U.S. Fire Administration / National Fire Academy

Coffee Break Training

Topic: Fire Pump Locations

Learning objective: *The student shall be able to identify fire separation or protection requirements for fire pump protection.*

Fire pumps are an essential part of many facilities' fire protection features. Whether they draw water from a stationary source, or boost the pressure from a tank or municipal supply, they should be protected in such a way that they will operate under the worst conditions.

NFPA 20, *Standard for the Installation of Stationary Pumps for Fire Protection* requires that the fire pump, driver, controller, water supply, and power supply be protected against possible interruption of service through damage caused by explosion, fire, flood, earthquake, rodents, insects, windstorm, freezing, vandalism, and other adverse conditions.

Indoor fire pumps in *highrise buildings* must be physically separated from the building or protected by 2-hour fire-resistance-rated construction. Indoor fire pumps in *non-highrise buildings* must be physically separated or protected by fire-resistance-rated construction in accordance with the following table.

Fire Pump Protection in Non-Highrise Buildings

Pump Room/House	Building(s) Exposing Pump Room/House	Required Separation
Not sprinklered	Not sprinklered	2-hour fire-rated or 50 ft (15.3 m)
Not sprinklered	Fully sprinklered	
Fully sprinklered	Not sprinklered	
Fully sprinklered	Fully sprinklered	1-hour fire-rated or 50 ft (15.3 m)

Fire pump units located outdoors shall be located at least 50 ft (15.3 m) away from any exposing building and also are required to be provided with protection against possible interruption.

For additional information, refer to NFPA 20, *Standard for the Installation of Stationary Pumps for Fire Protection*.