

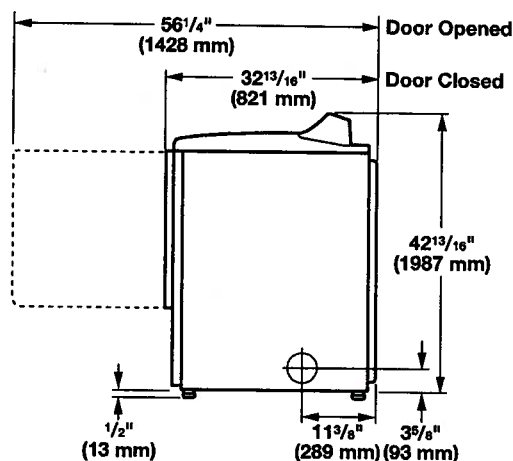


# 398

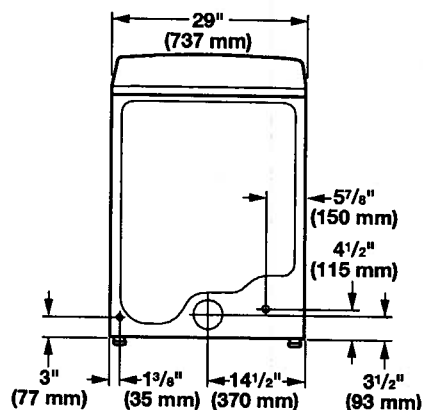
## Gas and Electric Dryer PRODUCT MODEL NUMBERS

MEDB835D, MEDB855D,  
MGDB835D, **MGDB855D**

Side view

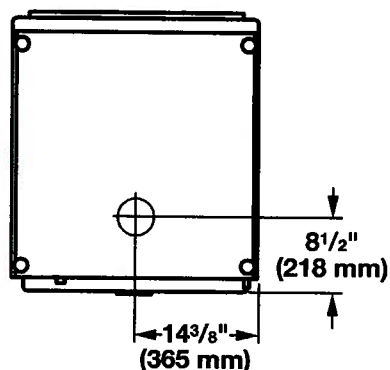


Back view



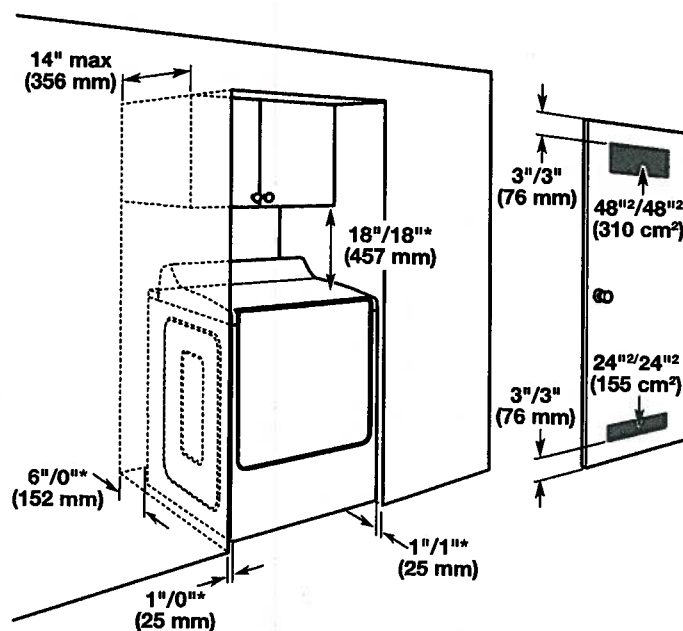
**NOTE:** Leveling legs 1/2" (13 mm) (3.6 washer capacity) or 1 1/2" (38 mm) (3.8 washer capacity) depending model.

Bottom view



**NOTE:** Most installations require a minimum of 6" (152 mm) clearance behind dryer for exhaust vent with elbow. See "Venting Requirements."

Minimum Required Spacing



\*Recommended/Minimum spacing

### Spacing for recessed area or closet installation

The dimensions shown are for the recommended spacing allowed.

- Additional spacing should be considered for ease of installation and servicing.
- Additional clearances might be required for wall, door, and floor moldings.
- Additional spacing of 1" (25 mm) on all sides of the dryer is recommended to reduce noise transfer.
- For closet installation, with a door, minimum ventilation openings in the top and bottom of the door are required. Louvered doors with equivalent ventilation openings are acceptable.
- Companion appliance spacing should also be considered.

# INSTALLATION REQUIREMENTS

## GAS SUPPLY REQUIREMENTS

**Gas supply:** This dryer is equipped for use with Natural gas. Dryer can be converted to L.P. gas. When rigid pipe is used it should be 1/2" IPS. When acceptable to the gas supplier and local codes, 3/8" approved tubing may be used for lengths under 20 ft (6.1 m). For lengths over 20 ft (6.1 m), larger tubing should be used. Pipe-joint compounds resistant to the action of L.P. gas must be used. An individual manual shutoff valve must be installed within 6 ft (1.8 m) of the dryer in accordance with the National Fuel Gas Code ANSI Z223.1.

## ELECTRICAL REQUIREMENTS - Gas models only

A 120-volt, 60 Hz, AC-only, 15 or 20 amp fused electrical supply is required. A time-delay fuse or circuit breaker and a separate circuit are recommended.

