# Installation



3 Series Freestanding 30" Dual Fuel Self-Clean Sealed Burner Range

RVDR3302 / CRVDR3302

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# **IMPORTANT**-Read and Follow!

- Before beginning, please read these instructions completely and carefully.
- DO NOT remove permanently affixed labels, warnings, or plates from product. This may void the warranty.
- All local and national codes and ordinances must be observed. Installation must conform with local codes or in the absence of codes, the National Fuel Gas Code ANSI Z223.1/NFPA-54 – latest edition.
- The installer must leave these instructions with the consumer who should retain for local inspector's use and for future reference.

**In Canada:** Installation must be in accordance with the current CAN/CGA B149.1 & 2 Gas Installation codes and/or local codes. Electrical installation must be in accordance with the current CSA C22.1 Canadian Electrical Codes Part 1 and/or local codes.

**In Massachusetts:** All gas products must be installed by a "Massachusetts" licensed plumber or gasfitter. A "T" type handle manual valve must be installed in the gas supply line to the appliance.

## Your safety and the safety of others is very important.

We have provided many important safety messages in this manual and on your appliance. **ALWAYS** read and obey all safety messages.



This is the safety alert symbol. This symbol alerts you to hazards that can kill or hurt you and others.

All safety messages will be preceded by the safety alert symbol and the word "DANGER," "WARNING" or "CAUTION." These words mean:

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Hazards or unsafe practices which WILL result in severe personal injury or death.

#### **WARNING**

Hazards or unsafe practices which COULD result in severe personal injury or death.

#### 

Hazards or unsafe practices which COULD result in minor personal injury or property damage.

All safety messages will identify the hazard, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

# **IMPORTANT**-Read and Follow!

# A GFI shall be used if required by NFPA-70 (National Electric Code), federal/state/local laws, or local ordinances.

- The required use of a GFI is normally related to the location of a receptacle with respect to any significant sources of water or moisture.
- Viking Range, LLC will NOT warranty any problems resulting from GFI outlets which are not installed properly or do not meet the requirements below.

#### If the use of a GFI is required, it should be:

- Of the receptacle type (breaker type or portable type NOT recommended)
- Used with permanent wiring only (temporary or portable wiring NOT recommended)
- On a dedicated circuit (no other receptacles, switches or loads in the circuit)
- Connected to a standard breaker of appropriate size (GFI breaker of the same size NOT recommended)
- Rated for Class A (5 mA +/- 1 mA trip current) as per UL 943 standard
- In good condition and free from any loose-fitting gaskets (if applicable in outdoor situations)
- Protected from moisture (water, steam, high humidity) as much as reasonably possible

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To prevent possible damage to cabinets and cabinet finishes, use only materials and finishes that will not discolor or delaminate and will withstand temperatures up to 194°F (90°C). Heat resistant adhesive must be used if the product is to be installed in laminated cabinetry. Check with your builder or cabinet supplier to make sure that the materials meet these requirements.

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THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

- **DO NOT** store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- 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 neighbor's phone.
  - –Follow the gas supplier's instructions.
  - -If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

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#### CHEMICAL HAZARD

To avoid risk of property damage and/or personal injury or death; this appliance is not

too be used as a heating source.

- Benzene is a chemical which is part of the gas supply to this cooking product, which is consumed in the flames during combustion. Exposure to a small amount of benzene is possible if a gas leak occurs. Formaldehyde and soot are by-products of incomplete combustion.
- This appliance contains or produces chemicals which can cause serious injury or death and which are known to the state of California to cause cancer, birth defects or other reproductive harm. To reduce the risk from substances in the fuel or from fuel combustion make sure this appliance is installed, operated, and maintained in accordance to the instructions in this document.

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#### ELECTRICAL SHOCK HAZARD

To avoid risk of electrical shock, personal injury or death; verify your appliance has been properly grounded in accordance with local codes or in absence of codes, with the National Electrical Code (NEC). ANSI/NFPA-70 – latest edition.

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while handling and moving. Possible

use of appliance moving devices is recommended.

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#### GAS LEAK HAZARD

To avoid risk of personal injury or death; leak testing of the appliance must be conducted

according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

• DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

#### 

TIPPING HAZARD



To reduce the risk of the appliance tipping, it must be secured by a properly installed anti-tip bracket(s). To make sure the bracket has been installed properly, look behind the range with a flashlight to verify proper installation

engaged in the rear top left corner of the range or under the range to verify that a floor hook and bracket have been installed.

