P90E Gas Fireplace

<table>
<thead>
<tr>
<th>Model</th>
<th>P90E-NG11</th>
<th>P90E-LP11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Type</td>
<td>Natural Gas</td>
<td>Propane</td>
</tr>
<tr>
<td>Minimum Supply Pressure</td>
<td>5&quot; W.C. (1.25 kPa)</td>
<td>11&quot; W.C. (2.74 kPa)</td>
</tr>
<tr>
<td>Manifold Pressure - High</td>
<td>3.5&quot; W.C. (0.87 kPa)</td>
<td>10&quot; W.C. (2.49 kPa)</td>
</tr>
<tr>
<td>Manifold Pressure - Low</td>
<td>1.6&quot; W.C. (0.40 kPa)</td>
<td>6.4&quot; W.C. (1.60 kPa)</td>
</tr>
<tr>
<td>Orifice Size</td>
<td>#34 DMS</td>
<td>#51 DMS</td>
</tr>
<tr>
<td>Minimum Input Altitude 0-4500 ft. (0-1372m)</td>
<td>23,500 BTU/h (6.89 kW)</td>
<td>25,500 BTU/h (7.47 kW)</td>
</tr>
<tr>
<td>Maximum Input Altitude 0-4500 ft. (0-1372m)</td>
<td>35,000 BTU/h (10.26 kW)</td>
<td>31,500 BTU/h (9.23 kW)</td>
</tr>
<tr>
<td>Vent Sizing</td>
<td>4&quot; Inner / 6-5/8&quot; Outer</td>
<td>4&quot; Inner / 6-5/8&quot; Outer</td>
</tr>
<tr>
<td>CSA P.4.1</td>
<td>71.36%</td>
<td>72.79%</td>
</tr>
</tbody>
</table>

Approved Venting Systems

- Flex Vent Systems: FPI AstroCap™ Flex Vent
- Rigid Pipe Vent Systems: Simpson Direct Vent Pro®
  - American Metal Products® Amerivent Direct
  - Security Secure Vent®
  - Selkirk Direct-Temp™
  - Metal-Fab® Sure Seal

Non-combustible material extends a minimum of 18-7/8" (479mm) above the front opening.

46-3/8", 1178mm if raised using 1-1/8" base standoffs.

Please refer to Exterior Vent Terminations for additional guidelines on vent locations.
Framing and Finishing

1. Frame in the enclosure for the unit with framing material.
2. For exterior walls, insulate the enclosure to the same degree as the rest of the house, apply vapor barrier and drywall, as per local installation codes. \textit{(Do not insulate the fireplace itself.)}
3. The top of the fireplace opening must not be closer than 44-1/4" (1124mm) to the ceiling.
4. \textbf{You must maintain proper clearances from the vent to combustible materials (Top Right).}
5. Use metal studs for framing where the minimum clearance from the vent to combustible material cannot be maintained.
6. Install the side nailing strips, top facing support, and the two standoffs before the unit is slipped into position.
7. Finishing the P90 requires the use of a non-combustible facing as detailed below.

**Clearance Requirements**

- **Side Wall Clearance**: 6-1/2" (165mm)
- **Top Clearance**: 2-1/2" (64mm)
- **Bottom Clearance**: 1-1/2" (38mm)
- **Min. Clearance to Combustibles from**: 0" (0mm)

**NOTE:** The minimum floor clearance must be maintained from the top surface of the carpeting, tile, etc.

**See Hearth Requirements in the installation manual.**

**Side Wall Clearance**

- **6-1/2" (165mm)**

**Horizontal Vent Clearances**

- **Top**: 2-1/2" (64mm)
- **Side**: 1-1/2" (38mm)
- **Bottom**: 1-1/2" (38mm)

**Vertical Vent Clearances**

- **1-1/4" (32mm)**

**Alcove Clearances**

- **Max. Depth**: 36" (914mm)
- **Min. Width**: 72" (1829mm)
- **Min. Height**: 72" (1829mm)

* see mantel clearance instructions

\textit{Refer to the "Combustible Mantels* section).}

**WARNING:**

Failure to maintain required clearances is a major cause of chimney related fires. Installation of this fireplace must comply with these clearances.

