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Steambath Control — Model: EC-150

Product Information – EC-150

1 year parts warranty

Preset time and programmable temperature.

Digital display of ambient and set temperature.

Icons for system status - heating and set temp.

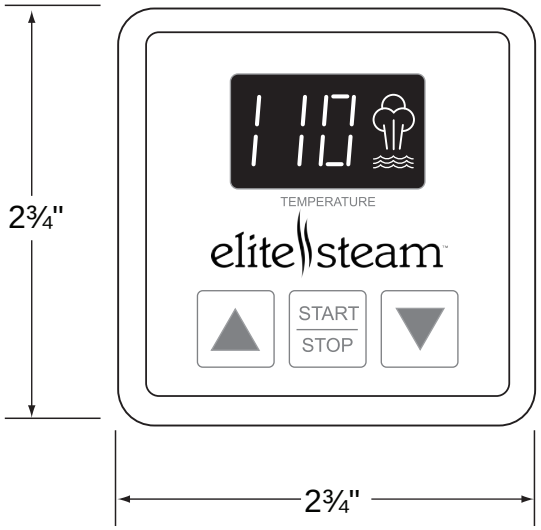
Dimensions: *2¾" x 2¾"*

Package Includes: *Control, 35-Ft. multi-conductor cable, 6-Pin coupler, 3199 series steamhead, strain relief clamp, silicone sealant, installation and operating instructions.*

Required Electrical Service: *Low-voltage connection from ES generator via multi-conductor cable (supplied).*

Product No. - Finishes:
EC-150-PC *- Polished Chrome*
EC-150-PN *- Polished Nickel*
EC-150-BN *- Brushed Nickel*

EC-150



Notes

Installation Notes

Surface Mount - 1½" hole required.

Mounts inside steam room.

EliteSteam recommends that the multi-conductor cable be run through ¾" conduit to protect cable from damage and to facilitate easy replacement.

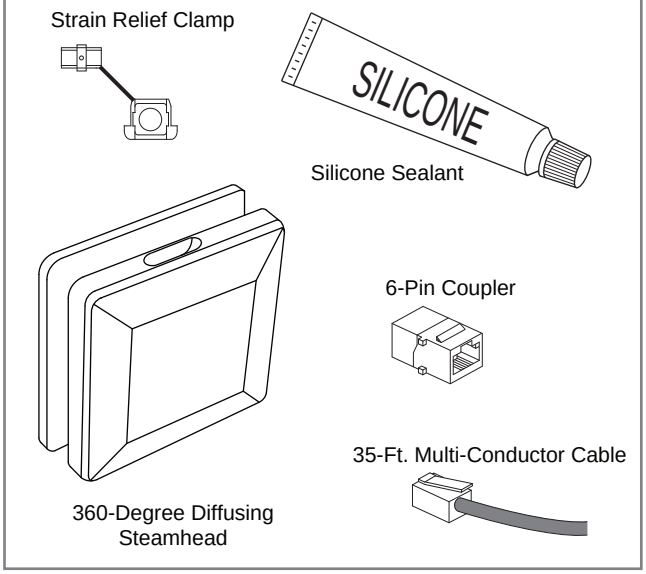
Mount control near seating area and not above steamhead.

Rough-in Notes

Control should be mounted 48" above the floor.

Steamhead to be mounted 12" to 18" above the finished floor or 6" above the rim of the tub and as far from the seating area as possible.

EC-150



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Steambath Generators — *Models: ES-12 and ES-15*

Important: *Locate Publication No. 199ES "Steam Bath Important Safety Instructions". This publication includes a Warning label which the Installer must secure to the wall near the entrance to the steam room in a highly visible location. This label and its additional safety information are packaged with the generator in the envelope containing the installation instructions. If it is lost or missing contact EliteSteam (800-555-6890) for a replacement Publication No. 199ES. This publication along with all documents must be left with the owner.*

EliteSteam "ES" Generator operates with one or two controls appropriately located inside and/or outside the steamroom. It's small enough in size to be tucked away using very little space in a vanity, closet, basement, or an insulated attic, but large enough to provide steam for most residential baths.

EliteSteam "ES" Steambath Generator comes factory assembled, carefully wired and tested.

1. Pre-Installation

a) Proper electrical supply (240 Volt): See rating label on Steam Generator and Chart on back page. Determine proper size of wire, voltage, amperage, and phase for the Steam Generator. 90°C copper wire is required for generator connection.

b) Dedicated overcurrent protection device, such as an in-line fuse/circuit breaker required: Fuse/circuit breaker to be installed must be sized in accordance with chart on back page. Do NOT install a GFI (Ground Fault Interrupter) to this equipment (per article 210-8 in the National Electric Code).

c) Route power supply cable to the location where the Steam Generator will be installed (before walls are closed).

