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IWMA
International Water Mist Association

Ann Micheli has been Managing Director at Ultra Fog since 2012. Her background in assisting Small & Medium Sized firms to diversify and to internationalize brought her into the fire suppression industry some 15 years ago, where she has been enjoying the challenge of developing a small, Italian marine fire company into the international group that it is today.

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The Benefits of Watermist in the Healthcare Sector: A Swedish Case Study

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Rising to the challenge..



- Modern healthcare facilities resemble mini cities, with many varying spaces and many different fire risks.
 - Patient wards
 - Operating Theatres
 - Atrium Entrance Halls
 - Kitchens, Restaurants, shops
 - Underground Parking
 - Technical Spaces
 - Automated Background Service Systems e.g
 - Laundries
 - Pharmaceutical distributions systems

And above all...



..People

Patients or Residents with limited ability to respond to any alarm

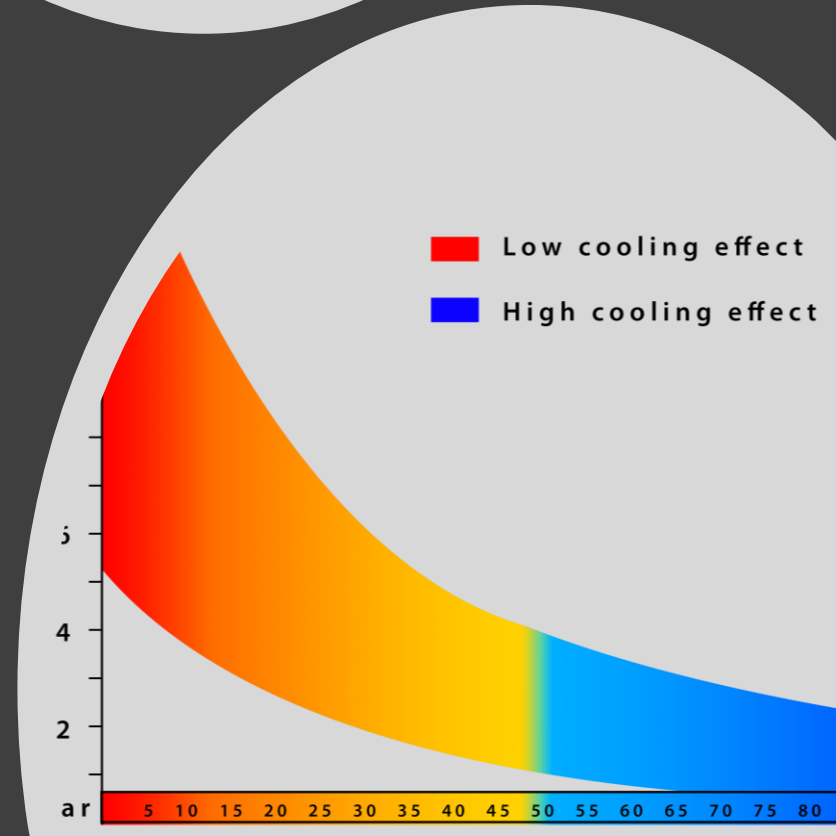
Staff and other workers, rarely in numbers sufficient to achieve full evacuation in the event of a fire.

Vistors who will have little to no knowledge of the layout of the building and fire escape routes.

For full evacuation staff would have to rely on the arrival of the Fire & Rescue Service

Why Watermist?..

- Water absorbs a large amount of heat
- Smaller water droplets = increased surface area and increased ability to absorb heat and cool surroundings
- Less water = facilitates evacuation and reduces down time
- Pressure increases the ability of the water to penetrate the fire plume.



