

The Station House

A News Letter for AHJ's,
Fire Sprinkler Contractors & Underwriters

Tragic Loss of Life in Nightclub Fire in Rhode Island



More than 300 people were in the Station nightclub on February 20, 2003 in West Warwick, Rhode Island. They were there to attend a music concert, but instead became a victim of one of the deadliest nightclub fires in U.S. history. Apparently a pyrotechnic display from the band ignited a flammable foam padded "sound suppressant" and the fire rapidly and tragically spread across the ceiling. In less than three minutes the entire nightclub was a raging inferno. There were no fire sprinklers in the facility.

100 people were killed, and almost 180 were injured, many critically in this disaster. Ironically the concert was being taped so there is television coverage of this fire from the beginning. Who, what and why this could have happened, and who will be blamed for this tragedy will be determined in the future. What could have prevented such a loss of life is clearly known today.

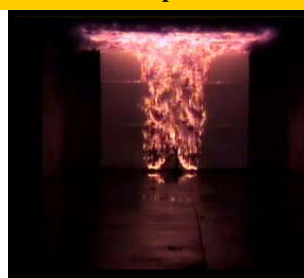
Shortly after the fire, an associate professor from the University of Maryland indicated to the media that the fire was so fast and hot, that he doubted even fire sprinklers could have prevented what had happened. This statement got the attention of Tyco Fire Products R&D department, who consequently simulated (2) fire tests in their lab. The simulated ceiling and "stage" wall did have flammable foam backing to get a reasonable test result. The first test had no sprinklers, and the second test had (1) standard fire sprinkler installed. The results are clear. A sprinkler controlled the fire to near suppression within 35 seconds of ignition.

Fire Sprinklers Can and Do Save Lives

Test 1— Fire Growth & Spread with No Sprinklers



10 Seconds
After Ignition



30 Seconds
After Ignition



45 Seconds—Near
Flash Over Conditions

Test 2— Fire Growth & Suppression with Fire Sprinkler



10 Seconds
After Ignition



22 Seconds—
Sprinkler Operates



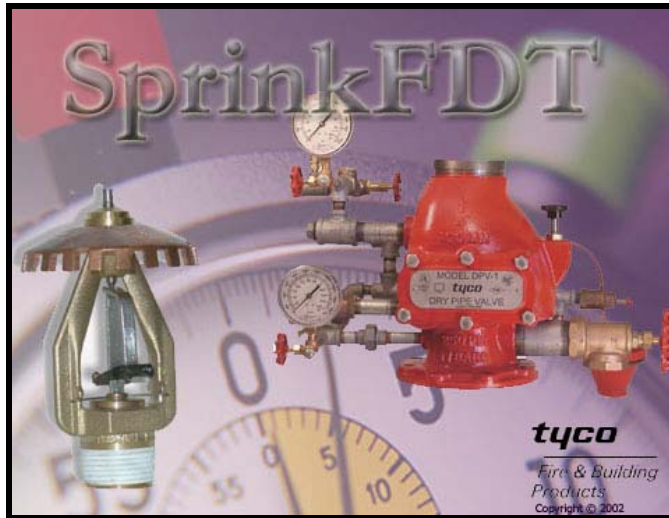
35 Seconds -
Near Suppression

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A CD video of the testing is available on request.

Dry System Time Calculation Program Receives New Listing



Tyco Fire Products' SprinkCAD group has received the first listing for a dry system calculation program. Entitled "SprinkFDT" (fluid delivery time), the program has successfully demonstrated its accuracy in calculating the trip time for dry pipe valves, as well as the water delivery time to one or more open sprinklers on the dry system.

The 2002 Edition of NFPA # 13 was modified to permit the use of such a program to demonstrate the ability of a dry pipe system to deliver water to open sprinklers. This exception was added in lieu of the traditional sixty second inspector's test for systems in excess of 750 gallons. "The listing of the program is a tremendous achievement", reports Mike Mahomet, the Business Unit Manager of the SprinkCAD group. "Much like hydraulic calculations that have become universally accepted, the SprinkFDT program will allow contractors, owners, architects and engineers, and Authorities Having Jurisdiction (AHJ's) to evaluate dry pipe systems for their response times. The surprising thing is that many of the dry systems that have less than a 750 gallon air capacity showed the inability to meet the requirements of the new NFPA code."

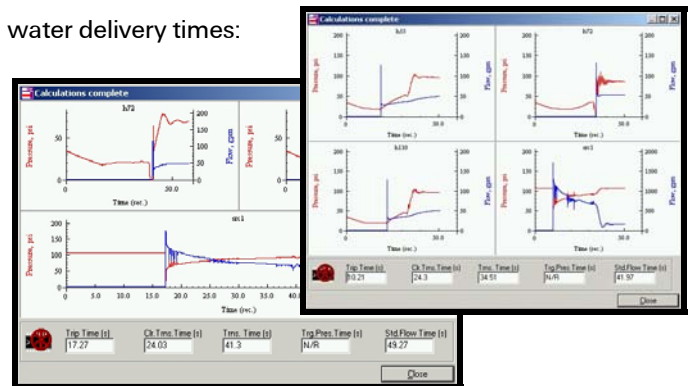
The program features an easy entry method, as well as graphic representations of the systems being calculated.