2. Electrical Rough-in

a) At this time read through the installation instructions for the selected control(s).

b) Route appropriate power cable to the location the Steam Generator will be installed. If receptacle is desired, mount the box for the receptacle near the location of the Steam Generator.

NOTE: *The plug and receptacle require a rating of no less than 250V and proper amperage. Refer to chart on page 4 for amperage rating.*

After the walls are complete, the Steam Generator and Control can be wired.

3. Steam Generator Electrical Installation

WARNING: *All power to the Steam Generator must be turned off.*

a) Remove the four screws holding the electrical access cover and remove cover.

b) Locate the supply line knockout. Mount proper strain relief into knockout hole (see Figure 2: Internal Electrical Connections).

c) Strip back power cable's outer insulation jacket eight inches and insert into Steam Generator. Strip back insulation ½" from the three (3) incoming wires (two power and one ground).

d) Connect incoming ground wire to fuse block and ground terminal.

CAUTION: *Be sure the ground wire does not come in contact with a live electrical part.*

e) Connect incoming power to terminals labeled "L1" and "L2" (see Figure 2: Internal Electrical Connections).

f) The Steam Generator is ready for operation once the installation of the controls is completed (refer to separate Installation and Operating Instructions).

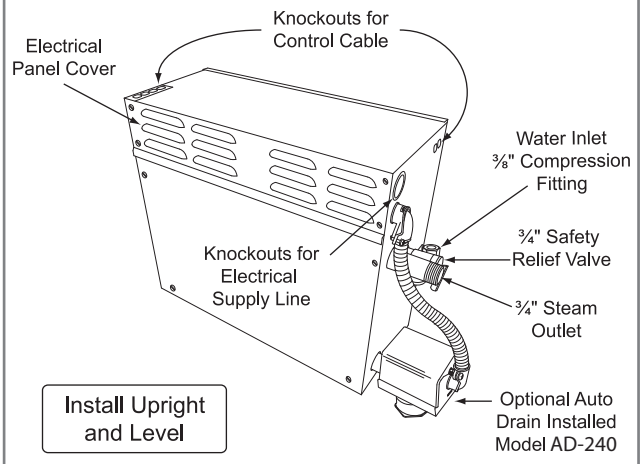
4. Optional Auto Drain Valve Connection

a) Open knockout for Auto Drain Valve conduit connection.

b) Route flexible conduit from valve to knockout and secure.

c) Connect two wires from valve to the J6 drain connection on the circuit board. (See wiring diagram)

Figure 1 - Steam Generator



IMPORTANT: *The warranty of this product is voided if it is used in a commercial application or for anything other than a residential steambath installation. All electrical connections must be performed by a licensed electrician in accordance with Local and National Electric Codes. This product is not intended for use with Home Automation systems.*

Checklist

Models: ES-12 and ES-15

Before starting, insure that the conditions of the following checklist have been met:

- ☐ *The proper size Steam Generator has been selected by using the sizing page in "The Generator Sizing Guide"*

  CAUTION: *An improperly sized Steam Generator will NOT produce the amount of steam necessary to reach selected temperature.*

- ☐ *The proper voltage Steam Generator has been selected (i.e., 240V). A 240V Generator operating on 208V will result in a 25% loss of power.*
- ☐ *The Steam Generator is installed in an upright position.*
- ☐ *The proper sized 90°C copper wire and circuit breaker have been used.*
- ☐ *The circuit breaker is NOT a GFI (Ground Fault Interrupter) type.*
- ☐ *The Steam Generator is properly grounded.*
- ☐ *The circuit breaker or disconnect switch is on.*
- ☐ *Water supply is open to the Steam Generator.*

