Specifications for 312 West Hyman

Part 1- Core and Shell

- 07 Thermal and Moisture Protection
- 08 Windows and Doors
- 13 Specialties- Core and Shell
- 15 Mechanical- Core and Shell
- 16 Electrical- Core and Shell

Part 2- Finish

- 10 Specialties- Interior Only
- 11 Equipment- Appliances, Interior Only
- 12 Furnishings- Interior Only
- 15 Mechanical- Interior Only
- 16 Electrical- Interior Only
- 22 Plumbing Interior Only

LINEAR

LANDSCAPE PRO™ MULTI SERIES Multi Sided Electric Fireplace



LANDSCAPE PRO[™] MULTI The Most Versatile Electric Fireplace on the Market

• MULTI SIZES: 44" | 56" | 68" | 80" | 96"

- MULTI INSTALL DEPTHS: BUILT-IN CLEAN FACE PARTIAL 2x4 RECESS WALL MOUNT
- MULTI CONFIGURATIONS: SINGLE SIDED, LEFT CORNER, RIGHT CORNER & 3-SIDED (BAY)
- MULTI LIGHT CONTROL: FLAME COLOR, EMBER BED COLOR & DOWNLIGHTING COLOR
- MULTI LIGHT COLORS: FULL RGB COLOR SPECTRUM IN ALL LIGHTING FEATURES

Up to 12 different install configurations included standard in the box!

Choose a beautiful single sided installation or get creative and design the fireplace exactly how you want into the feature wall of your dreams.





New high intensity multi-color flame technology paired with matching up lighting and downlighting create the full customizable experience in the home.

Hundreds of different stunning color combinations to select from!

LIGHTING

- New Hybrid-FX[™] Flame Technology
- Random, Beautiful Flame Image
- High Intensity RGB Flame Colors
- RGB Ember Bed Colors
- RGB Downlighting Colors
- Individually Controlled or Synchronized
- Full Color Spectrum in Each Light Feature
- Active Ember Bed

MEDIA

Clear Acrylic Stone Media

STANDARD FEATURES

MEDIA

- Black Smoke Acrylic Crystals
- Hand-Painted Canyon Driftwood
- Log Set Highly Detailed Realism

HEAT

- Up To 10,000 BTU Heat Output
- High Efficiency PTC Ceramic Heater

CONTROLS & FUNCTIONS

- Basic Features Manual Controls
- Full Feature Remote Control
 - RGB Color Wheel
 - Brightness Slide Bar
- Full Feature Modern Flames App

OPTIONAL UPGRADES

UPGRADED MEDIA

- River Stones 16 Piece Set
 6 Color Options
- ½" Reflective Fireglass 10 lb. Jars
 7 Color Options
- Recessed & Wall Mount Cabinets

OPTIONAL CONTROL

• Wireless Thermostat & Full Wall Control

LIGHTING - INDEPENDENT COLOR CONTROL Full Color Spectrum Flame, Ember Bed & Downlighting



DG SET STAI ЛА -MIUM I ARI _ К Canyon Driftwood Log Set, Smoke Glacier Crystals & Clear Stones







FLAMES & LIGHTING

15 WATTS NO HEAT



1500 WATT HEATER 120V 5,000 BTU UP TO 400 SQ FT

3000 WATT HEATER 240V 10,000 BTU UP TO 800 SQ FT

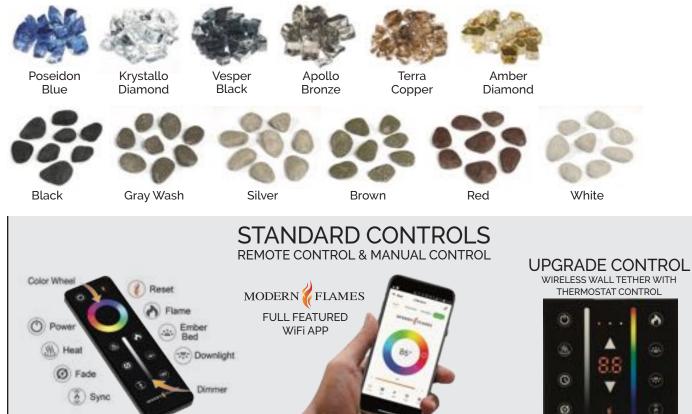


Landscape Pro Multi Fireplaces are equipped with adjustable heaters controlled by remote or phone app. Wall Tether has thermostat controls.

2

JPGRADE MEDIA

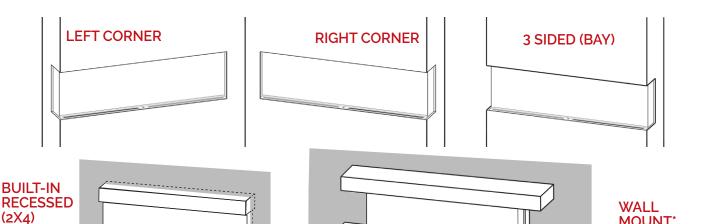
Premium Reflective Glass Media & Colorado River Stones



MULTI INSTALLATIONS - OVER 12 DIFFERENT CONFIGURATIONS

- BUILT-IN∕ CLEAN FACE INSTALLATION
- WALL MOUNT INSTALLATION
- BUILT-IN RECESSED INSTALLATION (2X4 WALL)
- FLOATING WALL CABINET
- FLOOR CABINET
- $\boldsymbol{\cdot}\, \text{SINGLE}\, \text{SIDED}$
- LEFT CORNER
- RIGHT CORNER

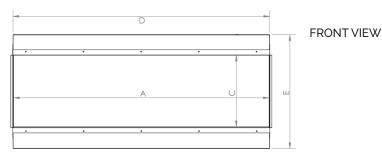




MOUNT* *Mantel So

*Mantel Sold Separately

MODEL & CONFIGURATION		1	VIEWING AREA		FIREBOX DIMENSIONS					
MODEL #	CONFIGURATION	A FRONT GLASS WIDTH	B SIDE GLASS WIDTH	C GLASS HEIGHT	0 OVERALL WIDTH	E OVERALL HEIGHT	F OVERALL DEPTH	G BOTTOM TO VIEWING	H TOP TO VIEWING	I BACK TO VIEWING
LPM-4416	SINGLE SIDED	43.875*		15.5"	44*	24.875*	11.5"	4.5*	4.5"	
	CORNER (L/R)	43.875"	5	15.5°	44*	24.875"	11.5"	4.5"	4.5"	4.125"
	3-SIDED (BAY)	43.875*	5	15.5"	44"	24.875"	11.5"	4.5"	4.5"	4.125"
LPM-5616	SINGLE SIDED	55.875*	*	15.5"	56*	24.875"	11.5"	4.5"	4.5"	
	CORNER (I/R)	55.875*	5	15.5"	56*	24.875*	11.5"	4.5"	4.5"	4.125*
	3-SIDED (BAY)	55.875*	5	15.5°	56*	24.875*	11.5"	4.5*	4.5*	4.125*
LPM-6816	SINGLE SIDED	67.875*		15.5"	68*	24.875"	11.5"	4.5"	4.5"	
	CORNER (L/R)	67.875*	5	15.5"	68*	24.875"	11.5"	4.5"	4.5"	4.125"
	3-SIDED (BAY)	67.875*	5	15.5"	68*	24.875*	11.5"	4.5"	4.5"	4.125"
LPM-8016	SINGLE SIDED	79.875*	2	15.5"	80"	24.875*	11.5"	4.5*	4.5"	1
	CORNER (L/R)	79.875*	5	15.5"	80*	24.875"	11.5"	4.5*	4.5"	4.125"
	3-SIDED (BAY)	79.875*	5	15.5"	80*	24.875*	11.5"	4.5"	4.5*	4.125
LPM-9616	SINGLE SIDED	95.875°	÷.	15.5°	96*	24.875"	11.5"	4.5*	4.5"	14
	CORNER (L/R)	95.875*	5	15.5"	96*	24.875"	11.5"	4.5"	4.5"	4.125"
	3-SIDED (BAY)	95.875*	5	15.5"	96*	24.875"	11.5"	4.5"	4.5"	4.125



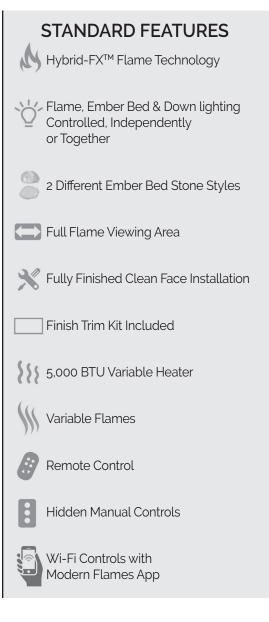


SIDE VIEW

LANDSCAPE PRO™ MULTI STUDIO SUITES

Modern Flames Landscape Pro Multi Studio Suites are artfully crafted and American Made. These mantels are specifically designed for our Landscape Pro Multi for either a wall mount or recessed mount application. Constructed with solid hard woods the Studio Suites are available in a classic Espresso or white paint grade ready for the DIY'er to finish it off themselves. For wall mount applications simple attached the Landscape Pro Multi to the wall and then attached the Suites mounting brackets for the top and bottom pieces. In a recessed mount installation, the Landscape Pro Multi will be recessed into the 2" x 4" wall. The additional fireplace that is exposed from the wall will be finished off with the top and bottom wood furniture pieces. These Studio Suites are the perfect way to finish off this fully featured electric fireplace.







LANDSCAPE PRO[™] MULTI STUDIO SUITES Dimension Specs

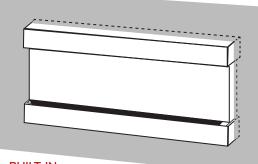


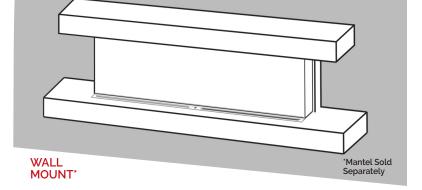
RECESSED WALL MOUNT MANTEL DIMENSIONAL SPECS

Part #	Width	Heigth	Depth
RWC-44LPM-(ESP/RTF)	58.5	28	10.25
RWC-56LPM-(ESP/RTF)	70.5	28	10.25
RWC-68LPM-(ESP/RTF)	82.5	28	10.25
RWC-80LPM-(ESP/RTF)	94.5	28	10.25

WALL MOUNT MANTEL DIMENSIONAL SPECS

Part #	Width	Heigth	Depth
WMC-44LPM-(ESP/RTF)	58.5	28	14.5
WMC-56LPM-(ESP/RTF)	70.5	28	14,5
WMC-68LPM-(ESP/RTF)	82.5	28	14.5
WMC-80LPM-(ESP/RTF)	94.5	28	14.5





BUILT-IN RECESSED (2X4)



ModernFlames.com 3515 E. Atlanta Ave. Phoenix, AZ 85040 (602) 268-9353 • (877) 246-9353



INNOVATING THE INDUSTRY STANDARDS OF TOMORROW

NETZERO FIRE

NZW60B NETZERO WATERPLACE NZWP60B NETZERO WATERPLACE PLATINUM

AA-11-05159 AA-11-05162

ALL YOU NEED IS WATER

The only fuel you need is water. Run a direct water line for a constant supply or enjoy up to 20 hours of continuous flame with the integrated tank and pumping system.



UP TO 20 FEET OF FLAME

The only limit is your imagination.

NetZero Waterplace burners can be connected to create up to 20 feet of continuous ribbons of flame. Use any combination of NZW20, NZW40 and NZW60 burners to design the perfect line of realistic flame for your space.

SMART CONTROLS

Control the fire with the included remote, app on your smartphone or home automation system.



Tap into the beauty of realistic flames in a totally unique fire. NetZero Waterplace uses pure water vapor to simulate dancing flames with zero heat or fuels.



NATURAL AND COLORED FLAMES

Enjoy the glow of natural orange flames or with Waterplace Platinum, choose from over 30 brilliant shades of colored flames.

REFILLING SYSTEM

The tank and integrated pump allow for up to 20 hours of run time, or with NetZero Waterplace Platinum you can connect directly to a plumb line for unlimited hours of ambiance.

FLAME CONTROL

Adjust the flame height and speed at the touch of a button.

AVAILABLE OPTIONS Choose from log sets, media and liners. The safe, cold vapor flames allow you to change out design accessories easily.



LOG SETS

BIRCH HD



WHITE OAK





NORWAY SPRUCE



MEDIA

ICEBERG CHIPS

GLASS DIAMONDS BL



BLACK GLASS







RIVER ROCK



LINERS



BLACK GLASS RED CLINKER BRICK



CONCRETE WAVE



NETZERO FIRE

NZW60B NETZERO WATERPLACE NZWP60B NETZERO WATERPLACE PLATINUM

AA-11-05159 AA-11-05162

Burner Specifications

Taula Qaura site :	C O literat		
Tank Capacity	6.0 liters		
Run Time	20 hours		
Weight	70.5 lbs - Waterplace 86 lbs - Waterplace Platinum		
Flue	Not required		
Electrical Connection	120V, 60HZ, min. 3.5A dedicated breaker		
Application	For indoor use only		
Flame Color	Natural Orange - Waterplace Over 30 Colors - Waterplace Platinum		

Burner Dimensions

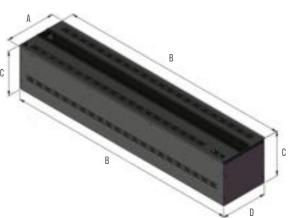
	A (in)	B (in)	C (in)	D (in)
NZW60B	13"	60"	8-3/4"	12"
NZWP60B	13"	60"	11-1/4"	12"

Cavity Measurements - Site-Built Enclosures

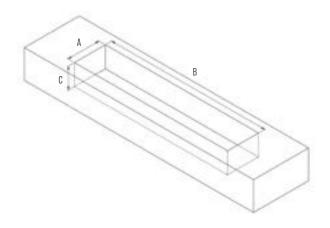
	A (in)	B (in)	C (in)	
NZW60B	12-1/8"	60-1/4"	11"	
NZWP60B	12-1/8"	60-1/4"	13-5/8"	

For installation specifications and required clearances, refer to the installation manual.





Cavity - Site-Built Enclosures





UP TO 20 FEET OF FLAME

Connect any combination of burners to create a continuous line of flame up to 20 feet.



WATER HARDNESS

Water hardness levels will affect performance and flame height.



INSTALLATION

Avoid drafty areas for optimal flame performance. Refer to the installation manual for guidance.



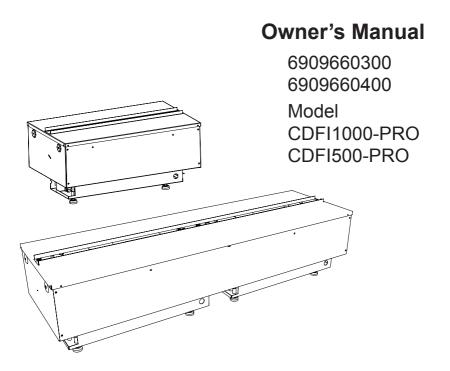
MAINTENANCE

Minimal maintenance is required. Refer to the Maintenance Checklist for details.

Manufactured to UL Standards

NetZero is a distributor of these products, which are designed and manufactured by AFIRE Ltd. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF AND SUPPLIED MANUALS. IMPLIED WARRANTIES OF MERCHANTABILITY, IMPLIED WARRANTIES OF FITNESS, IMPLIED WARRANTIES OF WORKMANSHIP AND OTHER IMPLIED WARRANTIES ARE EXCLUDED BY NETZERO.

NETZEROFIRE.COM



IMPORTANT SAFETY INFORMATION: Always read this manual first before attempting to install or use the Opti-myst[®] cassette. For your safety, always comply with all warnings and safety instructions contained in this manual to prevent personal injury or property damage.

To view the full line of Dimplex products, please visit www.dimplex.com

7214300200R00

Table of Contents

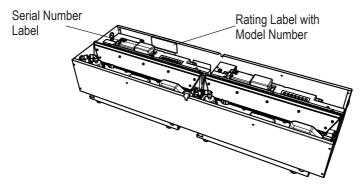
(i)	Welcome & Congratulations
X	
•	Operation
	Maintenance 17
	Accessories 18
Ø	Warranty
	Technical Support 22

Always use a qualified technician or service agency to repair this unit.

- **I NOTE:** Procedures and techniques that are considered important enough to emphasize.
- **A** CAUTION: Procedures and techniques which, if not carefully followed, will result in damage to the equipment.
- A WARNING: Procedures and techniques which, if not carefully followed, will expose the user to the risk of fire. serious injury, or death.

(i) Welcome & Congratulations

Thank you and congratulations for purchasing an Opti-myst[®] cassette from Dimplex. Please use our convenient online registration page to record your model and serial numbers for future reference at



www.dimplex.com/register

Please carefully read and save these instructions.

▲ CAUTION: Read all instructions and warnings carefully before starting installation. Failure to follow these instructions may result in a possible electric shock, fire hazard and will void the warranty.



▲ IMPORTANT INSTRUCTIONS

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

① Read all instructions before using the unit.

② Do not operate any unit if the unit has been dropped or damaged in any manner. Contact Dimplex Technical Service at 1-888-346-7539.

 \bigcirc Do not use outdoors.

④ Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.

(5) Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.

⁽⁶⁾ To disconnect the unit, turn the controls OFF, disconnect power at the service panel.

⑦ Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater. ⁽⁸⁾ To prevent a possible fire, do not block air intakes or exhaust in any manner.

 Do not modify the unit. Use it only as described in this manual.
 Any other use not recommended by the manufacturer may cause fire, electric shock or injury to persons.

(1) Do not burn wood or other materials in the unit.

⁽¹²⁾ Always use a certified electrician should new circuits or outlets be required.

⁽³⁾ Disconnect the power supply before performing any cleaning, maintenance or relocation of the unit.

⁽¹⁾ When transporting or storing the unit, keep in a dry place, free from excessive vibration and store so as to avoid damage.

IMPORTANT INSTRUCTIONS

A WARNING: Remote control contains small batteries. Keep away from children. If swallowed, seek medical attention immediately.

A WARNING. Do not install battery backwards, charge, put in fire or mix with used or other battery types - may explode or leak causing injury.

! NOTE: Changes or modifications not expressly approved by the party responsible for compliance could void user's authority to operate the equipment. **CAUTION:** This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.



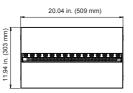
CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN NO USER-SERVICEABLE PARTS INSIDE SAVE THESE INSTRUCTIONS

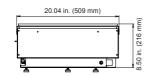


The CDFI1000-PRO and CDFI500-PRO are supplied in an assembled state and are designed to be permanently installed. The units come ready for hardwire installation and the use of the water refill containers.

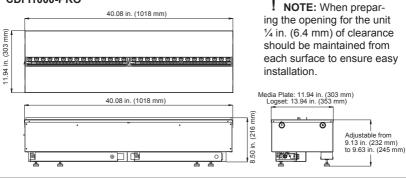
WARNING: Construction and electrical outlet wiring must comply with local building codes

Product Dimensions CDFI500-PRO





CDFI1000-PRO



Media Plate: 11.94 in. (303 mm) Logset: 13.94 in. (353 mm)

0

Adjustable from

9.13 in. (232 mm)

to 9.63 in. (245 mm)

Ó

and other applicable regulations to reduce the risk of fire, electric shock and injury to persons.

WARNING: To reduce the risk of fire, do not store or use gasoline or other flammable vapours or liquids in the vicinity of the unit.

! NOTE: A 15 Amp, 120 Volt circuit is required. A dedicated circuit is preferred but not essential in all cases. A dedicated circuit will be required if, after installation, the circuit breaker trips or the fuse blows on a regular basis when the cassette is operating. Additional appliances on the same circuit may exceed the current rating of the circuit breaker.

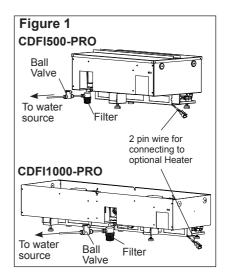
- WARNING: Failure to install the cassette as instructed below may result in damage to the equipment and or may expose the user to the risk of fire, serious injury, illness or death.
- WARNING: Do not attempt to wire your own new outlets or circuits. To reduce the risk of fire, electric shock or injury to persons, always use a licensed electrician.
- ★ WARNING: Ensure that the On/Off switch is set to the OFF position (refer to Operation section) and that the circuit on which the unit is to be installed has the power cut off at the service panel until installation is complete.

! NOTE: Please read all instructions before installing.

Cassette Plumbing

The units come equipped with refill containers for manual filling of the reservoir. The unit can be hard plumbed with the Dimplex plumbing accessory kit -CDFIPLUMB-KIT, available from your local Dimplex dealer, or with standard 1/4 in (6.4mm) tubing, using the information outlined below.

! NOTE: The plumbing accessory kit is designed for use with copper piping.



CAUTION: Ensure that all plumbing connections meet local plumbing code requirements.

A CAUTION: Ensure that the location of the plumbing connection allows for easy access to allow for shutoff during scheduled maintenance.

1. Locate a cold water line in the vicinity of the desired location of the cassette.

! NOTE: Normal tap water can be used in the Opti-myst[®] as long as the tap water is not considered to be hard water. In the event your tap water is hard, softened or filtered water is recommended.

 Turn OFF the main water supply and drain the line of any standing water (if possible), before proceeding to tie into the water line.

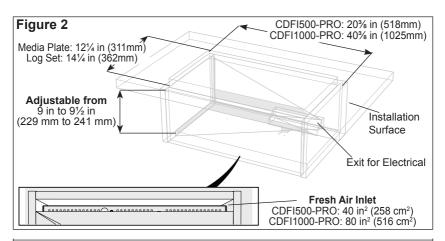
! NOTE: Once the new plumbing connections are complete ensure that the lines are flushed to prevent any debris from going into the unit.

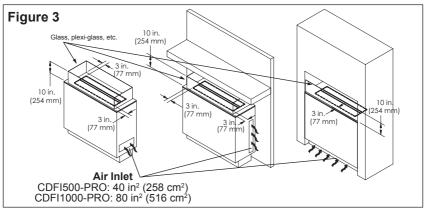
- On the cassette, remove the top cover assemblies (Figure 10, page 18) and prime each of the water reservoirs with 33.5 oz (1L) of water.
- Replace the top cover assemblies and ensure that the two plumbing caps are securely attached to the top cover of the water reservoirs. (Figure 10, page 18)

- Locate the ball valve located in the bottom center of the unit (near the back). (Figure 1)
- Attach one end of the ¼ in (6.4 mm) tubing to the ball valve. Insert the tubing into the ball valve fitting so that it is fully inserted (approximately ½ in (12 mm)).

! NOTE: Ensure that the end of the tubing is cut square, to prevent leaking.

- 7. Route the tubing to the area of the water source.
- Verify that all of the connections are fully inserted, and begin opening each of the valves, ensuring that no leaks are present.





Connecting Multiple Units Together

When connecting multiple units together, the plumbing should be constructed in a manifold style configuration, sized appropriately for the number of units that are being installed so a consistent volume water and pressure is being supplied to each unit.

New Construction

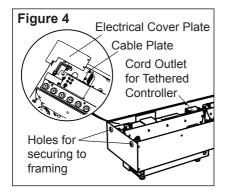
When determining a location for the Opti-myst[®] cassette, ensure that the unit will not be susceptible to drafts, vents, ceiling fans and other air currents. Similar to a candle, large movements of air will affect the unit's ability to create and maintain the flame effect.

If the desired location is susceptible to significant air movement, i.e. air vents, the different installation options illustrated in Figure 3 can be used. It is important that the surface surrounding the top of the cassette have at least a 3 in (72 mm) clearance from any vertical surface and the barrier be 10 in (254 mm) high from the installation surface, to ensure optimal flame production.

! NOTE: It is recommended that during drywall installation and finishing the media plate be installed with the provided bag to prevent dust and debris from entering the unit.

 Use studs to frame an enclosure with the following minimum internal/opening dimensions. Note that the Media Plate (supplied) and Log Set (optional) require different opening widths - see Figure 2.

! NOTE: A fresh air inlet that is a minimum of 80in² (516 cm²)



for the CDFI1000-PRO and 40in² (258 cm²) for the CDFI500-PRO, is required for optimum mist production. The air intake must allow for air to reach the underside of the Opti-myst Cassette (Figure 2 & 3). If installing into the Opti-myst Pro Box Heater (optional), no additional air intake is required. The Opti-myst Pro Box Heater is designed with air intakes included.

For *optimal performance*, a clearance of 18 in (457 mm) between the installation surface and any surface above should be maintained. A *minimum* clearance of 16 in (405 mm) must be maintained.

 In the back left corner of the unit, locate and remove the electrical cover plate, by removing the two securing screws. Install a ³/₆ in (10 mm) or ¹/₂ in (13 mm) cable connector, not included, suitable for mounting in a ⁷/₆ in (22 mm) hole, to the cable plate and feed the supply cable through the connector. The cable plate can be removed by removing the two securing screws on either side, to allow for easier access.

A CAUTION: Use two conductor, non-metallic sheath cable with ground wire (3 wires total) for the incoming power supply on the cassette. Use appropriate wire to meet local and national electrical codes for rated power.

! NOTE: When installing multiple units in the same vicinity they will need to be wired in parallel.

! NOTE: The Opti-myst[®] cassette is designed to allow for installation of a wall switch to control the incoming power to the unit.

- 4. Connect the black wire (live) from the unit to the live from the power supply.
- Connect the white wire (neutral) from the unit to the neutral wire from the power supply.
- Connect the green wire (ground) from the unit to the ground wire from the power supply.

- Place all connectors inside the unit and secure the cable clamp to unit, making sure that the cable clamp grips only the jacket of service cable.
- WARNING: Ensure the power wiring is not installed so that it is pinched or against a sharp edge and ensure that the power wiring is stored or secured to avoid tripping or snagging to reduce the risk of fire, electric shock or injury to persons.
- Install the unit into the roughed in framing ensuring that the unit is resting on two framing sills, one at the front and one at the back or a level surface. Ensure an air opening is maintained.
- Level the housing right to left and front to back, using the adjustable feet on the bottom of the unit.
- Secure the unit to the permanent framing on either end through a minimum of two holes (Figure 4).

Operation Preparation

- After the surrounding area has been dry walled and finished, remove the media plate from the unit.
- 2. Unwrap the tethered controller and ensure that the wire is lead through the opening in

the bottom of the unit where the hard plumbing attaches. (Figure 4)

3. Locate the tethered controller so that:

a) it can be easily accessed, if being used as the main controls, or

b) it is not obscured by either bricks, stone or sheet metal so that the signal that is sent from the remote control can be easily picked up.

- 4. Initialize the tethered controller to the remote (see operation section, page 16).
- 5. Fill the unit:
 - **Refill Containers** remove the fill cap assemblies from the inlet to the reservoir tanks, then install the refill containers. (Figure 10, page 18)

! NOTE: During initial installation, the Refill Container should be refilled after the Reservoir has filled to ensure the maximum operating time. Refill Container holds 42 oz. (1.25L).

• Hard Plumbed - prime each of the water reservoirs with 33.5 oz (1L) of water.

! NOTE: Normal tap water can be used in the Opti-myst_ $_{\odot}$ as long as the tap water is not considered

to be hard water. In the event your tap water is hard, you may use softened water or distilled water with ½ tsp. of salt (0.5 mL) added to the water reservoir. (The use of additional salt should only be when you notice that the unit is not producing mist as expected.)

6. Install the media plate or logset accessory on top.

! NOTE: If the intention is to accessorize the unit with something other than just the media plate or logset, ensure that media used does not have the ability to create small particles that may fall into the unit or have a overall weight above 10 lbs (4.5 kg) for the CDFI500-PRO and 20 lbs (9 kg) for the CDFI1000-PRO.

Customize Flame

The CDFI500-PRO and CDFI1000-PRO come with inserts that allow you to customize the look of the flame. Refer to Figures 5 and 6. To use the spacers, first break them along the break line (Figure 5). Second, insert into the nozzle at desired locations. It is recommended to place them under any media that crosses through the flame, for example, logs.

To use the slots, insert them into the nozzle (Figure 6). A total of 3 slot inserts can be used in each nozzle.



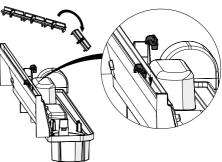
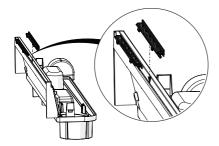


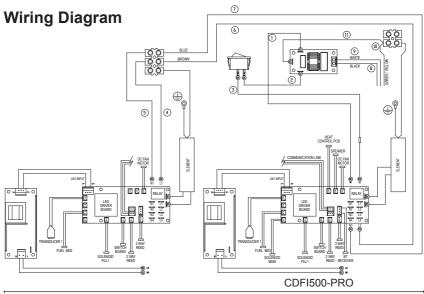
Figure 6



Bathroom Installation

This unit must be protected by a GFI circuit. If a receptacle is used it must be readily accessible.

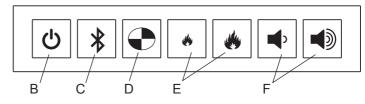
To prevent electrical shock this unit is an electrical appliance that is not watertight and must be installed as to prevent water from entering the unit. This unit must be installed away from showers, tubs, etc. Never locate fireplace over a bathtub or other water containers. Keep towels and other combustible materials 3 feet (0.9 m) away from the top of the unit.



Operation





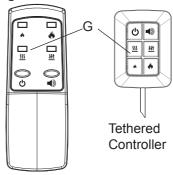


WARNING: This unit must be properly installed before it is used.

There are three different control options available for the unit: manual (under the media), tethered controller (must be connected to the unit) and a remote control.

The CDFI1000-PRO unit has two separate internal modules that are controlled by the settings entered on the left side (primary). Finer adjustment can be done using the controls on the right module to have both modules operating at the same level (secondary).

! NOTE: When the unit is used in an environment where background noise is very low, it may be possible to hear a sound which is related to the operation of the flame effect. This is normal and should not be a cause for concern. Figure 8



Remote Control

A. On/Off Switch

Supplies power to the unit.

B. 也 Standby

Turns flame effect on or puts the unit into standby mode.

! NOTE: When the unit is first turned on the lights will come on and mist will appear 45 seconds later.

Operation

C. Bluetooth

Required for initializing the remote together with the Cassette, see initialization instructions for more detail.

D. Test Mode

Used for troubleshooting issues - outlined in detail in the service manual which can be found on www.dimplex.com/customer_ support.

E. Flame Intensity Control

Adjusts the intensity of the flame and smoke effect when the unit has been activated.

Pressing the & will decrease the flame effect and pressing the & will increase the flame effect.

! NOTE: A few moments will be required between adjustment and a change to the flame effect.

! NOTE: During normal operation it is expected to see some condensation of water on the media plate. This will vary depending on ambient conditions and should be considered normal.

! NOTE: When the water tank is empty, the flame effect shuts OFF and the LED's will blink twice, continuously.

! NOTE: On the CDFI1000-

PRO, each side of the flame can be adjusted using the on-board controls.

F. Volume Control

Adjusts the volume of the wood fire sound effects.

On the unit: Pressing the ■> will decrease the volume and pressing the ■> will increase the volume.

On the Remote and Tethered

Controls: Pressing the ■) will turn the volume 'ON' (1) and 'OFF' (**O**).

G. Heat On/Off

Turns the optional heater

accessory 'ON' <u>\$\$</u> or 'OFF' <u>\$\$</u>. **NOTE:** The 2 pin heater wire (Figure 1) must be connected to

(Figure 1) must be connected to the heater for this control to work.

Remote Control

The tethered controller can be used in the same manner as the remote but houses the blue tooth receiver for communication with the remote.

The tethered controller must be connected to the unit and On/Off Switch must be in the 'ON' (1) position in order for the remote to operate.

Operation

! NOTE: To operate correctly the remote control must be initialized with the unit.

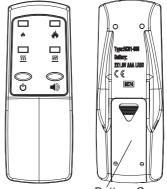
Remote Control Initialization/ Reprogram

In order for the remote to communicate with the unit the blue tooth must be setup, as outlined below:

- Verify that the tethered controller is connected correctly - the red light on the controller will be illuminated.
- Place the On/Off Switch (Figure 7A) in the ON (1) position.
- Press the Bluetooth initialization button on the Primary controls (left side).
- The unit will begin to beep and turn the lights ON and OFF every 2 ½ seconds to indicate that the unit is in synchronization mode.
- Within 20 seconds of pressing the blue tooth button, press any button on the remote control (Figure 9).

