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ACCREDITATION CRITERIA FOR IBC® SPECIAL INSPECTION AGENCIES

AC291

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PREFACE

The attached accreditation criteria has been issued to provide all interested parties with guidelines on implementing performance features of the applicable standards referenced in the accreditation criteria. The criteria was developed and adopted following public hearings conducted by the International Accreditation Service, Inc. (IAS), Accreditation Committee and is effective on the date shown above. All accreditations issued or reissued on or after the effective date must comply with criteria. If the criteria is an updated version from a previous edition, solid vertical lines (**I**) in the outer margin within the criteria indicate a technical change or addition from the previous edition. Deletion indicators (➜) are provided in the outer margins where a paragraph or item has been deleted if the deletion resulted from a technical change. This criteria may be further revised as the need dictates.

IAS may consider alternate criteria provided the proponent submits substantiating data demonstrating that the alternate criteria are at least equivalent to the attached criteria and otherwise meet applicable accreditation requirements.

ACCREDITATION CRITERIA FOR IBC® SPECIAL INSPECTION AGENCIES

1.0 INTRODUCTION

1.1 Scope: This document sets forth the requirements for obtaining and maintaining International Accreditation Service, Inc. (IAS), special inspection agency ("agency") accreditation and for the qualifying data that must be submitted relating to the scope of inspection for which accreditation is sought. This document supplements the IAS Rules of Procedure for IBC® Special Inspection Agency Accreditation. Section 1704 of the *International Building Code*® (IBC) provides for special inspection agencies. Under the IBC, final authority for recognition of special inspection agencies rests with the building official having jurisdiction, and nothing contained herein affects or diminishes that authority in any way.

1.2 Reference Documents

1.2.1 2003 or 2006 *International Building Code*® (IBC)[1].

1.2.2 ISO/IEC (International Organization for Standardization/International Electrotechnical Commission) Standard 17020:1998, General Criteria for the Operation of Various Types of Bodies Performing Inspection[2].

1.2.3 IAS Rules of Procedure for IBC® Special Inspection Agency Accreditation[3].

1.2.4 ISO/IEC (International Organization for Standardization/International Electrotechnical Commission) Standard 17024:2003, Conformity Assessment - General Requirements for Bodies operating Certification of persons.

1.2.5 IAS AC371 Accreditation Criteria for Training Agencies for Work Force Qualification Programs.

1.2.6 ASTM E 2659-09 Standard Practice for Certificate Programs.

1.2.7 ANSI/NOCA 1100 Standard for Assessment-Based Certificate Programs (2009).

2.0 DEFINITIONS

2.1 Accredited Calibration Provider: A calibration laboratory that is accredited by IAS [or an Accreditation Body with which IAS has a Mutual Recognition Arrangement (MRA) relationship] as operating under ISO/IEC Standard 17025.

2.2 Approved: Acceptable to the building official.

2.3 Approved Agency: An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved.

2.4 Certificate of Compliance: A certificate stating that materials and products meet specified standards or that work was done in compliance with approved construction documents.

2.5 Fire Protection Engineer (F.P.E.): An individual with specialized training in fire protection systems for building construction, as evidenced by a bachelor's or higher degree in fire protection engineering from an accredited college, university or engineering school.

2.6 Firestop System: An assemblage of materials including fill, void or cavity materials installed as a system to restore the fire, smoke or other resistance rating of fire-resistive assemblies that have been breached due to penetration by electrical, plumbing or mechanical items tested to ASTM E 814 / UL 1479, by expansion and construction joints tested to UL 2079 / ASTM E 1966, and by perimeter joints tested to ASTM E 2307 in buildings.

2.7 Label: An identification applied on a product by the manufacturer that contains the name of the manufacturer, the function and performance characteristics of the product or material, and the name and identification of an approved agency; and that indicates that a representative sample of the product or material has been tested and evaluated by an approved agency.

2.8 Manufacturer's Designation/Mark: An identification applied on a product by the manufacturer indicating that a product or material complies with a specified standard or set of rules.

2.9 Professional Engineer (P.E.): An engineer licensed to practice the applicable discipline in the state where the agency is operating.

2.10 Registered Architect (R.A.): An architect licensed to practice the applicable discipline in the state where the agency is operating.

