



Archive/museums

FirExting® gas extinguishing system
Museum of natural science

museum für
naturkunde
berlin



Berlin Museum of Natural History

The East Wing of the Berlin Museum of Natural History, which was destroyed in World War II, has been rebuilt: today it houses one of the most important natural science wet collections in Germany. The preserved snails, snakes, lizards, etc. are now on public display at the museum for the first time.

RISK ASSESSMENT

- The ethanol for preserving the animal specimens in glass vessels can cause a fire to spread very quickly should one break out.

THE PROTECTION OBJECTIVE

- To protect the wet collections, which encompass more than one million valuable animal specimens preserved in glass bottles of ethanol and are stored in room-height shelving systems in halls up to six metres high.
- To preserve the existing construction materials and aesthetics of the rooms to the greatest degree possible.

THE SOLUTION

- A VdS-approved FirExting® multi-zone nitrogen extinguishing system.
- Underground housing in a separate fire extinguishing installation.
- The system protects extinguishing zones on different storeys.
- If a fire is detected in the museum, the alarm will also be transmitted to the central fire alarm system, which can also shut off the ventilation system in the event of fire. The extinguishing gas is then pumped through the nozzles and into the protected area.
- The room is flooded within such a short time that the valuable jars containing the exhibits will not tip over or break in spite of the pressure which builds up (soft flooding).
- The system is virtually invisible to visitors thanks to its concealed installation in shafts and conduits, and behind protective plates.

KEY DATA

Industry:

Archive/museum

Country/city:

Berlin, Germany

Went into operation:

2010

Fire protection system:

FirExting® gas extinguishing system (nitrogen)
56 extinguishing agent cylinders (140 l each)

Protected object:

More than 1 million animal specimens preserved in ethanol, handwritten labels on glass jars, some of which are over 200 years old

Size of protected area:

7 extinguishing zones between 68 and 2,976 m²

Order volume:

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Responsibility:

NL Berlin



Acceptance



Reconstruction



Nitrogen



SILENT



Soft flooding