Residential Steam Showers

Once limited to spas, steam showers at home are good for relaxing, easing a cold or impressing the neighbors

BY ANDY ENGEL

"There was a Finn, the only Finn, who would not take a sauna. It isn't that I can't, he said, I simply do not wanna..." So begins my favorite Garrison Keillor poem, which I quote for two reasons:

- Although a steam shower differs from a sauna by virtue of its higher humidity, they have a common purpose: fostering relaxation.
- For a lot of people who are building a new home or remodeling an old one, the reason not to have a steam shower won't be that they can't, but that they "simply do not wanna."

Adding steam to a shower isn't pricey, at least in the context of building a home. A standard shower can be upgraded to a steam shower for about $2,000. Of course, this amount is a starting point, and there is no limit on what any shower could cost a dedicated spender.

Reactions to bathing in steam vary. Jennifer Black, a bath designer in Woodbury, Connecticut, urges her clients try a steam shower before installing one. She has learned that some people find being enveloped in steam too claustrophobic. These people can use their money on a vacation once their home is done.

Lane Meehan's reaction to her steam shower is more typical. Lane, co-owner of Cape Cod Tileworks, finds steam showers relaxing and claims that her steam shower was the only sure means of easing her child's croup. Glen Stewart, an Encinitas, California, furnituremaker, typically uses his shower to clear his sinuses. And perhaps more creatively, he has used his shower to steam warped wood so that he could clamp it flat.

Steam-shower enclosures differ from regular ones

So you've taken a steam shower, and you liked it. Now what? Whether you're building new or renovating, there are a few things you need to know. First and foremost is that shower-enclosure walls and ceilings must be covered entirely with a water-impervious material such as ceramic tile or stone (photo right, facing page). Painted drywall—even the water-resistant drywall often used above one-piece shower units—is not acceptable.

Another requirement for the shower enclosure is a door designed to keep in the steam. To keep in steam, the door (or a panel above it) must reach to the ceiling, and it must seal to its frame with the indoor equivalent of weatherstripping (photo right, p. 89).

Manufacturers of acrylic or fiberglass steam-shower units supply doors of this type with the unit (photo left, p. 89). If your shower is to have a custom door, the contractor has to know he's supplying a door for a steam shower. In many cases, custom doors include an operable transom to allow moisture to escape when the shower is being used for everyday bathing.

Another important detail is to slope or curve the shower's ceiling. This detail is important because steam condenses. If the shower ceiling is flat, condensed water rains down in a random, cold, unwelcome manner. Condensation on a sloped ceiling, however, follows the ceiling down to the wall instead of dripping on your skin.

None of the manufacturers or installers with whom I spoke strongly advocated any special measures, such as a plastic vapor barrier behind the wall and ceiling substrate. All of them, however, recommended a bath fan ducted to the outside, a good practice in any bathroom. That no one recommended a vapor barrier made me nervous at first. But when I learned that most residential steam

Believe it or not, heat and humidity can be relaxing. Steam billowing from this fitting can quickly raise the shower's temperature and humidity to points exceeding an August day in New Orleans. Photo by Dean Dellaventura.

Controls vary in cost and sophistication. The least-expensive control option is a simple on/off switch on a timer. You can also add a thermostat to maintain a steadily steamy environment. Photo courtesy of Sussman Lifestyle Corp.





A steam shower is a conventional shower with a steam head. The chief caveat is that all shower surfaces must be covered with a water-impervious material such as tile. It's also a good idea to slope the ceiling to guide condensation to the wall, not to your shoulders. Photo by Roe A. Osborn.



Steam generators can hide in just about any nook or cranny. While most generators are designed to fit in closets or vanities, this unit by Roma can also fit between the studs of a standard wall.

A tilesetter's steam-shower advice

by Tom Meehan

• ON SUBSTRATES: When installing a steam shower, I never use drywall as a substrate or mastic as a bonding agent. Cement backerboard and old-fashioned mud jobs will not deteriorate with steam. Bond the stone or tile to the wall substrate with a good latex-modified thinset mortar. When I am installing stone, I skim-coat the back of each piece with thinset mortar to block the pores and to help the stone have a denser composition.

