## Victaulic Vortex™ 1500 Fire Suppression System

The Victaulic Vortex 1500 fire suppression system is a hybrid system incorporating liquid (water) and inert gas (nitrogen) extinguishing agents discharged together from a single emitter.

Using proprietary supersonic technology, the system atomizes the water to <10 $\mu$ m forming a dense homogeneous suspension of nitrogen and water. In this manner two extinguishment mechanisms are occurring simultaneously: cooling and oxygen reduction.



Series 953 Emitter



Series 951 Addressable Combination Box PATENT-PENDING

APPLICATION OPERATION	<ul> <li>The Victaulic Vortex 1500 Fire Suppression System can effectively be applied in total flooding fire suppression applications in the following areas:</li> <li>Industrial machine spaces such as power generation plants, turbine enclosures, automotive manufacturing, steel foundry</li> </ul>		
			Flammable liquids storage
	Data Centers, Museums, Libraries		
	<ul> <li>Mining Facilities</li> </ul>		
	<b>Environmental Impact</b> Since the Victaulic Vortex 1500 system only discharges pure nitrogen and potable or de-ionized wate there are no environmental or life-safety risks as a result of system discharge. The EPA SNAP approval recognizes the Victaulic Vortex homogenous suspension discharge as a suitable replacement for Halo 1301. The system can be discharged immediately upon hazard detection, without a delay for occupar evacuation.		
	OPERATION	The system incorporates an open architecture design and is fully compatible with automatic hazard detection systems and is adaptable for remote manual activation if required.	
A system installation and maintenance manual is available containing information on system components and procedures concerning design, operation, inspection, maintenance and recharge.			
The Victaulic Vortex 1500 system is particularly useful for suppressing fires in hazards where an electrically non-conductive medium is essential or desirable, where clean up of other agents present a problem, where room integrity is not achievable or where the hazard is normally occupied and requires a non-toxic agent.			
The basic system consists of stored nitrogen and either potable or captive water supply, or de-ionized water piping along with single or multiple zone control boxes and system emitters in the hazard area. The suspension of water and nitrogen is distributed and discharged into the hazard area through a network of pipe and emitters. System emitters can be installed in either a pendent or sidewall configuration and are positioned via straight-forward cubic-foot/meter coverage volume requirements.			
JOB/OWNER	CONTRACTOR	ENGINEER	
System No	Submitted By	Spec Sect Para	
Location	Date	Approved	

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**REGULATORY INFORMATION** The Victaulic Vortex system has been witnessed by Underwriter's Laboratory and found to extinguish Class A polymeric and wood crib materials and Class B flammable liquid fires effectively in accordance with UL2127. Reference UL Investigative Report Project 07NK11919, EX5170 and FM Contract Test Report Project 3031726, Class 5560. The EPA has provided a Significant New Alternate Policy ("SNAP") approval for the Victaulic Vortex system and listed it as an acceptable replacement for Halon 1301 in total flooding applications. The Victaulic Vortex system has demonstrated the capability of extinguishing all fire scenarios of NFPA 750 and NFPA 2001 without needing to meet the extended discharge, room integrity (10 minute hold time) and delivery time (1 minute) requirements of NFPA 750 and 2001. INSTALLATION All system components and accessories must be installed by trained personnel. All installation must be performed according to the guidelines stated in the manufacturer's design, installation, operation, inspection, recharge and maintenance manual. See publication: I-VORTEX.1500. **TYPICAL SYSTEM LAYOUT** Emitters and piping Sensor Equipment Combination Control Box Water Supply Zone Control Nitrogen Supply Boxes Fluid Control Box WARRANTY Refer to the Warranty section of the current Price List or contact Victaulic for details.

NOTE

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