! NOTE: You will have only 20 seconds to perform this last step. Failure to do so will result in these steps needing to be followed again.

Figure 9



Báttery Cover

 If the synchronization was successful the LED's will blink 5 times and beep 5 times then the unit will go to Standby.

This will synchronize the remote control and the tethered controller.

! NOTE: It is possible to synchronize up to 5 units to one remote control.

Battery Replacement

To replace the battery:

- 1. Slide battery cover open on the remote control (Figure 9).
- 2. Install two 1.5 Volt (AAA) battery in the battery holder.
- 3. Close the battery cover.



Battery must be recycled or disposed of properly. Check with your Local Authority or

Retailer for recycling advice in your area.

Maintenance

WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of fire, electric shock or damage to persons.

Filling the water tank

When the water tank is empty, the flame effect will shut OFF and the LED's will blink continuously. Follow these steps to refil the tank.

A CAUTION: Allow at least five minutes for components to cool before disassembling the unit to refill.

- 1. Gently remove the media and place it carefully on the ground.
- 2. Turn the On/Off switch to the OFF position **(O)** (Figure 7A)
- 3. Remove the refill container by lifting upwards and outwards.
- 4. Refill the container with tap water.

! NOTE: Normal tap water can be used in the Opti-myst® as long as the tap water is not considered to be hard water. In the event your tap water is hard, you may use softened water or distilled water with ½ tsp. of salt (0.5 mL) added to the water reservoir. (The use of additional salt should only be when you notice that the unit is not producing mist as expected.)

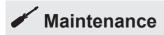
- 5. Screw the cap back on, *do not overtighten*.
- 6. Return the refill container to the sump, with the tank cap facing down and the flat side of the tank facing outward.
- 7. Turn the On/Off switch to the ON position (I). (Figure 7A)
- 8. Gently place the top tray back into position.

If you do not intend on using the unit for longer than 2 weeks, empty and drain the unit of water, and dry all of the water containing components.

Transducer Replacement

After prolonged usage the ability for the unit to produce mist may become reduced. When this occurs the replacement of the transducer may be required. This unit comes with additional transducer(s), located within the unit, which can be installed when this occurs.

! NOTE: There is a small tab that holds the transducer in place, that needs to be released before it can be removed.



Cleaning

It is recommended that the *top cover assembly, sump and transducer* are cleaned with soap and water on a *biweekly* basis.

A CAUTION: Do not put plastic components in the dishwasher.

The *water filter* (Figure 1) should be rinsed out on a *regular basis* to remove any collected particles.

Filter Cleaning

The *air filters* can be removed and gently rinsed with water to clean and dried on a towel before reinstalling.

! NOTE: Replace the filter so that the course black filter is facing the back of the unit.

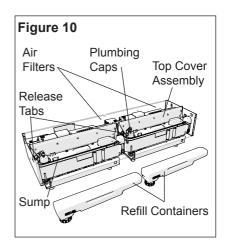
Surface Cleaning

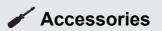
Use a warm damp cloth only to clean surfaces of the unit. Do not use abrasive cleaners.

! NOTE: If you need to move the unit ensure that all of the components that contain water have been emptied before relocating.

Servicing

Except for installation and cleaning described in this manual, an authorized service representative should perform any other servicing.





Please contact your local dealer for genuine Dimplex accessories. Example: logsets, plug kit, heater and plumbing kits.



Two Year Limited Warranty

Products to which this limited warranty applies

This limited warranty applies to your newly purchased Dimplex cassette and to newly purchased Dimplex fireplace surrounds (mantels) and trims. This limited warranty applies only to purchases made in any province of Canada except for Yukon Territory, Nunavut, or Northwest Territories or in any of the 50 States of the USA (and the District of Columbia) except for Hawaii and Alaska. This limited warranty applies to the original purchaser of the product only and is not transferable.

Products excluded from this limited warranty

Logset assemblies are only covered for transportation to the end user and will not be covered if damage occurs during normal operation and/or maintenance. Products purchased in Yukon Territory, Nunavut, Northwest Territories, Hawaii, or Alaska are not covered by this limited warranty. Products purchased in these States, provinces, or territories are sold AS IS without warranty or condition of any kind (including, without limitation, any implied warranties or conditions of merchantability or fitness for a particular purpose) and the entire risk of as to the quality and performance of the products is with the purchaser, and in the event of a defect the purchaser assumes the entire cost of all necessary servicing or repair.

What this limited warranty covers and for how long

Products, other than fireplace surrounds (mantels) and trims, covered by this limited warranty have been tested and inspected prior to shipment. Subject to the provisions of this warranty, Dimplex warrants such products to be free from defects in material and workmanship for a period of 2 years from the date of the first purchase of such products as follows: (a) a repair or replacement warranty on defective products or parts, including in-home services, for the first year following the date of first purchase; and (b) thereafter, a replacement of parts warranty on defective products and parts (with no in-home services) for the 1 year period commencing on the first anniversary of first purchase and ending on the second anniversary of the date of first purchase.

Dimplex fireplace surrounds (mantels) and trims covered by this limited warranty have been tested and inspected prior to shipment and, subject to the provisions of this warranty, Dimplex warrants such products to be free from defects in material and workmanship for a period of 1 year from the date of first purchase of such products. Warranty services do not include in-home services.

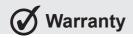
The limited 2 year warranty period for products other than fireplace surrounds (mantels) and trims and the limited 1 year warranty period for fireplace surrounds (mantels) and trims also applies to any implied warranties that may exist under applicable law. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to the purchaser.

What this limited warranty does not cover

This limited warranty does not apply to products that have been repaired (except by Dimplex or its authorized service representatives) or otherwise altered. This limited warranty does further not apply to defects resulting from misuse, abuse, accident, neglect, incorrect installation, improper maintenance or handling, or operation with an incorrect power source.

What you must do to get service under this limited warranty

Defects must be brought to the attention of Dimplex Technical Service by contacting



Dimplex at 1-888-DIMPLEX (1-888-346-7539), or 1367 Industrial Road, Cambridge Ontario, Canada N3H 4W3. Please have proof of purchase, catalogue/model and serial numbers available when calling. Limited warranty service requires a proof of purchase of the product.

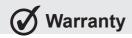
What Dimplex will do in the event of a defect

In the event a product or part covered by this limited warranty is proven to be defective in material or workmanship during (i) the 2 year limited warranty period for products other than fireplace surrounds (mantels) and trims, and (ii) the 1 year limited warranty period for surrounds (mantels) and trims, you have the following rights:

- Limited warranty service will be performed solely by dealers or service agents of Dimplex authorized to provide limited warranty services.
- For products (other than surrounds) (mantels) and trims) for the period ending at midnight on the first anniversary of the date of first purchase, Dimplex will in its sole discretion either repair or replace such defective product or part without charge. If Dimplex is unable to repair or replace such product or part, or if repair or replacement is not commercially practicable or cannot be timely made. Dimplex may, in lieu of repair or replacement, choose to refund the purchase price for such product or part. This limited warranty entitles the purchaser to on-site or in-home warranty services. Accordingly, Dimplex will be responsible for all labour and transportation costs associated with the repair or replacement of the product or part except as follows: (i) charges may be levied for travel costs incurred to travel to the purchaser's site where

the product is located if the purchaser's site is beyond 30 miles (48 km) from the closest service depot of Dimplex's dealer or service agent; and (ii) the purchaser is solely responsible for providing clear access to all serviceable parts of the product.

- For products (other than surrounds (mantels) and trims) for the period commencing at 12:01 a.m. on the day after the first anniversary of the first purchase and ending at midnight on the second anniversary of the date of first purchase, this limited warranty entitles the purchaser to replacement parts only without charge. If Dimplex is unable to replace such part, or if replacement is not commercially practicable or cannot be timely made, Dimplex may, in lieu of replacement, choose to refund the purchase price for such part. The purchaser shall not be entitled to on-site or in-home warranty services. The purchaser shall be responsible for all expenses incurred for the removal of the part and installation of the replacement part including, without limitation, all shipping costs and transportation costs to and from the authorized dealer's or service agent's place of business and all labour costs. Such costs shall not be the responsibility of Dimplex.
- For surrounds (mantels) and trims for the period ending at midnight on the first anniversary of the date of first purchase, Dimplex will in its sole discretion either repair or replace such defective surrounds (mantels) and trims or part thereof without charge. If Dimplex is unable to repair or replace such product or part, or if repair or replace ment is not commercially practicable or cannot be timely made, Dimplex may, in lieu of repair or replacement, choose to



refund the purchase price for such product or part. The purchaser shall not be entitled to on-site or in-house services. The purchaser is responsible for all expenses incurred for repair or replacement of such product or part including, without limitation, all shipping costs and transportation costs to and from the authorized dealer's or service agent's business and all labour costs. Such costs shall not be the responsibility of Dimplex.

 On-site or in-home services not provided under this warranty may be performed at the purchaser's specific request and expense at Dimplex's then-current rates for such services.

What Dimplex and its dealers and service agents are also not responsible for.

IN NO EVENT WILL DIMPLEX, OR ITS DIRECTORS, OFFICERS, OR AGENTS, BE LIABLE <u>TO THE PURCHASER OR</u> <u>ANY THIRD PARTY</u>. WHETHER IN CONTRACT, IN TORT, OR ON ANY OTHER BASIS, FOR ANY INDIRECT, SPECIAL, PUNITIVE, EXEMPLARY, CONSEQUENTIAL, OR INCIDENTAL LOSS, COST, OR DAMAGE ARISING OUT OF OR IN CONNECTION WITH THE SALE, MAINTENANCE, USE, OR INABILITY TO USE THE PRODUCT, EVEN IF DIMPLEX OR ITS DIRECTORS, OFFICERS, OR AGENTS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSSES, COSTS OR DAMAGES, OR IF SUCH LOSSES, COSTS, OR DAMAGES ARE FORESEEABLE. IN NO EVENT WILL DIMPLEX, OR ITS OFFICERS, DIRECTORS, OR AGENTS BE LIABLE FOR ANY DIRECT LOSSES, COSTS, OR DAMAGES THAT EXCEED THE PURCHASE PRICE OF THE PRODUCT.

SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO THE PURCHASER.

How State and Provincial law apply

This limited warranty gives you specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction. The provisions of the United Nations Convention on Contracts for the Sale of Goods shall not apply to this limited warranty or the sale of products covered by this limited warranty.



Technical and troubleshooting support, as well as a list of replacement parts can be found on

www.dimplex.com/customer_support.

Dimplex[®]

Dimplex North America Limited

1367 Industrial Road Cambridge ON Canada N3H 4W3

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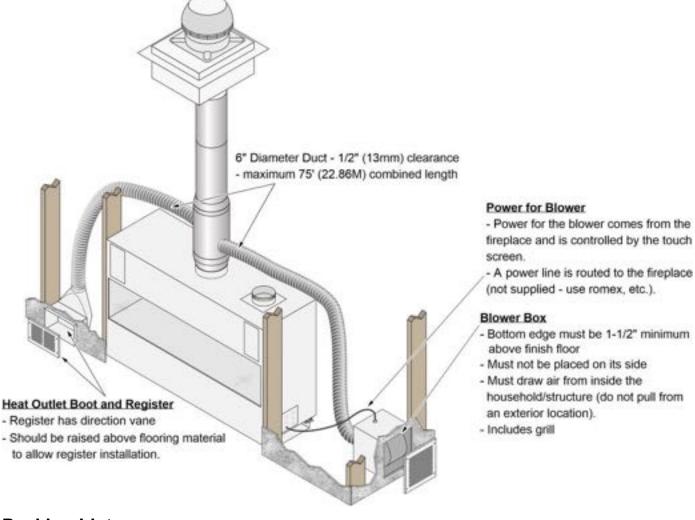
Compatibility Notes

This kit with any DaVinci or Maestro fireplace with TouchSmart™ controls.

Overview

The heat exchanger is designed to circulate room air through the fireplace to extract heat from the exhaust stream and deliver that heat back into the room. The heat exchanger is installed in line with the venting and air from a blower is routed through the exchanger and back into the room through a register.

Install the heat exchanger when venting the appliance. Make sure all work on ducts is complete and sealed before installing drvwall.

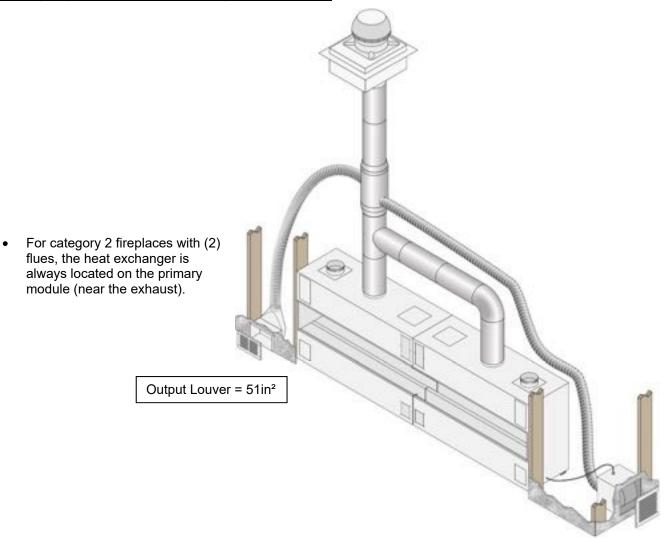


Packing List

- Heat Exchanger Vent section
- Blower Assembly with Strain Relief
- Blower Grill
- Heat Exchanger Lead (2 wire Molex)
- Register Boot 6" Dia. to 6" x 12" (153mm Dia. to 153mm x 305mm)
- Output Register (12" x 6") (305mm x 153mm)
- 33'(10.06M) of 6"(153mm) Diameter Duct (U.L. 181)
- 10" starter collar (for use with inline 180 fan <u>only</u>)



Category 2 - Heat Exchanger Location



Installation Notes

The blower included with this kit contains a vacuum switch, wire harness, and copper tubing is used in other applications. These items are not used for this application and can be disregarded.

Additional Options

 Remote Blower Intake Grill, SKU # 94400131 (allows for intake box to be concealed & air to be drawn from a register)

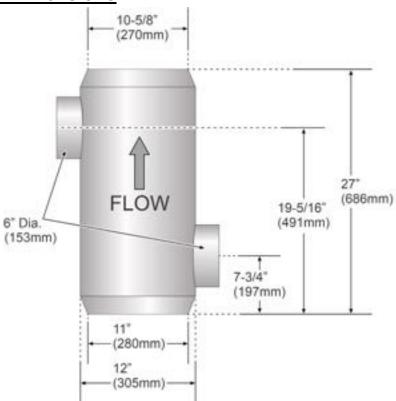
Installation Warnings

Warning: This kit must be installed as specified in these instructions. Do not modify any component.

- **Warning:** Use of any external blower other than the blower included with this kit will void the warranty and listing of this appliance and may create a fire hazard.
- **Warning:** Disconnect power to the fireplace (turn the service breaker off) before conducting the installation. Enable power to the fireplace only after the installation is verified.
- **Note**: This kit <u>must</u> be installed by a qualified service technician.
- **Note**: Some building codes may require the use of firestop spacers whenever the duct passes from room to room.



Heat Exchanger Dimensions



Fireplace Heat Exchanger Requirements

- The heat exchanger must be installed directly on the flue starter collar (or on top of the vent "t" section if it is installed on a 2-flue fireplace).
- The heat exchanger fan must be ducted to the lower of the two side collars on the heat exchanger.
- The inlet and outlet of the heat exchanger must be in the same airspace (cannot be installed in separate rooms that can be isolated by a door).
- All connections to and from the heat exchanger (vent and duct) must be sealed with aluminum (U.L. 181A-P) tape.

Clearances

- Minimum 3/4" (19mm) clearance is required to the heat exchanger.
- The duct (and its connection to the heat exchanger) has a minimum 1/2" (13mm) clearance.

Duct Installation

Maximum Duct Length

• The maximum duct length is 75' (22.9M) (inlet and outlet combined length).



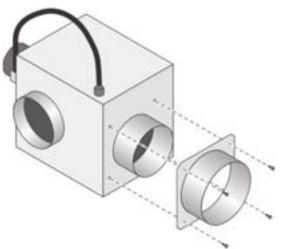
Using an Inline Power Vent



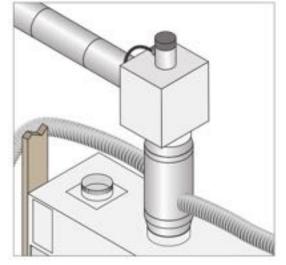
A 10" to 8" reducer must be installed on top of the heat exchanger or 10" pipe must be run from the heat exchanger to the power-vent when using an inline power vent fan. A 10" collar will be offered with the inline power-vent for heat exchanger installations.

If using an inline power vent fan in conjunction with the heat exchanger, you must use the Inline 180. The collar on the inline fan is 8" and the heat exchanger is 10". A 10" starter is included with this kit to adapt the fan to the heat exchanger.

- Locate the (4) screws around the intake of the fan and remove them using a 1/4" nut driver
- Place the 10" collar over the existing 8" collar and secure using the screws



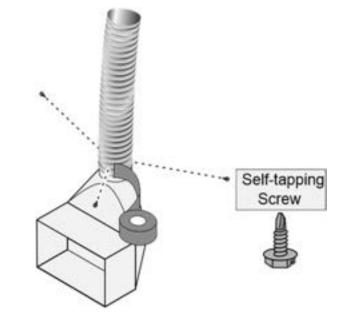
- Secure the 8" pipe to the outlet of the blower with selftapping screws.
- Seal the pipe to the outlet of the inline blower with 600° rated silicone caulk.
- All pipe between the heat exchanger and the inline fan must be 10" diameter.
- All pipe between the inline fan and the termination must be 8" diameter.
- Install the heat exchanger directly on the flue collar of the fireplace.
- The inline fan can be installed directly on top of the heat exchanger. Support as needed.





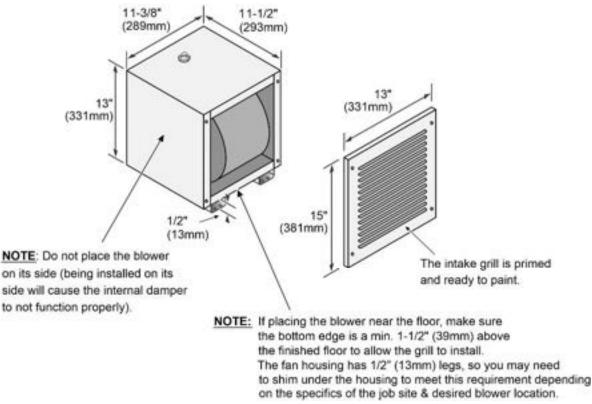
Duct Routing

- The duct has a 1/2" (12.7mm) minimum clearance to combustibles.
- The duct must maintain a minimum 1" (26mm) clearance to the fireplace B-Vent exhaust.
- Do not route duct in external areas or areas subject to severe cold or heat.
- The duct inlet and outlet must be placed within the household/structure. Do not pull air from outside the household/structure.
- The included duct is listed to U.L. 181. If using an alternative duct, make sure it complies with U.L. 181.
- Secure all flex connections with three self-tapping screws and seal with aluminum (U.L. 181A-P) tape



Blower Box Placement

- The blower box has a removable grill that allows access to the blower. The blower box must be placed so it may be accessed at a later time.
- The blower box must only be placed on the standoff legs (gill cannot be facing upward or downward. <u>Do not place the blower box on its side</u> (power inlet on the side with the grill on its side).

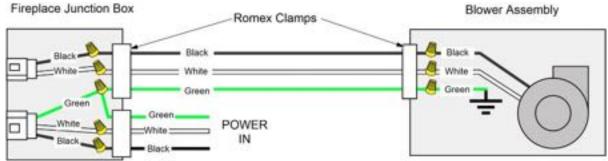




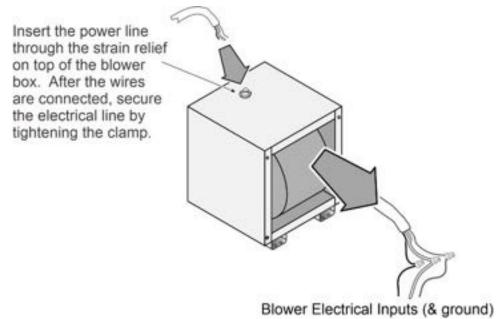
Wiring Instructions

WARNING: All wiring should be done by a qualified electrician and shall be in compliance with local codes and with the current National Electric Code ANSI/NFPA 70 (in the U.S.), or with the current CSC22.1 Canadian Electric Code (in Canada).

<u>Wiring Diagram</u>



Blower Box Wiring

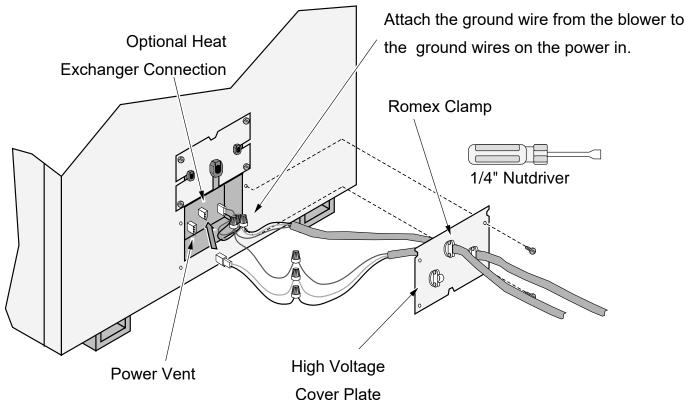


Wiring on the Fireplace Junction Box

- See manual for details on accessing the junction box.
- Route the power from the heat exchanger blower to the connector on the fireplace as shown below. **NOTE:** The ground wire from the blower should be connected to the ground wire from the power in.



DaVinci HeatSmart™ Heat Exchanger



Operating Instructions

- The person operating the fireplace must turn the blower on and off manually using the fireplace TouchSmart[™] controller. If the blower is left on and the fireplace is turned off, the heat exchanger will turn off as well and will come back on at the last setting when the fireplace is turned back on.
- Use the touch screen to control the blower speed (see manual for details).

Maintenance Instructions

• Once a year the grill should be removed and the blower area cleaned. Use a vacuum to clean around the squirrel-cage blower, being careful not to damage any of the blades.



44" AGA RANGEHOOD

MODEL: AMCHD44

A C P C 0

AGArangeusa.com



PERFORMANCE FEATURES

High powered and sleek, the 44" AGA Rangehood brings both good looks and functionality to your kitchen..

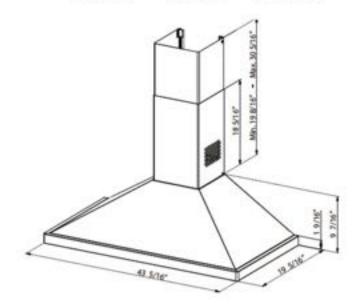
- · Three-speed 600 CFM fan, blower included
- Includes charcoal filters to remove cooking odors
- Internal and external venting available; includes recirculation kit for inside venting
- Removable stainless steel baffles fit in most dishwasher for easy clean-up
- Two (2) 20 watt halogen lights on underside of hood
- · Adjustable duct cover included

WARRANTY

·1 Year limited warranty on all parts and labor

FINISHES

NOTE: Colors not in stock could have a 4-12 week lead time (check for availability)



AGA





GLOSS BLACK



IVORY / OYSTER MATTE BLACK

WHITE / SNOWDROP





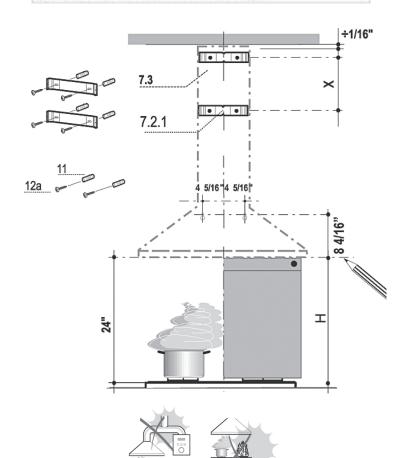
44" AGA RANGEHOOD

Specifications are subject to change without notice. Visit www.AGArangeUSA.com for the most up-to-date information.

TECHNICAL DETAILS				
	тесци			
		ICAL	DLIAILS	

Vent Hood Width	43 5/15
Duct Cover Width	8 1/ ₄ *
Vent Hood Height	9 7/16*
Duct Cover Minimum Height	18 1/*
Duct Cover Maximum Height	30 ⁵ / _m *
Duct Cover Depth	8 1/,*
Electrical Requirements	120v, 60hz, 15amps
Warranty	1 year limited warranty on all parts and labor

Optional 24° chimney extension (Part# SAG-1120316720) replaces the upper half of the two-piece chimney which will give you a maximum of 41° chimney height.



MIDDLEBY

INSTALLATION

- The manufacturer will not be held liable for any damages resulting from incorrect or improper installation.
- Check that the main voltage corresponds to that indicated on the rating plate fixed to the inside of the hood.
- The electrical supply must be properly and sufficiently grounded.
- Connect the extractor to the exhaust flue through a pipe of minimum diameter 6". The route of the flue must be as short as possible.
- Do not connect the extractor hood to exhaust ducts carrying combustion fumes (boilers, fireplaces, etc.).
- If the extractor is used in conjunction with nonelectrical appliances (e.g. gas burning appliances), a sufficient degree of aeration must be guaranteed in the room in order to prevent the backfl ow of exhaust gas. The kitchen must have an opening communicating directly with the open air in order to guarantee the entry of clean air.

USE

- The range hood has been designed exclusively for domestic use to eliminate kitchen odors.
- Never use the hood for purposes other than for which it has been designed.
- Never leave high naked flames under the hood when it is in operation.
- Adjust the flame intensity to direct it onto the bottom of the pan only, making sure that it does not engulf the sides.
- Deep fat fryers must be continuously monitored during use: overheated oil can burst into flames.
- The hood should not be used by children or persons not instructed in its correct use.

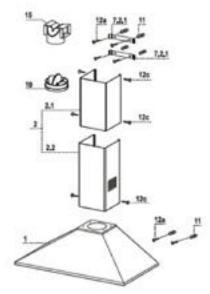


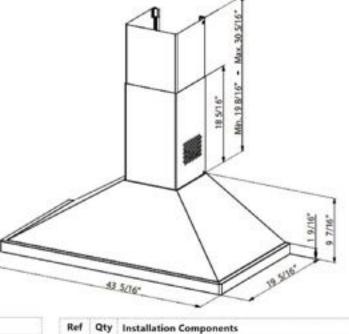


44" AGA RANGEHOOD

Specifications are subject to change without notice. Visit www.AGArangeUSA.com for the most up-to-date information.

DIMENSIONS & PARTS





Installation Components

Wall Plugs (it supplied)

Screws 3/16" x 1 3/4"

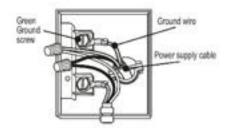
5crews 1/8" x 3/8"

Documentation

Instruction Manual

Upper Chimney Section Liong Brackets

Ref	Qty	Product Components
1	1	Hood Body, complete with: Controls, Light, Blower, Filters
2	1	1 Telescopic Chimney comprising:
2.1	1	Upper Section
2.2	1	Lower Section
10	1	Damper
15	1	Air Outlet Connection



ELECTRICAL CONNECTION

- · Remove the cover from the Field Wiring Compartment with a Phillips screwdriver.
- · Feed the Power Supply Cable through the electrical knockout. Connect the Power Supply Cable to the rangehood cable. Attach the Power Supply Cable grounding lead to the green screw provided. Attach the White lead of the power supply to the White lead of the rangehood with a twist-on type wire connector. Attach the Black lead of the power supply to the Black lead of the rangehood with a twist on type wire connector.

AGA

· Replace the cover.

MIDDLEBY RESIDENTIAL

CHIMNEY ASSEMBLY

7.2.1

11

1Za

12c

2

6

6

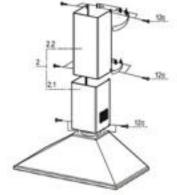
6

Qty

1

Upper Exhaust Chimney

- · Slightly widen the two sides of the upper chimney and hook them behind the brackets 7.2.1, making sure that they are well seated.
- · Secure the sides to the brackets using the 4 screws 12c supplied.



Lower Exhaust Chimney

- · Slightly widen the two sides of the chimney and hook them between the upper chimney and the wall, making sure that they are well seated.
- . Fix the lower part laterally to the hood body using the 2 screws 12c supplied.

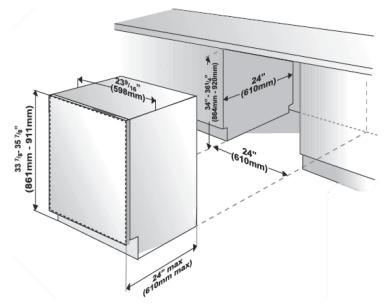




MODEL: AMCTTDW

24" MERCURY BUILT-IN TALL TUB DISHWASHER





AMCTTDW includes AGA Mercury Door Panel Kit and Dishwasher FDWU324 (some assembly required)

MULTI-LEVEL WASHING

- · Variable pressure wash adjusts water volume, pressure, and temperature according to load size and soil levels
- Multi-level washing with stainless steel bottom spray arm, upper spray arm and top nozzle ensures clean dishes
- Turbidity sensor monitors the soil level of the dishes for superior quality
- Triple filtration system removes the smallest particles for clean water circulation
- · Flow-through water heater is concealed to provide a safer alternative to exposed heaters

CONDENSATE QUICK DRY

- Moisture condensates on the cooler stainless steel tank and door and drains to the sump area
- · Quick and efficient drying

QUIET CLEAN™ PERFORMANCE PACKAGE

• Three layers of insulation – bitumen, cotton, and full side walls create one of the quietest dishwashers on the market

LOADING

- Accommodates 14 international place settings
- · Industry-leading heavy gauge top and bottom dish baskets hold even the heaviest dishes
- · Adjustable stemware shelves can be used for holding ladles or other small utensils
- · Foldable tines provide versatility for the loading of pots, pans, and uniquely sized items in top and bottom racks
- Bottom rack has four and top rack has three split foldable tines with variable setting from flat to vertical
- · Sliding cutlery basket can be moved horizontally to any position

FEATURES

- · LCD screen with remaining time indicator
- Touch button direct access control
- · Cycle indicator light on floor
- · Energy Star Qualified
- Multiple Cycle Function Options: Express, Sanitize, High Gloss, Half Load & Delay Start





24" MERCURY BUILT-IN TALL TUB DISHWASHER

TECHNICAL DETAILS	
Overall Width	23-9/16" (59.8 cm)
Overall Height from Floor	33-7/8" (86.0 cm) minimum to 35 7/8" (91.1 cm) maximum
Overall Depth	To front of door panel: 22 3/16" (56.4 cm)
Cutout Width	24" (61.0 cm)
Cutout Height	34" (86.4 cm) minimum to 36 1/4" (92.0 cm) maximum
Cutout Depth	24" (61.0 cm)
Electrical Requirements	12.0 amps, 120V/60Hz; 4" (120cm) electrical cord with supplied with unit
Water-Heating Element Rating	1100 watts
Inlet Water Temperature	120°F (49°C) required
Drain Hose	6.4' (1.9m) drain hose provided
Drain Hose High Loop Required	Height from floor – 28″ (71.0 cm)
Approximate Shipping Weight	94 lb. (42 kg)

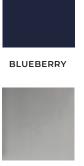
Please do not prepare installation from brochure data only. See installation instructions for important clearance/installation information.

WARRANTY

·1 Year limited warranty on all parts and labor

FINISHES

NOTE: Colors not in stock could have a 4-12 week lead time (check for availability)





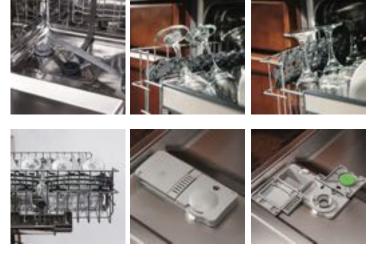


MATTE BLACK





SNOWDROP



AMCTTDW includes AGA Mercury Door Panel Kit and Dishwasher FDWU324 (some assembly required)

STAINLESS STEEL

OYSTER

AGA





36" MERCURY COUNTER DEPTH FRENCH DOOR REFRIGERATOR

MODEL: MMCFDR23



FINISHES

NOTE: Colors not in stock could have a 4-12 week lead time (check for availability)













AGA





STAINI ESS STEEL

OYSTER

SNOWDROP

INTERIOR FEATURES

Storage Drawer with 12 Temperature Settings

Choose from 9 preset selections (like Ready to Serve, Cheese, White/Sparkling Wine, Beer, Fish/Shellfish) plus three customizable settings to ensure your food remains at the ideal temperature for serving and maintaining freshness.

