



Hot Yoga Workouts

People in the sprinkler industry need to be aware of a growing trend in workouts: the Hot Yoga Workout. The idea is to heat the room to a person's body temperature (about 98°F) during the yoga exercises to relax the muscles and get them to stretch farther. While this might improve a person's yoga experience, it certainly is not good for the fire sprinkler system.

Ordinary temperature sprinklers are supposed to be used only in rooms where the ambient temperature will stay at 100°F or below. Typically, these sprinklers are used in building situations where people live and work, including exercise gyms, because the space is usually conditioned to remain under 100°F to keep people comfortable. NFPA 13 discourages the use of higher temperature sprinklers because these will cause a delay in the activation of the sprinkler during a fire since the sprinkler will have to warm up to a higher temperature before it opens.

There are two conditions where NFPA 13 mandates the use of higher temperature sprinklers. The first is where heat sources (like unit heaters or skylights) are present. Depending on the sprinklers proximity to the heat source, the sprinkler may need to be intermediate temperature or high temperature rated.

The second condition under which NFPA 13 requires the use of higher temperature rated sprinklers is where the ambient temperature is expected to exceed 100°F. In this case, the temperature rating of the sprinkler will depend on the ambient temperature. If the ambient temperature is expected to be between 100°F and 150°F, intermediate temperature sprinklers need to be used. If the ambient temperature is expected to be between 150°F and 225°F, then high temperature sprinklers need to be used.

Although the objective is to heat the room to 98°F, higher temperatures are possible closer to the ceiling. Using the typical heaters, a temperature of 98°F near the floor can easily lead to a temperature of 110°F or 120°F closer to the ceiling. While this does not reach the activation temperature of an ordinary temperature sprinkler, it does exceed the maximum allowable ambient temperature of NFPA 13 for ordinary temperature sprinklers. In one experiment under a 10 ft ceiling, a temperature of 156°F was measured while the temperature at the floor was only 98°F.



Even if the temperature never gets to 150°F at the ceiling, damage can occur to the sprinkler during repeated exposures to temperatures above the maximum allowable ambient temperature. For ordinary temperature glass bulb sprinklers, the fluid expands and the bubble disappears around 100°F. Even if the sprinkler does not open, the glass bulb weakens when the room cools down and the fluid contracts and the bubble snaps back into existence. After repeated cycles, the glass can fracture. For solder link sprinklers, the solder experiences extra stress when it is heated close to its operating temperature and repeated cycles of heating and cooling weaken the link.

For new construction, whenever an exercise gym or workout facility is being protected with sprinklers, the owner should be asked, as a part of filling out the Owner's Certificate mandated by NFPA 13, whether or not they intend on having Hot Yoga classes. If they say that they will have such classes, then they will need intermediate temperature sprinklers (at least). If they specifically state that they are not going to have such classes, then ordinary temperature sprinkler will be reasonable to use in the facility.

For existing facilities, we need to educate the operators of these facilities that they cannot do Hot Yoga classes unless they work with a sprinkler contractor first and change out the sprinklers in the rooms where they want to do the Hot Yoga classes with higher temperature sprinklers.

TECHNICAL TUESDAYS
for the 2nd half of 2012 have been announced.

Click to view course descriptions, dates and times and to sign up!

Upcoming NFSA "Technical Tuesday" Seminar – July 10

Topic: Is that really an Obstruction?

Instructors: James D. Lake

Date: Tuesday, July 10, 2012- 10:30 am EST

The rules governing clearance between sprinklers and partitions, library stacks and structural components are intended to provide sufficient distance for the sprinkler spray pattern to develop and deliver water over the floor area it covers. These rules vary by sprinkler type and the kind of obstruction. This seminar will explore the rules governing clearance to sprinklers and demonstrate the impact of the rules on actual sprinkler spray patterns.

To register or for more information, click [HERE](#) or contact Michael Repko at (845) 878-4207 or e-mail to seminars@nfsa.org.

Layout Technician Training Course (2-week course)

Fishkill, NY – October 8-19, 2012

For more information, contact Nicole Sprague using Sprague@nfsa.org or by calling 845-878-4200 ext. 149 or click [HERE](#).

Upcoming In-Class Training Seminars

The NFSA training department also offers in-class training on a variety of subjects at locations across the country, and in recognition of the current recession has adopted a new reduced fee structure. Here are some upcoming seminars:

July 9	Denver, CO	Sprinkler System Installation Requirements
July 10	Denver, CO	Fire Service Mains & Their Appurtenances
July 11-12	Denver, CO	2-Day Sprinkler Protection of Storage
July 11	West Palm Beach, FL	Inspection, Testing & Maintenance for the AHJ
July 13	Altamonte Springs, FL	Inspection, Testing & Maintenance for the AHJ
July 24	Mashantucket, CT	Plan Review Procedures & Policies
July 24	Westminster, CO	Sprinkler Installation Requirements
July 25	Westminster, CO	Fire Service Mains & Their Appurtenances
July 26	Westminster, CO	NFPA 13 Update 2010

These seminars qualify for continuing education as required by NICET, and meet mandatory Continuing Education Requirements for Businesses and Authorities Having Jurisdiction.

To register for these in-class seminars, click [HERE](#). Or contact Michael Repko at (845) 878-4207 or e-mail to seminars@nfsa.org for more information.

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About the National Fire Sprinkler Association

Established in 1905, the National Fire Sprinkler Association (NFSA) is the voice of the fire sprinkler industry. NFSA leads the drive to get life-saving and property protecting fire sprinklers into all buildings; provides support and resources for its members – fire sprinkler contractors, manufacturers and suppliers; and educates authorities having jurisdiction on fire protection issues. Headquartered in Patterson, N.Y., NFSA has regional operations offices throughout the country. www.nfsa.org

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