## ELECTRICAL REQUIREMENTS - Electric models only

To supply the required 3 or 4 wire, single phase, 120/240 volt, 60 Hz., AC only electrical supply (or 3 or 4 wire, 120/208 volt electrical supply, if specified on the serial/rating plate) on a separate 30-amp circuit, fused on both sides of the line. A time-delay fuse or circuit breaker is recommended. Connect to an individual branch circuit.

## WATER (STEAM MODELS ONLY) REQUIREMENTS

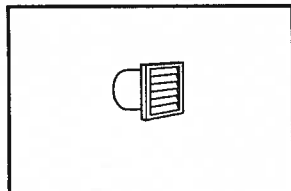
The dryer must be connected to the cold water faucet using new inlet hoses. Do not use old hoses. Do not overtighten. Damage to the coupling can result.

## VENTING REQUIREMENTS

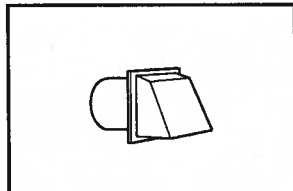
**Exhaust venting:** Exhaust your dryer to the outside. 4" (102 mm) diameter vent is required. Rigid or flexible metal exhaust vent must be used. Do not use plastic or metal foil vet. Exhaust hood must be at least 12" (305 mm) from the ground or any object that may be in the path of the exhaust.

### Exhaust hoods:

#### Recommended Styles:

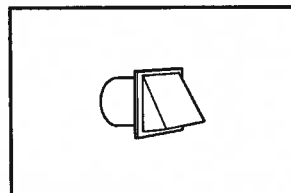


Louvered Hood



Box Hood

#### Acceptable Style:



Angled Hood

### Determine vent path:

- Select route that will provide straightest and most direct path outdoors.
- Plan installation to use fewest number of elbows and turns.
- When using elbows or making turns, allow as much room as possible.
- Bend vent gradually to avoid kinking.
- Use as few 90° turns as possible.

### Determine vent length and elbows needed for best drying performance:

- Use following Vent System Chart to determine type of vent material and hood combinations acceptable to use.

**NOTE:** Do not use vent runs longer than those specified in Vent System Chart. Exhaust systems longer than those specified will:

- Shorten life of dryer.
- Reduce performance, resulting in longer drying times and increased energy usage.

The Vent System Charts provide venting requirements that will help achieve best drying performance.

### Vent System Chart

| Number of 90° elbows | Type of vent | Angled hoods    |
|----------------------|--------------|-----------------|
| 0                    | Rigid metal  | 64 ft. (20 m)   |
| 1                    | Rigid metal  | 54 ft. (16.5 m) |
| 2                    | Rigid metal  | 44 ft. (13.4 m) |
| 3                    | Rigid metal  | 35 ft. (10.7 m) |
| 4                    | Rigid metal  | 27 ft. (8.2 m)  |

**NOTE:** Bottom exhaust installations have a 90° turn inside the dryer. To determine maximum exhaust length, add one 90° turn to the charts.

## PRODUCT MODEL NUMBERS

KBFS20EC KBFS25EC  
KBFS22EC KRFC300E  
KRFF302E KRFF305E

**Electrical:** A 115-volt, 60-Hz, AC-only, 15- or 20-amp fused, grounded electrical supply is required. It is recommended that a separate circuit serving only your refrigerator be provided. Use an outlet that cannot be turned off by a switch. Do not use an extension cord.

**NOTE:** Before performing any type of installation, cleaning, or removing a light bulb, turn the control (Thermostat, Refrigerator or Freezer Control depending on the model) to OFF and then disconnect the refrigerator from the electrical source. When you are finished, reconnect the refrigerator to the electrical source and reset the control (Thermostat, Refrigerator or Freezer Control depending on the model) to the desired setting. See "Using the Controls."

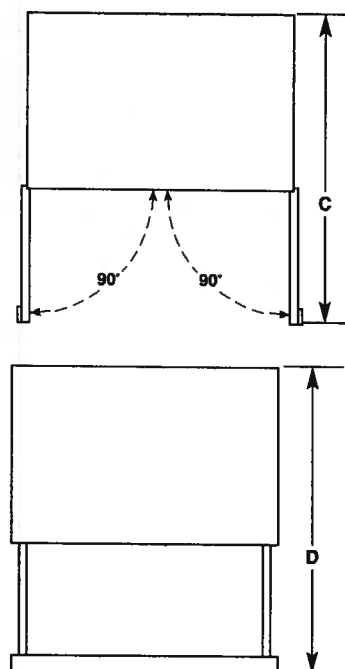
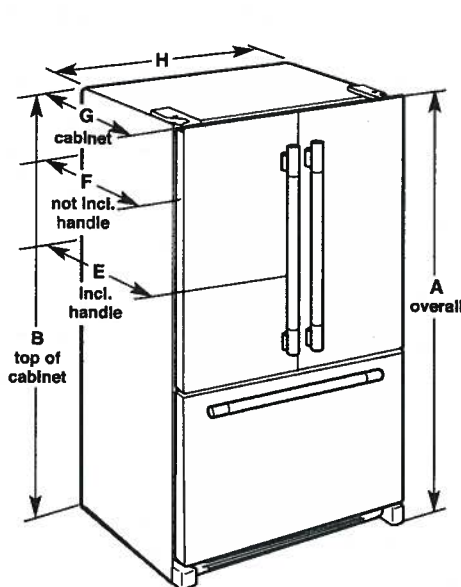
**Water:** A cold water supply with water pressure between 35 and 120 psi (241 and 827 kPa) is required to operate the ice maker and water dispenser. If you have questions about your water pressure, call a licensed, qualified plumber.

