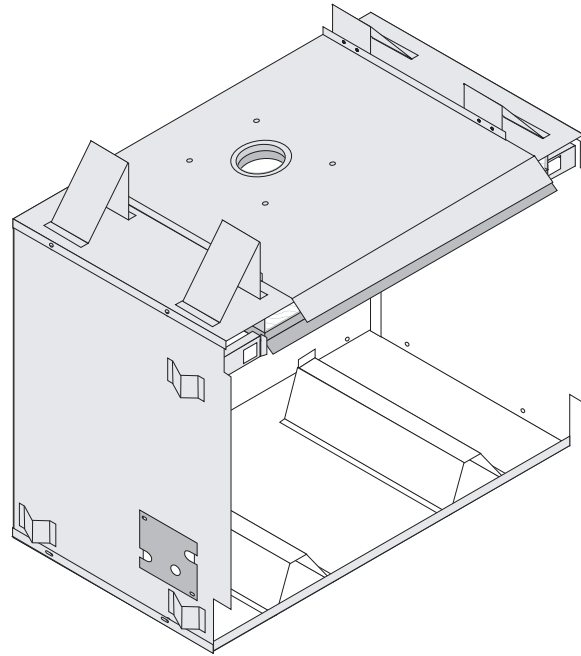




U20/E21 GAS INSERT ZERO CLEARANCE KIT

KIT # 530-936



Owners & Installation

Manual

PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

WARNING:

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult an authorized installer, service agency or the gas supplier.

FOR YOUR SAFETY

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

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

FOR YOUR SAFETY

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.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

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10/46 James St.,
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Tested by:
Warnock Hersey:



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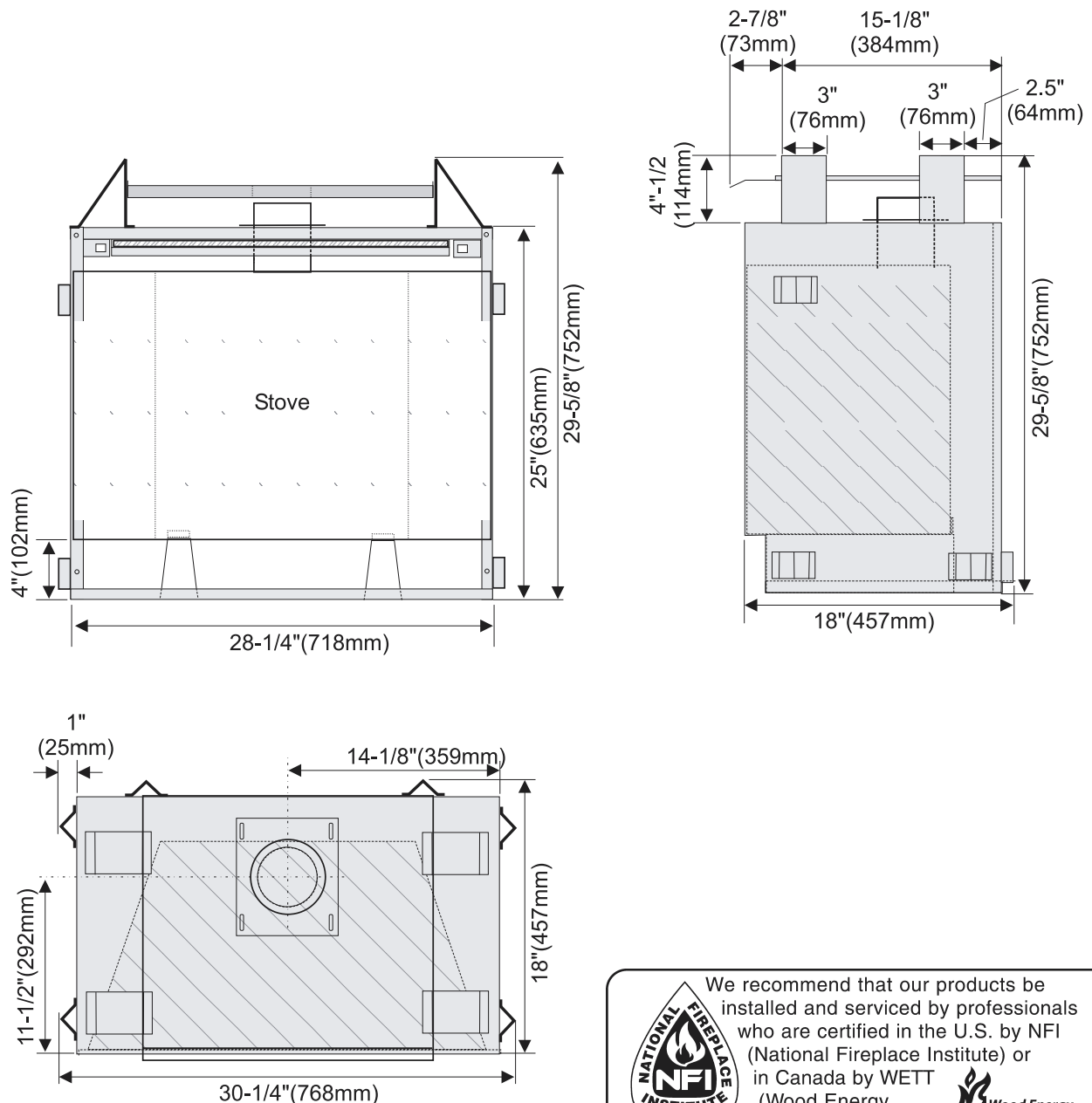
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LISTINGS AND CODE APPROVALS

This gas component has been tested in accordance with National Safety Standards, and has been certified by Warnock Hersey for installation and operation in the United States, Canada, Australia, and New Zealand as described in these Installation and Operating Instructions.