Figure 2 - Internal Electrical Connections

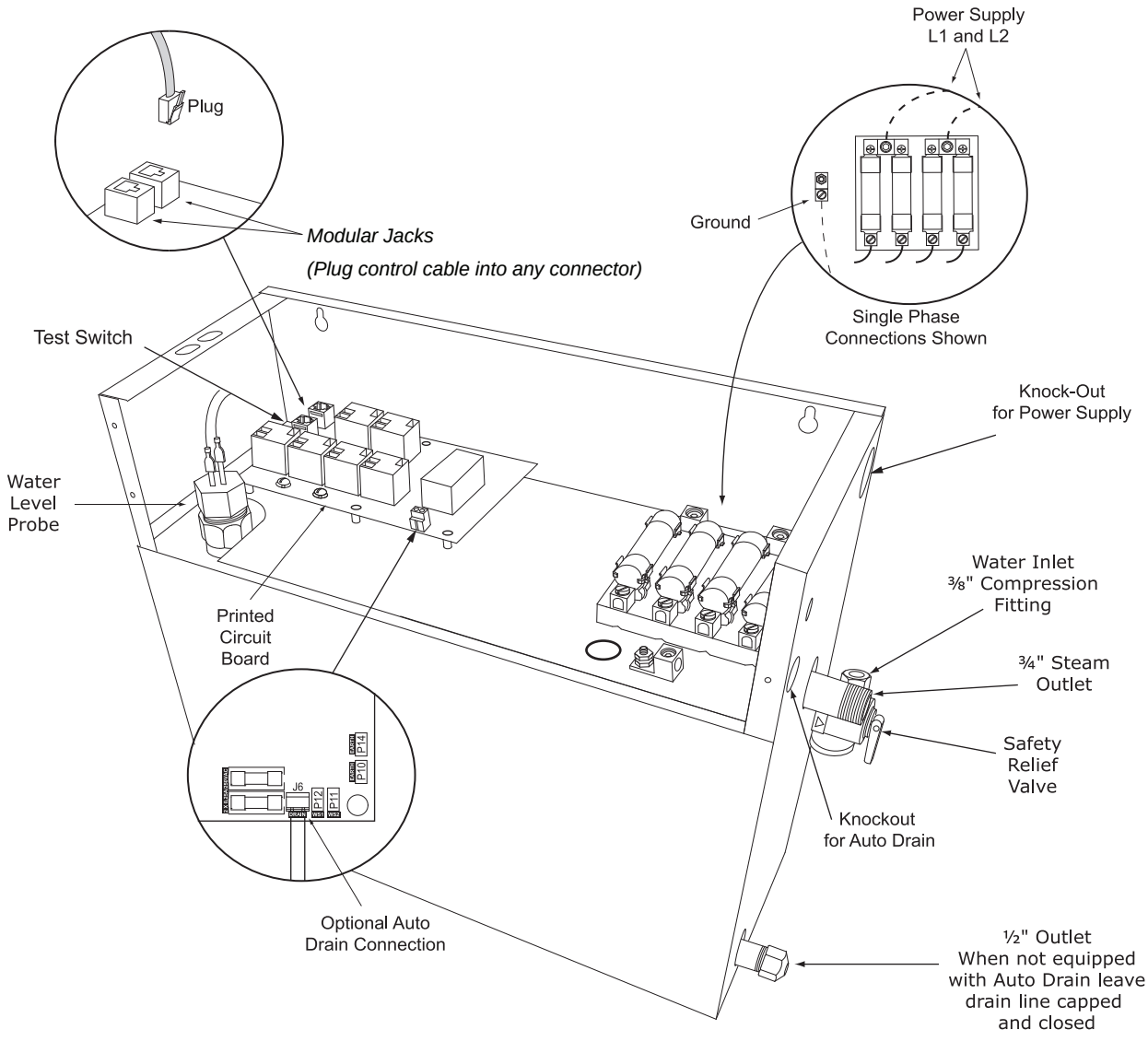
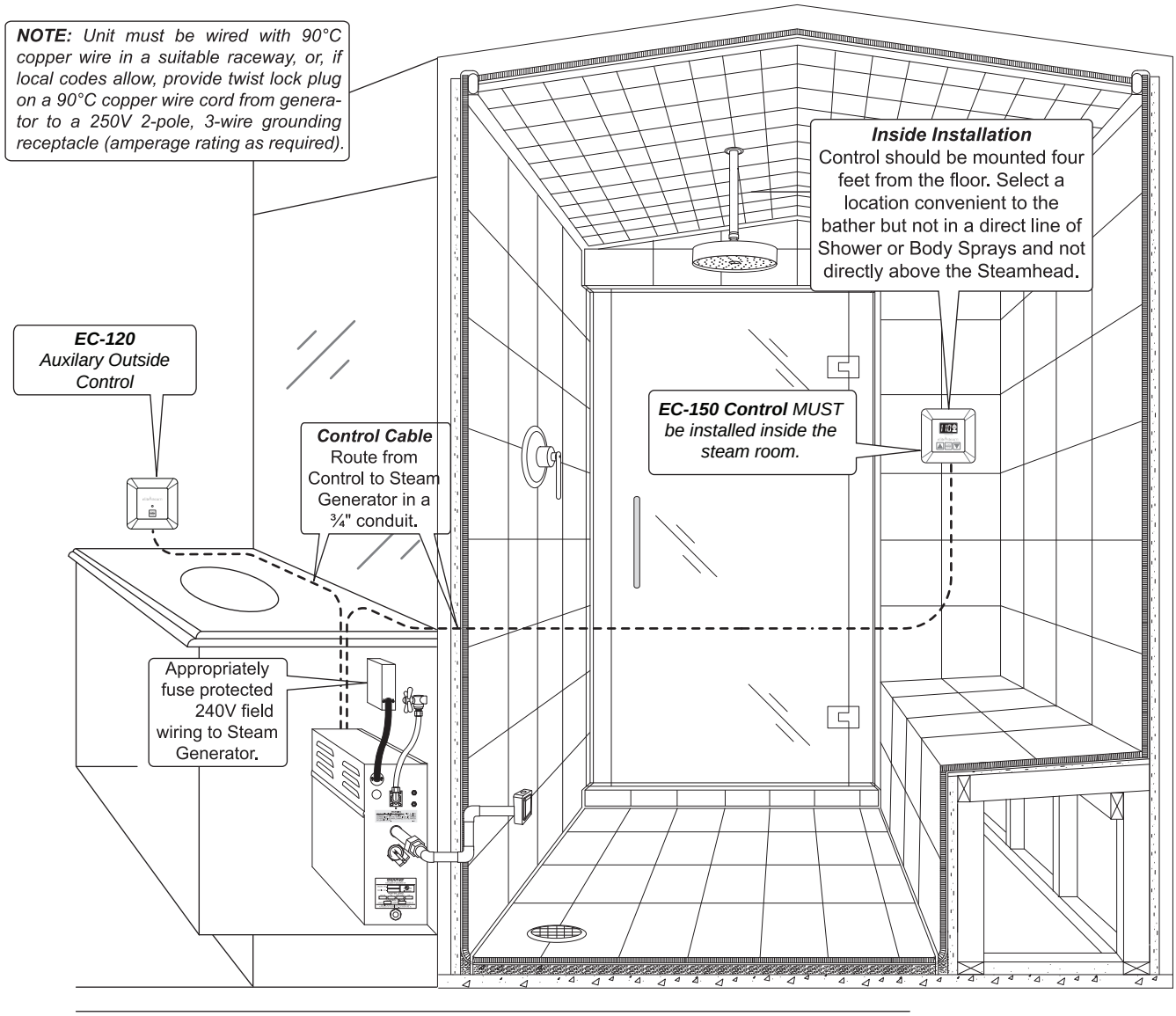


