

EZ TANKLESS

EZ DELUXE

**OPERATION
& INSTALLATION
MANUAL**

EZ DELUXE TANKLESS WATER HEATER SPECIFICATIONS

Maximum Gas Consumption BTU/h	87,500
Hot Water Supply at 45f Temperature Rise	3.4GPM
LPG (Propane)	11" WC
NG (Natural Gas)	8" WC
Exhaust System	Direct Vent w/ Concentric Flue Pipe
Ignition System	Water Controlled Electric Ignition
Electric Supply	110V
Safety Devices	Flame Sensors Thermal Limit Switch Thermal Fuse Fan RPM Sensor Surge Protect Fuse
Suitable Inlet Water Pressure	8-100 PSI
Water Connection	G 1/2" to 1/2" NPT w/incl. fitting
Gas Connection	G 1/2" to 1/2" NPT w/incl. fitting



WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

- **WHAT TO DO IF YOU SMELL GAS:**

- Evacuate all persons from the home.
- Shut off the gas supply at the nearest shutoff or main.
- Do not touch an electrical switch, use any phone, or any other electrical devices.
- Contact the nearest gas supplier or qualified service technician for repairs.
- If you cannot reach a gas supplier or qualified service technician, contact the nearest fire department.
- Do not turn on the gas supply until the gas leak(s) has been repaired.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

INSTALLER/CUSTOMER RESPONSIBILITIES

- Installation and Service is recommended to be performed by a qualified installer, service agency or gas supplier.
- Read and observe all safety rules.
- Shut off gas appliances and their pilot lights (if any) when refueling.
- Keep these instructions and warranty for future reference.
- Follow all applicable State and Local Codes.
- Follow a regular schedule of maintenance as outlined in this manual.

**WARNING – FIRE OR EXPLOSION**

WARNING: These instructions must be followed exactly, or a fire or explosion may result causing property damage, personal injury or death.

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FOR YOUR SAFETY --- WHAT TO DO IF YOU SMELL GAS:

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- Do not turn on the gas supply until the gas leak(s) has been repaired.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier

USA AND CANADA - FOLLOW ALL APPLICABLE STATE AND LOCAL CODES IN THE ABSENCE OF LOCAL CODES OR REGULATIONS REFER TO CURRENT STANDARDS:

The installation must conform to one or more of the following, as applicable:

1. Local codes or, in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1/NFPA 54 and/or CSA B149.1, Natural Gas and Propane Installation Code.

IMPORTANT SAFETY INFORMATION

READ THE SAFETY INFORMATION

Your safety and the safety of others are very important. There are many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the safety alert symbol. Recognize this symbol as an indication of Important Safety Information! This symbol alerts you to potential hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word “DANGER,” “WARNING,” “CAUTION,” or “NOTICE.”

These words mean:

- ⚠ DANGER:** An imminently hazardous situation that will result in death or serious injury.
- ⚠ WARNING:** A potentially hazardous situation that can result in death or serious injury and/or damage to property.
- ⚠ CAUTION:** A potentially hazardous situation that may result in minor or moderate injury.
- NOTICE:** Attention is called to observe a specified procedure or maintain a specific condition.

⚠ WARNINGS:

- This water heater is not approved for use in manufactured (mobile) homes!
- Improper installation, adjustment, alteration, service, or maintenance can cause death, personal injury, or property damage. Follow the instructions in this manual.

READ ALL INSTRUCTIONS BEFORE USING.

Be sure to read and understand the entire Use and Care Manual before attempting to install or operate this water heater. It may save you time and money. Pay particular attention to the Safety Instructions. Failure to follow these warnings could result in death or serious bodily injury. Should you have problems understanding the instructions in this manual, or have any questions, STOP and get help from a qualified service technician or the local gas utility.

IMPORTANT SAFETY INFORMATION

Water Heater Venting Safety


⚠ DANGER:

- Failure to install and properly vent the water heater to the outdoors as outlined in the “Venting” section of the Installation Instructions in this manual will result in death from fire, explosion, or asphyxiation from carbon monoxide. **NEVER** operate this water heater unless it is properly vented and has the air supply piping properly installed and terminated to the outdoors.
- Be sure to inspect the vent terminal, the air intake, and the vent system on the water heater for proper installation at initial start-up and at least annually thereafter. Refer to the “Care and Cleaning” section of this manual for more information regarding vent system inspection.

⚠ WARNINGS:

- Gasoline and other flammable liquids, materials, and vapors (including paint thinners, solvents, and adhesives) are extremely dangerous. **DO NOT** handle, use, or store gasoline or other flammable or combustible materials anywhere in the vicinity of a water heater or any other appliance. Be sure to read and follow the labels on the water heater, as well as the warnings printed in this manual. Failure to do so can result in death, bodily injury, or property damage.
- Combustible construction refers to adjacent walls and ceilings and should not be confused with combustible or flammable products and materials. Combustible materials, such as clothing, cleaning materials, or flammable liquids, should never be stored in the vicinity of this or any gas appliance. Fire or explosion can occur causing death, personal injury, and/or property damage.
- Follow vent manufacturer's instructions for venting installation, including additional clearances from combustibles, to avoid conditions that can lead to death, personal injury, and/or property damage.
- Use vent kit supplied by EZ Tankless **ONLY**. The EZ Deluxe requires a specially designed Dual Chamber Intake/Exhaust Concentric Vent Kit. This kit is supplied with the purchase of the heater. If any extensions are needed, please contact EZ Tankless.
- **Moisture in the flue gas will condense as it leaves the vent terminal.** The Vent is designed to use a down slope to allow the condensation fall to the outside. **However, improper location or installation may result** in this condensate freezing on the exterior wall, under the eaves, and on surrounding objects. Some discoloration to the exterior of the building is to be expected if not installed with a downslope as advised.
- For multiple-unit installation, a minimum distance between vent terminations must be maintained to prevent recirculation of vent gases.

⚠ DANGER



⚠ Vapors from flammable liquids will explode and catch fire causing death or severe burns.

Do not use or store flammable products such as gasoline, solvents or adhesives in the same room or area near the water heater.

Keep flammable products:

1. far away from heater,
2. in approved containers,
3. tightly closed and
4. out of children's reach.

Water heater has a main burner flame.

The main burner flame:

1. which can come on at any time and
2. will ignite flammable vapors.

Vapors:

1. cannot be seen,
2. are heavier than air,
3. go a long way on the floor and
4. can be carried from other rooms to the main burner flame by air currents.