**IMPORTANT:** The pressure of the water coming out of a reverse osmosis system going to the water inlet valve of the refrigerator needs to be between 35 and 120 psi (241 and 827 kPa).

**Reverse Osmosis Water Supply:** If a reverse osmosis water filtration system is connected to your cold water supply, the water pressure to the reverse osmosis system needs to be a minimum of 40 to 60 psi (276 to 414 kPa).

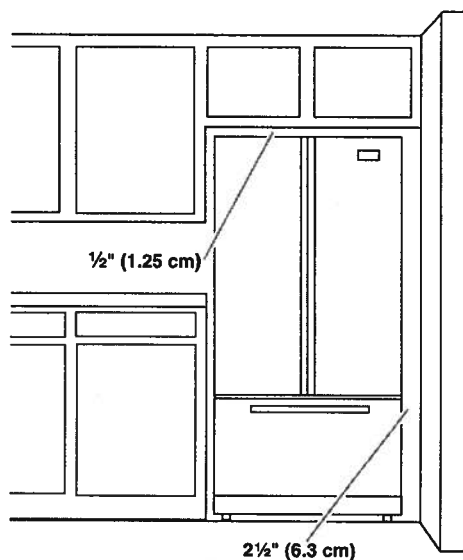
## Bottom Mount Refrigerator

### PRODUCT DIMENSIONS



| Model Number/Size          | Height - Overall "A"                           | Height - Top of Cabinet "B"                    | Depth - Doors Open 90° "C"                      | Depth - Drawer Open "D"                         | Depth - With Handles "E"                       | Depth - Without Handles "F"                    | Depth - Cabinet Only "G"                      | Width - Cabinet "H"                           |
|----------------------------|--|--|---|---|--|--|---|---|
| KBFS20EC<br>20.0 cu. ft.   | 70 <sup>1</sup> / <sub>8</sub> "<br>(178.1 cm) | 68 <sup>1</sup> / <sub>2</sub> "<br>(174.0 cm) | 43"<br>(109.2 cm)                               | 44 <sup>1</sup> / <sub>2</sub> "<br>(113 cm)    | 29 <sup>3</sup> / <sub>8</sub> "<br>(74.6 cm)  | 28"<br>(71.1 cm)                               | 24 <sup>1</sup> / <sub>8</sub> "<br>(61.3 cm) | 35 <sup>3</sup> / <sub>8</sub> "<br>(90.5 cm) |
| KBFS22EC<br>(21.7 cu. ft.) | 70 <sup>1</sup> / <sub>8</sub> "<br>(178.1 cm) | 68 <sup>1</sup> / <sub>8</sub> "<br>(174.0 cm) | 47 <sup>1</sup> / <sub>16</sub> "<br>(119.5 cm) | 52 <sup>1</sup> / <sub>16</sub> "<br>(132.2 cm) | 34 <sup>7</sup> / <sub>16</sub> "<br>(87.5 cm) | 31 <sup>1</sup> / <sub>16</sub> "<br>(81.1 cm) | 28 <sup>1</sup> / <sub>8</sub> "<br>(71.4 cm) | 32 <sup>5</sup> / <sub>8</sub> "<br>(82.9 cm) |
| KBFS25EC<br>(24.8 cu. ft.) | 70 <sup>1</sup> / <sub>8</sub> "<br>(178.1 cm) | 68 <sup>1</sup> / <sub>8</sub> "<br>(174.8 cm) | 48 <sup>1</sup> / <sub>16</sub> "<br>(122.1 cm) | 53 <sup>1</sup> / <sub>8</sub> "<br>(135 cm)    | 35 <sup>7</sup> / <sub>16</sub> "<br>(90 cm)   | 32 <sup>1</sup> / <sub>16</sub> "<br>(83.7 cm) | 29 <sup>1</sup> / <sub>8</sub> "<br>(74 cm)   | 35 <sup>3</sup> / <sub>8</sub> "<br>(90.5 cm) |
| KRFC300E<br>(20 cu. ft.)   | 70 <sup>1</sup> / <sub>8</sub> "<br>(178.1 cm) | 68 <sup>7</sup> / <sub>8</sub> "<br>(174.9 cm) | 43 <sup>1</sup> / <sub>8</sub> "<br>(109.5 cm)  | 48 <sup>1</sup> / <sub>8</sub> "<br>(122.2 cm)  | 30 <sup>1</sup> / <sub>2</sub> "<br>(77.5 cm)  | 28"<br>(71.1 cm)                               | 24 <sup>1</sup> / <sub>8</sub> "<br>(61.3 cm) | 35 <sup>3</sup> / <sub>8</sub> "<br>(90.8 cm) |
| KRFF302E<br>(22.1 cu. ft.) | 70 <sup>1</sup> / <sub>8</sub> "<br>(178.1 cm) | 68 <sup>7</sup> / <sub>8</sub> "<br>(174.9 cm) | 47 <sup>1</sup> / <sub>8</sub> "<br>(122.2 cm)  | 52 <sup>1</sup> / <sub>8</sub> "<br>(134.9 cm)  | 34 <sup>1</sup> / <sub>2</sub> "<br>(90.2 cm)  | 32"<br>(83.8 cm)                               | 28 <sup>1</sup> / <sub>8</sub> "<br>(74 cm)   | 32 <sup>5</sup> / <sub>8</sub> "<br>(83.5 cm) |
| KRFF305E<br>(25.2 cu. ft.) | 70 <sup>1</sup> / <sub>8</sub> "<br>(178.1 cm) | 68 <sup>7</sup> / <sub>8</sub> "<br>(174.9 cm) | 48 <sup>1</sup> / <sub>8</sub> "<br>(122.2 cm)  | 53 <sup>1</sup> / <sub>8</sub> "<br>(134.9 cm)  | 35 <sup>1</sup> / <sub>2</sub> "<br>(90.2 cm)  | 33"<br>(83.8 cm)                               | 29 <sup>1</sup> / <sub>8</sub> "<br>(74 cm)   | 35 <sup>7</sup> / <sub>8</sub> "<br>(91.1 cm) |