2.11 Special Inspection: Inspection as herein required of the materials, installation, fabrication, erection or placement of components and connections requiring special expertise to ensure compliance with approved construction documents and referenced standards.

2.12 Special Inspection Agency (SIA): A third-party entity approved by the building official to perform special inspections.

2.13 Special Inspection, Continuous: The full-time observation of work requiring special inspection by a qualified inspector employed by an approved agency who inspects the work being performed.

2.14 Special Inspection, Periodic: The part-time or intermittent observation of work requiring special inspection by a qualified inspector employed by an approved agency that inspects the work in progress and at the completion of the work.

2.15 Special Inspector: A person employed by an agency, and approved by the building official, to perform certain types of inspection as detailed in the IBC.

2.16 Sprayed Fire-resistant Materials: Cementitious or fibrous materials that are spray-applied to provide fire-resistant protection of the substrates.

2.17 Structural Observation: The visual observation of the structural system by a registered design professional for general conformance to the approved construction documents at significant construction stages and at completion of the structural system. Structural

observation does not waive inspections required by Section 109 or Section 1704 of the IBC.

3.0 BASIC INFORMATION

The following basic information must be submitted by agencies applying for Special Inspection Agency accreditation:

Note: An electronic format is acceptable.

3.1 Data showing compliance with Section 3.0 of the IAS Rules of Procedure for IBC® Special Inspection Agency Accreditation.

3.2 A manual showing compliance with the relevant requirements of ISO/IEC Standard 17020:1998, General Criteria for the Operation of Various Types of Bodies Performing Inspection. The relevant requirements are as follows:

3.2.1 A copy of the current business license issued by the jurisdiction where inspections are conducted.

3.2.2 Agency's field and type of inspection, including detailed procedure for each field of inspection. IAS offers accreditation in the following fields of special inspection:

- Concrete Construction (Prestressed and Reinforced)
- Nondestructive Testing (NDT)
- Pier Foundations
- Pile Foundations
- Post-installed Structural Anchors in Concrete
- Soils
- Sprayed Fire-resistant Materials
- Steel (High-strength Bolting and Welding)
- Masonry Construction
- Structural Wood Construction
- Exterior Insulation and Finishing (EIFS)
- Firestop Systems
- Special Cases

3.2.3 Evidence of liability insurance per state or local requirements.

3.2.4 Detailed information on impartiality, independence and integrity, including documented procedures on how the agency ensures freedom of employees from external pressures that could impact inspection activities. (Compensation of inspectors must not directly depend on the number of inspections they perform and in no case on the results of such inspections.)

3.2.5 An affidavit signed by an officer of the agency attesting to compliance with the third-party requirements described in the following note.

Note: The applicant agency and its inspection staff shall not be part of or have a financial or other interest in the construction, manufacture, representation, supply, installation or maintenance of the structures or components (including any fixtures or appliances) which they inspect, or in entities that supply similar competitive items or services. The agency and its staff shall not engage in any activities that may conflict with their independence of judgment and integrity. The agency must operate in a nondiscriminatory, transparent manner so as to allow full access to its services by interested parties.

3.2.6 Policies and procedures on how the agency ensures confidentiality of client information.

Note: Implementation of Sections 3.2.4 and 3.2.6 must provide objective evidence that the inspector has read and understood these requirements. Appropriate objective evidence may be in a form, referencing the requirement, or any other method appropriate to ensure personnel understand and attest they are in compliance with the requirements.

3.2.7 An organizational chart and documents defining positions and responsibilities of key personnel, including the following:

3.2.7.1 A technical manager (however named) with the necessary qualifications and experience, who has overall responsibility for the technical operations.

3.2.7.2 A quality manager (however named) with the necessary qualifications and experience who has the responsibility for the quality system and its implementation. This person should have direct access to the highest level of authority within the organization.

Note: Necessary qualifications and experience must be sufficient to effectively perform their responsibilities.

3.2.7.3 Field supervisor(s) who is (are) responsible for the quality of inspections, and the training and monitoring inspectors for each field of inspection. If the field inspection supervisor covers more than one field of inspection, he/she shall be suitably qualified in each field.

