VID FIREKILL
LOW PRESSURE WATERMIST

# Commercial Building Low Pressure Watermist Fire Protection

# COMMERCIAL BUILDINGS

**VID FIREKILL is a world leading innovative developer and manufacturer of water based firefighting products, specializing in fixed water based systems utilizing environmentally friendly firefighting methods.**

Commercial buildings are busy places full of potential fire hazards, and with their complexity and combination of functions, these buildings present unique challenges to fire protection.

VID FIREKILL offers complete fire protection of all types of commercial buildings such as office buildings, hotels, shopping centers, warehouses, hospitals, medical centers, and more.

The **FIREKILL™** low pressure watermist suppression system is designed to protect different areas of commercial buildings from fire and ensure the safety of people, protect property assets, and prevent expensive business interruptions.

The **FIREKILL™** low pressure watermist system complies with NFPA 750 and the European Standard 14972 for watermist systems.

The system only uses potable water as a suppression agent, making it safe for people and the environment.

# COMPLETE FIRE PROTECTION

In compact downtown areas, commercial buildings are often multi-use buildings that serve more than one purpose. This may include shopping centers and food establishments at ground level, office spaces on upper floors, and underground parking garages.

These mixed occupancy buildings add additional challenges to fire protection due to the different kinds of fire groups.

The **FIREKILL™** low pressure watermist system provides complete fire protection of multi-use buildings by combining different types of **FIREKILL™** nozzles individually suited for specific areas and hazard groups.


1. Atriums
2. Offices
3. Conference rooms
4. Reception and lobby areas
5. Retail shops and kiosks
6. Food and drink establishments
7. Kitchens
8. Hotel room and suites
9. Corridors
10. Clinics
11. Storage rooms
12. Server rooms
13. Technical rooms
14. Enclosed parking

## THE FIREKILL™ SYSTEM

The **FIREKILL™** system for protection of commercial buildings features uniquely designed low pressure watermist nozzles. The combination of nozzles depends on individual requirements and building type.

The **FIREKILL™** OH nozzle range consists of patented automatic semi-concealed low pressure watermist nozzles specially designed for effective and reliable protection of OH1, OH2, and OH3 risks.
The OH nozzles come in pendent, sidewall and upright versions, and can be supplied with different finishes, colors and print to blend in with almost any kind of surface.

Large open spaces with excessive ceiling heights, such as atriums, are protected by small **FIREKILL™** APS low pressure watermist sidewall nozzles. The unique nozzles can project a spray 13 meters from a single side to protect a maximum atrium width of 26 meters from opposing sides.

For fire protection of generator rooms, the system utilizes the **FIREKILL™** open low pressure watermist K6 nozzles. The robust nozzles effectively suppress fire in high hazard equipment while keeping water damage to electrical equipment to a minimum.

Model OH

Model APS

Model K6

The nozzles can be provided in different finishes and materials to make the system blend in with almost any type of surface, securing the aesthetics of the surroundings.

Hospital, The Netherlands

## FACTS ABOUT LOW PRESSURE WATERMIST

- Low pressure watermist systems can be designed, installed and maintained with the same skillset as conventional fire sprinkler systems.
- The low pressure watermist system offers an advantage over conventional fire sprinkler systems when it comes to water usage.
- Low pressure watermist systems use the same pressure class components as conventional sprinkler systems.
- Low pressure watermist systems are more robust and reliable than high pressure watermist systems as the system waterways and nozzle orifices are larger.
- Low pressure watermist systems require less electricity than conventional sprinkler systems and high pressure watermist systems.
- Low pressure watermist systems are approved to the same approval standards as high pressure watermist systems.

# BENEFITS OF THE FIREKILL SYSTEM

**Successfully tested and approved**

The **FIREKILL™** low pressure watermist system is approved to cover complete commercial buildings from fire. The system complies with NFPA 750 and the European Standard 14972 for watermist systems.

**Environmentally friendly**

The **FIREKILL™** low pressure watermist system uses 60 - 90% less water compared to traditional fire sprinkler systems.
Firefighting without harmfull substances!
The low pressure watermist system only uses potable water as suppression agent, which makes the system safe for people and the environment.

