



VALUABLE ARTIFACTS

Challenge

Protecting valuable works of art, some 22,000 drawings and paintings, as well as countless sculptures, casts and prints which date as far back as the Middle Ages, without the risk of damage from the fire suppression system.

Solution

SAPPHIRE Fire Suppression System.

Application

Using SAPPHIRE to protect items of national importance.

Total Protection for Norway's Valuable Artifacts

Tyco Fire Protection Products has showcased its SAPPHIRE fire protection range with the completion of three installations in Norway at the National Library, National Gallery and Edvard Munch Museum.

Providing total fire suppression and protection, the SAPPHIRE system ensures Norway's most treasured and artistic and literary heritage remains safe from the devastating risk of fire. Each of the internationally renowned venues house irreplaceable artefacts relating to Norway's culture. The National Gallery in particular contains in the region of 22,000 drawings and paintings, as well as countless sculptures, casts and prints which date as far back as the Middle Ages.

When looking to protect such valuable works of art, a fire suppression solution capable of providing complete protection without the risk of damage to the building's contents is key. Stringent criteria relating to the speed of extinguishant deployment, selection of appropriate agent and characteristics regarding discharge safety in occupied areas must all be considered. The SAPPHIRE system offers absolute confidence in meeting these key requirements and these were major factors, alongside its sustainability and environmental credentials, in the system being specified for the three projects in Norway.

In each project the SAPPHIRE system was installed using 3M™ Novec™ 1230 fire protection fluid, a colourless and odourless extinguishant which behaves like water but evaporates on contact, leaving no residue or dampness. This ensured complete protection for the fragile artefacts within the museums and gallery which may otherwise have been destroyed or severely damaged by traditional water sprinkler systems. The installations have an installed footprint similar to that of other chemical clean agent systems. Most importantly, the Novec 1230 fluid has the lowest design concentration and highest safety margin of any viable Halon 1301 chemical alternative.



Valuable Artifacts Continued...

The SAPPHIRE system has a minimal impact on the environment, ensuring the system meets the stringent environmental standards. In comparison to other halocarbon agents, it delivers a significant reduction in global warming potential and typical total flooding applications use a low concentration of the agent that is well below saturation or condensation level.

Alan Elder, Sales Director Engineered and Pre-Engineered Systems, EMEA, comments "The SAPPHIRE system is ideally suited to occupied spaces and buildings that contain valuable or irreplaceable contents. As an engineered system we advocate early involvement to ensure an appropriate solution is designed to meet the needs of each specific application. The benefits of the system in terms of speed of suppression, health and safety, sustainability and object protection are clear and we're very pleased to provide a total fire protection solution for three renowned buildings for Norway's art and culture."