



## Saunas Go Green

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***New steam room designs use half the energy and eliminate daily cleaning and chemicals thanks to new materials and advanced technology.***

Commercial health clubs and wellness facilities across the country are being forced to reconsider traditional tiled steam rooms for sanitary reasons. The warm, wet environment of a traditional steam room is an ideal breeding ground for mold, mildew, bacteria and all types of viruses. There is a rapid increase of viral epidemics such as MRSA (Methicillin-resistant Staphylococcus aureus) and Staphylococcus (the Staph virus), historically originating from within hospitals, now originating in athletic facilities and schools in 27% of the staph cases reported in the U.S. according to the CDC. Health departments across the country have turned their attention to public and commercial facilities. In 2007 alone, dozens of health clubs were closed due to sanitary and health issues.

### Traditional Steam Rooms

Historically, steam rooms have been constructed with various forms of tile using ceramic or some form of stone. These tile materials, including the grout and mortar components, are highly porous. It only takes a few days for organic material-matter such as mold, mildew, bacteria and various forms of viral matter-to flourish within the pores of this material in a steam room environment. Dry saunas, on the other hand, typically maintain average temperatures of around 180 degrees, a temperature considerably higher than the maximum survivable temperature (140 degrees) of most virus and influenza strains. Saunas made of cedar also offer the added benefit of natural resistance to mold and mildew. Because the source of heat in a steam room is in the moisture, temperatures within steam rooms are typically between 105 to 110 degrees. The result is a warm, wet and porous environment, ideal for the harvesting of all types of harmful organic matter.

### Hybrid Steam Rooms

The hybrid steam room uses sanitary and energy efficient alternatives to the traditional tile steam room. These hybrid saunas are already popping-up in high-profile clubs such as Gold's Gym and the YMCA, as well as the new Washington Nationals Ballpark. Gold's Gym in Loveland, Colo., opened its doors in December of 2006, and according to owner Lynn Mecham, "the hybrid steam rooms are the cleanest part of the gym-almost no maintenance on our part and the members consistently comment on how clean they are." Many clubs today are opting to convert existing tile rooms into the hybrid-panel construction to bypass health risks and maintenance challenges. "We could not keep up with member complaints," says Shane Riffle, YMCA director for Boise, Idaho.

"Regardless of the cleaning frequency or cleaning chemicals we used, we simply could not maintain a clean and sterile steam room environment. Two years ago we converted our tile rooms to a hybrid steam room and all of our problems went away-including customer complaints."

## **Sterile, Green and Virtually Maintenance Free**

Bruce Carter of Optimal Design Architecture in Weston, Fla., a leading fitness facility design firm, says that the unique panel design systems of the new hybrid rooms address nearly all the problems related to traditional tile steam rooms. "Traditional steam rooms typically require deep cleaning on a daily basis, and within just a couple of years grout deteriorates, requiring replacement-leading to the need to retile every 4 to 6 years. Hybrid steam systems, on the other hand, sterilize automatically every night and only need to be wiped down with basic eco-friendly cleaning products. For the benefit of our clients, and our clients' clients, we no longer spec tile rooms." Eliminating daily use of harsh chemicals is in line with today's movement towards more eco-friendly business practices.

In addition to nonporous design, hybrid steam rooms come with an advanced corona-discharge sterilization system that automatically eliminates all organic matter (mold, mildew, fungus and viruses) by the infusion of O3. "At night, our cleaning crews simply press the button on the generator, and the rooms are perfectly clean by morning," says Mecham.

## **An environmentally-friendly system**

Architects, builders and commercial facility operators across the country are pursuing ways to reduce energy costs. Manufacturers claim their hybrids are up to 50% more efficient than stone tile and 40% more efficient than ceramic tile. This is good news for club owners and managers, since less maintenance and lower energy bills translate into big savings.

## **Functionality and Design**

It is rare when practicality can be combined with what is considered good design. But hybrid steam room customers say it happens. "We had tile rooms in our older facilities, and we put a hybrid room in our new club. It certainly lives up to its promise. We have zero maintenance problems, and the members love it," says French McGhee, maintenance director for Hockessin Athletic Club in Hockessin, Del. "Typically the first thing a new customer says when they walk into our locker room is 'Wow-what is that? straight out of the future?' They look clean, and they are clean." Hybrid steam rooms are produced from vacuum-formed poly-ethylene panels with steel and fiberglass reinforcement. The standard color is brilliant white with full glass doors and glass front panels.

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