## LOCATION REQUIREMENTS



To ensure proper ventilation for your refrigerator, allow for a 1/2" (1.25 cm) space on each side and at the top. Allow for 1" (2.54 cm) of space behind the refrigerator. If your refrigerator has an ice maker, make sure you leave some extra space at the back for the water line connections.

If you are installing your refrigerator next to a fixed wall, leave 2 1/2" (6.3 cm) minimum on the hinge side (some models require more) to allow for the door to swing open.

**NOTE:** This refrigerator is intended for use in a location where the temperature ranges from a minimum of 55°F (13°C) to a maximum of 110°F (43°C). The preferred room temperature range for optimum performance, which reduces electricity usage and provides superior cooling, is between 60°F (15°C) and 90°F (32°C). It is recommended that you do not install the refrigerator near a heat source, such as an oven or radiator.



## Undercounter Dishwasher

### PRODUCT MODEL NUMBERS

MDB4949SD MDB8959SF MDB8979SF  
MDB7949SD MDB8979SE

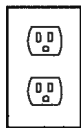
**Electrical Requirements:** 120-volt, 60 Hz, AC-only, 15- or 20-amp. fused electrical supply. Copper wire only. A time delay fuse or circuit breaker and separate circuit is recommended.

**If direct wiring dishwasher:** Use flexible, armored or nonmetallic, sheathed copper wire with grounding wire that meets the wiring requirements for your home and local codes and ordinances. Use a UL Listed or CSA Approved conduit connector.

**If connecting dishwasher with a power supply cord:**

Use power supply cord kit (Part Number 4317824) marked for use with dishwashers. Follow the kit instructions for installing the power supply cord.

Power supply cord must plug into a grounded 3 prong outlet located in the cabinet next to the dishwasher opening. Outlet must meet all local codes and ordinances.

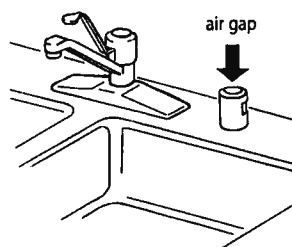


**Water Supply Requirements:** A hot water line with 20 to 120 psi (138 to 862 kPa) water pressure. Water temperature must be 120°F (49°C) water at dishwasher. Use 3/8" O.D. copper tubing with compression fitting or flexible braided water supply line.

**Note:** 1/2" minimum plastic tubing is not recommended. Use a 90° elbow with 3/4" hose connection with rubber washer (Part Number W10273460). Do not solder within 6" (15.2 cm) from water inlet valve.

**Drain Requirements:** A new drain hose is supplied with your dishwasher. If this is not long enough, use a new drain hose with a maximum length of 12' (3.7 m) (Part Number 3385556) that meets all current AHAM/IAPMO test standards, is resistant to heat and detergent, and fits the 1" (2.5 cm) drain connector of the dishwasher.

Make sure to connect the drain hose to waste tee or disposer inlet above drain trap in house plumbing and 20" (50.8 cm) minimum above the floor. It is recommended that the



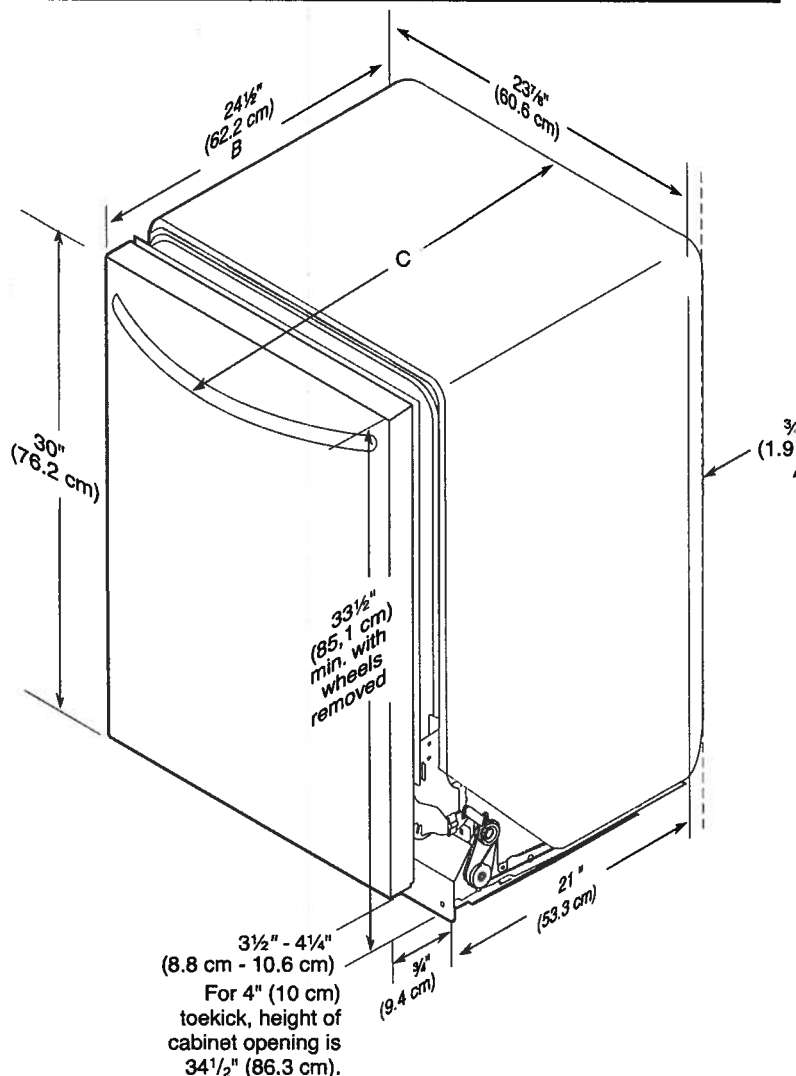
drain hose either be looped up and securely fastened to the underside of the counter or be connected to an air gap.