CASE STUDY: SAHLGRENKA HOSPITAL GOTTHENBURG

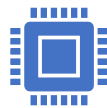


CASE STUDY: SAHLGRENKA HOSPITAL GOTHENBURG





Sahlgrenska Hospital Low Rise Building Watermist Project



2 phase project:

Phase 1: Eye Clinic

Phase 2: Intensive Care /
Admin / Reception



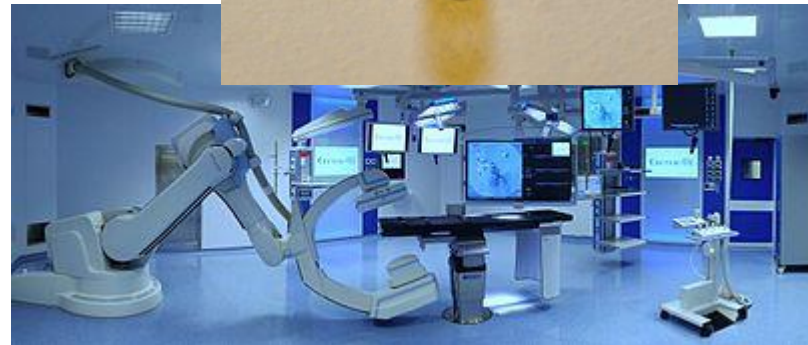
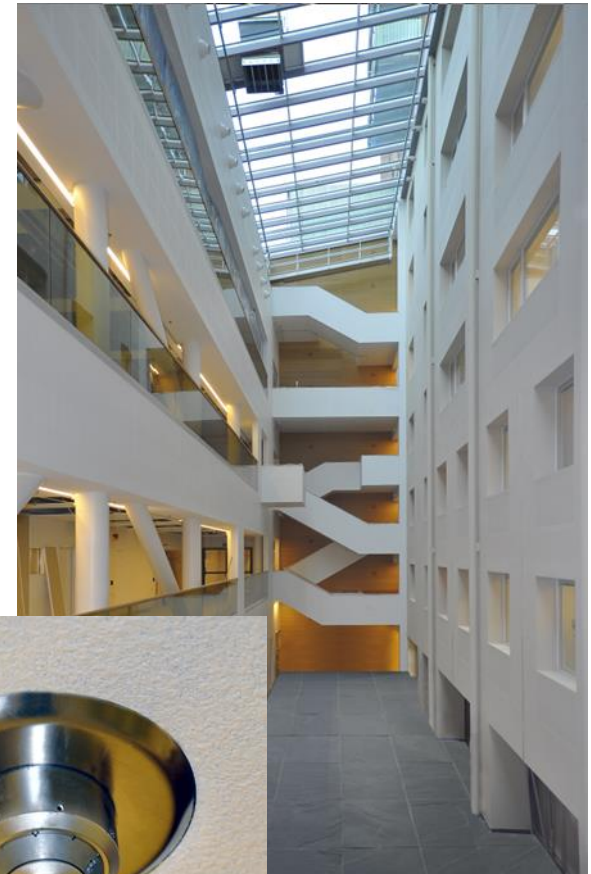
**Each building is
comprised of
some 10 000m2
across 7 floors.**



**Design Criteria:
OH1/EN12845:2004**

Reasons for Specifying Watermist:

