



Member of the FM Global Group

Examination Standard for Storage Cabinets for Ignitable (Flammable or Combustible) Liquids

Class Number 6050

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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.

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1. INTRODUCTION

1.1 Purpose

- 1.1.1 This standard states testing and certification requirements for cabinets used to store ignitable (flammable or combustible) liquids.
- 1.1.2 Testing and certification criteria may include performance requirements, marking requirements, examination of manufacturing facility(ies), audit of quality assurance procedures, and a follow-up program.

1.2 Scope

- 1.2.1 This standard sets performance and construction requirements for storage cabinets for ignitable (flammable or combustible) liquids.

1.3 Basis for Requirements

- 1.3.1 The requirements of this standard are based on experience, research and testing, and/or the standards of other organizations. The advice of manufacturers, users, trade associations, and loss control specialists was also considered.
- 1.3.2 The requirements of this standard reflect tests and practices used to examine characteristics of storage cabinets for the purpose of obtaining certification. Storage cabinets having characteristics not anticipated by this standard may be certified if performance equal, or superior, to that required by this standard is demonstrated.

1.4 Basis for Certification

Certification is based upon satisfactory evaluation of the product and the manufacturer in the following major areas:

- 1.4.1 Examination and tests on production samples shall be performed to evaluate:
 - the suitability of the product;
 - the performance of the product as specified by the manufacturer and required for certification;
 - the durability and reliability of the product.
- 1.4.2 An examination of the manufacturing facilities and audit of quality control procedures may be conducted to evaluate the manufacturer's ability to consistently produce the product which is examined and tested, and the marking procedures used to identify the product. Subsequent surveillance may be required by the certification agency in accordance with the certification scheme to ensure ongoing compliance.
- 1.4.3 This standard includes the option of recognizing any cabinet that has met all the requirements of the latest version of the EN14470 Standard, Part 1 only, with the following stipulations:
 - a) the cabinet must pass a load test per FM Approvals Examination Standard 6050;
 - b) flame arrester assemblies must pass the requirements of FM Approvals Examination Standard 6050;
 - c) a representative from the certification agency must be present to witness tests in their entirety.

Note: Part 2 of the EN14470 Standard is not included nor covered in this standard.

- 1.4.4 Cabinets submitted for certification that are to be tested in accordance with the latest version of the EN14470 standard must be performed at a facility capable of meeting all testing requirements per the latest version of the EN14470 Standard. The lab must have an active relationship with the certification agency and be ISO 17025 certified or have been certified at the time of the testing.
- 1.4.5 The following must be submitted in order to gain recognition from the certification agency of cabinets tested to the EN14470 Standard:
- 1.4.5.1 Submittal of a signed formal report describing which cabinets were tested and have met the minimum requirements of the latest version of the EN 14470 Standard. The report must include and not limited to the following as outlined in Section A.6 of the latest version of the EN14470 Standard:
- fire rating for each cabinet for which certification is being sought;
 - testing facility name and location;
 - which tests were performed;
 - and all other requirements as outlined in Section A.6 of the latest version of the EN14470 Standard.
- 1.4.5.2 Documentation describing the cabinet regarding to its size, capacity, door style, material selection and method of automatic closing must be submitted for our review and evaluation.
- 1.4.5.3 Assembly drawings showing cabinet and door construction, material thickness and self-closing door mechanism. Other detailed information may be requested, if deemed necessary.

1.5 Basis for Continued Certification

The basis for continual certification may include the following based upon the certification scheme and requirements of the certification agency:

- production or availability of the product as currently certified;
- the continued use of acceptable quality assurance procedures;
- satisfactory field experience;
- compliance with the terms stipulated by the certification;
- satisfactory re-examination of production samples for continued conformity to requirements; and
- satisfactory surveillance audits conducted as part of the certification agency's product surveillance program.

1.6 Effective Date

The effective date of this examination standard mandates that all products tested for certification after the effective date shall satisfy the requirements of this standard.

The effective date of this standard is eighteen (18) months after the publication date of the standard for compliance with all requirements.

1.7 System of Units

Units of measurement used in this standard are United States (U.S.) customary units. These are followed by their arithmetic equivalents in International System (SI) units, enclosed in parentheses. The first value stated shall be regarded as the requirement. The converted equivalent value may be approximate. Conversion of U.S. customary units is in accordance with ANSI/IEEE/ASTM SI 10.