Make sure to use an air gap if the drain hose is connected to house plumbing lower than 20" (50.8 cm) above subfloor or floor.

Use 1/2" (1.3 cm) minimum I.D. drain line fittings.

If required, the air gap should be installed in accordance with the air gap installation instructions. When connecting the air gap, a rubber hose (not provided) will be needed to connect to the waste tee or disposer inlet.

### PRODUCT DIMENSIONS



- A. Insulation may be compressed (not used on all models).
- B. For panel-ready models, dishwasher depth is 24" (60 cm) not including the 3/4" (1.9 cm) custom door panel.
- C. Door handles may protrude forward of the face of the dishwasher; varies by model.

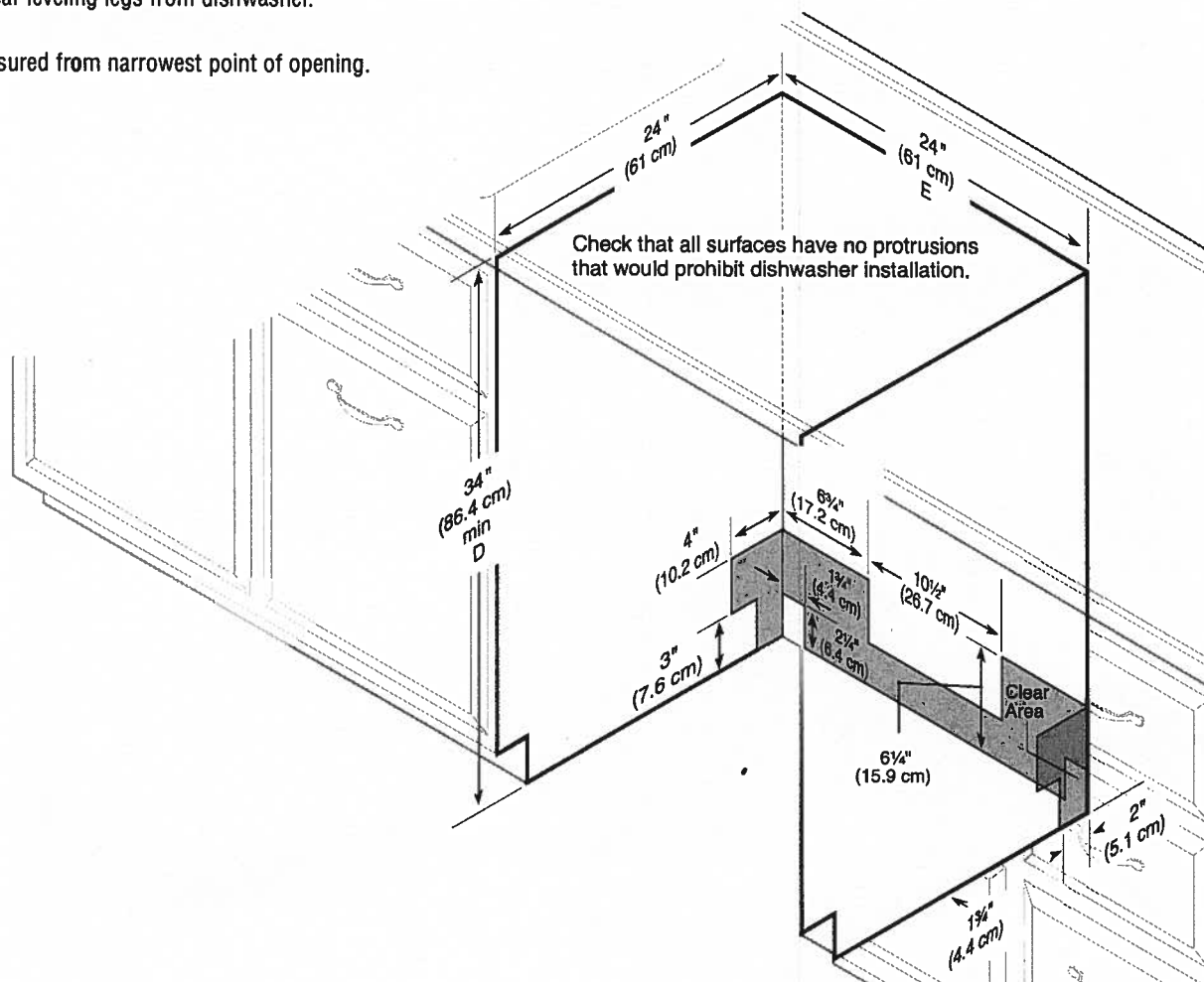
## CABINET CUTOUT DIMENSIONS

**NOTE:** Shaded areas of cabinet walls show where utility connections may be installed.

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\*Measure from the lowest point on the underside of the countertop. May be reduced to  $33\frac{1}{2}"$  (85.1 cm) by removing the rear leveling legs from dishwasher.

