STEAMIST®

Steam Generator — Models: TSG & SMP 20, 24 and 30

Features

Limited Lifetime warranty - 2-year in home labor warranty where available

Selectable “Instamist” (TSG models only)

Proportional Steam

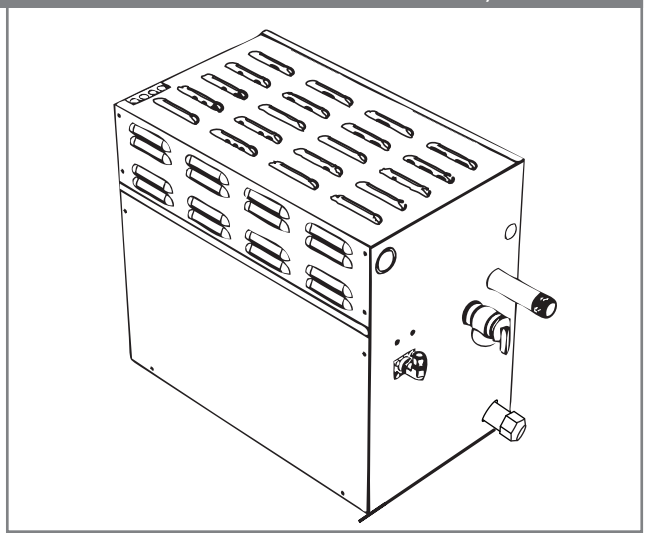
Steady Steam (TSG models only)

Microprocessor based diagnostics and LED indication

Stainless Steel Tank Construction

Intelligent control communication

UL/cUL (pending)



Steam Generator Specification Chart

Product Number	KW Rating	*Max. Cu. Ft. Range	Volts/Phase/ Max. Amps	Line Fuse	Dimensions L x W x H
TSG-20 or SMP-20 TSG-20-208 or SMP-20-208 TSG-20-208/3 or SMP-20-208/3	20	900	240/1/83 208/1/96 208/3/56	100 110 70	19" x 11 1/8" x 17"
TSG-24 or SMP-24 TSG-24-208 or SMP-24-208 TSG-24-208/3 or SMP-24-208/3	24	1100	240/1/100 208/1/115 208/3/67	125 150 80	19" x 11 1/8" x 17"
TSG-30 or SMP-30 TSG-30-208 or SMP-30-208 TSG-30-208/3 or SMP-30-208/3	30	1350	240/1/125 208/1/144 208/3/83	150 175 100	19" x 11 1/8" x 17"

* *Refer to sizing guidelines to accurately determine the proper size generator for the installation.*
90°C copper wire is required for generator connection. Installation shall be in accordance with NEC and local electrical codes.

Required Equipment

TSC Control

Required Electrical Service

Dedicated circuit required: See Specification Chart for proper electrical requirements

Product Information

Water Supply - ⅜" Compression Fitting, 120 PSI Max

Steam Outlet - ¾" Brass NPT male thread

Pressure Relief Valve - ¾" NPT female thread

Drain Outlet - Capped ½" Brass NPT male thread

Supplied with a 35’ control cable

Generator

Weight - 50 lbs.

Installation Notes

For optimum performance, the steam generator should be mounted as close as possible to the steam room. If needed, the steam pipe may be up to 50’ long.

Steam Generators should be accessible for service.

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

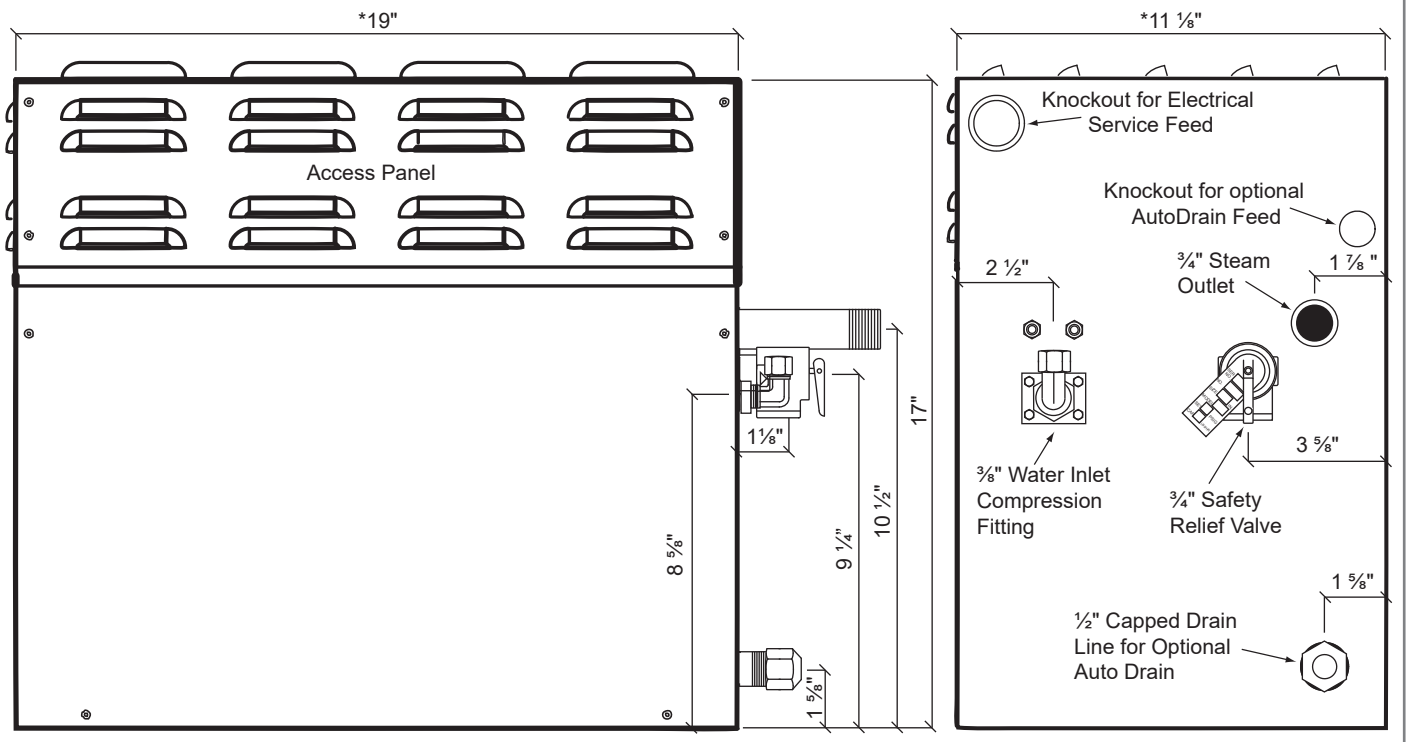
Steam generators must NOT be installed outdoors, in moist, humid areas, in areas prone to freezing, or extreme heat such as an unventilated attic. To do so will void the warranty.