· Fully Cantilevered, Adjustable Glass Shelves All-glass shelves can be arranged in a variety of flexible configurations to fit wide and tall items.

Dual Level Organization System

Stay well organized with two large-capacity baskets in a self-closing bottom freezer drawer. Each basket rolls out on a smooth-glide system to easily access freezer contents, and a separate ice bin stores crescent ice for cold drinks.

PERFORMANCE FEATURES

Customized Temperature Controls

Adjust the refrigerator and freezer temperatures independently.

· Filtration Systems

Soft, transitional LED lighting gradually illuminates the interior with ample light as you open the door. Perfect for night-time trips to the refrigerator!

· Humidity-Controlled Crisper Drawers

Smooth-glide crisper drawers feature adjustable humidity control and minimal temperature variation to preserve even the most delicate fruits and vegetables longer.

Integrated Alarm System

To protect the temperature integrity of your refrigerator contents, you'll be notified of any power failures, if a door is ajar over five minutes, and if the interior cabinet temperature rises above 56 degrees for more than 20 minutes.

WARRANTY

·1 Year limited warranty on all parts and labor

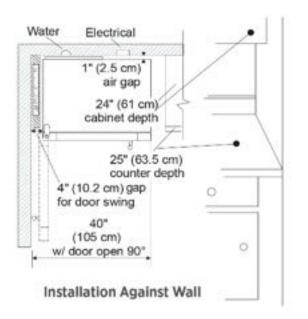


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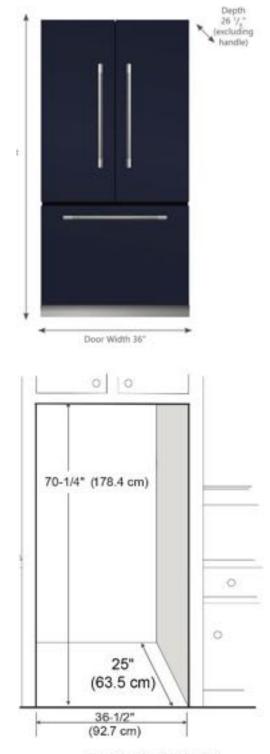
36" MERCURY COUNTER DEPTH FRENCH DOOR REFRIGERATOR

TECHNICAL DETAILS

Overall Dimensions	35 ³ / ₈ [*] W (cabinet) x 70* H x 26 ⁷ / ₈ [*] D
Total Capacity	22.2 cu. ft.
1. Refrigerator Capacity	15.4 cu. ft.
2. Freezer Capacity	6.8 cu. ft.
Plumbing Requirements	1/4" copper tubing
ice Maker	Located in freezer
Electronic Temperature Controls	2
Humidity Controlled Crispers	2
Temperature Controlled Deli Drawer	1
Gallon Door Storage Shelves	2
Adjustable Glass Shelves	4 (3 cantilever and 1 in/out shelf)
Freezer Drawer	Removable
Electrical Requirements	115v, 60hz on separate 15amp circuit
Warranty	1 year limited qarranty on all parts and labor



AGA



Standard Installation



GERMAN ENGINEERING





Liebherr's sleek **RU 510** 24" beverage/wine center stores a variety of drinks to perfection, while keeping them close at hand in any kitchen, bar, or entertainment area. Whether you're entertaining a large group, or having a quiet family night at home, the RU 510 offers amazing capacity and superior storage, with sophisticated design that blends beautifully with any decor.

The **RU 510** features a glass door for a clear view of stored beverages, and an elegant stainless steel frame that can also accommodate a custom panel if desired. The appliance offers a variety of storage flexibility options thanks to the glass shelves with stainless steel trim, a convenient split shelf for storing taller items, and a pull out metal rack. The electronic control system is situated at the top of the interior and is visible through the glass door, allowing for temperature settings between 37°F to 68°F.



ADA Compliant

Beverage/Wine Cooler

Council motions all (A) tot
Sound rating dB(A)**
Total capacity cu.ft. (I)
Max. No. of Bordeaux bottles (0.75 I)
Number of shelves
Shelves on telescopic rails
Shelf material
Electronic control
Temperature range °F (°C)
Temperature zones
Interior light
Door alarm
Safety thermostat
Activated Charcoal filter
Door type
Integrated lock
Door hinges
Product dimensions (H/W/D) in. (cm)
Cut out dimensions (H/W/D) in. (cm)
Net weight lbs. (kg)
Voltage V/Hz

39 3.8 (108) 4 1 glass MagicEye with digital temp. display, touch electronic +36°F to +68°F (+2°C to +20°C) 1 LED lighting permanently on acoustic yes yes Glass door with stainless steel frame ves right, reversible 32 1/4" / 23 9/16" / 22 3/4" (81.8/59.7/57.7) 32 5/16"-34 5/16" / 23 5/8" / 21 11/16" (82-87/60/55) 103.6 (47.0) 115/60

* Estimated energy cost will depend on utility rates and use. Estimated energy cost based on a national average electricity cost of 12 cents per KWh.

RU 510

GrandCru

LED

** Noise output - according to EN 60704-3.

Features





German Engineering: Our superior products offer premium quality, cutting edge design, and innovative features that best fit your lifestyle. The use of high quality materials, perfectly detailed finishes, and elite cooling components are combined with the latest production processes, resulting in an outstanding cooling product.



SuperQuiet: Noise levels are kept to a minimum thanks to virtually silent, speed-controlled, and sound absorbing compressors. Alongside a low noise cooling circuit, these features ensure exact performance, energy efficiency, and SuperQuiet operation.



Precision Electronics: The electronic control system is situated at the top of the interior. The temperature can be set from 37°F to 68°F. The cabinet includes a lock for added protection of items stored.



LED Lighting: The energy efficient LED ceiling light not only emits virtually no heat to cast a cool glow to give a pleasing ambient light inside the appliance as well as the room.



Storage shelves: This unit offers flexible storage options thanks to two glass shelves, a convenient split shelf for storing taller items, and a pull-out metal rack.



Integrated Lock: A sturdy lock protects your fine wine collection.



Alarm: Liebherr wine cabinets are equipped with a trustworthy alarm system which alerts the owner if the door has been left open, or if there are temperature changes.

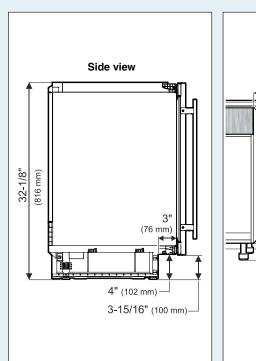


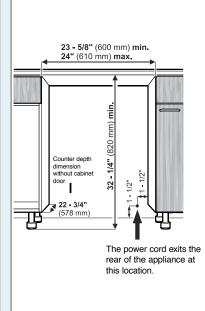
ADA Compliant: The Americans with Disabilities Act (ADA) establishes guidelines for consumer products to make them accessible to people with disabilities. Liebherr ADA compliant refrigerators allow one handed operation, fit below a 34" countertop and have controls that are positioned no higher than 48" above point of installation.



Star-K: Liebherr's refrigeration products are certified as Sabbath compliant by the Star-K organization. These units meet the strict religious requirements of the organization and are designed to meet all the needs of our Kosher users.

Appliance and Cabinet Dimensions





Height when adjustable feet have been screwed in as far as they will go.

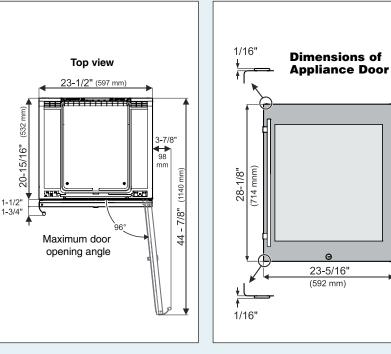
Delivery status = feet approx. 1/8" unscrewed.

Maximum height adjustment = 2" (51 mm) to allow for a 6" (153 mm) toe kick.

Free length of the power cord = 78 - 3/4 inch (2000 mm)

IMPORTANT

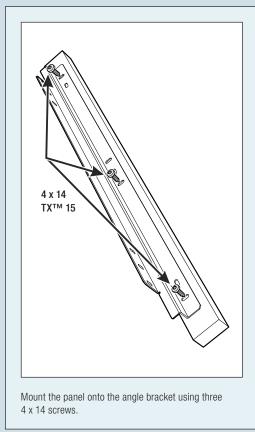
The electrical outlet must not be situated behind the appliance and must be easily accessible.



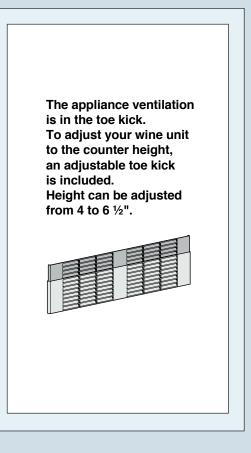
IMPORTANT

The floor on which the appliance stands must be horizontal and level. The kitchen units must be aligned horizontally and vertically.

Mounting the panel onto the angle bracket



Appliance Venting



Subject to modification. For up-to-date information, visit home.liebherr.com.

24"



ENERGY STAR CERTIFIED

Panasonic - WhisperCeiling DC : FV-1115VQ1

Specifications	
ENERGY STAR Unique ID:	2337780
Brand Name:	Panasonic
Model Name:	WhisperCeiling DC
Model Number:	FV-1115VQ1
Туре:	Bathroom/Utility Room
Lighting:	No
Number of Speeds:	3 or more
Airflow 1 (cfm):	150.0
Airflow 2 (cfm):	130
Airflow 3 (cfm):	110
Bathroom and Utility Room Airflow at 0.25 in. w.g.:	154.7
Efficacy 1 (cfm/Watt):	12.9
Efficacy 2 (cfm/Watt):	14.7
Efficacy 3 (cfm/Watt):	16.3
Sound Level (sones):	0.1 - 0.2
Bathroom and Utility Room Sound Level (sones) at 0.25 in. w.g.:	0.7
Duct Size:	6 inch diameter
Date Available On Market:	2017-10-01
Markets:	United States, Canada
ENERGY STAR Certified:	Yes
ENERGY STAR Most Efficient:	Yes

Additional Model Information

UPC Codes

Captured On: 01/16/2023

LG LAUNDRY



DLE3600_/DLG3601_

7.4 cu.ft. Front Load Dryer with Built-In Intelligence

7.4 cu. ft. Ultra Large Capacity Al Fabric Sensor/ Smart Pairing™ LG ThinQ® Technology / Proactive Customer Care Tempered Glass Door FlowSense[™] Duct Clogging and Lint Filter Indicators ENERGY STAR® Certified **Closet Depth** LoDecibel[™] Quiet Operation **Reversible Door** Wrinkle Care Option

AVAILABLE COLORS



🔿 alexa





Google As

Enjoy new ways to control your home with LG smart appliances • Use the ThinQ® app to start the laundry while you're out • Get alerts when the cycle is finished

• With Smart Pairing[™], the washer can tell the dryer to select a compatible drying cycle

SUMMARY	
Туре	Front Load Dryer
Capacity	7.4 cu. ft.
Matching Washer	WM3600HWA, WM3600HVA
Sensor Dry	Yes
Color	White (W), Graphite Steel (V)
APPEARANCE	
Intelligent Electronic Controls with LED Display	Yes
Dial-A-Cycle™	Yes
Touch Buttons	Yes
DRYER PROGRAMS	
No. of Programs	10
Programs (Sensor Dry)	Normal, Heavy Duty, Bedding, Small Load, Perm Press, Delicates, Towels, Speed Dry (Manual Dry), Air Dry (Manual Dry), Downloaded
No. of Options	9
Options	More Time, Less Time, Damp Dry Signal, Wrinkle Care, Control Lock, Wi-Fi, Energy Saver, Remote Start, Signal
Temperature Settings	High, Med.High, Medium, Low, Ultra Low
Drying Levels	Very Dry, More Dry, Normal Dry, Less Dry, Damp Dry
Manual Dry Times	60 min., 40 min., 30 min., 20 min., More Time/Less Time
FABRIC CARE FEATURES	
A.I Dry	Yes
Sensor Dry	Yes
Precise Temperature Control with Variable Heater	Yes

	CONVENIENCE FEATURES	
	3 Minute Installation Check	Yes
	LoDecibel [™] Quiet Operation	Yes
	End of Cycle Signal	Yes
	Reversible Door	Yes
	FlowSense™ Duct Clogging Indicator	Yes
	Wrinkle Care Option	Yes
	Child Lock	Yes
	Venting Option	Electric: 4 Way Venting / Gas: 3 Way Venting
	4 Adjustable Legs	Yes
	Remaining Time Display/Status Indicator(s)	Yes
s,	ThinQ [®] TECHNOLOGY	
э,	SmartDiagnosis™ (v3.0)	Yes
d	Wi-Fi	Yes
	Remote Start and Cycle Monitor	Yes
	Energy Monitoring	Yes (Wi-Fi)
e	ENERGY	
.e	ENERGY STAR [®] Certified	Yes
	CEF	3.94 (Electric), 3.49 (Gas)
	MATERIALS AND FINISHES	
	Aluminized Alloy Steel Drum	Yes
	Tub Rear	Painted
,	Cabinet	Painted Steel
	Door	Tempered Glass Door
	All Available Colors	White (W), Graphite Steel (V)
	POWER SOURCE	
	Ratings	CSA Listed
	Electrical Requirements	120V, 15 Amps (Gas) / 240V 30 Amps (Electric)
	Туре	Electric, Gas



	BTU Rating	Electric: 10,000 Gas: 20,000
	OPTIONS	
	LP Conversion Kit	383EEL3002D
	Side Venting Kit	3911EZ9131X
	Pedestal	WDP4W, WDP4V
	Pedestal (WxHxD)	27 x 14 1/8 x 30 3/4 (50 1/2 D with door open)
	DIMENSIONS (ELECTRIC)	
	Product (WxHxD)	27" x 39" x 30 1/8"
	Depth with Door Open	51 3/8"
	Carton (WxHxD)	29 1/2" x 42 1/4" x 31 1/4"
	Weight (Product)	121.9 lbs.
_	Weight (Carton)	140.2 lbs
	DIMENSIONS (GAS)	
	Product (WxHxD)	27" x 39" x 30 1/8"
	Depth with Door Open	51 3/8"
	Carton (WxHxD)	29 1/2" x 42 1/4" x 31 1/4"
	Weight (Product)	136.03 lbs
	Weight (Carton)	151.7 lbs
	LIMITED WARRANTY	
	Parts & Labor	1 Year
	Drum	3 Years
	UPC CODES	
	DLE3600W (White)	048231028332
	DLG3601W (White)	048231028349
	WM3600HWA (White)	048231028264
	DLE3600V (Graphite Steel)	048231028318
	DLG3601V (Graphite Steel)	048231028325
	WM3600HVA (Graphite Steel)	048231028257

SMART APPLIANCE

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18" Bar Handle ADA-compliant Dishwasher



800 Series - Stainless Steel SPX68B55UC



SPX68B55UC Stainless Steel

The 18" wide dishwasher perfectly fits in compact spaces.

Features & Benefits	
reatures & Denents	

44 dBA: dishwasher runs quietly so your kitchen conversations aren't interrupted.

Get hands-free voice operation with Amazon Alexa or Hey Google, smart reordering of detergent tabs via the Amazon Alexa app, plus so much more -all with the Home Connect[™] app on your smartphone.

3rd rack provides the perfect space for silverware and large utensils while its V shape leaves room below for taller items. Also includes a lower rack silverware basket.

The Favorite button allows you to easily access your preferred cycle/option combination with 1 touch.

AquaStop Plus® detects leaks with a dual sensor system, and then contains them for premium protection.

General Properties	
Number of wash cycles	6
Number of options	5
Special Program	Machine Care
dBA	44
Drying system	PureDry
Third rack	Standard
Rack adjustability	RackMatic [®]
Tub material	Stainless steel
Control type	Buttons
Concealed water heating element	Yes
Leak protection system	24/7 AquaStop® Plus
Water softener	No
Five-level wash	Yes
ChildLock	No
Home Connect™ (Wi-Fi enabled)	Yes
Special features	InfoLight®, Favorite button
Efficiency	
Water usage per cycle	3.5
Energy efficiency class	Tier 1
ENERGY STAR® certified	Yes
Total annual energy consumption (kWh)	269
Total annual water consumption (g)	574
Capacity	

Technical Details	
Watts (W)	1440 W
Current (A)	12 Amps
Volts (V)	120 V
Frequency (Hz)	60 Hz
Power cord full length	67"
Power cord install length from edge of unit when facing the door (in)	Left – 51" Right – 51"
Minimum water pressure (Ib/sin)	7
Length inlet hose (in)	65"
Length outlet hose (in)	80 5/8"
Dimensions & Weight	
Overall appliance dimensions (HxWxD)(in)	32 1/16" x 17 5/8" x 22 9/16"
dimensions (HxWxD)(in) Required cutout size	x 22 9/16" 32 1/8" x 17 3/4"
dimensions (HxWxD)(in) Required cutout size (HxWxD) (in)	x 22 9/16" 32 1/8" x 17 3/4" x 24"
dimensions (HxWxD) (in) Required cutout size (HxWxD) (in) Adjustable feet	x 22 9/16" 32 1/8" x 17 3/4" x 24" Yes
dimensions (HxWxD) (in) Required cutout size (HxWxD) (in) Adjustable feet Net weight (lbs)	x 22 9/16" 32 1/8" x 17 3/4" x 24" Yes
dimensions (HxWxD) (in) Required cutout size (HxWxD) (in) Adjustable feet Net weight (lbs) Accessories–Optional	x 22 9/16" 32 1/8" x 17 3/4" x 24" Yes 77 lbs
dimensions (HxWxD) (in) Required cutout size (HxWxD) (in) Adjustable feet Net weight (lbs) Accessories–Optional Junction Box Dishwasher Drain Hose	x 22 9/16" 32 1/8" x 17 3/4" x 24" Yes 77 lbs SMZPCJB1UC
dimensions (HxWxD) (in) Required cutout size (HxWxD) (in) Adjustable feet Net weight (Ibs) Accessories—Optional Junction Box Dishwasher Drain Hose Extension 76 3/4"	x 22 9/16" 32 1/8" x 17 3/4" x 24" Yes 77 lbs SMZPCJB1UC SGZ1010UC





Home Connect



Accessories: To purchase Bosch accessories, cleaners & parts please visit www.bosch-home.com/us/store or call 1-800-944-2904 (Mon to Fri 5 am to 6 pm PST), Sat 6 am to 3 pm PST). Notes: All height, width and depth dimensions are shown in inches. BSH reserves the absolute and unrestricted right to change product materials and specifications, at any time, without notice. Consult the product's installation instructions for final dimensional data and other details prior to making cutout. Warranties: Please see Use & Care manual or Bosch website for statement of limited warranty.

For more information on our entire line of products, go to www.bosch-home.com/us or call 1-800-944-2904

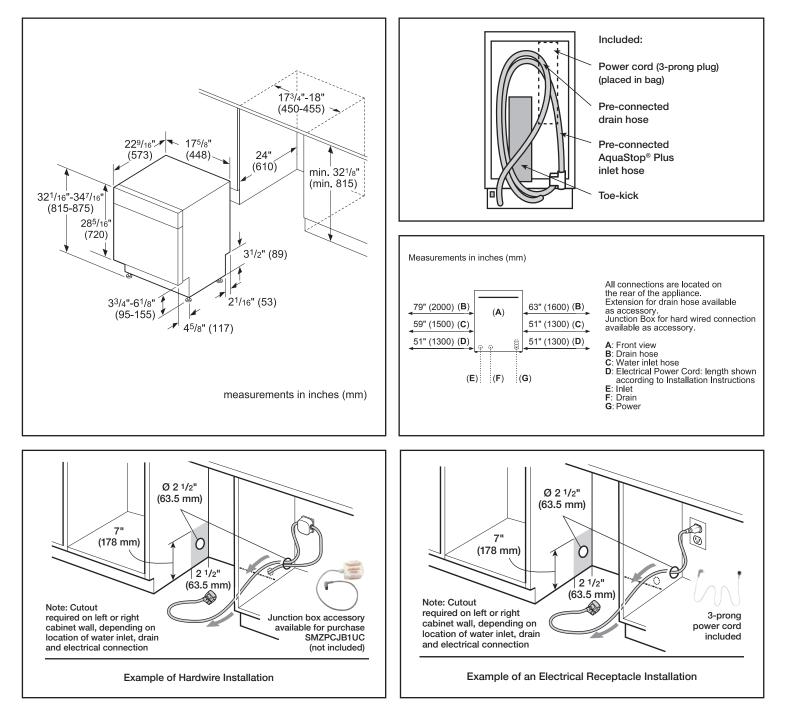
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18" Bar Handle ADA-compliant Dishwasher



800 Series - Stainless Steel SPX68B55UC

Installation Details



Accessories: To purchase Bosch accessories, cleaners & parts please visit www.bosch-home.com/us/store or call 1-800-944-2904 (Mon to Fri 5 am to 6 pm PST, Sat 6 am to 3 pm PST). Notes: All height, width and depth dimensions are shown in inches. BSH reserves the absolute and unrestricted right to change product materials and specifications, at any time, without notice. Consult the product's installation instructions for final dimensional data and other details prior to making cutout. Warranties: Please see Use & Care manual or Bosch website for statement of limited warranty.

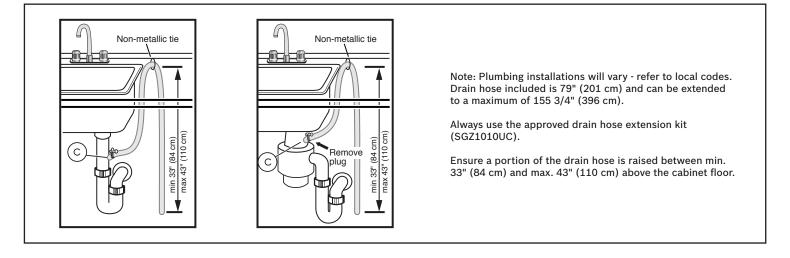
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18" Bar Handle ADA-compliant Dishwasher

800 Series – Stainless Steel SPX68B55UC

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The **UPR 513** takes both the designer and the user in mind, offering convenient features and design flexibility to fit any home. The universally designed, pull-out undercounter refrigerator can be adjusted in height to match that of the counter space, providing an optimal fit for countertops up to 34" high. Like all Liebherr integrated appliances, the UPR 513 uses door-on-door technology, allowing custom panels to be affixed directly onto the appliance door, ensuring seamless integration within your custom design, as well as easy installation.

The **UPR 513** includes a variety of flexible storage features to fit your specific needs. The door bin can be used to store tall beverages, or can be adjusted for larger gallon storage. Items stored in the bottom bin are automatically raised upon door opening thanks to the LiftUp Box system, bringing your foods closer and easier within reach. The UPR 513's fully extendable SoftTelescopic drawers provide reliable self-retraction and soft closing, while the elegant, yet tough, spacesaving GlassLine shelves are both scratch resistant and easy to clean.

Noise is kept to a minimum thanks to virtually silent, speed controlled, and specially-absorbed compressors along with a low noise cooling circuit, ensuring exact performance, energy efficiency and SuperQuiet operation.

Undercounter

Energy consumption (kWh/y)
Estimated Yearly Energy Cost in US \$*
Sound rating dB(A)**
Refrigerator capacity cu.ft. (I)
Number of shelves
Number of fruit and vegetable drawers
Electronic control
Refrigerator temperature range °F (°C)***
Defrost type
Interior light
Door alarm
Gallon storage
Lift-up Box
Door type
SoftSystem
Door hinges
Product dimensions (H/W/D) in. (cm)
Cut out dimensions (H/W/D) in. (cm)
Net weight lbs. (kg)
Voltage V/Hz



UPR 513 Premium	Energy STAR	Soft System	Soft Telescopic	ADA Compliant	K	
225						
27						
37						
4.4 (124)						
2						

2
1
MagicEye with LCD temp. display, touch electronic
+36°F to +48°F (+2°C to +9°C)
automatic
LED lighting
visual and acoustic
yes
yes
panel ready or stainless steel panel as accessory
yes
pullout
32 5/16"-34 11/16" / 23 9/16" / 21 11/16" (82-88/59.7/55)
32 5/16"-34 11/16" / 23 5/8" / 21 11/16" (82-88/60/55)
96.3 (43.7)
115/60

* Estimated energy cost will depend on utility rates and use. Estimated energy cost based on a national average electricity cost of 12 cents per KWh.

** Noise output - according to EN 60704-3.



German Engineering: Our superior products offer premium quality, cutting edge design, and innovative features that best fit your lifestyle. The use of high quality materials, perfectly detailed finishes, and elite cooling components are combined with the latest production processes, resulting in an outstanding cooling product.



Energy Star: The entire line of North American Liebherr appliances meet or exceed ENERGY STAR [®] rating requirements, greatly reducing greenhouse emissions and energy costs.



SuperCool

SuperCool: The automatic SuperCool function lowers the refrigerator temperature down as far as 35°F for as long as 12 hours - ideal for rapidly cooling freshly stored food.



SuperQuiet: Noise levels are kept to a minimum thanks to virtually silent, speed-controlled, and sound absorbing compressors. Alongside a low noise cooling circuit, these features ensure exact performance, energy efficiency, and SuperQuiet operation.



SoftTelescopic: The fully extendible pull-out fridge compartment is mounted on telescopic rails with soft stop and self-closing. It has a practical bottle shelf and a removable fruit and vegetable drawer. The large drawer can also be divided into two equal-sized compartments, with further storage space underneath.



Electronic Display: Our intuitive electronic touch control panel ensures all functions are easy and convenient to use as well as guarantees that the settings selected remain accurate and constant.



GlassLine: The elegant yet tough GlassLine shelves are scratch resistant and easy to clean as well as dishwasher safe. The space-saving shelves are designed for organization and are completely adjustable to suit your needs and the contents of the refrigerator. Additionally, the lighting shines through for a brighter interior.



LED: The LED ceiling light creates a high-class lighting ambience within the refrigerator. Its beautifully designed, space-efficient housing is centrally positioned to provide a delightfully even illumination.



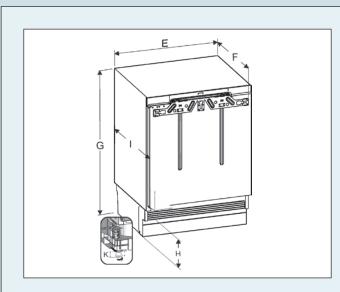
Vegetable bins: vegetable bins provide plenty of space for organizing fruit and vegetables. In addition, they are easy to clean.

(24")

Super Cool

Diagrams

Appliance Dimensions



E	23 - 1/2" (597 mm)			
F closed: 21 - 5/8" (550 mm) max. opened: 39 - 3/4" (1010 mm)				
G adjustable feet screwed in: 32 - 1/4" (819,5 mm) adjustable feet screwed out max: 34 - 1/4" (869,5 mm)				
H 6-5/8" - 8-9/16" (168 mm - 218 mm)				
	21 - 1/4" (540 mm)			
K	max. height adjustment: 2" (max. 50 mm)			

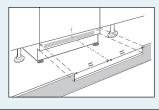
Toe Kick Installation

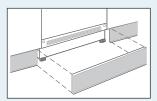
The toe kick installation will be different depending on the cabinetry where the appliance is installed. A toe kick panel will be required to cover the gap between the ventilation grill and the floor.

A cut-out in the toe kick panel is necessary when the toe kick covers the ventilation openings of the ventilation grill.

If the cabinets do not have a toe kick, a toe kick can be prepared and fitted just in front of the appliance.

A stainless steel adjustable toe kick is provided with the unit. A custom panel toe kick can also be used.

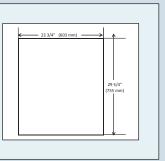




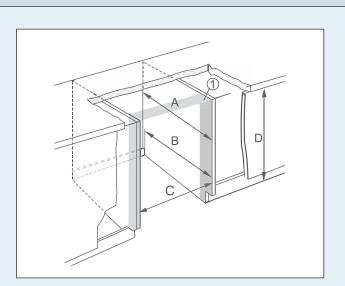
Door Panel for Standard Toe Kick

These panel dimensions are for inset flush installation in a standard cabinet opening of 24" (610 mm) wide with a cabinet that is 30" (762 mm) tall plus a 4" (102 mm) or 4 1/2" (115 mm) toe kick.

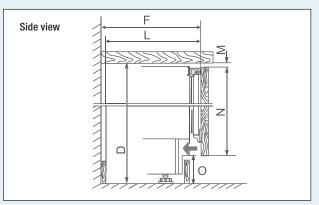
If the cabinet opening is different you will need to modify the door panel accordingly.



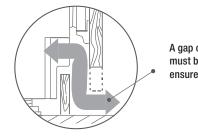
Cabinet Dimensions



Α	min. 21-5/8" (min. 550 mm)
В	21 - 1/4" (540 mm)
С	23 - 5/8" - 24" (600 mm - 610 mm)
D	32 - 1/4" - 34 - 5/8" (820 mm - 880 mm)
	3" (approx. 76 mm) of the cabinet needs to be finished as it can be seen when the door is open.



32 - 1/4" - 34 - 5/8" (820 mm - 880 mm)
closed: 21 - 5/8" (550 mm) max. opened: 39 - 3/4" (1010 mm)
21 - 1/4" (540 mm)
1/8" (4 mm)
25 - 7/16" - 30 - 5/16" (646 mm - 770 mm)
max. 4" - 6 " (max. 102 mm - 152 mm)



A gap of 1 3/8" (35 mm) must be maintained to ensure sufficient ventilation.



INDUCTION RANGE

MODEL: AMC48IN

The AGA Mercury range is known for its bold design, contemporary details, zero-clearance facade and mod style cooking controls. It is truly a statement piece in any luxury kitchen.

Designed and built in the UK, this range is a technical masterpiece, the embodiment of exquisite quality and stylish, thoughtful design. Available in five sophisticated finish options, The AGA Mercury range is the perfect match for any mood or lifestyle.

SPECIFICATIONS

- Electrical: Induction Zone: 18.5 kW, (45 A)
- Oven: 2.5 kW (17A), 240V
- Electrical Rating: 240V (2 Wire + N + Grd), 60Hz, 18.5 kW
- Cooktop Ratings:

Front Left: 1.4 kW (Max) 2.2 kW (Boost) Rear Left: 1.85 kW (Max) 3.0 kW (Boost) Center: 2.3 kW (Max) 3.7 kW (Boost) Front Right: 1.85 kW (Max) 3.0 kW (Boost) Rear Right: 1.85 kW (Max) 3.0 kW (Boost)

- Product Dimensions: 47 9/16" W x 28 7/16" D x 36 1/8" H
- Shipping weight (lbs): 448lbs (includes range, crate & pallet)

WARRANTY

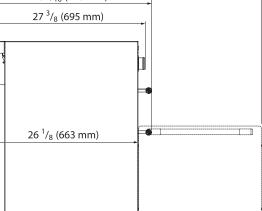
· 2 Year Warranty on parts and labor with exception of cosmetic damage

FINISHES

60333

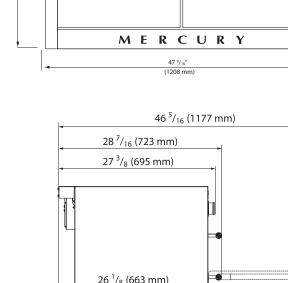
SNOWDROP (SNW

NOTE: Colors not in stock could have a 4-12 week lead time (check for availability)



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MIDDLEBY

36 ^{1/}8" (920 mm)

48" MERCURY







.....