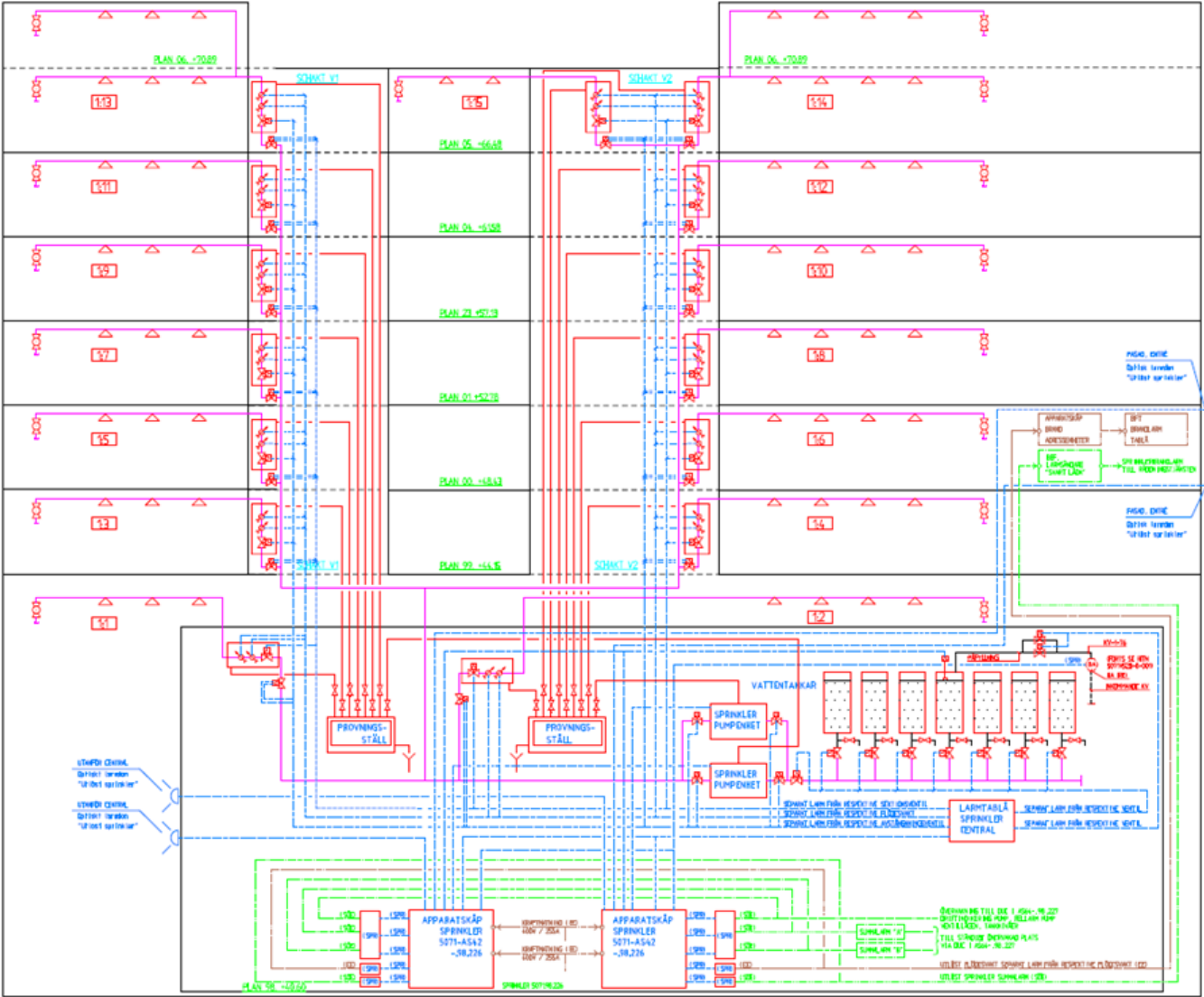
- Reduced water supply availability
- Building Space was at a premium: No space for large water tanks
- Specialised use of internal space (intensive care, eye clinic) = sensitive high value equipment to be protected.
- Tight building schedule: ease of installation
- Low lifetime maintenance costs