The new NFPA code establishes the following minimum

| Hazard | Number of Most Remote Sprinklers Initially Open | Maximum Time of Water Delivery |
|------------------|---|--------------------------------|
| Residential | 1 | 15 Seconds |
| Light Ordinary I | 1 | 60 Seconds |
| Ordinary I | 2 | 50 Seconds |
| Ordinary II | 2 | 50 Seconds |
| Extra I | 4 | 45 Seconds |
| Extra II | 4 | 45 Seconds |

water delivery times:



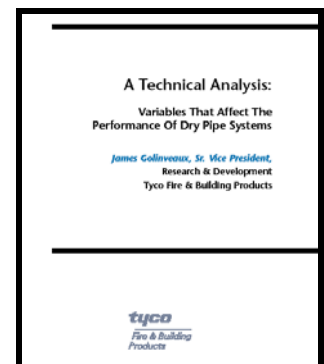
Program Calculates "Trip-Time" to the Second

The program and the changes to the NFPA # 13 Code regarding Dry Sprinkler Systems represent the latest developments in the evolving technology of fire protection.

James Golinveaux, Sr. V.P. of Research and Development for Tyco Fire Products has prepared a 'White Paper' on dry systems that addresses and explains the concepts and test findings when using the "SprinkFDT" program.

The paper and other information can be accessed at the www.tyco-fire.com website, and the link provided to the www.sprinkcad.com website.

Further information is also available from the Tyco Fire Products' SprinkCAD group at 800-495-5541.



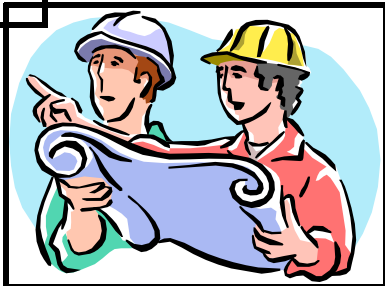
Tyco Fire & Building Products Technical Services & R&D Center Tops in the Industry

Need Technical Assistance With Sprinklers, Valves or Codes?



Tyco Fire & Building Products is rapidly establishing a reputation for being the source of information in response to technical questions. The technical department within the Tyco Fire & Building Products' Re-

“Technical Support to our Customers is our Reputation”



search and Development Center in Cranston, Rhode Island, is staffed to handle inquiries that vary from product application to re-setting obsolete valves.

Gordon Farrell, Mark Fessenden, Don Fleenor, and Kevin Maughan bring a combined fifty plus years of experience in fire protection to the Technical Services Staff. Product design engineers and technicians on the R&D staff provide added support and a wealth of experience with all types of fixed fire protection equipment. “Our goal is to provide the best technical support in the industry for our entire product line, as well as being a first stop for technical fire protection information”, states Bob Brinkman, President of Tyco Fire Products. “Our technical support staff is the best in the industry.”

Initially established to assist with the Central, Gem, and Star brands of Tyco Fire Products, the group finds itself responding to questions that vary from product listings and applications, to the maintenance and servicing of current and obsolete products. “Our current volume of phone calls exceeds one thousand per month”, Kevin Maughan, Manager of Technical Services proudly reports. The call volume has steadily increased over the past two and a half years, indicating that the group has become recognized as a dependable source of technical information for the industry. “We are here to help anyone in the fire protection community to the best of our abilities.”



Located just outside Providence, the Research and Development facility is within minutes of the Providence (Warwick) airport. The facilities are the best in the industry, and laboratory approvals and listings are often completed in the facility under the watchful eyes of the appropriate agency representatives. A residential sprinkler test lab has recently been completed, and it allows the Research and Development department to conduct sprinkler tests in the same environment as those at the UL labs.



CPVC Hands-On Training



Classroom Sprinkler Training

In addition to technical assistance, monthly fire protection training is offered at the R&D facility. The course covers the basics of sprinkler systems (including hydraulic calculations), sprinkler

valves (including hands-on training), and pipe and joining methods (both steel and CPVC plastic). The course is open to anyone, and arrangements can be made through the Tyco Fire Products' website at www.tyco-fire.com, or by contacting the TFP R&D center directly at 401-781-8220. Technical assistance is available at the same number or by contacting: 800-381-9312.



Valve Hands-On Training

Contact us on the Web at: www.tyco-fire.com for more information.

Fire Sprinklers Never Sleep— Success Stories

1— Sprinklers Save Courthouse

Sprinklers Save Courthouse

The Sacramento, Calif. County courthouse was recently spared. Thanks to the activation of a fire sprinkler system. A February 22, 2003 fire inside the records section of the courthouse “would have been much worse if the sprinklers had not automatically activated” a fire department official told reporters for *The Sacramento Bee* newspaper.

The fire started in a cubicle inside the first floor records department. Investigators think it could have started in an electrical outlet inside the cubicle. A stack of computer paper was piled next to the outlet. The fire activated two sprinkler heads above the cubicle. Arriving firefighters found the fire by listening for the sound of the sprinklers and heading in that direction. The fire was largely contained to the single cubicle.

