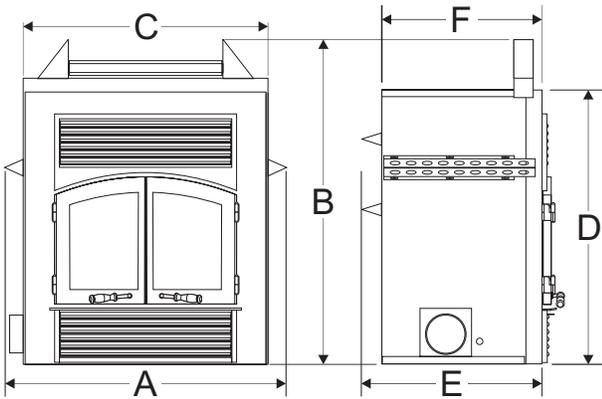


## R90 Wood Fireplace

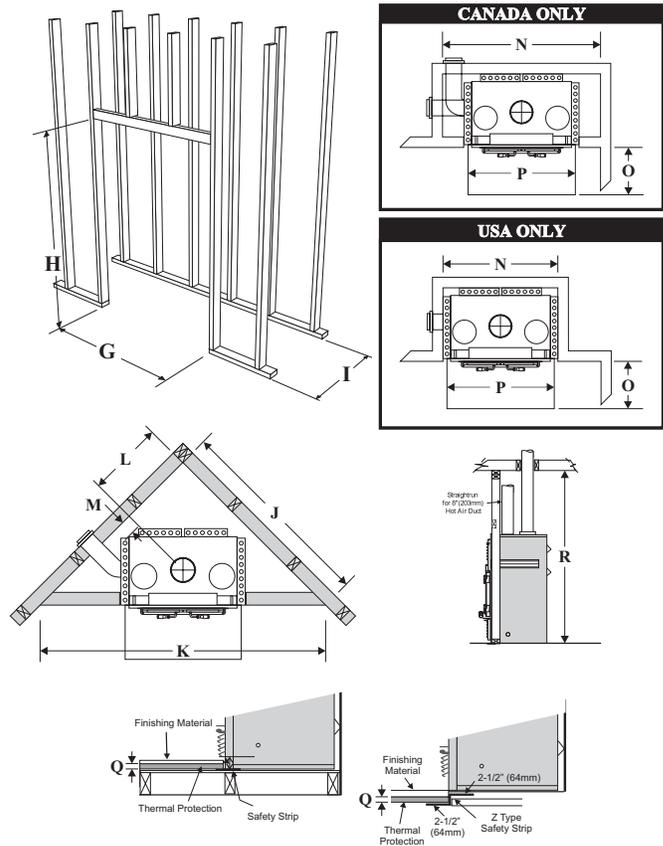
Model	R90
Emissions	3.72 g/hr
Efficiency (EPA)	63%
BTU/h (EPA)	11,720 (Low) to 42,400 (High)
Flue Size	8" (203mm) Diameter
Log Size	20" (508mm)
Shipping Weight	612 lbs. (278 kg)
Stripped Weight	570 lbs (259 kg)



Unit Dimensions	Description	R90
A	Unit Width w/ standoffs	43-5/8" (1108mm)
B	Unit Height w/ standoffs	50-1/2" (1283mm)
C	Unit Width	38" (965mm)
D	Unit Height	42-5/8" (1067mm)
E	Unit Depth w/ standoffs	28" (711mm)
F	Unit Depth	25" (635mm)

Framing Dimensions	Description	R90	
		USA Only	Canada Only
G	Framing Width	44" (1118mm)	44" (1118mm)
H	Framing Height	50-3/4" (1289mm)	50-3/4" (1289mm)
I	Framing Depth	28" (710mm)	28" (710mm)
J	Corner Wall Length	68" (1729mm)	81-1/2" (2072mm)
K	Corner Facing Wall Width	96-1/4" (2445mm)	115-3/8" (2930mm)
L	Inside Corner to Center Vent	24-1/2" (624mm)	31-1/4" (795mm)
M	Unit Corner Clearance	3" (76mm)	9-3/4" (248mm)
N	Inside Chase Framing Width	44" (1118mm)	60" (1524mm)
O	Hearth** Depth	18" (457mm)	18" (457mm)
P	Hearth** Width	40" (1016mm)	40" (1016mm)
Q	Thermal Protection Thickness	1/2" (12.7mm)	1/2" (12.7mm)
R	Combustible Ceiling Height	84" (2134mm)	84" (2134mm)