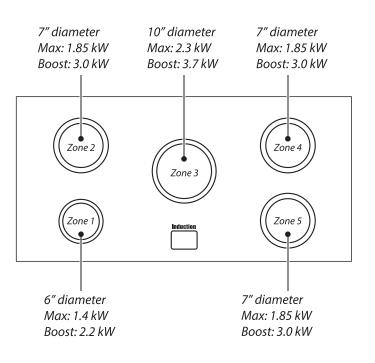
OYSTER (OYS)



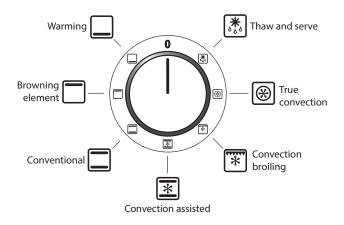


48" MERCURY INDUCTION RANGE

5 BURNER INDUCTION COOKTOP



7 MULTIFUNCTION COOKING MODES



AGA

MIDDLEBY

FEATURES

- Extra-large 43"W x 21 ½"D ceramic glass surface with 5 induction burners and facia touch controls efficiently utilizes / transfers / captures 90% of energy generated compared to only 55% with that of a traditional gas burner
- Touch pad features: 3700w boost, residual heat indicator, 9 power settings, timer, pause, overheat detection and child safety lock
- 9 Hi-Fi Style Infinite Controls turn with stereo-like grace
- Powerful 8-pass, 2300 watt Broiling Oven ready in 5 minutes
- A second extra-large true European convection oven (right oven)
- Glide-out Broiler System with adjustable heights and extendable gliding tray spacious enough to cook six 6-oz steaks at once
- One extra-large 7-Mode Multifunction Oven, Thaw-to-Serve, Convection Bake, Convection Broil, Fan Assist Bake, Conventional Bake, Top Brown or Base Heat Modes
- Over 6 cubic feet of oven space amongst 3 separate ovens maximize utility and reduce energy consumption
- The multifunction oven features 3 heavy-duty stainless steel shelves including a removable Telescopic shelf, while the second oven features 2 heavy-duty stainless steel shelves
- Spacious bottom drawer with rubber mat to protect and store your cookware
- Easy clean technology with black vitreous enamel interior

WashTower™ with Center Control™

Ultra Large Capacity 4.5 cu. ft. Washer and 7.4 cu.ft. Dryer

Single Unit WashTower™ Design

Built-In Intelligence with AIDD/AI Fabric Sensor, Smart Learner, Smart Pairing[™] Advanced Washing and Drying with TurboWash[™] 360°, Allergiene[™]

Manual Dry Times

FABRIC CARE FEATURES

wash cycle and TurboSteam[®] technology Steam Technology / AAFA Certified

Proactive Customer Care/ ThinQ[®] Technology Includes Dryer Rack

Tempered Glass Door

ENERGY STAR[®] Certified

NeveRust[™] Stainless Steel Tub with Stainless Steel Lifters

LoDecibel[™] Quiet Operation

Noble Steel Finish

SUMMARY	Washer	Dryer		
Туре	Front Load Washer	Front Load Dryer		
Capacity (cu.ft.)	4.5 cu. ft.	7.4 cu. ft.		
Color Noble Steel				
APPEARANCE	Washer	Dryer		
Hard Buttons Yes				
Touch Buttons	'es			
Full Touch Electronic Control Panel with LED Display	Ŷ	′es		
Unified Center Control	Y	'es		
ENERGY	Washer	Dryer		
ENERGY STAR® Qualified	Y	'es		
CEE Tier	Tier2	-		
IMEF	2.92	-		
IWF	2.9	-		
CEF	-	Electric: 3.94 Gas: 3.49		
PROGRAMS	Washer	Dryer		
No. of Programs	6	6		
	Normal, Bedding, Delicates, Heavy Duty, Speed Wash, Downloaded	Normal, Bedding, Delicates, Heavy Duty, Small Load, Downloaded		
OPTIONS	Washer	Dryer		
No. of Options	10	9		
	TurboWash®, Steam, Extra Rinse, Pre- wash, Sanitary, Tub Clean, Drum Light, Child Lock, Signal, Wil-Fi / Remote Start	Wrinkle Care, TurboSteam™, Re- duce Static , Energy Saver, Steam Fresh, Drum Light, Child Lock, Signal, Wi-Fi / Remote Start		
DETAILS	Washer	Dryer		
No. of Wash/Rinse Temps	5	-		
Wash/Rinse Temps	Hot, Warm/Hot, Warm, Cold/Warm, Cold	-		
No. of Spin Speeds	5	-		
Spin Speeds	High, Medium/ High, Medium, Low, No Spin	-		
Max RPM	1300	-		
Water Levels	Load Sensing	-		
No. of Soil Levels	5	-		
Temperature Settings	-	High, Medium/High, Medium, Low/Me- dium, Low		
Drying Levels	-	Very, More, Normal, Less, Damp		

Less, Damp

ALDD Yes TurboWash™ 360 Technology Yes Steam Technology Yes Allergiene™ Cycle Yes Sanitary Cycle Yes SenseClean™ System Yes Al Dry Yes Sensor Dry Yes Precise Temperature Control Yes with Variable Heater Yes (TurboSteam™) Steam Technology CONVENIENCE FEATURES Washer Dryer TrueBalance[™] Anti-Vibration Yes System Prewash, Main Wash (with liquid 4 Tray Dispense detergent cup), Bleach, Fabric Softener LoDecibel[™] Quiet Operation Yes End of Cycle Signal Yes LoadSense Yes Child Lock Yes Auto Suds Removal Yes Leveling Legs 4 Adjustable Leos Easy Loading TilTub™ Yes Drum Liaht Yes Remaining Time Display/Status Yes Indicator(s) 3 Minute Installation Check Yes LoDecibel[™] Quiet Operation Yes End of Cycle Signal Yes Drum Light Yes Reversible Door Yes FlowSense[™] Duct Clogging Yes Indicator Wrinkle Care Option Yes Child Lock Yes Electric: 3 Way Venting Option Venting / Gas: 2 Way Venting 4 Adjustable Legs Yes Remaining Time Display/Status Yes Indicator(s)



60 min., 50 min., 40

min., 30 min., 20 min

Dryer

Washe





ThinQ [®] TECHNOLOGY	Washer	Dryer
SmartDiagnosis™ (v3.0)		/es
Wi-Fi		/es
Remote Start and Cycle Monitor		/es
Energy Monitoring		/es
Tub Clean Coach	Yes	-
MOTOR AND AGITATOR	Washer	Dryer
Motor Type	Inverter Direct Drive Motor	-
Axis	Horizontal	-
MATERIALS AND FINISHES	Washer	Dryer
NeveRust™ Stainless Steel Drum	Yes	-
Cabinet	PCM	-
Control Panel	Plastic	-
Top Plate	Painted	-
NeveRust [™] Stainless Steel Drum	-	Yes
Tub Rear	-	Painted
CERTIFICATION	Washer	Dryer
AAFA	Yes	-
POWER SOURCE	Washer	Dryer
Ratings	UL Listed	-
Electrical Requirements	120V, 10 Amps	-
Туре	Electric	-
Ratings	-	CSA Listed
Electrical Requirements	-	120V, 15 Amps (Gas) 240V 30 Amps (Electric)
Туре	-	Gas / Electric
BTU Rating	-	10,000 Feet
LP Conversion Kit	-	383EEL3002D
Side Venting Kit	-	383EEL9001B
DIMENSIONS	Washer	Dryer
Product (WxHxD)	27" × 74 3	/8" x 30 3/8"
Depth with Door Open	55" D wit	h door open
Carton (WxHxD)	30 1/16" x 7	9 11/32" x 32"
Weight (Product/Carton)		26 lb / 361 lb) 9 lb / 364 lb
LIMITED WARRANTY	Washer	Dryer
Parts and Labor	2 Year	2 Year
Direct Drive Motor	10 Years	-
Drum	3 Years	3 Years
UPC CODES		
	19517/000595	
WSEX200HNA (Noble Steel)	195174000595 195174000601	



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WM3600H_A

4.5 cu.ft. Front Load Washer with Built-In Intelligence

& Steam Technology

EY FEATURES

4.5 cu. ft. Ultra Large Capacity Al Fabric Sensor/ Smart Pairing[™] AAFA certified LG washer LG ThinQ[®] Technology / Proactive Customer Care Tempered Glass Door ColdWash[™] Technology Direct Drive Motor 10-Year Limited Warranty ENERGY STAR[®] Certified Closet Depth NeveRust[™] Stainless Steel Tub



LG ThinQ

sple.As

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Enjoy new ways to control your home with LG smart appliances

• Use the ThinQ[®] app to start the laundry while you're out • Get alerts when the cycle is finished

 \bullet With Smart Pairing $\ensuremath{^{\text{TM}}}$, the washer can tell the dryer to select a compatible drying cycle

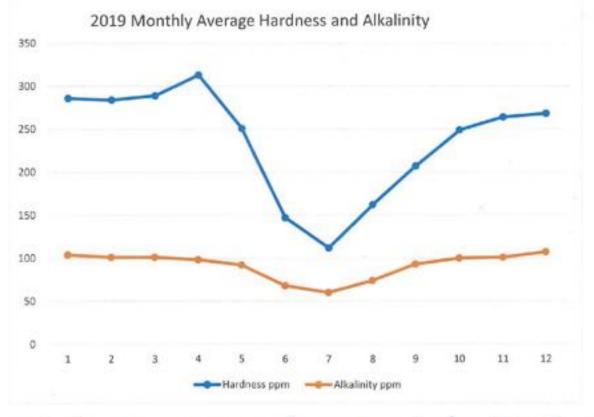


SUMMARY		Max RPM	1300	Control Panel	Plastic	
Туре	Front Load Washer	Water Levels	Load Sensing	Top Plate	Painted	
Capacity (cu.ft.)	4.5 cu. ft.	No. of Soil Levels	5	Door / Rim	Glass/White Rim (White), Glass	
Matching Electric Dryer	DLE3600W, DLE3600V	FABRIC CARE FEATURES			Silver Rim (Graphite Steel)	
Matching Gas Dryer	DLG3601W, DLG3601V	AI DD™	Yes	Door Cover	Tinted Cover	
Color	White (W), Graphite Steel (V)	Steam Technology	Yes	All Available Colors	White (W), Graphite Steel (V)	
APPEARANCE		Allergiene™ Cycle	Yes	CERTIFICATION		
Hard Buttons	Yes	Sanitary Cycle	Yes	AAFA	Yes	
Touch Buttons	Yes	ColdWash [™] Option	Yes	POWER SOURCE		
Dial-A-Cycle™	Yes	SenseClean™ System	Yes	Ratings	UL Listed	
ENERGY		CONVENIENCE FEATURES		Electrical Requirements	120V, 10 Amps	
ENERGY STAR® Most Efficient	Y.	TrueBalance™ Anti-Vibration	Yes	Туре	Electric	
2019	Yes	System	fes	OPTIONS/ACCESSORIES		
ENERGY STAR [®] Qualified	Yes		Prewash, Main Wash (with liquid	Pedestal	WDP4W, WDP4V	
CEE Tier IMEF	2 2.92	4 Tray Dispenser	detergent cup), Bleach, Fabric Softener	Pedestal (WxHxD)	27 x 14 1/8 x 30 3/4 (50 9/16 I with door open)	
IWE	2.92	LoDecibel [™] Quiet Operation	Yes	LG Sidekick™ Pedestal Washer	WD100CW, WD100CV	
WASH PROGRAMS	2.9	End of Cycle Signal	Yes	LG Sidekick™ Pedestal Washer	27 x 14 1/8 x 30 3/4 (50 9/16 [
	10	LoadSense	Yes	(WxHxD)	with door open)	
No. of Programs	10 Normal, Heavy Duty, Bedding, Al- lergiene™, Tub Clean, Perm. Press, Delicates, Speed Wash, Rinse +	Child Lock	Yes	Stacking Kit	KSTK1	
		Auto Suds Removal	Yes	DIMENSIONS		
Wash Programs		Leveling Legs	4 Adjustable Legs	Product (WxHxD)	27" x 39" x 30 1/4"	
	Spin, Downloaded	Easy Loading TilTub™	Yes	Depth with Door Open	(55" D with door open)	
WASH OPTIONS No. of Options	9	ThinQ [®] TECHNOLOGY SmartDiagnosis [™] (v3.0)	Yes	Carton (WxHxD)	29 23/32" x 41 27/32" x 31 17/32"	
	Steam, Delay Wash, Pre-Wash,	Wi-Fi	Yes	Weight (Product/Carton)	187.4 / 209.8 lbs	
	Extra Rinse, Cold Wash, Wi-Fi,	Remote Start and Cycle Monitor	Yes			
Options	Remote Start, Spin Only, Control	Energy Monitoring	Yes	Parts and Labor	1 Year	
	Lock	MOTOR AND AGITATOR	165	Direct Drive Motor	10 Years	
WASH DETAILS		Motor Type	Inverter Direct Drive Motor	Drum	3 Years	
No. of Wash/Rinse Temps	5	Axis	Horizontal	UPC CODES	5 10013	
Wash/Rinse Temps	Extra Hot, Hot, Warm, Cold,	Axis MATERIALS AND FINISHES	HUHZUNTAL	WM3600HWA (White)	048231028264	
Na af Caia Casada	Tap Cold 5	NeveRust [™] Stainless Steel Drum	Yes	WM3600HVA (Graphite Steel)	048231028257	
No. of Spin Speeds			PCM	the second and a second	0.020.020207	
Spin Speeds	Extra High, High, Medium, Low, No Spin	Cabinet	PCIVI			

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FINISHED WATER DATA 2019

Month	Temp C	рН	Hardness ppm	Alkalinity ppm
Jan	0.9	8.2	286	104
Feb	0.8	8.2	284	101
Mar	2	8.3	289	101
Apr	4	8.2	313	98
May	6	8.2	251	92
Jun	7	8	147	68
Jul	9	8	112	60
Aug	10	8.1	162	74
Sep	9	8.3	207	93
Oct	5	8.3	249	100
Nov	/ 2	8.3	264	101
Dec	1	8.4	268	107



Hardness range in gpg (grains per gallon) is 7-17gpg 7gpg Summer 17gpg Winter

104ppm/17.1 = 6gpg To Calculate gpg

1.4





DRINKING WATER QUALITY REPORT

PUBLIC WATER SYSTEM ID: PWSID CO0149122



We are pleased to present to you this year's water quality report. This report summaries water quality testing results for the 2021 calendar year. Our constant goal is to provide you with a safe and dependable supply of drinking water.

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

LEARN MORE ABOUT ASPEN'S WATER

If you have any questions about this report or for more information about the City of Aspen's Water resources, conservation goals and our Integrated Water Resource Plan, please contact the City's Utility Office at 970-920-5110 or the Colorado Department of Public Health and Environment at 303-692-3500.

The City of Aspen continues to monitor the COVID-19 Pandemic and our Drinking water Treatment standards and methods ensures a complete disinfection process with no threat of our process water becoming a source of the Virus. For more information on the City of Aspen's COVID-19 rules and responses please contact the City's Utilities Office.

2 | 2021 WATER QUALITY REPORT | CITY OF ASPEN

CITY OF ASPEN WATER SOURCES

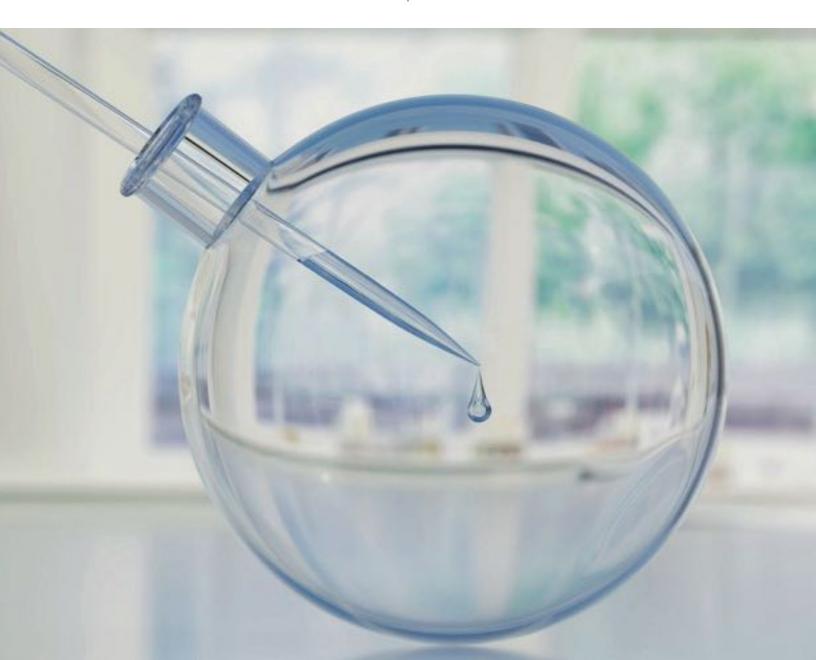
The City of Aspen is very fortunate to have our source water coming directly from Certified Wilderness Areas within the White River National Forest. They are Castle Creek, Maroon Creek, Thomas Reservoir and Rio Grande Well. Rio Grande Well is designated as an emergency source only. The water you use at your home or business typically come from Castle Creek but may be supplemented periodically from Maroon Creek. Source water protection is an important aspect of maintaining water quality for environment aspects and Drinking water production. The City of Aspen maintains a Source Water Protection Plan (SWAP) and it is available at: drive.google.com/file/d/OBotmPQ67k3NVNVIMeFRwS2VVaEU/view?resourcekey=0-r6bw-xPpQ7NcAEOhkE9TgQ

ESTIMATED SUSCEPTIBILITY

POTENTIAL CONTAMINATION SOURCES

Moderately High

EPA Superfund / Abandoned Contaminated sites, Past Mining Activity, Aboveground, Underground, and leaking storage sites, existing/Septic Systems



GENERAL INFORMATION ABOUT DRINKING WATER

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).



The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

• *Microbial contaminants:* viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

• **Inorganic contaminants:** salts and metals, which can be naturallyoccurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

• **Pesticides and herbicides**: may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.

• **Radioactive contaminants**: can be naturally occurring or be the result of oil and gas production and mining activities.

• **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

WATER QUALITY DATA TERMS AND ABBREVIATIONS

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.

Maximum Contaminant Level (MCL) - The highest level of a contaminant allowed in drinking water.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Nephelometric Turbidity Unit (NTU) - Measure of the clarity or cloudiness of water. Turbidity more than 5 NTU is just noticeable to the typical person.

Not Established (NE) - Does not apply or not available.

Parts per Billion = Micrograms per liter (ppb = ug/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per Million = Milligrams per liter (ppm = mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Running Annual Average (RAA) - An average of Monitoring results for the previous 12 calendar months or previous four quarters Running Annual Average (LRAA).

DRINKING WATER QUALITY DATA

The City of Aspen routinely monitors for contaminants in your drinking water according to Federal and State laws. The data presented in this report are the result of monitoring for the period of Jan. 1 to Dec.31, 2021 or from the most recent testing done in accordance with regulations. The Colorado Department of Public Health & Environment does not require us to monitor for all contaminants each year because the concentrations of some constituents are not expected to vary significantly from year to year or the City of Aspens Source water and systems is not considered vulnerable to that type of Contaminant. Therefore, some of our data, though representative, may be more than one year old.

CONSTITUENTS DETECTED

Constituent	Units	MCL	MCLG	Result	Violation (Yes/No)	Sample Date	Typical source of Constituent
Chlorine	ppm	MRDL=4	MRDLG=4	0.75	No	Minimum of 30 samples monthly in 2021	Water additive used to control microbes; Measurable Residual Disinfectant
Fluoride	ppm	4	4	0.58	No	Daily 2021	Erosion of natural deposits; drinking water supplement
Sodium	ppm	NE	NE	3.64	No	2020	Erosion of natural deposits
Total Coliform Bacteria	Absent or present	No more than 5% of 30 Minimum samples can be positive	O	No positives	No	Jan.1 through Dec.31, 2021	Naturally present in the Environment

Constituent	Units	TT Requirement	Result	Violation (Yes/No)	Sample Date	Typical source of Constituent
Turbidity	NTU	Not to exceed 1 NTU for any single measurement	Highest Single measurement: 0.202 NTU	No	Continuously 2021	Soil Runoff/ Snowmelt
Turbidity	NTU	95% of Monthly sample must be ≤ 0.3 NTU	Lowest Monthly % of samples meeting TT standard: 100%	f samples Co eting TT No		Water additive used to control microbes; residual disinfectant rule
Chlorine	ppm	95% of Months samples must be at least 0.2 ppm	Lowest Monthly % of samples meeting TT standard: 100%	No	Continuously in 2021	Water additive used to control microbes; residual disinfectant rule

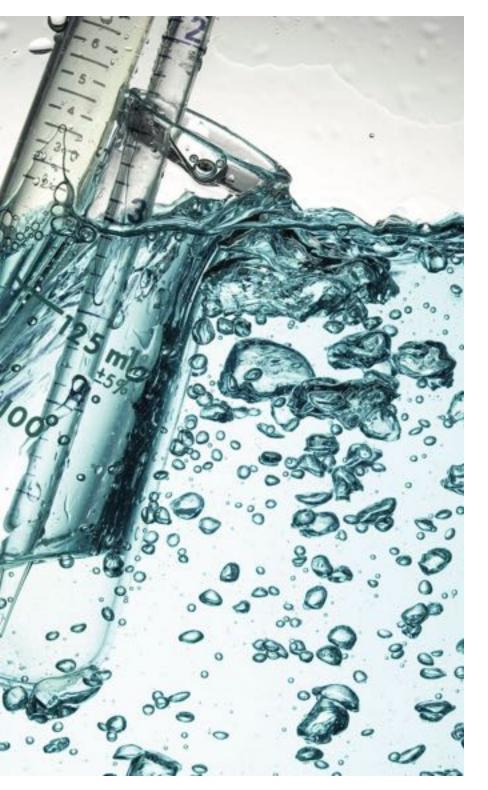
Constituent	Units	AL	90th Percentile	Number of sites over AL	Violation (yes/No)	Sample Date	Typical source of Constituent
Lead	ppb	15	0.7	0	No	2021	Corrosion of household plumbing system, erosion of natural deposit

Constituent	Units	MCL	MCLG	Average	Range of all samples	Violation* (yes/No)	Sample Date	Typical source of Constituent
Haloacetic Acids	ppb	60	NE	10.94	4.85 - 23.2	No	Quarterly 2021	Byproduct of drinking water disinfection
Total Trihalo-methanes	ppb	80	NE	10.86	4.8 - 18.7	No	Quarterly 2021	Byproduct of drinking water disinfection

DISINFECTION BYPRODUCT PRECURSORS - TOTAL ORGANIC CARBON REMOVAL RATIO

Water Treatment Plant	Compliance Factor (minimum RAA)*	RAA	Violation (yes/No)	Sample Date	Typical source of Constituent
Castle Creek Treatment Plant	1.0	1.03	No	Quarterly 2021	Naturally present in the Environment

*If Minimum ration not met and no violation identified then the system achieved compliance using alternative criteria



LEAD TESTING INFORMATION

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). Lead in drinking water comes primarily from materials and components associated with Service lines and home plumbing. The City of Aspen provides high-quality drinking water that does not promote any leaching or corrosion leading to higher levels of Lead. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at epa.gov/safewater/ lead.

2021 VIOLATION

Findings from the routine drinking water sanitary survey performed by the Colorado Department of Public Health and Environment on September 8 and 9, 2021 resulted in notification to Aspen Water Department on September 30, 2021, resulted in the below violations.

These violations were not Public Health emergencies and there were no adverse health impacts from any of the violations listed. Utility customers water always remained safe and no alternate water source was required. All of these actions were remedied, and the system was back in compliance in October 2021. The City of Aspen continues to monitor water quality 24 hours a day, seven days a week, to ensure the water is safe to drink.

This notification complies with federal and state laws requiring water systems to notify customers when a drinking water standard is not in compliance.

Backflow Assembly Testing Compliance Ratio - The state drinking water program requires that all public drinking water systems test a percentage of the backflow prevention devices annually. For 2020, the passing percentage ratio was 80%. The City of Aspen received a violation because our water system had completed only 72% compliance in testing by the required date; thus, we did not meet the required percentage. The situation was resolved on October 13, 2021, and the City continuously reaches out to homeowners and property managers, and backflow testers to ensure backflow assembly testing is performed and certified, then submitted to the water department.

Storage Tank Inspection Plan - An overflow screen on the Thunderbowl Water Storage Tank was damaged when an unidentified source covered it with boulders and rock, resulting in an approximate 4-inch cut in the screen.

Repair was completed September 16, 2021, before the issuance of the official violation notification. The system is now compliant. The storage tank management plan has been updated to ensure that defect repair timelines address the coordination of obtaining necessary materials and equipment.

Monitoring & Recordkeeping and Data Verification - The City is required to calibrate their turbidimeters quarterly or more per the manufacturer's recommendation. One of the turbidimeters was missing a calibration for the second quarter. Reminders have been set to ensure compliance going forth.

Finished Water Storage - Minimum Number of Period Storage Tank Inspections - At time of inspection the City's periodic tank inspection logbook noticed there were two inspections on the Tiehack storage tank in 2020 that were performed less than 60 days after the first. The City met the criteria of two inspections for the year 2020, but will need to ensure they are not within 60 days of each other going forward.

For further questions contact:

Aspen Water Customer Care City of Aspen Utilities Department 500 Doolittle Drive, Aspen CO 81611 970-920-5110, Justin.Forman@aspen.gov

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in public places or by distributing copies by hand.





ASPEN.GOV



CITY OF ASPEN 2021 Drinking Water Quality Report Covering Data For Calendar Year 2020

Public Water System ID: CO0149122

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact Charlie Bailey at 970-920-5110 with any questions or for public participation opportunities that may affect water quality. This report is available online at: https://www.cityofaspen.com/Archive.aspx?ADID=846

General Information

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting epa.gov/ground-water-and-drinking-water.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

•Microbial contaminants: viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

•Inorganic contaminants: salts and metals, which can be naturallyoccurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

•Pesticides and herbicides: may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses. •Radioactive contaminants: can be naturally occurring or be the result of oil and gas production and mining activities.

•Organic chemical contaminants: including synthetic and volatile ASPEN CITY OF, PWS ID: CO0149122 organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at epa.gov/safewater/lead, or alternatively contact CJ Oliver, Environmental Health Director at 970-920-5008 https://www.cityofaspen.com/1196/Lead-in-Water

Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit wqcdcompliance.com/ccr. The report is located under "Guidance: Source Water Assessment Reports". Search the table using 149122, ASPEN CITY OF, or by contacting Charlie Bailey at 970-920-5110. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination has or will occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

2021 CCR Page 1 of 5

Our Water Sources

Source	Source Type	<u>Water Type</u>	Potential Source(s) of Contamination
Castle Creek	Intake	Surface Water	Existing/Abandoned Mine Sites, Aboveground, Underground and Leaking Storage Tank Sites
Maroon Creek	Intake	Surface Water	
Rio Grande Well	Well	Ground Water	

Terms and Abbreviations

- Maximum Contaminant Level (MCL) The highest level of a contaminant allowed in drinking water.
- Treatment Technique (TT) A required process intended to reduce the level of a contaminant in drinking water.
- Health-Based A violation of either a MCL or TT.
- Non-Health-Based A violation that is not a MCL or TT.
- Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- Maximum Residual Disinfectant Level (MRDL) The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Maximum Contaminant Level Goal (MCLG) The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum Residual Disinfectant Level Goal (MRDLG) The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Violation (No Abbreviation) Failure to meet a Colorado Primary Drinking Water Regulation.
- Formal Enforcement Action (No Abbreviation) Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- Variance and Exemptions (V/E) Department permission not to meet a MCL or treatment technique under certain conditions.
- Gross Alpha (No Abbreviation) Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** Measure of the radioactivity in water.
- Nephelometric Turbidity Unit (NTU) Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- Average (x-bar) Typical value.
- Range (R) Lowest value to the highest value.
- Sample Size (n) Number or count of values (i.e. number of water samples collected).
- Parts per million = Milligrams per liter (ppm = mg/L) One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Not Applicable (N/A) Does not apply or not available.
- Level 1 Assessment A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- Level 2 Assessment A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Detected Contaminants

The City of Aspen routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2020 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

Disinfectants Sampled in the Distribution System TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm OR If sample size is less than 40 no more than 1 sample is below 0.2 ppm Typical Sources: Water additive used to control microbes

30 Samples are taken per month (>360 samples in 2020) at representative sites in our distribution system with 100% of samples being at least 0.2ppm

	Lead and Copper Sampled in the Distribution System							
Contaminant Name	Time Period	90 th Percentile	Sample Size	Unit of Measure	90 th Percentile AL	Sample Sites Above AL	90 th Percentile AL Exceedance	Typical Sources
Lead	07/22/2020 to 08/28/2020	0.7	30	ррb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	07/22/2020 to 08/28/2020	0.14	30	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

	Disinfection Byproducts Sampled in the Distribution System								
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2020	7.66	4 to 11.5	8	ррb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalome thanes (TTHM)	2020	10.25	4.47 to 16.4	8	ррb	80	N/A	No	Byproduct of drinking water disinfection

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	TT Minimum Ratio	TT Violation	Typical Sources
Total Organic Carbon Ratio	2020	1.6	1 to 4	5	Ratio	1.00	No	Naturally present in the environment

	Summary of Turbidity Sampled at the Entry Point to the Distribution System							
Contaminant	Sample Level Found TT Requirement TT Typical							
Name	Date			Violation	Sources			
T 1 1		TT' 1 4 1 4		N	G 1 D			
Turbidity	Date/Month:	Highest single measurement:	Maximum 1 NTU for any single	No	Soil Runoff			
	Jun	0.169 NTU	measurement					

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Gross Alpha	2020	2.59	2.59 to 2.59	1	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2020	1.2	1.2 to 1.2	1	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2020	3	3 to 3	1	ррb	30	0	No	Erosion of natural deposits

	Inorganic Contaminants Sampled at the Entry Point to the Distribution System								
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Fluoride	2020	0.82	0.82 to 0.82	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth

Secondary st	Secondary Contaminants **Secondary standards are <u>non-enforceable</u> guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.						
Contaminant Name							
Sodium	2020	3.64	3.64 to 3.64	1	ppm	N/A	

Violations, Significant Deficiencies, and Formal Enforcement Actions

This violation does not mean that the	Non-Health-Based Violations ere was a problem with the water quality. If the immediately.	re had been, we would have notified you				
Name	Description	Time Period				
LEAD & COPPER RULE FAILURE TO MONITOR AND/OR 10/01/2020 - Open REPORT 10/01/2020 - Open						
	Additional Violation Information					
CDPHE approved sample pool sites that materials evaluation of the service line ar testing. The City of Aspen has been atter	nd test 30 LEAD and COPPER samples each year are at the highest risk for lead and copper contami ad interior plumbing type, this requires city staff to npting to perform this evaluation at properties, bu nd enter these additional "highest risk" residences.	nation. The highest risk sites are based on a o enter people's homes and perform materials it the COVID-19 pandemic severely				
Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.						
The City of Aspen is in the process of identifying and performing the necessary materials evaluation at additional residences so that in the future all 30 sites will be Tier 1 HIGHEST RISK. Tier 1 sampling sites are single family structures with copper pipes with lead solder installed later 1982 (but before 9/20/1988) or contain lead pipes and/or that are served by a lead service line						

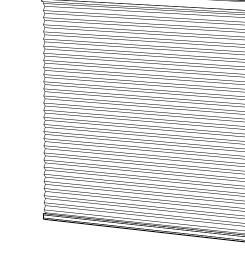
Serena Insulating Honeycomb Shades

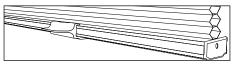
Sivoia QS Triathlon Insulating Honeycomb Shades

Lutron remote-controlled insulating honeycomb shades start, move, and stop smoothly and quietly, providing privacy and light control at the touch of a button.

Features

- Battery-powered, wired power, and cordless manual models available
- Industry leading battery performance*
- Precise drive is capable of stopping at 0.125 in (3 mm) intervals throughout the entire travel of the shade
- Triathlon drive technology maintains accurate bottom rail alignment by compensating for fabric weight and battery voltage
- Easy installation and maintenance
- Built in wireless communication using Clear Connect RF technology
- Wireless control range: 30 ft (9 m)
- * Battery performance details are available in your shade ordering tool.





