Important Installation Information

GAS type verification

Verify the type of gas supplied to the location. Ensure that the appliance is connected to the type of gas for which it is certified. All ranges are certified for use with natural gas or propane (LP) gas. Make certain the range matches the gas type available.

Important

- A backguard must be utilized when there is less than a 12" horizontal clearance between combustible materials and the back edge of the range. The Thermador Low Back backguard must be ordered separately and installed at the rear of the range. For island installations and other installations with more than 12" clearance, an optional stainless steel Island Trim is available to cover the backguard mounting flanges.
- Verify that the appliance is correct for the type of gas being provided. Refer to Step 5 on Page 12 before proceeding with the installation.

Gas Supply:

Natural Gas – 6 inch water column. (14.9 mb) min., 14 inch (34.9 mb) max.

Propane Gas – 11 inch water column. (27.4 mb), min., 14 inch (34.9 mb) max.

Electric Power Supply:

30" Model:

4 Burners - 120 VAC, 60 Hz., 1Ph., 15 Amp circuit. 36" Models:

6 Burners – 120 VAC, 60 Hz., 1Ph., 15 Amp circuit.

4 Burners with Grill – 120 VAC, 60 Hz., 1Ph., 15 Amp circuit.

4 Burners with Griddle – 120 VAC, 60 Hz., 1Ph., 20 Amp circuit.

48" Models:

6 Burners with Grill – 120 VAC, 60 Hz., 1Ph., 15 Amp circuit. 6 Burners with Griddle – 120 VAC, 60 Hz., 1Ph., 20 Amp circuit.

4 Burners with Grill and Griddle–120 VAC, 60 Hz., 1Ph., 20 Amp circuit.



CAUTION

When connecting the unit to propane gas, make certain the propane gas tank is equipped with its own high-pressure regulator in addition to the pressure regulator supplied with the range. The maximum gas pressure to this appliance must not exceed 14.0 inches water column (34.9 mb) from the propane gas tank to the pressure regulator.



CAUTION

This unit is designed as a cooking appliance. Based on safety considerations, never use it for warming or heating a room.

This appliance complies with one or more of the following standards:

- UL 858, Standard for the Safety of Household Electric Ranges
- UL 923, Standard for the Safety of Microwave Cooking Appliances
- UL 507, Standard for the Safety of Electric Fans
- ANSI Z21.1, American National Standard for Household Cooking Gas Appliances
- CAN/CSA-C22.2 No. 113-M1984 Fans and Ventilators
- CAN/CSA-C22.2 No. 61-M89 Household Cooking Ranges

It is <u>strongly recommended</u> that this appliance be installed in conjunction with a suitable overhead vent hood. (See Step 1 for Ventilation Requirements.) Due to the high heat capability of this unit, particular attention should be paid to the hood and duct work installation to assure it meets local building codes.

It is the responsibility of the owner and the installer to determine if additional requirements and/or standards apply to specific installations.



CAUTION

To eliminate risk of burns or fire caused by reaching over heated surface units, cabinet storage located above the surface units should be avoided.

Check local building codes for the proper method of appliance installation. Local codes vary. Installation, electrical connections and grounding must comply with all applicable codes. In the absence of local codes the appliance should be installed in accordance with the National Fuel Gas Code ANSI Z223.1/ NFPA 54 current issue and National Electrical Code ANSI/NFPA 70-current issue. In Canada, installation must be in accordance with the CAN 1-B149.1 and .2 – Installation Codes for Gas Burning Appliances and/ or local codes.

Step 1: Ventilation Requirements

It is <u>strongly recommended</u> that a suitable exhaust hood be installed above the range. Downdraft ventilation should not be used. The table below indicates the Thermador hoods, by model number, that are recommended for use with all ranges.

1. Select Hood and Blower Models:

- For wall installations, the hood width must, at a minimum, equal the width of the range cooking surface. Where space permits, a hood larger in width than the cooking surface may be desirable for improved ventilation performance.
- For island installations, the hood width should, at a minimum, overhang the range cooking surface by 3" on each side.

IMPORTANT:

Ventilation hoods and blowers are designed for use with single wall ducting. However, some local building codes or inspectors may require double wall ducting. Consult local building codes and/or local agencies before starting to assure that hood and duct installation will meet local requirements.