To accommodate varying thicknesses and finishes of hearth materials, we have increased the overall height of the appliance by a further 1 1/8". This increase is added with the inclusion of two stand-offs at the bottom of the unit, below the outer box, taking the overall height of the framing dimensions from 45-1/4" up to 46-3/8".

In the event that you should choose to use thinner materials to finish the hearth, you can omit the stand-offs provided for raising the unit. However, we recommend that you leave the framing dimensions as they are in the installation manual and alter only the facing requirement by reducing it by the same distance that you have lowered the unit.

Insert the 2 unit base stand-offs underneath the unit as shown in the diagram below. Space the stand-offs centrally, approximately 2 or 2-1/2 feet apart. Ensure that the unit is not unstable.

\textbf{WARNING:}

Fire hazard is an extreme risk if these clearances are not adhered to.

\textbf{Note:} After unit is framed in, steel studs can be used inside of the wood framing to attach the noncombustible material. An optional steel stud framing kit is available for this purpose—see manual for details. If choosing not to purchase this kit, steel studs can be used in place—to attach the non combustible material. Use the optional steel stud kit instructions as a guide.
OPTIONAL FRAMING KIT

An optional framing kit is available to facilitate easier installation of the noncombustible board. The optional framing kit is to be installed within the existing wood framing. The framed opening is 46-1/2" wide x 45-1/4" high or 46-3/8" high if using the base standoffs and 21-1/2" deep. See instruction manual for complete details.

1. Fold out side nailing strips from the side of the unit to 90º as shown below. Determine the overall combined thickness of the non-combustible board + finished material being used. The nailing strips can be adjusted up to 3-3/8".

2. Adjust the nailing strips by loosening 2 screws on each nailing strip - adjust and retighten screws.

3. Attach both vertical studs and secure using pointed wood screws to penetrate steel studs to secure. There are 6 screws which are not provided. (2 at bottom, 2 at top and 2 on sides). (Corner framing shown in diagram).

4. Slide the unit into position. Hook up gas, venting and electrical prior to installing the remaining steel studs.

5. Secure the top horizontal steel stud (792-023) as shown with 2 screws per side.

6. Secure the wide horizontal stud (792-021) with 2 screws per side.

7. Secure 2 thin vertical studs (792-033) on either side of the appliance with 4 screws each. Above screws are provided.

NOTE: Ensure the flat side of the steel stud is facing the wood framing.

Horizontal stud (792-023)- see Step 5
Wide Horizontal stud (792-021)- see Step 6
Thin Vertical studs - (792-033) see Step 7

Attach tall vertical studs (792-022) from framing kit to existing wood framing.
**Facing Requirement**

This fireplace requires a non-combustible facing material extending from the framing header and sides. The flanges on the front face of the fireplace are for a facing thickness of 3-3/8" (86mm).

**Facing Over 3-3/8" (86mm) Thick**

If the facing material is over 3-3/8" (86mm) thick (example: brick or river rock), install the facing around the perimeter of the face. You may wish to make a face template as shown on the diagram.

Regency provides a template on the box.

**HEARTH REQUIREMENTS**

**Floor Mounted Fireplaces Raised Fireplaces**

- Hearth must be under this flange.
- Tile, Marble, Brick, or other non-combustible material.
- Cement Board

**No hearth is required when the unit is raised 3" (76mm) off of the floor surface.**

You must take into account the depth of the floor covering (carpet, tile, linoleum, etc.) when determining the height of the fireplace stand.

Please note that all vertical measurements are taken from the base of the unit excluding risers or bottom stand-offs.
Combustible Mantels

Because of the extreme heat this fireplace emits, the mantel clearances are critical. Combustible mantel clearances from top of the louvers are shown in the diagram below. Mantel may be installed anywhere in the shaded area or higher.

*** Measured from the base of the Unit.

Note: If desired a non-combustible mantel may be installed at a lower height.

Note: Ensure the paint that is used on the mantel and the facing is “heat resistant” or the paint may discolor.

