



NY Fire Consultants, Inc. Fire Safety Message

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October 2007

Fire Safety and Evacuation Preparedness Training for Resident Managers, Superintendents, Handymen and other Building Staff

NY Fire Consultants is pleased to announce that their new training facility will open November 7, 2007. Our staff is comprised of retired lieutenants, captains and chief officers from the New York City Fire Department. The first set of classes will be for residential building Staff. The classes will be held at the New Yorker Hotel, Eighth Avenue and West 34th Street. The seminar will be a PowerPoint presentation approximately 1 1/2 hours in duration. A study guide hand-out and a certificate of completion will be given to each attendee. See page 9 for registration form.

- Overview of Fire Safety Plans for Residential Buildings
- Fire Prevention Strategy
- Life safety instructions during a fire
- When to and when not to extinguish a small fire
- Fire extinguisher type and identification labels
- Housekeeping Issues
- Flammable and Combustible Liquids
- Electrical Fire Hazards

Our seminars have been specifically designed to reduce the risk of fire through the promotion of fire safety awareness and basic fire training for all staff. Our training provides the building manager and building staff with an overview of their roles in the event of a fire or emergency. It also provides participants with the necessary knowledge and skills to enable them to deal with small fires safely, by using portable fire extinguishers, and to develop an awareness of the dangers and causes of fire.

NY Fire Consultants, founded in 2000 by retired Deputy Chief Jim Bullock and retired FF Robert O'Brien, quickly became the fire and life safety consultants for high quality residential buildings in and around New York City. During their initial year, fire safety plans were required in all residential buildings. Since then, NY Fire Consultants has prepared the plans for over 600 NYC buildings. After a Fifth Avenue residential building board was deeply concerned about building safety, NY Fire Consultants was asked to evaluate the building entirely and to provide the building staff with fire and emergency training. The training was so well received, other clients asked us to provide customized presentations for their buildings. NY Fire Consultants can now offer professionally prepared seminars for buildings with smaller staffs at the new centrally located Mid-Town facility.

Call or write for more information
(718) 432-1600
info@NYFireSafe.com

FIRE PUMPS

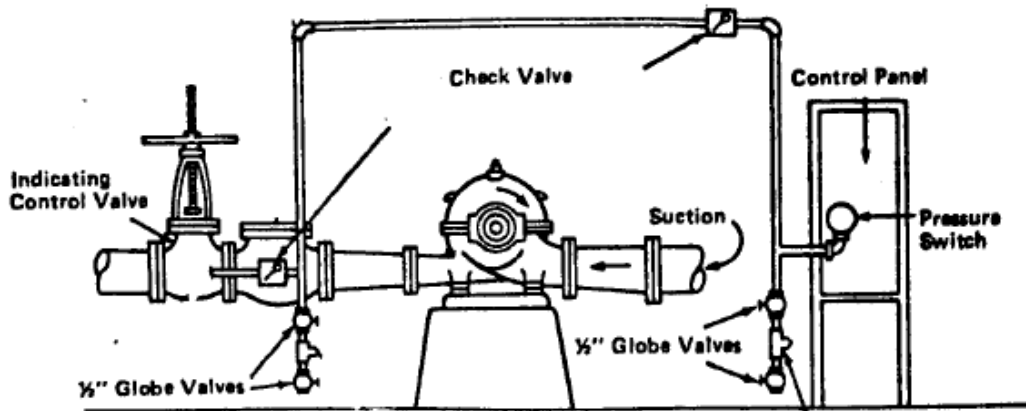
A fire pump can be used as a primary water supply source for a standpipe or sprinkler system. They may also be used in combination with gravity tanks and pressure tanks to supply a sprinkler system. Water tanks and the Fire Department siamese connection may also be connected to the fire pump to supply water to a standpipe system. The fire pump is usually connected to the public water main for most of its water supply. Fire pumps are designed to take the water from a supply source and then discharge the water into the standpipe or sprinkler system under pressure. The pressure with which the water is discharged from the pump is called the total head. The total head is usually measured in pounds per square inch (psi). The higher the psi rating of the pump the greater the pressure with which the water can be discharged. Acceptable fire pumps must deliver a minimum of at least 25 psi at the highest line of sprinkler heads or the highest line of hoses in a standpipe system.

The Centrifugal Pump

The centrifugal fire pump is the standard pump used in most fire protection systems. This is the preferred pump because it is reliable, compact, and requires little maintenance. And it can be powered by a variety of drivers including electric motors, internal combustion engines, and steam turbines.