- THIS RANGE CAN TIP.
- A CHILD OR ADULT CAN TIP THE RANGE AND BE KILLED.
- FAILURE TO INSTALL THE ANTI-TIP DEVICE CAN RESULT IN DEATH OR SERIOUS BURNS TO CHILDREN OR ADULTS.
- IF THE RANGE IS MOVED THEN THE ANTI-TIP DEVICE MUST BE RE-ENGAGED.

# Dimensions





*Note:* Units shown with island trim.

# **Specifications**

RVDR3302/CRVDR3302	
Description	
Overall width	29-7/8" (75.9 cm)
Overall height	To top of side panel – 35-7/8" (91.1 cm) min. 37" (94.0 cm) max. Legs adjust – 1-1/8" (2.9 cm)
Overall depth from rear	To front of side panel – 25" (63.5 cm) To front of door – 25-3/4" (65.4 cm) To front of control panel – 27 1/8" (68.9 cm) To end of knobs – 29" (73.7 cm)
Additions to Overall Height	To top of island trim – add 1" (2.54 cm) To top of backguard – add 6" (15.2 cm) To top of high shelf – add 18-3/16" (46.2 cm)
Gas Requirements	Shipped standard for Natural gas, field convert with LP conversion kit (purchased separately); Accepts standard residential 1/2" (1.3 cm) ID gas service line
Gas Manifold Pressure	Natural 5.0" W.C.P./ Liquid Propane L/P 10.0" W.C.P.
Electrical Requirements	240-208 VAC 60 Hz electrical connection box on product, connect with locally supplied 3-wire, flexible cord or "pigtail" rated 40 amp. 125-250 VAC minimum. Cord must be agency approved for use with household electric ranges.
Max Amp Usage	240V – 25.4 amps 208V – 22.9 amps
Surface Burner Rating Natural/LP Left front Left rear Center Right rear Right front	18,000 BTU Nat/16,000 BTU LP/Propane (5.3 kW Nat/4.7 kW LP/Propane) 9,100 BTU Nat/6,500 BTU LP/Propane (2.7 kW Nat/1.9 kW LP/Propane) 9,100 BTU Nat/8,000 BTU LP/Propane (2.7 kW Nat/2.4 kW LP/Propane) 12,000 BTU Nat/11,000 BTU LP/Propane (3.5 kW Nat/3.2 kW LP/Propane) 17,000 BTU Nat/15,000 BTU LP/Propane (5.1 kW Nat/4.4 kW LP/Propane)
Oven Interior Width	25-5/16" (64.6 cm)
Oven Interior Height	16-1/2" (41.9 cm)
Oven Interior Depth	Overall – 19-1/2" (49.5 cm) AHAM – 16-13/16" (42.7 cm)
Oven Volume Overall AHAM	4.7 cu. ft. 4.1 cu. ft.
Approximate shipping weight	410 lbs. (184.5 kg)

Note: Clearances from non-combustible materials are not part of the ANSI Z21.1 scope and not certified by CSA. Clearances to noncombustible materials must be approved by the authority having jurisdiction.

Minimum clearances from adjacent combustible construction:

Below cooking surface (36" [91.4 cm] and below)

- Sides 0"
- Top grate support 36" (91.4 cm)

Above cooking surface (above 36" [91.4 cm])

- Sides 6" (15.2 cm)
- Within 6" (15.2 cm) side clearance, wall cabinets no deeper than 13" (33.0 cm) must be minimum 18" (45.7 cm) above cooking surface
- Wall cabinets directly above product must be a minimum of 42" (106.7 cm) above cooking surface
- Rear 0" with 6" backguard or high shelf; 0" with island trim and non-combustible rear wall;
- 6" (15.2 cm) with island trim and combustible rear wall

# Clearance Dimensions (Proximity to Cabinets)

 This range may be installed directly adjacent to existing 36" (91.4 cm) high base cabinets.

**IMPORTANT:** The side trim MUST be 3/8" (.95 cm) above the adjacent base cabinet countertop. This can be accomplished by raising the unit using the adjustment spindles on the legs.

