



Member of the FM Global Group

Approval Standard for Firestop Contractors

Class Number 4991

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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 The purpose of this standard is to improve the performance and installation of firestop systems and their components by examining and qualifying contractors involved in the installation of such systems and components.
- 1.1.2 This standard shall be used to assess the ability of responsible individuals designated by firms that install firestop systems and their components to understand the requirements and restrictions/limitations of the Firestop Contractors International Association's (FCIA) Manual of Practice and FM Approval requirements.

1.2 Scope

- 1.2.1 This standard sets the requirements for Approval of Firestopping Contractors who install firestop systems and their components that are listed by an accredited third party testing or listing agency as fire rated construction of specific hourly ratings.
- 1.2.2 This standard examines the contractor's training and education of its workforce, general knowledge of firestop systems and their components, handling, design selection, installation and application procedures to ensure a practical and reliable installation.
- 1.2.3 This standard, in part, assesses the ability of a Designated Responsible Individual (DRI) to interpret and understand the information contained in the FCIA's Manual of Practice and FM Approval requirements as evidenced by satisfying the minimum requirements of written examinations. A contractor who meets this and all other requirements of this standard shall be listed in the *Approval Guide*, an online publication of FM Approvals, as an Approved Firestop Contractor.

1.3 Basis for Requirements

- 1.3.1 The requirements of this standard are based on field loss experience, research and testing, and/or the application standards and advice of manufacturers, installers, users, trade associations, authorities having jurisdiction and/or loss control specialists.
- 1.3.2 Meeting these requirements qualifies a contractor as an Approved installer of firestopping systems and their components. Where the system(s) or product(s) being installed is(are) part of a fire rated system shown in a published listing by a recognized listing agency, listing agency requirements prohibit component substitution or modification to a listed system without prior written authorization by the listing agency that published the listing. Component substitution shall also not be allowed for an Equivalent Fire Resistant Rated Assembly.

1.4 Basis for Approval

- 1.4.1 FM Approval shall be based upon a satisfactory evaluation of the contractor in the following areas:
 - Verification that the contractor has been in the firestop installation business for the two (2) year period immediately prior to obtaining Approval.
 - Assurance that the Designated Responsible Individual employed by the contractor has a demonstrated knowledge of the FCIA Manual of Practice, FM Approval requirements, overall product knowledge in his/her area of expertise and the ability to select firestopping components,

systems and assemblies as shown in a published listing by a recognized listing agency that will meet or exceed written specifications, as evidenced by satisfying the minimum requirements of written examinations.

- An initial, in-house and job-site Surveillance Audit of the contractor's quality control program.

1.4.2 Continued Approval shall be based upon a satisfactory evaluation of the contractor in the following areas:

- Proof that the Designated Responsible Individual employed by the contractor continues to exhibit a demonstrated knowledge of the FCIA Manual of Practice, FM Approval requirements, overall product knowledge in his or her area of expertise and the ability to select appropriate firestopping components, systems and assemblies as shown in a published listing by a recognized listing agency that will meet or exceed written specifications, as evidenced by periodic written examinations every three (3) years.
- Attendance by the contractor's Designated Responsible Individual at FCIA sponsored seminars or equivalent educational courses resulting in the collection of at least six (6) Continuing Educational Units (CEUs) or forty-eight (48) Learning Units (LUs) every three (3) years. Seminars sponsored by the FCIA shall be made available to both members and non-members of the FCIA in order to be eligible for credit. Equivalent educational courses shall deal with topics such as life safety, loss prevention, fire containment, building codes and other subjects at the discretion of FM Approvals. Designated Responsible Individuals may also receive CEU's for giving presentations at industry sponsored seminars with the prior written approval of FM Approvals.
- Verification and proper installation of firestopping systems resulting from annual, in-house and job-site Surveillance Audits.
- Continued satisfactory performance of firestopping systems installed under this program.
- A documented and archived record keeping system for all installations.

1.5 Approval Categories

1.5.1 FM Approvals recognizes that Firestop Contractors may specialize in one or more areas. These areas include, but are not limited to firestop joint systems, floor perimeter/slab edge/exterior wall cavity systems and through penetration systems. For the purposes of this Approval Standard, there shall be only a single Approval category, Firestop Contractor, that will encompass all firestopping systems. Approved Firestop Contractors shall be knowledgeable in and meet the test requirements for all areas of firestopping contained in the FCIA Manual of Practice.