Figure 3 - Typical Installation

Models: ES-12 and ES-15

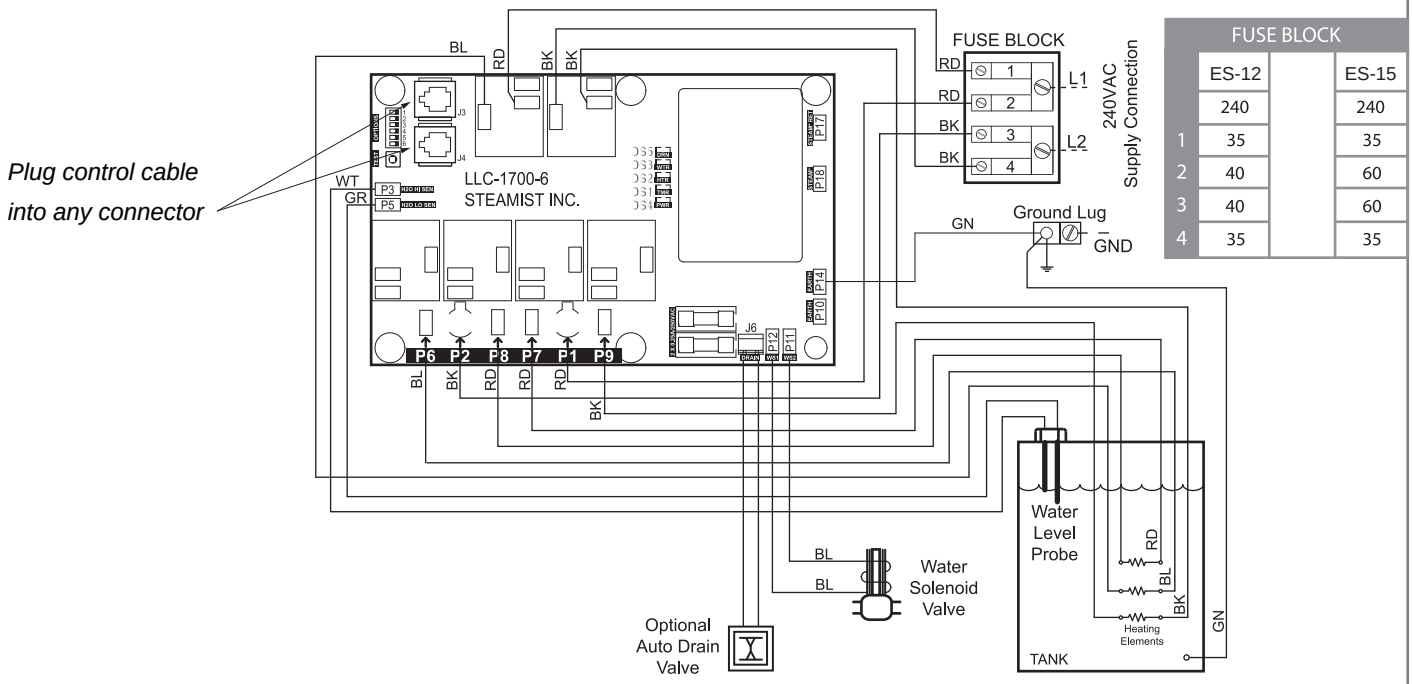
The Electrical Instructions must be given to the homeowner for future use.



