

## SYSTEM IN PRACTICE: Sahlgrenska Hospital

IWMA University of Lund

12<sup>th</sup> March 2015



High pressure  
water fog sprinkler  
systems for fighting fires

[www.ultrafog.com](http://www.ultrafog.com)

# Delivering fire protection solutions for industry, buildings, occupants and property

Ultra Fog Fire Extinguishing System | Reliable and efficient | Environmentally friendly and safe



## Ultra Fog High Pressure Watermist Fire Suppression

- ULTRAFOG<sup>®</sup> is a HIGH PRESSURE watermist system
  - 100-120 bar (at the nozzle)
  - only water is used (normal tap water, passing salt water in marine applications)
  - Tested and Type approved systems for a range of applications
  - Patented nozzle
  - System designed for ease of installation and ease of maintenance.



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## Sahlgrenska Hospital Low Rise Building Project

- Customer: Västfastigheter
- 2-Phase project
  - Phase 1: Eye Clinic
  - Phase 2: Intensive Care, Admin & Reception
- Each building is composed of some 10.000 m<sup>2</sup> across 7 floors
- Design Criteria: OH1 / EN12845:2004



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## 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



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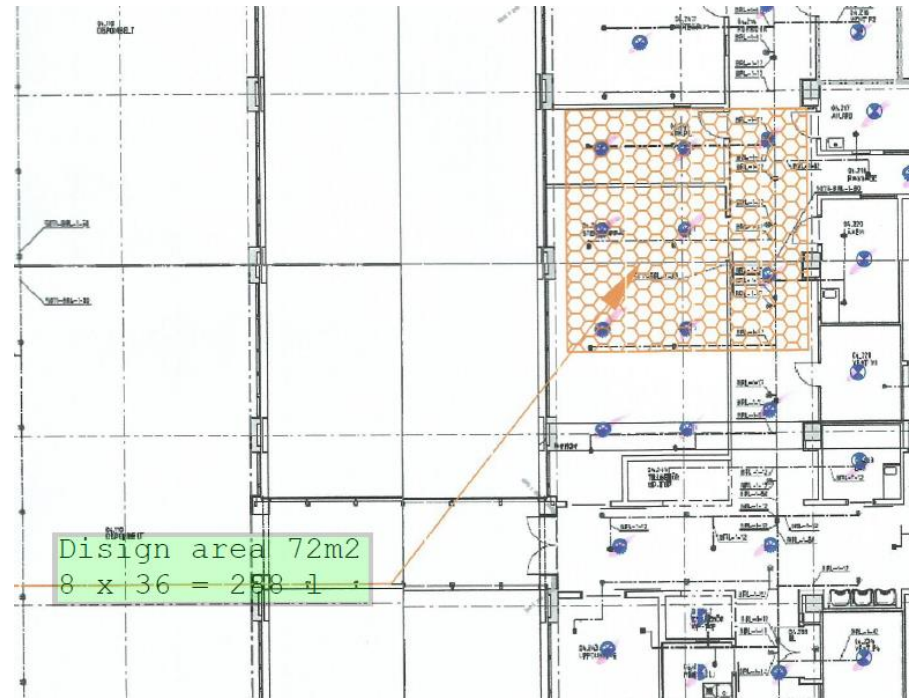
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## Sahlgrenska Hospital: Most Demanding Area

- The area shown in the submitted drawing is placed on level 2 in the building.
- 72 m<sup>2</sup>
- Max 6 pcs nozzles, 36 l/min each