Cordless Manual models include bottom bar handle

Specifications

Regulatory

- cULus listed (E135084)
- FCC (USA)
- IC (Canada)
- CFT (Mexico)
- CRC (Columbia)
- SUTEL (Costa Rica)
- ANATEL (Brazil)
- SUPERTEL (Ecuador)
- CE
- FCC (USA, Hong Kong)
- CMIIT (China)
- IDA (Singapore)
- CE (European Union)
- TRA (UAE)

Ratings

- Operating Voltage: 6-12V----
- Operating Wattage: 5 W
- Torque: 2.5 in-lb (0.28 N•m)
- Speed: 1.8 in/sec

Environment

- Temperature: 32° F to 104° F (0° C to 40° C)
- For indoor use only
- Relative Humidity: <90% non-condensing

Compatible Controls

Serena Models

- Pico wireless control
- 4-Group RF Shade Remote Control
- Caséta (Smart Bridge)

Sivoia QS Triathlon models

- Pico wireless control
- 4-Group RF Shade Remote Control
- seeTouch RF keypads
- GRAFIK Eye QS
- RadioRA 2
- HomeWorks QS
- Caséta (Smart Bridge Pro)

LUTRON SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:	
Job Number:		

Page

System Dimensions

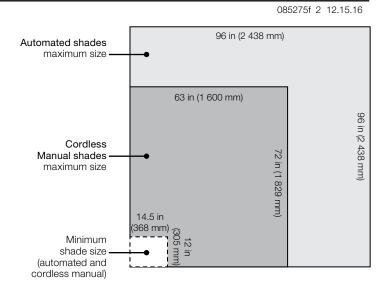
Shade Width*

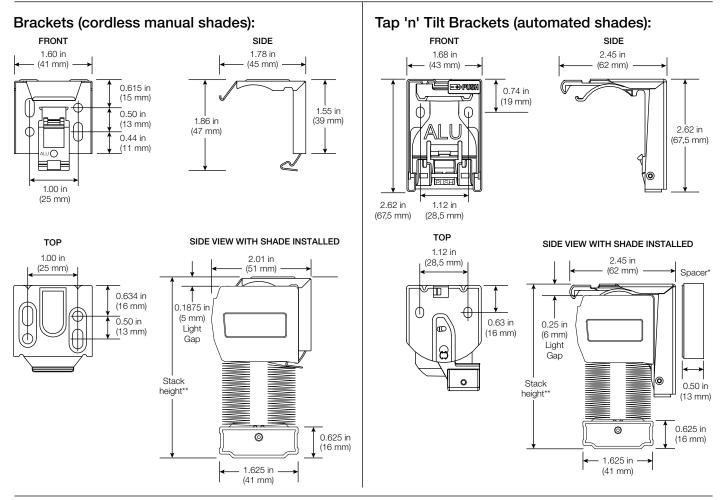
Shade Type	Minimum	Maximum	
Cordless Manual	14.5 in (368 mm)	63 in (1 600 mm)	
Automated	14.5 in (368 mm)	96 in (2 438 mm)	

*Fabric width = shade width minus 0.125 in (3 mm)

Shade Height

Shade Type	Minimum	Maximum
Cordless Manual	12 in (305 mm)	72 in (1 829 mm)
Automated	12 in. (305 mm)	96 in (2 438 mm)





* Spacers are included when outside-mount above/below trim is indicated on the original order, and/or the shade is equipped with an external battery holder. (See 'Mounting Options' on page 3 and 'Battery requirements by shade size and fabric' on page 4.)

** Total height of the fully raised shade from the top of the bracket to the bottom of the bottom rail. For details, see Serena Stack Guidelines.pdf

Model Numbers:

SPECIFICATION SUBMITTAL

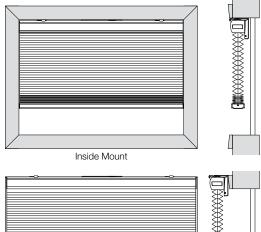
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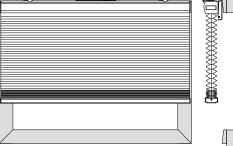
Job	Number:	

Job Name:

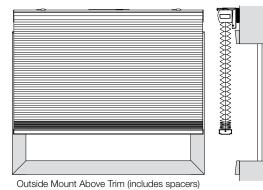
Mounting Options

Depending on the window dimensions, the shade can be mounted inside the window frame or outside the window frame.





Outside Mount on Trim



Bracket count by shade size and fabric

Shade Width/	Brackets	
Cyprus • Monaco • Sedona	Rio ● Napa ● Prague	Required
14½ in - 45 in	14½ in - 48 in	2
(368 mm - 1 143 mm)	(368 mm - 1219 mm)	2
451⁄% in - 69 in	481⁄⊮ in - 72 in	3
(1 146 mm - 1 753 mm)	(1 222 mm - 1 829 mm)	3
69 1⁄8 in - 96 in	721⁄4 in - 96 in	4
(1 756 mm - 2 438 mm)	(1 832 mm - 2 438 mm)	4

SPECIFICATION SUBMITTAL

-	LUTRON SPECIFICATIO	N SUBMITTAL	Page
	Job Name:	Model Numbers:	
	Job Number:		

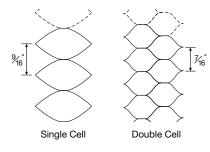
Fabric Options

Lutron Insulating Honeycomb Shades are available in a wide variety of types:

Light-Filtering Single-Cell Cyprus* Monaco, Rio	3.5 3.5	
Monaco, Rio	25	
	3.5	
Sedona	0.7	
Napa	3.4	
Prague	0.9	
Light-Filtering Double-Cell		
Monaco, Rio	3.6	
Room-Darkening		
Cyprus*	4.3	
Monaco, Rio	4.3	

* Available with fire rated option

Honeycomb Options (profile view)

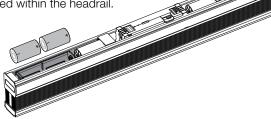


Cell height shown is for general reference only. Cell-to-cell distance will vary along the height of an actual shade.

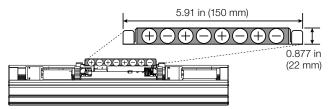
Power Options

Battery power

- Batteries are not included.
- Type and quantity vary with shade size and fabric choice (see table below).
- The battery holders are typically located within the headrail.



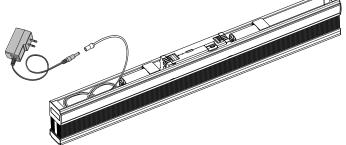
• Shades that are not wide enough to include battery holders within the headrail have a battery holder located on the back of the headrail. Mounting bracket spacers are included to provide additional rear clearance.



Power panel 10-output power supply SPS-P1-10-6 available separately.

Plug-in power supply

- Shade includes 15 ft (4572 mm) power wire
- Wiring compartment can be located on either side.



Individual power supply CSPS-XX-1-6-WH available separately.

CSPS-P1-1-6-WH = \bigcirc CSPS-P2-1-6-WH = \bigcirc CSPS-P3-1-6-WH = \bigcirc

Input Voltage: 120-240 V~ Max. input current: 1.5 A Operating frequency:

50/60 Hz

Output Voltage: 12 V===

Output Current: 5 A

ESD Protection: (+/-) 16 kV

Secondary wiring must be of type CL2, CL2P, CL2R, CL2X or other cable with equivalent or better electrical, mechanical, and flammability ratings in accordance with local and national electric code.

LUTRON SPECIFICATION SUBMITTAL Page Job Name: Model Numbers:

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MITSUBISHI ELECTRIC SALES CANADA INC.

4299 14th Avenue Markham, Ontario L3R 0.0, Canada Phone 905-475-7728 for a greener tomorrow





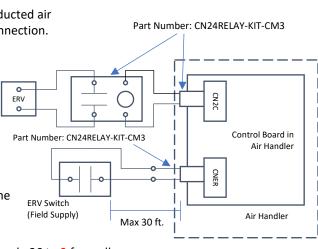
Installing Mitsubishi Electric Air Handling Units with ERV and Humidifiers

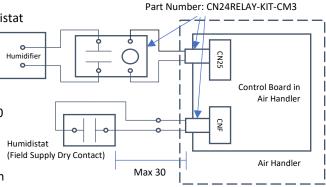
Energy Recovery Ventilation systems and humidifiers are becoming more prevalent in today's HVAC installations. With the movement towards Net Zero and emissions free housing, Mitsubishi Electric expects the trend to continue well into the future. How to incorporate both ERV's and Humidifiers together or separately is explained below.

The information below applies to the following units: PVA, SVZ and PEAD ducted air handling units. Please note SEZ units do not support ERV or humidifier connection.

- (A) ERV Connectors on PVA, SVZ and PEAD and sequence of operation are all the same:
- Once the FAN is running, the control board CN2C Connector outputs a 12VDC signal to activate 12VDC relay which closes dry contacts to turn ON ERV.
- If ERV closes field supplied normally open dry-contacts on connector CNER on control board during thermo off then system turns fan on and outputs a 12VDC signal on CN2C connector on the control board to turn ON ERV.
- During defrost cycle, ERV is turned off by turning off CN2C signal.
 Mode 26 is set to 1 (default) is for older homes and may change mode 26 to 2 for well insulated homes.
- (B) Humidifier Control connectors are also the same on PVA, SVZ and PEAD units. Sequence of operations for the units as follows:
- When in HEAT mode and Air handler receives input from humidistat through CNF connector, Fan starts on HIGH
- Air handler *CN25* Connector outputs a 12VDC signal to activate 12VDC relay which closes dry contacts to turn ON Humidify. The humidistat controls percentage of humidity.
- When humidistat opens (CNF) the fan will continue to run for 30 seconds to clear ductwork from moisture

Ensure mode 13 is set to 2 (default). Mode 16 controls humidifier operation. MESCA recommends mode 16 be set to 2 to enable operation when the indoor unit is heat / fan or STOP condition.





At a Glance – Quick set-up

ERV Control	Connect as shown above (A) and ERV operation available in cool/heat/fan and STOP conditions	
	Mode 26 =1 (default value) – Mode 26 = 2 for well insulated house	
Connect as shown above (B). Humidifier works in HEAT mode only.		
Humidifier Control	Mode 13 – Set to 2 (Default)	
	Mode 16 – Application based. Well insulated homes set to 2. Otherwise leave as default (1)	
NOTE: 12VDC relays are polarity sensitive. Make sure pin 1 (red wire) of CN25 and CN2C goes to + terminal of relay		



Models 300, 400, 400M, 500, 500M, 600, 600M, 700 & 700M

Includes Safety & Operating Instructions and Warranty Information

READ AND SAVE THESE INSTRUCTIONS

INTRODUCTION

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OPERATING INSTRUCTIONS – MODELS 400, 500, 600 & 700 6 Digital Humidifier Control Indicator Lights
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MAINTENANCE INSTRUCTIONS Model 300 16 Models 400 & 400M 17 Models 500, 500M, 600 & 600M 18 Models 700 & 700M 19
LIMITED WARRANTY

WARNI

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A CAUTION

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Thank you for your recent Aprilaire® humidifier purchase. We appreciate your business and are pleased to add your name to our growing list of customers. You have invested in the highest quality equipment available. Aprilaire manufactures whole-house indoor air quality products and is a recognized leader in the heating and air conditioning industry. Your humidifier will require periodic maintenance to assure continued fine performance. See page 14 to obtain service parts and/or replacement Water Panel® evaporators.

Please take a few minutes and read this booklet. This will familiarize you with the benefits you will receive from the equipment you just purchased and help you understand the routine maintenance that will be required.

Be sure to register your humidifier warranty online at www.aprilaire.com/warranty

Genuine Aprilaire[®] Replacement Water Panels[®] are available from your installing contractor or from most other heating and air conditioning contractors in your area. Use the dealer locator in our web site **www.aprilaire.com** or call 800-334-6011. Purchase only genuine Aprilaire Water Panels to maintain peak performance.



The minerals and solid residue not trapped by the replaceable Water Panel[®] evaporator are flushed down the drain in the Models 300, 500, 500M, 600, 600M, 700 and 700M. This is the most effective and least expensive methot to dispose of trouble-causing minerals. The drain also eliminates the probler caused by stagnant water.

PRINCIPLE OF OPERATION

aprilaire-300-400-400m-500-500m-600-600m-700-700m-humidifier-owners-manual-B2209190.pdf

n, you have invested in a humidi ure's own way of adding moistur ghout the heating season. It is v ur new humidifier – questions or questions or um benefits fro new humidifier receive maxim possible that you have questions concerning your new what it can do for you, and what you should do to rec it. This booklet is intended to answer these questions. syste ы dific ur purchase of this num rates on the evaporativ a optimum relative hurr viding g

ng comfortable April day, combines just the nount of moisture. Aprilaire humidifiers em nts, to give you the optimum RH for maximu tture, in producing an invigorating contemporating contemperature and the right amour esame principle, with refinements, towable comfort all winter long. ature, in proc

> _` evaluation of a humidifier are precise con formance and minimum maintenance. The e humidifier provides all of these advantage The important considerations in the evalutificient capacity, trouble-free perform or Aprilation of your Aprilate hur ere, briefly, is the method: ope

Except for Model 300, the Aprilaire humidifier is installed to operate in conjunction with the heating, ventilating, air conditioning equipment (HVAC) blower. When the Aprilaire Humidifier Control calls for humidity and the blower motor is operating, water flows to the distribution tray located at the top of the humidifier. The water is uniformly distributed across the width of the tray and through a scientifically designed system of outlets. It flows by gravity over the Water Panel[®] evaporator, the heart of the humidifier. Dry, hot air is moved through the moisture-laden Water Panel[®] evaporator where natural evaporation takes place. The now-humidified air carrying moisture in vapor form (nature's own way) is circulated throughout the home.

With bypass Models 400, 500 and 600 Series, HVAC system airflow is drawn through the humidifier from the supply duct to the return duct. 700 Series mo and Model 300 have a built-in fan which draws air through the Water Panel.

through the humidifier from the supply duct to the return duct. 700 Series models, and Model 300 have a built-in fan which draws air through the Water Panel. Model 300 must use service hot water (140°F maximum) for a heat source, as heat is needed for evaporation. The other models can work with cold or hot water, but hot water provides maximum output and is recommended if the humidifier is to be run in fan-only mode. While the water going to the humidifier is hot, the flushing water to the drain will be cold. The heat is extracted during the evaporation process.

The correct water flow is determined by an orifice provided with each drain type humidifier. When the humidifier is operating, there will be a small, steady stream of water to drain, which flushes away most of the trouble-causing minerals.

ed to be ŏ It is ę ≥ the not use the saddle valve to reg npletely open or closed. S D

Trouble-free performance and minimum maintenance are assured by the design features of the Aprilaire humidifier. All humidifier housing parts that come in contact with water are non-metal and will never rust or corrode. Neither heat nor water will affect them under normal operating conditions.

The Water Panel[®] evaporator, designed especially for uniform, high evaporation, and the scale control insert (which encases the Water Panel) effectively traps mineral deposits which are often the cause of damage to working parts in ordinary humidifiers. **The Water Panel[®] evaporator is the heart of the humidifier and must be in good condition to assure high capacity trouble-free performance. It should be changed at least annually with the exception of Models 400 and 400M which should be changed at least twice per heating season.**

The distribution tray incorporates a synthetic fabric liner that is designed to deliver water uniformly over the entire top surface of the Water Panel[®] evaporator, provided the humidifier is mounted level. It is normal for some mineral deposits to form in the distribution tray as it dries out between humidification cycles. These deposits can actually help distribute water in the tray, but if they block the openings, they should be removed as described in the **PERIODIC PREVENTATIVE MAINTENANCE** section of this manual.

Your Digital Humidifier Control works in conjunction with your HVAC system to control the operation of the humidifier. The control senses indoor RH and outdoor temperature and automatically adjusts the operation time of the humidifier to provide the optimum humidity level in the home.

The Automatic Control can be set to turn on the HVAC blower when humidity is required. Plumbing the humidifier to hot water is required for this mode of operation.

The digital readout on the control displays the RH level inside the cold air return duct. RH is a measure of the amount of moisture in the air as a percentage of what the air can hold. Warm air can hold more moisture than cold air can. The control has lights which indicate humidifier operation, when the Water Panel needs to be replaced and when service is required. See **OPERATING INSTRUCTIONS** for more information. There are many humidifiers on the market. They all add moisture... with varying degrees of efficiency. None, however, offer the features, design, and performance incorporated into your new Aprilaire humidifier.

AUTOMATIC MODE

OPERATING INSTRUCTIONS - MODELS 400, 500, 600 & 700

The Digital Humidifier Control offers two modes of operation, Automatic o Manual. An explanation of both modes follows. (See **FIGURE A** on page 7 Automatic mode. See **FIGURE B** on page 8 for Manual mode.)

- ig be rs the foll 9f , this syste ode, E e Aut en in th Wh
- You will always receive the optimum amount of humidity so that your home and its furnishings are always protected from the damaging eff of excess condensation or low humidity during the heating season. The control automatically adjusts your home's RH based on the outdoor ed. m comfort is m atically adjusts your h asing the time maxim
 - erature changes. It also during the summer seaso outdoor temperatu etting to **OFF** duri 0 Simple operation with few adjustments. The co to manually adjust the control when outdoor tem eliminates the need to turn the dial setting to OF

DIGITAL HUMIDIFIER CONTROL INDICATOR LIGHTS

midifier is not that the hurr Call Dealer for Service: The red light indicates t operating normally and that service is required.

÷ ge low light indicates that it is time to cha Change Water Panel: The yel Water Panel in the humidifier. ÷

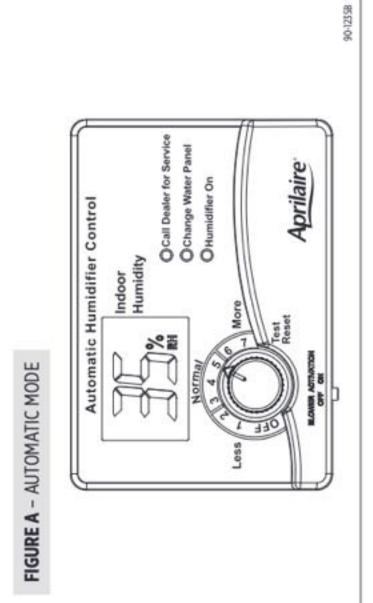
idifier On: The green light indicates that the humidifier is operating Ę. 로

BLOWER ACTIVATION

The BLOWER ACTIVATION switch is set to the **ON** position to allow the humidifier control to activate the HVAC fan for maximum humidification. For this setting the Models 500, 600 and 700 must be connected to hot water.

If the HVAC system has been idle for one hour, the humidifier control will activate the HVAC system fan to sample the air for 3 minutes. If the RH is lower than the set point, the humidifier control will activate the humidifier and keep the fan running. The humidifier will continue to operate for 2 hours or until the humidification set point is reached.

If the RH set point has not been reached by the end of a call for heat, the control will continue to operate the humidifier and the HVAC fan until the humidification set point is reached or 2 hours have elapsed. When the BLOWER ACTIVATION switch is in the **OFF** position, the humidifier control will only operate the humidifier if humidity is required and the HVAC system fan is operating or the HVAC system is producing heat.



d in the cold air return duct. **Durin** control needs to be set initially to v these steps when adjusting your the ed \geq fo e r Control is in , your humid lition. Please match your home's condition control (refer to FIGURE A). son, ng seas Your Aprilaire I

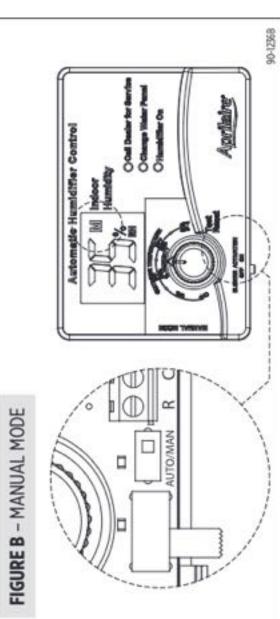
0 within the normal range. Durir y to adjust the dial for more o omfort and home's requiremen ייכינפאשרא tu איז your personal comf eration Guide. cessar to **5**, wh ay be n∽ 9 - Ope .±= 5 humidity, dependir Refer to **TABLE 3 -**48 h š n the dial next 24-4 Turi the -

or adjustment: nstruction. Rel le's con 5 8 nt upon of th 3 may be necessar TABLE 3 - Opera ig th 2. DL

ds whe OFF led to meet your reating seasons. Meeting seasons. Meeting to **OFF** ntrolled Ire heati 0 0 ou ter of yo be adji Φ D The RH in your should not need of the dial settir performing ann

Refer to the **ANNUAL MAINTENANCE** section for instructions on changing the Water Panel or call your heating and air conditioning dealer for service. After th Water Panel is replaced, turn the control knob to the **Test/Reset** position until the green **Humidifier On** light flashes, to reset the Water Panel change timer.

MANUAL MODE	



MAN position and **M** in the display), it is important to anticipate a drop in outdoor temperature and reduce the setting accordingly to avoid excessi condensation. For example, with an outdoor temperature of 20°F the cor setting will be 35% RH. If the temperature is expected to fall to 0°F, then reduce the setting to 25% several hours prior to the temperature change. itch iws ler I mode (see FIGURE B -lisplay), it is important to duce the setting accordir D ne Mar 1 in th **Σ** the din installe When insta MAN positi outdoor ter

would 0 s, which are I I levels that v suitable for OUTDOOR ings, v RH lev ě etween els that betv Igs. T idity 0 st desirable for comfo tion of your home an ch, rep ÷ e TABLE 1 for t of lost 5 -0

P Lunfort and humidi ome and to avoid ir windows. For the indoor RH of 50% feal for comfort, but ably would result in can cause damaning g the rendant 2 rol is an on of damano age. indows ii ually an This sar winusu idity. of fogging or frost is under the much here of w 8 0 onsidered ideal fo tely, it probably tion, which can c ving th d.C on can oo Obser on your t safegua UO . on the i home. a ample, a ay be cor Ø Inati ication els vater o fortu 8 C

RH 40% 35% 25% 20% 15% OR e +20° -10° -20° TABLE 1 3 Le

CHANGE WATER PANEL INDICATOR

The control keeps track of humidifier operation time. The yellow **Change Water Panel** light flashes after a preset amount of running time has elapsed. This running time is preset by the installer based on the humidifier model and water P

TEST/RESET

ation to be checked even if ope difier The Test/Reset feature allows the hu there is no call for humidity.

Set the knob to **Test/Reset**, make sure that the water saddle valve is open and that there is electricity to the humidifier. The HVAC fan must be running for the humidifier to function. Note: Turning the knob to **Test/Reset** resets the **Change Water Panel** timer. The humidifier will only operate for 1 minute in test mode. (Model 400 and 400M: Floats must be down for the solenoid valve to allow water flow.) Reduce the Humidifier Control setting to the recommended inside RH, depending on the outside temperature. **DO NOT LEAVE IN TEST MODE AS** water flow.) Reduce the Humidifier C RH, depending on the outside tempe HUMIDIFIER WILL NOT OPERATE.

ADDITIONAL INFORMATION

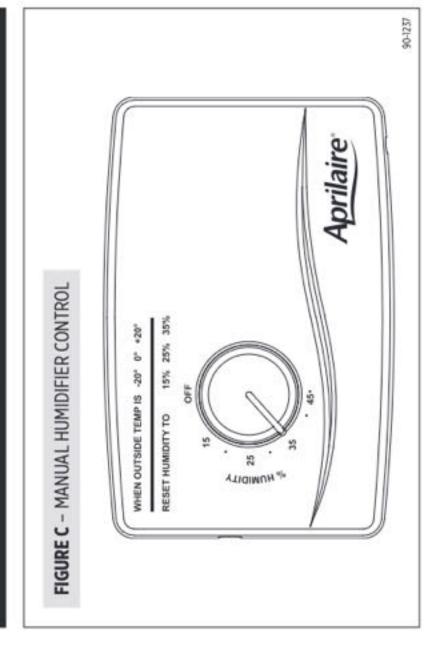
Your humidifier is a precision system that will accurately maintain the RH in your home. For every 2°F change in outdoor temperature, the Digital Humid Control will automatically adjust the indoor RH by 1%.

The Digital Humidifier Control will accurately control the humidity in your home to a maximum of 45% RH. The RH Values in **TABLE 2** are targets based on outdoor temperature and the Digital Humidifier Control setting. The actual RH may vary due to conditions in the home (cooking, showering, etc.).

1 10% 10% 15% 2 10% 10% 15% 20% 3 10% 15% 20% 25% 4 15% 20% 25% 30% 5 20% 25% 30% 35%	25% 30% 30% 35% 35% 40%	40% 45%
6 25% 30% 35% 4(40% 45%	45%

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Condensation on windows.	Reduce the setting on the control dial by 1 increment.
Lack of humidity.	Increase the setting on the control dial by 1 increment. If the humidifier control is already at the maximum setting of 7 , set the BLOWER ACTIVATION switch to ON . The humidifier should be plumbed to hot water when using the Blower Activation feature.
Humidifier does not operate. (Solenoid does not "click" when control is moved to Test/Reset position.)	Turn dial to Test/Reset . Make certain HVAC blower is operating. If unit still does not operate, consult a heating contractor.
Humidifier won't shut off.	Turn dial to OFF . If unit continues to operate, consult a heating contractor.
Test mode.	System operation is checked by setting the knob to Test/Reset . Make certain HVAC blower is operating. Humidifier will operate for one minute. If the control knob is left in the Test/Reset position, after 1 minute the display will flash the software revision level e.g. rl. Note: Placing the knob in Test/Reset resets the Water Panel change timer.
Red Call Dealer for Service light flashes (FIGURE A).	Note the error code on the display (E1, E2, E3 or E4) and call your heating and air conditioning dealer.
Yellow Change Water Panel light flashes (FIGURE A).	Refer to ANNUAL MAINTENANCE on page 14 for instructions on changing the Water Panel, or call your heating and air conditioning dealer for service. After the Water Panel is replaced, turn the control knob to the Test/Reset position until the green Humidifier On light flashes, to reset the Water Panel change timer.



Your Aprilaire humidifier is controlled by a Manual Humidifier Control (see **FIGURE C**). The Manual Humidifier Control is installed either in the cold air return duct or on an interior wall of the home. With the Manual Humidifier Control, it is important to anticipate a drop in outdoor temperature and reduce the setting accordingly to avoid excessive condensation, just as with the Digital Humidifier Control installed in Manual mode (see page 8). To determine the indoor RH, slowly turn the knob clockwise and counterclockwise and listen for 2 clicks. The indoor RH is within the range of the 2 clicks.

CHECK THE HUMIDIFIER OPERATION

MANUAL HUMIDIFIER CONTROL

Set the knob to the highest setting, make sure that the water saddle valve is open and that there is electricity to the humidifier. The HVAC system must be operating for the humidifier to function. Confirm that the solenoid valve is energized and water is flowing into the humidifier. Return control knob to desired setting.

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ЯN Be sure to keep fireplace dampers closed when not in use. They provide excellent escape route for heat, as well as humidity.

ADDITIONAL INFORMATION FOR ALL MODELS

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300) DIFIER CONTROL (INCLUDED WITH MODEL DIGITAL HUMI

e display. This means the difier is running. In order ions must be met: e + uh a 8 will appear o rily mean the lifier, several c ON. ON e ON bu sing the ON out it does r to turn on 9 ć gin by pr ntrol is o the con for 3 8

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On occasion, indoor moisture producing activities such as clothes drying, cooking, showers, etc., may raise the RH level higher than it should be, even though the Aprilaire humidifier is not operating. Telltale indications are condensation or frost on cold surfaces such as windows, doors, walls, etc. If such condensation persists for several hours, your home should be ventilated to dissipate the potentially damaging excess moisture. dissip ò

EFFECT OF WATER CHARACTERISTICS

Your humidifier is designed to operate using hot, cold, hard or mechanically softened water. (Hot water is required for Model 300 and recommended for all models to ensure maximum performance.)

Water contains varying amounts of minerals. The residue remaining as a result of hard water evaporation is primarily calcium and magnesium components and is usually quite hard, scaly, and dense. Residue from softened water tends to be soft and fluffy and has a greater volume than hard water deposits. In either case, the service life of a Water Panel evaporator will be the same. The Water Panel evaporator should be changed at least once a year with the exception of Models 400 and 400M which should be changed at least twice a heating season. In the drain-equipped models, most of the mineral solids are flushed down the drain.

Hot supply water, 140°F maximum, is recommended with drain type humidifiers for increasing capacity and is required for heat pump and air handler applications.

A WARNING

RISK OF SCALDING. Water temperature over 125°F can cause severe burns and scald instantly. Shut off the hot water supply before disconnecting or tapping into any hot water supply line.

PERIODIC PREVENTATIVE MAINTENANCE

ANNUAL MAINTENAN

3

For best performance, we recommend that you replace the Water Panel evaporator in your Aprilaire humidifier at least annually with the except of Models 400 and 400M which should be changed at least twice per heating season.

light (Digital Control only) will blink whe hel. See individual model instructions for The **Change Water Panel** indicator it is time to change your Water Par

----Water Pan To purchase a new

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Unit			2002	202
Call the installer of your Aprilaire humidifier. This	information is often found on which an imment	2		Call your heating and air conditioning dealer.

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- actors. r Humidifying nditioning Coni Look in the Yellow Pages under Apparatus or Heating & Air Con ю.

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 - els to 5 Genuine Aprilaire Water Primance. Ge Purchase only G maintain perforr

If your humidifier is equipped with a Digital Humidifier Control with **Change Water Panel** indicator, after replacing the Water Panel, turn the control knob to the **Test/Reset** position until the **Humidifier On** light blinks to reset its timer. (Blower must be operating and HVAC calling for heat.) Be sure to turn the control knob back to it's original setting. If the **Humidifier On** light continues to blink, your humidifier is in Test mode. **DO NOT LEAVE THE CONTROL IN TEST MODE OR HUMIDIFIER WILL NOT OPERATE**.

ANNUAL SUMMER SHUTDOWN

mper, ga r Models 400, 400M, 500, 500M, 600 and 600M close the bypass tich is a part of the humidifier, with the small damper handle. For Mo

difier Control: 로

- adjustr (see FIGURE A): No g ntrol in Au iidifier Cor sary. Digital Hun is necessar 2.
 - 5 qo 4 + Set FIGURE B): e de (se len rol in Mar S Digital Humidifier (the **OFF** position. .
- 0 the OFF b to the JRE C): Set t FIGU ntrol (see nidifier Con uAl Hu • Man

Note: Periodic inspection and preventative maintenance of your total heatin system is important for efficient and safe operation. Your heating contractor service your humidifier when he services the HVAC system.

uld be 5 he Water Panel, which s mineral deposits. lave a distribution tray above th nually and cleaned of excess m els h ed an mod All

WATER LINE INSPECTION AND SERVICE INSTRUCTIONS

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WATER FEED TU

from inside Remove the in-line strainer fro the inlet side of the valve by u nail or wire. COL m

ORIFICE

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INLET

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- ep Flush the in-line strainer clean or re with a new strainer, Part No. 4004. Ū. 4
- le. Double Reconnect the inlet water lir wrench to prevent leaking. Ŕ ŝ
- ater feed tube at th t t \Box ġ.