- The range CANNOT be installed directly adjacent to sidewalls, tall cabinets, tall appliances, or other side vertical surfaces above 36" (91.4 cm) high. There must be a minimum of 6" (15.2 cm) side clearance from the range to such combustible surfaces above the 36" (91.4 cm) counter height.
- Within the 6" (15.2 cm) side clearance to combustible vertical surfaces above 36" (91.4 cm), the maximum wall cabinet depth must be 13" (33.0 cm) and wall cabinets within this 6" (15.2 cm) side clearance must be 18" (45.7 cm) above the 36" (91.4 cm) high countertop.
- Wall cabinets above the range must be a minimum of 42" (106.7 cm)

#### 



#### **BURN HAZARD**

To avoid risk of personal injury: the use of cabinets for storage above the appliance may result in a potential burn hazard. Combustible items may ignite, metallic items may become hot and cause burns. If cabinet storage is used, the risk can be reduced by installing a rangehood that projects horizontally a minimum 5" (12.7 cm) beyond the bottom of cabinets.

above the range cooking surface for the full width

of the range. This minimum height requirement does not apply if a range hood is installed over the cooking surface.



Note: If a range hood is installed, wall cabinets above the range have a different minimum clearance height.

# Clearance Dimensions (Wood/Composite Overlay)



# **Electrical & Gas Requirements**

#### **Electrical Requirements**

Check your national and local codes regarding this unit. This range requires 3-wire or 4-wire, 240-208 VAC/60 Hz. See "Electrical Connection" section for grounding instructions. Must be fused seperately from any other circuit.

#### 



ELECTRICAL SHOCK HAZARD

To avoid the risk of electrical shock, personal injury or death; verify electrical power is turned off at the breaker box and gas supply is turned off until the range is installed and ready to operate, installation by an authorized installer only.

#### **Gas Connection**

The gas supply (service) line must be the same size or greater than the inlet line of the appliance. This range uses a 1/2" (1.3 cm) ID NPT (Sch40) inlet. Sealant on all pipe joints must be resistive to LP gas.

The range is designed specifically for natural or LP gas. Before beginning installation verify that the model is compatible with the intended gas supply.

#### Manual shut-off valve:

This installer-supplied valve must be installed in the gas service line before the appliance in the gas stream and in a location where it can be reached quickly in the event of an emergency.

**In Massachusetts:** A "T" handle type manual valve must be installed in the gas supply line to the appliance.

**IMPORTANT: Any conversion required must be performed by your dealer or a qualified licensed plumber or gas service company.** Please provide the service person with this manual before work begins.

#### **Pressure Regulator:**

- All heavy-duty, commercial type cooking equipment must have a pressure regulator on the incoming service line for safe and efficient operation, since service pressure may fluctuate with local demand. External regulators are not required on this range since a regulator is built into each unit at the factory. Under no condition bypass this builtin regulator.
- Manifold pressure should be checked with a manometer, natural gas requires 5.0" W.C.P. and LP gas requires 10.0" W.C.P. Incoming line pressure upstream from the regulator must be 1" W.C.P. higher than the manifold pressure in order to check the regulator. The regulator used on this range can withstand a maximum input pressure of 1/2" PSI (14.0" W.C.P.). If the line pressure is in excess of that amount, a step down regulator will be required.
- The appliance must be disconnected from the gas supply piping system during any pressure testing of that system.

# **Electrical & Gas Requirements**

#### **Flexible Connections:**

If the unit is to be installed with flexible couplings and/or quick-disconnect fittings, the installer must use a heavy-duty AGA design-certified flexible connector of at least 1/2" (1.3 cm) ID NPT (with suitable strain reliefs) in compliance with ANSI Z21.41 and Z21.69.

# **In Canada:** CAN 1-6, 10-88 metal connectors for gas appliances and CAN 1-6.9 M79 quick disconnect devices for use with gas fuel.

**In Massachusetts:** This appliance must be installed with a 36" (3-foot) long flexible gas connector.



# **General Information**

#### READ AND FOLLOW ALL WARNING AND CAUTION INFORMATION WHEN INSTALLING THIS APPLIANCE.

- All openings in the wall behind the appliance and in the floor under the appliance must be sealed.
- **DO NOT** obstruct the flow of combustion and ventilation air.

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Avoid any damage to oven vents. The vents need to be unobstructed and open to provide proper airflow for optimal oven performance.

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The cooling fan should be operating when the unit is in operation. If you notice the cooling fan is not operating or you observe unusual or excessive noise coming from the cooling fan, contact a Viking Authorized Service Center before continuing operation. Failure to do so can result in damage to the oven or surrounding cabinets.

#### Moving, Handling, and Unpacking

Remove and discard all packing materials, including cardboard and tape on the outside and inside of the range.

Remove the cardboard top pack containing the burner heads, burner caps, grates, leveling legs and anti-tip bracket from the top of the range.

**DO NOT** discard the anti-tip metal brackets (2) supplied with the range. These are the anti-tip devices and one must be installed with the unit.

Type 1 is a wall mount device which can be used for all installation applications.