Check with your local building code agency before you begin your installation to ensure compliance with local codes, including the need for "permits" and follow-up inspections. If any problems are encountered regarding code approvals, or if you wish clarification on any of the instructions contained here, contact your local dealer.

Specifications



INSTALLATION

GENERAL INFORMATION

This kit consists of factory built parts that require minimal assembly to form the Zero Clearance box for the U20/E21 Gas Insert. The Zero Clearance box can then be fixed into a framed combustible construction, and a standard "B-vent" installed on the assembly for the required venting. The insert can be installed later. The faceplate will normally overlap on top of the finished wall. Using Kit# 530-936 you can convert the U20/E21 Gas Insert models into highly efficient heat producing Zero Clearance Fireplaces.

PARTS

Included with Kit:

- 1 Main Body Assembly (5 pieces)
- 1 Faceplate Top Insulation
- 1 Zero Clearance Top Louver Assembly

Sold Separately:

(Rq)=Required

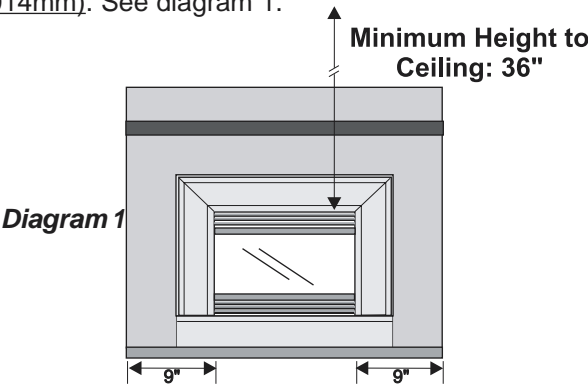
- (Rq) 1 402-918 Faceplate 40-1/4"W x 26-1/4"H (1020mm W x 665mm H) c/w faceplate trim.
- (Rq) 1 532-926 4"(102mm) Hearth Trim

CLEARANCES TO COMBUSTIBLES

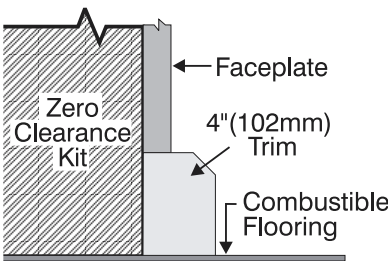
The clearances for the Zero Clearance Kit are 0" to combustibles (back, side and floor) but when planning your installation review the clearances required for the Insert (see below) after it is installed in the Zero Clearance Kit.

Clearances to Combustibles for Insert

The minimum clearance from the side of the appliance to a combustible side wall is 9 inches (229mm). See the "Mantel Clearances" chart (Diagram 2) for the minimum clearance from the bottom of the Top Faceplate to a combustible mantel. The minimum height from the bottom of the Top Faceplate to the ceiling is 36 inches (914mm). See diagram 1.



The Zero Clearance Kit must be installed on a flat, solid, continuous surface (e.g. wood, metal, concrete). This may be the floor, or raised up on a platform to enhance its visual impact.



NOTE: The specified '0' inch floor clearance means that the top surface of the flooring material, i.e. carpeting, tile, etc., must not extend above the bottom edge of the 4" Hearth Trim.

Combustible Mantel Clearances

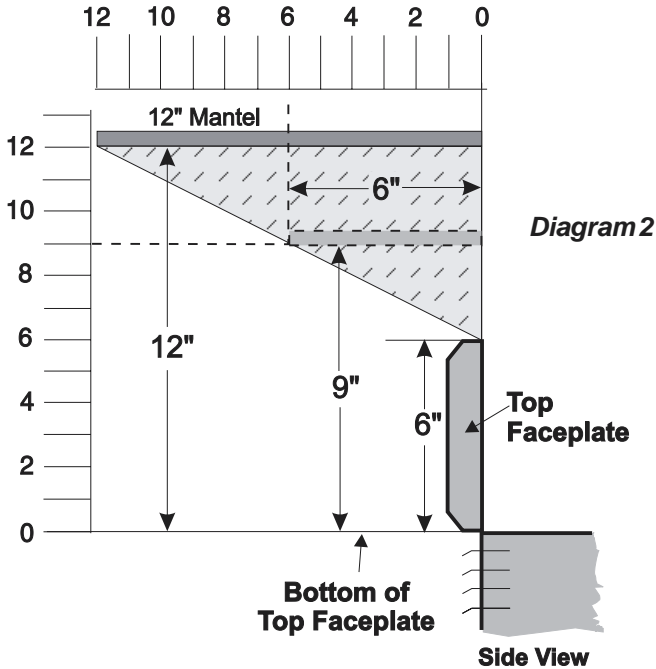


Diagram 2: Mantel can be installed anywhere in the shaded area or higher. Use the grid to determine height and depth of mantel.

Example: a 6" deep mantel must be 9" above the bottom of the top faceplate.