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

Service Access

Minimum: 30" W x 24" D x 24" H (37" W with Auto Drain)

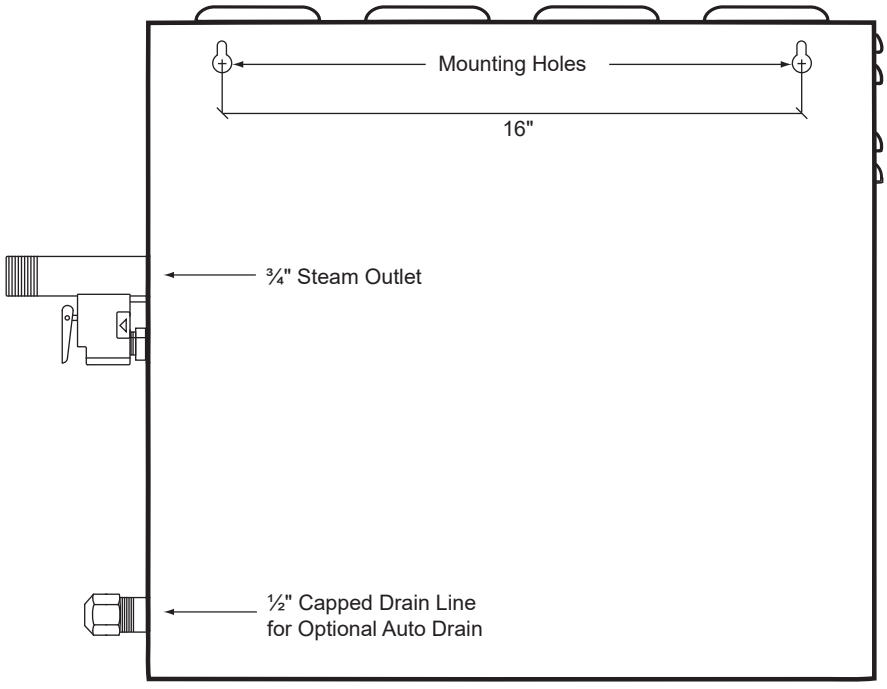
Dimensional Drawing — Models: TSG & SMP 20, 24 and 30