Principles of Operation

The water available to the centrifugal pump must always be under pressure because the fire pump cannot draw water by itself from the supply source. A water tank can be used if the tank uses gravity to supply water to the pump. In other words the gravity forces the water to flow into the pump. This type of water tank is called a suction tank. The water flows from the tank through the supply inlet into the pump. As the water passes to the center of the pump it reaches a rotating impeller. The impeller "grabs" the water on the inlet side of the pump. Then the impeller discharges the water under increased pressure into the standpipe or sprinkler system. There are several kinds and models of centrifugal pumps. Some centrifugal pumps can discharge water from 250 gpm (gallons per minute) up to 5,000 gpm. Most centrifugal pumps have a single impeller and are therefore commonly called single stage fire pumps.

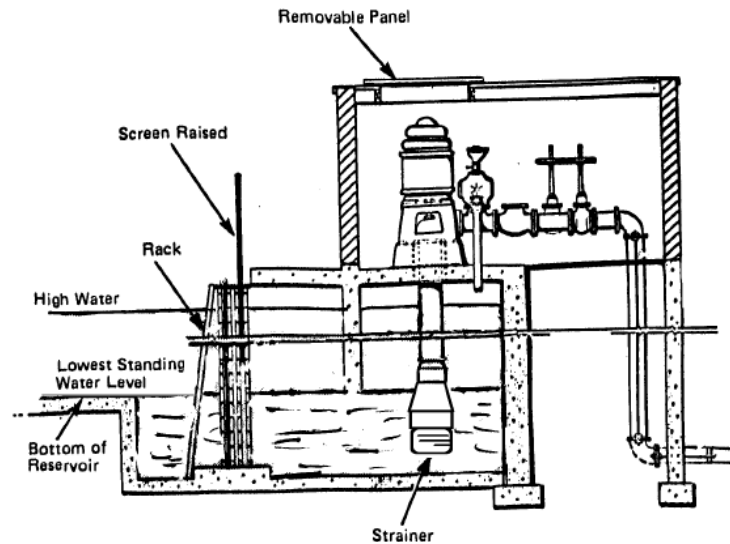


Centrifugal Pump

The Vertical Turbine Pump

The vertical turbine pump is really a modified centrifugal pump that has the capability to draw water from streams, ponds, wells etc. Unlike the standard centrifugal pump the vertical turbine pump does not need the suction supply to be under pressure for it to operate. Instead it draws the water into the pump by suction. The water is drawn into the pump. When it reaches the rotating impellers the water pressure is increased and then forcefully discharged into the fire protection system. Although the vertical turbine pump is capable of drawing water from a well it is generally not recommended to use a well as the main water supply source because it may dry up without warning. Should the well dry up it would make the fire pump useless. It is better to draw from the well and to fill a water

storage tank. The fire pump should then be attached to the storage tank, as it is a more reliable supply source. It is important to inspect the water intake hose, foot valve, and the strainer regularly. Mud, gravel, leaves, or other materials could obstruct system's piping and cause damage to the pump.



A Vertical Fire Pump Arrangement Using a Water Reservoir

Pump Activation

A fire pump can be started automatically or manually. The pump can be started automatically by an electric controller or an engine controller. Controllers activate the pump when there is a drop in water pressure or water flow in the fire protection system. The controllers are adjusted so that a minor drop in water pressure or minor increase in water flow due to a small leak will not activate the pumps. The controllers for the fire pumps are expensive. They require extensive maintenance and periodic testing. If an electric motor drive is used, a standby power generator is sometimes required. If an engine controller is used the appropriate fuel storage tanks should be filled and checked regularly. When manually activated pumps are installed, they are usually used in combination with a gravity tank or a pressure tank. These tanks are designed to operate when there is a pressure drop in the fire protection system. The operation of the gravity or pressure tank and the triggering of its supervisory devices (alarms) will alert the Certificate of Fitness holder that the fire pump must be activated. The Certificate of Fitness holder (or another responsible individual) should then manually activate the fire pump according to manufacturer's instructions. Manually operated fire pumps are often found in industrial and manufacturing occupancies having personnel on the premises at all times. Sometimes remote push buttons are used to activate the pump. These remote push buttons are designed to start the

pump but not to stop the pump. Pumps may also have a timer installed that keeps the pump running for a pre-determined period of time once it is activated. This timer is designed to reduce the wear and tear on the pump and its parts due to excessive starting and stopping.