Note: A non-combustible mantel may be installed at a lower height if the framing is made of metal studs covered with a non-combustible board.

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

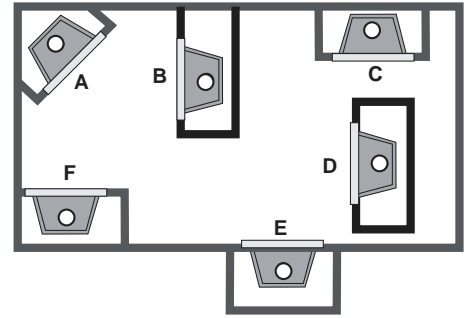
LOCATING YOUR U20/E21 FIREPLACE

Due to high temperatures the Insert should be located out of traffic and away from furniture and draperies. Provide a minimum of 48" (1220mm) front clearance to the unit.

This appliance is Listed for bedroom installations when used with a Listed Millivolt Thermostat. Some areas may have further requirements, check local codes before installation.

This appliance is Listed for Alcove installations, maintain minimum Alcove clearances as follows, minimum ceiling height of 53-1/2", minimum width of 48" and a maximum depth of 36".

This unit is not approved for installation into a mobile home.



- | | |
|-----------------|------------------------|
| a) Cross Corner | d) Island |
| b) Room Divider | e) Flush with Wall |
| c) Flat on wall | f) Flat on Wall Corner |

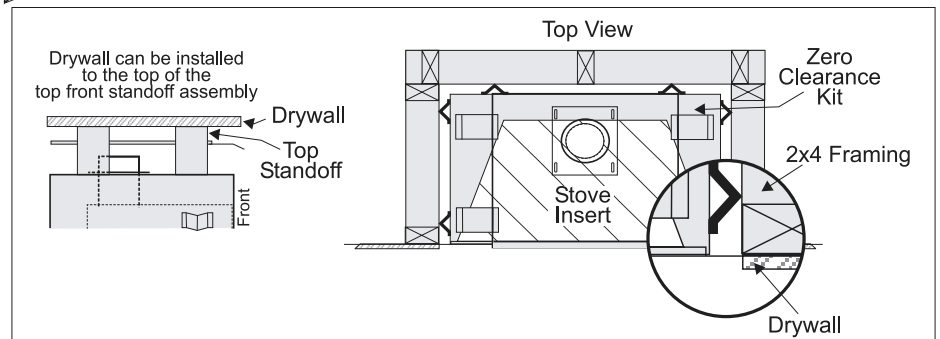
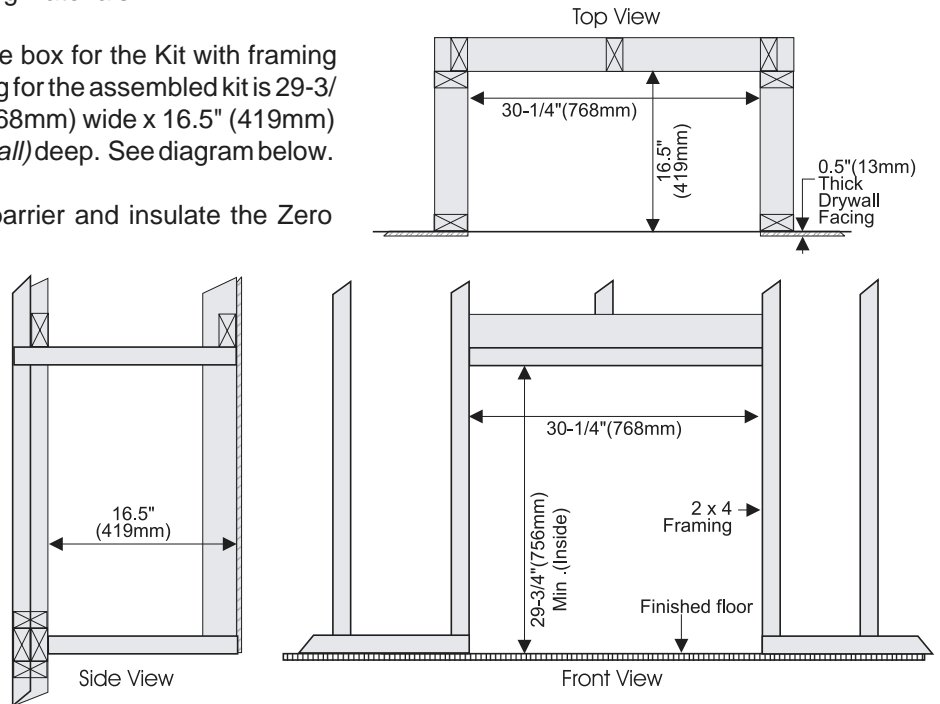
FRAMING

- 1) The trim kit allows for 1/2" (13 mm) of finish facing material. The kit may be installed directly on and/or against standard combustible building materials.

- 2) Frame in the Zero Clearance box for the Kit with framing material. The framed opening for the assembled kit is 29-3/4" (756mm) high x 30.25" (768mm) wide x 16.5" (419mm) (17" (432mm) including drywall) deep. See diagram below.

- 3) For exterior walls, vapour barrier and insulate the Zero Clearance box to the same degree as the rest of the house, or according to local installation codes.

- 4) The appliance may be enclosed above the standoffs on the cabinet but the clearances stated on the b-vent chimney must be maintained.