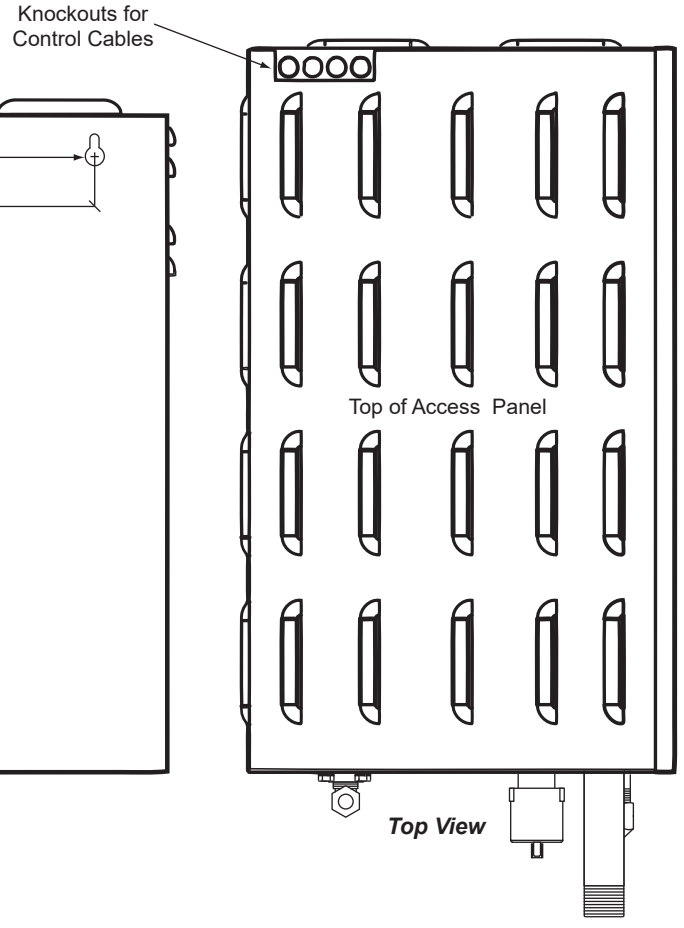
Front Access

Front Side View

** Add ¼" to the dimension for the louvers*



Back View



Top View

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Steambath Generators — Models: TSG & SMP 20, 24 and 30

Important: *Locate Publication No. 199 "Steam Bath Important Safety Instructions". This publication includes a Warning label that the contractor must install on 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 Steamist (201-933-0700) for a replacement Publication No. 199. This publication along with all documents must be left with the owner.*

NOTE: *A "TSC" series control is required to operate the "TSG" or "SMP" model steam generator.*

The Steamist "TSG" or "SMP" Generator operates with only "TSC" series controls mounted inside and an optional TSX or TSR remote control located outside the steamroom. It's small enough in size to be tucked away using very little space in a vanity, closet, or basement, but large enough to provide steam for most residential baths.

The Steamist "TSG" or "SMP" Steambath Generator comes factory assembled, carefully wired and tested.

1. Pre-Installation

a) Proper electrical supply (208 or 240 Volt): See rating label on Steam Generator and Chart on page 4. Determine proper size of wire, voltage, amperage, and phase for the Steam Generator. 90°C copper wire is required for generator connection.

b) 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) 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 two screws holding the electrical access cover and remove cover.

b) Locate the supply line knockout. Mount proper strain relief into knockout hole.

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) Insert ground wire into grounding lug located on the right side of the electrical compartment and secure.

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

e) Locate the terminal/fuse block in the upper portion of the electrical compartment. Insert power wires into the power lugs on the front of the terminal/fuse block and secure.

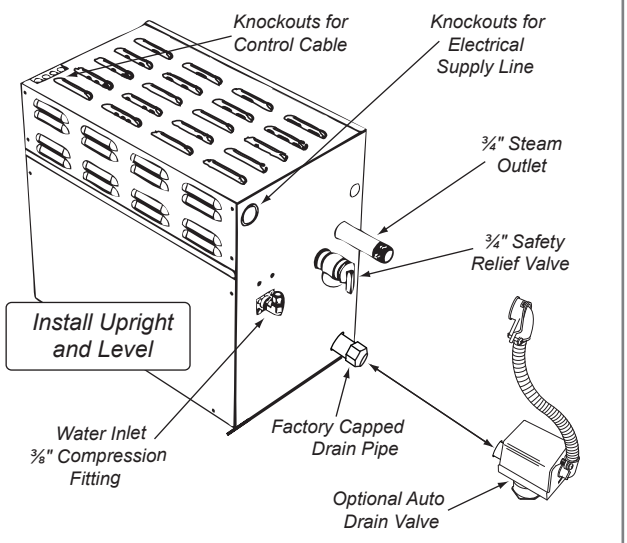
4. Optional Auto Drain Valve Connection

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 auto DRAIN connection J11 on the printed circuit board (see Figure 2).

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.*

5. *Ganging Mulltiple Steam Generators*

IMPORTANT: *When ganging 2 to 4 "TSG" model steam generators together, an additional 3199 steam head and 5370 control cable must be purchased for each additional generator.*

a) Locate the Control Cable knockout at top of steam generator. Mount proper strain relief into knockout hole.

b) Route 5370 control cable from any one of the 3 Modular Jacks located on the circuit board to the steam generator to be ganged (see Pub# 370).

c) Set DIP Switches on each additional Steam Generator's main PCB as shown in the Gangable Generators chart (see Pub# 370).

Checklist

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 "Full Line Brochure," "Pricing Guide," or "The Generator Sizing Guide" in the Residential Systems/Steambath Product Information section of the Steamist website - www.steamist.com.*

  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., 208V or 240V). A 208V Generator operating on 240V will damage the heating element, and 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