3.2.7.4 Deputies in the absence of technical manager, quality manager and/or field supervisor(s).

3.2.7.5 A matrix matching inspector certifications against the fields of inspections shall be maintained and current. [Minimum educational, experience and/or certification requirements for special inspectors are noted in Section 6.0. This matrix also must include the date of employment and date of certification. It must be understood that local and state laws may preempt IAS requirements as far as inspector certifications and registrations are concerned.]

Note: Refer to Section 5.2.3.

3.2.8 Documented safety procedures addressing the field inspections.

3.2.9 Documented policies and procedures on equipment maintenance, including the following:

3.2.9.1 Equipment used for performing special inspection in the field.

3.2.9.2 Equipment used for performing testing under special inspection in the field.

3.2.9.3 Calibration of test/inspection equipment with traceability to an accredited calibration provider, including identifying the calibration status of the equipment by a label or other suitable means.

3.2.9.4 Handling defective equipment.

3.2.10 Policies and procedures on security and backup of stored data (hard and electronic).

3.2.11 All documents issued to personnel in the inspection agency as part of the quality system shall be reviewed and approved for use by authorized personnel prior to issue. A master list or an equivalent document control procedure identifying the current revision status and distribution of documents in the quality system shall be established and be readily available to preclude the use of invalid and/or obsolete documents.

3.2.11.1 Management system documents generated by the inspection agency shall be uniquely identified. Such identification shall include the date of issue and/or revision identification, page numbering, the total number of pages or a mark to signify the end of the document, and the issuing authority.

3.2.11.2 Procedures shall be established to describe how changes in documents maintained in computerized systems are made and controlled.

Note 1: Controlled documents include but are not limited to the quality manual, standard operating procedures, special inspection procedures, and copies of forms, checklists, etc., relevant to the inspection activities.

Note 2: Invalid or obsolete documents must be promptly removed from all points of issue or use. Obsolete documents retained for either legal or knowledge-preservation purposes must be suitably marked.

3.2.12 Policies and procedures for contract review to show that the agency only conducts work within its area of expertise and that the agency has adequate resources to fully discharge its responsibilities in a competent manner.

3.2.13 Documented procedure for preparation, acquisition, handling and storage of material samples or field-prepared specimens in accordance with the requirements stipulated in applicable standards or codes.

Note: In the absence of such information, the agency must have procedures for documenting sampling, handling, storage and transportation techniques.

3.2.14 Documented policies and procedures on how the agency shall retain records of all activities. Agency shall maintain all records pertaining to the contract review.

Note: Such records, including inspection and test reports, shall be held in a secure environment for such period as stipulated in the contract documents or prevailing local laws, which ever is longer.

3.2.15 Policies and procedures for subcontracting to other IAS-accredited agencies.

Note: Subcontracting is permitted only to IAS-accredited agencies or to qualified individuals. The accredited agency must have documentation substantiating that the subcontractor agrees to operate under the agency's quality management system. A list of current subcontractors must be maintained.

3.2.16 Documented procedures for client feedback and for processing complaints and appeals from clients and regulatory agencies.

Note: Records of all complaints and resolutions shall be maintained.

3.2.17 Policies and procedures for internal audits.

Note: For agencies with fewer than five employees, internal audits may be performed by an independent individual qualified in conformity assessment.

3.2.18 Policies and procedures for management review. The management review shall take account of:

3.2.18.1 Internal audit reports.

3.2.18.2 External audit report.

3.2.18.3 Priority objectives.

3.2.18.4 Plan for improvement.

3.2.18.5 Results of feedback.

3.2.18.6 Training needs.

3.2.18.7 Results of monitoring inspectors in the field.

3.2.19 Procedure to notify building official and registered design professional if corrective actions arising from inspection activities remain unresolved. This must be consistent with requirements noted in Section 1704.1.2 of the 2006 IBC.

3.2.20 Procedure for dispatching and distribution of daily, intermediate and final reports.

4.0 INSPECTION REPORTS

Inspection reports issued by the agency shall accurately and clearly outline the results of special inspections. Inspection reports shall comply with Section 1704.1.2 of the IBC and contain the following information, as applicable:

4.1 Inspection date, and arrival and departure times of the inspector.

4.2 Information pertaining to review of material records. (Material certification requirements are included, but not limited, to those noted in Appendix A.)

