

SYNOPSIS OF INDIAN STANDARD

IS 15519:2020

Water Mist Fire Protection Systems — System Design, Installation and Commissioning — Code of Practice (First Revision)

This standard specifies minimum requirements for design, supply, installation, testing, commissioning, maintenance and the criteria for acceptance of fixed land-based water mist systems.

This standard addresses the use of fine water sprays for the efficient control, suppression or extinguishment of fires using limited volumes of water; which can be effective on both liquid fuel fires (Class B) and solid fuel fires (Class A).

Three classes of water mist systems based on pressure, and another 3 classes of water mist systems based on size of water droplets ranging from 200 microns to 1000 microns are covered. Six system types namely pre-engineered, engineered, deluge, dry, pre-action and wet systems; including 15 types of nozzles to achieve the desired fire protection are covered. Advantages including high water saving yet fire suppressing systems, and limitations with respect to the use on surfaces made of certain types of metal/materials are also covered.

Detailed safety requirements; approach towards design of water mist sprinkler systems; hydraulic calculations; water supply requirements; provisions on types of pumps and pumping requirements; and related components like nozzles, pipes, supports, strainers, valves, pressure gauges, and storage containers are also addressed. With a view to ensuring successful running/performance, detailed provisions on review, commissioning, acceptance & maintenance, including check-lists are included in the standard.

SJP
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