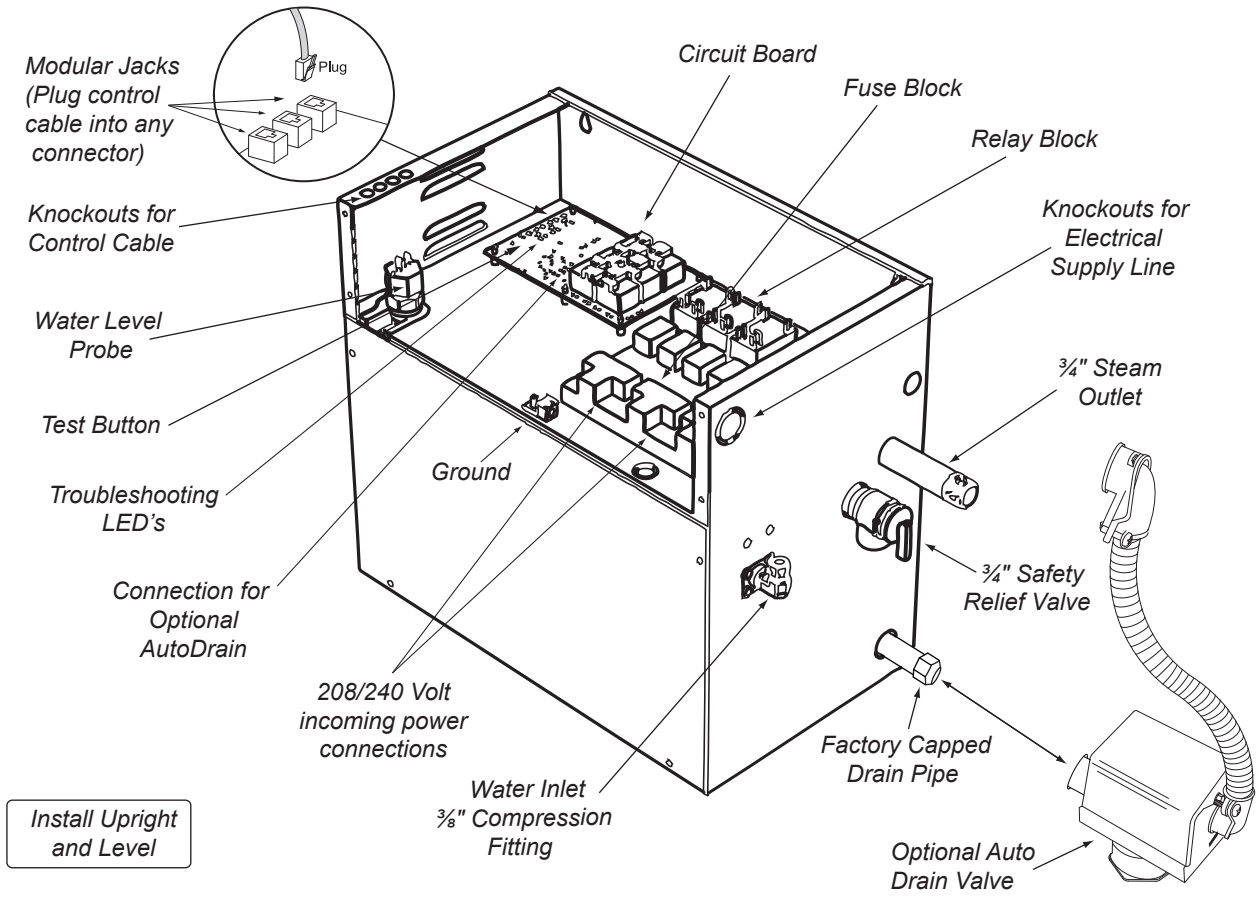
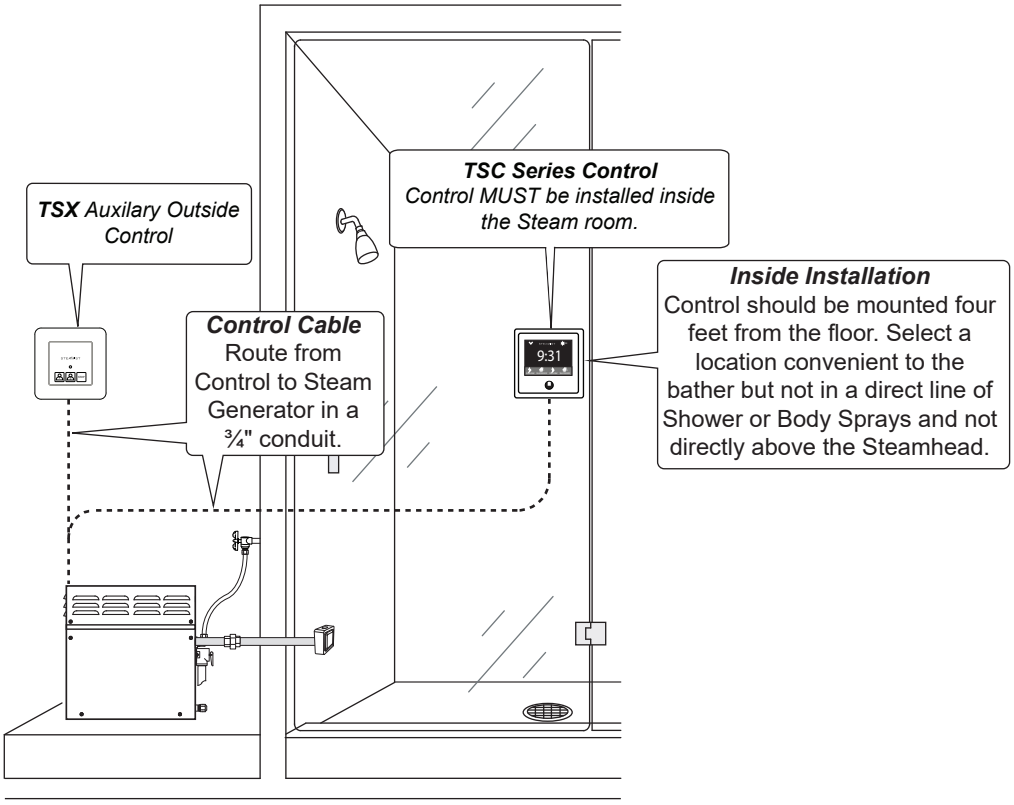