4.3 Structure/item inspected, including applicable codes, standards, approved construction documents, etc.

4.4 Results of inspection/tests witnessed or performed.

4.5 Information pertaining to review of labeling and the agency's label control system.

4.6 Resolution of any discrepancies noted during previous inspections.

Note: Separate documentation is acceptable.

4.7 Description of samples obtained, if any, including quantity, dimensions and relevant physical characteristics.

4.8 Identification of test/inspection equipment used in the inspection.

4.9 Names and signatures of the inspector and client's representative (as applicable).

5.0 TRAINING AND SUPERVISION/MONITORING OF INSPECTORS

IBC special inspection agencies shall have procedures for the training and supervision/monitoring of inspectors. Detailed records of training and supervision/monitoring

activities shall be maintained and be made available for review by IAS during on-site assessments, reassessments and surveillance visits.

5.1 Inspector Training: All inspectors of the agency shall undergo training in specific competencies by a supervisor or senior inspector or shall obtain training/education through other formal arrangements that are applicable to the inspector's duties. Plans for continued training to keep pace with developing technology and code changes shall be in place.

All such training shall be documented by the agency.

5.2 Supervision/Monitoring of Inspectors

5.2.1 To ensure consistency in inspections and compliance with accreditation requirements, IBC special inspection agencies shall have an effective supervision/monitoring system for their inspectors. This also will include regular review of inspection reports by supervisory personnel.

5.2.2 The inspection agency management shall conduct a review of each inspector at a minimum frequency of once every six months. The six-month review shall include:

- Review of the inspection reports for adequacy and completeness
- Competence of the inspector with the agency's internal standard operating procedures
- Compliance with requirements imposed by the jurisdiction in which inspections are conducted.
- Review of feedback from the clients and building department staff

5.2.3 Inspection agency shall have records of monitoring their inspectors at least once during the first month of employment. Thereafter, inspectors shall be monitored periodically in the field but not less than once every three years for each field of inspection by the agency.

6.0 MINIMUM QUALIFICATIONS FOR SPECIAL INSPECTORS

6.1 Concrete Construction (Pre-stressed/Pre-cast/Cast-in-Place/Poured-in-Place and Reinforced)

6.1.1 Pre-stressed/Pre-cast/Cast-in-Place/Poured-in-Place Concrete

6.1.1.1 Current ICC certification in prestressed concrete inspection and one year of experience; or

6.1.1.2 P.E. and a minimum one year of direct experience in prestressed concrete construction. Inspector must be qualified under Section 6.1.1.1 within 12 months of accreditation; or

6.1.1.3 Bachelors degree in Civil or Structural Engineering from an accredited institution and a minimum one year of experience. Inspector must be qualified under Section 6.1.1.1 within 12 months of accreditation; or

6.1.1.4 ACI Concrete Construction Special Inspector and a minimum two years of experience. Inspector must be qualified under Section 6.1.1.1 within 12 months of accreditation.

6.1.2 Reinforced Concrete

6.1.2.1 Current certification in reinforced concrete special inspection by ICC (see note below) and one year of experience; or

6.1.2.2 P.E. and a minimum one year of direct experience in reinforced concrete construction. Inspector must be qualified under Section 6.1.2.1 within 12 months of accreditation; or

6.1.2.3 Bachelors degree in Civil or Structural Engineering from an accredited institution and a minimum two years of experience. Inspector must be qualified under Section 6.1.2.1 within 12 months of accreditation; or

6.1.2.4 ACI Concrete Construction Special Inspector and a minimum one year of experience. Inspector must be qualified under Section 6.1.2.1 within 12 months of accreditation.

Note: Passing the ICC exam on reinforced concrete special inspection or having the reinforced concrete associate certification will not be considered without meeting the education/work experience requirements by ACI & ICC.

6.2 Nondestructive Testing (NDT)

6.2.1 Personnel qualified in accordance with nationally-recognized NDT personnel qualifications practice or standard, such as ANSI/ASNT-CP-189 or SNT-TC-1A; or

6.2.2 American Society for Nondestructive Testing (ASNT) Level II and a minimum one year of direct testing experience as determined and approved by an in-house ASNT Level III.

6.3 Pier and Pile Foundations

6.3.1 Current ICC certification in Concrete Special Inspection in addition to one of the following:

6.3.2 P.E. and a minimum of one year of experience.

6.3.3 NICET III or IV (geotechnical/construction or construction material testing/soils) and a minimum of five years of experience.

