**Dry Type Sprinklers**



**Replacement or Representative Sample Testing**

***When dry type sprinklers have been in service 10 years or longer, owners should have them inspected and either replaced, or have a representative sample of the sprinklers tested.***

Dry type sprinklers are commonly used in cold storage facilities and may be used in both wet and dry type sprinkler systems. These sprinklers have a unique assembly that includes an extension piece which separates the water seal from the sprinkler head. This unique construction feature ensures that water in the sprinkler system does not enter an area that may be below 40 degrees Fahrenheit until sprinkler activation.

In order to maintain the reliability of the sprinkler system, the *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, NFPA 25*, requires these sprinklers to be either replaced after not more than 10 years in service, or representative samples tested after not more than 10 years in service and retested at 10-year intervals.





 Pendent dry type sprinkler Sidewall dry type sprinkler

This testing is of particular importance because the majority of dry type sprinklers manufactured between the 1960’s to the early 2000’s were constructed using a dynamic O-ring water seal. UL has conducted operational testing on thousands of dry type sprinklers sampled from a large number of field installation sites. Results from this testing have indicated that approximately 50 percent of the O-ring sealed dry type sprinklers have experienced inhibited operating characteristics primarily due to the water seal assembly not releasing in the intended manner. In some cases, the O-ring type water seal did not release when 100 psig was applied to the inlet, which is well above the normal water pressure found in many sprinkler systems.

For information and instructions for submitting sprinkler samples to UL for testing under its Field Sprinkler Sample Testing program please visit [www.ul.com/fieldsprinklertesting](http://www.ul.com/fieldsprinklertesting). For more information please contact Kerry Bell in Northbrook, Ill. at Kerry.M.Bell@ ul.com or at +1.847.664.2629.

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