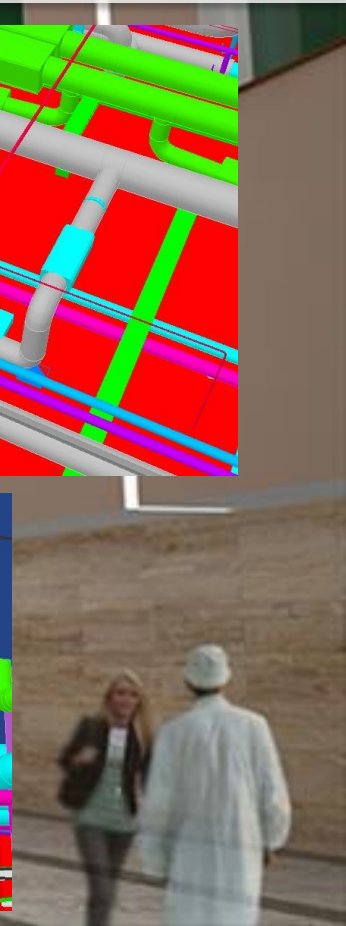
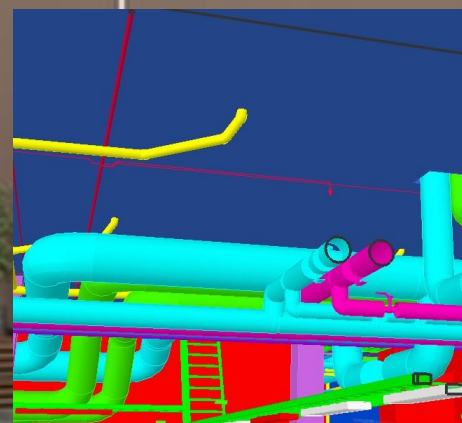
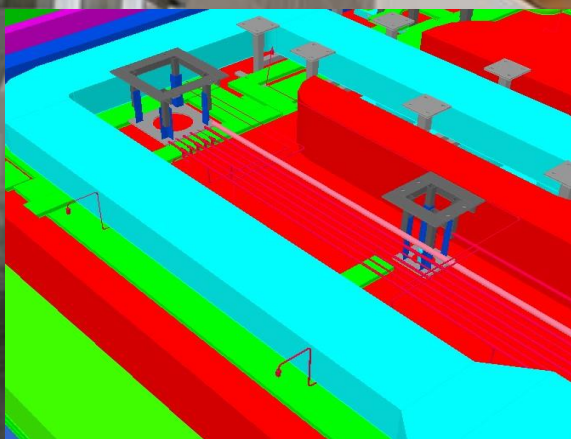
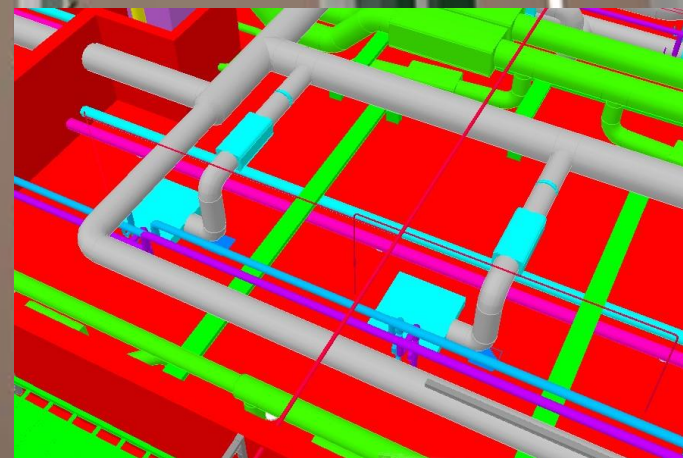
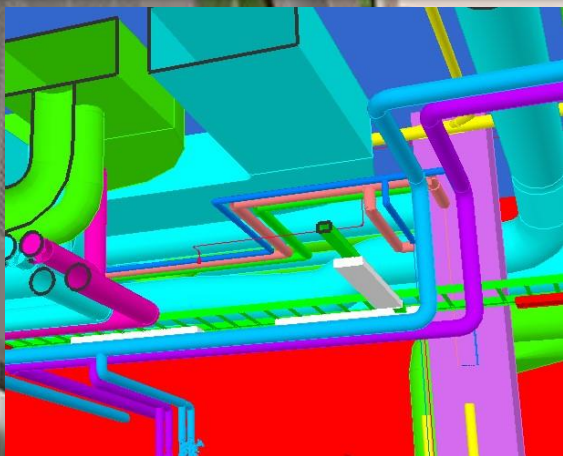


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## Sahlgrenska Hospital: 3D design





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## Sahlgrenska Hospital: Ultrafog System 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
- 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 12.25m<sup>2</sup>, to be centrally located, this nozzle is used for small areas (eg. Bathrooms etc).