Installation:

Do not install water heater where flammable products will be stored or used unless the main burner flame is at least

18" above the floor. This will reduce, but not eliminate, the risk of vapors being ignited by the main burner flame.

Read and follow water heater warnings and instructions. If owners manual is missing, contact the retailer or manufacturer.

⚠ CAUTIONS:

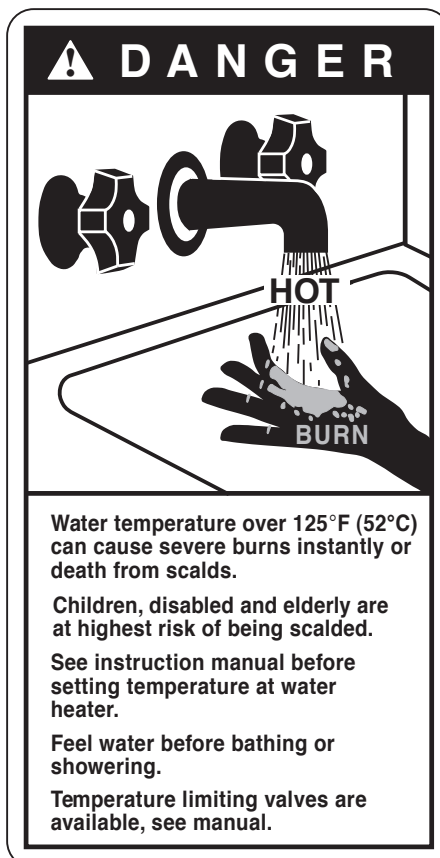
- Ensure that the appliance vent is securely attached to the vent connection on the top of the water heater. **DO NOT USE SCREWS.** Use the included Aluminum Duct Tape to seal all connections.

IMPORTANT SAFETY INFORMATION

Water Supply Safety

⚠ DANGERS:

- **WATER TEMPERATURE SETTINGS**
– Safety and energy conservation are factors to be considered when selecting the water temperature setting of a water heater's remote control. Water temperatures above 125°F (52°C) can cause death or severe burns from scalding. Be sure to read and follow the warnings outlined on the pictured label.
- There is a hot water scald potential if the water temperature is set too high. Households with small children, the disabled, or elderly persons may require a 120°F (49°C) or lower temperature setting to prevent contact with "HOT" water.
- Before manually operating the relief valve, make certain no one will be exposed to the danger of the hot water released by the valve. The water may be hot enough to create a scald hazard. The water should be released into a suitable drain to prevent injury or property damage.
- Failure to perform the recommended Routine Preventive Maintenance can harm the proper operation of this water heater, which can cause carbon monoxide dangers, excessive hot water temperatures, and other potentially hazardous conditions.



⚠ CAUTIONS:

- This water heater must only be used with the following water supply system conditions:
 - With clean, potable water free of corrosive chemicals, sand, dirt, or other contaminants.
 - With inlet water temperatures above 32°F (0°C), but not exceeding 120°F (49°C).
 - DO NOT reverse the hot and cold water connections. The water heater will not operate.

⚠ WARNINGS:

- **IMPORTANT: DO NOT** apply heat to the HOT or COLD water connections. If sweat connections are used, sweat tubing to adapter before fitting adapter to the water connections on heater. Any heat applied to the water supply fittings will permanently damage the internal components of the water heater.
- In case the pipe insulation is not rated for the appropriate weather conditions, install electric heat tracing or equivalent to prevent freezing of the pipes. DO NOT insulate or block the drain valve on the hot outlet fitting. If the pipes are allowed to freeze, the water heater and the pipes may malfunction or leak due to freezing water.
- Failure to drain the water heater as described on "Draining the Water Heater" can cause serious personal injuries from scalding and/or damage the water heater.

Time/Temperature Relationship in Scalds

Water Temperature	Time to Produce a Serious Burn
120°F (49°C)	More than 5 minutes
125°F (52°C)	1 1/2 to 2 minutes
130°F (54°C)	About 30 seconds
135°F (57°C)	About 10 seconds
140°F (60°C)	Less than 5 seconds
145°F (63°C)	Less than 3 seconds
150°F (66°C)	About 1 1/2 seconds
155°F (68°C)	About 1 second

Table courtesy of Shriners Burn Institute

Temperature Conversion Chart °F/°C

85	100	102	104	106	108	110	112	114	116	118	120	125	130	140	°F
29	38	39	40	41	42	43	44	46	47	48	49	52	54	60	°C

IMPORTANT SAFETY INFORMATION

Natural Gas and Liquefied Petroleum Safety

⚠ DANGERS:

- Never attempt to convert the water heater from natural gas to LP or vice versa. The water heater must only use the fuel type in accordance with listing on data plate—natural gas for natural gas units and LP for LP units. Any other fuel usage will result in death or serious personal injury from fire and/or explosion. This water heater is not certified for any other fuel type.
- Both natural gas and propane (LP) have an odorant added to aid in detecting a gas leak. Some people may not physically be able to smell or recognize this odorant. If you are unsure or unfamiliar with the smell of natural gas or LP, ask the gas supplier. Other conditions, such as “odorant fade,” which causes the odorant to diminish in intensity, can also hide or camouflage a gas leak.
- Water heaters using LP gas are different from natural gas models. A natural gas water heater will not function safely on LP and vice versa.
- LP must be used with great caution. It is heavier than air and will collect first in lower areas, making it hard to detect at nose level.
- Before attempting to light the water heater, make sure to look and smell for gas leaks. Use a soapy solution to check all gas fittings and connections. Bubbling at a connection indicates a leak that must be corrected. When smelling to detect a gas leak, be sure to also sniff near the floor.
- Gas detectors are recommended in LP and natural gas applications and their installation should be in accordance with the detector manufacturer’s recommendations and/or local laws, rules, regulations, or customs.
- Combustible materials, such as clothing, solvents, cleaning materials, or flammable liquids, must not be placed in the vicinity of the water heater.
- If a gas leak is present or suspected:
 - DO NOT attempt to find the cause yourself.
 - Never use an open flame to test for gas leaks. The gas can ignite resulting in death, personal injury, or property damage.

