Table 9.15: Dry Chemical System Requirements

ITEMS	REQUIREMENTS
6. DETECTORS / OPERATING DEVICES	i. The operating devices shall be designed to function properly through a minimum temperature range from 0°C to 49°C or marked to indicate their temperature limitations. ii. The detectors or Operating devices and control system shall be part of the listed system as assembly. iii. The detection of Dry Chemical System shall be interfaced with The main fire detection and alarm system.
7. FUEL/POWER SHUT-OFF	i. Shutdown of Ventilation, fans, openings, doors and windows, shutdown of fuel, gas, electrical power to the protected equipment etc. shall be achieved at the time of system discharge for the successful extinguishing of fire. ii. Shutoff devices shall require manual resetting prior to fuel or power being restored.
8. SYSTEM ACTUATION	i. Dry Chemical Systems shall have both automatic and manual methods of actuation except for hand hose line systems. ii. At least one manual actuator shall be provided for each system. iii. A readily accessible means for manual activation shall be located in a path of egress. The manual activation device shall be installed no more than 1200 mm, nor less than 1067 mm, above the floor and shall clearly identify the hazard protected.
9. TOTAL FLOODING SYSTEMS	i. A total flooding type of system shall be used only where there is a permanent enclosure surrounding the hazard that adequately enables the required concentration to be built up. ii. The total area of unclosable openings shall not exceed 15 percent of the total area of the sides, top and bottom of the enclosure. iii. Where unclosable openings exceed 15 percent of the total enclosure surface area, a local application system shall be used to protect the entire hazard. iv. Where possible, openings such as doorways, windows, and so on, shall be arranged to close before, or simultaneously with, the start of the dry chemical discharge. v. In engineered systems, the minimum design rate of application shall be based on the quantity of dry chemical and the maximum time to obtain the design concentration, as described in the manufacturer's listed design and installation manual. vi. In engineered systems, the rate of application shall be such that the design concentration in all parts of the enclosure shall be obtained within 30 seconds.
10. LOCAL APPLICATION SYSTEMS	i. Local application systems shall be used for the extinguishment of fires in flammable or combustible liquids, gases, and shallow solids (e.g., paint deposits) where the hazard is not enclosed or where the enclosure does not conform to the requirements for total flooding. ii. For flammable liquid fires, the nozzles shall be placed tankside or overhead, or a combination of tankside and overhead within the limits of the listing, and located to prevent splashing during discharge. iii. The minimum effective discharge time and required minimum quantity of dry chemical and the minimum application rate shall be as per the manufacturer's specifications.