1.6 Effective Date

1.6.1 The effective date of an Approval Standard mandates that all services tested for Approval after the effective date shall satisfy the requirements of that Standard.

1.6.2 The effective date of this Standard is **July 1, 2015** for compliance with all requirements.

2. APPLICABLE DOCUMENTS AND DEFINITIONS

2.1 Applicable Documents

The following standards, publications, and practices are referenced in this standard:

Firestop Contractors International Association (FCIA) Manual of Practice

2.2 Definitions

For purposes of this standard, the following terms apply:

Approved Firestop Contractor — a contractor who meets the requirements established in this Standard.

Authority Having Jurisdiction (AHJ) — the organization, office, official or individual responsible for approving or accepting firestopping components, installations, procedures or Equivalent Fire Resistance Rated Assemblies. Firestop Contractors, or their employees, shall not be considered as the Authority Having Jurisdiction.

Continuing Education Unit (CEU) — is a measure used in Continuing Education programs. For the purpose of this document, CEUs must be issued by providers who have successfully gone through the Authorized Provider Accreditation Process and are approved to issue CEUs by the International Association for Continuing Education and Training (IACET). CEUs shall be related to firestopping, the construction industry, loss prevention, safety, fire containment, building codes, business administration or other areas acceptable to FM Approvals.

Contractor — a business entity providing the service of installing firestopping assemblies, systems and their components in building constructions.

Designated Responsible Individual (DRI) — the contractor's employee who meets the criteria contained in this Standard. The Designated Responsible Individual shall provide oversight for the proper design selection, installation and transmission of information to field personnel and is responsible for continuing to meet the criteria needed to maintain continued Approval within that firm.

Equivalent Fire Resistance Rated Assembly — an assemblage of materials or products that do not qualify as a Fire Resistance Rated System but are acceptable to the Authority Having Jurisdiction. Commonly known as an Engineering Judgment (EJ).

Fire Resistance Rated System — an assemblage of specific materials or products rated in accordance with a nationally recognized test method that resist the passage of fire through openings in fire resistance rated building construction for a prescribed period. The requirements and limitations of such systems shall be listed and shown in publications issued by independent third party testing or certification agencies.

Firestopping — fire resistant materials, systems and assemblies installed around and/or directly to through penetrating items, construction joints or floor perimeter/slab edge conditions in order to maintain the fire resistance of rated building construction.

Learning Unit (LU) — is a standard unit to measure learning. LUs do not need to be recognized by the International Association for Continuing Education and Training (IACET). They shall be educational in nature. One (1) LU = one (1) hour of learning. Such units may be obtained by attending or presenting at conferences, training programs (manufacturer or otherwise) and other educational settings related to firestopping, the construction industry, loss prevention, safety, fire containment, building codes, business administration or other areas acceptable to FM Approval. LUs shall be permitted to be granted for training provided by the DRI's employer provided training is acceptable to FM Approvals.

3. GENERAL INFORMATION AND REQUIREMENTS

3.1 Overview

- 3.1.1 A firestopping system is designed to protect openings in walls, floors, construction joints and at floor and wall slab edge conditions against the spread of fire within buildings or adjacent compartments. Such systems are tested in laboratory conditions in accordance with applicable test standards recognized by various authorities having jurisdiction and listed or published by accredited testing and listing agencies.
- 3.1.2 In order to achieve the intended results under actual or field conditions, it is necessary that a contractor not only use the products specified in the published listings, but that the products be installed in accordance with manufacturer's written installation instructions and accepted industry practices. Failure to install any single component in the specified manner may jeopardize the integrity of the entire system.
- 3.1.3 As a means of increasing the reliability and performance of firestopping systems, this Standard was developed to ensure that an Approved Contractor employ at least one Designated Responsible Individual who understands the requirements and restrictions of the various listing agency publications, the FCIA Manual of Practice and FM Approval requirements. The Designated Responsible Individual shall also have a knowledge of firestopping components, systems and assemblies, their proper selection, installation, and the ability to identify and implement corrective action when deficiencies or non-conformances occur.