⚠ WARNINGS:

- The installation of gas piping must comply with local utility company requirements and/or in the absence of local codes, use the latest edition of National Fuel Gas Code (NFGC), ANSI Z223.1/NFPA 54, or CAN/CSA B149.1, Natural Gas and Propane Installation Code.
- If inlet gas pressure is out of allowable range [4.0” w.c. (1.0kPa) – 10.5” w.c. (2.6kPa)] for Natural Gas, or [8.0” w.c. (2.0kPa) – 13.0” w.c. (3.2kPa)] for LP gas, a gas pressure regulator must be installed to maintain the allowable inlet gas pressure.
- Should overheating occur or the gas supply fail to shut off, turn off the manual gas control valve to the water heater.

⚠ CAUTIONS:

- DO NOT attempt repair of electrical wiring, gas piping, remote control, burners, vent connectors, or other safety devices. Refer repairs to qualified service personnel.
- Turn off the manual gas shut-off valve if the water heater has been subjected to overheating, fire, flood, physical damage, or if the gas supply fails to shut off.
- DO NOT turn on the water heater unless the water and gas supplies are completely opened.

IMPORTANT SAFETY INFORMATION

Before operating this water heater, be sure to read and follow the instructions on the label pictured below and all other labels on the water heater, as well as the warnings printed in this manual.

Failure to do so can result in unsafe operation of the water heater, resulting in death, personal injury, or property damage. Should you have any problems reading or following the instructions in this manual, STOP and get help from a qualified service technician.

FOR YOUR SAFETY READ BEFORE OPERATING

WARNING : If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. DO NOT try to light the burner by hand.

B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.



WHAT TO DO IF YOU SMELL GAS

- DO NOT try to light any appliance. ● DO NOT touch any electric switch; DO NOT use any phone in your building. ● Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions. ● If you cannot reach your gas supplier, call the fire department.
- DO NOT return to your home until authorized by the gas supplier or fire department.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. DO NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

OPERATING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Turn off all electric power to the appliance.
3. DO NOT attempt to light the burner by hand.
4. Turn the Gas Shutoff Valve located on the outside of the unit clockwise  to the "OFF" position.
5. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
6. Turn the Gas Shutoff Valve located on the outside of the unit counterclockwise  to the "ON" position.
7. Turn on all electric power to the appliance.
8. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

GAS SHUTOFF
VALVE



OPEN



CLOSE

TO TURN OFF GAS TO APPLIANCE

1. Turn off all electric power to the appliance if service is to be performed.
2. Turn the Gas Shutoff Valve located on the outside of the unit clockwise  to the "OFF" position.

IMPORTANT SAFETY INFORMATION

Electrical Safety

DANGER:

- **Shock Hazard** – Make sure the electrical power to the water heater is off to avoid electric shock that will result in death or serious personal injury.

WARNINGS:

- For your safety, the information in this manual must be followed to minimize the risk of fire, explosion, or electric shock that can result in death, personal injury, and/or property damage.
- Field wiring connections and electrical grounding must comply with local codes or, in the absence of local codes, with the latest edition of the National Electrical Code, ANSI/NFPA 70, or in Canada, Canadian Electrical Code, CAN/CSA C22.1, Part 1.

CAUTIONS:

- Label all wires prior to disconnecting for service. Wiring errors can cause dangerous and improper operation. Verify correct operation after servicing.
- For your safety, burner inspection and cleaning should be performed only by qualified service personnel.
- Make certain the power to the water heater is OFF before removing the unit cover panel. Exposed electrical components and moving parts can cause personal injuries.
- For your safety, DO NOT attempt repair of electrical wiring, gas piping, remote control, burners, vent connectors, or other safety devices. Refer repairs to qualified service personnel.

FOR INSTALLATIONS IN THE STATE OF CALIFORNIA

California law requires that water heaters must be braced, anchored, or strapped to resist falling or horizontal displacement due to earthquake motions. For water heaters up to 52-gallon capacity, a brochure with generic earthquake bracing instructions can be obtained from: Office of the State Architect, 1102 Q Street, Suite 5100, Sacramento, CA 95814, or you may call 916-445-8100 or ask a water heater dealer.

However, applicable local codes shall govern installation. For residential water heaters of a capacity greater than 52 gallons or tankless-style, consult the local building jurisdiction code for acceptable bracing procedures.

IMPORTANT SAFETY INFORMATION

General Installation and Maintenance Safety

⚠️ WARNINGS:

- This water heater must be installed in accordance with these instructions, local codes, utility company requirements and/or in the absence of local codes, use the latest edition of the American National Standard/National Fuel Gas Code (NFPA), ANSI Z223.1 and National Fire Protection Association, NFPA 54.
- For your safety, DO NOT attempt to disassemble this water heater for any reason. Improper adjustments, alterations, service, or maintenance can cause death, personal injury, or property damage.

SAFETY PRECAUTIONS:

Read this manual entirely before installing and/or operating the water heater.

Use this water heater only for its intended purpose as described in this Use and Care Manual.

Have the installer show you the location of the gas shut-off valve and how to shut it off if necessary. Turn off the manual shut-off valve if the water heater has been subjected to overheating, fire, flood, physical damage, or if the gas supply fails to shut off.

Be sure your water heater is properly installed in accordance with local codes and the provided installation instructions.

DO NOT attempt to repair or replace any part of your water heater unless it is specifically recommended in this manual. All other servicing should be referred to a qualified service technician.

SAVE THESE INSTRUCTIONS

PRODUCT INFORMATION

For Your Records

Write down and save the following product information along with the original sales slip and/or cancelled check. The model and serial numbers can be found on the top label on the right side of the water heater.

MODEL NUMBER:

SERIAL NUMBER:

DATE OF INSTALLATION:

INSTALLING COMPANY/PHONE NUMBER:

PLUMBING CONTRACTOR/PHONE NUMBER:

Read This Manual

Inside you will find many helpful hints on how to use and maintain your water heater properly. A little preventive care on your part can save you time and money over the life of your water heater.

You'll find many answers to common problems in the "Troubleshooting Chart" on this Use and Care Manual. Always refer to this chart before calling for service. Referring to this chart before calling may answer your question(s) and eliminate the need for service.

Preoperating Checklist

- ☐ Is the main gas valve to the water heater turned on?
- ☐ Is the fuse in place or is the breaker turned on?
- ☐ Does the water heater's electronic ignition light?
- ☐ Is the water temperature set to a safe temperature?
- ☐ Is the water heater connected to a floor drain?
- ☐ Is the water heater properly vented to the outside?
- ☐ Is the water heater installed in a safe location away from flammable materials and/or freezing conditions?

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Note: Please ensure that the contents of this manual have been fully understood prior to installation or operation of this gas tankless water heater.