Figure 3 - Typical Installation

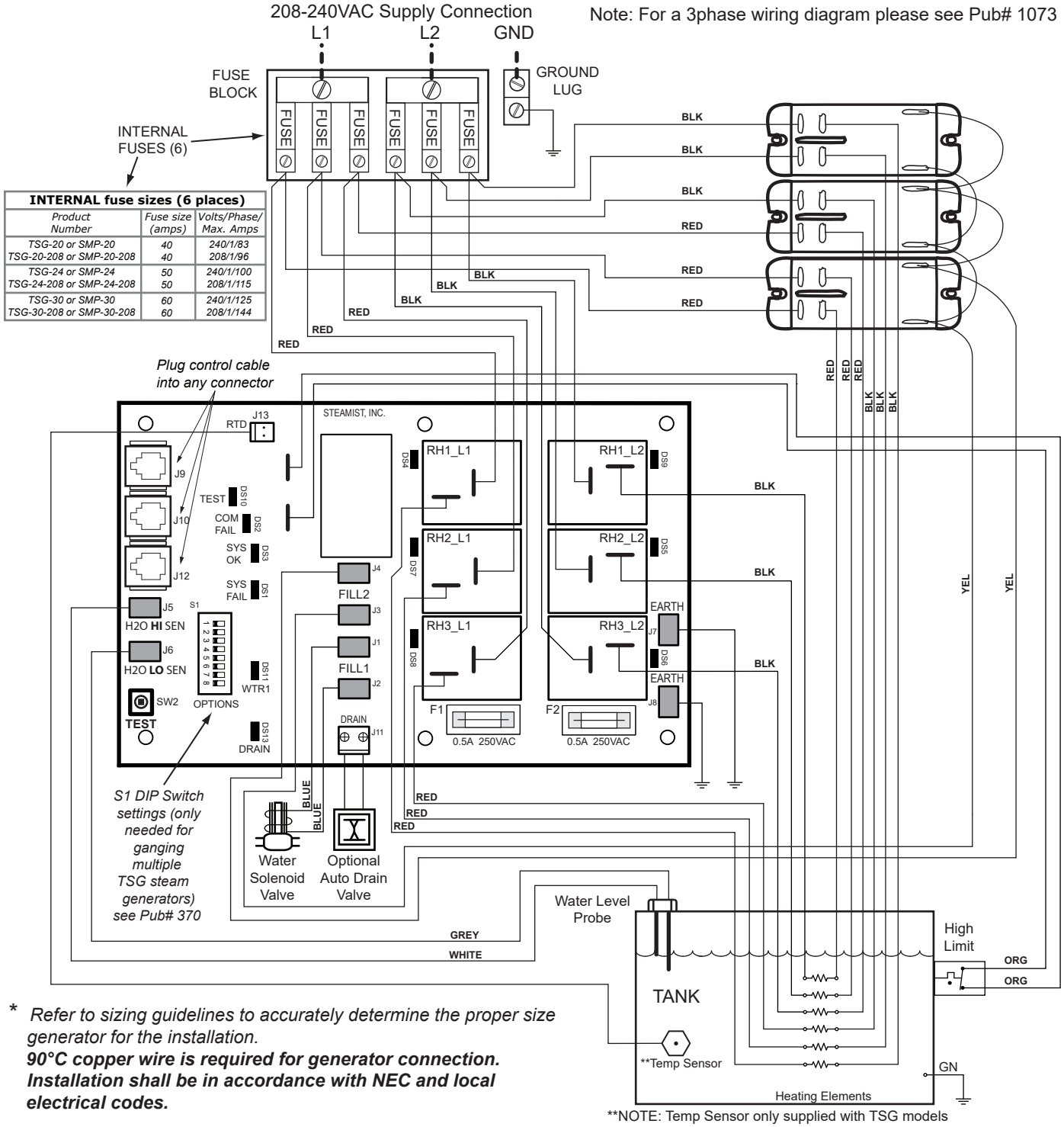
The Electrical Instructions must be given to the homeowner for future use.

NOTE: *Unit must be wired with 90°C copper wire in a suitable raceway, or, if local codes allow, provide twist lock plug on a 90°C copper wire cord from generator to a 250V 2-pole, 3-wire grounding receptacle (amperage rating as required).*



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

Figure 4 - Wiring Diagram - Single Phase — Models: TSG & SMP 20, 24 and 30



* *Refer to sizing guidelines to accurately determine the proper size generator for the installation.*

90°C copper wire is required for generator connection. Installation shall be in accordance with NEC and local electrical codes.