Do not install a microwave oven / ventilator combination above the range, as these types of units do not provide the proper ventilation and are not suitable for use with the range.

2. Hood Placement:

The lower edge of the hood should be installed a minimum of 36" above the range cooking surface. Also use a 36" minimum clearance if the hood contains any combustible materials such as a wood covering. (See Figure 1).

3. Consider Make-Up Air:

- Due to the high volume of ventilation air, a source of outside replacement air is recommended. This is particularly important for tightly sealed and insulated homes.
- A qualified heating and ventilating contractor should be consulted.

| side. | | | | | |
|-------------|-------------------------------------|---------------------------------------|--|-------------------------|--|
| RANGE WIDTH | WALL INSTALLATION HOOD* BLOWER** | | ISLAND INSTALLATION HOOD BLOWER | | |
| 30" RANGE | PH30CS PHE30 / 36 | VTR1030D, VTR1530D, or VTN1030C | HNI42YS HTNI42YS | VTR1030D or VTR1530D | |
| | HNW36YS | VTR1030D, or VTR1530D | 111141210 | | |
| 36" RANGE | PH36CS / 42CS PHE36 / 42 | VTR1030D, VTR1530D, or VTN1030C | HNI42YS HTNI42YS | VTR1030D or VTR1530D | |
| | HNW36YS / 42YS | VTR1030D, or VTR1530D | | | |
| 48" RANGE | PH48CS / 54CS PHE48 / 60 | VTR1030D, VTR1530D, or VTN1030C | HNI48YS/54YS VTR1530D HTNI48YS/54YS | | |
| | HNW48YS | VTR1030D, or VTR1530D | | | |

Notes: * For wall installations where adequate space is available, the installer or user may elect to use a hood that is wider than the rangetop cooking surface. This may be particularly beneficial for installations having a long duct run or when heavy usage of the grill is anticipated, in which improved capturing of the cooking exhaust is desired.

^{**} Thermador offers a choice of remote (VTR1030D or VTR1530D) or internal (VTN1030C) blowers for use in wall installations.

- The range is a free standing unit. If the unit is to be placed adjacent to cabinets, the clearances shown in Fig. 1 are required. The same clearances apply to island installations, except for the overhead cabinets, which must have a space wide enough to accept the flared island hood as indicated in Fig. 1.
- The 36" ranges may be recessed into the cabinets beyond the edge of the front face of the oven (See Figures 2A and 2B). The 30" and 48" ranges are not approved to be installed flush with the cabinets.

A CAUTION

In these installations, the door and cabinet on 36-inch models can cause a pinching hazard.

3. The gas and electrical supply should be within the zones shown in Fig. 3A.

Note: The maximum depth of over head cabinets installed on either side of the hood is 13".

A 36-inch minimum clearance is required between the top of the range and the bottom of an unprotected cabinet. It is recommended that the bottom of the wood or metal cabinet be protected by not less than 1/4 inch of a flame retardant material covered with not less than No. 28 MSG sheet steel, 0.015 inch (0.38 mm) thick stainless steel, 0.024 inch (0.6 mm) aluminum, or 0.020 inch (0.5 mm) thick copper. Flame retardant materials bear the following mark:

UNDERWRITERS LABORATORIES INC. CLASSIFIED MINERAL AND FIBER BOARDS SURFACE BURNING CHARACTERISTICS

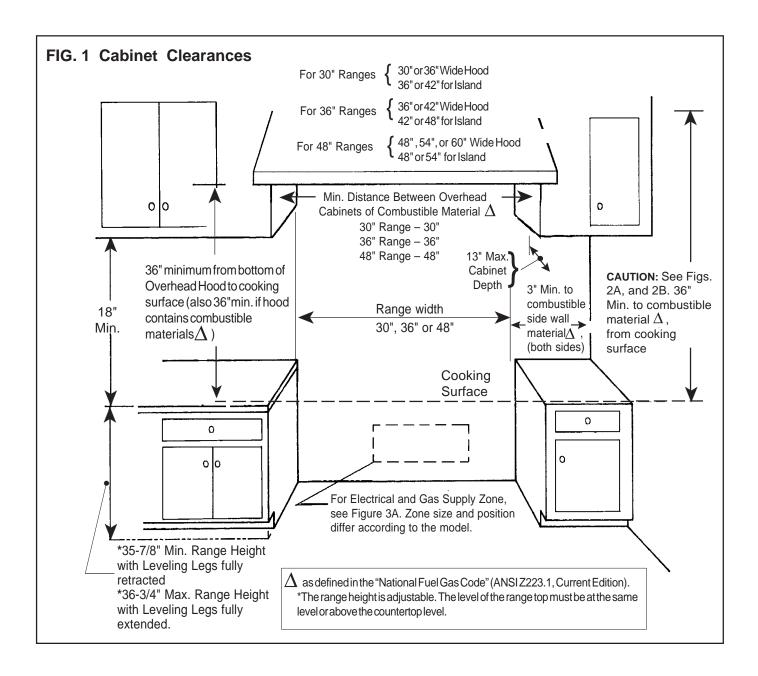
Followed by the flame spread and smoke ratings, these designations are shown as "FHC (Flame Spread/Smoke Developed)." Materials with "O" flame spread ratings are flame retardant. Local codes may allow other flame spread ratings.

- 4. Any openings in the wall behind the range and in the floor under the range must be sealed.
- 5. When there is less than a 12" horizontal clearance between combustible material ∆ and the back edge of the range above the cooking surface, a Thermador Low Back or Pot and Pan Shelf must be installed. (See Fig. 2A). When clearance to combustible material ∆ is over 12", a Thermador Island Trim may be used. (See Fig. 2B). Figures 2A and 2B indicate the space required for each type of backguard.
- 6. A three (3) inch minimum clearance is needed when the range is installed beside a combustible side wall.
- Always keep appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- 8. Do not obstruct the flow of combustion and ventilation air to the unit.
- △ As defined in the "National Fuel Gas Code" (ANSI Z223.1 / NFPA 54, Current Edition).

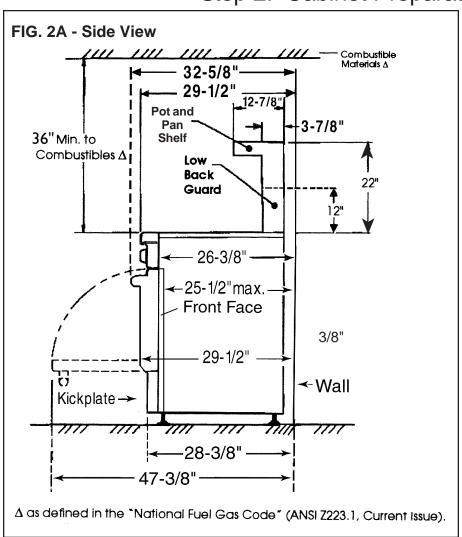
A

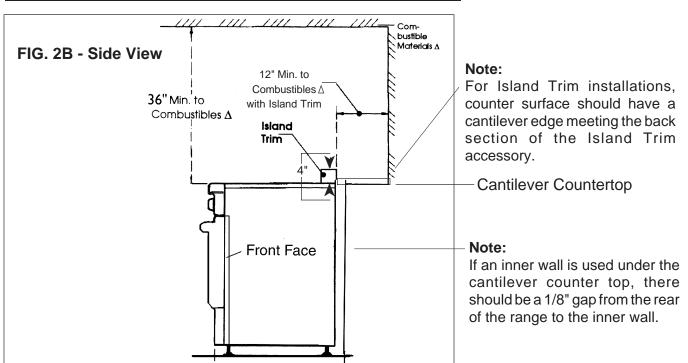
CAUTION:

Do not install the 30" and 48" ranges such that the oven door is flush with the cabinet face. A flush installation could result in damage to the cabinets due to exposure to high heat.