1.0 LIMITED WARRANTY

WHAT IS COVERED?

The EZ Tankless warranty covers any defects in materials or product workmanship when the product is installed and operated in accordance with written installation instructions contained herein, subject to the terms outlined within this limited warranty document. This warranty is applicable only to products that are installed by a state qualified or licensed contractor, or installations approved by EZ Tankless through the return of included warranty card and documentation demonstrating proof of installation.

HOW LONG DOES COVERAGE LAST?

ITEM	PERIOD OF COVERAGE
Heat Exchanger	5 Years*
All other parts and components	1 Year*
Reasonable Labor	1 Year*†

*Warranty period begins from date of purchase unless proper proof of installation is provided, in which case warranty period begins from date of installation.

†Warranty only covers labor deemed necessary and performed by EZ Tankless tech support staff at our repair center in Earl Park, IN.

WHAT WILL EZ TANKLESS PROVIDE?

EZ Tankless will repair or replace the product or any part or component that is considered defective in materials or workmanship, except as set forth below: EZ Tankless will provide parts with free shipping for most repairs. EZ Tankless will perform labor and pay shipping costs to repair the product if deemed necessary by EZ Tankless. All repairs must be performed using genuine EZ Tankless parts.

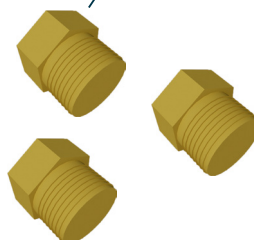
If EZ Tankless determines that repair of a product is not possible, EZ Tankless will replace with a comparable product, at EZ Tankless’ discretion. If a component or product returned to EZ Tankless is found to be free of defects in material or workmanship, or damaged by improper installation or during return shipping, the warranty claim for product, parts and labor may be denied.

2.0 WHAT'S INCLUDED?



1 x EZ Tankless Water Heater

3 x 1/2" NPT Bushings



1 x Horizontal Direct Vent Pipe





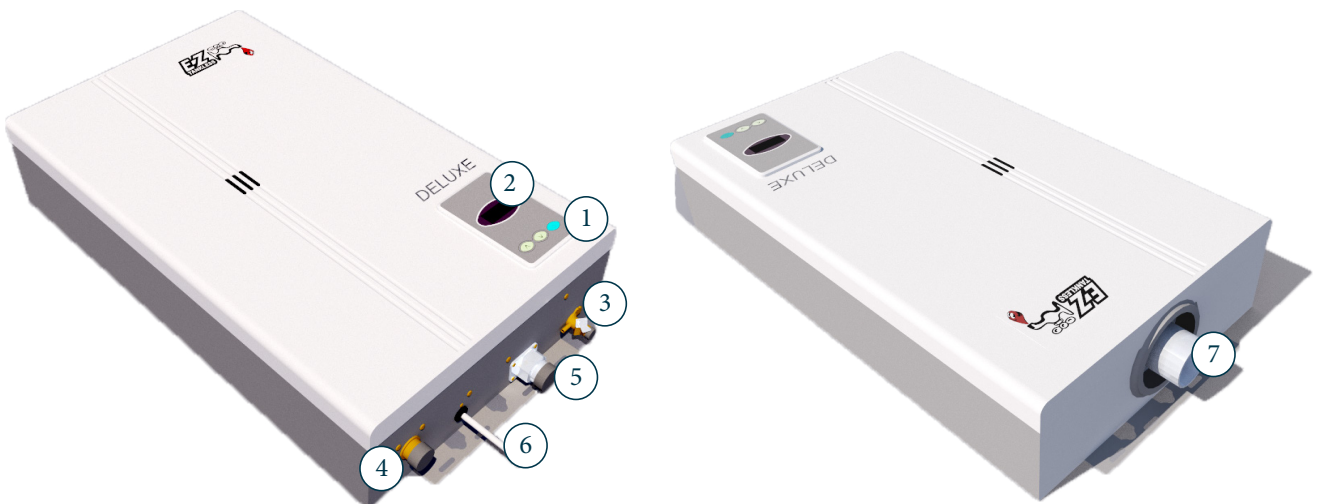
⚠NOTICE

The 3x supplied 1/2" NPT Fittings MUST be used with the GAS and WATER CONNECTIONS for all installation types.

2.1 FEATURES AND BENEFITS

- The EZ Deluxe features our advanced sealed double-chamber forced air intake - exhaust system
- Fully-automatic operation. Once installed, simply turn on the water spigot or shower—instantaneous hot water will arrive in a few moments. After the tap is turned off, the tankless heater will extinguish and cease operation
- Key touch LCD panel with easy to understand display
- High efficiency concentric venting system. Our direct vent system uses a dual chambered single pipe. Inlet air flowing through the outer chamber keeps the exposed pipe cool while outlet exhaust gases flow through the inner chamber
- Featuring a proportional control valve for both electricity and gas, the EZ Deluxe self regulates gas flow to maintain a constant water temperature
- Simple and aesthetically pleasing design features – the unobtrusive unit design fits seamlessly in a variety of locations
- Advance electronic ignition is safer, more convenient, and more energy efficient than a pilot light system
- High thermal efficiency (88%)
- Low water pressure ignition. The heater can function as low as 8PSI water pressure, making it suitable for use at high altitude or for installations using well water with older or less powerful pumping systems
- Dynamic gas and fan control allows for consistent temperatures in proportion to water flow

- | | |
|------------------------------|---------------|
| ① Touch Control Panel | ⑤ Gas Inlet |
| ② Temperature Display | ⑥ Power Cord |
| ③ Water Inlet + Flow Control | ⑦ Flue Outlet |
| ④ Water Outlet | |



3.0 SAFETY PRECAUTIONS

01. Always check water temperature by hand before entering shower or bath. The temperature may have been changed. Do not touch the unit cover or the flue outlet while in use.
02. Do not insert objects into the flue outlet. On colder days steam may discharge from the flue outlet. This condition is normal for high efficiency appliances.
03. The vent/air intake should be positioned away from flammable materials such as trees, shrubs, etc.

3.1 HOT WATER RISK

01. Hot water is dangerous, especially for the young and the elderly or the infirm. The EZ Tankless water heater allows you to precisely control the temperature of your hot water, ensuring safe water temperature. Water temperature over 125°F can cause severe burns instantly or death from scalding.
02. Hot water can cause first degree burns with exposure for as little as:
3 Seconds at 140°F
20 Seconds at 130°F
8 Minutes at 120°F
03. Test the temperature of the water with your elbow to ensure adequate temperature before placing a child in the bath or shower.
04. Do not leave children or an infirm person in the bath unsupervised.