\*\* Required Non-combustible Hearth with thermal protection - Minimum "K" Factor of 20.07 (CAN) or 0.84 (US)



**NOTE:** Hearth requires thermal protection in front of the fireplace and must have at least 1/2" (13mm) Millboard under the finishing material with minimum "k" factor of 20.07 (in Canada), 0.84 (in US). If the bottom of the unit is raised 4" (102mm) above the hearth, the thermal floor protection is not required.

**NOTE:** Safety strip is required when the fireplace rests on a combustible surface, and should extend 2" in front and on the sides of the fireplace. When using a wooden support to raise the fireplace. A "Z" type safety strip, not supplied, must be fabricated (Use 20 gauge galvanized sheet steel).

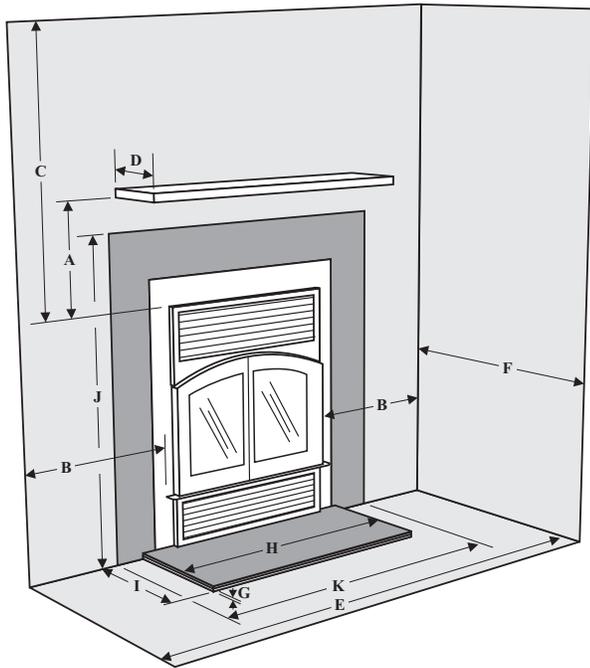
Wood Fireplaces

## R90 Wood Fireplace

### Clearances Requirements

No combustible materials on the face of unit.

Required Hearth must be non-combustible and will require thermal protection. Minimum thermal protection must have a "k" factor of 20.07 (in Canada), 0.84 (in US).



Combustibles may not extend to unit face.

Do not notch wallboard around standoffs.

The R90 may be placed on or near construction materials. The combustion air kit, fire stop spacer and roof flashings (not chase flashings) may be placed directly on or against normal construction materials. The chimney requires a minimum 2" (51mm) clearance. A combustible mantle (to a depth of 10", 254mm) may be installed no closer than 18" (457mm) above the warm air vent or 55-1/2" (1410mm) from bottom of unit.

The chimney must be enclosed when installed in or passing through a living area where combustible material or people may come in contact with it. This is important to prevent possible personal injury or fire hazard.

For any further information, please call your dealer. Special restrictions apply to the front and facing of the fireplace and nearby walls.

**WARNING:** If insulation is used, do not place the unit against it. Insulation or vapor barriers, if used, must be secured to assure insulation and vapor barriers remain in place and do not affect the required air spaces.

**WARNING:** Do not pack or fill required air spaces with insulation or other material. No material of any kind is allowed in these areas.

#### NOTES:

- 1) Do not insulate the chase cavity with blown or fill type insulation materials.
- 2) Local codes may not require a firestop at the ceiling level for outside chase installations; however, it is recommended for safety and the reduction of heat loss.
- 3) We recommend that you insulate at least the first floor of the chase to prevent heat loss.
- 4) Some local codes require 1 hour fire rating on one or all sides of fire chases. Check with your local authorities.

