

The Approval Process for Firestop Contractors – FM Approvals[®] Approval Standard 4991

Joseph Nunes
Advance Engineer
Materials Group

Topics for Today's Discussion

- Definitions
- A description of the program
- The Approval process
- What exams are required and what are they like?
- What needs to be in a QA Manual?
- What are the audits like?
- How do I maintain the Approval?

Definitions

- Approved Firestop Contractor
 - A contractor who meets the requirements of FM Approval Standard 4991.
- Contractor
 - A business entity providing the services of installing firestop assemblies, systems and components.
- Designated Responsible Individual (DRI)
 - The contractor's employee who meets the criteria contained in FM Approval Standard 4991.

Definitions

- Surveillance Audit
 - Is a mechanism used to ensure that the appropriate controls are in place and to verify that the contractor is conforming specific requirements as stated in their Approval Report and QA Manual. The audit shall occur at least annually. For Firestop Contractors, the auditor shall visit both the office and a job-site.
- Re-examination
 - a periodic requalification required of each DRI. Can be accomplished by written examinations or attainment of continuing education credits

- Method to qualify companies
- Assesses commitment to a QA program
- Ability to understand requirements of FCIA MOP and FM Approvals criteria
- Proper selection and installation of systems

- Method to qualify companies
 - Assess the company's commitment to a QA program.
 - Ability of individuals to understand the requirements and restrictions/limitations of the FCIA MOP, FM criteria and design selection/installation.
 - Examine the contractor's training and education of its workforce.

- Assesses commitment to a QA program
 - Review the company's QA Manual and management's commitment to the manual.
 - Commitment to maintaining a documented and archived record keeping system for all installations.
 - Adherence to the manual, procedures and documentation via follow-up Surveillance Audits — both office and job-site.

- Ability to understand requirements of FCIA MOP and FM Approvals criteria
 - Assess DRI's knowledge by requiring passing score of 80 on two (2) separate exams
 - General Information
 - Design Selection

- Proper selection and installation of systems
 - Assess DRI's ability via written examination.
 - Review the contractor's written QA Manual.
 - Conduct initial Surveillance Audit
 - Conduct destructive examination of installations for conformance to the selected design criteria

Why Should I Partner With FM Approvals?

- FM Approvals is a Nationally Recognized Testing Laboratory (NRTL)
- Products and services recognized and accepted by end users and local regulators
- Competitive advantage & marketing differentiation
- You are also partnering with FM Global
- Marketing tool
 - Differentiate your company from the competition.
 - Placement of FM Approval Mark on installation labels.
 - Partnering with FM Global
 - Access to end users and local regulators

- Contact FM Approvals
- Submit an application for Approval
- Proposal by FM and project authorization
- Assess DRIs must take and pass DRI exams
- Submit a written QA Manual
- Office and job-site audits
- Issue documentation and listing
- main steps to a program
 - Written exams
 - Surveillance audit
 - QA Manual review
 - Approval report and documentation

- Assess DRIs must take and pass two (2) DRI exams
 General Exam and Design Selection Exam
- Each company must have at least one (1) DRI
- An individual can be a DRI for one (1) location only
- Possible remote exams for the short term
- Physical meetings after June 2021

- Submit a written QA Manual
 - FM provides a list of items to address
 - You decide how your level of commitment
 - We don't tell you how to run your business
 - We review, comment and make suggestions
 - No minimum length or number of pages
 - FCIA has a template members can use

- Office and job-site audits
 - Initial audit usually by your project engineer
 - Review of documentation and material storage
 - Not interested in financials
 - Office and job-site at least annually
 - Verify minimum two (2) years in firestopping business and adherence to QA Manual

What Are the Exams Like?

- Closed books
- No calculators or mfg's catalogs needed
- All questions are T/F and multiple choice
- 2 hrs 45 minutes to complete both exams
- Score of 80 needed on each exam

What Are the Exams Like?

Design Selection Exam

You do not need to remember any specific designs

Copies of the applicable design(s) are provided

Many different mfg's products are included

You are given a situation and asked to determine which design(s) can be used

What Are the Exams Like?

- Design Selection Exam
- Most of the problems aren't as tricky as the previous one but you will need to read them carefully.
- There are 5 problems each with 5 parts so each answer is worth 4 points.
- There are problems on Through Penetrations, Joints, Head of Wall and Perimeter Edge
- You need to know all these even if you make a business decision to only do some of these types of firestopping

What Needs to be in a QA Manual?

- Management Organization
- Receiving Inspection
- Material Storage
- In-Process Controls
- Final Assembly and Test
- We don't tell you how to run your business!

What Needs to be in a QA Manual?

- Assign a unique document name
- Assign a date of issue
- Show revision levels
- Non Conforming Materials
- Procurement and Supplier Control
- Design Selection
- Drawing and Document Control
- Corrective Action

What Are the Audits Like?

- Office audit
 - Review one or more submittal packages
 - Examine material storage conditions
 - Review how design information is transferred to the job-site (how does the installer know which design goes where)
- Job-site audit
 - Examine material storage
 - Review documentation on site
 - Witness several installations being done or conduct destruction examination on several items
 - Yearly full up surveillance audits

Maintaining Your Status as a DRI

- Continued employment with the company
- Continuing education/ obtaining LUs
- Re-examination every three (3) years

Maintaining the Company's Approval

- Satisfactory follow-up Surveillance Audits
 - Office and job-site
 - Review of records and submittal packages
 - Storage and handling of materials
 - Handling non-conformances
 - Inspection by company personnel
 - Destructive examination at job-site
 - Labeling

Maintaining the Company's Approval

- Employment of at least one (1) DRI
 - Verification of employment
 - DRI for only one (1) location
 - Continuing education/re-examination reminder
 - About 33% of contractors have more than one (1) DRI

Maintaining Your Status as a DRI

- Continued employment with the company
 - Status does not transfer to a new employer
 - Active in position with responsibilities as a DRI
- Continuing education/ obtaining LUs
 - One (1) LU = one (1) hour of education or training
 - Attending FCIA conferences (12 LUs) each
 - Re-examination every three (3) years

Maintaining Your Status as a DRI

- Continuing education/ obtaining LUs
 - One (1) LU = one (1) hour of education or training
 - Attending FCIA conferences (12 LUs) each
 - Manufacturers training (varies on duration of training)
 - Webinars
 - Other educational opportunities
 - Don't mix up CEUs and LUs1 CEU = 8 Lus
 - CEU & LU definitions are in the FM Standard 4991.
 - CEU's are issued by certified organizations only.

FM Approved Contractors

Year	No. of Locations	No. of DRIs
2000	0	0
2004	18	24
2006	43	59
2008	54	81
2010	80	117
2012	100	148
2014	106	153
2016	100	161
2017	99	143
2018	104	150
2019	104	168
2020	98	163

Understanding the Benefit

- World wide recognition
- Third party testing lab
- Increasing the value of being FM Approved
- As construction demands increase, so does the need for FM Approved products and services
- Deal with one individual

Thank you.

Joseph Nunes
Joseph.nunes@fmapprovals.com
T: (781) 255-4874