3.2 SCALDS-FIRST AID GUIDANCE

01. Remove clothing - remove all wet clothing, quickly, as wet clothing retains the heat.
02. Apply cold water for 30 minutes - immediately submerge the burnt area in cold water for 30 minutes to reduce the heat in the skin, preventing deeper burning. Never use butter, oils, or ointment to cover the burn, as they may retain the heat.
03. Keep the individual warm - place a blanket around the affected individual.
04. Seek medical advice - call your medical advice hotline and describe the scalding properties, follow their directions to provide further treatment if necessary.

3.3 PROFESSIONAL INSTALL

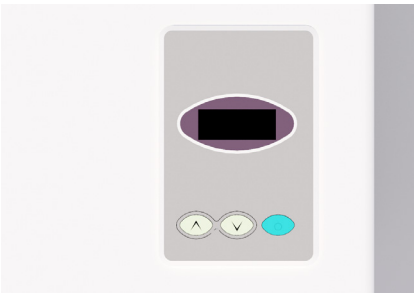
01. EZ Tankless recommends installation and service performed by qualified installer service agency or the gas supplier.
02. DO NOT use matches, candles or other sources of ignition when checking for gas leaks.

4.0 INITIAL SETUP AND OPERATION

Note: These steps should be followed for every new location or water source

1. ON/OFF SWITCH

Turn the systems power on. Display will light up with temp.



2. INITIAL TEMPERATUE SETTING: BETWEEN 40-50C



3. WATER SOURCE

Inlet water source should be at least 1 GPM filtered water at a minimum of 8PSI. Lower water flow or a lower water pressure may result in unit failing to ignite.

4. AFTER FIRST IGNITION ADJUSTMENTS

If you use mixing valves anywhere in the home we do recommend setting the heater with a lower water temp setting in combination with using more hot water in the mixture. This will guarantee that there is at least 1GPM running through the heater.

CELSIUS	FAHRENHEIT
35	95
36	97
37	99
38	100
39	102
40	104
41	106
42	108
43	109
44	111
45	113
46	115
47	117
48	118
49	120
50	122
51	124
52	126
53	127
54	129
55	131
56	133
57	135
58	136
59	138
60	140
61	142
62	144
63	145
64	147
65	149

4.1 SPECIAL NOTES - INSTALLATIONS

Be sure to tape all vent seams with included vent tape.

1. WELL WATER INSTALLATIONS

Due to the fluctuation in water pressure when using on a well water system, users may experience fluctuations in water temperature. Fluctuations can be rectified with use of a water pressure regulator. When using a well system with a pump switch set to 40-60PSI, it is best to set your water pressure regulator at 45PSI. Alternatively, if using a pump switch set to 30-50PSI, it is recommended to set your water pressure regulator at 35PSI.

2. BASEMENT INSTALLATIONS IN COLD WEATHER CLIMATES

The EZ Deluxe does not come provided with freeze protection. If exposed to freezing temperatures, the water in the heat exchanger can freeze and can damage the pipework within the heat exchanger. When performing a basement wall installation, it is recommended to install on a sub-frame (e.g 2x4) to create a air buffer between the wall and the back of the unit. This is to reduce risk of freezing through direct contact with basement walls. Typically basement walls are poorly insulated & thus surface temperatures can be much colder than the ambient room air.

3. MIXING VALVES

Modern mixing valves use a thermostatic temperature valve to control hot and cold water to faucets, showerheads, and tub fixtures. These devices can often cause an issue when used in conjunction with a tankless water heater set at a high temperature. When water temp is set above 110-120F, these valves will add cold water to adjust the temperature to keep from scalding. An unwanted effect of this is that the hot water flow may drop below required levels to keep the heater running. There are a number of recommendations to reduce the risk:

- a. Lower the water temperature setting on the water heater. Suggested settings of approx. 42C are ideal in many scenarios.
- b. Adjust the temperature setting on the mixing valve. (See manual for each individual fixture.)
- c. Replace showerhead with a high flow rate showerhead. It is common for a mixing valve fixture used in conjunction with a water saving showerhead to cause ignition issues with most tankless water heaters. Be sure to use a showerhead with at least a 2GPM flow rate in conjunction with a mixing valve fixture to limit issues.