IMPORTANT: *Run the Control Cable through a ¾" conduit. Remove protective cap when making the final connection to Control.*

ES-12/15 Single Phase Schematic

Models: ES-12 and ES-15



FUSE BLOCK			
	ES-12		ES-15
	240		240
1	35		35
2	40		60
3	40		60
4	35		35

LED Chart		
DS1	GRN	TIMER ON
DS2	YEL	HEATER ON
DS3	AMB	WATER FILL ON
DS4	RED	POWER ON
DS5	AMB	DRAIN ON

Specification Chart

Model No.	*Max. Adjusted Cu. Ft. For Area Up To*	*KW*	*Volt*	*Phase*	*Amps*	*Breaker Size*	**Minimum Wire Size*
ES-12	550	12	240	1	50	60	4
ES-15	675	15	240	1	63	80	3

**** 90ºC Copper wire is required for steam generator connection. Minimum wire size shown. Installation shall be in accordance with NEC and local Electrical Codes.***

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Steambath Generators — Models: ES-12 and ES-15

Important: *Locate Publication No. 199ES "Steam Bath Important Safety Instructions". This publication includes a Warning label which the Installer must secure to the wall near the entrance to the steam room in a highly visible location. This label and its additional safety information are packaged with the generator in the envelope containing the installation instructions. If it is lost or missing contact EliteSteam (800-555-6890) for a replacement Publication No. 199ES. This publication along with all documents must be left with the owner.*

The EliteSteam "ES" Generator comes factory assembled, carefully wired and tested.

WARNING: *All electrical power should be turned OFF when working with Steam Generator.*

IMPORTANT: *The Plumbing Installation must conform to local and national codes.*

1. Pre-Installation

a) Be sure that the proper size Steam Generator has been selected by using the sizing page in the "The Generator Sizing Guide".

CAUTION: *An improperly sized Steam Generator may NOT produce the amount of steam necessary to reach selected temperature.*

b) For optimum performance, the Steam Generator should be located as close as possible to the Steamroom, Shower or tub enclosure using a ¾" copper pipe (1/2" copper pipe is also acceptable, but not preferred). If the steam pipe exceeds ten feet, it should be insulated using appropriate pipe insulation rated for a minimum of 212° F. Maximum steam pipe distance should not exceed a total of fifty linear feet. Refer to Installation Suggestions on page 4.

CAUTION: *Do NOT install near flammable material such as paints, thinners, gasoline, etc.*

CAUTION: *Steam generators must NOT be installed outdoors, in moist, humid areas, in areas prone to freezing, or extreme heat such as an unventilated attic. To do so will void the warranty.*

c) The steam line and safety valve reach a temperature of 212°F during operation and should be appropriately protected to prevent personal injury by accidental contact.

2. Plumbing Rough-in

Plumbing rough-in is required for the water supply and steam line; this should be completed before the walls are closed. For operation, the "ES" Steam Generator requires a ⅜" O.D. copper tubing to the fitting on the generator for water inlet and a ¾" copper or brass pipe for steam outlet.

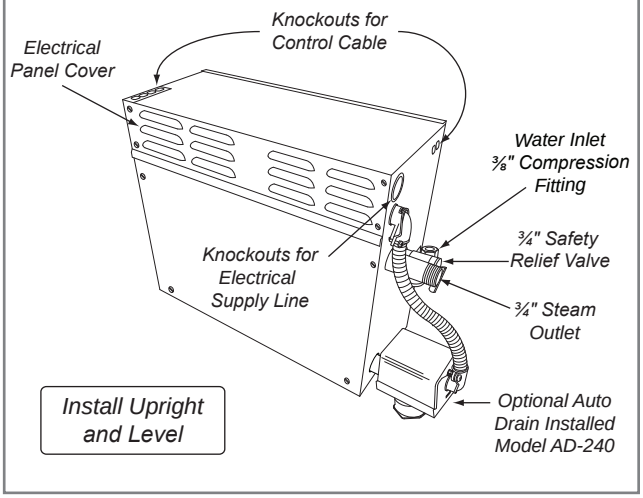
NOTE: *Safety Valve should be connected using a union to a minimum ¾" indirect waste or as required by local plumbing codes. In the unlikely event this valve should open, the discharge must be directed to prevent damage to the home. Do NOT connect the Safety Valve output to the steam line.*

a) ***Water Inlet -*** *Rough in a water line, 120 PSI max, to the hot or cold supply. A shut off valve with a 3/8" connection to the steam generator is to be provided at the generator location (see Figure 4 on page 3).*

b) ***Steam Outlet -*** *Rough in the steam line using a ¾" Brass pipe or Copper tube with sweated fittings only. Do NOT use plastic pipe or fittings. Do not use any push-fit, snap-fit or anything else that is not specifically rated for 212ºF steam. Do NOT use Black Iron or Galvanized pipe to avoid rust and discoloration to steam room. The steam head location should be 12" to 18" above the steam room floor or 6" above a rim of a bathtub and as far from the seating area and user control as possible.*

