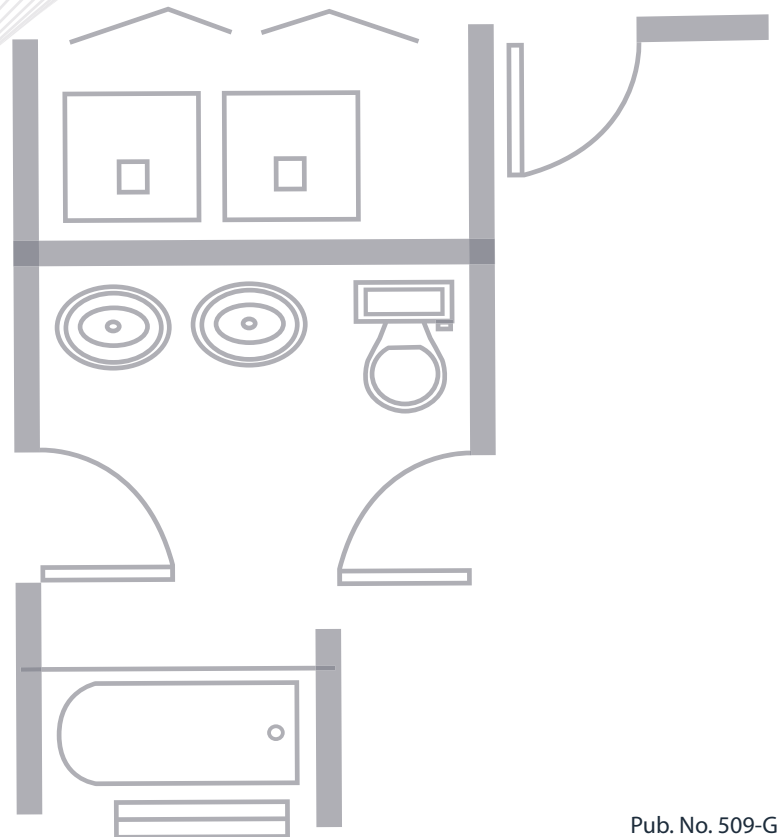
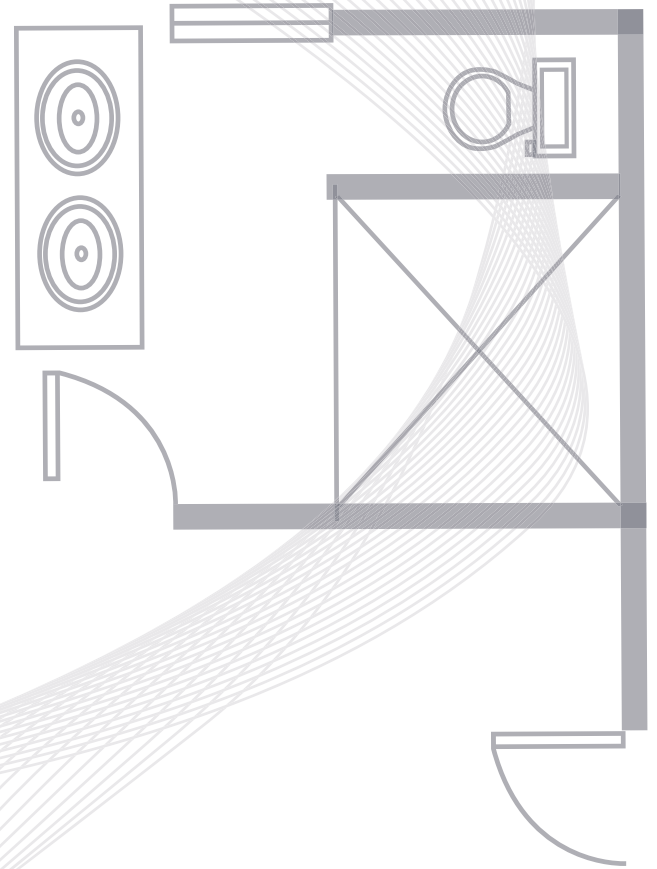


STEAMIST®

Residential Steam Bath Architectural Guidelines



This guideline has been formulated to help provide trades with the necessary information to correctly specify steam bath generator for residential use.

In recent years, the bathroom has become a major point of interest, and the design elements have become as diverse as the rest of the architecture within the home. The bathroom has become considerably larger in size, and the materials used in the construction of the luxury bath are limitless in nature.

To keep pace with the dramatic changes in the bath and shower area, the need to consider certain factors is necessary to design and size the steam equipment properly.

We hope this information will become a useful tool in planning your luxury Steamist steam bath.

Considerations for Steamroom Construction

When the steamroom is completed it should be attractive and functional. However, consideration must be given to the unique steamroom environment. There are certain factors to make it more enjoyable, such as a sloped ceiling to avoid condensation from dripping on the bather and skid-resistant flooring for safety. There are also factors to make it more functional, such as vaporproof doors and properly sizing the steamroom.