**Cost effective, easy to install, and requires low maintenance**

With the use of low water pressure and low water consumption the **FIREKILL™** low pressure watermist system can be designed with small system components (e.g., pump, pipes, and fittings) resulting in cost savings. Further, as the system installation procedures are similar to the installation of traditional fire sprinkler systems but with fewer nozzles and smaller pipes, installation work can be done fast and easily saving time and money.

**Less damaging**

The minimal water usage makes the system economical while also minimizing the risk of water damage to the building and essential equipment.

**Robust and reliable**

The low water pressure makes the system reliable and robust, and due to the system's large waterways and orifice design, the risk of strainers clogging is minimized.

**Aesthetic fire protection**

The **FIREKILL™** system can be delivered with nozzles in different paint and finishes to make the system blend in with almost any type of surface, securing the aesthetics of the surroundings. The nozzles can also be delivered with logo print.

# APPROVALS

All our products are successfully tested by ISO17025 accredited fire test laboratories and 3. party approved to comply with the latest updates on international approval standards for watermist system components for fire protection.

FM APPROVED

**Certificate of Compliance**

This certificate is issued for the following:

| | |
|---|---|
| System Designation: | FIREKILL™ Occupancy Protection System using Model OH-VSO & OH-OS automatic nozzles |
| Design, Installation, Operation and Maintenance Manual: | FIREKILL™ Occupancy Protection System using Model OH-VSO & OH-OS automatic nozzles, Design, Installation, Operation and Maintenance Manual (DIOM) for protection of Non-Storage Occupancies, Hazard Category 1 (HC-1), Doc. No.: 40605-02-03, Issue/Date: September 28, 2015 |

**Prepared for:**
VID FIRE-KILL APS
SVALBARDVEJ 13
SVENDBORG
DK-5700
DENMARK

**Manufactured at:**
VID FIRE-KILL APS
SVALBARDVEJ 13
SVENDBORG
DK-5700
DENMARK

FM Approvals Class: 5560

Approval Identification: 3053358 Approval Granted: October 14, 2015

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.

David B. Fuller
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FM Approvals
Member of the FM Global Group

FM APPROVED

**Certificate of Compliance**

This certificate is issued for the following:

**Water Mist System**

| | |
|---|---|
| System Designation: | FIREKILL™ Total Flooding System Using Model K6 Open Nozzles for the protection of machinery in enclosures with volumes up to, and including, 362,800 ft³ (4610 m³) at a maximum height of 39.4 ft (12.0 m) |
| Design, Installation, Operation and Maintenance Manual: | FIREKILL™ Total Flooding System Using Model K6 Open Nozzles Design, Installation and Maintenance (DIOM) Manual for protection of machinery and combustion turbines in enclosures, Doc No 110629-02-004, dated 10-10-2007 |

**Prepared for:**
VID FIRE-KILL APS
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DENMARK

**Manufactured at:**
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FM Approvals Class: 5560

Approval Identification: 3061155 Approval Granted: December 19, 2017

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.

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IBS Institut für Brandschutztechnik und Sicherheitsforschung

**Approval Certificate for Protection of HC2-HC3 risks**

**Certificate No.: 322091501-1**
Certificate date: 28th August 2022
Engineer: Wolfgang REICHÖR / SchD
Extension: 812

**SYSTEM MANUFACTURER:** VID FIRE-KILL APS, Svalbardvej 13, DK-5700 Svenborg

**SYSTEM:** Low Pressure Watermist System for HC2-HC3 risks

**SCOPE OF CERTIFICATE:** Automatic Low-Pressure Water Mist System system is
**Nozzle: OH-PX2**
Applications: Non storage and manufacturing areas with ordinary combustibles, with plastic and ignitable liquids used or stored not in excess of incidental quantities. No plastic construction elements.
Non storage and manufacturing areas with ordinary combustibles with un-cartooned plastics and ignitable liquids not used or stored in excess of incidental quantities. No plastic construction elements.