**NOTE: Temp Sensor only supplied with TSG models

Steam Generator Specification Chart

Product Number	KW Rating	*Max. Cu. Ft. Range	Volts/Phase/ Max. Amps	Line Fuse	Dimensions L x W x H
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TSG-24 or SMP-24 TSG-24-208 or SMP-24-208 TSG-24-208/3 or SMP-24-208/3	24	1100	240/1/100 208/1/115 208/3/67	125 150 80	19" x 11 1/8" x 17"
TSG-30 or SMP-30 TSG-30-208 or SMP-30-208 TSG-30-208/3 or SMP-30-208/3	30	1350	240/1/125 208/1/144 208/3/83	150 175 100	19" x 11 1/8" x 17"

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Steambath Generators — Models: TSG & SMP 20, 24 and 30

Important: *Locate Publication No. 199 "Steam Bath Important Safety Instructions". This publication includes a Warning label that the contractor must install on 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 Steamist (201-933-0700) for a replacement Publication No. 199. This publication along with all documents must be left with the owner.*

The Steamist "TSG" or "SMP" Generator comes factory assembled, carefully wired and tested.

The Plumbing Installation must conform to local and national codes. All electrical power should be turned OFF when working with Steam Generator.

1. Pre-Installation

a) *Be sure that the proper size Steam Generator has been selected by using the sizing page in the "Full Line Brochure," "Pricing Guide," "The Generator Sizing Guide," "Architectural Guidelines," or in the Residential Systems/Steambath Product Information section of the Steamist website - www.steamist.com.*

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.*

WARNING: *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 is required for the water supply and steam line this should be completed before the walls are closed. For operation, the "TSG" or "SMP" 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.

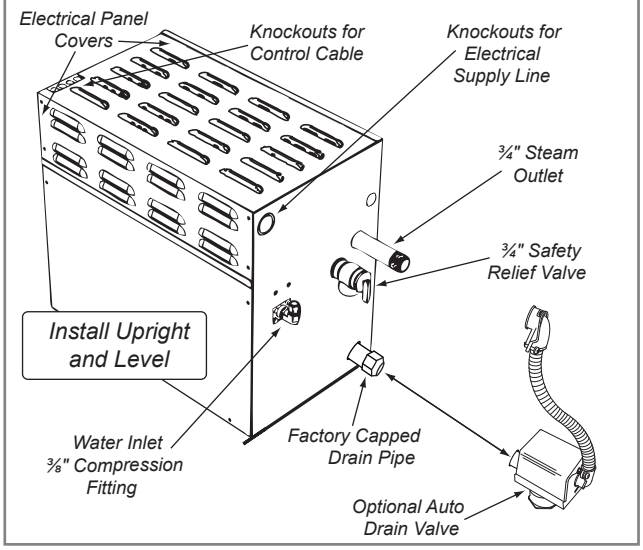
NOTE: *Safety Valve should be connected to a minimum ¾" indirect waste or as required by local plumbing codes. In the unlikely event this valve should open, the discharge must be directed to prevent damage to the home.*

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" copper or brass pipe; do NOT use black iron or galvanized pipe; it will rust and discolor the wall of the steambath. Do NOT use any plastic type pipe or fittings. The steamhead location should be 12" to 18" above the shower floor or 6" above the rim of the bathtub, as far from the seating area 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 allowing condensation to run back toward the Steam Generator (preferred), or toward the steam head. When installing multiple steam generators DO NOT interconnect the steam pipes.*

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 in allation.*

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 - Sample Plumbing Diagram (Layout of components varies across models)