To insure the steamroom is properly sized, the calculation in "SIZING THE STEAMROOM" must be completed. The calculations take into account certain building materials, exterior walls and other construction factors. When properly sized the steam generator should produce enough steam so the average steam bath temperature is about 110°-115°F with a humidity factor of approximately 98%.

Recommendations When Planning Your Next Steamist Steam Bath

Insulate all walls and ceiling.

Ceiling should be sloped (a minimum of 2" per foot) to prevent condensation from dripping on the bather. (Sometimes sloped from the center to minimize ceiling height reduction.)

Vents inside the steamroom are not recommended, but if used, they must be positive closing vents. The vent must form a vapor-tight seal. Ducts must be waterproof.

For optimum performance the ceiling height should not exceed 8 feet. If ceiling height exceeds 8 feet (10 feet max) a heat loss multiplier of 15% for each additional foot must be added to the calculation. (See Sizing Calculator)

Local utility line voltage — choose appropriate steam generator, i.e., 208 or 240 volt.

A floor drain must be provided for condensate runoff and cleaning.

For safety, flooring should be skid-resistant.

Steam line should not exceed 25 feet; a steam line over 10 feet must be insulated with pipe insulation rated for a minimum of 212°F. The line must never form a trap or gully; it should be pitched toward steam generator (preferably) or steamhead.

For the comfort of the bather, provide a slightly sloped built-in seat to allow for condensate runoff.

Walls, ceiling and floor must be completely covered with a waterproof finish, e.g., tile, marble.

All cracks and joints must be filled with a silicone sealer.

When using a skylight or window it must be double pane and skylights must be closed off and sealed at the ceiling height.

Steam generator must be compatible with the cubic feet of the steamroom and the materials used in construction (refer to "SIZING THE STEAMROOM").

Select a serviceable area to mount the steam generator that is protected from freezing and moisture. Steam generator must never be mounted outdoors or in the steamroom.

Typical Installation

Alternate Attic Location
 (Insulated to Prevent Freezing)
 Not all models will work in a attic where
 temperatures may exceed 100°F,
 check product specifications

Vaporproof Lights Rated for Wet Environment

Slope Ceiling 2" per Foot

Silicone All Corners or Joints

Vaporproof Door

Showerhead

Steamist Control

Pressure Balance
 Valve

Non-Organic
 Adhesive or
 Thin Set
 Cement Board
 Vapor-Retarding
 Membrane
 (3-5 Mil Plastic)
 1/2" Minimum
 Exterior Grade
 Plywood Seat
 Reinforcement

Steamhead
 18" Above
 Floor Opposite
 Bench or Seat

Slope Steam
 Pipe to
 Prevent
 Condensation
 from
 Collecting

Alternate
 Closet
 Location

Bench
 Slightly Sloped
 for Condensate
 Runoff

Steam
 Generator
 in Vanity

Insulation
 (Interior and
 Exterior Walls)

Vapor-Retarding
 Membrane

Skid-Resistant
 Tile

Slope Floor
 Toward Drain

2 x 4
 Construction

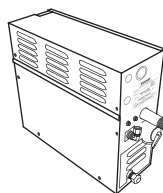
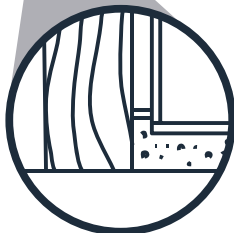
Subfloor

