



## **Water Mist Systems**

**Q1: What is water mist?**

**A:** (2003) NFPA 750 3.3.18 defines water mist as a water spray for which the  $Dv_{0.99}$ , for the flow-weighted cumulative volumetric distribution of water droplets, is less than 1000 microns at the minimum design operating pressure of the water mist nozzle.

**Q2: What is a water mist system?**

**A:** (2003) NFPA 750 3.3.20 defines a water mist system as a distribution system connected to a water supply or water and atomizing media supplies that is equipped with one or more nozzles capable of delivering water mist intended to control, suppress, or extinguish fires and that has been demonstrated to meet the performance requirements of its listing and this standard.

**Q3: Do I need a sprinkler contractor's license to install a water mist system?**

**A:** No.

**Q4: Is a water mist system considered a sprinkler system?**

**A:** No. A water-mist system and a sprinkler system are both classified as separate types of water-based fire protection systems and each has their own separate definition. These and other types of water-based fire protection systems such as standpipe and hose systems, water spray fixed systems, etc. each have their own NFPA standard addressing requirements for design and installation; however, they all fall within the scope of NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Systems*.

**Q5: Is a water mist system considered a fixed fire extinguishing system?**

**A:** Yes. R.71-8307.3(A)(9) defines "fixed extinguishing system." The definition is found in Subarticle 8 of our regulations and can be read on our website at <http://www.lironline.com/FMARSHAL/SubArticlePdfs/subart8.pdf>. The definition includes water mist systems because water is also a chemical [its chemical formula is  $H_2O$ ].

**Q6: Do I need a license or permit to install a fixed fire extinguishing system?**

**A:** Yes. R.71-8307.4(A) states "Each firm installing or servicing fixed fire extinguishing systems, portable fire extinguishers, or hydrostatic testing shall be licensed." R.71-8307.5(A) states "Each person installing or servicing fixed fire extinguishing systems, portable fire extinguishers, and hydrostatic testing shall be issued permits."

**Q7: What kind of license is required to install a fixed fire extinguishing system?**

**A:** Class D Fire Equipment Dealer License

**Q8: What standard(s) apply to the installation and maintenance of water mist systems?**

**A:** NFPA 750, *Standard on Water Mist Fire Protection Systems*, contains the minimum requirements for the design, installation, maintenance, and testing of water mist fire protection systems. The commentary to the (2008) NFPA *Water-Based Fire Protection Systems Handbook* states that “the requirements for inspection, testing, and maintenance of water mist systems in (2008) NFPA 25 are taken from Chapter 13 of (2006) NFPA 750. They must be supplemented by the specific requirements contained in each manufacturer’s design, installation, operation, and maintenance (DIOM) manual, which is required for all listed or approved water mist system equipment.” (2006) IFC 901.6.1 requires water mist systems be inspected, tested and maintained in accordance with NFPA 750.

**Q9: Who do I contact if I have questions about getting licensed to install a fixed fire extinguishing system?**

**A:** Additional questions may be directed to the Assistant State Fire Marshal for Codes Enforcement – Engineering who may be contacted by phone at (803) 896-9880.