3.2 Eligibility Requirements

- 3.2.1 Eligibility as an FM Approved Firestop Contractor shall be made available to those contractors who have been successfully evaluated in the following areas:
- a) verification that the contractor has been in the firestopping business for at least the two (2) year period immediately prior to obtaining Approval.
 - b) a demonstrated knowledge by the contractor's Designated Responsible Individual of the FCIA Manual of Practice, FM Approval requirements, overall product knowledge in his or her area of expertise and the ability to select appropriate firestopping components, systems and assemblies as shown in a published listing by a recognized listing agency that will meet or exceed written specifications, as evidenced by written examinations administered by FM Approvals, on which the Designated Responsible Individual obtains a score of 80% or better on each test;
 - c) a demonstrated quality control program;
 - d) a documented and archived record keeping system for all installations;
 - e) and documented technical training acceptable to FM Approvals.

3.3 Demonstrated Knowledge

- 3.3.1 A demonstrated knowledge shall be evidenced by exceeding the minimum examination score indicated above.
- 3.3.2 Examinations will be proctored by FM Approvals' personnel, or their designees, at designated times and places. Positive identification will be required for admittance to the examination area. Examinations will be conducted at FM Approvals in individual and group settings. If the demand for testing is sufficient, FM Approvals will conduct such examinations at other locations where groups of contractors are expected to assemble. This includes, but is not limited to, industry trade shows, regional or local trade association meetings or on site at firestopping component manufacturers' sales or training sessions.

3.4 Designated Responsible Individuals

- 3.4.1 Contractors who obtain FM Approval recognition shall employ at least one Designated Responsible Individual who has passed all written examinations required of this Standard.
- 3.4.2 Contractors who use multiple store fronts or conduct business under multiple business names shall:
- a) qualify at least one (1) Designated Responsible Individual at each location for which the business entity is Approved.
 - b) be allowed to have branch offices or store fronts that are not FM Approved. Such non-Approved branch offices or store fronts shall not indicate that they are FM Approved, shall not apply labels to their work that indicates they are FM Approved nor shall they conduct business that requires an FM Approved Firestop Contractor.
 - c) use field personnel (supervisors and installers) that are employed by the same branch office or store front where the Approved company and DRI are located when an FM Approved Firestop Contractor is required.
- 3.4.3 In the event that the Designated Responsible Individual ceases employment with the contractor, or is unable to perform his or her duties due to extended illness, injury or incapacitation, the contractor shall be given a grace period of two (2) months to employ or qualify another Designated Responsible Individual, without penalty or loss of Approval. During any such grace period, the contractor shall not install or apply labels or markings to any firestopping to indicate FM Approval.

3.5 Approval Categories

Only a single category of Approval, Firestop Contractor, is available. Contractors who specialize in the installation of firestop joint systems, floor perimeter/slab edge/exterior wall cavity systems, through penetration systems or other types of firestopping, shall be knowledgeable and examined on all types of firestopping systems shown in the FCIA Manual of Practice.

3.6 Continuing Education

- 3.6.1 The Designated Responsible Individual employed by an Approved Firestop Contractor shall continue to attend training programs and educational seminars resulting in the collection of at least six (6) continuing educational units (CEUs) or forty-eight (48) learning units (LUs) every three (3) years.
- 3.6.2 CEUs and LUs can be obtained by attendance at industry approved education training or technical construction related educational seminars or by attending educational programs offered by accredited colleges, universities and other providers of adult education. Such training or seminars shall deal with topics such as loss prevention, fire containment, building codes and other construction related topics at the discretion of FM Approvals.
- 3.6.3 Seminars sponsored by the FCIA shall be made available to non-members in order to be eligible for credit. Designated Responsible Individuals may receive CEUs or LUs for giving presentations at industry sponsored seminars..
- 3.6.4 Eight (8) LUs shall be granted to DRIs who are elected and serve on the FCIA Board of Directors or as Committee Chairs and Vice Chairs. LUs shall also be permitted to be granted for being officers of other organizations at the sole discretion of FM Approvals.
- 3.6.5 Twelve (12) LUs shall be granted for attending the full program of any single FCIA conference or educational event.

