



Member of the FM Global Group

Approval Standard for Storage Cabinets for Ignitable (Flammable) Liquids

Class Number 6050

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Foreword

The FM Approvals certification mark is intended to verify that the products and services described will meet FM Approvals' stated conditions of performance, safety and quality useful to the ends of property conservation. The purpose of Approval Standards is to present the criteria for FM Approval of various types of products and services, as guidance for FM Approvals personnel, manufacturers, users and authorities having jurisdiction.

Products submitted for certification by FM Approvals shall demonstrate that they meet the intent of the Approval Standard, and that quality control in manufacturing shall ensure a consistently uniform and reliable product. Approval Standards strive to be performance-oriented. They are intended to facilitate technological development.

For examining equipment, materials and services, Approval Standards:

- a) must be useful to the ends of property conservation by preventing, limiting or not causing damage under the conditions stated by the Approval listing; and
- b) must be readily identifiable.

Continuance of Approval and listing depends on compliance with the Approval Agreement, satisfactory performance in the field, on successful re-examinations of equipment, materials, and services as appropriate, and on periodic follow-up audits of the manufacturing facility.

FM Approvals LLC reserves the right in its sole judgment to change or revise its standards, criteria, methods, or procedures.

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1. INTRODUCTION

1.1 Purpose

- 1.1.1 This standard states Approval requirements for cabinets used to store ignitable (flammable) liquids.
- 1.1.2 FM Approval criteria may include, but are not limited to, 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) 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 Approval. Storage cabinets having characteristics not anticipated by this standard may be FM Approved if performance equal, or superior, to that required by this standard is demonstrated or if the intent of the standard is met. Alternatively, storage cabinets which meet all of the requirements identified in this standard may not be FM Approved if other conditions which adversely affect performance exist or if the intent of this standard is not met.

1.4 Basis for Approval

Approval 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 by FM Approvals and as far as practical;
 - the durability and reliability of the product.
- 1.4.2 An examination of the manufacturing facilities and audit of quality control procedures is made to evaluate the manufacturer's ability to consistently produce the product which was examined and tested, and the marking procedures used to identify the product. These examinations may be repeated as part of FM Approvals' Surveillance Audit Program.
- 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 FM Approval load test per FM Approvals standard 6050;
 - b) flame arrester assemblies must pass the requirements of FM Approvals standard 6050;
 - c) a representative from FM Approvals must be present to witness tests in their entirety.

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