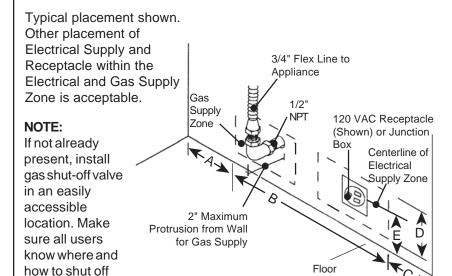
Step 2: Cabinet Preparation





GAS AND ELECTRIC SUPPLY ZONES:

FIG. 3A Gas & Electrical Supply Zones for All Gas Ranges



NOTE: The installer should inform the consumer of the location of the gas shut-off valve.

the gas supply to

the range.

| Model | Α | В | С | D | Е |
|-------|---------|-----|---------|--------|--------|
| 30" | 8" | 12" | 10" | 6-1/2" | 5-1/4" |
| 36" | 10-1/2" | 15" | 10-1/2" | 6-1/2" | 5-1/4" |
| 48" | 16-1/2" | 16" | 15-1/2" | 6-1/2" | 5-1/4" |

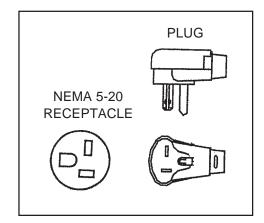
NOTE: Any opening in the wall behind the appliance and any opening in the floor under the appliance must be sealed.

The All Gas ranges may be connected to the power supply with a range supply cord (supplied with range) or by hard-wiring to the power supply. It is the responsibility of the installer to provide the proper wiring components (cord or conduit and wires) and complete the gas connection as dictated by local codes and ordinances, and/or the National Electric Code. The units must be properly grounded. Refer to Step 6 for details.

The range must be connected only to the type of gas for which it is certified. If the range is to be connected to propane gas, ensure that the propane gas supply tank is equipped with its own high pressure regulator in addition to the pressure regulator supplied with the range. (See Step 5.)

IMPORTANT:

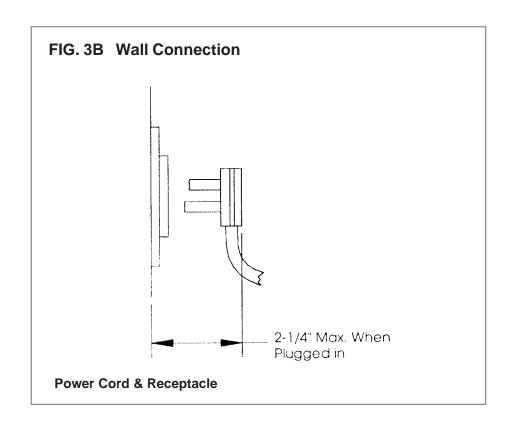
The cord supplied with gas ranges having electric griddle requires a NEMA 5-20 receptacle, shown here. Local codes may require a different wiring method.



ELECTRICAL SUPPLY

Installation of the range must be planned so that the rough-in of the junction box for the receptacle or conduit connection will allow maximum clearance to the rear of the unit.

To minimize binding when the unit is connected to the receptacle or junction box, orient the receptacle or conduit connector, and slide back into position.



IMPORTANT

For all gas range models with an electric griddle, a dedicated 20 Amp service is required for proper operation.

Step 5: Gas Requirements and Hookup

Verify the type of gas being used at the installation site. As shipped from the factory, units are configured for use with only natural gas or propane (LP) gas. Make certain the range matches the type of gas available at this location. These ranges are NOT convertible between different types of gas.

For installation of the appliance at high altitude, please consult your local gas company for their recommendation of the correct orifice sizes and any other necessary adjustments that will provide proper gas combustion at specified altitudes.

CAUTION

When connecting unit to propane gas, make certain the propane gas tank is equipped with its own high pressure regulator in addition to the pressure regulator supplied with the appliance. The pressure of the gas supplied to the appliance regulator must not exceed 14" (34.9 mb) water column.

Natural Gas Requirements:

Inlet Connection: 3/4" NPT external

1/2" NPT internal

(Minimum 3/4" dia. flex line.)

Supply Pressure: 6" min. to 14" max. water column.

(14.9 to 34.9 mb)

Manifold Pressure: 5" water column (12.5 mb)

Propane Gas Requirements:

Inlet Connection: 3/4" NPT external

1/2" NPT internal

(Minimum 3/4" dia. flex line.)

Supply Pressure: 11" min. to 14" max. water column.

(27.4 mb to 34.9 mb)

Manifold Pressure: 10" water column (24.9 mb)



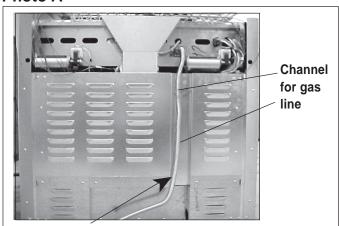
WARNING

Gas line must not come in contact with any components inside back cover of range. Run gas line in channel in back of range.