3.7 Terminology for Systems and Assemblies

- 3.7.1 FM Approvals recognizes that due to the large number of variables encountered in building construction, it is not always possible to select materials, components and configurations that meet all criteria for a specific firestop design. As a result, this Approval Standard classifies firestopping into two types — Fire Resistance Rated Systems and Equivalent Fire Resistance Rated Assemblies.
- 3.7.1.1 A Fire Resistance Rated System is an assemblage of specific materials or products that have been rated in accordance with a nationally recognized test method. The requirements and limitations of such systems are listed and shown in publications issued by independent third party testing and certification agencies.
- 3.7.1.2 An Equivalent Fire Resistance Rated Assembly is an assemblage of materials and products that have not been subjected to a fire endurance test or are not listed and shown in publications issued by an independent third party testing or certification agency. In most cases, an Equivalent Fire Resistance Rated Assembly is designed based on the engineering judgement of manufacturers and others. The acceptance of an Equivalent Fire Resistance Rated Assembly is the prerogative of the Authority Having Jurisdiction.
- 3.7.2 FM Approvals recommends the use of Fire Resistance Rated Systems as firestopping. In cases where a Fire Resistance Rated System is not available, it may be necessary to utilize an Equivalent Fire Resistant Rated Assembly if acceptable to the Authority Having Jurisdiction. In these cases, the Approved Firestop Contractor shall receive written authorization from the Authority Having Jurisdiction responsible for approving and accepting the use of non-Fire Resistance Rated Systems prior to installing Equivalent Fire Resistance Rated Assembly(ies) or their components.

3.8 Markings

- 3.8.1 The need or requirement for labeling or marking firestopping installed under this program shall be done on a job-by-job basis in accordance with the specific project's written specifications. In cases where the project specification states that the firestopping shall be labeled or marked in accordance with FM Approval Standard 4991, Approval of Firestop Contractors, the requirements shown in Paragraphs 3.8.2 to 3.8.6 shall be applicable. If not specifically stated in the project specifications, the use of Paragraphs 3.8.2 to 3.8.6 is optional at the discretion of the Approved Firestop Contractor.
- 3.8.2 When required by the project specification, each Fire Resistance Rated System installed by an Approved Firestop Contractor shall bear a permanent label or marking. Samples of such labels or markings are shown in Appendix A. Labels or markings shall be metal or plastic. Metallic labels shall be secured with permanent fasteners. Plastic labels shall be self-adhering and shall be evaluated for adhesive quality for the proposed substrates. The adhesive and label used shall provide for partial destruction of the label when removal is attempted.
- 3.8.2.1 For penetration type firestop systems or assemblies, the label or marking shall be located adjacent to or within 6 in. (150 mm) of any edge of the system or assembly.
- 3.8.2.2 For head of wall, expansion joint and floor/exterior wall slab edge type firestop systems or assemblies, the label or marking shall be located adjacent to or within 6 in. (150 mm) of the firestop system or assembly and spaced at not more than 50 ft (15.2 m) on center.
- 3.8.3 Labels and markings may be omitted if they would be visible in a finished area with the written authorization of the Authority Having Jurisdiction.
- 3.8.4 Fire Resistance Rated Systems — when required, labels or markings shall contain the FM Approval mark, the design number or designation of the assembly, the words “Installed by [contractor's name and address], an FM Approved Firestop Contractor”, and the words “Do Not Disturb — Fire Resistance Rated Firestop System”. Additional information may be included at the Contractor's discretion.

3.8.5 Equivalent Fire Resistance Rated Assemblies — contractors shall be allowed to place a label or marking for such assemblies; however any such label or marking shall be prohibited from using the words ‘Approved’, ‘FM Approval’ or any reference to this program, express or implied, that indicate FM Approval as a Firestop Contractor.

3.8.6 The labels shown above shall be applied within thirty (30) days of completing the Installation of the individual firestop.

4. PERFORMANCE REQUIREMENTS AND VERIFICATION

4.1 Eligibility

Contractors seeking Approval shall submit the information needed to verify that the Contractor has been in the firestopping business for at least the two (2) year period immediately prior to obtaining Approval. Proof of workers compensation and liability insurance as legally mandated shall be provided.