STRAINE

ict the water feed tube by gently ig it and looking for cracks or signs of Replace tube if it is cracked, brittle, flexing it and looking for wear. Replace tube if it i or has been damaged. Ispe 2

INLET COMPRE NUT

- Inspect the orifice in the water feed tube and make sure the small opening is unplugged. œ.
- nt le ich to pr uble wr De. Do ter feed tub ect the 2

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- If applicable, flex Irain line with ack onto the drain ect the drain line to attened or blocked. Remove the drain line from the bottom of the humidifier. If ap it to loosen any mineral deposits or blockages. Flush the drain water under pressure to clear it of any debris, and slip it back fitting. If drain line does not flow properly, replace it. Inspect the make sure it has a constant downward slope and is not flatten 9.
 - er to the HVAC cal po t p ply UO C Ë

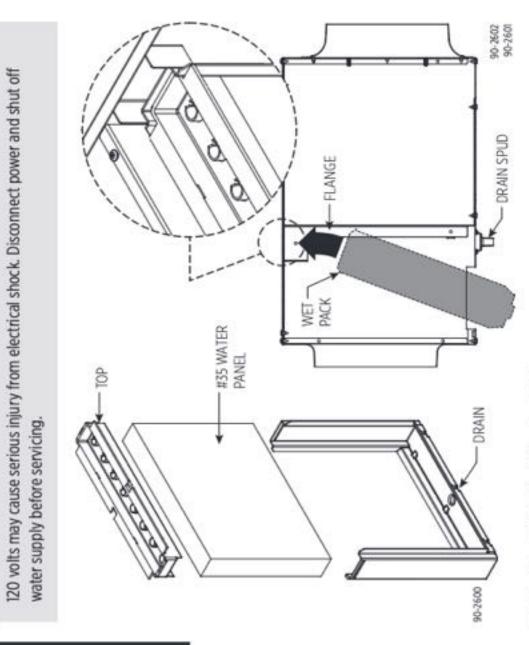
REQUIRED MAINTENANCE INSTRUCTIONS APRILAIRE HUMIDIFIER MODELS 400 & 400M

REQUIRED MAINTENANCE INSTRUCTIONS APRILAIRE HUMIDIFIER MODEL 300

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WODEF 300

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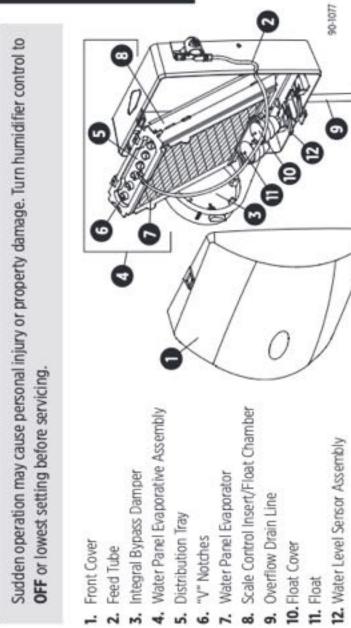
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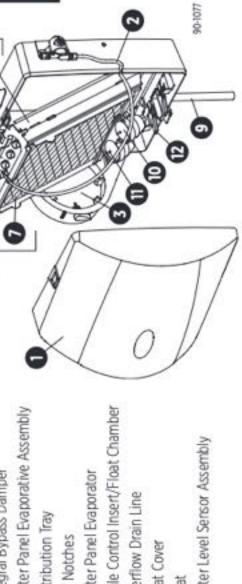
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A CAUTION serv Re ISe may ca

WODER 400 SEBIES





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- F position.
 (3) to the SUMMER position.
 (3) to the SUMMER position.
 ront cover (1) and pull cover off base with oution tray (5) at the top of the Water Pitte assembly forward and lift it out of the embly more than needed to clear the ho N AN tu, gral t top a Wate Wate tube the V ter Pa Tip Wat (4). the war e assembly . Do not tip -bending th 60 - ~ ~ 4
- ΕЪ any rr brush of tray in vin 유원 Soa Soa rt (8). Lightly : ic fabric liner. 3 try i f 10
 - 5 70 the of rying to 9
- with a (prouph 2 2 5 53 chamber and s chamber and s oat cover. Make y up and down ently flexing it tat ble ň
- 6 ò age by the as be
- (8) (9) C io Pan back we a the t (5) etc 9. ര് റ്
 - the til it not to over-bly firmly ba eva (4) top 10.
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(Automatic or Manual mode) Check system ope he knob to Test/Reset. With HVAC blower opera one minute. DO NOT LEAVE IN TEST MODE AS 400): ting th -2 5 3 atic Digital Humi set Change Wate Auto and HUN Set

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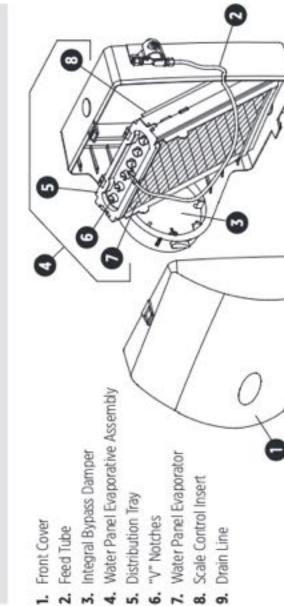
REQUIRED MAINTENANCE INSTRUCTIONS APRILAIRE HUMIDIFIER MODELS 700 & 700M

REQUIRED MAINTENANCE INSTRUCTIONS APRILAIRE HUMIDIFIER MODELS 500, 500M, 600 & 600M

WODEF 200 & 600 SERIES

CAUTION 5 4

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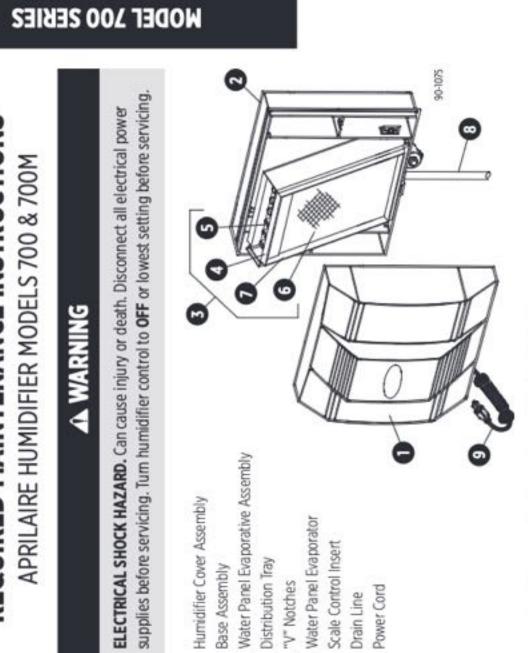
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- AMER and p 8 € I setting and turn dial to the **OFF** position. Turn the integral bypass damper (3) to the atches on the top and bottom of front cover supply. ater abs
- à 5 6 p G it of the ibly out this - ~ ~ +
 - off an tray i ts. the sh (8) at [9] ŝ
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mode) Check system **Test/Reset** With HVAC ne minute. DO NOT LEAVE II F 5 8 omatic or Manual setting the knob t r will operate for o b b Is So. m operation. Is 500 & 600): (A r Panel indicator 1 for heat, humidi or RATE. oper blow TEST Set h 12

WARNING 4

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and HV and HV 5 8 V node) Check system opera . With HVAC blower opera EAVE IN TEST MODE AS H or Manual IIIA Test/Reset. V e. DO NOT LE 224 -8 SP Par 5 **5 5** 8 3

13. Se NOTE

LIMITED WARRANTY

Your Research Products Corporation Aprilaire® humidifier unit is expressly warranted for five (5) years from date of installation to be free from defects in materials or workmanship except, however, for the disposable Water Panel which will have to be replaced from time to time depending upon the amount of use.

Research Products Corporation's exclusive obligation under this warranty shall be to supply, without charge, a replacement for any part of the humidifier which is found to be defective within such five (5) year period and which is returned not later than thirty (30) days after said five (5) year period by you to either your original supplier or to Research Products Corporation, Madison, Wisconsin 53701, together with the model number and installation date of the humidifier.

THIS WARRANTY SHALL NOT OBLIGATE RESEARCH PRODUCTS CORPORATION FOR ANY LABOR COSTS AND SHALL NOT APPLY TO DEFECTS IN WORKMANSHIP OR MATERIALS FURNISHED BY YOUR INSTALLER AS CONTRASTED TO DEFECTS IN THE HUMIDIFIER ITSELF.

IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL BE LIMITED IN DURATION TO THE AFORESAID FIVE YEAR PERIOD. RESEARCH PRODUCTS CORPORATION'S LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, OTHER THAN DAMAGES FOR PERSONAL INJURIES, RESULTING FROM ANY BREACH OF THE AFORESAID IMPLIED WARRANTIES OR THE ABOVE LIMITED WARRANTY IS EXPRESSLY EXCLUDED. THIS LIMITED WARRANTY IS VOID IF DEFECT(S) RESULT FROM FAILURE TO HAVE THIS UNIT INSTALLED BY A QUALIFIED HEATING AND AIR CONDITIONING CONTRACTOR. IF THE LIMITED WARRANTY IS VOID DUE TO FAILURE TO USE A QUALIFIED CONTRACTOR, ALL DISCLAIMERS OF IMPLIED WARRANTIES SHALL BE EFFECTIVE UPON INSTALLATION.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages so the above exclusion or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

WARRANTY REGISTRATION

Visit us online at **www.aprilaire.com** to register your Aprilaire product. If you do not have online access, please mail a postcard with your name, address, phone number, email address, product purchased, model number, date of purchase, and dealer name and address to: Research Products Corporation, P.O. Box 1467, Madison, WI 53701.

Your warranty registration information will not be sold or shared outside of this company.

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20 English



Standard-Linear Slot Diffuser 16"x4" Front



Standard-Linear Slot Diffuser 16"x4" Back





ENERGY STAR CERTIFIED Water Heaters

A. O. Smith - Heat Pump : HPS10-80H45DV 2**

Specifications	
ENERGY STAR Unique ID:	2397462
ENERGY STAR Partner:	A.O. Smith Corporation
Brand Name:	A. O. Smith
Model Name:	Heat Pump
Model Number:	HPS10-80H45DV 2**
Туре:	Hybrid/Electric Heat Pump
Fuel:	Electric
Storage Volume (gallons):	82
Tank Height (inches):	69.0
Tank Diameter (inches):	27.0
Input Voltage for HPWH:	240
Electric Usage at 125°F outlet temp (kWh/ yr):	1279
Uniform Energy Factor (UEF):	3.88
First Hour Rating at 125°F outlet temp (gallons/hr):	95
Recovery Efficiency per UEF test method (%):	430.00
Max. Amps:	22.0
Refrigerant with GWP:	R-134a (GWP:1430)
Connected Functionality:	No
Date Certified:	2022-08-25
Markets:	United States
ENERGY STAR Certified:	Yes

Additional Model Information

UPC Codes

Captured On: 01/16/2023



ENERGY STAR CERTIFIED Water Heaters

Rheem - XE80T10HS45U0 : XE80T10HS45U0

Specifications	
ENERGY STAR Unique ID:	2391217
ENERGY STAR Partner:	Rheem Sales Company, Inc.
Brand Name:	Rheem
Model Name:	XE80T10HS45U0
Model Number:	XE80T10HS45U0
Туре:	Hybrid/Electric Heat Pump
Fuel:	Electric
Storage Volume (gallons):	72
Tank Height (inches):	47.2
Tank Diameter (inches):	20.0
Input Voltage for HPWH:	240
Electric Usage at 125°F outlet temp (kWh/ yr):	1213
Uniform Energy Factor (UEF):	4.07
First Hour Rating at 125°F outlet temp (gallons/hr):	87
Recovery Efficiency per UEF test method (%):	447.00
Max. Amps:	21.0
Refrigerant with GWP:	R-134a (GWP:1430)
Connected Functionality:	No
Date Certified:	2022-11-22
Markets:	United States
ENERGY STAR Certified:	Yes

Additional Model Information

UPC Codes

Captured On: 01/16/2023

ECO 3" LED DOWNLIGHT

ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC **ED3SNIC**

PROJECT:	
TYPE:	
NOTE:	





RATED WATTAGE	20.1W, 13.4W, 11.3W
DELIVERED LUMENS	Up to 1929 Im
EFFICACY	Up to 108 LPW
CCT @ 90CRI	2700K, 3000K, 3500K, 4000K, Warm Dim
COLOR QUALITY	90+ CRI, 2-Step SDCM
LED LIFETIME	55,000 hours @ L90

DELIVERED LUMENS MATRIX

ED3 (20.1W)	10° Optic	30° Optic	50° Optic	80° Optic	
2700K (90CRI)	1669 lm	1744 lm	1592 lm	1125 lm	
3000K (90CRI)	1803 lm	1884 lm	1720 lm	1216 lm	
3500K (90CRI)	1846 lm	1929 lm	1761 lm	1244 lm	
4000K (90CRI)	1900 lm 1985 lm 1812 lm		1812 lm	1281 lm	
ED3 NIC, RIC (13.4W)	10° Optic	30° Optic	50° Optic	80° Optic	
Warm Dim (98 CRI, R9>90)	868 lm	938 lm	846 lm	604 lm	
ED3 AIC, ANC (20.1W)	10° Optic	30° Optic	50° Optic	80° Optic	
Warm Dim (98 CRI, R9>90)	1195 lm	1291 lm	1165 lm	832 lm	

ED3L (11.3W)	10° Optic	30° Optic	50° Optic	80° Optic
2700K (90CRI)	1061 lm	1108 lm	1012 lm	715 lm
3000K (90CRI)	1146 lm	1198 lm	1093 lm	773 lm
3500K (90CRI)	1173 lm	1226 lm	1119 lm	791 lm
4000K (90CRI)	1207 lm	1262 lm	1152 lm	814 lm

ED3S (13.4W)	10° Optic	30° Optic	50° Optic	80° Optic
2700K (90CRI)	1214 lm	1269 lm	1158 lm	819 lm
3000K (90CRI)	1312 lm	1371 lm	1252 lm	885 lm
3500K (90CRI)	1343 lm	1403 lm	1281 lm	905 lm
4000K (90CRI)	1382 lm	1445 lm	1319 lm	932 lm
Warm Dim (98 CRI, R9>90)	868 lm	938 lm	846 lm	604 lm

ED3NC, ED3LNIC ED3AIC, ED3LAIC **ED3SNIC** ED3RM, ED3LRIC

SILENT VU™ OPTICS TECHNOLOGY

OPTICS	50° Installed, 10°, 30°, 80° available
ADJUSTABLE	0° to 45° tilt (Adjustable housings only)
MEDIA	Clear, Solite, Frosted, Linear Spread

POWER SUPPLY

INPUT VOLTAGE	120/277V, 50/60Hz
DIMMING	TRIAC, ELV, 0-10V, dims to 1%
SERVICABILITY	Below Ceiling Access

TRIM COLORS

• Champagne

Champagne w/ White Flange

• White

Black

TRIM OPTIONS

- Fixed or Adjustable
- Round or Square
- Standard or Trimless •
- Wall Wash Wet Location

HOUSING INSTALLATION

- New Construction includes (2) galvanized steel adjustable hanger bars
- Remodel option available
- 5/8" ~ 2" ceiling thickness
- Min Plenum Height: 21/2" Shallow
- Ceiling Material: Drywall, T-bar grid
- Steel junction box with up to (4) 1/2" knockouts
- AIC, NIC, RIC, SNIC models are Air Tight
- AIC, SNIC models are CCEA compliant. (Note: polycell spray-in foam insulation must be kept 3" from housing)

LISTINGS AND WARRANTY

cULus Listed	ASTM E283 Certified Airtight (AIC, NIC, RIC, SNIC Models)
UL Listed for Damp Location (All Styles)	UL Listed for Wet Location (Wet Location Trim Style)
IC Rated and Non IC Rated Available	CCEA (Chicago Plenum) Approved (AIC, SNIC Models)
Five (5) years limited warranty	CA Title 24-JA8 Compliant (AIC, NIC, RIC, SNIC Models)



· Black w/ White Flange

• Silver w/ White Flange











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ECO 3" LED DOWNLIGHT

ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC ED3SNIC PROJECT:

TYPE:

NOTE:

ORDER MATRIX

ED3

ECO 3" HOUSING + LIGHT ENGINE ORDER MATRIX (Example: ED3AIC-309050-21S)

HOUSING BASE		LED PERFORMANCE			DRIVER ASSEMBLY			
FAMILY AP	PERTURE		INSTALLATION TYPE	ССТ	CRI	OPTIC	WATTAGE	LED DIMMING DRIVER
ED3	ECO 3"	AIC Anc NC RM	(Adjustable New Construction, IC, CCEA) (Adj New Construction) (New Construction) (Remodel)	 -27 (2700K) -30 (3000K) -35 (3500K) -40 (4000K) 	90 (90 CRI)	50 (50° Flood) Installed 10°, 30°, 80° optics available from the Additional Optics Accessories table below	-21 (20.1W)	S Universal Dimming Driver (1%-100% 0-10V, TRIAC, ELV, 120V/277V)
ED3 Warm	ECO 3" Dim	AIC ¹ ANC ¹ NIC ¹ RIC ¹	(Adjustable New Construction, IC, CCEA) (Adj New Construction) (New Construction IC) (Remodel IC)	-WD ² (1800K~3000K) Warm Dim	98 (98 CRI) Warm Dim	50 (50° Flood) Installed 10°, 30°, 80° optics available from the Additional Optics Accessories table below	-15 ¹ (13.4W) NIC or RIC Installation Type only -21 ^{1,2} (20.1W) AIC or ANC Installation Type only	S Universal Dimming Driver (1%-100% 0-10V, TRIAC, ELV, 120V/277V)

1. AIC or ANC Installation Type and Wattage Code -21. NIC or RIC Installation Type and Wattage Code -15. 2. Wattage Code -21 Title 24 JA-8 compliant only with 10° , 30° or 50° optic installed.

ED3L

ECO 3" HOUSING + LIGHT ENGINE ORDER MATRIX (Example: ED3LAIC-309050-12S2)

HOUSING BASE		LED PI	RFORMANCE	DR	DRIVER ASSEMBLY	
FAMILY APERTURE	INSTALLATION TYPE	ССТ	CRI OPTIC	WATTAGE	LED DIMMING DRIVER	
ED3L ECO 3" LPD	AIC (Adjustable New Construction, IC, CCEA) ANC (Adj New Construction) NIC (New Construction IC) RIC (Remodel IC)	 -27 (2700K) -30 (3000K) -35 (3500K) -40 (4000K) 	90 (90 CRI) 50 (50° Floo Installed 10°, 30°, 80° o available from ti Additional Optic Accessories tab below	otics e	S2 Phase Control Dimming Driver (1%-100% TRIAC, ELV, 120V/277V)	

ED3S

ECO 3" HOUSING + LIGHT ENGINE ORDER MATRIX (Example: ED3SNIC-309050-15S)

	HOUSING BASE		PERFORMANCE	DRIVER ASSEMBLY	
FAMILY APERTURE	Y APERTURE INSTALLATION TYPE		CRI OPTIC	WATTAGE LED DIMMING DRIVER	
ED3S EC0 3" Shallow	NIC (Shallow Plenum New Construction, IC, CCEA)	 -27 (2700K) -30 (3000K) -35 (3500K) -40 (4000K) 	90 (90 CRI) 50 (50° Flood) Installed 10°, 30°, 80° optics available from the Additional Optics Accessories table below	-15 (13.4W) S Universal Dimming Driver (1%-100% 0-10V, TRIAC, ELV, 120V/277V)	
ED3S ECO 3" Shallow Warm Dim	NIC (Shallow Plenum New Construction, IC, CCEA)	-WD (1800K~3000K) Warm Dim	98 (98 CRI) 50 (50° Flood) Warm Dim	-15 (13.4W) S Universal Dimming Driver	



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ECO 3" LED DOWNLIGHT

ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC ED3SNIC PROJECT:

TYPE:

NOTE:

ORDER MATRIX

TRIM & TRIMLESS

ECO 3" DOWNLIGHT TRIM ORDER MATRIX (Example: ED3-RFSTWT)

FAMILY APERTURE	TRIM SHAPE	TRIM POSITION	TRIM STYLE	TRIM FINISH
ED3- ECO 3" Flanged	R (Round)	F (Fixed)	ST (Standard)	WT (White) BW ³ (Black w/ White Flange)
	S (Square)	A (Adjustable)	WW ^{1,2} (Wall Wash)	BK (Black) SW ³ (Silver w/ White Flange)
			WL ¹ (Wet Location)	CN (Champagne) CW ³ (Champagne w/ White Flange)

1. Use F (Fixed Position) for WW (Wall Wash) and WL (Wet Location) style.

2. WW (Wall Wash) Style Trim ships with recommended 80° optic.

3. Color option available in ST (Standard) Style only.

EC0 3" DOWNLIGHT TRIMLESS ORDER MATRIX (Example: ED3-KRFSTWT)

FAMILY APERTURE	КІТ	REFLECTOR SHAPE	REFLECTOR POSITION	REFLECTOR STYLE	REFLECTOR FINISH
ED3- ECO 3" Trimless	K (Reflector and Mudplate Kit)	R (Round) S ¹ (Square)	F (Fixed)A¹ (Adjustable)	ST (AIC (Adjustable IC), ANC (Adjustable Non-IC), SNIC (Shallow) housing types only) RM (NC (Fixed), RM (Remodel) housing types only)	WT (White)BK (Black)CN (Champagne)

OPTICAL MEDIA

(Clear Lens)

(Solite Lens)

(Frosted Lens)

(Media Holder)

(Linear Spread Lens)

1. S (Square) and A (Adjustable) not available for RM Reflector Style.

ACCESSORIES

ECO 3" ACCESSORIES FOR ECO ED3, ED3L, ED3S

ADDI	TIONAL OPTICS
ED3-10-OPTIC ¹	(10° Spot)
ED3-30-OPTIC ¹	(30° Narrow Flood)
ED3-50-OPTIC ¹	(50° Flood)
ED3-80-0PTIC ²	(80° Wide Flood)

1. WD with 10°, 30°, 50° Optic requires MP (Solite Lens). 2. WD with 80° Optic requires FR (Frosted Lens).

3. MHLDR required when ordering 2 optical media. 4. MHLDR only compatible with AIC, ANC and SNIC. EMERGENCY OPTIONSEM-1000(25W Remote Inverter)EM-1002(10W Remote Inverter)EM-1003(35W Remote Inverter)EM-1003-CA(35W Remote Inverter) Title 20EM-1004(50W Remote Inverter)EM-1006(25W Remote Inverter) Title 20

TRIM ACCESSORIES

ECO 3" TRIM ACCESSORIES ORDER MATRIX (Example: ED3-R-TL)

SIZE		ST	/LE	
ED3- EC0 3"	R-TL	(Round Trimless Mudplate for AIC/ANC/SNIC)	R-FMA	(Round Flush Mount Adapter)
	R-RMTL	(Round Trimless Mudplate for RM/NC)	S-FMA	(Square Flush Mount Adapter)
	S-TL	(Square Trimless Mudplate/Housing Collar)	TC1	(Thick Ceiling Adapter for ceilings $^{11}/_{16}$ " to 11/4")
			TC2	(Thick Ceiling Adapter for ceilings 15/16" to 2")

ED3-CL

ED3-MP1

ED3-FR²

ED3-LS

ED3-MHLDR^{3,4}

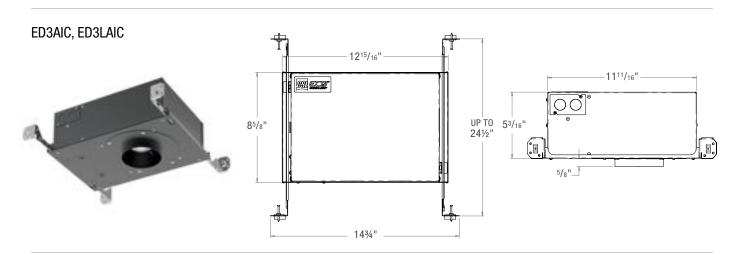
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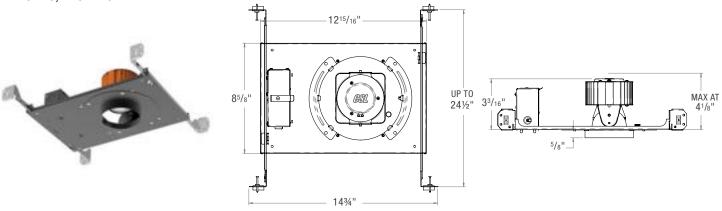


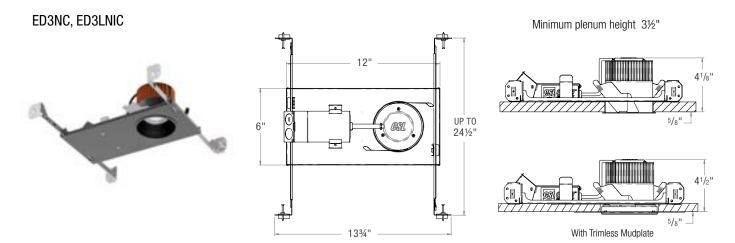
AS ECD	ECO 3" LED DOWNLIGHT	PROJECT:
	ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC	TYPE:
SPEC-00272 NEW ECO, 3", V-7.1, UPDATED 12/29/2022	ED3SNIC	NOTE:

HOUSING AND LIGHT ENGINE LINE DRAWINGS



ED3ANC, ED3LANC





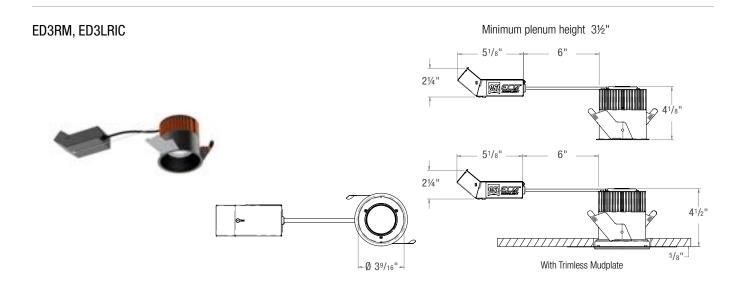
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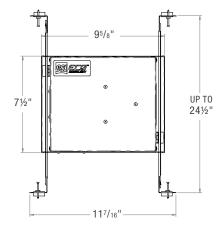
	ECO 3" LED DOWNLIGHT	PROJECT:
	ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC	TYPE:
SPEC-00272 NEW ECO, 3", V-7.1, UPDATED 12/29/2022	ED3SNIC	NOTE:

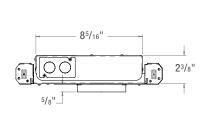
HOUSING AND LIGHT ENGINE LINE DRAWINGS



ED3SNIC



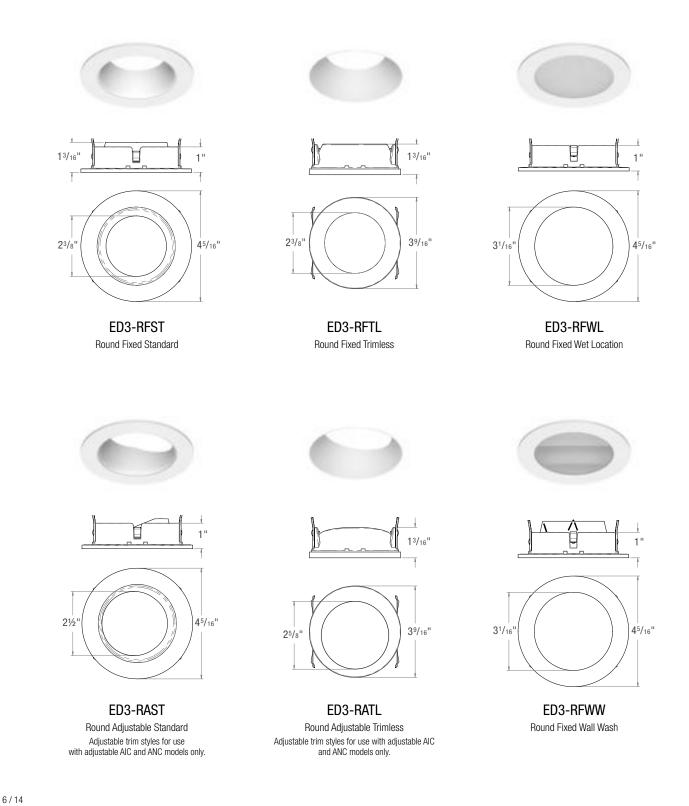






RECO	ECO 3" LED DOWNLIGHT	PROJECT:
	ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC	ТҮРЕ:
SPEC-00272 NEW ECO. 3". V-7.1. UPDATED 12/29/2022	ED3SNIC	NOTE:

TRIM STYLES

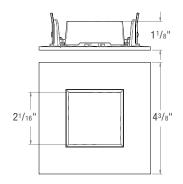




RECO	ECO 3" LED DOWNLIGHT	PROJECT:
	ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC	TYPE:
SPEC-00272 NEW ECO, 3", V-7.1, UPDATED 12/29/2022	ED3SNIC	NOTE:

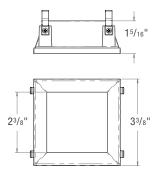
TRIM STYLES





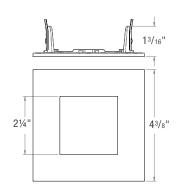
ED3-SFST Square Fixed Standard





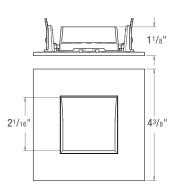
ED3-SFTL Square Fixed Trimless Trimless Style for use with SNIC models only.





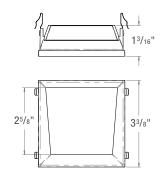
ED3-SFWL Square Fixed Wet Location





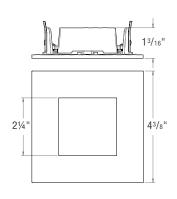
ED3-SAST Square Adjustable Standard Adjustable trim styles for use with adjustable AIC and ANC models only.





ED3-SATL Square Adjustable Trimless Adjustable trim styles for use with adjustable AIC and ANC models only.