\*\*Minimum, measured from narrowest point of opening.





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# KitchenAid® 30" (76.2 cm) Slide-in Gas Range

## PRODUCT MODEL NUMBERS

KSGB900E

KSGG700E

## GAS SUPPLY REQUIREMENTS

### Gas supply line:

- Provide a gas supply line of  $\frac{3}{4}$ " (1.9 cm) rigid pipe to the range location. A smaller size pipe on longer runs may result in insufficient gas supply. With LP gas, piping or tubing size can be  $\frac{1}{2}$ " (1.3 cm) minimum. Usually, LP gas suppliers determine the size and materials used in the system.

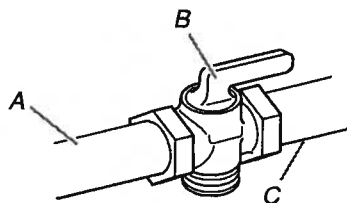
**NOTE:** Pipe-joint compounds that resist the action of LP gas must be used. Do not use TEFLON® tape.

### Flexible metal appliance connector:

- If local codes permit, a new CSA design-certified, 4 to 5 ft (122 to 152.4 cm) long,  $\frac{1}{2}$ " (1.3 cm) or  $\frac{3}{4}$ " (1.9 cm) I.D., flexible metal appliance connector may be used for connecting range to the gas supply line.



- A  $\frac{1}{2}$ " (1.3 cm) male pipe thread is needed for connection to the female pipe threads of the inlet to the appliance pressure regulator.
- Do not kink or damage the flexible metal tubing when moving the range.
- Must include a shutoff valve:  
The supply line must be equipped with a manual shutoff valve. This valve should be located in the same room but external to the range opening, such as an adjacent cabinet. It should be in a location that allows ease of opening and closing. Do not block access to shutoff valve. The valve is for turning on or shutting off gas to the range.



A. Gas supply line  
B. Shutoff valve "open" position  
C. To range

## Gas Pressure Regulator

The gas pressure regulator supplied with this range must be used. The inlet pressure to the regulator should be as follows for proper operation:

Natural gas:

Minimum pressure: 5" WCP

Maximum pressure: 14" WCP

LP gas:

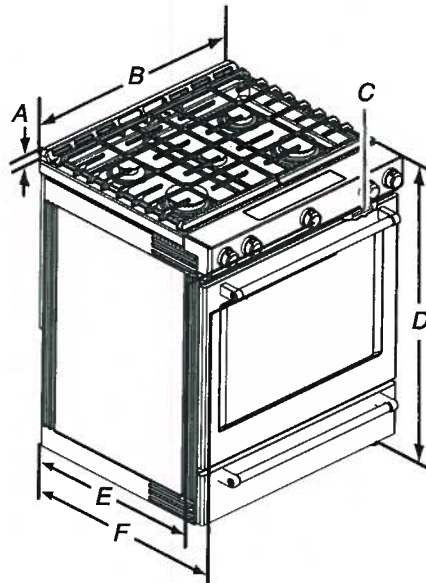
Minimum pressure: 11" WCP

Maximum pressure: 14" WCP

Contact local gas supplier if you are not sure about the inlet pressure.

## PRODUCT DIMENSIONS

This manual covers several models. Your model may appear different from the models depicted. Dimensions given are maximum dimensions across all models.



A. 1 $\frac{1}{8}$ " (3.0 cm) height from cooktop to top of vent

B. 29 $\frac{7}{8}$ " (75.9 cm)

C. Model/serial number plate (located behind the oven door on the top right-hand side of the oven frame)

D. 36" (91.4 cm) height to top of cooktop edge with leveling legs screwed all the way in\*

E. 28 $\frac{5}{16}$ " (71.9 cm) max. depth from front of console to back of range.

F. 28 $\frac{7}{8}$ " (73.3 cm) max. depth from handle to back of range.

**IMPORTANT:** Range must be level after installation. Follow the instructions in the "Level Range" section. Using the cooktop as a reference for leveling the range is not recommended.

\*Range can be raised approximately 1" (2.5 cm) by adjusting the leveling legs.

## Type of Gas

### Natural gas:

- This range is factory set for use with Natural gas. See "Gas Conversions" section. The model/serial rating plate located behind the control panel has information on the types of gas that can be used. If the types of gas listed do not include the type of gas available, check with the local gas supplier.

### LP gas conversion:

Conversion must be done by a qualified service technician.

No attempt shall be made to convert the appliance from the gas specified on the model/serial rating plate for use with a different gas without consulting the serving gas supplier. See "Gas Conversions" section.

\*TEFLON is a registered trademark of E.I. Du Pont De Nemours and Company.

## ELECTRICAL REQUIREMENTS

**IMPORTANT:** The range must be electrically grounded in accordance with local codes and ordinances, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 or Canadian Electrical Code, CSA C22.1.