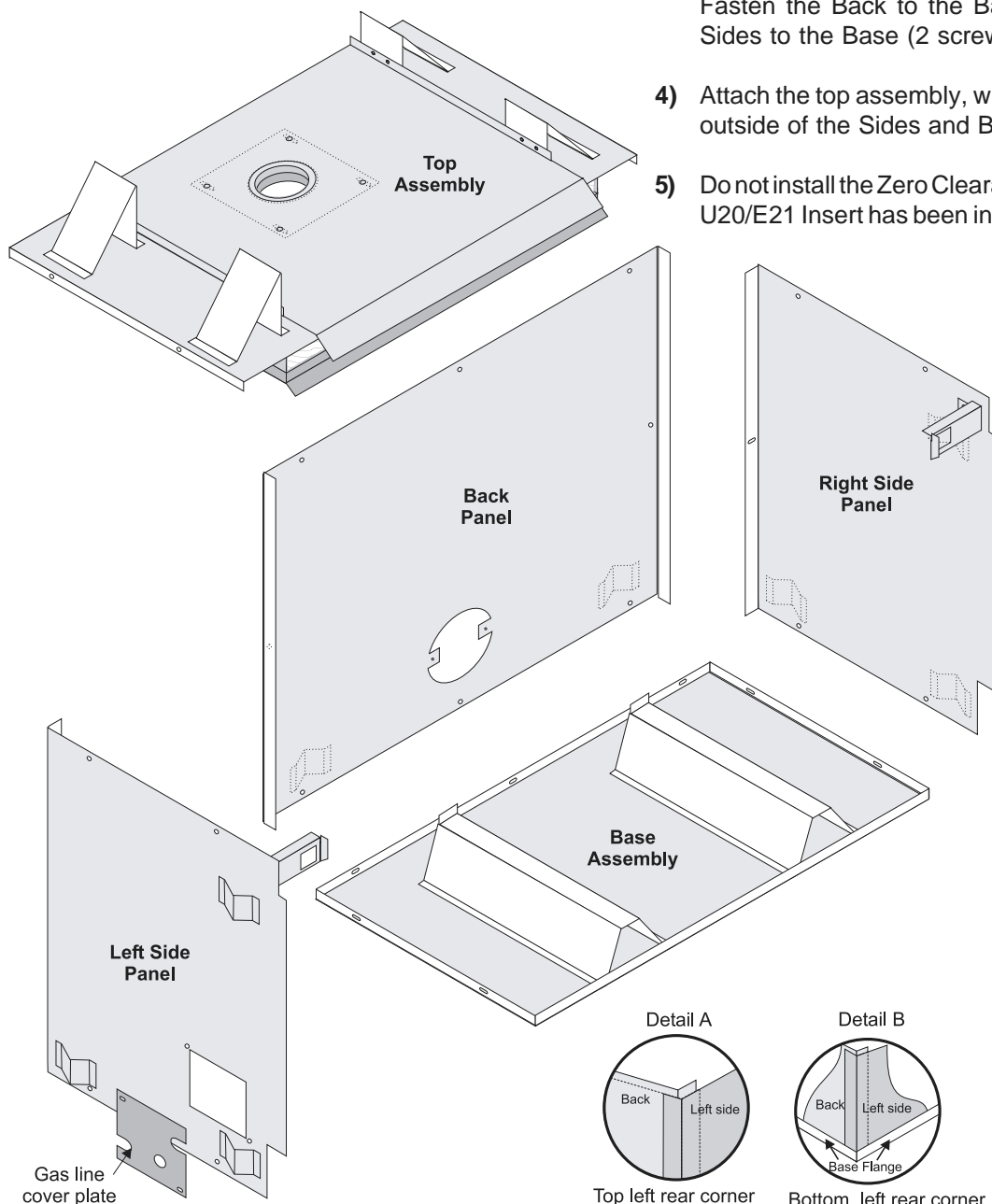


INSTALLATION

KIT ASSEMBLY

Parts

- 1) Top Assembly
- 2) Base Assembly
- 3) Back Panel
- 4) Left Side Panel
- 5) Right Side Panel
- 6) Gas Line Cover Plate



Kit Assembly

- 1) Lay the Base Assembly on a flat surface.
- 2) Attach the Left and Right Side panels to the Back panel (one screw each side). **NOTE:** the Side flanges are on the outside, Back flanges are on the inside.
- 3) Lift the Back/Side Assembly onto the Base, position as shown in the diagram. The Back and Sides rest on the Base with the Base flanges on the outside. Fasten the Back to the Base (3 screws) and the Sides to the Base (2 screws for each side).
- 4) Attach the top assembly, with the top flanges on the outside of the Sides and Back panels.
- 5) Do not install the Zero Clearance Top Louver until the U20/E21 Insert has been installed.

VENTING

- 1) This fireplace must be vented with a 4" (100mm) diameter Class "B" vent. The installation of the venting system must conform and be in accordance with the natural gas installation code CAN/CGA - B149 (Canada), ANSI Z223.1 (U.S.A.), AG 601 (Australia), and NZS 5261 (New Zealand). Minimum chimney height from base of fireplace must be at least 12 feet (3.7m).