CAUTION: *No shutoff valve can be installed in the steam line. Do NOT create traps or valleys in this line which would trap condensation and block the flow of steam. The steam pipe should be pitched toward the Steam Generator allowing condensation to run back toward the Steam Generator (preferred), or toward the steamhead. If the steam generator is equipped with a drain valve, do NOT connect the drain pipe to the steam line.*

Figure 1- Steam Generator



IMPORTANT: *The warranty of this product is voided if it is used in a commercial application or for anything other than a residential steambath installation. This product is not intended for use with Home Automation systems.*

3. Steam Generator Installation

The Steam Generator should be mounted in a location convenient for hook-up and service by the plumber and electrician.

***CAUTION:** The Steam Generator is designed to be used ONLY in an upright and level position; to do otherwise would damage the unit and void the warranty.*

a) *The Steam Generator can be mounted to a wall or set on the floor. However, the unit must be secured. To secure the unit to a vertical wall, loosen the two screws holding the electrical access cover, remove cover (see Figure 1). Located inside the cabinet near the top left and right corners are mounting holes. Place top cover back and secure.*

b) *Connect the ⅜" water inlet to a shut off valve as described in Section 2.a. The valve must be kept in an open position during normal operation. In an area where water hammer is a problem install a water hammer arrestor in the line. Refer to Figure 2.*

***IMPORTANT:** Do NOT use a "saddle valve" or piercing type valve for water connection.*

c) *Connect the steam line from rough-in location described in Section 2 to the ¾" nipple on the Steam Generator using a union.*

