



Land Standards



Standard	
General Design & Installation	
EN 14972-1:2020	Fixed firefighting systems - Water mist systems Design and installation
VdS 3188:2020	Water Mist Sprinkler Systems and Water Mist Extinguishing Systems (High Pressure Systems) - Planning and Installation
NFPA 750:2023	Standard on Water Mist Fire Protection Systems
FM Global Loss Prevention Data Sheet 4-2:2022	Water mist systems

Business Segment	Application	Fire Test Protocols	Type approvals	
Residential	Residential occupancies	prEN 14972-17 (no published document available yet)	Test protocol for residential occupancies for automatic nozzle systems	
		BS 8458:2015	Fixed fire protection systems – Residential and domestic watermist systems – Code of practice for design and installation	
		UL 2167:2021	Water Mist Nozzles for Fire Protection Service Ch.44 - Residential area fire tests	
Commercial buildings	Offices, schools, hotels, recreational areas, etc (EUR OH1, FM HC-1, NFPA LH)	EN 14972-3:2021	Test protocol for office, school class rooms and hotel for automatic nozzle systems	
		prEN 14972-4	Test protocol for non-storage occupancies for automatic nozzle systems	
		FprEN 14972-7	Test protocol for commercial low hazard occupancies for automatic nozzle systems	
		VdS 3883-1en:2020	Fire Test Protocol for Water Mist Systems, Part 1: Protection of office spaces and accommodation areas	
		BS 8489-7:2016	Fixed fire protection systems – Industrial and commercial watermist systems Part 7: Fire performance tests and requirements for watermist systems for the protection of low hazard occupancies	
		FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX G: Fire tests for water mist systems for the protection of non-storage occupancies, Hazard Category 1 (HC-1) [formerly Light Hazard occupancies]	
		UL 2167:2021	Water Mist Nozzles for Fire Protection Service Ch.43 - Shipboard public space fire tests & Ch.45 - Light Hazard area fire tests	
	Sidewall sprinklers	FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX G: Fire tests for water mist systems for the protection of non-storage occupancies, Hazard Category 1 (HC-1) [formerly Light Hazard occupancies]	
		VdS 3883-2en:2020	Protection of Office Spaces and Accommodation Areas with Water Mist Sidewall Sprinklers	
	False floors and false ceilings	EN 14972-6:2023	Test protocol for false floors and false ceilings for automatic nozzle systems	
		VdS 3883-3en:2020	Fire Test Protocol for Water Mist Systems, Part 3: Protection of False Ceilings and False Floor of OH Group 1	
	Atrium	EN 14972-10:2022	Test protocol for atrium protection with sidewall nozzles for open nozzle systems	
	Car garages / Parking garages NFPA OH1	prEN 14972-5 (no published document available yet)	Test protocol for car garages for automatic nozzle systems	
		VdS 3883-4en:2020	Fire Test Protocol for Water Mist Systems, Part 4: Protection of car garages	
		UL 2167:2021	Water Mist Nozzles for Fire Protection Service Ch.46 - Ordinary Hazard Group 1 fire tests	
	Sales, storage & shopping areas NFPA OH2	prEN 14972-2 (no published document available yet)	Test protocol for shopping areas for automatic nozzle systems	
		VdS 3883-5en	Fire Test Protocol for Water Mist Systems, Part 5: Protection of selected sales and storage areas and mechanical floors	
		UL 2167:2021	Water Mist Nozzles for Fire Protection Service Ch.47 - Ordinary Hazard Group 2 fire tests	
	FM Global Non-Storage Occupancies, Hazard Category 2 (HC-2)	FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX P: Fire tests for water mist systems for the protection of non-storage occupancies, Hazard Category 2 (HC-2)	
		FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX P: Fire tests for water mist systems for the protection of non-storage occupancies, Hazard Category 3 (HC-3)	
	Data halls	FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX M: Fire tests for water mist systems for the protection of data processing equipment rooms/halls - above raised floor	
		FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX N: Fire tests for water mist systems for the protection of data processing equipment rooms/halls - below raised floor	
	Mechanical escalators	VdS-Rolltreppen/escalator_en_V1(Draft)-20.08.09	Test Setup and Requirements - Protection of mechanical escalator	
	Commercial deep fat cooking fryers	prEN 14972-12 (no published document available yet)	Test protocol for commercial deep fat cooking fryers for open nozzle systems	
	Industrial applications	Machinery spaces & turbine enclosures < 80 m³	FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX A: Fire tests for water mist systems for the protection of machinery in enclosures with volumes not exceeding 80 m³
			FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX B: Fire tests for water mist systems for the protection of combustion turbines in enclosures with volumes not exceeding 80 m³
		Machinery spaces & turbine enclosures < 260 m³	FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX C: Fire tests for water mist systems for the protection of machinery in enclosures with volumes not exceeding 260 m³
FM 5560:2021			Approval Standard for Water Mist Systems, APPENDIX D: Fire tests for water mist systems for the protection of combustion turbines in enclosures with volumes not exceeding 260 m³	
EN 14972-9 (2020)			Test protocol for machinery in enclosures not exceeding 260 m³ for open nozzle systems	
Machinery spaces & turbine enclosures > 260 m³		EN 14972-15:2021	Test protocol for combustion turbines in enclosures not exceeding 260 m³ for open nozzle systems	
		FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX E: Fire tests for water mist systems for the protection of machinery in enclosures with volumes exceeding 260 m³	
		FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX F: Fire tests for water mist systems for the protection of combustion turbines in enclosures with volumes exceeding 260 m³	
		EN 14972-8 (2020)	Test protocol for machinery in enclosures exceeding 260 m³ for open nozzle systems	
Local application		EN 14972-14:2021	Test protocol for combustion turbines in enclosures exceeding 260 m³ for open nozzle systems	
		FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX I: Fire tests for water mist systems for the protection of local applications	
Wet benches and other similar processing equipment		prEN 14972-13 (no published document available yet)	Test protocol for wet benches and other similar processing equipment for open nozzle systems	
		FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX H: Fire tests for water mist systems for the protection of wet benches and other similar processing equipment	
Chemical fume hoods		FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX L: Fire tests for water mist systems for the protection of chemical fume hoods	
Industrial oil cookers		EN 14972-16 (2020)	Test protocol for industrial oil cookers for open nozzle systems	
	FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX J: Fire tests for water mist systems for the protection of industrial oil cookers		
Continuous wood board presses	FM 5560:2021	Approval Standard for Water Mist Systems, APPENDIX K: Fire tests for water mist systems for the protection of continuous wood board presses		
Cable tunnels / Cable ducts	EN 14972-11:2023	Test protocol for cable tunnels for open nozzle systems		
	VdS 3883-8en	Fire Test Protocol for Water Mist Systems, Part 8: Protection of Cable Ducts		
Flammable liquid storages and processing	VdS 3883-7en	Fire Test Protocol for Water Mist Systems, Part 7: Protection of Areas with Combustible Liquids		
Paint shops / booths	VdS 3883-6en	Fire Test Protocol for Water Mist Systems, Part 6: Protection of Paint Booths		

Footnote 1; If standards for an application do not yet exist, IWMA recommends full-scale fire tests to prove system performance.