- 2) **Masonry Chimney Installation:**

This application can be connected to a masonry chimney flue. Make sure the masonry chimney is clean and in good working order. When an existing masonry chimney is unlined and local experience indicates that gas condensation may be a problem or if local codes dictate, an approved liner should be installed. Use "B" Vent to bridge the gap between the fireplace and the masonry chimney. To ensure proper flue sizing and operation it is recommended that the masonry chimney be lined with an approved aluminium chimney liner of the same diameter as the "B" Vent. Make sure connection between "B" Vent and masonry is completely sealed. Flue pipe exposed to cold air should be insulated in a chase. If condensation occurs, a trap should be installed at bottom of flue.

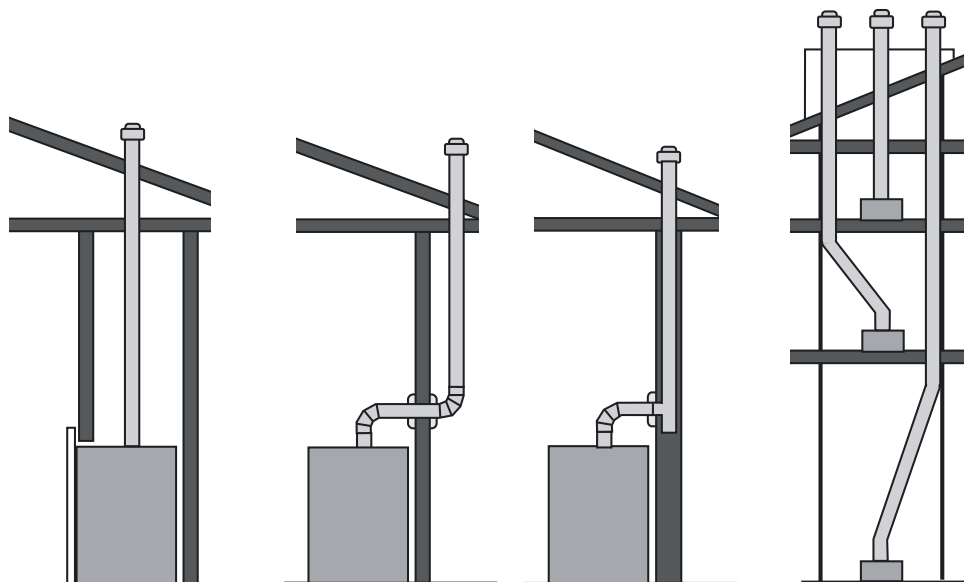
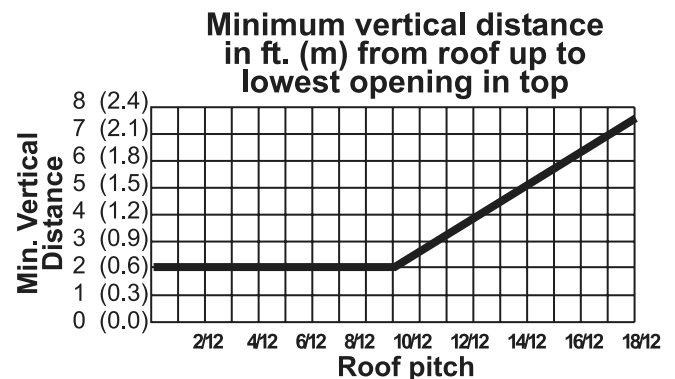
Use a maximum of two offsets; four 45° elbows, or two 90° elbows for example. Slope horizontal pipe at least 1/4" (6.4 mm) rise per foot of run. Horizontal runs should not exceed the vertical rise. Keep horizontal runs to a minimum. See chart below.

NOTE: Cold Climate Installation

When this appliance is to be installed against a non-insulated wall or in a chase, fibreglass insulation should be installed around the body of the fireplace.

Note: The draft hood must be installed parallel to the fireplace opening, as shown below. See Instructions in U20/E21 Installation Manual.

Install stove insert as per U20/E21 Installation Manual, see also page 8.