#### NOTES:

- 1) Minimum Chase sizes must be met according to the framing directions (page 149). **US Installations** will require a minimum ventilation with one 30 sq. in. (194 sq. cm.) opening grill (air is drawn from within the home not outside).
- 2) Mantel min. Height of 18" (457mm) from top of louver opening to underneath mantel or 55 1/2" (1410mm) from bottom of unit.
- 3) Minimum non-combustible facing must be installed according to the table on this page. Finishing material to be installed on top of this.
- 4) Framing is slightly larger than unit dimensions to allow for easier installation (50 3/4", 1289mm h x 44", 1118mm w)
- 5) Must maintain a min. of 46" (1168mm) from top of louver opening to finished ceiling.
- 6) Sidewall clearances, as detailed on this page, must be maintained according to your location.
- 7) Hearth must be a min. 40" (1016mm) wide x 18" (457mm) deep and 1/2" (127mm) thick.

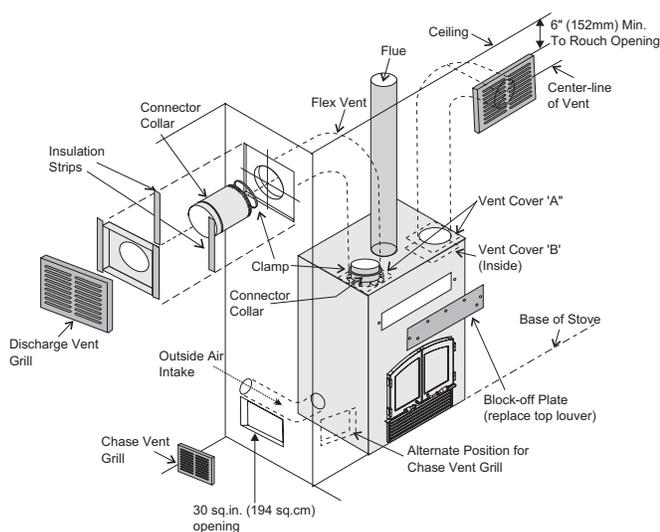
Clearance:	Dimension		Measured From:
	USA Only	Canada Only	
A: Mantel Height	18" (457mm)	18" (457mm)	Minimum (See Page 86)
B: Sidewall	18" (457mm)	24" (610mm)	Side of fireplace opening
C: Ceiling	46" (1168mm)	46" (1168mm)	Top of fireplace opening
D: Mantel Depth	10" (254mm)	10" (254mm)	Maximum (See Page 86)
E: Alcove Width	N/A	N/A	Approved for Single Sidewall only
F: Alcove Depth	N/A	N/A	Approved for Single Sidewall only
G: Thermal Protection Height	1/2" (13mm)	1/2" (13mm)	Bottom to top of Protection.
H: Hearth Width	40" (1016mm)	40" (1016mm)	Edge to Edge of Hearth
I: Hearth Depth	18" (457mm)	18" (457mm)	Front of Hearth to Wall
J: Facing Height**	52-1/2" (1334mm)	51-1/2" (1308mm)	Floor to Facing Height**
K: Facing Width**	44" (1118mm)	60" (1524mm)	Edge to Edge of Facing**

\*\*Required non-combustible facing.

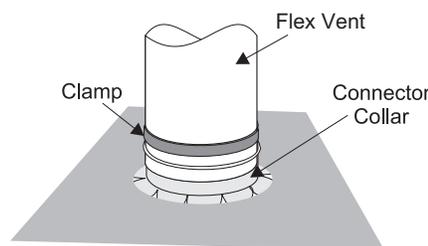
## Gravity Air Feed Kit Option

The Gravity Air Feed Kit is designed to extend the heat output vent above the R90 to the front or the side. The upper louver opening is blocked off and flex vent is connected to the vent holes in the top of the unit and run to discharge vent grilles. Both 8" (203mm) diameter insulated Flex vents must be used along with one 30 sq. inch (194cm<sup>2</sup>) chase vent grill to bring additional air into the chase (for U.S. installations only).