Cement Board

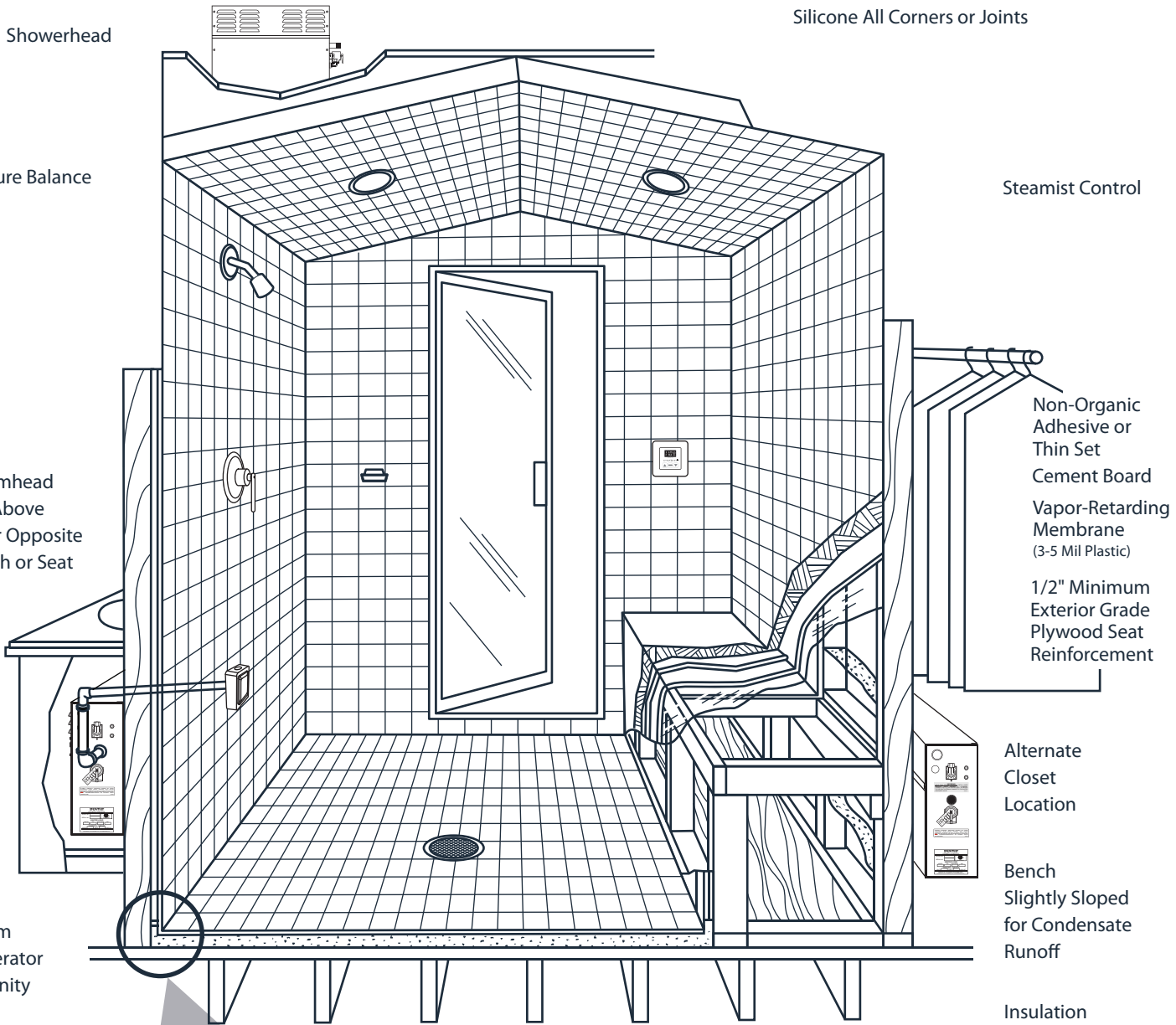
Thin Set Tile

Shower Pan Liner

Mortar Bed



Alternate Basement Location
 Insulated and Dry



SIZING THE STEAMROOM

To select the proper steam generator, you must factor in the size of the steamroom, and make adjustments based on heat-loss factors determined by the steamroom's location and construction materials. Below, we have completed a sample calculation based on a steamroom that is 4' long, 5' wide and 8' high, constructed with ceramic tile, with one insulated exterior wall. Visit www.steamist.com for automatic sizing and generator selection guide.

Step One: Calculate Cubic Footage

Measure length, width and height of bath or shower enclosure (steamroom), multiply to determine cubic footage. (Example: 4' x 5' x 8' = 160 cu. ft.) Important: For optimum performance, ceiling height should not exceed 8'.

Step Two: Determine Heat-Loss Factor

Consider construction materials used in steamroom; find heat-loss multiplier below. Multiply by cubic footage. When there is more than one type of material, use the one with the higher heat-loss factor. (Example: Ceramic tile: 160 cu. ft. x 1.35 = 216 cu. ft.)

Material	Heat-Loss Multiplier
Ceramic tile	1.35
All glass tile or glass block walls	1.35
Porcelain tile	1.35
Natural stone tiles* up to 1/2"	2.0
Natural stone slabs over 1/2"	2.0

*Natural stone tiles (e.g. marble, travertine, slate, granite, etc.)

Step Three: Additional Heat-Loss Factors

Insulated Exterior Walls – an additional multiplier (1.10 per outside wall) is required for each exterior wall surrounding the steamroom. (Example: 208 cu. ft. x 1.10 = 228 cu. ft.)

Step Four: Select Model

Select the Generator with a Maximum Cubic Foot Range that is equal to or greater than your calculated Total Adjusted Cubic Feet.

Note 1: For ceiling heights over 8 feet add 15% for each additional foot. Please use Steamist online calculator at www.steamist.com or call the factory for model selection.

Note 2: If the steamroom has a skylight or an outside window, select the next larger size generator. The skylight or window must be double-pane and sealed from inside the steamroom.

Note 3: Generator voltage must match existing local utilities (208 or 240 volt).

Precautionary Warning Prior to Purchase

Before using a steam bath, please consult with your physician. If you are an elderly person, or pregnant woman, or suffering from heart disease, high blood pressure, diabetes, or not in good health, you should not use this device unless otherwise directed by your physician. If you have any other condition that requires the use of medication or drugs, it is also necessary to check with your doctor before steambathing. Avoid direct contact with the steam coming out of the steamhead and with the steamhead itself, as this could cause serious burns or physical injury. For additional information about the steam product and important safety issues,