Pressure Maintenance Pumps (Jockey Pumps)

Pressure maintenance pumps, sometimes referred to as jockey pumps, are often found on sprinkler systems. These pumps are designed to automatically operate when there is a slight drop in pressure due to the leakage in the system or a pressure surge. The jockey pump restores the pressure in the fire protection system to the desired level. When the drop of pressure in the system is greater than the capacity of the jockey pump the fire pump is activated.

Fire Pump Location

The fire pump should be housed in a room that is fire-resistant or constructed of non-combustible material. The pump room should be located as close as possible to the fire protection system. The pump room should be kept clean and accessible at all times. The fire pump, driver, and controller should be protected against possible interruption of service. The temperature inside the pump room should be maintained above 40° Fahrenheit at all times to prevent freezing of the water in the system. The pump room should only be used for fire protection functions and not for general plant operations.

Operation and Supervision

When fire pumps are activated by electric automatic controllers it is essential that they be constantly monitored to ensure the availability of the electrical power supply in case of an emergency. For this reason, supervisory devices are installed on the pumps to alert the Certificate of Fitness holder and/or a central station company when there is an electrical power failure. In cases where the steam turbines or internal combustion engines are used similar supervisory devices are installed to signal when there is a problem with the controlling equipment.

Pump Inspection and Maintenance

In order to ensure the reliable operation of the pump in the case of an emergency regular inspections and maintenance should be conducted by the Certificate of Fitness holder. The pump should be activated each **week** according to the manufacturer's specifications to ensure that it is working properly. When the pump is in operation a small water leak is desirable and should not be considered a

malfunction. If an automatic controller operates the fire pump, the pump should be activated by reducing the water pressure in the system. This can be done by opening the test drain or initiating a large water flow from the system. By starting the fire pump this way the Certificate of Fitness holder can determine if the automatic controller is working properly. Care should be taken to make sure that the pump does not overheat while conducting the test. The centrifugal pump relies on the water supply for cooling and lubrication. The pump should never be operated without the pump being supplied with water. A visual inspection of all parts of the pump and the controlling equipment should also be conducted each week. This inspection should include the condition and reliability of the power supply. If any problems are discovered with the equipment immediate action should be taken to correct them. Fire pumps should be fully tested **annually** to make sure that the pump, driver, power supply and all other parts are working properly.

Booster Pumps

Booster pumps are sometimes used in sprinkler systems. They are small pumps with limited power and are usually located in the basement. The booster pump is used when the water pressure available at the highest sprinkler head does not quite meet the needs of the sprinkler system. This small pump increases the water pressure in the sprinkler system until it reaches acceptable levels. The Booster pump should not be confused with the fire pump or the jockey pump.

Beware!

Not renewing your NYC Certificates and Permits will provide City inspectors with an opportunity to pay your building a visit.

The fine for a "failure to renew" violation will cost you, for a first time offense, at least \$250 - \$500. The subsequent inspections may cost you much more. In our experience it is rare for an inspector to issue only 1 violation during a visit, if one is found, multiple violations are usually issued. This can add up to significant penalties! The key is to not give an inspector a reason to visit. Keep your building's registrations up to date.

We found help, and so have some of the largest NYC Real Estate management firms. It's a company called Cityfile, Their tools are designed specifically for buildings within the 5 boroughs of NYC. Cityfile helps you organize, track, maintain, educate your staff on all your building compliance requirements and ensures your building is up to date with all City and State regulations. Cityfiles's

multi tiered user access levels allows for: Owners, Administrators, Property Managers, Superintendents... anyone to receive alerts 90, 60 and/or 30 days prior to pending expirations, creating a support safely net within your organization.

Best of all, a Cityfile representative will populate your current data into their website, where all data is available 24/7. Don't give City Inspectors an excuse to inspect your building, let them go to the building next door.

We at NY Fire Consultants suggest you call Cityfile today at (212) 732-2300 to schedule a fifteen minute presentation; it will be well worth your time.

Emergency Action Plan in High-Rise Buildings

Highlights of the Rule stipulate that each building must develop, implement and practice an Emergency Action Plan, including:

- Written EAPs must be submitted for Fire Department review and acceptance.
- Designation of a Fire Safety/EAP Director to be authorized to implement the Emergency Action Plan. Other staff must be trained (Deputy Wardens) to assist in building evacuations.
- EAPs must be implemented within designated time frames:
 1. August 2006--40 stories or higher.
 2. October 2006--25-40 stories.
 3. December 2006--All others.
- Distribute emergency evacuation educational materials to building occupants. Routinely conduct emergency escape drills with building tenants/occupants:
 1. Twice during first year.
 2. Once yearly thereafter.