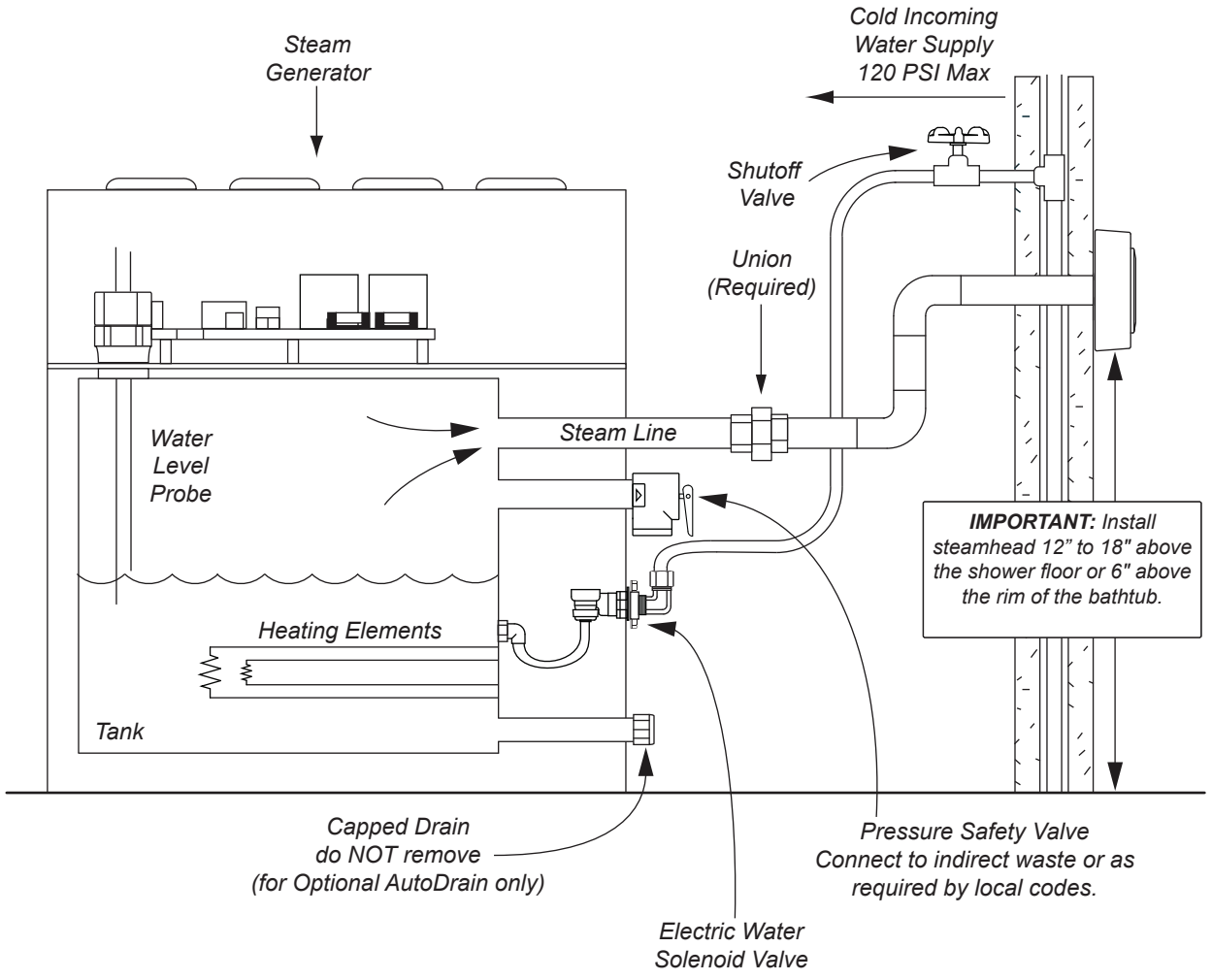
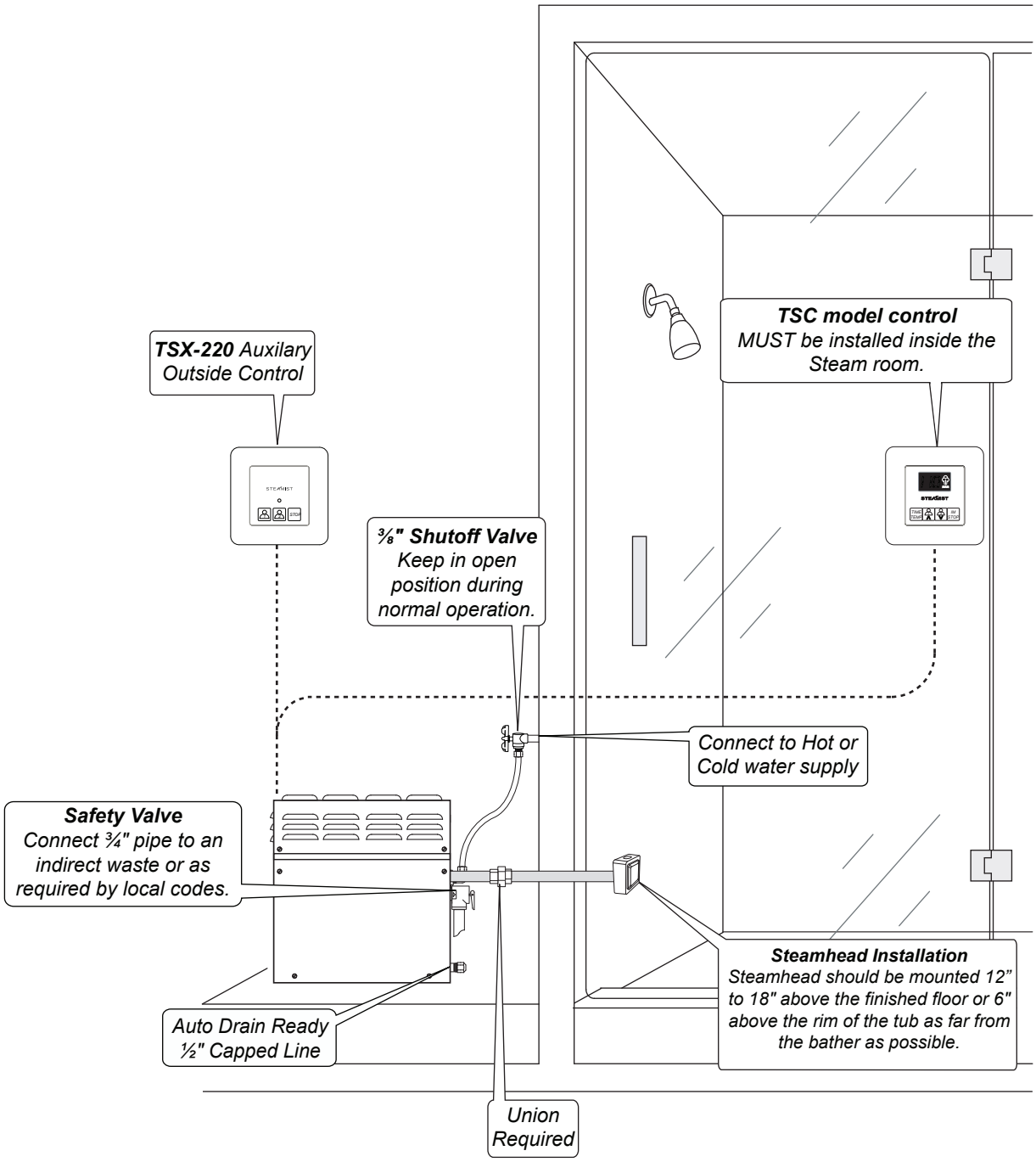