• ON GROUTING: Two types of grouts can be used: latex modified and epoxy (epoxy grout cannot be used with limestone). Latex modified is the most common and easiest to work with.

• ON SEALING STONE AND GROUT: Always seal a full shower stall with a good impregnator, such as 511 Impregnator (Miracle Sealants Co.; www.miraclesealants.com; 800-350-1901). A good impregnator can be expensive but is worth every penny. With natural stone, this process should be repeated once at least every two years.

—Tom Meehan is co-owner of Cape Cod Tileworks in Harwich, MA.

showers use only 1 gal. or so of water per use, I relaxed. Some of the endless conventional showers taken by teenagers must put twice that amount of vapor into the air.

Where does the steam come from?

The heart of any steam shower is the steam generator (photo above). Steam generators are typically suitcase-size electric boilers that hide in a vanity, closet, basement or heated attic near the shower. At least one manufacturer, Roma, makes a generator that can fit between the studs of a 2x4 wall. Wherever it's hidden, a steam generator must be accessible for servicing. Also, most manufacturers recommend that the generator be placed within a 25-ft. pipe run of the shower.

A steam generator needs a water feed, and most need a 220v electrical supply. Steam generators pull between 20 amps and 70 amps (or even more), depending on the size of the enclosure. There is an exception. Mr. Steam makes Steam@home, a 120v steam generator that plugs into a dedicated 20-amp outlet. The unit is designed to heat up only a small, one-person acrylic shower stall.

The generator capacity you need depends primarily on the size of the shower enclo-

Photo this page: Roe A. Osborn



Buy the package. Several manufacturers supply acrylic shower units set up for steam with an arched ceiling and a sealing door.



A door that seals is another necessity. Run-of-the-mill shower doors are intended to contain only liquid water. To keep in steam, weatherstripping is called for.

sure. Several other factors apply, however. For example, stone absorbs more heat than tile. Having a window, skylight, high ceiling or large glass enclosure can necessitate that you increase generator size by 25% to 75%. Each manufacturer has a chart that factors in the details to figure the size generator you need.

Drainage is another consideration. If the generator's pressure-relief valve vents, it should drain somewhere harmless. Also, most steam generators can have an automatic flushing option that cleans out the tank to minimize scale buildup. If yours has this feature, it must be connected to your home's waste drain.

Water goes in, steam comes out

In all but the largest, most decadent of steam showers, one steam head, usually supplied with the generator, provides enough mist to trigger a foghorn. These heads are available in finishes just like other plumbing fixtures. Steam heads can even be equipped with small reservoirs that heat scented oils.

Steam heads should go near the bottom of the shower, about 6 in. to 8 in. above the floor. This placement gives the downward-facing steam slot space to disperse the steam and takes into account the fact that steam rises. The exception to this rule is if you're combining a steam shower with a bathtub. In this case, the head should be a similar distance above the tub rim. Because these heads get hot, people are less likely to lean on them when the head is close to the floor.

Most steam showers include a bench. If yours does, the steam head should be well away from the bench to minimize the risk of burns.

The other hardware item that goes in the shower is the control. The simplest are on/off switches, but options include timers and thermostats. Timers and on/off switches can be outside the shower to save you the trouble of opening the shower door to start the steam. Or you can put a set of controls inside and outside the shower. It's a good idea to have an on/off switch inside the shower in case you decide you've had enough steam before the timer finishes. If the steam starts to make you feel claustrophobic, turning on the regular shower for a minute will condense much of the steam. Controls for steam showers are low-voltage relays or air switches, so there's no risk of electrocution. □

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Photos by the author, except where noted.

Sources of steam generators

AIRMIST (U.S. DISTRIBUTOR OF TYCO GENERATORS)
(800) 728-6226
airmist.com

AMEREC
(800) 331-0349
amerec.com

MR. STEAM
(800) 767-8326
mrsteam.com

ROMA
(800) 657-0656
romasteambath.com

STEAM
(201) 933-0700
steamist.com

STEAMTEC
(718) 297-7601

Sources of steam-shower units

JACUZZI
(800) 288-4002
jacuzzi.com

KOHLER
(800) 456-4537
kohler.com

LASCO
(800) 877-2005
lascobathware.com

MAAX
(800) 463-6229
maax.com

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