ED3-SFWW Square Fixed Wall Wash





ECO 3" LED DOWNLIGHT

ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC ED3SNIC

PROJECT:

TYPE: NOTE:

TRIM FINISHES



ED3-RFSTWT WT (White Reflector with White Trim)



ED3-RFSTBK BK (Black Reflector with Black Trim)



ED3-RFSTCN CN (Champagne Reflector with Champagne Trim)



ED3-RFSTSW SW (Silver Reflector with White Trim)



ED3-RFSTBW BW (Black Reflector with White Trim)



ED3-RFSTCW CW (Champagne Reflector with White Trim)



ED3-SFSTWT WT (White Reflector with White Trim)



ED3-SFSTBK BK (Black Reflector with Black Trim)



ED3-SFSTCN CN (Champagne Reflector with Champagne Trim)



ED3-SFSTSW
SW (Silver Reflector with White Trim)

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ED3-SFSTBW
BW (Black Reflector with White Trim)

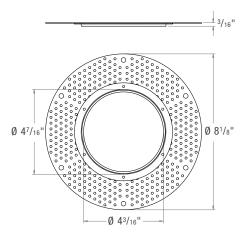


ED3-SFSTCW CW (Champagne Reflector with White Trim)

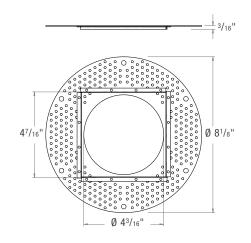


RECO	ECO 3" LED DOWNLIGHT	PROJECT:
	ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC	TYPE:
SPEC-00272 NEW ECO 3", V-7 1, UPDATED 12/29/2022	ED3SNIC	NOTE:

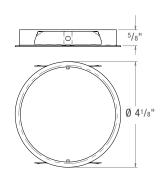
ACCESSORIES



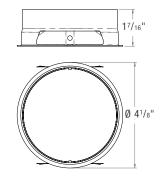




ED3-S-FMA Square Flush Mount Adapter



ED3-TC1 Thick Ceiling Adapter for ceilings ¹¹/16" to 11/4"

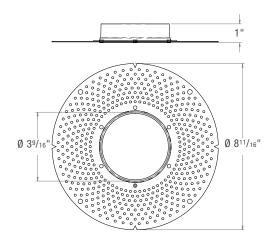


ED3-TC2 Thick Ceiling Adapter for ceilings 1⁵/16" to 2"

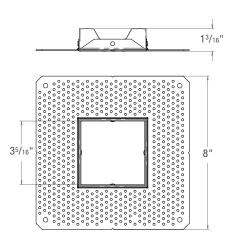


	ECO 3" LED DOWNLIGHT	PROJECT:
	ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC	TYPE:
SPEC-00272 NEW ECO, 3", V-7.1, UPDATED 12/29/2022	ED3SNIC	NOTE:

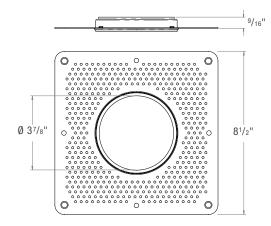
TRIMLESS ACCESSORIES



ED3-R-TL Round Trimless Mudplate For use with AIC, ANC, SNIC housings only







ED3-R-RMTL Round Trimless Mudplate For use with NC, NIC, RM, RIC housings only





ECO 3" LED DOWNLIGHT

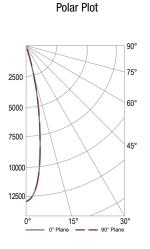
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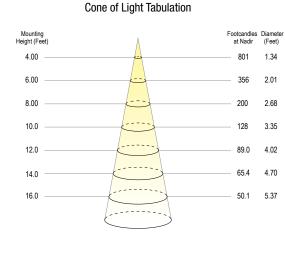
TYPE:

NOTE:

PHOTOMETRICS

Eco Downlight 3" ANC model (2700K, 90 CRI, 10° Optic, 21W) Round, Standard, White Trim



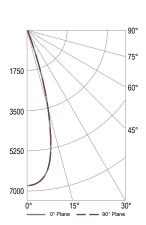


Voltage	Current	Power
120.1 VAC	0.1664 A	19.62 W
Power Factor	Frequency	Current THD

Summary of Results

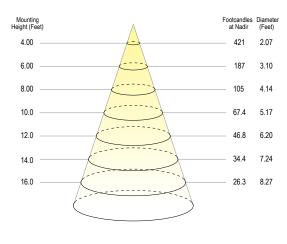
Spacing Criteria 0-180: 0.34 90-270: 0.34		Total Lumen Outpu Luminaire Efficad Maximum Cande	
	Zone	Lumens	% of Luminaire
	0-40	1652	99.0%
	0-60	1663	99.6%
	0-90	1669	100.0%

Eco Downlight 3" ANC model (2700K, 90 CRI, 30° Optic, 21W) Round, Standard, White Trim



Polar Plot

Cone of Light Tabulation



Voltage	Current	Power
120.1 VAC	0.1662 A	19.60 W
Power Factor	Frequency	Current THD

Summary of Results

··· · · · · · · · · ·					
Spacing Criteria	Total Lumen Outpu	ut: 1701 Lumens			
0-180: 0.52	Luminaire Efficacy: 86.8 lm/w				
90-270: 0.52	Maximum Candel	la: 6743 Candela			
Zone	Lumens	% of Luminaire			
0-40	1684	99.0%			
0-60	1697	99.7%			
0-90	1701	100.0%			





SPEC-00272 NEW ECO, 3", V-7.1, UPDATED 12/29/2022

ECO 3" LED DOWNLIGHT

ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC **ED3SNIC**

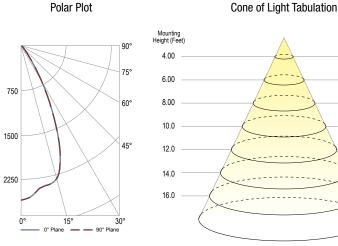
PROJECT:

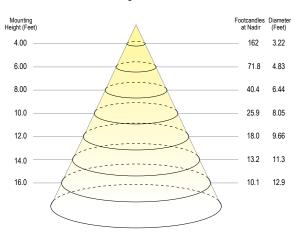
TYPE:

NOTE:

PHOTOMETRICS

Eco Downlight 3" ANC model (2700K, 90 CRI, 50° Optic, 21W) Round, Standard, White Trim



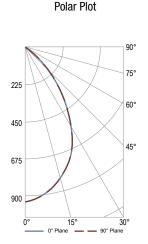


Voltage	Current	Power
120.1 VAC	0.1663 A	19.62 W
Power Factor	Frequency	Current THD

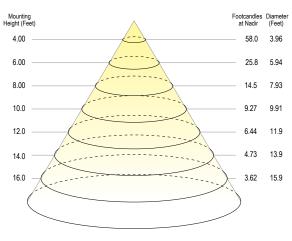
Summary of Results

Spacing Criteria 0-180: 0.80 90-270: 0.80	Total Lumen Outpu Luminaire Efficad Maximum Candel	
Zone	Lumens	% of Luminaire
0-40	1555	97.7%
0-60	1587	99.7%
0-90	1592	100.0%

Eco Downlight 3" ANC model (2700K, 90 CRI, 80° Optic, 21W) Round, Standard, White Trim







Voltage	Current	Power
120.0 VAC	0.1740 A	20.71 W
Power Factor	Frequency	Current THD

Summary of Results

Spacing Criteria 0-180: 0.99 90-270: 0.99	Total Lumen Outpu Luminaire Efficad Maximum Cande	:): 54.3 lm/w
Zone	Lumens	% of Luminaire
0-40	896	79.6%
0-60	1106	98.3%
0-90	1125	100.0%





ECO 3" LED DOWNLIGHT

ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC ED3SNIC PROJECT:

TYPE:

NOTE:

FOR DRIVER TYPE "S"

SPEC-00272 NEW ECO, 3", V-7.1, UPDATED 12/29/2022

Universal Dimming Driver, ED3 and ED3S only

Compatible Phase Control Dimmers			
MFG	Model	MFG	Model
Lutron	LGCL-153PL	Leviton	VPE06
Lutron	DVRP-253P	Leviton	DW1KD-1BZ
Lutron	RRD-6CL	Leviton	IPE04
Lutron	NTELV-600P	Leviton	IPL06
Lutron	DVELV-303P	Cooper	SAL06P
Lutron	MAELV-600		
Lutron	PD-6WCL		
Lutron	SELV-300P		
Lutron	DVCL-153P		

Compatible dimmer information provided by the dimming driver manufacturer

Compatible 0-10VDC Dimmers		
MFG	Model	
Lutron	NFTV	
Lutron	DVTV	
Lutron	DVSTV	
Leviton	IP710-LFZ	
Lightolier SR1200ZTUNV		
Cooper	SF10P-W	
Leviton	IP710-DL	

Compatible dimmer information provided by the dimming driver manufacturer

13/14



RECO	ECO 3" LED DOWNLIGHT	PROJECT:
	ED3AIC, ED3ANC, ED3NC, ED3RM ED3LAIC, ED3LANC, ED3LNIC, ED3LRIC	TYPE:
SPEC-00272 NEW ECO, 3", V-7.1, UPDATED 12/29/2022	ED3SNIC	NOTE:

FOR DRIVER TYPE "S2"

Phase Control Dimming Driver, ED3L only

Compatible Phase Control Dimmers			
MFG	Model	MFG	Model
Lutron	S-603PG	Leviton	6631-LW
Lutron	DVCL-153P	Leviton	VPE06
Lutron	TGCL-153P	Leviton	6683-IW
Lutron	S600P	Leviton	6161
Lutron	DVELV303P	Leviton	6633-P
Lutron	SELV300P	Leviton	IPE04
Lutron	TG-600P	Cooper	DLC03P
Lutron	LG600P	Cooper	SLC03P
Lutron	CT103P	Cooper	DAL06P
Lutron	MAELV600	Lightolier	ZP260QEW
Lutron	FAELV500		

Compatible dimmer information provided by the dimming driver manufacturer

14/14



LUTRON

Application Note #804

Revision B July 2022

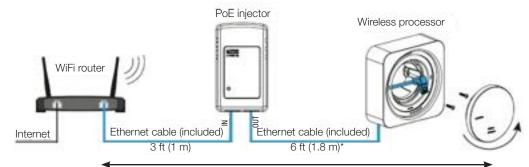
RadioRA 3 Wireless Setup Guide

Clear Connect is Lutron's ultra-reliable wireless brand of technology used to provide high-performance lighting control solutions to end users; it's wireless that just works. Clear Connect wireless allows the use of existing house wiring for the ultimate flexibility in new construction or retrofit/remodel applications. To help ensure reliable wireless performance of a RadioRA 3 system, please follow the requirements provided in this Setup Guide.

RadioRA 3 Device Types and Design Rules

RadioRA 3 Wireless Processor (Clear Connect – Type A and Clear Connect – Type X)

- Reliability of Clear Connect wireless communication requires that the wireless processor be centrally located and within a maximum distance of the specific wireless devices in the system.
- Wireless processors must be mounted 5 ft (1.5 m) away from wireless interference sources like microwaves, Wireless Access Points (WAPs), WiFi routers, and other 2.4 GHz wireless devices.
- DO NOT mount Radio Powr Savr sensors within 4 ft (1.2 m) of HVAC vents, halogen or incandescent light bulbs, microwave ovens, WiFi routers, IOT cameras, or other non-Clear Connect wireless devices. When using Clear Connect Type X devices, ensure sensor is mounted at a distance of 2 ft (0.6 m) or greater from the devices.
- PoE switch or injector requirements: Powered by an IEEE 802.3af, IEEE 802.3at or IEEE 802.3bt compliant Power over Ethernet.



Provide a minimum of 5 ft (1.5 m) to help ensure wireless reliability

* Note: Cannot exceed 100 ft (30.48 m)

Sunnata Keypads, Dimmers, and Switches (Clear Connect - Type X)



- Maximum of 100 Sunnata devices per processor
- Each Sunnata device must be within 75 ft (22.8 m) of the processor
- Each Sunnata device must be within 25 ft (7.6 m) of at least two other Sunnata devices, or the processor and one other device
- At least two Sunnata devices must be within 25 ft (7.6 m) of the processor
- To improve the wireless coverage of the system, install additional Sunnata devices to help meet the above wireless range requirements.

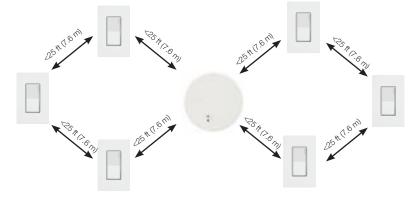
Note: The RadioRA 2 auxiliary repeater (RR-AUX-REP-WH), and Lutron wireless repeater (L-REPPRO-BL) do not extend the wireless range for Sunnata devices and may not be used to meet the above wireless range requirements for Sunnata devices.

* Clear Connect – Type X devices do not extend the range of RadioRA 2 repeaters.

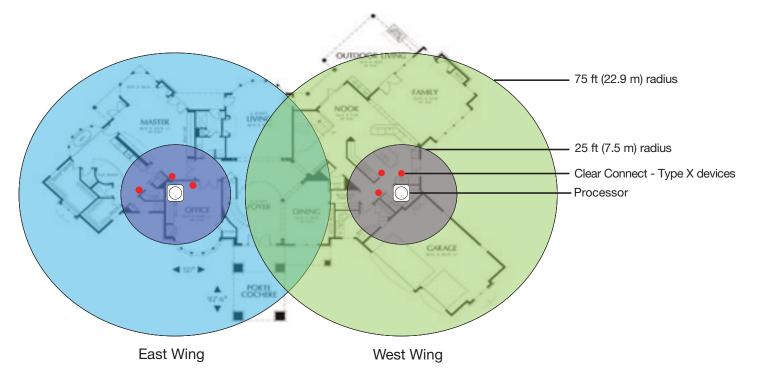


RadioRA 3 Device Types and Design Rules (cont.)

Sunnata Keypads, Dimmers, and Switches (Clear Connect – Type X)



Multi-Processor System

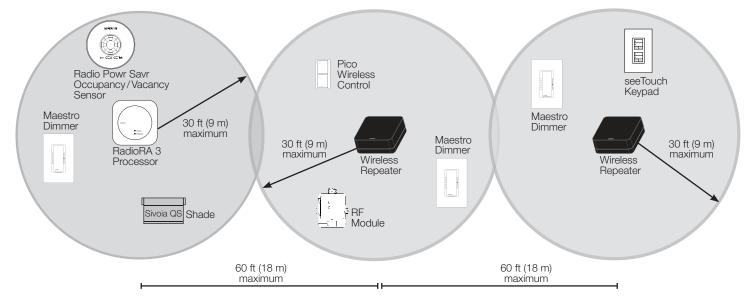


RadioRA 3 Device Types and Design Rules (cont.)

seeTouch, Maestro, Shades, Pico Wireless Controls, VCRX, and Sensors (Clear Connect – Type A*)



- Maximum of 100 Clear Connect Type A devices or 100 zones per link (includes 4 auxiliary/wireless repeaters and 1 processor address).
- RF range between Clear Connect Type A Repeaters is 60 ft (18 m) and 30 ft (9 m) to other devices, with a total possible coverage area of 2500 ft² (232 m²) per repeater/processor.
- Clear Connect Type A devices and repeaters do not extend the range of Type X devices.



* Examples only; not a complete list of all Clear Connect – Type A devices.

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LUTRON

Freestanding, Maddux option

Boutique Collection





Table of Contents

Introduction
SculptureStone [®]
Hydrotherapies
Bath Tubs
Sinks
Counter-Sinks
Vanity Sinks
Shower Bases
Color
Custom
Culture

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7

Bath as Art

Art is the tangible expression of imagination and skill combined to create an experience and evoke a response. This is the Boutique Collection from MTI. The embodiment of MTI's commitment to high design, sensuous beauty and personal wellness.

These are purposefully designed vessels that are beautiful in their form and effective in their function. Works of art that saturate the senses and create a unique experience with the luxurious, smooth touch of molded stone. Sculptured forms handcrafted in the USA by the skilled artisans of MTI.

Feel the difference. Experience the luxury. Indulge yourself with a work of art from the Boutique Collection.





THE BOUTIQUE COLLECTION

MTI's Boutique Collection offers you extraordinary products of inspired, award-winning designs. Works of art that will transform your bathroom into nothing less than the extraordinary.

Tubs, sinks, counter-sinks, vanity sinks, shower bases and versatile accessories and options. All created in MTI's proprietary SculptureStone®: 100% solid, mostly organic, beautiful and easy to maintain.

For the art of the Boutique Collection also lies in what is not visible.

SCULPTURESTONE

- MTI Boutique Collection products are manufactured using a proprietary, luxurious SculptureStone material, also referred to as Engineered Solid Stone.
- * Approximately 70% of the material is organic: natural stone that is comprised of various minerals.
- * This is refined into a powder and combined with highperformance resins that are binding agents.
- * The material is liquefied, poured into a mold, cured and hand-finished.
- * The result is a solid work of art: molded stone. Smooth, 100% solid, luxurious.
- No top coating, layers or hollow areas.
- * This material is non-porous, stain-, mold- and mildewresistant, making cleaning and maintenance easy.

HYDROTHERAPIES FOR WELLNESS



Soaking Bath

The most elemental form of hydrotherapy is the soaking bath, where heat and water's natural buoyancy foster deep relaxation. All MTI soaker tubs are ergonomically designed for maximum comfort, and our SculputreStone helps keep bath water warm longer. And this means a longer soak for you.

Feel the Difference

Dedication and pride of workmanship drive our craftsmen to produce your choice of a velvety smooth soft matte or hand-polished deep gloss finish.



Air Bath

The blissful combination of water, heat and air movement creates an incomparable effect that is as therapeutic as it is relaxing. The movement of millions of tiny air bubbles contacting the skin activates the lymphatic system, increases blood flow, stimulates endorphins and relieves sore muscles and other painful ailments. Air flow can be adjusted from soft to stimulating.



JULIET * 2 models available 67" and 72" in length

DESIGN EXCELLENCE

MTI has received more than 160 national and international awards for design excellence and product innovation. For Russell Adams, President and Chief Design Officer, the common thread is "design with purpose". More than creating products that are high in design aesthetics, the products must contribute to the lives of those who are pursuing holistic wellness.

The following pages contain a good sampling of MTI Boutique Collection products. Go to **mtibaths.com** for additional products, detailed specifications and pricing.



ELISE • 3 models available from 62" to 73" in length • optional low-profile recessed pedestal shown at the bottom right



ELISE * with integrated pedestal * 6 models available from 62" to 73" in length





ALISSA * 2 models available from 62" to 73" in length * optional low-profile recessed pedestal shown at the bottom right



ALISSA * with integrated pedestal * 6 models available from 62" to 73" in length





CÁSCARA * 71" in length



BOWIE * 70" in length



THE BLAKE • 66" in length shown in Stratus Gray exterior

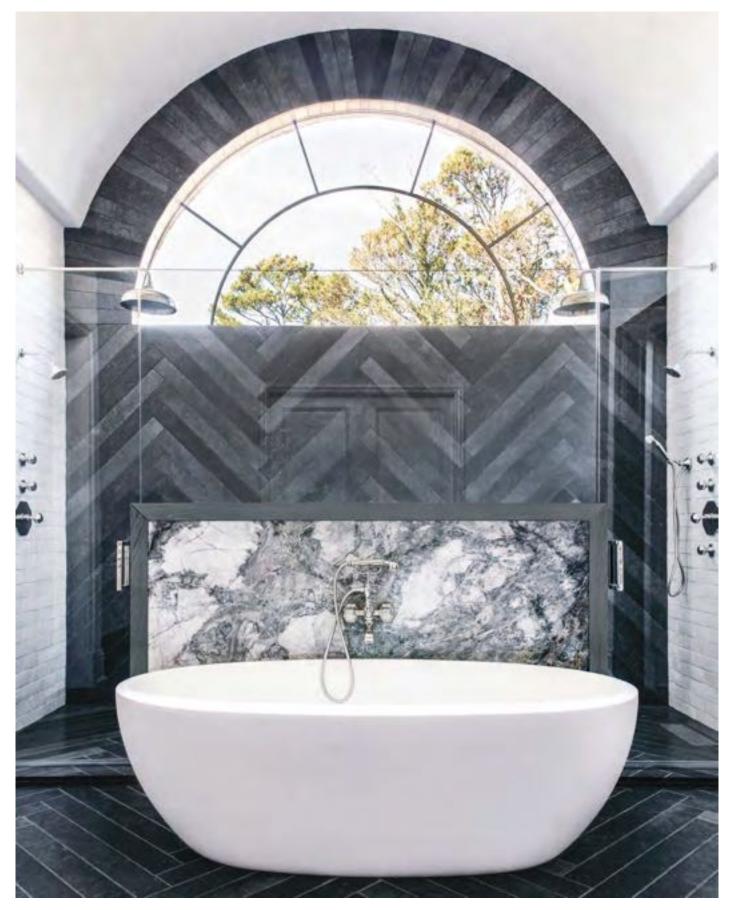


MALLORY + 66" in length shown in Sapphire Blue exterior





MALLORY + 60" in length



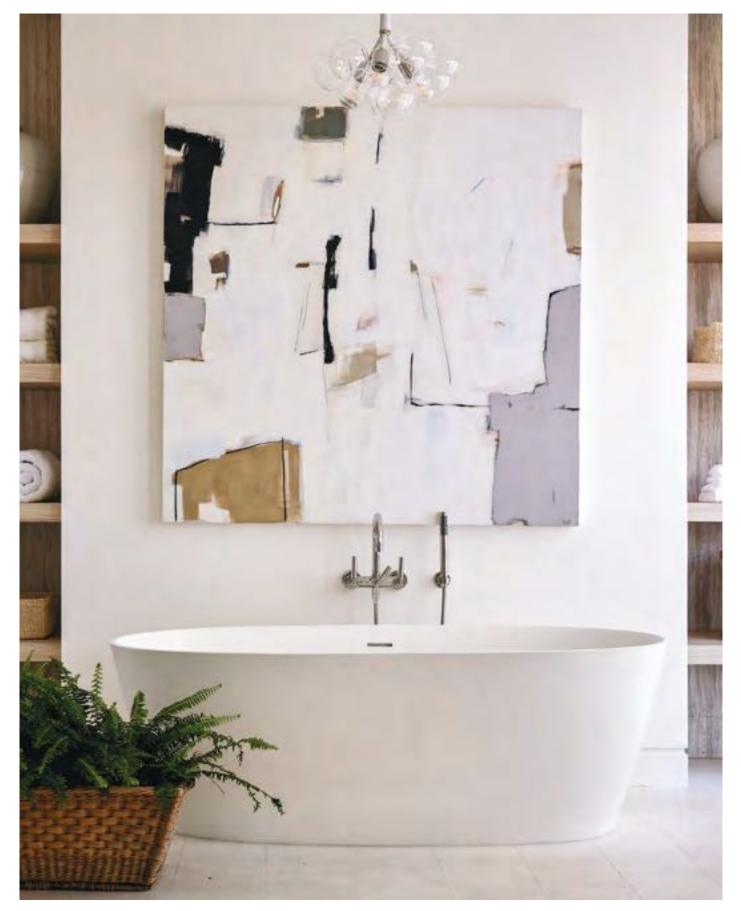
CÁSSANDRA + 72" in length



LYDIA + 66" in length



LYDIA + 56" in length



ELENA • 2 models available from 58" to 65" in length with flat or semi-rolled lip



ELENA WITH CRADLE • 2 models available from 58" to 65" in length with flat or semi-rolled lip • cradle available in many colors



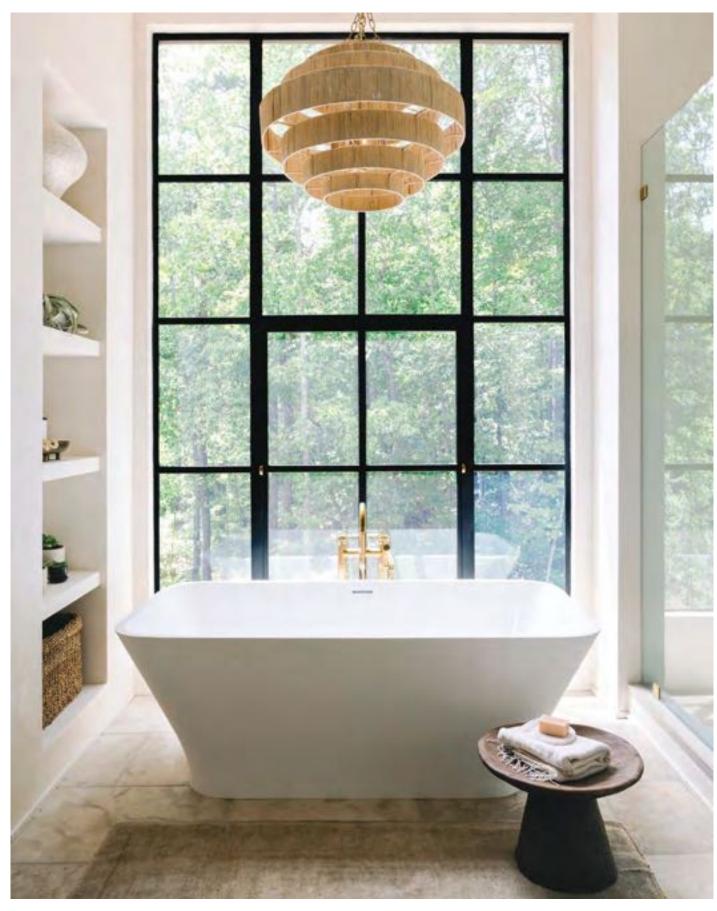
ELENA WITH AVAILABLE PEDESTAL OPTION * 66" in length with flat or rolled lip * pedestal not shown



MADDUX • 2 models available from 59" to 65" in length



AKANA * 66" in length



ADDISON * 3 models available from 58" to 66" in length * also shown at top right





PETRA WITH TEAK WRAP * 60" in length * also available without teak



HALO * 52" round with flat or rolled lip



ADRIAN + 68" in length



INTARCIA • 67" in length shown with pedestal • shown to the right without pedestal

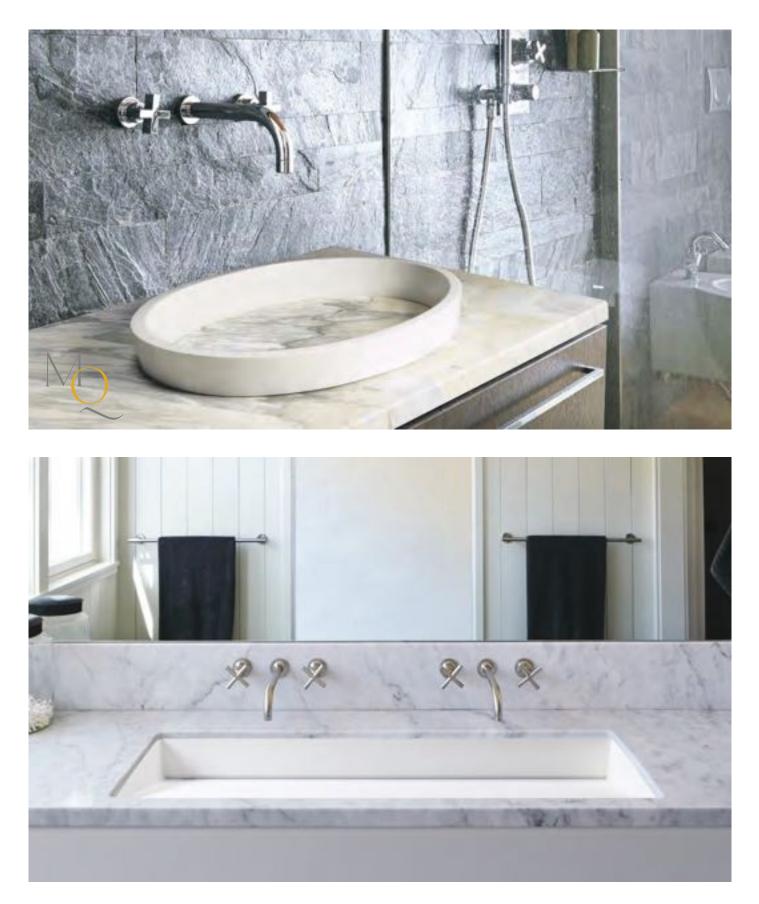
The Intarcia tub, as well as the Continuum and Intarcia sinks, were designed by internationally renowned kitchen and bath designer Matthew Quinn. The Intarcia tub is available with the pedestal base shown above.



Matthew Quinn is one of the foremost designers in the kitchen and bath industry and Principal of Design Galleria Kitchen and Bath Studio and the Matthew Quinn Collection. "My design philosophy is that innovative designs can be elegantly simple yet always provocative."



Bathroom Sinks



Vessel, Semi-Recessed, Undermount, Wall-Mount

Boutique Collection sinks are no less than stunning vessels. Like our tubs, each is a work of art. Designed and handcrafted with exquisite detailing and available in a large variety of sizes and shapes that either mimic or complement Boutique tubs. All created in SculptureStone. Boutique bathroom sinks include vessel-style, semi-recessed, undermount and wall-mount. See them all at **mtibaths.com**.











MTI Counter-Sinks seamlessly integrate the sink bowl with the counter top and complement a variety of design aesthetics. And they can be highly personalized in counter length, depth and height; bowl style and position(s); wall-mount or vanity-mount installations. They are easy to clean and compatible with most manufacturers' vanities. All created in SculptureStone.

Accessible from any counter-sink product page on mtibaths.com, the MTI Configurator will walk you through specifying your personalized counter-sink.







Vanity Sinks

MTI Vanity Sinks are simply elegant, and the possibilities for personalization are many. There are different lengths and depths from which to choose, and depending on the vanity length, one or two sink bowls may be selected from a variety of sizes and shapes. Constructed in SculptureStone with waterfall-style sides or parsons-style legs as shown below.





Shower Bases

MTI's Boutique Collection shower bases are constructed of the same SculptureStone material as the tubs and sinks. These low-profile shower bases are available in five lengths ranging from 48" to 72". You can also create a custom shower base. All models feature a concealed drain and a low-profile, multiple-threshold design for versatile installation, great looks and easy entrance. They are slip-resistant and easy to maintain.



Color!

Let your personality show through with a splash of color in the bathroom. The Boutique Collection allows you to choose from a variety of exterior colors to accent or integrate with your bathroom decor. Available on many tubs, vessel and semi-recessed sinks in matte or gloss finish. Go to **mtibaths.com** for details.



SAPPHIRE BLUE





BLUE LAGOON





TERRACOTTA





STORM GRAY





ΟΝΥΧ





STRATUS GRAY

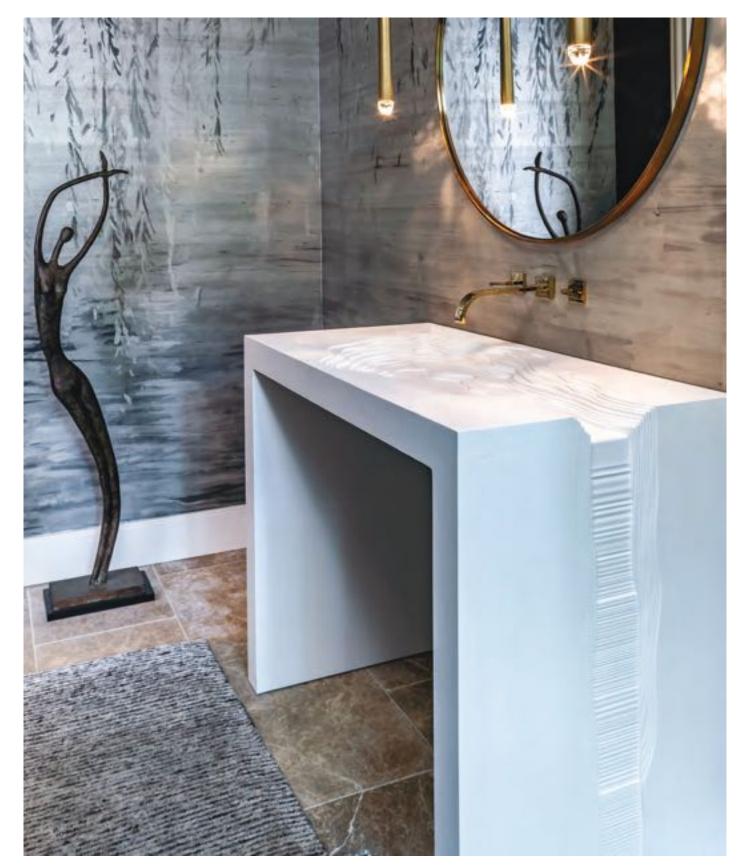


Custom Design and Manufacturing





We love what we do. MTI offers custom design and manufacturing for both residential and commercial applications, from volume orders to one-of-a-kinds. Some examples are below. Contact us at **quotes@mtibaths .com**.



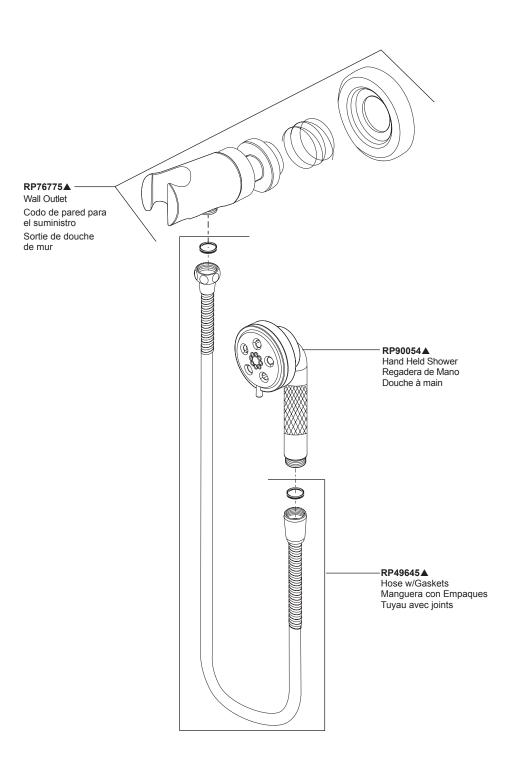




MTI Baths Sugar Hill, GA 30518 800.783.8827 mtibaths.com



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▲ Specify Finish / Especifíque el Acabado / Précisez le Fini

Master tub option 1



Stargaze®

72" x 36" freestanding Heated BubbleMassage™ air bath

K-1958-GH

Features

- 118 to 122 airjets release thousands of heated bubbles that surround and support the body in a warm massage
- Automatic and manual purge cycles remove residual water from air channels after use
- Variable-speed blower lets you adjust massage intensity to 18 levels
- Freestanding design creates a striking focal point in your bathing area
- 16" (406 mm) depth offers a deep soaking experience
- Integral lumbar support on both ends
- Textured bottom surface
- Wide ledge on one side is ideal for deck-mount faucet and/or handshower
- Straight shroud
- Built-in 600W BubbleMassage[™] heater warms humidified air before it enters the bath
- Automatic and manual purge cycles remove residual water from air channels after use

Material

Acrylic

Technology

- Auto-shutoff timer on blower allows users to enjoy Heated BubbleMassage™ experience for 60 minutes before turning off
- User interface: electronic keypad control

Installation

- Center drain
- Freestanding
- PureFlo drains are not recommended for a deck-mount faucet installation
- Remote blower motor installation required (relocation kit is included)

Recommended Products/Accessories

K-7265 Brass toe tap bath drain K-24916 Wireless Music Kit K-37385 rough-in cable drain, PVC, 45" cable K-23726 Drain treatment K-23732 Tub & shower cleaner



Codes/Standards

ASME A112.19.7/CSA B45.10 CSA B45.5/IAPMO Z124 ASTM E162 ASTM E662 UL 1795 CSA C22.2 No. 218.2

KOHLER[®] Plastic Baths and Shower Bases Lifetime Limited WarrantyKOHLER[®] Hydrotherapy Components Five-Year Limited Warranty

See website for detailed warranty information.

Available Colors/Finishes

Color tiles intended for reference only.