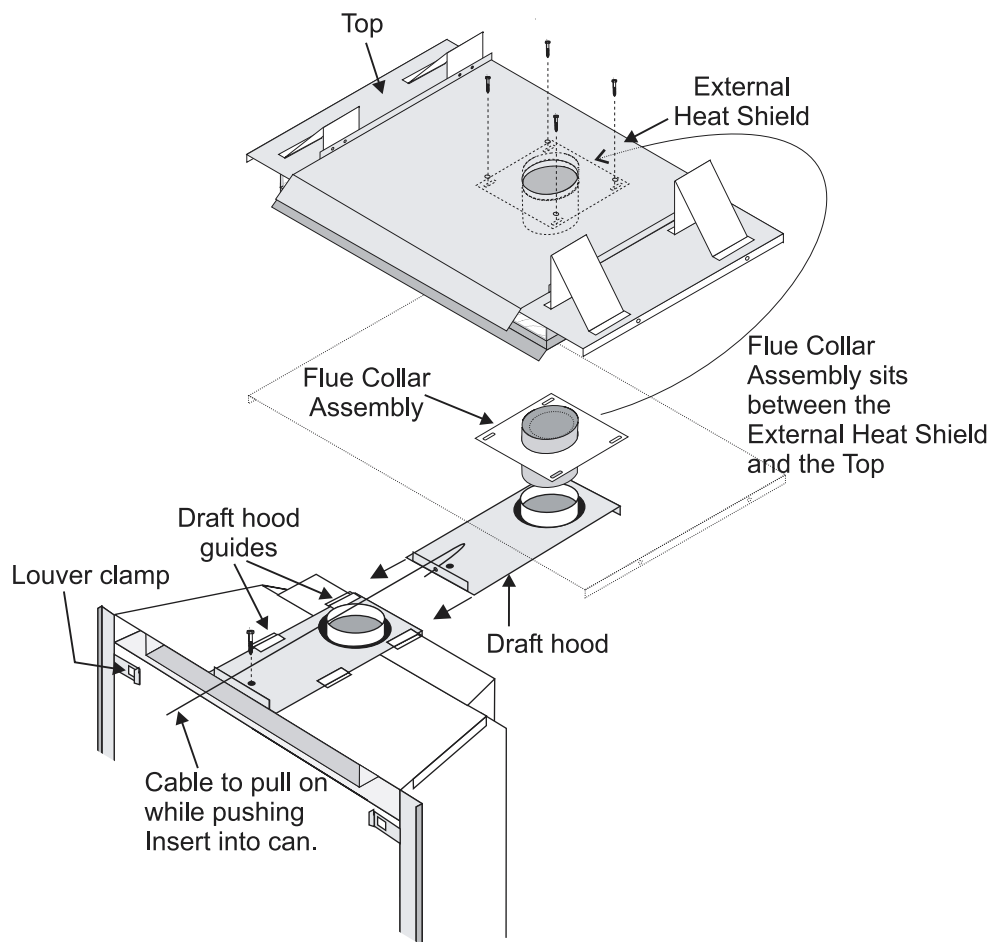
Variable Chimney Routes

INSTALLATION

INSERT INSTALLATION

- 1) Insert the U20/E21 Zero Clearance box into desired location and frame according to the instructions on page 5.
- 2) Run required gas and electrical connections to the Zero Clearance box, both are located on the left hand side of the U20/E21 Insert. See "Gas Supply Line" on page 9 and "Electrical Supply" on page 9.
- 3) Remove the screw holding the draft hood slide plate on the U20/E21 unit and remove.
- 4) Attach the draft hood slide plate to the flue collar assembly with three sheet metal screws.
- 5) Slide the gas insert in all the way back using the draft hood guides. Draft hood must be in original position and replace the screw holding the draft hood.
- 6) Make the final gas and electrical connections as per the Insert Instruction manual. Use the gas line cover plate that is included with the Zero Clearance box.
- 7) Assemble the Faceplate and Trim and the 4" Hearth Trim to the U20/E21 zero clearance box as per the instructions on page 10.
- 8) Attach the Top louver assembly to the Zero Clearance Kit by placing the louver clamps into the square hole on the louver holding brackets as per the instructions on page 11.

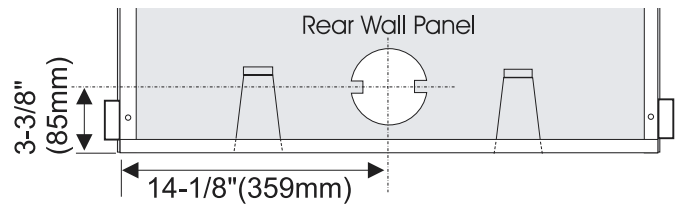
NOTE: ensure that when the draft hood slide plate is screwed in that it is the same height as the draft hood guides or it will not slide into position.



Note: Do not operate unit if draft hood is not fastened in original position.

OPTIONAL OUTSIDE COMBUSTION AIR SUPPLY INSTALLATION

A 4" (100 mm) dia. aluminum flex pipe or equivalent may be installed from the outside (with a proper exterior cover) to the Zero Clearance cabinet. There is an outside hole provided on the rear wall of the kit. This will provide adequate outside combustion air supply to the heater.

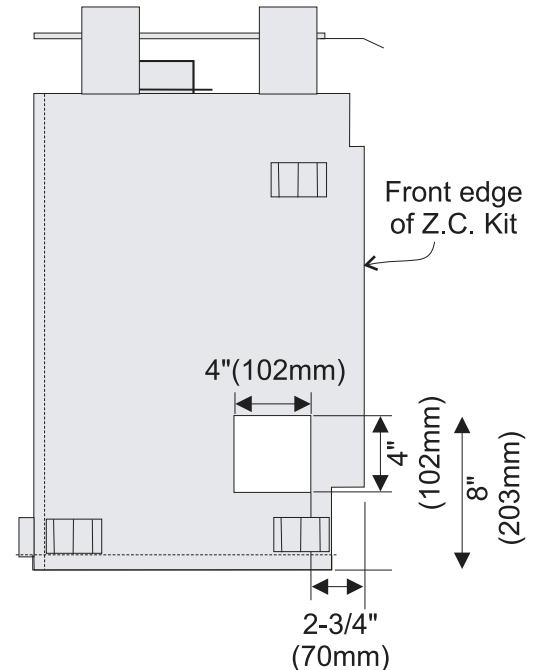


GAS SUPPLY LINE

An authorized service person should install the gas line in accordance with all local building codes. If codes permit, flex gas line or coiled copper tubing may be used as gas supply line. The suggested way to install the gas supply line is as follows: run 1/2" (9.5 mm) NPT gas line to the left side of the framed opening. (See U20/E21 installation instructions for additional information).