Figure 2 - Plumbing Diagram

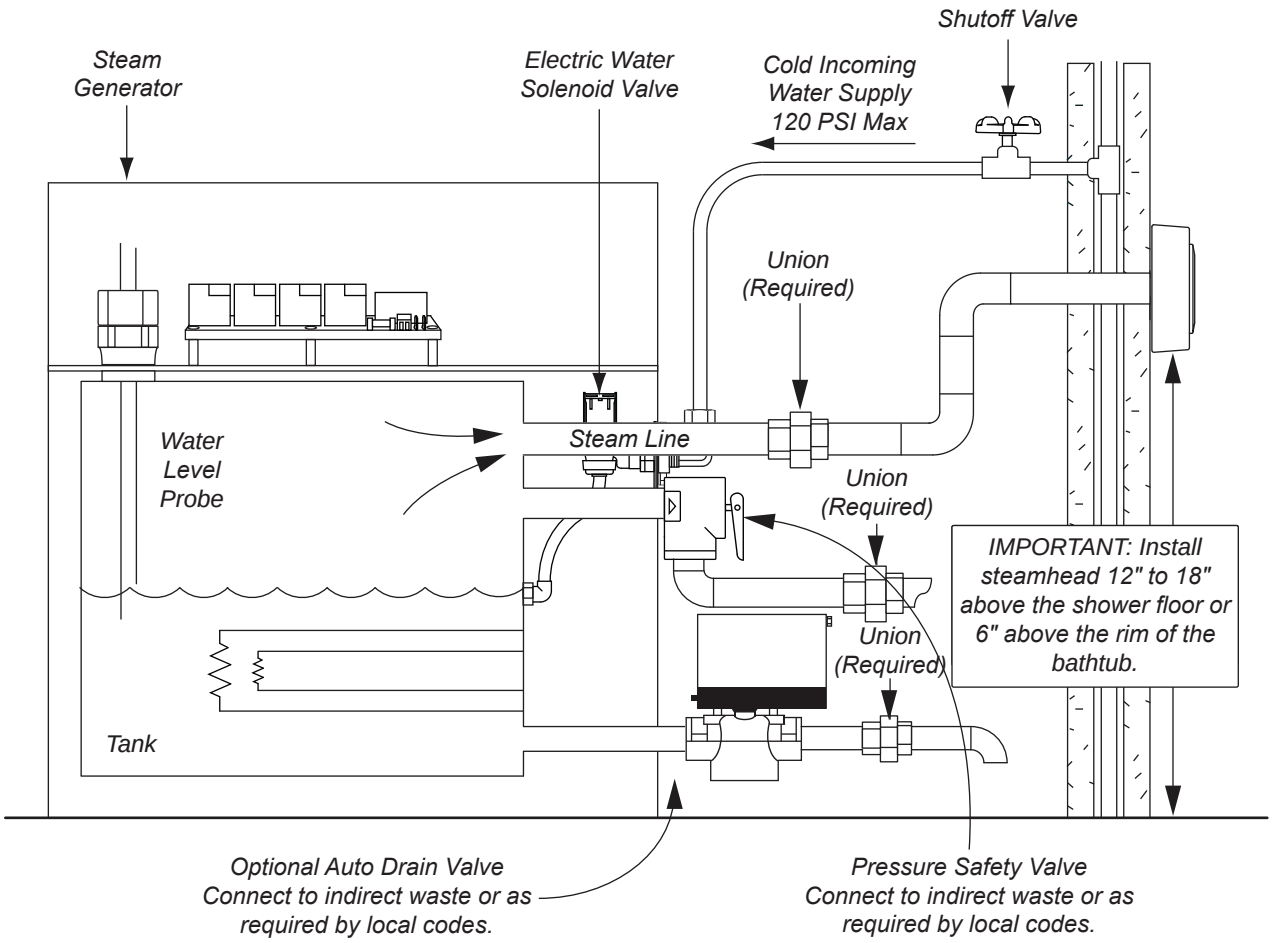
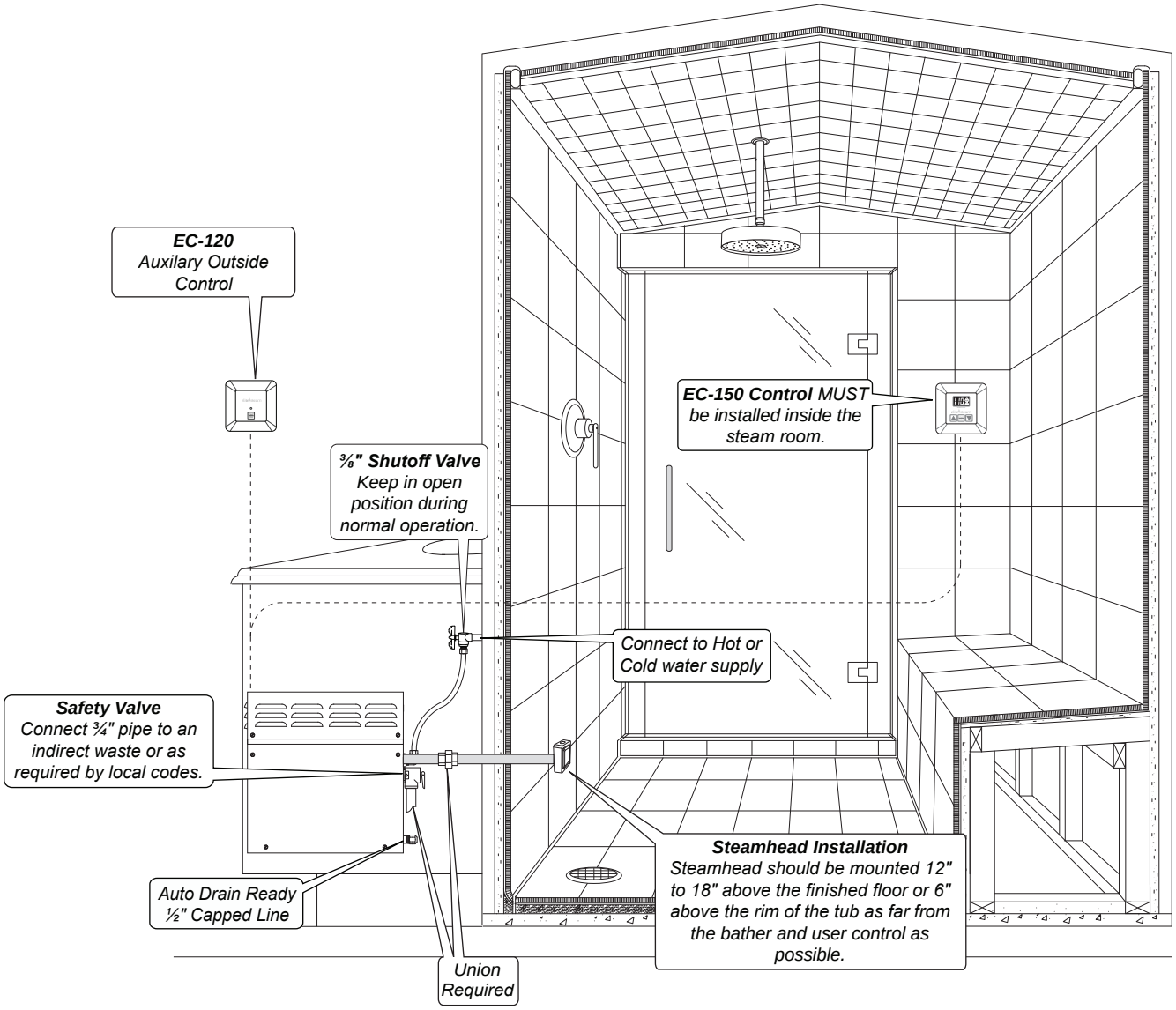


Figure 4 - Typical Installation — Models: ES-12 and ES-15

The Plumbing Instructions must be given to the homeowner for future use.