![Diagram of mantel clearances and dimensions]
Snorkel Terminations

Snorkel Terminations:
For installations requiring a vertical rise on the exterior of the building, 14-inch and 36-inch tall Snorkel Terminations and the Riser Vents are available. Follow the same installation procedures as used for standard Horizontal Termination. NEVER install the snorkel upside down.

Below Grade Snorkel Installation
If the Snorkel Termination must be installed below grade, i.e. basement application, proper drainage must be provided to prevent water from entering the Snorkel Termination. Refer to Rigid Pipe Installation instructions for details. Do not attempt to enclose the Snorkel within the wall, or any other type of enclosure.

FPI Direct Vent System (Flex)
Horizontal Terminations Only
This venting system, in combination with the P90E Direct Vent Gas Fireplace, have been tested and listed as a direct vent heater system by Intertek. The location of the termination cap must conform to the requirements in the Vent Terminal Locations diagram, see manual.

FPI Direct Vent (Flex) System Termination Kits include all the parts needed to install the P90E using a flexible vent.

<table>
<thead>
<tr>
<th>FPI Kit #</th>
<th>Length</th>
<th>Contains:</th>
</tr>
</thead>
</table>
| #946-515  | 4 Feet | 1. 6-5/8" flexible liner (Kit length)  
|           |        | 2. 4" flexible liner (Kit length)  
|           |        | 3. spring spacers (4/7)  
|           |        | 4. thimble (2)  
|           |        | 5. AstroCap termination cap (1)  
|           |        | 6. screws (12)  
|           |        | 7. tube of Mill Pac (1)  
|           |        | 8. plated screws (8)  
|           |        | 9. S.S. screws #8 x 1-1/2" drill point (4) |
| #946-516  | 10 Feet| 1. 6-5/8" flexible liner (Kit length)  
|           |       | 2. 4" flexible liner (Kit length)  
|           |       | 3. spring spacers (4/7)  
|           |       | 4. thimble (2)  
|           |       | 5. AstroCap termination cap (1)  
|           |       | 6. screws (12)  
|           |       | 7. tube of Mill Pac (1)  
|           |       | 8. plated screws (8)  
|           |       | 9. S.S. screws #8 x 1-1/2" drill point (4) |

Notes:
1. Liner sections should be continuous without any joints or seams.
2. Only Flex pipe purchased from Regency may be used for Flex installations.
3. Horizontal sections must be supported every 3 feet.
Rigid Pipe Venting
Horizontal or Vertical Terminations

Venting Arrangements - Vertical Terminations
Rigid Pipe System
(Propane & Natural Gas)

The P90E is approved for a maximum 40 ft. straight vertical, with Rigid Pipe vent systems for Propane and Natural Gas.

The lightly shaded area, in the diagram shows allowable venting configurations with a maximum two 45° elbows.

The darker shaded area, in the diagram shows allowable venting configurations using a maximum of two 90° elbows.

- Vent must be supported at offsets.
- Horizontal sections must be supported every 3 feet.
- Firestops are required at each floor level and whenever passing through a wall.
- Maintain clearances to combustible materials.
- Minimum of 1' pipe section between and elbows.

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

If required by the external termination location the listed alternate termination caps may be used.
Venting Arrangements - Horizontal Terminations

The P90 is approved for a maximum 20 ft. straight horizontal, with Rigid Pipe vent systems for Propane and Natural Gas.

The lightly shaded area, , in the diagram shows allowable venting configurations of either Flex or Rigid piping in sizes 4" x 6-5/8" using a maximum of one 90° elbow.

The darker shaded area, , in the diagram shows allowable venting configurations of Rigid piping in sizes 5" x 8" using a maximum of one 90° elbow.

Note: Must use optional rigid pipe adaptor (Part # 510-994) when using Rigid Pipe.

Note: All Rigid Pipe sizes 5” x 8” must use FPI increaser starter collar (Part # 946-605) at the beginning of the vent run.

- Maintain clearances to combustibles.
- Horizontal vent must be supported every 3 feet.
- Firestops are required at each floor level and whenever passing through a wall.

A vent guard may be required as per local codes, refer to Exterior Vent Termination Locations.

Note: FPI Direct Vent System (Flex) is only approved for horizontal terminations.

Gas Fireplaces