

Approval Standard

Fire and Smoke Door
Holder and/or Release
Devices

Class Number 4121
April 2013

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Member of the FM Global Group

Approval Standard for Fire and Smoke Door Holder and/or Release Devices

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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 surveillance 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 fire and smoke door holder and/or release devices.
- 1.1.2 Fire and smoke doors play an important role in preventing fire, smoke and other products of combustion from spreading and migrating from the room of origin to other compartments within a building. In order to perform their intended function, fire and smoke doors must be closed and securely latched at the time of the fire. In an effort to accomplish this, building codes have specified that pedestrian and vehicular openings in rated walls shall be protected by automatic closing fire and smoke doors.
- 1.1.3 In order to facilitate the movement of people and vehicles, doors are often held in the open position. When kept in the open position to allow for frequent traffic, door holders and release devices must be used. These units are connected to detectors so that when a detector is activated and sends a signal that an alarm condition exists, the door holder and release device perform their function by automatically disconnecting from the door. With the door holder and release device no longer keeping the door in the open position, the door is allowed to close due to the presence of an automatic closing device.
- 1.1.4 The Approval criteria contained in this standard shall include, but are not limited to, performance requirements, marking requirements, an examination of manufacturing facility(ies), an audit of quality assurance procedures, and a surveillance program.

1.2 Scope

- 1.2.1 This standard sets the performance requirements for fire and smoke door holder and/or release devices. They shall be examined for their ability to keep a fire or smoke door in the open position by either electromechanical or electromagnetic means until such time that the unit(s) receive a signal from an external source such as a product of combustion device or a simulated alarm signal meant to test the system.
- 1.2.2 This standard is not intended to be used to determine when or where door holder and/or release devices are used nor is it intended to be used to determine the type of detection devices to be used or where such detection devices are to be located.
- 1.2.3 This standard is not intended to qualify power operated release devices. Such devices would use this Approval Standard to assess the door holder and/or release features but must be used in conjunction with other Approval Standards, as applicable, to assess the power operator and automatic closing functions of the unit.
- 1.2.4 This standard is not intended to qualify self-closing or automatic closing devices. The purpose of the door holder and/or release device is to keep the door in the open position until it receives a signal. Once the door is free to close, the action of getting the door into the closed position is the responsibility of the automatic closing device.
- 1.2.5 This standard is intended to evaluate only those hazards investigated and is not intended to determine suitability for the end use of the product.
- 1.2.6 The results of tests conducted under the controlled conditions required by this standard shall not be used to describe or appraise performance under actual fire or natural hazard conditions as actual fire and natural hazard conditions vary widely.

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, jurisdictions and/or loss control specialists was also considered.

1.3.2 The requirements of this standard reflect tests and practices used to examine characteristics of door holder and/or release devices for the purpose of obtaining Approval. Fire door holder and/or release devices 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, fire and smoke door holder and/or release devices 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 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 is 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.

1.5 Basis for Continued Approval

Continued Approval is based upon:

- production or availability of the product as currently FM Approved;
- the continued use of acceptable quality assurance procedures;
- satisfactory field experience;
- compliance with the terms stipulated in the Approval report;
- satisfactory re-examination of production samples for continued conformity to requirements; and
- satisfactory Surveillance Audits conducted as part of FM Approvals' product follow-up program.

Also, as a condition of retaining Approval, manufacturers may not change a product or service without prior authorization by FM Approvals.

1.6 Effective Date

The effective date of an Approval standard mandates that all products tested for Approval after the effective date shall satisfy the requirements of that standard. Products FM Approved under a previous edition shall comply with the new version by the effective date or else forfeit Approval.

The effective date of this standard is May 1, 2014 for compliance with all requirements.