If codes permit and a separate ground wire is used, it is recommended that a qualified electrical installer determine that the ground path is adequate.

- A 120 volt, 60 Hz., AC only, 15-amp fused, electrical circuit is required. A time-delay fuse or circuit breaker is also recommended. It is recommended that a separate circuit serving only this range be provided.
- Electronic ignition systems operate within wide voltage limits, but proper grounding and polarity are necessary. Check that the outlet provides 120-volt power and is correctly grounded.

## CABINET OPENING DIMENSIONS

Cabinet opening dimensions shown are for 25" (64.0 cm) countertop depth, 24" (61.0 cm) base cabinet depth and 36" (91.4 cm) countertop height.

**IMPORTANT:** If installing a range hood or microwave hood combination above the range, follow the range hood or microwave hood combination installation instructions for dimensional clearances above the cooktop surface.

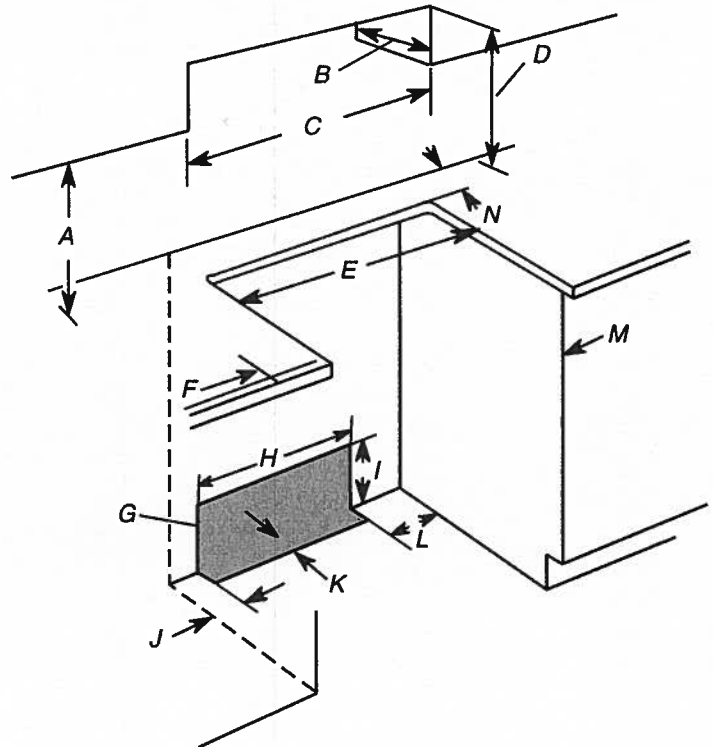
Range may be installed next to combustible walls with zero clearance.

**NOTE:** When installed in a slide-in cutout, the front of oven door may protrude beyond the base cabinet.

- A. 18" (45.7 cm) upper side cabinet to countertop
- B. 13" (33 cm) max. upper cabinet depth
- C. 30" (76.2 cm) min. opening width
- D. For minimum clearance to top of cooktop, see NOTE\*.
- E. In U.S.A.: 30" (76.2 cm) min. opening width  
In Canada: 31" (78.7 cm) min. opening width
- F. 3" (7.6 cm) min. clearance from both sides of range to side wall or other combustible material.
- G. The shaded area is recommended for installation of rigid gas pipe and grounded outlet.
- H. 13 1/8" (33.3 cm)
- I. 7 1/16" (19.5 cm)
- J. 4 13/16" (12.2 cm)
- K. 3 1/16" (9.4 cm) or measurement of N, whichever is greater
- L. 12" (30.5 cm)
- M. Cabinet door or hinges should not extend into the cutout.
- N. Remaining counter depth should not exceed 2 1/4" (5.7 cm)

**\*NOTE:** 24" (61.0 cm) minimum when bottom of wood or metal cabinet is shielded by not less than 1/4" (0.64 cm) flame retardant millboard covered with not less than No. 28 MSG sheet steel, 0.015" (0.4 mm) stainless steel, 0.024" (0.6 mm) aluminum or 0.020" (0.5 mm) copper.

30" (76.2 cm) minimum clearance between the top of the cooking platform and the bottom of an uncovered wood or metal cabinet.



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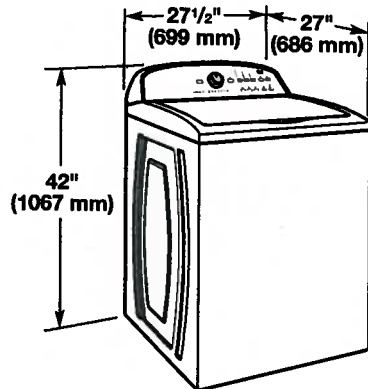