Type 2 is a floor mount device which can be used for all applications other than when the range is installed on a concrete sub-floor.

**Important:** The range **MUST** be installed with one of the anti-tip devices.

Refer to "Anti-tip Device Installation" section for details on installation.

Some stainless steel parts may have a plastic protective wrap which must be peeled off. The interior should be washed thoroughly with hot, soapy water to remove film residues and any dust or debris before being used, then rinsed and wiped dry. Solutions stronger than soap and water are rarely needed.

# Installation

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**DO NOT** use the handle or oven door to lift the oven. Remove door before installation to ensure that it is not used to lift the unit. **DO NOT** lift or carry the door by the handle.

Removing the door must be done by your dealer, a qualified licensed plumber, or certified gas installer.

#### Door Removal



Open door completely. Fold latches back until locked in place.



Gently close until latches stop door.



Lift door up and out.

#### Leg Installation



Legs are packed in the cardboard top pack. **Note:** Legs should be installed near to where appliance is to be used, as they are not secure for long transit.



Screw legs into couplings on all four corners.



Note: It is strongly recommended that a pallet or lift jack be used rather than tilting. Raise unit about a foot. Unscrew temporary legs from couplings.



Lower range gently to keep any undue strain from legs and internal mounting hardware.

#### Electrical Connection (3-wire)

*Note:* If you have a 4-wire connection, see following section for 4-wire connection instructions.

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ELECTRICAL SHOCK HAZARD To avoid risk or electrical shock, personal injury or death; grounding product to the frame of the unit may or may not be permitted through your local codes. If ground to the frame is not permitted then a 4-conductor power cord must be used.

Use a 3-wire power supply cord kit rated for 40 amps – 125/250 volts with closed loop terminals and marked for use with ranges.

Where local codes do not permit grounding through neutral, use a 4-wire power supply cord. The cord or conduit must be secured to the range with the strain relief bracket.

The electrical connection is made at the terminal block, which is located behind the access door on the back of the range.

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Electrical Code (NEC) ANSI/NFPA-70 – latest edition.



Remove access door.



Remove supply cord strain relief bracket and three supply cord mounting screws on terminal block.



Feed supply cord up through hole in bottom of range back.

#### Electrical Connection (3-wire) (cont.)



To make a bare wire connection, use holes on the left side of the terminal block. To connect eyelet style wires, use holes on right side of terminal.



Push supply cord toward terminal block to relieve strain, reattach supply cord strain relief bracket over supply cord.



Attach line #1 (black) and line #2 (red) leads to outside terminal. Attach neutral wire (white) to center terminal on the terminal block.



Reattach access door.

#### **Electrical Connection (4-wire)**

#### WARNING

ELECTRICAL SHOCK HAZARD To avoid risk or electrical shock, personal injury or death; grounding product to the frame of the unit may or may not be permitted through your local codes. If ground to the frame is not permitted then a 4-conductor power cord must be used.

Use a 4-wire power supply cord kit rated for 40 amps - 125/250 volts with closed loop terminals and marked for use with ranges.

Where local codes do not permit grounding through neutral, use a 4-wire power supply cord. The cord or conduit must be secured to the range with the strain relief bracket.

The electrical connection is made at the terminal block, which is located behind the access door on the back of the range.

#### WARNING



#### ELECTRICAL SHOCK HAZARD

To avoid risk of electrical shock, personal injury or death; verify your appliance has been properly grounded in accordance with local codes or in absence of codes, with the National Electrical Code (NEC) ANSI/NFPA-70 latest edition.



Remove access door.



bracket and three supply cord mounting screws on the terminal block.

and discard ground strap.

#### Electrical Connection (4-wire) (cont.)



To make a bare wire connection, use holes on the left side of the terminal block. To connect eyelet style wires, use holes on right side of terminal.



Feed supply cord up through hole in bottom of range back.



Attach ground lead (green) with ground screw that was removed.



Attach line #1 (black) and line #2 (red) leads to outside terminal. Attach neutral wire (white) to center terminal on terminal block.



Reattach access door.



Push supply cord toward terminal block to relieve strain, reattach supply cord strain relief bracket over supply cord.

#### Leveling/Adjustments/Alignment



Measure the four corners in cutout area to verify if flooring is level.



For uneven or sloped floors, level unit with metal shims only, as the adjustment required may exceed the thread available in the leg.



Move unit into opening.



Check that unit is level side to side and front to back. Side trim of the high corner must be 3/8" (0.95 cm) above countertop.



If leveling is required, move unit out of opening.



Lift unit and prop on wood blocks.