4. POWER SUPPLY CONNECTION

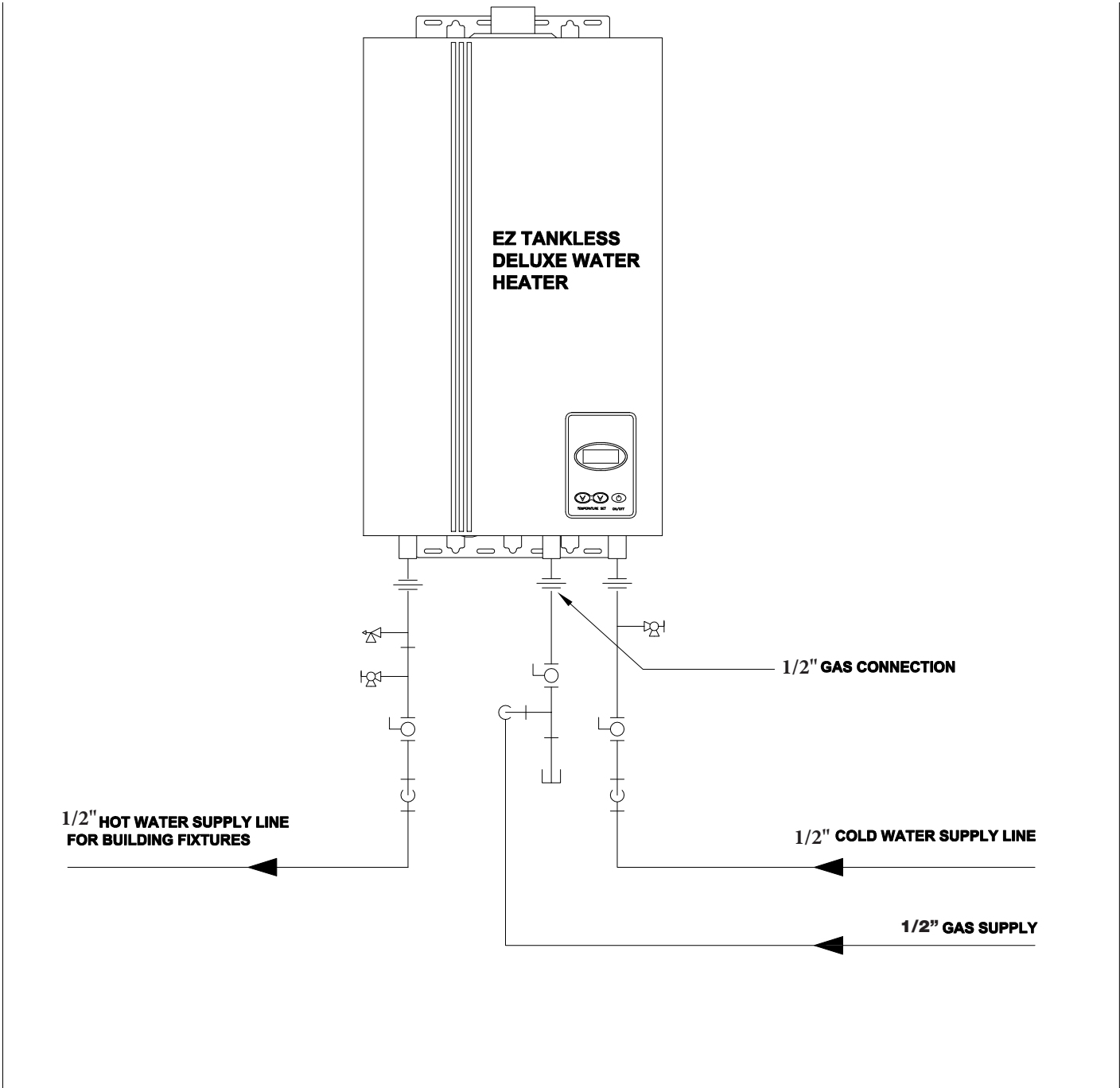
The EZ Deluxe uses many sensors that are based on resistors. It is important to protect the electronics of the EZ Deluxe system by plugging the units power cord into a surge protector. EZ Tankless recommends the wall outlet used is above all water connections.

5. CARBON MONOXIDE DETECTOR

A carbon monoxide detector should be located in the same room as the installation.

6. GAS LEAK TEST

Use a soapy water solution to test for leaks at all the connections and fittings. If bubbles are seen, it indicates a gas leak that must be corrected.



KEY			
	1/2" Ball Valve		Pressure Relief Valve
	1/2" Union		Boiler Drain Valve
	Ball Valve		
	Union		

This drawing is not an engineered drawing. It is intended for use only as a guide and does not act as replacement for professionally engineered installation drawings. This drawing is not intended to portray a complete installation syssem. The project engineer and/or installation contractor should determine the necessary components for configuration of the system being installed. This drawing does not imply compliance with local building code requirements. It is the responsibility of the project engineer and/or contractor to ensure that the installation is fully in accordance with the applicable building code through the authority having jurisdiction. Obtain approval with local building code officials prior to installation.

EZ TANKLESS WATER HEATERS

EZ-Deluxe: Domestic Hot Water - Standard Installation Schematic

5.0 RECOMMENDED EZ DELUXE MAINTENANCE

1. CHECK THE GAS HOSE AND REGULATOR FOR ANY DEFECTS

Propane regulators, especially single stage regulators, defect at a high rate predominantly due to age. Most single stage regulators will eventually allow a higher pressure than the required 11"WC by the EZ Deluxe. When this happens the unit will not ignite. This is the most common fault that causes ignition failure.

2. CHECK THE EXHAUST VENT FOR BLOCKAGE REGULARLY

Debris, animals, or insects may enter the exhaust vent at anytime. Be sure to regularly check the exhaust vent for any blockage. A blockage of the exhaust vent will cause inconsistent water temperatures as well as potential damage to internal components.

3. CLEAN INLET WATER FILTER SCREEN REGULARLY

Located just inside of the water inlet fitting on the bottom of the EZ Deluxe is a filter screen. This screen is used to keep sediment and small debris from entering the heat exchanger. Be sure to regularly check this screen for any debris that it may have caught. Remove the screen from the inlet using a small pick or screwdriver, blow away or rinse away any debris that may have accumulated and reinstall the filter screen into the water inlet before next use.

4. FLUSH UNIT ONCE A YEAR

With the heating of water through a heat exchanger comes the build up of minerals over time throughout the water heater parts and components. It is recommended to flush your tankless water heater with half cut distilled white vinegar/water at least once per year when used on a regular basis, to ensure continued use and to avoid parts damage.

5. ALWAYS KEEP COVER OF UNIT CLEAN

The cover of your water heater will become hot during use. It is not recommended to place any stickers, magnets, or other decorative material on the cover of the EZ Deluxe. Be sure to wipe away any dirt or debris that may be on the cover before each use.

6.0 TROUBLESHOOTING

Q1. WHEN THE HOT WATER TAP IS OPENED, AND THE EZ DELUXE IS NOT RESPONDING.

A. If you are running water through the system, but do not see a showerhead image on the display, the heater is failing to sense the water flow. This will require one of the following to resolve the issue:

1. Flush the unit. Flushing the unit with Distilled White Vinegar will help to clean the magnetic turbine located inside of the flow sensor housing.
2. Disassemble and clean the flow sensor housing by hand. Please call our tech support department for access to our tech support videos (Note: Tech support videos are intended for advanced technicians only).
3. Replace the flow sensor housing. If after cleaning the flow sensor housing by hand the system still fails to sense water flow, the flow sensor housing may need to be replaced.

Q2. THE DISPLAY SHOWS AN 'E0'/'01' ERROR CODE WHEN TRYING TO IGNITE.

A. This is an error on the inlet water temperature probe. We recommend trying to clean it before replacing it. It is located on the flow sensor housing located on the bottom right of the unit where the water first enters. It will have a set of two black wires coming off of it and held in by one or two screws. Turn the water off to the unit then remove the two screws holding the temperature probe in place. Once removed, clean the probe with white vinegar and reinstall it. If the unit continues to show an E0 after cleaning the probe then it will need to be replaced.

Q3. THE DISPLAY SHOWS AN 'E1'/'10'/'11'/'12' ERROR CODE WHEN TRYING TO IGNITE.