4.2 Written Test Requirements

4.2.1 The contractor’s Designated Responsible Individual shall pass two (2) written examinations obtaining a score of 80% or better on each test. The required tests are shown below.

<i>Test Subject</i>	<i>Topic</i>
A	General Information Exam
B	System Design Selection Exam

4.2.2 The basis for each examination shall be the FCIA Firestop Manual of Practice, this Approval Standard and the ability to select proper listed systems for specific conditions. Test subject topics that are likely to be included on each examination are shown in Appendices B and C.

4.2.3 An individual shall be limited to taking each written examination once every thirty (30) days and not more than three (3) times in any six (6) month period.

4.3 Surveillance Audit

4.3.1 An initial audit of the contractor’s home office and a job site is part of the Approval process. The intent of the audits is to verify the contractor’s quality control program, system design selection capabilities, training, transmission of system design requirements to field personnel, successful installation, marking of installed systems and assemblies and handling of non-conformances.

4.3.2 As part of the initial job-site audit, FM Approvals shall conduct a minimum of two (2) randomly selected items to be examined for destructive testing.

4.4 Demonstrated Quality Manual and Documentation Program

- 4.4.1 At a minimum, the following documentation shall be part of the contractor's quality control program.
- 4.4.1.1 A submittal package for all scope of work (penetrations, joints and perimeter fire containment systems) showing the system(s) that are intended to be installed based on the design drawings or initial job-site survey. As part of the submittal package, the contractor shall include product data sheets, Material Safety Data Sheets, a matrix or table showing the selected system(s) that are to be installed, a description of the penetrant or joint (example – sprinkler piping) and any other comments needed to minimize the system design selection by field personnel.
- 4.4.1.2 When the individual system design selection is not done by the DRI, the DRI shall review and initial the system designs.
- 4.4.1.3 All submittal packages shall be signed by the DRI to signify that it has been reviewed prior to be submitted to field personnel.
- 4.4.1.4 A written policy, acceptable to FM Approvals, on the frequency of conducting destructive testing or witnessing system installations including frequency, record keeping and marking of areas where the destructive testing was conducted.

5. CONTINUED APPROVAL AND OPERATIONS REQUIREMENTS

5.1 Demonstrated Quality Control Program

- 5.1.1 A quality assurance program is required to assure that each component and the finished firestopping system or assembly installed by the contractor shall be in accordance with the requirements of the specified system or assembly. Conformance to design drawings, transmission of system design and installation requirements to field personnel, marking of installed systems, attainment of required follow-up CEUs for the Designated Responsible Individual, and records of components used and on-going firestopping system performance are the areas of interest.
- 5.1.2 The contractor shall demonstrate a quality assurance program that specifies controls for at least the following areas:
- corporate guidelines for quality assurance;
appropriate measures for designing the system or assembly and transferring the design requirements to installation personnel;
 - appropriate measures to ensure proper installation
 - a functioning material control system
 - appropriate measures to ensure proper labeling or marking (if required)
 - appropriate material handling procedures
 - appropriate measures for inspecting completed assemblies
- 5.1.3 Documentation/Manual — The contractor shall have written policies and procedures in place as part of their quality assurance program. The written program shall include a record keeping program for each type of system or assembly installed.
- 5.1.4 Records — To assure adequate traceability of components and application, the contractor shall maintain a

record of all firestopping installations for a minimum period of seven (7) years from the date of installation.

5.2 Surveillance Audits

5.2.1

Follow-up audits at the home office and at a job site shall be conducted periodically, but at least annually, by FM Approvals or its representatives. Additional audits may be conducted based on jurisdictional requirements or if deficiencies in installations or evidence of improper system design selection are found to have occurred.