## Washer

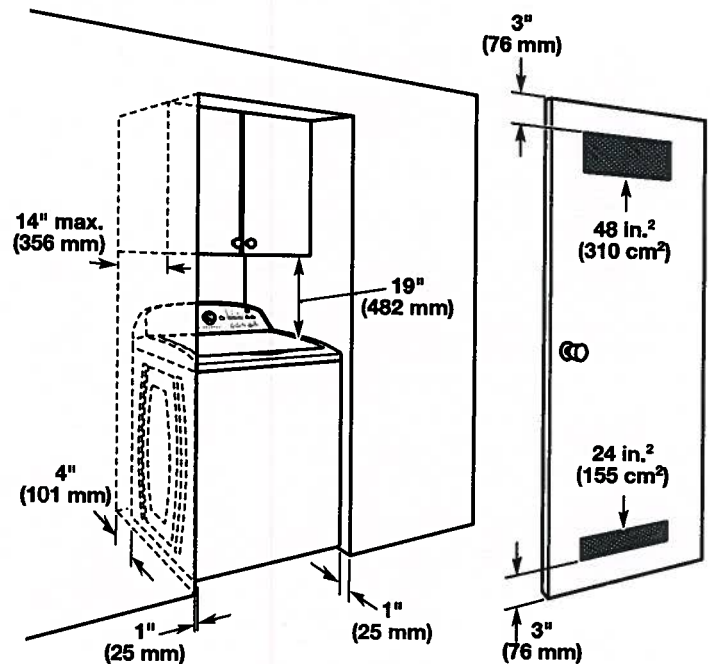
### PRODUCT MODEL NUMBERS

MVWC555D, MVWX655D,  
MVWB755D, **MVWB855D**,  
MVWC565F

#### Washer Dimensions:



#### Recessed area or closet installation



Dimensions show recommended spacing allowed, except for closet door ventilation openings which are minimum required. This washer has been tested for installation with spacing of 0" (0 mm) clearance on the sides. Consider allowing more space for ease of installation and servicing, and spacing for companion appliances and clearances for walls, doors, and floor moldings. Add spacing of 1" (25 mm) on all sides of washer to reduce noise transfer. If a closet door or louvered door is installed, top and bottom air openings in door are required.



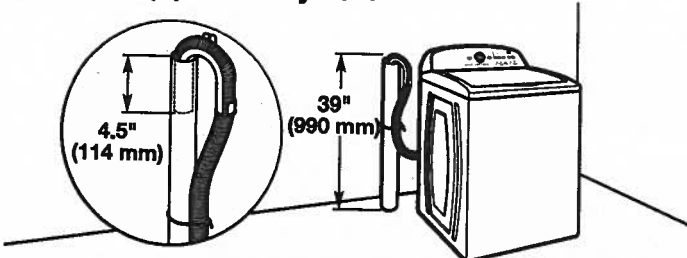
# ELECTRICAL REQUIREMENTS

A 120 volt, 60 Hz., AC only, 15- or 20-amp, fused electrical supply is required. A time-delay fuse or circuit breaker is recommended. It is recommended that a separate circuit serving only this appliance be provided.

## DRAIN SYSTEM

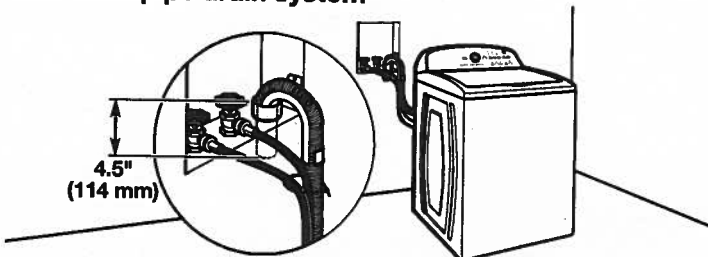
Drain system can be installed using a floor drain, wall standpipe, floor standpipe, or laundry tub. Select method you need.

### Floor standpipe drain system



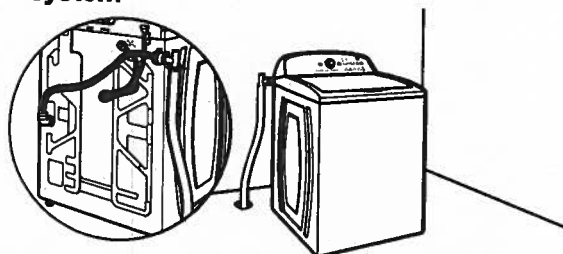
Minimum diameter for a standpipe drain: 2" (51 mm). Minimum carry-away capacity: 17 gal. (64 L) per minute. Top of standpipe must be at least 39" (990 mm) high; install no higher than 96" (2.44 m) from bottom of washer. If you must install higher than 96" (2.44 m), you will need a sump pump system.

### Wall standpipe drain system



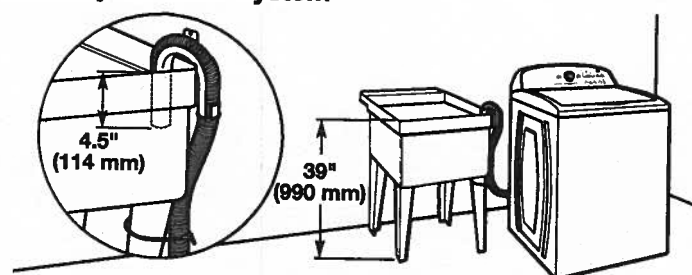
See requirements for floor standpipe drain system.

### Floor drain system



Floor drain system requires a Siphon Break Kit (Part Number 285834), 2 Connector Kits (Part Number 285835), and an Extension Drain Hose (Part Number 285863) that may be purchased separately. To order, please see toll-free phone numbers in your Use and Care Guide. Minimum siphon break: 28" (710 mm) from bottom of washer. (Additional hoses may be needed.)

### Laundry tub drain system



Minimum capacity: 20 gal. (76 L). Top of laundry tub must be at least 39" (990 mm) above floor; install no higher than 96" (2.44 m) from bottom of washer.

**IMPORTANT:** To avoid siphoning, no more than 4.5" (114 mm) of drain hose should be inside standpipe or below the top of wash tub. Secure drain hose with cable tie.