#### Leveling/Adjustments/Alignments (cont.)



Set the high corner of range so that the top of side trim is 3/8'' (0.95 cm) above countertop. Level range to high corner.

#### Anti-tip Device Installation



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#### TIPPING HAZARD



To reduce the risk of the appliance tipping, it must be secured by a properly installed anti-tip bracket(s). To make sure the bracket has been installed properly, look behind the range with a flashlight to verify proper installation engaged in the rear

top left corner of the range or under the range to verify that a floor hook and bracket have been installed.

#### Wall Mount Anti-tip Installation



Measure from floor to bottom of the anit-tip opening located on the back of range. This will be measurement (A).



Locate anti-tip bracket on rear wall with the top left corner at measurement (A) plus 1/2" (1.3 cm) from the floor and 3-5/8" (9.2 cm) from where the right side of range (facing range) is to be located.



Mark and drill holes where bracket will be located.

Attach bracket with mounting hardware provided.

#### Floor Mount Anti-tip Installation

Dim A from Rear Wall	3-7/8"
Without Standoffs	(9.8 cm)
Dim A from Rear Wall	4-5/8″
With Standoffs	(11.7 cm)



Refer to chart for dimension A based on whether or not standoffs are used with the rear trim device. Mark and drill 1/8" (.32 cm) holes where



Mount anti-tip bracket hook to floor using screws provided.



Remove two screws from back of range.



Attach bracket to back of range using two screws.

#### **Connecting Gas & Electric**

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GAS LEAK HAZARD To avoid risk of personal injury or death; leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution. • DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

Note: Refer to electrical and gas requirements section for proper installation information.



Connect gas and electrical. Before placing appliance in operation, always check for gas leaks. This must be performed by your dealer, a qualified licensed plumber, or gas service company.



Burner heads and burner caps are packed in the cardboard top pack with the grates. Align burner head on burner base. Place burner cap on burner head. Place grate onto the burner pan.

#### **Final Installation**



Slide range into place. Be sure anti-tip bracket slides into the anti-tip opening.



Check that unit is level side to side and front to back. The side trim must be 3/8" (0.95 cm) above countertop. If unit is not level repeat Steps 5-7 of "Leveling/Adjustments/Alignment" section.

## Door Replacement



Carefully realign door on hinges. Slide in and down.





Close door

# **Final Preparation**

 All stainless steel body parts should be wiped with hot, soapy water and with a liquid cleaner designed for this material.
 If buildup occurs, **DO NOT** use steel wool, abrasive cloths, cleansers, or powders!
 If it is necessary to scrape stainless steel to remove encrusted materials, soak with hot, wet cloths to loosen the material, then use a wool or nylon scraper. **DO NOT** use a metal knife, spatula, or any other material tool to scrape stainless steel! Scratches are almost impossible to remove.

# **Performance Checklist**

A qualified installer should carry out the following checks:

h Check top burner
 ignition. See drawing
 for proper flame
 height on HI. The low
 flame should light at
 every port.



- h Check oven bake function—bake element on full power, center and outside broil elements at partial power.
- h Convection bake function—bake and broil elements the same with the convection fan on.
- h Check TruConvec<sup>™</sup> function—TruConvec element (behind convection fan cover) on and convection fan on.
- h Check HI broil function-both broil elements at full power.
- h Check LOW broil function—inner broil element only.
- h Check convection broil function—both broil elements at full power with convection fan on.
- h Check self-clean function—door will lock in

approximately 30 seconds, the center and outside broil elements will turn on and the bake element will turn on at partial power. Check broil elements through window to make sure they are on, then abort self-clean cycle to unlock door.

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When conducting performance test, **DO NOT** run self-clean cycle for more than 10 minutes with oven racks inside oven. This could cause them to discolor due to the high temperature required for self-cleaning.

# Service & Registration

Only authorized replacement parts may be used in performing service on the appliance. All servicing should be referred to a qualified technician.

Contact Viking Range, LLC, 1-888-845-4641, for the nearest service parts distributor in your area or write to:

#### VIKING RANGE, LLC PREFERRED SERVICE 111 Front Street Greenwood, Mississippi 38930 USA

The serial number and model number for your range can be found by opening the door and looking under the control panel.



Record the following information indicated below. You will need it if service is ever required.

Model number
Serial number
Date of purchase
Date installed
Dealer's name
Address

# These installation instructions should remain with the unit for future reference.

Viking Range, LLC 111 Front Street Greenwood, Mississippi 38930 USA (662) 455-1200

For product information, call 1-888-845-4641 or visit our website at vikingrange.com