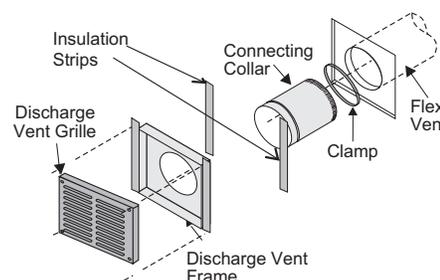
Qty	Description
4	Connector Collars
4	Adjustable Clamps
2	5' lengths of flexible vent pipe (8" dia.)
2	Insulated Sleeves
1	Block Off Plate
2	Discharge Vent Mounting Frames
7	1/4-20 x 1/2" Truss Head Screws (used for EX90/R90 only)
2	16 x 8 Discharge Vent Grilles
4	#8 Drywall Anchors
4	Insulation Strips
1	Chase Vent Frame (for U.S. installations only)
1	8 x 8 Chase Vent Grille (for U.S. installations only)



- 1) Remove the screw from the vent hole cover (vent cover 'A') on top of the unit.
- 2) Take the connector collar and press and rotate it into the hole to cut through the insulation layer. Remove the collar and remove insulation from the collar. The screws for the inner cover should be exposed.
- 3) Remove the screws from the inner cover (vent cover 'B') and slide it back under the insulation.
- 4) Extend flex vent and pull the insulation sleeves over the 8" (203mm) diameter flex vents. Leave a short section of flex vent exposed at each end. On one end insert the collar into the flex vent and use a clamp to hold the flex vent in place.
- 5) Use tin snips to cut slits into the rim of the connector collar. A minimum of four tabs will be required so cut the slits 1" (25mm) (i.e. 1" (25mm) wide tabs) apart around the perimeter of the collar.
- 6) Install the connecting collar into the top of the unit until the bead of the collar rests against the top of the inner top of the unit. Reach inside the upper louver opening and use pliers to bend the tabs (minimum 4) out on the connector collar. A hammer may be required to lightly tap the tabs and bend them so that they fit tightly against the bottom of the inner top. Pull the insulation sleeve down to the top of the unit. Repeat steps 1-6 for the second flex vent and collar assembly.



- 7) Position the vent frames for the Discharge Grilles into the rough opening of the stud wall framing. Make sure to add two insulation strips behind the flanges of the frame prior to securing to wall. The frames will fit between studs framed at 16" (406mm) on center. Use 4 nails or screws to mount the frame to the stud framing.



- 8) Insert the connecting collar into the other end of the 5 ft. (1.5m) flex vent and use an adjustable clamp to hold the vent in place. Cut tabs into the rim of the connector collar (a minimum of 4 tabs will be required). Push the collar through the 8" (203mm) hole in the mounting frame. Use pliers to bend out tabs (minimum 4) to secure the collar to the mounting frame.
- 9) Pull the insulation sleeve up the flex vent to the back of the mounting frame. The flex vent should now be connected to both the unit and the mounting frames securely. Repeat steps 1-8 for the second flex vent assembly.
- 10) Install the block-off plate to the unit. The block-off plate will cover the upper louver opening of the unit and force the fan air to circulate through the two 8" (203mm) diameter flex vents. Put high temperature sealant onto the block-off plate. Mount the block-off plate onto the front of the unit and cover the upper louver opening. Make sure that all exposed holes in the block-off plate are sealed with high temperature sealant

**NOTE: Make sure the block-off plate is flush and fastened tightly to the Regency R90 Fireplace.**

- 11) The rough opening size for the Chase Vent Grille is 3" H x 10" W (76mm H x 254mm W).

**WARNING: A chase vent of 30 sq. inches (194 cm<sup>2</sup>) MUST be installed in all applications, otherwise serious overheating of the chase may result. Use the chase vent supplied with the R90 unit only or any equivalent one with the same or less restriction of air flow.**

- 12) Recheck all flex vent-work connections to make sure that they are secure. Install wall sheathing and cut-out openings for the chase ventilation, and hot air discharge outlets.
- 13) Install the Chase Vent Grille and install the Discharge Vent Grilles for the hot air outlets.

**NOTE: There must be a minimum of 5" (127mm) between the gravity air vents.**