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Examination Standard for Dry Chemical Extinguishing Systems

Class Number 5320

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Foreword

This standard is intended to verify that the products and services described will meet stated conditions of performance, safety and quality useful to the ends of property conservation. The purpose of this standard is to present the criteria for examination of various types of products and services.

Examination in accordance with this standard shall demonstrate compliance and verify that quality control in manufacturing shall ensure a consistent and reliable product.

Table of Contents

1. INTRODUCTION

1.1 Purpose

1.1.1 This standard states testing and certification requirements for fixed fire extinguishing systems which use dry chemical as the primary means of extinguishant.

1.1.2 Testing and certification criteria may include, but are not limited to, performance requirements, marking requirements, examination of manufacturing and filling facilities, audit of quality assurance procedures, and a surveillance program.

1.2 Scope

1.2.1 Pre-engineered dry chemical fire extinguishing systems are classified into one of two general categories according to protection type: total flooding or local application. Total flooding systems are designed to uniformly discharge dry chemical throughout the entire protected volume, and are intended to be used for the protection of Class A hazards, Class B hazards, or both. Local application systems are designed to discharge dry chemical directly onto a specific area of protection, and are intended to be used for the protection of Class B hazards only. Either type shall be designed for automatic and manual control to protect single or multiple hazard areas.

1.2.2 A basic dry chemical extinguishing system typically comprises one or more agent storage containers, discharge valves arranged for automatic or manual/automatic control, lock-out valves (when required), piping, and discharge nozzles. Alternate design features may also be acceptable, provided they exhibit equivalent durability and effectiveness that can be determined employing the subject standard, at the discretion of the certification agency. Compatible certified detectors and detection and release controls are required for automatic electrical operation of these systems, but are not included in the scope of this standard. If a system uses an integral detection and actuation system, it may be evaluated as a part of that system, using criteria derived from those used for standalone detection and control systems.

1.2.3 This standard requires the examination of complete systems. Complete systems shall be submitted along with design, installation, operation, and maintenance instructions for certification. However, the manufacturer may, at any time, submit additional components or auxiliary equipment for use on the certified system. Purchased devices such as thermostats, releases, and timers must also be submitted by the system manufacturer for evaluation as a part of the system, even though such devices may already be certified and listed by the certification agency. At minimum, a system shall consist of those components and auxiliary equipment considered necessary by the certification agency for the system to operate properly when connected to a certified detection and control system. Incomplete systems shall not be certified.