The New York City Fire Department will be enforcing this law starting in October! If you did not submit your Emergency Action Plan yet expect a visit from the Fire Department soon.

Reminder

Local Law 10/81 Deadline for Elevators & Escalators

Information You Need To Know

If your building has elevators and/or escalators, you must file an inspection report with the Department of Buildings by October 1, 2007.

Emergency Action Plans

What is an EAP? An Emergency Action Plan outlines the procedures for a buildings response to a non-fire-related emergency involving an explosion, biological, chemical, radiological, nuclear or hazardous materials incident, natural disasters such as a hurricane or earthquake, or other emergency conditions that occur inside or in close proximity to their buildings.



Fire Safety and Evacuation Preparedness Training for Resident Managers, Superintendents, Handymen and other Building Staff

Registration form Page 9



For a **free** subscription to the online, totally digital *Space Lifestyle Magazine* and an entry into the New Forks Parabolic Flight and Jazz Contest
<http://www.newforks.net/spacelifestyle.html>

NY Fire Consultants Services:

<u>Fire and Life Safety Consulting</u> Fire and Life Safety Inspections Fire Safety Plans for Residential Buildings (LL 10 of 1999) Fire Safety & Evacuation Plans Commercial (Class E) Buildings	<u>Emergency Procedures Manuals Fire & Evacuation Preparedness Training</u> Hotel Staff Building Service Employees
<u>Emergency Action Plans</u> FDNY Submissions Training Drills	<u>Interior Fire Alarms Consultants</u>
<u>Expert Witnesses Provided</u>	<u>Violations Correction & Removal</u> Environmental Control Board Fire & Building Department Housing Preservation & Development
	<u>Fire Consultantants Construction Protects</u>

NY Fire Consultants, Inc. 165 McBaine Ave., Staten Island , NY 10309 718-432-1600



NY Fire Consultants, Inc.

**165 McBaine Avenue
Staten Island, NY 10309
(718) 432-1600 (718) 967-8195 fax**

Fire Safety & Awareness Training For Residential Building Staff

The seminar will include but is not limited to the following topics:

- Overview of Fire Safety Plans for Residential Buildings
- Fire Prevention Strategy
- Life safety instructions during a fire
- When to and when not to extinguish a small fire
- Fire extinguisher type and identification labels

Central location- Hotel New Yorker West 34th St. & 8th Avenue (Suite 1570)

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Mail in Registration Form

Student Name: _____ Employed by: _____

Work Address: _____

Home Phone: _____ Cell/Pager: _____

Email: _____

SCHEDULE OF CLASSES 2007

Doors Open 9:30 AM Classes start at 10:00 AM (Please circle one)

November 7, 2007 November 14, 2007 November 28, 2007

December 5, 2007 December 12, 2007 December 19, 2007

Course fee is: \$ 75.00

Company Checks or Money Orders Payable to: *NY Fire Consultants, Inc.*

Mail payments to: ***NY Fire Consultants, Inc.***, 165 McBaine Avenue, Staten Island NY 10309

Students must Pre-Register



Personal Life Safety Guide Book

Fireproof Residential Apartment Buildings

The Personal Life Safety Guide Book offers a quick reference for fire and life safety emergencies. A must for residential building staff.

Bomb Threat
Carbon Monoxide
Chemical Spills
Extreme Heat
Fire
First Aid
Gas Leaks
Heart Attack

Person Trapped in Elevator
Poisoning
Power Outage
Robbery or Mugging
Shelter in Place
Suspected Terrorist
Suspicious Packages
Threatening Behavior

HOTEL
EMPLOYEES
GUIDE BOOK
NOW AVAILABLE
CALL

- Overall size 3.5 " x 5.5"
- Coated card stock
- Can write emergency telephone numbers on back
- Comes with a vinyl pouch that fits in your shirt pocket

Prices:

100 +
\$4.50

500 +
\$4.25

1000+
\$3.75

Combine building orders and Save



Basic Emergency Information at Your Finger Tips

Phone (718) 432-1600
Fax (718) 967-8195
Email: info@NYFireSafe.com