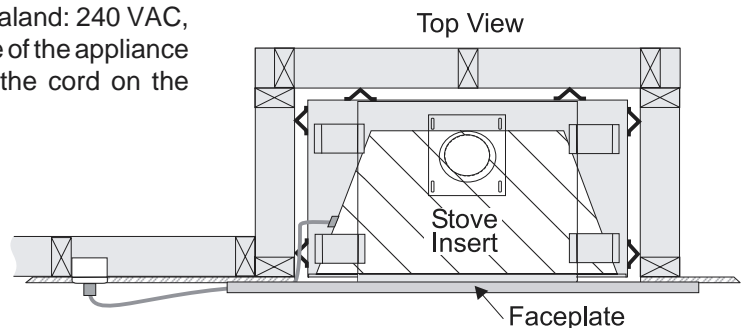
Specifications

	Min. Inlet Gas Pressure	Input Rating
Natural Gas	4.5" w.c. 1.12 kP	21,000 Btu/hr 22 mj/h
Propane	11" w.c. 2.74 kPa	21,000 Btu/hr 22 mj/h



ELECTRICAL SUPPLY

Provide 120 VAC, 60 Hz (in Australia and New Zealand: 240 VAC, 50 Hz) receptacle within 24" (610mm) of the left side of the appliance (not inside the Zero Clearance Cabinet). Plug the cord on the appliance into the receptacle.



INSTALLATION

FACEPLATE & TRIM INSTALLATION

- 1) Lay the faceplate panels flat, facedown on something soft so they don't scratch.
- 2)
 - a) Take the top faceplate and align the holes in it with the holes in the side panels. Using the screws provided, attach from the top of the panel (holes in the top panel are slightly larger than the holes in the side panel to facilitate easier installation). See diagram 1.
 - b) 4"(102mm) Hearth Trim. Attach the Hearth Trim to the bottom of the faceplate side panels with the screws provided. See diagram 1.

Hint: Don't tighten the screws down completely at this point, do a trial fit to the unit. Make any necessary adjustments and when it fits properly then tighten down the screws.

- 3) Using the trim clips provided, join the left side trim (with the ON/OFF switch) to the top trim. See diagram 2. Connect the right side trim to the top trim.
- 4) Place the trim on the assembled faceplate panels, aligning the wire connections from the switches with the notch on the left side panel.
- 5) Connect the fan switch wires by taking the black and red wires with the male ends (in the grey harness) and connect them with the 2 wire connectors from the fan speed control.
- 6) Connect the ON/OFF switch wires by taking the black and red wires with the female ends and connect them to the ON/OFF switch.
- 7) Install these wires in the clips on the left faceplate to ensure they don't touch the insert. See diagram 3.
- 8) The power cord should be run behind the faceplate panel from the U20/E21 to electrical outlet box.
- 9) Place top insulation in behind the top faceplate as in the diagram. Pressed securely into place.

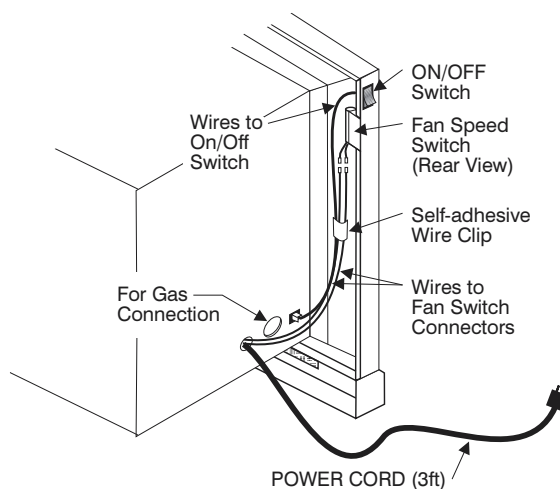
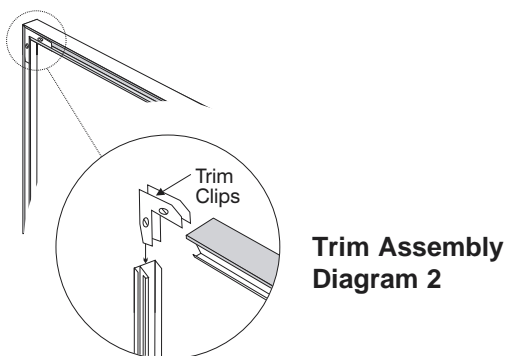
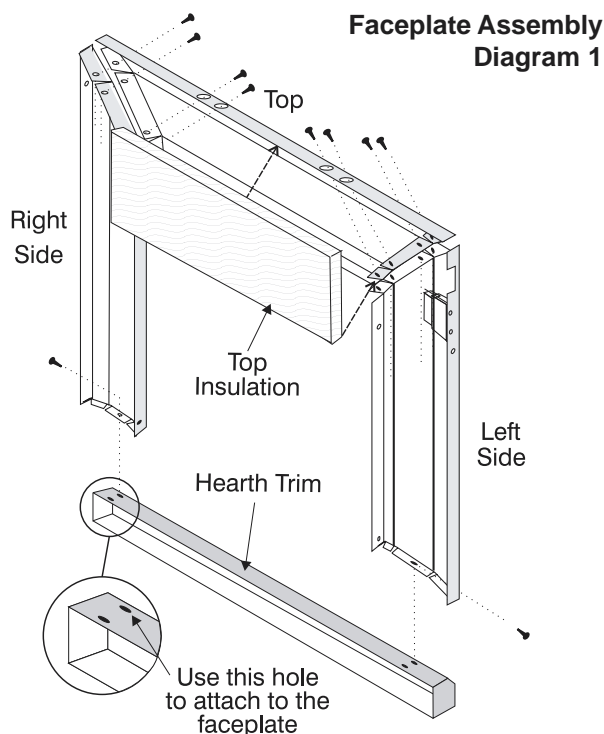
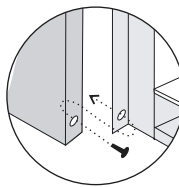
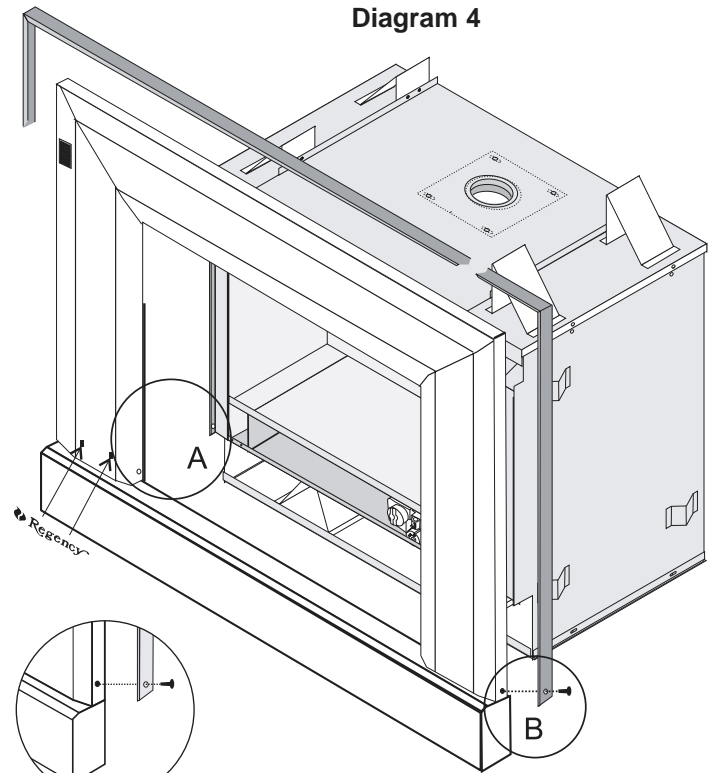


