

CHAPTER 10

FIRE PROTECTION

10-1. General.

Requirements for fire protection are covered in MIL-HDBK-1008. Protection of Air Force installations should be in accordance with AFR 88-15.

10-2. Hydrants.

Fire hydrants were discussed in chapter 6 paragraph 6-6a, and special features for cold regions use shown in figures 6-9 and 6-10. Hydrants must be accessible and operable at all times (regardless of frost depth, snow cover and temperature).

10-3. Truck systems.

Motorized fire pumping apparatus with booster tanks and hoses will normally be provided for protection of remote buildings not serviced by the water distribution system. Winter operation in the Arctic will require tank trucks on standby in heated garages and a protected water point with a pumping capability of at least 350 to 500 gallons per minute for refilling the tank trucks if hydrants are not available.

10-4. Chemical and gas methods.

A halon gas system is recommended in high hazard

buildings where sensitive electrical or mechanical systems could be destroyed by water. Guidance and criteria for systems of this type can be found in DOD 4270.1. Foaming equipment will not function at optimum levels below -15 degree F air temperatures since aspiration of the foam is not complete. Standard carbon dioxide fire extinguishers will also not function properly at below-freezing temperatures. Dry chemical extinguishers have been used successfully and range in size from hand-held units to large dolly-mounted units containing about 350 pounds of chemical.

10-5. Alarm systems.

Central alarm systems must be designed in accordance with TM 5-813-3/AFM 88-10, Vol.3. In many cases it is advantageous to integrate the systems with other utility system sensors for protection of the water distribution network and sewage transmission lines (see section 6 and 7). All of these signals can be transmitted to the fire department and other central alarm centers where appropriate action can be initiated.