft. (305mm).
- Maintain clearances to combustibles as listed in the "Clearances" section.
- · Horizontal vent must be supported every 3 feet.
- Firestops are required at each floor level and whenever passing through a wall.
- Must use optional rigid pipe adaptor (Part# 510-994. when using rigid pipe vent systems.
- Refer to the "Vent Restrictor Position" section for details on how to change the vent restrictor from the factory setting of Set 0 through to Set 3 if required.





# VERTICAL TERMINATIONS RIGID PIPE 4" X 6-5/8"

- Two 45° elbows equal to one 90° elbow. Maximum of six 45° elbows allowed, not including the starting 45° elbow at the flue collar.
- Vent must be supported at offsets.
- Minimum distance between elbows is 1 ft. (305mm).
- Maintain clearances to combustibles as listed in the "Clearances" section.
- Horizontal vent must be supported every 3 feet.
- Firestops are required at each floor level and whenever passing through a wall.

  Must use optional rigid pipe adaptor (Part# 510-994. when using rigid pipe vent systems)

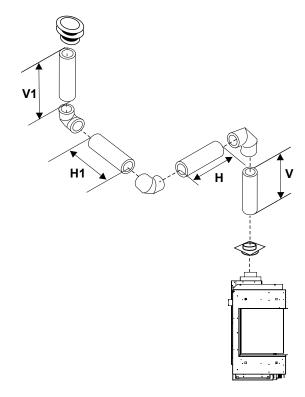
# Vertical Venting with Three (3) 90° Elbows

### One 90° elbow = Two 45° elbows.

Option	V	H + H1	V + V1	
A)	1' Min.	2' Max	3' Min.	
B)	2' Min.	3' Max	4' Min.	
C)	3' Min.	4' Max	6' Min.	
D)	4' Min.	5' Max	7' Min.	
E)	5' Min.	6' Max	8' Min.	
F)	6' Min.	7' Max	9' Min.	
G)	7' Min.	8' Max	10' Min.	
Lengths do not include elbow indicated				

With these options, max. total pipe length is 30 feet with min. of 10 feet total vertical and max. 8 feet total horizontal.

Please note min. 1 foot between 90° elbows is required.





# **GUIDELINES FOR INSTALLING A TV/ARTWORK ABOVE THE UNIT**

Note: All wiring should stay free and clear of the vent system to avoid damage due to heat. We recommend using a metal receptacle box and BX cable (120 volt wire protected by metal sheathing) if located directly in front of the vent system. Ensure wiring is secured without any sag.

**ZERO CLEARANCE TO TV:** While most consumers prefer to centrally locate a wall mounted TV, the "Cool-Touch Wall Technology" means that the bottom edge of the TV can be installed flush with the bottom edge of the ventilated fireplace chase opening.

# TV RECESSED INTO WALL

The TV may be recessed into a wall as shown below. This can only recess into the chase opening a maximum of 3-1/2 inches and must be a minimum of 12 inches from the fireplace lip to the first stud. To achieve a maximum of 3-1/2" recess, the wall must be of a maximum of 2" as shown.

