

# Selecting samples and sending sprinklers to Kiwa FSS Testing

Sprinkler systems need to be properly maintained and inspected in order for them to work reliably. An essential part of this is gaining an insight into whether the sprinklers work reliably. That is why sprinklers need to be periodically replaced unless a laboratory test shows that the ageing of the sprinklers has not impaired their operation.



#### **Laboratory test**

The purpose of the test is to compare several specific aspects of the sprinklers against criteria stipulated in the standards. The sprinklers are also tested against these criteria when they are manufactured. The test makes it possible to gain an idea of how ageing has affected the sprinklers. For this reason, it is important that the tested sprinklers provide a representative picture of the other sprinklers that are still installed.



### **Selecting samples**

The number of samples selected will depend on the applicable standards. NFPA 25 stipulates a sample of 1% of the sprinklers installed for each type of sprinkler in each area with similar conditions, and a minimum of 4 sprinklers.

The sample size described in EN 12845 is 20 sprinklers per 5,000 sprinklers for each type of sprinklers in each area with similar conditions.

The frequencies at which the sprinklers should be tested vary by standard. NFPA 25 stipulates frequency's per type from 20 till 75 years, while EN 12845 has one frequency of 25 years for all types of sprinklers.



#### **Marking**

It is important that all sprinklers sent for testing are individually marked with a unique and indelible code or number. This makes it possible to trace the test results back to the position where the sprinklers are installed. If the sprinklers are marked, Kiwa FSS Testing will use this marking to guarantee traceability.

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#### Representative samples

The tested sprinklers should provide a representative picture of the other sprinklers that are still installed. That is why it is important to make sure that the sprinklers do not get damaged or dry out during transport. If the sprinklers become damaged/dried out during transport, the test results obtained may not be representative of the other sprinklers that are still installed. To prevent this, sprinklers in wet systems should be delivered in a 'wet' condition to the laboratory. This can be done by sealing the sprinklers with a cap once they have been removed and still contain water. To transport them safely, Kiwa FSS Testing provides a kit for returning the sprinklers with boxes that have separate sections that can carry up to 20 sprinklers.

#### Get in touch!

If you have any questions about testing sprinklers of if you are interested in the prepaid return kit, please contact us.

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