(Reprinted from SprinklerAge magazine)

2- Sprinklers Credited at Foam Mattress Factory Fire

December 14, 2002, fire erupted at a foam mattress factory in Shelton, Connecticut, the second in 19 months. The blaze at Latex Foam International was sparked by two mattresses that jammed on the conveyer belt inside a dryer, Shelton Fire Marshall James Tortora said.

Unlike a fire that destroyed the company’s factory at its former site in Ansonia on May 14, 2001, the blaze Saturday was limited. Tortora credited sprinklers inside the dryer. “It was an excellent idea that proved its worth today,” he said.

Without the sprinklers, the fire “would have been as devastating as what happened in Ansonio,” Tortora said. News of the fire upset city officials and residents who raised environmental questions when the plant relocated to Shelton last year. John Anglace Jr., president of the Board of Aldermen, said the company assured local officials that new technology would make such a fire impossible.

(Reprinted from FPC magazine)



3— Sprinkler Systems Extinguish Wisconsin Cooking Fire

Cooking oil left unattended in a wok on a restaurant's gas stove overheated and ignited. Fortunately, the restaurant's full-coverage, wet-pipe sprinkler system and the wet-chemical hood operated, extinguishing the fire and limiting damage.

The restaurant occupied part of a single-story strip mall that had wood and masonry walls and a steel-framed roof covered by a built-up metal deck. The restaurant's sprinkler system water flow alarm was monitored.

The fire department responding crews found the restaurant filled with black smoke. Firefighters advanced a hose line through the unlocked front door, and worked their way towards the rear of the restaurant, where they found that the extinguishing systems had put the fire out before it could spread to the ductwork or the roof. Firefighters shut down the single sprinkler that had operated and performed salvage operations.

Investigators determined that the blaze began when the chef left the restaurant to go to the bank, leaving the oil-filled wok heating on the stove. The fire was confined to the stove and its hood system, and there were no injuries.

(Reprinted from NFPA Journal)

4— Sprinklers Control Washington Fire

After seeing smoke coming from a second-floor dryer vent of a three-story apartment building, a police patrolman alerted the building's occupants and notified the fire department at 10:38 p.m. He then retrieved the portable fire extinguisher from his cruiser and was using it on the flames coming from the dryer's open door when a sprinkler activated. By the time firefighters arrived, the patrolman and the sprinkler system had extinguished the fire.

The fire began when clothes, towels, and other items the apartment's occupant was drying ignited after the occupant went to bed. It was the fourth fire in the apartment complex the sprinkler system controlled or extinguished, and a fire department spokesman noted that, without the sprinklers, the blaze could have been serious. As it was, damage to the \$450,000 structure was estimated at just \$5,000, and damage to the apartment's contents, valued at \$20,000, came to \$2,000.

(Reprinted from NFPA Journal)



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Remember State Fire Marshal, Your VRP Statistics Are Attached ...

Your state's Voluntary Replacement Program Statistics are attached to this Newsletter. The Statistics for the VRP are state and Program specific. You may distribute these statistics or this news letter to your constituents. We encourage you to pass along the information contained in this newsletter and the positive progress that is being made in the VRP.

Tyco CEO, Ed Breen, Discusses Integrity Mission & Values For All Tyco Employees



Ed Breen
Tyco CEO

Mission:

"We will increase the value of our company and our global portfolio of diversified brands by exceeding customers' expectations and achieving market leadership and operating excellence in every segment of our company."

Values:

Integrity: We demand of each other and ourselves the highest standards of

individual and corporate integrity. We vigorously safeguard company assets and comply with all company policies and laws.

Excellence: We must continually challenge each other to improve our products, our processes and ourselves. We must strive always to understand our customers' businesses and help them achieve their goals. We are dedicated to diversity, fair treatment, mutual respect and trust of our employees and customers.

Teamwork: We foster an environment that encourages innovation, creativity and results through teamwork. We practice leadership that teaches, inspires and promotes full participation and career development. We encourage open and effective communication and interaction.

Accountability: We will meet the commitments we make and take personal responsibility for all actions and results. We will create an operating discipline of continuous improvement that will integrated into our culture.

Tyco Fire Websites Instant Information — 24 / 7



Looking for a new product? Do you need the comprehensive laboratory listings for a specific product?



What is the proper trim arrangement for the TFP DV-1, deluge valve with pneumatic pilot line operation? The answers to these and many other questions are available twenty-four hours per day, seven days per week at the Tyco Fire Products websites.

Tyco maintains several websites that can be accessed very easily through any web browser. The sites are continually updated with information that ranges from technical data sheets to price lists. You can view, download, and/or print the following and more at any of the websites:

Complete Product Offering, Latest Software Packages, Technical Data, Price Lists, Literature and Brochures, and much more

The sites can easily be accessed through the following:

- www.tyco-fire.com
- www.centraisprinkler.com
- www.gemsprinkler.com
- www.starsprinkler.com
- www.sprinkcad.com
- www.sprinklerreplacement.com

Navigation through the sites has been made extremely simple. TFP makes every effort to update the sites constantly, and to keep all information current.