**APPLICABLE STANDARDS:** EN 14972
FM 5560

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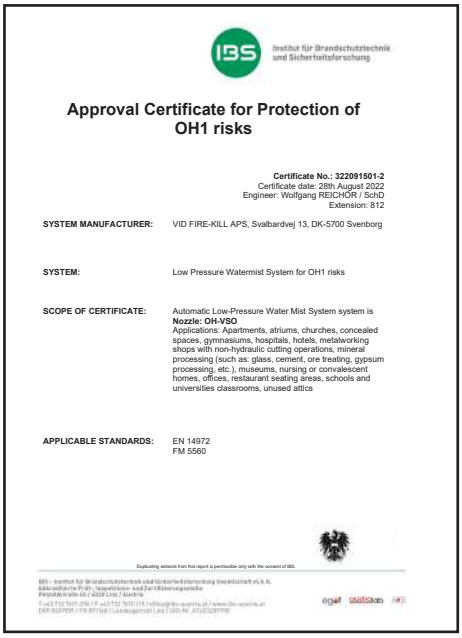

IBS Institut für Brandschutztechnik und Sicherheitsforschung

**Approval Certificate for Protection of OH1 risks**

**Certificate No.: 322091501-2**
Certificate date: 28th August 2022
Engineer: Wolfgang REICHÖR / SchD
Extension: 812

**SYSTEM MANUFACTURER:** VID FIRE-KILL APS, Svalbardvej 13, DK-5700 Svenborg

**SYSTEM:** Low Pressure Watermist System for OH1 risks

**SCOPE OF CERTIFICATE:** Automatic Low-Pressure Water Mist System system is
**Nozzle: OH-VSO**
Applications: Apartments, atriums, churches, concealed spaces, gymnasiums, hospitals, hotels, metalworking shops with non-hydraulic cutting operations, mineral processing (such as: glass, cement, ore treating, gypsum processing, etc.), museums, nursing or convalescent homes, offices, restaurant seating areas, schools and universities classrooms, unused attics

**APPLICABLE STANDARDS:** EN 14972
FM 5560

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**Approval Certificate for Protection of OH1 risks**

**Certificate No.: 322091501-3**
Certificate date: 28th August 2022
Engineer: Wolfgang REICHÖR / SchD
Extension: 812

**SYSTEM MANUFACTURER:** VID FIRE-KILL APS, Svalbardvej 13, DK-5700 Svenborg

**SYSTEM:** Low Pressure Watermist System for OH1 risks

**SCOPE OF CERTIFICATE:** Automatic Low-Pressure Water Mist System system is
**Nozzle: OH-SW2**
Applications: Offices, Public areas of low fire load, hotel rooms, rooms in hospitals, care homes, schools, flats, accommodation areas as well as any other comparable risks.

**APPLICABLE STANDARDS:** EN 14972

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**Approval Certificate for Protection of OH2 risks**

**Certificate No.: 322091501-4**
Certificate date: 28th August 2022
Engineer: Wolfgang REICHÖR / SchD
Extension: 812

**SYSTEM MANUFACTURER:** VID FIRE-KILL APS, Svalbardvej 13, DK-5700 Svenborg

**SYSTEM:** Low Pressure Watermist System for OH2 risks

**SCOPE OF CERTIFICATE:** Automatic Low-Pressure Water Mist System system is
**Nozzle: OH-UPR**
Applications: Non-automatic, fully enclosed garages, underground garages, car park garages

**APPLICABLE STANDARDS:** EN 14972

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**Approval Certificate for Protection of Atrium risks**

**Certificate No.: 322092802-1**
Certificate date: 28th September 2022
Engineer: Wolfgang REICHÖR / ReiP
Extension: 812

**SYSTEM MANUFACTURER:** VID FIRE-KILL APS, Svalbardvej 13, DK-5700 Svenborg

**SYSTEM:** Low Pressure Watermist System for Atrium risks

**SCOPE OF CERTIFICATE:** Automatic Low-Pressure Water Mist System

**System: Model APS Type A**
Applications: Atriums with a max. width of 16 m

**System: Model APS Type B**
Applications: Atriums with a max. width of 20 m

**System: Model APS Type C**
Applications: Atriums with a max. width of 26 m

**System: Model APS Type D**
Applications: Atriums with a max. width of 5 m

Risk for all systems: Large enclosures with low fire load situated at floor-level.

**APPLICABLE STANDARDS:** EN 14972

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