A. Does the unit show an 'E1' error code every time the unit tries to ignite or sporadically?

1. Should the unit be showing the 'E1' error code only occasionally, we recommend flushing the system with distilled white vinegar.
2. Should the unit be showing 'E1' every single time it tries to fire:
 - A. Check to make sure that only EZ Tankless vent is being used. Be sure that the vent is installed in a horizontal manner, through an exterior wall and vented outdoors. Check that there is nothing blocking the proper flow of air through the intake or exhaust.
 - B. After verifying proper flow of air through the vent system, remove the front cover of the unit (Be careful as the display should remain attached for this test.) Once the front cover is removed, while viewing into the combustion chamber windows, open a water source to allow the heater to try to fire. If the unit fires on the right side of the burners, but only the right side before going to the 'E1' error code, your unit will need a motherboard replacement.
3. If your unit is showing 'E1' error code and the above steps have been taken to address the issue without resolution, please call EZ Tankless Tech Support for further assistance.

Q4. THE DISPLAY SHOWS AN 'E2'/'70' ERROR CODE WHEN TRYING TO IGNITE. A. Please call EZ Tankless support for assistance.

Q5. THE DISPLAY SHOWS AN 'E4'/'32'/'40' ERROR CODE WHEN TRYING TO IGNITE.

A. This is an error in the fan sensor, fan motor, or motherboard. Remove the front cover of the EZ Deluxe, keeping the display wires attached. Locate the fan in the bottom left corner of the unit. Run a hot water tap. Watch the fan blades and observe how they are spinning. If the fan increases to high speed when the unit senses water flow, but the unit shows an 'E4' error code, the fan sensor is faulty and requires replacement. If the fan spins very slowly and the unit goes to E4, the motherboard needs replaced. If the fan does not spin at all, the fan motor is faulty and requires replacement.

Q6. THE DISPLAY SHOWS AN 'E5'/'13' ERROR CODE WHEN TRYING TO IGNITE.

A. This is an error of the limit switch or limit switch wire. Remove the front cover of the EZ Deluxe, keeping the display wires attached. Locate the limit switch in the top left corner. Remove the wires from the limit switch. Complete the circuit between the two wires using a piece of wire, or by sliding the two tabs together (A video of this test can be found on our web site). Run water through a hot water tap connected to your EZ Tankless Deluxe unit kit. If the unit fires and runs while the wires are "jumped", a new limit switch is required. If, after jumping the limit switch wires, the unit still returns an 'E5' error code, the thermal fuse in the wire may have been blown.

1. To Diagnose: Follow the wire back to the motherboard. Remove the wire from the motherboard, and using a flathead screwdriver, complete the circuit between the two prongs inside of the socket from which the limit switch wire had been removed. If the unit runs as it should, a new limit switch is required.

Q7. THE DISPLAY SHOWS AN 'E6'/'60' ERROR CODE WHEN TRYING TO IGNITE.

A. This is an error on the outlet water temperature probe. We recommend trying to clean it before replacing it. It is located to the left of the fan on the outgoing water line. It will have a set of two white wires coming off of it and held in by one bolt. Turn the water off to the unit then remove the bolt holding the temperature probe in place. Once removed, clean the probe with white vinegar and reinstall it. If the unit continues to show an 'E6' after cleaning the probe then it will need to be replaced.

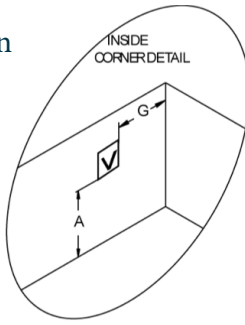
Q8. LOW WATER FLOW

A. Check that flow control lever is in max position.

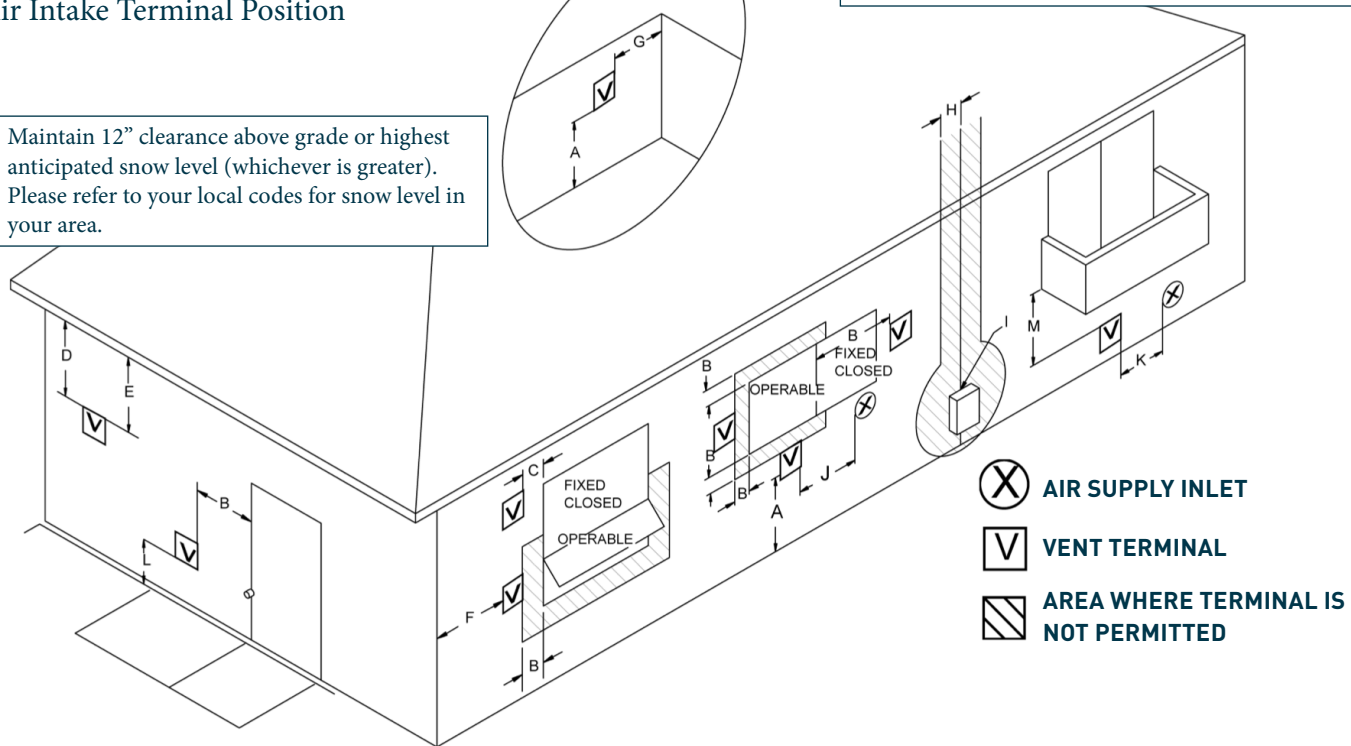
VENT TERMINAL CLEARANCES

Table 2 Recommended Vent/Combustion Air Intake Terminal Position

Maintain 12" clearance above grade or highest anticipated snow level (whichever is greater). Please refer to your local codes for snow level in your area.