Steam Outlet Pipe - *Use a ¾" Copper or Brass pipe.*

CAUTION: *Do NOT install a shutoff valve on the steam outlet pipe. Do NOT create traps or valleys in this line which would prevent the flow of steam. The steam outlet pipe should be pitched toward the Steam Generator (preferred), allowing condensation to run back into the Steam Generator or toward the steamhead. If the steam pipe exceeds ten feet, use an appropriate pipe insulation rated for a minimum of 212°F.*

IMPORTANT: *Union MUST be used on Steam Line, Safety Relief Valve, and Drainline.*

Access Requirements

Models: ES-12 and ES-15

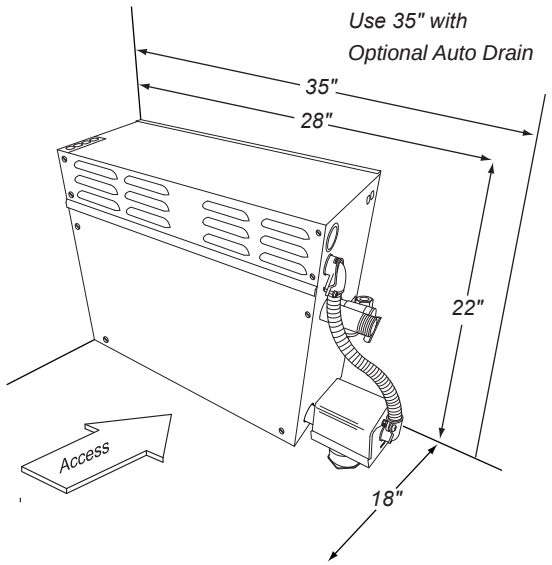
Select a location for mounting the Steam Generator that is accessible for installation and service. The access requirement indicates the minimum space for convenient access to Steam Generator.

***CAUTION:** All models must be installed INDOORS, in a DRY, NON-FREEZING location away from flammable materials such as: Gasoline, Paints, Thinners, Etc.*

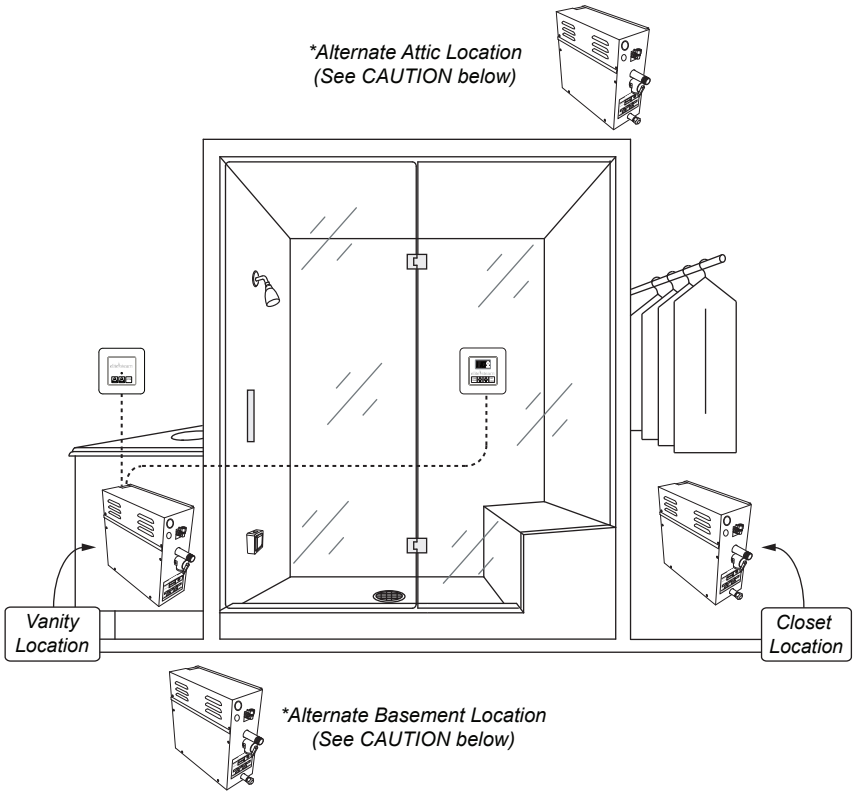
***NOTE:** This steam generator is NOT intended to be used for space heating purposes.*

***IMPORTANT:** Steam Generator must be installed upright and level. The serial number info should be visible and the Steam Generator should be accessible for service.*

Figure 5



Installation Suggestions



***CAUTION:** Steam generators must NOT be installed outdoors, in moist, humid areas, in areas prone to freezing, or extreme heat such as an unventilated attic. To do so will void the warranty.*