Figure 4 - Typical Installation — Models: TSG & SMP 20, 24 and 30

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.*

Access Requirements

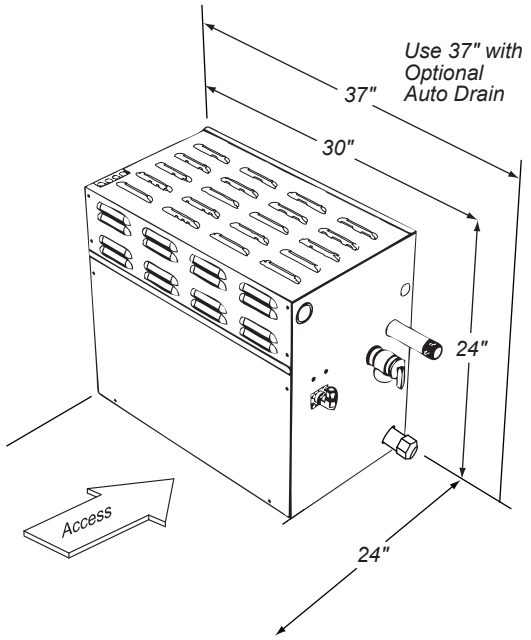
Models: TSG & SMP 20, 24 and 30

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.

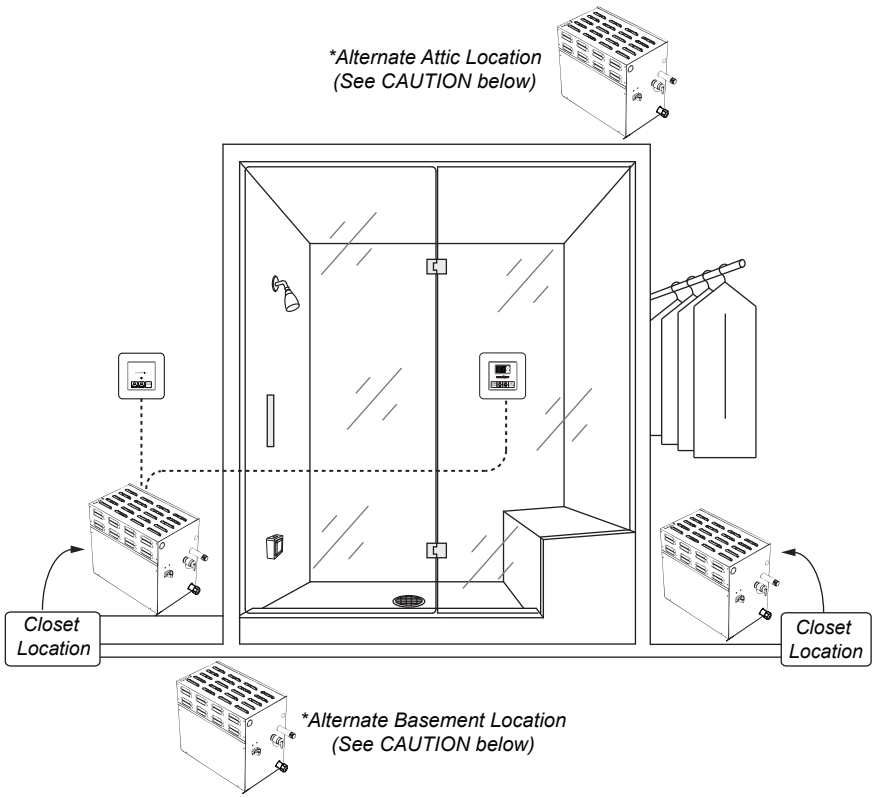
> ***CAUTION:*** *All models must be installed INDOORS, in a DRY, NON-FREEZING location away from flammable materials such as: Gasoline, Paints, Thinners, Etc.*

> ***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 be located indoors, in an area where the temperature is limited to 50ºF - 104ºF. 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.*