HOOK UP

- A manual gas shut-off valve must be installed external to the appliance, in a location accessible from the front, for the purpose of shutting off the gas supply. The supply line must not interfere with the back of the unit. Make sure the gas supply is turned off at the manual shut-off valve before connecting the appliance.
- The range is supplied with its own pressure regulator that has been permanently mounted within the range body.
- Use 3/4" flex line to connect between the gas supply and the appliance inlet pipe, which exits the upper rear of the appliance. The appliance pipe connection has a 3/4" NPT external thread and a 1/2" NPT internal thread. (See Photo A.) Use caution to avoid crimping the 3/4" flex line when making bends.
- The gas supply connections shall be made by a competent technician and in accordance with local codes or ordinances. In the absence of a local code, the installation must conform to the National Fuel Gas Code ANSI Z223.1/NFPA54current issue.
- Always use pipe sealing compound or Teflon® tape on the pipe threads, and be careful not to apply excessive pressure when tightening the fittings.
- Leak testing of the appliance shall be in accordance with the following instructions.
 - Turn on gas and check supply line connections for leaks using a soap and water solution.
 - Bubbles forming indicate a gas leak. Repair all leaks immediately after finding them.
 - Do not use a flame of any kind to check for gas leaks.

Photo A



Use 3/4" flex line to connect between the gas supply and the appliance manifold pipe, which exits the upper left rear of the appliance.

Step 6: Electrical Requirements, Connection & Grounding

 Before installing, turn power OFF at the service panel. Lock service panel to prevent power from being turned ON accidentally.

| Chart B: Electrical Supply Circuit Requirements | | | | | | | | |
|---|---------|---------------|-----------|--------|--|--|--|--|
| MODELTYPE | VOLTAGE | CURRENTRATING | FREQUENCY | PHASE | | | | |
| 30" | 120 VAC | 15 Amps | 60 Hz. | Single | | | | |
| 36" | 120 VAC | 15 Amps | 60 Hz. | Single | | | | |
| 36" with Grill | 120 VAC | 15 Amps | 60 Hz. | Single | | | | |
| 36" with Griddle | 120 VAC | 20 Amps | 60 Hz. | Single | | | | |
| 48" with Grill | 120 VAC | 15 Amps | 60 Hz. | Single | | | | |
| 48" with Griddle | 120 VAC | 20 Amps | 60 Hz. | Single | | | | |
| 48" with Grill | 120 VAC | 20 Amps | 60 Hz. | Single | | | | |
| and Griddle | | | | | | | | |

- A neutral supply wire must be provided from the power source (breaker/fuse panel) because critical range components, including the surface burner spark re-ignition modules, require 120 VAC to operate safely and properly. An improper 120 VAC power supply will cause malfunction, damage to this appliance, and possibly create a condition of shock hazard. If the correct power supply circuit is not provided, it is the responsibility and obligation of the installer and user to have proper power supply connected. This must be accomplished in accordance with all applicable
- local codes and ordinances by a qualified electrician. In the absence of local codes and ordinances, the power supply connection shall be in accordance with the National Electrical Code.
- Observe all governing codes and ordinances when grounding. In the absence of these codes or ordinances observe National Electrical Code ANSI/NFPA No. 70 current issue.
- Electric wiring diagrams and schematics have been placed in the toe kick area of the range for access by a qualified service technician.

IMPORTANT

For all gas ranges with electric griddle, dedicated 20 AMP service is required for proper operation.

Before you plug in an electrical cord, be sure all controls are in the OFF position.

For appliances equipped with a cord and plug, do not cut or remove the ground prong. It must be plugged into a matching grounding type receptacle to avoid electrical shock. If there is any doubt as to whether the wall receptacle is properly grounded, the customer should have it checked by a qualified electrician.

Installer - show the owner the location of the circuit breaker or fuse. Mark it for easy reference.

A

CAUTION

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5kPa.).

The appliance and its individual shut off valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of 1/2 psig (3.5kPa.).

When checking the manifold gas pressure, the inlet pressure to the regulator should be at least 6.0" (14.9 mb) W.C. for natural gas or 11.0" (27.4 mb) for propane.

Do not attempt any adjustment of the pressure regulator.