5.3 Re-Examination

- 5.3.1 The contractor's Designated Responsible Individual shall be required to pass a written re-examination in accordance with Para 4.2 every three (3) years. The re-examination may be required sooner if there are significant changes to the FCIA Manual of Practice or if there is sufficient evidence of poor firestopping performance attributable to improper installation or non-conformance with the requirements of this document on systems and assemblies installed by the contractor.
- 5.3.2 The periodic written re-examination described in Par 5.3.1 shall not be required when a DRI obtains at least nine (9) CEUs or seventy-two (72) LUs during the three (3) year period. A pro-rated combination of CEUs and LUs shall be permitted to be used to satisfy this requirement.
- 5.3.3 A re-examination due dates of either June 30th or December 31st shall be assigned to each DRI depending on the date they passed their last written examination. Those who take such written re-examinations during the 1st six (6) months of a calendar year shall be assigned a June 30th due date. Those who take such written re-examinations during the last six (6) months of a calendar year shall be assigned a December 31st due date.
- 5.3.4 As an alternate to attaining the necessary CEUs/LUs and taking the written re-examination, an existing DRI shall be permitted to take the two (2) written examinations described in Par. 4.2 every three (3) years in order to re-qualify as a DRI.

APPENDIX A: Approval Marks

Installed by (Contractor's name and address),
an FM Approved Firestop Contractor
Do Not Disturb – Fire Resistance Rated System



Label for Fire Resistance Rated Systems

APPENDIX B: The FCIA Manual of Practice and FM Approval Requirements — General Information Exam

I Background

- 1.1 A requirement for obtaining FM Approval recognition as a Firestop Contractor is that the contractor shall employ at least one Designated Responsible Individual who has demonstrated a knowledge of various aspects of firestopping and FM Approval requirements.
- 1.2 This knowledge shall be assessed by having the Designated Responsible Individual obtain a satisfactory minimum score on written examinations administered by FM Approvals or its designees.

II Purpose

- 2.1 The purpose of this Appendix is to provide information on the topics likely to be included on the written examination entitled “The FCIA Manual of Practice and FM Approval Requirements — General Information Test”.
- 2.2 This examination shall be a closed book examination.
- 2.3 The items shown in this Appendix are considered to be an overview of what the examination will include and are not to be considered as a complete list. Topics other than those shown below may be included on the examination at the sole discretion of FM Approvals. It is also possible that a topic shown below may not appear on the examination.

III Applicability

- 3.1 For details on the eligibility and the minimum test score needed refer to Paragraphs 3.2 and 4.2 of this Standard.

IV Topics

4.1 The following topics are likely to be included on the examination referenced above:

- Knowledge of construction materials
- Listing agencies and their systems
- Knowledge of T, F and L ratings
- Authorities having jurisdiction
- Specifications, estimating and bidding
- Non-conformances
- Designated Responsible Individuals
- Terminology for systems and assemblies
- Hourly ratings
- Types of firestop systems
- Definitions/acronyms
- Building codes
- Close-out documents
- Quality control
- Continuing education requirements
- Approval markings and requirements

APPENDIX C: Selection of Firestop Systems and Assemblies — System Design Selection Exam

I Background

- 1.1 A requirement for obtaining FM Approval recognition as a Firestop Contractor is that the contractor shall employ at least one Designated Responsible Individual who has demonstrated a knowledge of various aspects of firestopping and FM Approval requirements.
- 1.2 This knowledge shall be assessed by having the Designated Responsible Individual satisfy a minimum score requirement on written examinations administered by FM Approvals or its designees.

II Purpose

- 2.1 The purpose of this Appendix is to provide information on the general topics likely to be included on the written examination entitled “Selection of Firestop Systems and Assemblies”.
- 2.2 This examination shall be a closed book examination. Materials and listings of various firestop systems and assemblies shall be provided for use during the examination. Calculators shall be permitted to be used.
- 2.3 The items shown in this Appendix are considered to be an overview of what the examination will include and are not to be considered as a complete list. Topics other than those shown below may be included on the examination at the sole discretion of FM Approvals. It is also possible that a topic shown below may not appear on the examination.

III Applicability

- 3.1 For details on the eligibility and the minimum test score needed refer to Paragraphs 3.2 and 4.2 of this standard.

IV Topics

- 4.1 The following topics are likely to be included on the examination referenced above:
 - Specifications, estimating and bidding
 - Equivalent Fire Rated Assembly Selection
 - Non-conformances
 - Fire Resistance Rated System Selection