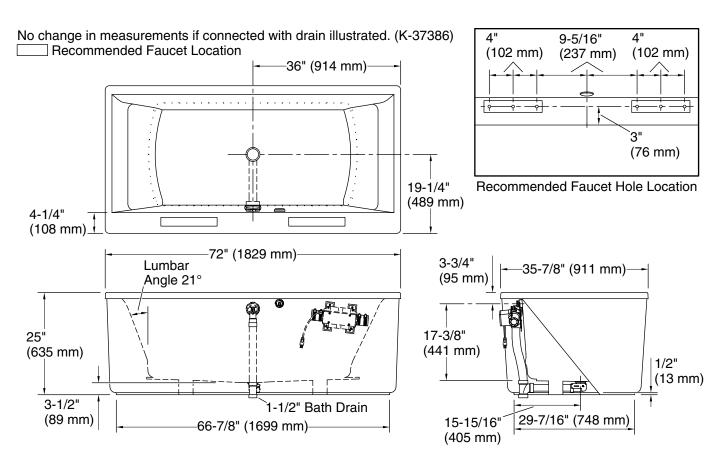
Color Code Description

0 White





72" x 36" freestanding Heated BubbleMassage™ air bath K-1958-GH



Required Electrical Service

Two dedicated circuits required, protected with Class A Ground-Fault Circuit-Interrupter (GFCI). Outside North America, this device may be known as a Residual Current Device (RCD).

 Blower:
 120 V, 15 A, 60 Hz

 Heater:
 120 V, 15 A, 60 Hz

Technical Information

All product dimensions are nominal.		
Installation:	Freestanding	
Drain location:	Center	
Basin area, bottom:	50-3/4" x 24-7/8" (1289 mm x 632 mm)	
Basin area, top:	67-5/8" x 29-3/16" (1718 mm x 741 mm)	
Weight:	100 lbs (45.4 kg)	
Minimum floor load:	45 lbs/ft² (219.7 kg/m²)	
Water depth:	15-11/16" (399 mm)	
Water capacity:	90 gal (340.7 L)	
Template:	Footprint, 1245664, not required, included	
Electrical component	Plower: 100 V 10 A 60 H-	

Electrical component Blower: 120 V, 10 A, 60 Hz 1-800-4KOHLER (1-800-456-4537)

Kohler Co. reserves the right to make revisions without notice to product specifications. For the most current Specification Sheet, go to <u>www.kohler.com</u>. 3-26-2023 21:51 - US/CA

Notes

Measure your actual product for rough-in details.

Install this product according to the installation instructions.

The hot water supply should be 70% of the capacity of the bath or greater. Installations will vary.

This bath is designed for freestanding installation only.

If installing a rim-mount faucet, make sure there is no interference above or below the deck before drilling any holes.



Master tub option 2

KOHLER_®

Stargaze®

72" x 36" freestanding bath **K-6366**

Features

- Freestanding design creates a striking focal point in your bathing area
- Integral lumbar support on both ends
- 16" (406 mm) depth offers a deep soaking experience
- Wide deck along one side simplifies installation and provides support for getting in and out of bath
- Straight shroud
- Textured bottom surface

Material

Acrylic

Installation

- Center drain
- Freestanding

Recommended Products/Accessories

K-7265 Brass toe tap bath drain K-37385 rough-in cable drain, PVC, 45" cable K-24916 Wireless Music Kit K-23726 Drain treatment K-23732 Tub & shower cleaner



Codes/Standards

CSA B45.5/IAPMO Z124 ASTM E162 ASTM E662

KOHLER[®] Plastic Baths and Shower Bases Lifetime Limited Warranty

See website for detailed warranty information.

Available Colors/Finishes

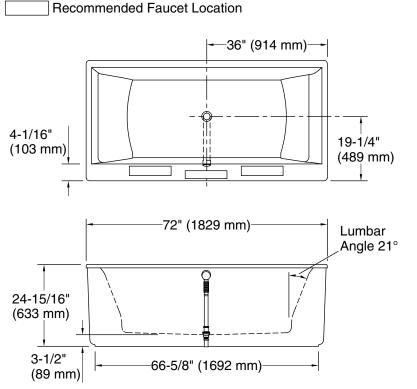
Color tiles intended for reference only.

Color Code Description

0 White







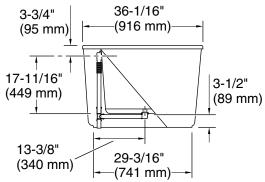
No change in measurements if connected with drain illustrated. (K-7265)

Technical Information

All product dimensions are nominal.		
Installation:	Freestanding	
Drain location:	Center	
Basin area, bottom:	50" x 25-1/2" (1270 mm x 648 mm)	
Basin area, top:	61" x 27-1/2" (1549 mm x 699 mm)	
Weight:	152 lbs (68.9 kg)	
Minimum floor load:	48.8 lbs/ft² (238.3 kg/m²)	
Water depth:	15-11/16" (399 mm)	
Water capacity:	90 gal (340.7 L)	
Template:	Footprint, 1245664, not required, not included	

4" 13-1/4" 4" (102 mm) (337 mm) (102 mm) (102 mm) 3" 3" (76 mm) 8" (203 mm) (95 mm)

Recommended Faucet Hole Location



Notes

Measure your actual product for rough-in details.

Install this product according to the installation instructions.

The hot water supply should be 70% of the capacity of the bath or greater. Installations will vary.

This bath is designed for freestanding installation only.

Do not support the load weight of the bath by the rim.

If installing a rim-mount faucet, make sure there is no interference above or below the deck before drilling any holes.



Reach[®] Curv



One-piece compact elongated toilet with skirted trapway, dual-flush K-23188

Features

- One-piece toilets integrate the tank and bowl into a seamless, easy-to-clean design
- Compact elongated bowl offers added comfort while occupying the same space as a round-front bowl
- Standard height
- Top-mount dual-flush actuator offers a choice of 0.8 or 1.28 gpf (3.0 or 4.8 lpf)
- 2" (51 mm) glazed trapway
- Fully skirted trapway simplifies cleaning
- Quiet-Close™ elongated lid and seat prevents slamming
- Alternative option available: Reach Curv with hidden cord design (K-23188-HC)

Installation

- Standard 12" (305 mm) rough-in
- Supply line sold separately
- Requires mounting plate 1362736 for heated seat installation

Recommended Products/Accessories

1023457 1265114

Included Components

Additional Components: 1422716 Slow Close Seat





Codes/Standards

ASME A112.19.2/CSA B45.1 ASME A112.19.14 DOE - Energy Policy Act 1992 EPA WaterSense® California Energy Commission (CEC)

KOHLER[®] Toilets and Seats Limited Warranty

See website for detailed warranty information.

Available Colors/Finishes

Color tiles intended for reference only.

Color Code Description

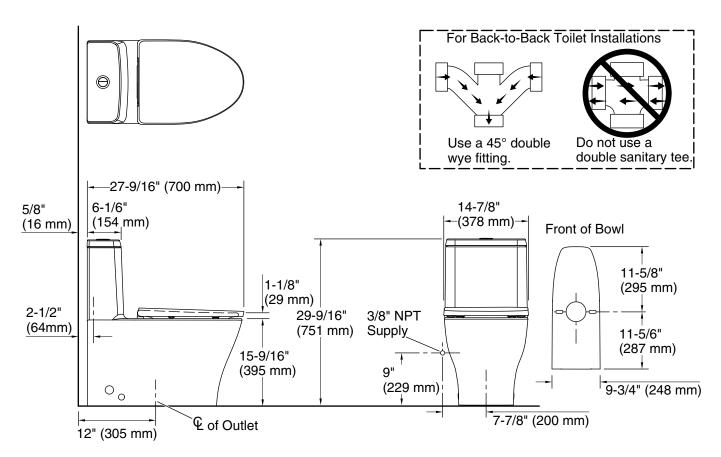
0 White





Reach® Curv

One-piece compact elongated toilet with skirted trapway, dual-flush K-23188



Technical Information

All product dimensions are nominal.

Toilet type:	Floor-mount
Waste Outlet:	Floor
Bowl shape:	Compact elongated
Flush type:	Class Five Siphonic Dual-Flush
Trap passageway:	2" (51 mm)
Water surface size:	7-3/4" x 5-3/4" (197 mm x 146 mm)
Rim to water surface:	5-13/16" (148 mm)
Rough-in:	12" (305 mm)
Seat-mounting holes:	5-1/2" (140 mm)
Template:	Footprint, 1392770-7, not required, included

Fixture Supply Requirements

Min static pressure:20 psi (137.9 kPa)Max static pressure:80 psi (551.6 kPa)Min flowing15 psi (103.4 kPa)

1-800-4KOHLER (1-800-456-4537) Kohler Co. reserves the right to make revisions without notice to product specifications. For the most current Specification Sheet, go to <u>www.kohler.com</u>. 3-7-2023 22:27 - US/CA

Notes

Install this product according to the installation instructions.





Freestanding tub, acrylic option Too decorative?

MTI BASICS®



Freestanding Tubs

MTI BASICS® tubs are the perfect solution when needs are more simple and desires more modest. This selection includes a variety of tubs in the most popular shapes and sizes at a very affordable price.



MBXFSX5832A



MBXFSX5832C



MBXFSX5832A 58" × 32" × 22" Features an integrated deck for mounting faucetry and is designed for above-floor rough-in.



Above-floor rough-in shown with optional quick-connect drain.



MBXFSX5832C 58" × 33" × 22" Features an integrated deck for mounting faucetry and is designed for above-floor rough-in.



MBOFS6636



MBOFSX6636



MBOFS6636 66" × 37" × 22"

MBOFS6636A

66" x 36" x 22" Same as above but with a shallower bowl for above-floor rough-in.





MBOFSX6636

66" × 37" × 22" Features an integrated deck for mounting faucetry.

MBOFSX6636A

66" x 37" x 22" Same as above but with a shallower bowl for above-floor rough-in.





MBLX6032 60" × 32" × 22" **MBLX6636** 67" × 36" × 24"



MBCRFS6632



MBRFSX6636

MBLX6032



MBTRFS6636



MBTRFS6636 66" × 36" × 23"



MBCRFS6632 66" × 32" × 20"



MBRFSX6636 66" × 36" × 23" Features an extended deck for mounting faucetry.

MBRFSX6636A 66" x 36" x 23" Same as above but with a shallower bowl for above-floor rough-in.

Rectangular Drop-in Tubs



MBCR6632



MBRX7248E



 MBCR6032
 60" × 32" × 20"

 MBCR6632
 66" × 32" × 20"

 MBCR6636
 66" × 36" × 21"

 MBCR7242
 72" × 42" × 20"

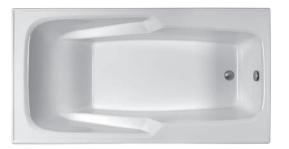
Above models can also be undermounted.



MBCR7242C 72" × 42" × 22" Can also be undermounted.



MBRR6030E 60" × 30" × 17" MBRR6032E 59" × 32" × 19" MBRR6036E20 60" × 36" × 20" MBRR6630E 66" × 30" × 19" MBRR6634E 66" × 34" × 20"



MBRR7136E 71" × 36" × 19"



MBRX6048E21



MBRX7248E 71" × 47" × 20"



MBRX6048E21 60" × 48" × 21"



MBRO6042E



 MBRO6042E
 60" × 42" × 19"

 MBRO7142E
 71" × 42" × 19"

 MBRO7236E
 72" × 36" × 20"



MBRO7142C 71" × 42" × 19"



MBRO6036E 60" × 36" × 19"



MBTR6636

Corner Drop-in Tubs



MBOC6060



MBTR6636 66" × 36" × 21" **MBTR7240** 72" × 40" × 21"





59" × 59" × 21"

Oval Drop-in Tubs



MBODI6636



MBODI6036 60" × 36" × 19" **MBODI7236** 73" × 36" × 23"



MBODI7042 69" × 42" × 20"



MBODI6042 60" × 42" × 22"



MBODI6636A 66" × 36" × 17"

Integral-Skirted Tubs



MBISC6030 A/D 60" × 30" × 19" / 16" MBISC6032 A/D 60" × 32" × 19" / 16" MBISC6036 A/D 60" × 36" × 19" / 16"



MBIS7236 (shown) 72" × 36" × 21" MBIS7242 72" × 42" × 21"



MBIS6032 (shown) 60" × 32" × 19" **MBIS6042** 60" × 42" × 20"

The MBISC models are available in two different heights: • 19[°] height allows for an above floor rough-in (AFR)

* 16" height complies with ADA regulations (ADA)



MBIS6030 (shown) 60" × 30" × 19" **MBIS6036** 60" × 36" × 20"



MBIS6030

Shown with non-removable panel for soakers. This front skirt design above applies to the 6 MBIS models shown here. The MBISC models have a flat, non-removable skirt.

Standard Features and Options

All Baths

- Durable high-gloss Acrylic CXL[™].
- * White standard; biscuit upgrade.
- * Bath reinforcement consisting of a thick layer of fiberglass / titanium / resin, plus 1/2" metal reinforcement on all sides of rectangular and corner tubs.
- Textured bottom meets ASTM F-462-1994 slip resistance.
- * 2-year residential warranty. 1-year commercial warranty.

Additional For Whirlpools

- * Directionally-adjustable point-massage jets.
- * 1-bhp whisper-quiet pump with silent air volume control.
- * Left- or right-hand pump locations available on center drain and corner tubs.

Additional For Air Baths

- * 3/4 bhp heated blower with automatic purge system that activates 20 minutes after use.
- * 12 low-profile air jet distribution ports are installed on the tub floor with color-matching air caps.
- Check valves in jets prevent water from entering air lines.
- Pre-leveled foam base.

Additional For Integral-Skirted Tubs

- Integral tile flange on 3 sides.
- * Left- or right-hand drain configuration (must specify when ordering).
- * Front panel is removable for whirlpools and air baths, except MBISC models.

Freestanding Tubs

- * Available as a soaker only.
- * Can be configured with a Virtual Spout integrated high-flow tub filler.
- * Access panel included to facilitate drain or Virtual Spout installation.
- * Tub may also be specified without a panel.
- * Select models include an integral faucet deck.

Tub Options



Inline Heater 650-watt heater maintains

bath water temperature at 104°. Available for whirlpools, air baths* and soakers*, except freestanding. *Requires a low-force, recirculating pump for operation.



Tile Flange

Chemically bonded to the tub, which ensures a water-tight seal between the top tub surface and surrounding wall area. Integral tile flange is also available on most models.

PLEASE NOTE: Designer Collection tub options do not apply to BASICS tubs.





High-density foam support is standard with air baths and pre-leveled frame systems. Adds 2"-3" to overall tub height,

except for integral-skirted models.

Pre-Leveled Frame System Hardwood constructed frame simplifies the installation process. Includes high-density foam that supports the bottom of the pre-leveled bath. Shown with optional skirting.

Kitchen Sinks



One-Piece Construction with Apron



MBKS254 33" × 22" × 9" Optional stainless steel grid available



MBKS50 33" × 22" × 9" Shown with optional stainless steel grid



MBKS30 33" × 22" × 8" (L / R)









Cutaway of bath reinforcement

0

Whirlpool Jet

Integral skirt



MTI BASICS® includes an assortment of kitchen sinks. Manufactured in high-gloss Acrylic CXL, MTI BASICS sinks are attractive, scratch- and stain-resistant and easy to clean.

This selection of products can help when the circumstances and applications are valuesensitive. You can get the function you need in a form you will like. Products shown include a 1-year residential and commercial warranty.

Available in white or biscuit



33" × 22" × 8" (L / R) Shown with optional stainless steel grids



MBKS244 25" × 22" × 6"

Drop-in / Undermount

Optional stainless steel grids available



MBKS40 25" × 22" × 9"

MTI's Walk-in Tub A Specialty Bath

There is a large, ever-growing segment of the American population, age 50 and over, who intend to remain in their homes for as long as they possibly can, living comfortably and independently.

Over time needs may change and requirements may become more specific, such as those resulting from mobility factors. Should this need arise, MTI's Walk-In Tub is designed to sensitively accommodate those who are mobility-challenged.

MTI's walk-in tub is available with a number of different hydrotherapies, combination packages and options. So if it is a walk-in tub that is needed, MTI goes beyond with the right product and features, and at the right price.



Shown as a right-hand drain configuration with valve package



Inside view of tub



Optional extension panel to fit 60" openings



MBWI5030 52" × 30" × 38"

Features

- Welded steel frame with adjustable leveling "feet" for stability
- Slip-resistant textured bottom
- 2 acrylic grab bars for security
- Fast drain for convenience
- * Light-weight, easy-to-latch door for ease of operation

Measuring $52" \times 30" \times 38"$, the Walk-In Tub is available with optional matching end panels or an extension panel to finish-off a full 60" width opening.

NOTE: Please specify left- or right-hand drain location when ordering.

Standard Features and Options



Soaker

- Constructed with Acrylic CXL and multiple layers of ma grade gelcoat with a backing of fiberglass / titanium /
- White only.
- Stainless steel structural frame with 6 leveling feet.
- Front removable acrylic panels for equipment access necessary.
- * Left- or right-hand drain location (must specify when ordering).
- * Light-weight marine-grade door with easy-to-latch stai steel hardware.
- * 2 acrylic grab bars for security.
- Quick release cable drain included in chrome, plus do safety drain.
- 2-year residential warranty, 1-year commercial warranty

Microbubbles - includes all of the soaker features plus:

1 microbubbles infusion port and pump.

Whirlpool - includes all of the soaker features, plus:

- * Six directionally-adjustable point-massage jets.
- 1-bhp whisper-quiet pump with silent air volume control.

Air Bath - includes all of the soaker features, plus:

- * Twenty low-profile air jets are installed around the side walls of the bathing well with color-matching air caps. Each jet has an independent check valve to prevent water and residue from entering the air lines.
- * 3/4-bhp heated blower with automatic purge that dries the air jets 20 minutes after use.

Combination Packages

- * Air bath and whirlpool
- Air bath and microbubbles

Quick-release cable drain for convenience

> Acrylic grab bars for added security

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THE PACKAGES TO THE LEFT ARE AVAILABLE WITH EITHER OR BOTH OF THE FOLLOWING:

Factory-Installed Valves

- Gooseneck spout in polished chrome finish.
- Matching Roman tub hot and cold levers.
- Deck-mounted hand-held shower with diverter.

Radiance®

- Radiance[®] is a tub surface heating system designed to warm the interior surface of the tub.
- * Radiance utilizes electric heating grids for the backrest area and seat of the tub. Grids are integrated in the tub structure.
- * Low-voltage design. Uses energy equivalent to a standard light bulb. Designed to remain on at all times to ensure a warm surface during entry and throughout the bathing process.

WALK-IN TUB OPTIONS

- Inline heater
- Tile flange
- Matching end panel
- Extension panel to accommodate a 60" opening





MTI Baths Sugar Hill, GA 30518 800.783.8827 mtibaths.com

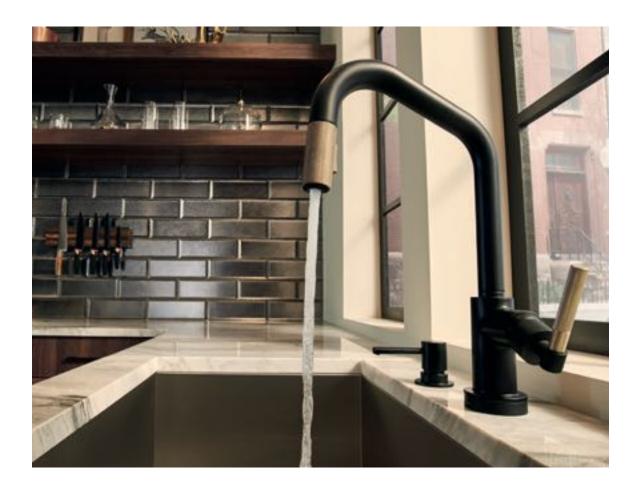


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Lavatory faucets Hand shower for all three bathes

LITZE® KITCHEN COLLECTION

Art meets craft.





Sell Sheet

LITZE® KITCHEN COLLECTION

The Litze[®] Kitchen Collection by Brizo[®] melds a clean, contemporary sensibility with a crafted style to strike the perfect balance. Carefully chosen touches abound—including deliberately placed, beautifully textured knurling details— provide functional benefits while celebrating the beauty of craftsmanship.

Available Finishes

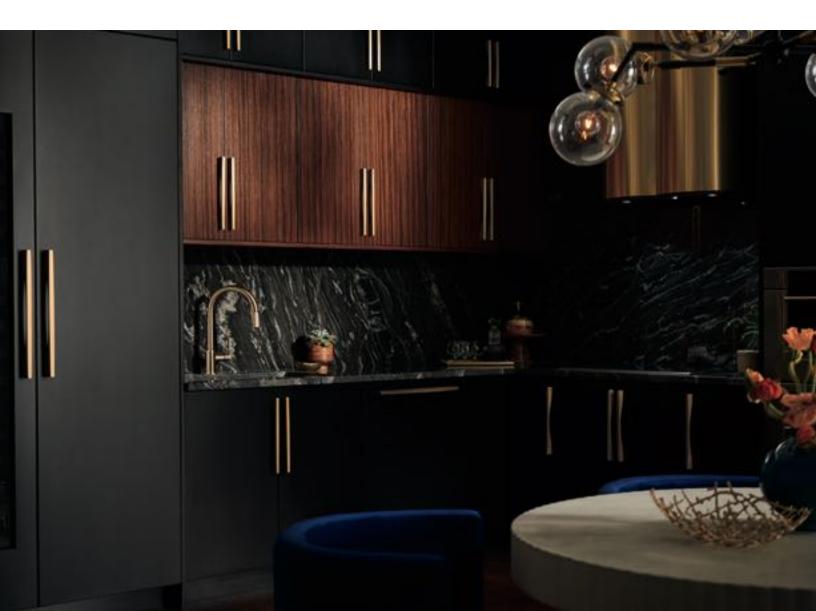








MATTE BLACK/ BRILLIANCE® LUXE GOLD® (BLGL)

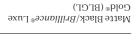




Polished Chrome (PC)



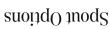
Brilliance® Stainless (SS)



Brilliance® Polished Nickel (PN)

63063LF Knurled Handle in Brilliance® Luxe Gold® (GL) Pull-Down Kitchen Faucet with Angled Spout and





Three spout options-Angled, Arc or





the collection. Square-are available throughout



Arc Spout





Juod² Spout



Industrial Handle

Knurled Handle

*Instant Hot and Beverage Faucets available with Knurled Handle only.

Randle Options

 $\mathfrak{g}_{\mathrm{S}}$

Industrial or Knurled handle^{*} All faucets are available with either an

.yith Knurled Handle only. *Instant Hot and Beverage Faucets available



Pull-Down Kitchen Faucet with Square Spout and Industrial Handle 63054LF



Pull-Down Kitchen Faucet with Arc Spout and Knurled Handle $63043 \rm LF$



Articulating Kitchen Faucet with Industrial Handle 63244LF



Articulating Kitchen Faucet with Knurled Handle and Finished Metal Hose 63143LF





Bridge Kitchen Faucet with Angled Spout and Knurled Handles 62563LF



Bridge Kitchen Faucet with Square Spout and Industrial Handles 62554LF



Bridge Kitchen Faucet with Arc Spout and Knurled Handles 62543LF





Bar Faucet with Angled Spout and Industrial Handle 61064LF

Bar Faucet with Square Spout and Knurled Handle 61053LF





Instant Hot Faucet with Angled Spout and Knurled Handle 61363LF-H



Instant Hot Faucet with Square Spout and Knurled Handle 61353LF-H



Instant Hot Faucet with Arc Spout and Knurled Handle 61343LF-H





Beverage Faucet with Angled Spout and Knurled Handle 61363LF-C



Beverage Faucet with Square Spout and Knurled Handle 61353LF-C



Beverage Faucet with Arc Spout and Knurled Handle 61343LF-C



Wall Mount Pot Filler Faucet with Knurled Handle 62843LF



Soap/Lotion Dispenser RP79275



The ESSENTIAL[™] shower series

Unlimited flexibility, *effortless* sophistication.

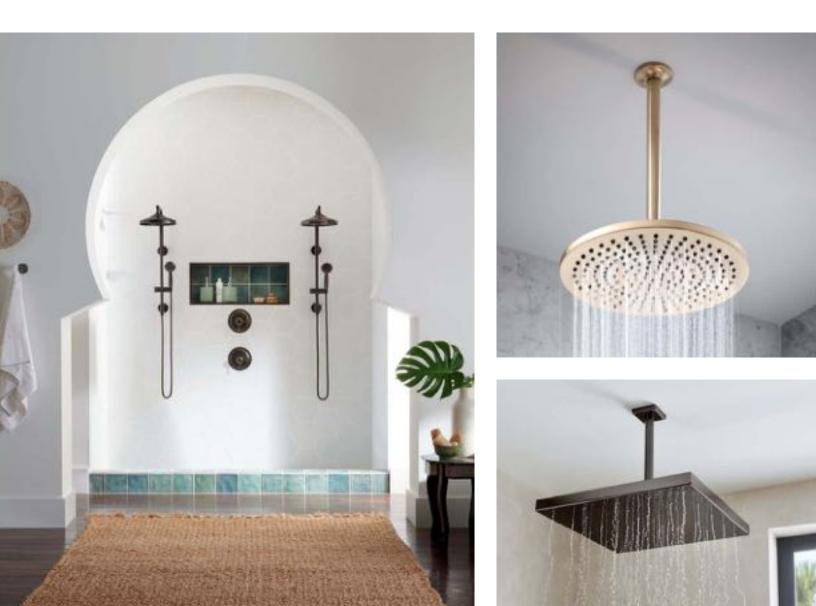


B31ZO



The ESSENTIAL[™] SHOWER SERIES

The Essential[™] Shower Series provides a wealth of coordinated options to create the ideal custom shower. A wide range of finishes are available in three exquisite styles, designed to complement any Brizo[®] bath collection. So no matter what style you choose, the entire space lives in harmony.



CLASSIC

Graceful curves and nuanced lines combine in the Classic style of the Essential[™] Shower Series. Each component is exquisitely adorned with just the right amount of detail to add a note of distinction to any custom shower.







7" Classic Round H_2OKinetic® Multi-Function Wall Mount Shower Head 87495 $87495-2.5^*$



10" Classic Wall Mount Shower Arm and Flange RP70909



10 7/16" Classic Slide Bar Shower Arm and Flange 81376





7" Classic Round $\rm H_2OKinetic^{\otimes}$ Single-Function Wall Mount Shower Head 87305



Classic Round H₂OKinetic® Multi-Function Hand Shower RP81079 Wall Elbow, Holder and Hose available

10" Ceiling Mount Shower

Available as 6", 14" and 24"

Arm and Round Flange

RP48986



Classic Round H₂OKinetic[®] Multi-Function Hydrati[®] 2|l Shower 86220



4" Tile-In Round Shower Drain BT061414 Available for preformed applications BT051414



7" Classic Wall Mount Shower Arm and Flange RP62929



Touch-Clean® Round Body Spray 84110

HydraChoice Max[®] Body Spray Round Trim with Rejuvenating Spray Head T84613, SH84101 Invigorating Spray Head T84613, SH84102 Touch Clean[®] Spray Head T84613, SH84103



11" Classic Round Single-Function Raincan Shower Head 83310 83310-2.5*



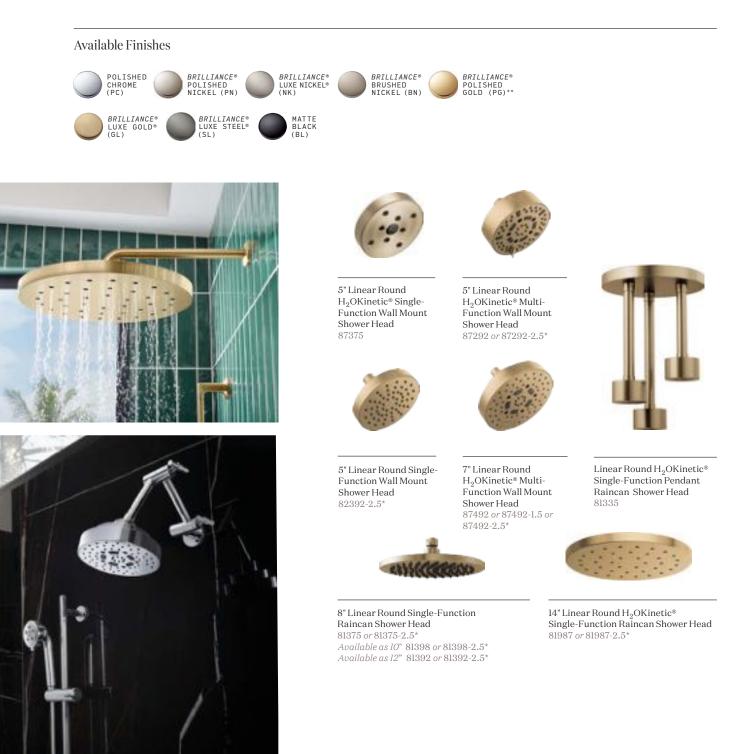
Classic Round H₂OKinetic[®] Multi-Function Hydrati[®] 2|1 Shower 86200-2.5*



Classic Round Slide Bar with Hose 74795

LINEAR ROUND

The Linear Round style of the Essential[™] Shower Series brings new refinement to timeless simplicity. Its sweeping curvatures and streamlined architecture make a breathtaking statement in any space.





107/16" Linear Round Slide Bar Shower Arm and Flange 81892



4" Tile-In Round Shower Drain BT061414 Available for preformed applications BT051414



Linear Round Jointed Wall Mount Shower Arm and Flange RP81434



7" Linear Round Wall Mount Shower Arm and Flange RP74751



16" Linear Round Wall Mount Shower Arm and Flange RP71648





Linear Round Diverter Tub Spout RP81438 Available as Non-Diverter

18" Linear Round Shower Column 80092 $Extension \ available$ RP100924



Linear Round Slide Bar with Hose 74792



Linear Round H₂OKinetic[®] Multi-Function Hydrati® 2|1 Shower 86275-2.5*



Touch-Clean® Round Body Spray 84110



Linear Round H₂OKinetic[®] Single-Function Hand Shower RP73147 Wall Elbow, Holder and Hose available



HydraChoice Max® Body Spray Round Trim with Rejuvenating Spray Head T84613, SH84101 Invigorating Spray Head T84613, SH84102 Touch Clean[®] Spray Head T84613, SH84103

H₂OKinetic[®] Multi-Function Hand Shower RP101288 Wall Elbow, Holder and Hose available



**Finish available on select mode 1s only.

See brizo.com for full collection details



Linear Round



LINEAR SQUARE

Artfulness meets minimalism in the Linear Square style of the Essential[™] Shower Series. Its striking clean lines and geometric angles offer an elevated take on the modern shower.











5" Linear Square $\rm H_2OKinetic^{\otimes}$ Single-Function Wall Mount Shower Head 87380



7" Linear Square $H_2OKinetic^{\circledast}$ Multi-Function Wall Mount Shower Head 87406 87406-2.5*



8" Linear Square Single-Function Raincan Shower Head 83341 83341-2.5* Available as 12" 81399 81399-2.5*



l
4" Linear Square $\rm H_2OKinetic^{\circledast}$ Single-Function Raincan Shower Head 81986 81986-2.5*



7" Linear Square Wall Mount Shower Arm and Flange RP74448



16" Linear Square Wall Mount Shower Arm and Flange RP71650



Linear Square H₂OKinetic[®] Multi-Function Hydrati[®] 2|1 Shower 86280 86280-2.5*



10" Ceiling Mount Shower Arm and Square Flange RP70765 Available as 6", 14" and 24"



Linear Square H₂OKinetic[®] Multi-Function Hand Shower RP92007 Wall Elbow, Holder and Hose available



Linear Square Multi-Function Hand Shower 88099 Wall Elbow, Holder and Hose available



4" Tile-In Square Shower Drain BT062415

Touch-Clean® Square Body Spray 84121

Linear Square Slide Bar with Hose 74799









Column

HydraChoice Max® Body Spray Square Trim with Rejuvenating Spray Head T84913, SH84101 Invigorating Spray Head T84913, SH84102 Touch Clean® Spray Head T84913, SH84103

 $*Model is not Watersense^{\$} labeled. Watersense^{\$} is a registered trademark of the U.S. Environmental Protection Agency.$ **Finish available on select models only.







80099 Extension available RP100923

18" Linear Square Shower