

Protection of Heritage Buildings with water mist

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Bio Intro: Hans is the Manager of the Technical Service and Training department for Water Mist Systems. In this role Hans is the Technical Trainer and Support contact for internal and external customers to develop new opportunities for today's and future developments in the water mist industry.



Hans Schipper from Johnson Controls International (formally known as Tyco Fire Protection Products) is based out of Enschede, the Netherlands. Hans, with a background as a mechanical engineer in the process industry started his career with JCI more than 12 years ago as a Technical Service Engineer for fire suppression systems. Through the years he primarily focused on water mist and sprinkler systems and got promoted from Engineer to Manager of the Technical Service and Training department for Water Mist Systems. In this role Hans is the Technical Trainer and Support contact for in and external customers to develop new opportunities for today's and future developments in the water mist industry.

Abstract:

The protection of heritage buildings should be a good topic due to some of the recent incidents. Historic/heritage buildings are the physical remains that represent the past. They can record not only the variations of building techniques and materials but also the history of a country.

Due to the complex structures and lack of fire protection measures, most historic buildings are faced with serious fire threats as they can be damaged by flame, heat, smoke, dirt, falling debris, together with inappropriate fire measures. They usually have a high fire load. If we just take a look at some of the recent fires in historically significant buildings and museums, there is a zero percent chance of recovery from any content or architectural feature that was consumed by the fire.

Protecting historic buildings from fire is a challenge. There's a general reluctance to implement modern fire protection systems in old structures due to a concern over what people might view as the impact on the historic fabric or historic integrity of the building.

They may imagine pipes and wires and conduit running across architecturally significant ceilings and walls. In other words, there is a concern about the visual appeal, or lack of appeal, of systems.

Another concern and common misconception, is that damage from water based fire protection systems (sprinklers, nozzles) would be more significant than damage caused by a fire.

One option that has recently gained in popularity is implementing a water mist system, which typically uses piping that's smaller in diameter, minimizing its impact on architectural features.

To bring more value to the use of water mist for these applications we will present the benefits why to choose for water mist, looking to the aspects as mentioned above. This will be backed by some projects protected with water mist and the challenges faced and solved

KEYWORDS: water mist systems, fire test protocol, light hazard, ordinary hazard, and heritage buildings