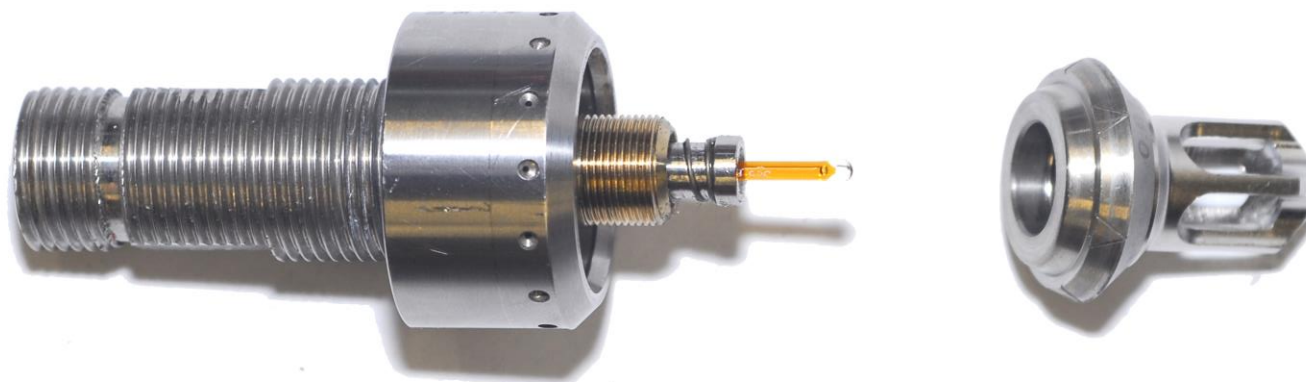
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## Sahlgrenska Hospital: Ultrafog Easy Maintenance Nozzles

- Easy bulb change



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- Ultra Fog Test tool



Tool comes with a hose to collect water to a bucket/bottle for measuring of flow and k-factor

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## Sahlgrenska Hospital: Installation

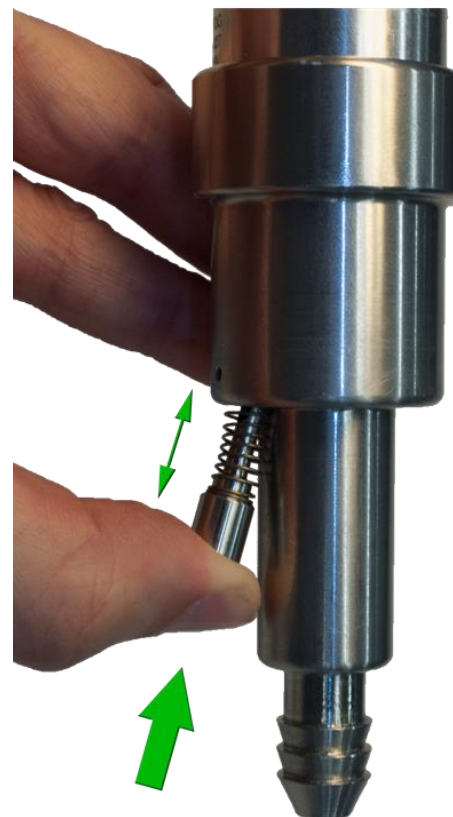
- Ultra Fog Test tool

Connect Ultra Fog test

tool to sprinkler head.

Then push rod to open the  
sprinkler head.

After finished test, release  
rod and remove test tool.



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## Sahlgrenska Hospital: Ultrafog Easy Maintenance Nozzles

- Ultra Fog Test tool
  - Unique features for a sprinkler head
  - Simple procedure for testing
  - Direct response for measuring k-factor
  - Works on pilot pressure mode
  - Drains out air efficiently
  - Verifies function of water release



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## Contact Details

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