Terminals should be positioned to avoid products of combustion entering openings into buildings or other vents.



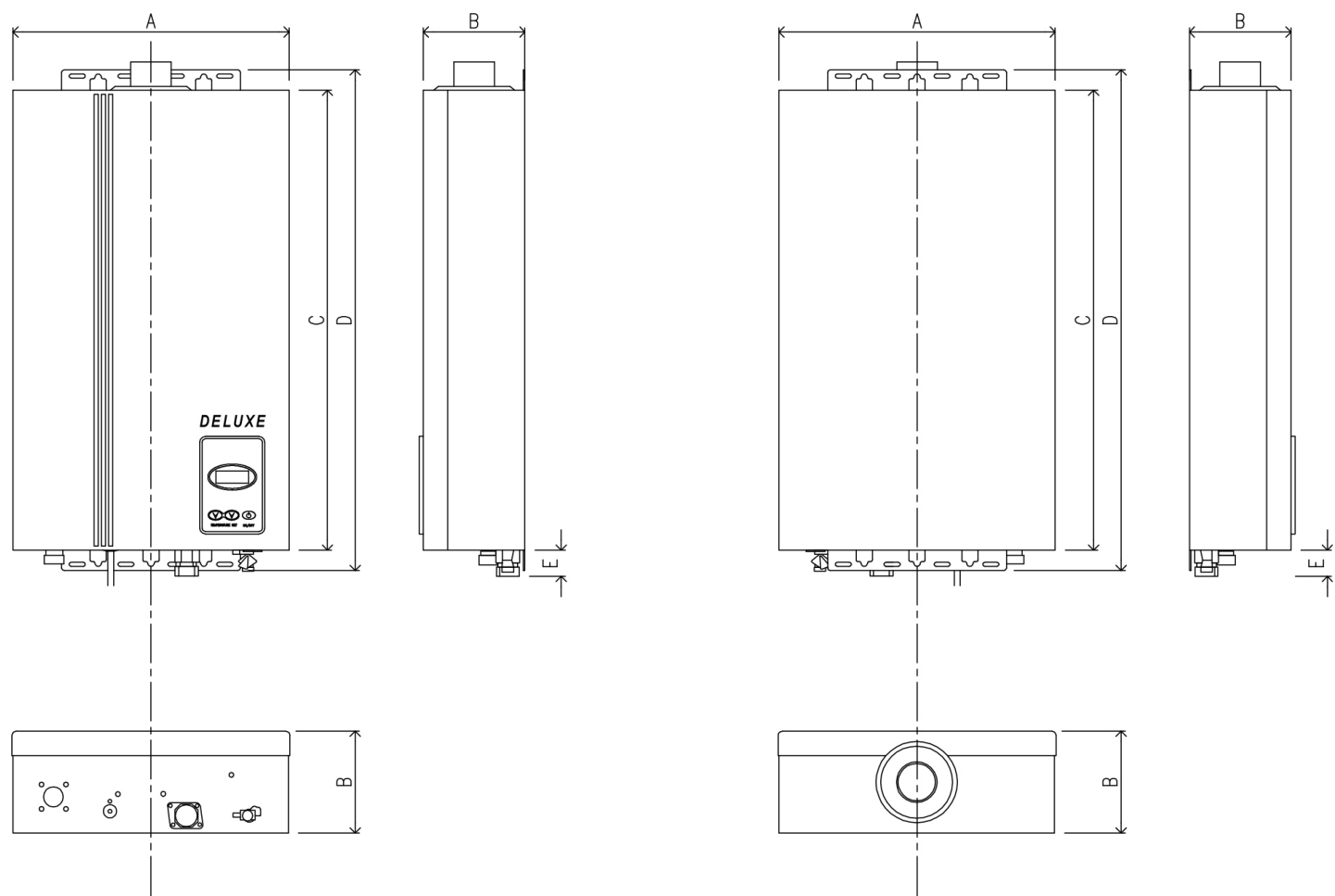
REF	DESCRIPTION	CANADIAN INSTALLATIONS	USA INSTALLATIONS
A	Clearance above grade, veranda, porch, deck, or balcony	12 inches (30 cm)	12 inches (30 cm)
B	Clearance to window or door that may be opened	36 inches (91 cm)	12 inches (30 cm)
C	Clearance to permanently closed window	*	*
D	Vertical clearance to ventilated soffit, located above the terminal within a horizontal distance of 2 feet (61 cm) from the center line of the terminal	*	*
E	Clearance to unventilated soffit	*	*
F	Clearance to outside corner	*	*
G	Clearance to inside corner	*	*
H	Clearance to each side of center line extended above meter/regulator assembly	3 feet (91 cm) within a height 15 feet (4.5 m) above the meter/regulator assembly	*
I	Clearance to service regulator vent outlet	36 inches (91 cm)	*
J	Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance	36 inches (91 cm)	12 inches (30 cm)
K	Clearance to a mechanical air supply inlet	6 feet (1.83 m)	3 feet (91 cm) above if within 10 feet (3 m) horizontally
L	Clearance above paved sidewalk or paved driveway located on public property	7 feet (2.13 m) [1]	*
M	Clearance under veranda, porch, deck, or balcony	12 inches (30 cm) [2]	*

[1] A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.

[2] Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

* For clearances not specified in ANSI Z223.1/NFPA 54, clearances are in accordance with local installation codes and the requirements of the gas supplier. Clearance to opposite wall is 24 inches (60 cm).

7.0 INFORMATIONAL DRAWINGS



DIM	DESCRIPTION	
A	Width	13-7/8" or 351mm
B	Depth	4-7/8" or 125mm
C	Height - Unit	22-7/8" or 566mm
D	Height - Including Brackets	24-5/16" or 618mm
E ₁	Hot Water Outlet (from wall)	3/4" of 20mm
E ₂		1-3/4" or 42mm
E ₃		2-1/4" or 52mm

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