100% system redundancy

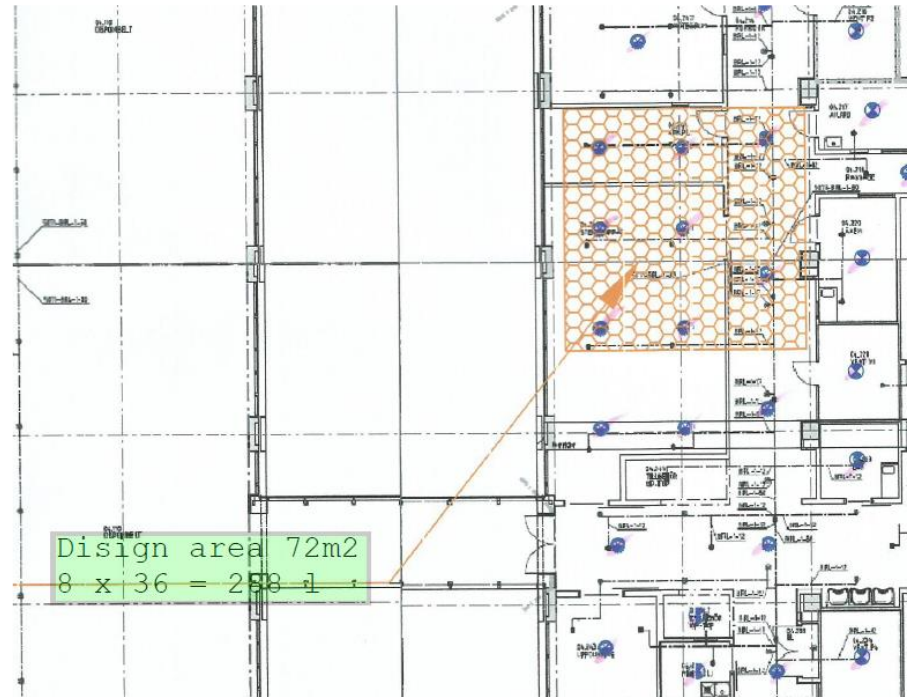


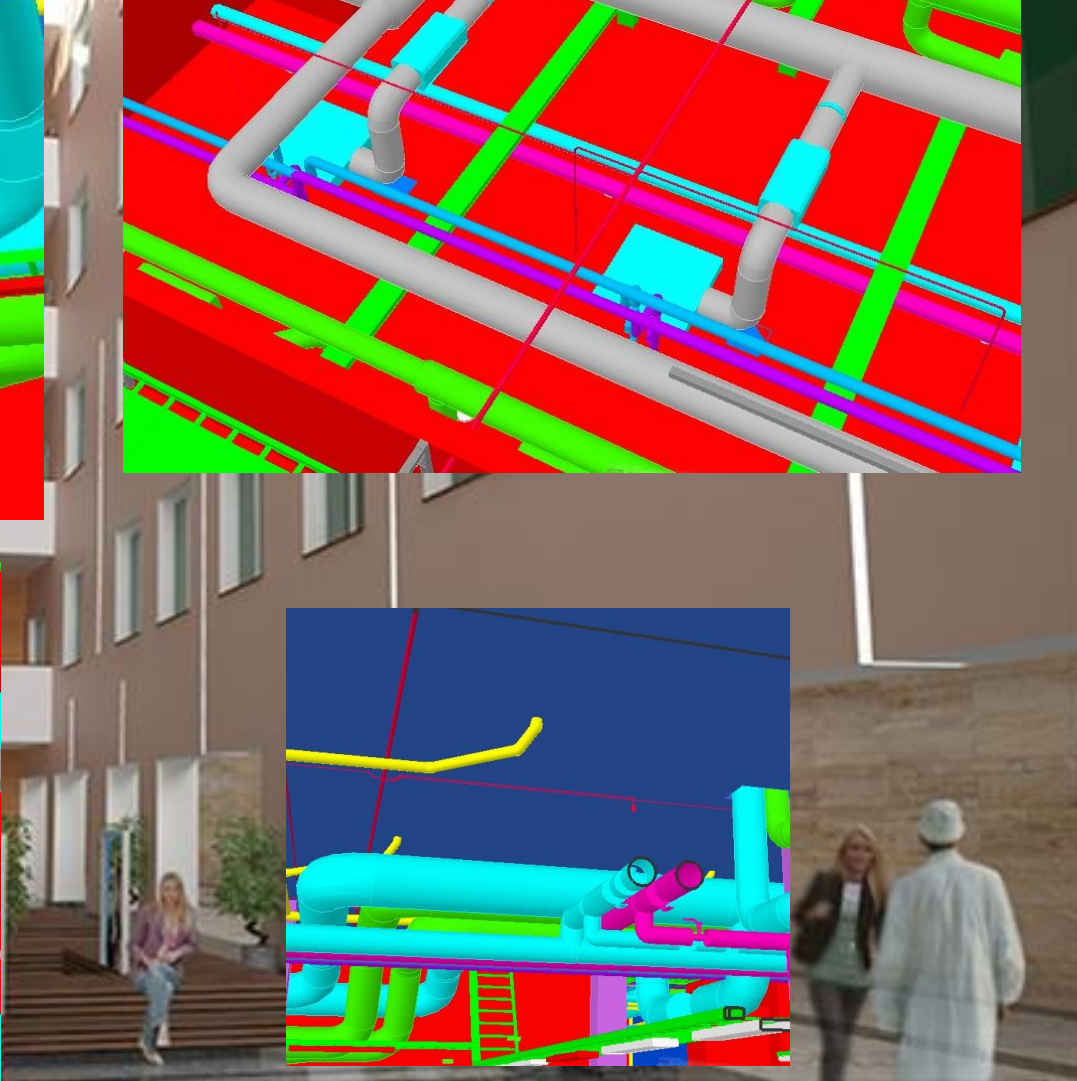
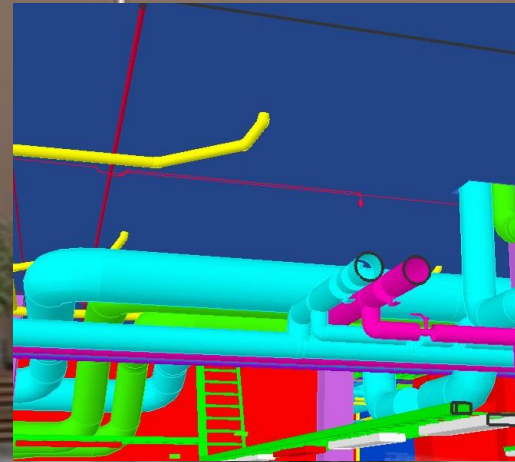
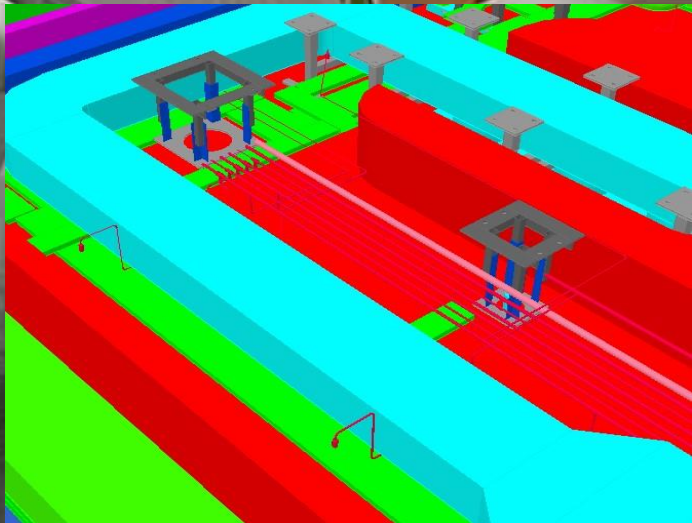
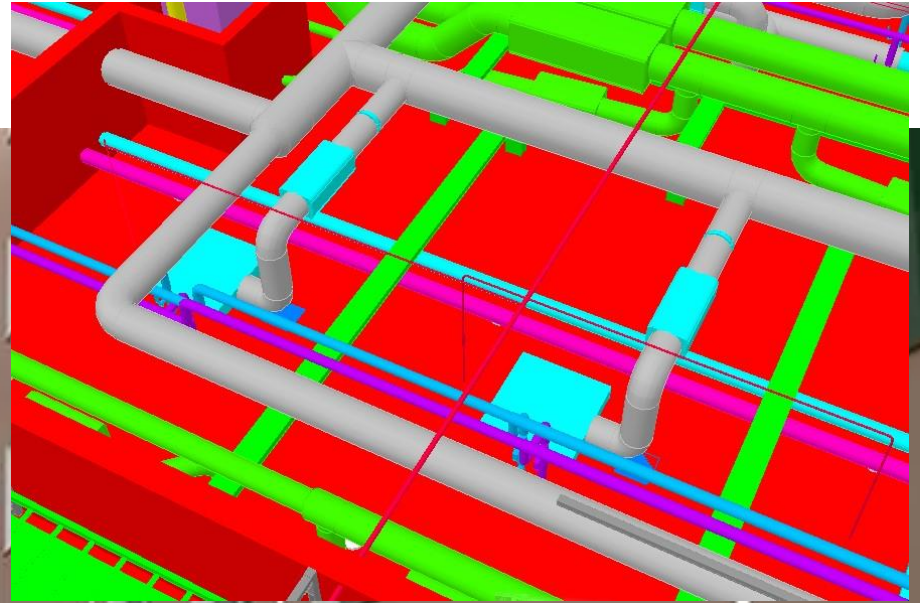
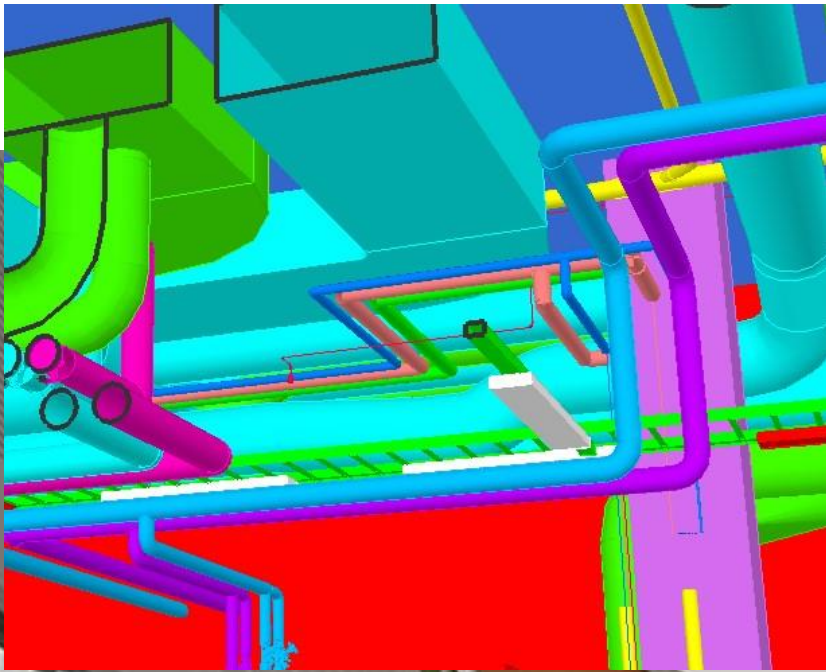
SYSTEM DESIGN



MOST DEMANDING AREA

- The area shown in the submitted drawing is located on level 2 in the building.
- 72 m²
- Max 6 pcs nozzles, 36 l/min each





3D DESIGN DRAWINGS

Sahlgrenska Hospital: Nozzle Design

Nozzles used in this project:

- 603-260-061 – B - an automatic 'Hi-Flow' bulb nozzle approved for 2,5 mt height, 5.3 mt spacing, no coverage limit.
 - This nozzle can protect up to 48m²
- 603-300-061 – B - an automatic 'Hi-Flow' bulb nozzle approved for 12 mt height, 4.5 mt spacing, no coverage limit
- 603-08- B - a standard automatic bulb nozzle approved for 2,5 mt height, coverage 12.25m², to be centrally located, this nozzle is used for small areas (eg. Bathrooms etc).



INSTALLATION



SUMMING UP

- **Watermist is a tried and tested technology**
- **Recognised International Standards**
- **Flexible Personalised Solutions**
- **High fire suppression efficacy**
- **Ease of Installation with minimal disruption in a 24/7 environment.**
- **Easy retrofit**
- **Lifetime Service and Maintenance**

