



Designation: FCIA-01 - FCIA Recommended Practice for the Survey of Fire Resistance Rated and Smoke Resistant Penetration and Joint Firestopping in Existing Buildings

1. Scope

1.1 This Practice covers the establishing of procedures to survey firestopping, including methods for survey.

Note 1: Currently, building owners and managers have no way to understand what is being provided when a company ‘surveys’ a building’s firestop systems. Also, there is confusion in the marketplace between a ‘survey’ and an ‘inspection’. This new standard will give the building owner and manager, and companies that perform this work, a quantifiable minimum to evaluate.

1.2 This survey is not intended to establish any performance criteria for surveyed barriers.

1.3 This practice is not meant to be an inspection, nor a substitute for inspection per ASTM E 2174 or ASTM E 2393.

2. Referenced Documents

2.1 Standards:

2.1.1 E 814 Test Method for Fire Tests of Penetration Firestop Systems

2.1.2 UL 1479-94 Fire Tests of Through-Penetration Fire Stops

2.1.3 ASTM E 2174 & ASTM E 2393

2.2 Other Documents:

2.2.1 FCIA Manual of Practice

2.2.2 FM Firestop Exam

2.2.3 UL Firestop Exam

2.2.4 FCIA Education Program for the UL & FM Firestop Exam

2.2.5 UL Fire Resistance Directories

2.2.6 FM Approvals Guide

2.2.7 Intertek Systems Listing Book

3. Terminology

3.1 Definitions of Terms Specific to this Standard Practice:

3.2 Definitions –

3.2.1 *Survey document*—any information provided to the surveyor by the building owner and manager that is to be used as the basis for the survey process. This information shall include, but is not limited to, specifications, as-built plans, contract drawings, listed designs, judgments, or the engineering judgment design with illustrated instructions, building codes, and other documentation.

3.2.2 *Survey* - to examine as to condition, situation, or value: appraise, without destructive testing of subject firestop systems or engineering judgments.

3.2.3 *Survey form*—the document contained in this standard practice that is used to record information obtained during the survey.

3.2.4 *Surveyor*—an individual meeting the qualifications set forth in this document and who performs the survey.

4. Surveyor

4.1 Contractor, survey company, with an individual(s) who has passed the UL or FM Firestop Exam for Designated Responsible Individual, (DRI).

4.2 Surveyors shall maintain 6 CEU’s every 3 years or retest to verify continued knowledge.

4.3 Conflict of Interest – Independence – Survey firm and surveyor shall be independent of manufacturer and supplier, distributor, manufacturers representative.

5 Summary of Practice

- 5.1 This practice sets forth the minimum requirements to qualify a surveyor to use this practice.
- 5.2 This practice provides the minimum information required to survey an existing building.
- 5.3 This practice provides a standard survey form that is to be used when surveying firestopping.
- 5.4 This practice provides a standard report format that is to be used when reporting the survey results.

6 Significance and Use

- 6.1 This practice is intended to provide a standard set of guidelines that are to be followed when conducting and reporting on surveys of installed fire stops.
- 6.2 This practice is not intended to provide a basis for selecting installers or products, systems or all the preceding.

7 Survey Process:

- 7.1 The building owner and manager is to supply surveyor with a current life safety plan delineating fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions.
 - 7.1.1 If no life safety plans are available with hourly rated wall assemblies from building owner and or manager, the survey provider is to request a life safety plan be developed to provide to the survey firm. The building owner or manager may assign evaluation of portions of buildings, rather than the complete building.
- 7.2 Visual survey of wall and/or floor assemblies, as per life safety plan, at intervals; identify the Wall / Floor Assembly Construction, identify missing wall / floor Assembly Sections, 'compromised construction', and shall be identified on the report as follows:
 - 7.2.1 Record "Visually Non Compliant"
 - 7.2.2 Record "Visually Compliant"
 - 7.2.3 Record "cannot confirm compliance"
- 7.3 Record data
 - 7.3.1 The following are Survey Activities
 - 7.3.1.1 Identify Wall / Floor type, fire resistance rating, smoke resistant properties, for the assembly, based on life safety plans, supplied by owner, architect/engineer.
 - 7.3.1.2 Survey the wall or floor's firestopping systems.
 - 7.3.2 Smoke assemblies identified;
 - 7.3.2.1 SB - Smoke Barrier – Look on both sides
 - 7.3.2.2 SP – Smoke Partition – Verify that one side is sealed. Look at one side, if nothing exists, look at other side to verify, as it may be sealed only on one side.
 - 7.3.3 Identify Items, firestopping
 - 7.3.3.1 Identify whether firestopped or non-firestopped.
 - 7.3.3.2 Identify nominal size of opening, gap size
 - 7.3.3.3 Identify penetrating items
 - 7.3.3.4 Visually identify nominal annular space, gap size
 - 7.3.3.5 'Angled' penetrating items (i.e., 45degrees to the wall, floor)
 - 7.3.3.6 Perpendicular with, but penetrating membrane or wall/floor
 - 7.3.3.7 Identify membrane penetration, through penetrations
 - 7.3.3.8 Identify type of penetrating item(s) or joint
 - 7.3.3.8.1 Parallel to wall/floor
 - 7.3.3.9 Sample Survey Form, see Appendix A
 - 7.3.3.10 Result of survey – All observed non-compliant or cannot confirm compliance shall be documented and marked on the survey forms. In addition, the surveyor shall physically identify the location where a required firestopping system has been omitted or where the survey results indicate that the installed firestopping is as described below:
 - 7.3.3.10.1 Visually Compliant
 - 7.3.3.10.2 Visually Not Compliant
 - 7.3.3.10.3 Cannot Confirm Compliance
 - 7.3.3.11 The surveyor shall advise the building owner or manager of any deficiencies noted in the survey report.

8 Report

- 8.1 At the end of the survey process, the surveyor shall submit a final report.
- 8.2 The final report shall contain a cover page with the following:
 - 8.2.1 The project name, location, and reference number;
 - 8.2.2 The name and address of the surveyor;
 - 8.2.3 The name and address of the building owner and manager;
- 8.3 The final report shall contain results of the survey, as noted above.

Appendix A – Checklist form

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