Diagram 3

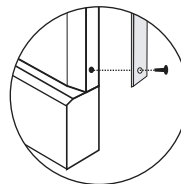
INSTALLATION

- 10) Attach the brass trim to the faceplate by drilling a 1/8" (3mm) hole through the faceplate using the hole in the trim as a guide. Fasten the trim to the faceplate panels using the plated screws. #10 x1/2". See diagram 4 detail 'B'.
- 11) Attach the faceplate panels to the insert body using the 4 remaining black screws. See diagram 4 detail 'A'. These screws will also fasten the insert to the Zero Clearance sides.
- 12) Push the logo plate into the two holes in the bottom left corner of the faceplate.

Note: *This faceplate and Hearth Trim Assembly replaces the standard Assembly as shown in the U20/E21 Installation Manual.*



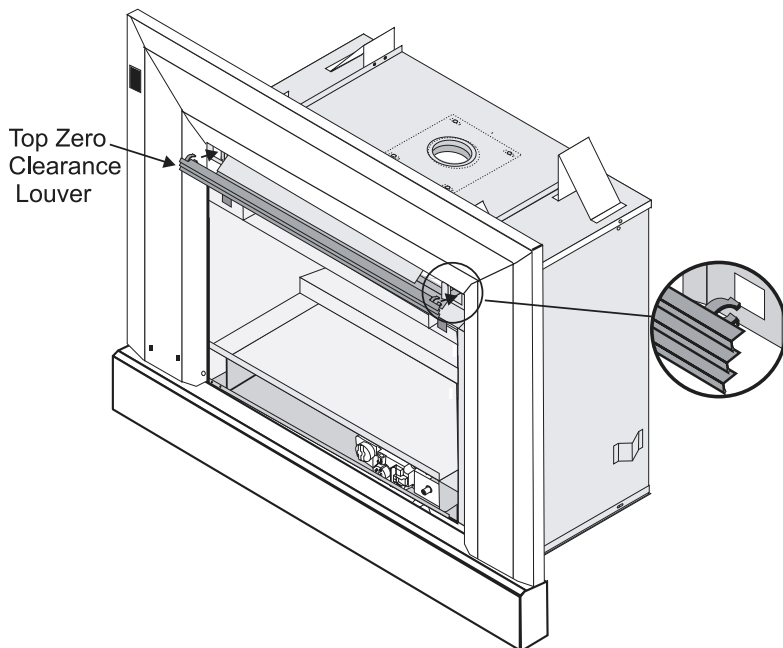
Detail
A



Detail
B

ZERO CLEARANCE TOP LOUVER

Attach the Top louver assembly to the Zero Clearance box by placing the louver clamps into the square hole on the louver holding brackets.



FINISHED FACING NOTES

Install finished facing surface of 1/2" (13mm) thickness on framing. Drywall 1/2" (13 mm) thick can extend flush with the appliance on all three sides of the front face. The height at which the mantle must be installed above the top louver depends on the depth of the mantle. If the mantle is to be painted, use a heat resistant paint to prevent discolouration.