6.3.4 NICET CT Certified Engineering Technologist and a minimum of five years of experience.

6.4 Post-installed Structural Anchors in Concrete

6.4.1 Current ICC Certification in Reinforced Concrete Special Inspection.

6.4.2 Current ICC certification as a Residential or Commercial Building Inspector, as applicable, and a minimum two years of experience related to the activity being inspected; or

6.4.3 P.E. and a minimum one year of experience related to the activity being inspected. Inspector must be qualified under Section 6.4.1 within 12 months of accreditation; or

6.4.4 Bachelors degree in Civil or Structural Engineering from an accredited institution and a minimum two years of experience related to the activity being inspected. Inspector must be qualified under Section 6.4.1 within 12 months of accreditation.

6.5 Soils

6.5.1 NICET Level II Geotechnical Engineering Technology Certification, or ICC Soils Special Inspector Certification, and a minimum two years of experience; or

6.5.2 Technician with a minimum three years of documented experience directly related to soils testing and inspection under a licensed P.E. Inspector must be qualified under Section 6.5.1 within 12 months of accreditation; or

6.5.3 Bachelors degree in Civil or Structural Engineering/Geotech/Geologist from an accredited institution and a minimum one year of experience. Inspector must be qualified under Section 6.5.1 within 12 months of accreditation; or

6.5.4 P.E. in civil engineering or equivalent P.E. and a minimum one year of experience. Inspector must be qualified under Section 6.5.1 within 12 months of accreditation; or

6.5.5 P.E. in Geotechnical engineering.

6.6 Spray-applied Fire-resistant Materials

6.6.1 Current ICC certification as a Spray-applied Fireproofing Special Inspector and a minimum of one year experience; or

6.6.2 P.E. and a minimum one year of experience in fireproofing applications. Inspector must be qualified under Section 6.6.1 within 12 months of accreditation; or

6.6.3 Bachelors degree in Civil or Structural Engineering from an accredited institution and a minimum two years of experience in fireproofing applications. Inspector must be qualified under Section 6.6.1 within 12 months of accreditation.

6.7 Steel (High-strength Bolting and Welding)

6.7.1 Bolting: Current ICC certification as a Structural Steel and Bolting Special Inspector and a minimum one year of experience.

Note: Current certifications for Structural Steel and Welding Special Inspector are valid until the date of expiration.

6.7.2 Welding

6.7.2.1 AWS Certified Welding Inspector (CWI), and

6.7.2.2 Current ICC certification as a Structural Steel and Welding Special Inspector and a minimum one year of experience.

6.8 Masonry Construction

6.8.1 Current ICC certification in masonry and a minimum one year of experience; or

6.8.2 P.E. and a minimum one year of relevant experience. Inspector must be qualified under Section 6.8.1 within 12 months of accreditation; or

6.8.3 Bachelors degree in Civil or Structural Engineering from an accredited institution and a minimum two years experience. Inspector must be qualified under Section 6.8.1 within 12 months of accreditation.

6.9 Structural Wood Construction

Current ICC certification as a commercial or residential building inspector, as applicable, and

6.9.1 A minimum two years of direct experience in engineered wood products; or

6.9.2 A minimum five years of direct experience as a journeyman carpenter.

6.10 Exterior Insulation and Finish Systems (EIFS)

6.10.1 Current ICC certification as a reinforced concrete special inspector; or

6.10.2 Current ICC certification as a residential or commercial building inspector, and a minimum of two years of experience related to the activity being inspected; or

6.10.3 Bachelors degree in Civil or Structural Engineering from an accredited institution and a minimum two years of experience related to the activity being inspected. Inspector must be qualified under Section 6.10.1 within 12 months of accreditation; or

6.10.4 NICET CT Certified Engineering Technologist and a minimum five years of experience. Inspector must be qualified under Section 6.10.1 within 12 months of accreditation.

6.11 Firestop Systems

6.11.1 Successful completion of the UL Firestop Designated Responsible Individual (DRI) Examination and a minimum of one year of experience in the on-site quality control of installed firestops, fire-resistive joint systems, and perimeter fire barriers; or

6.11.2 Successful completion of the FM Approvals Designated Responsible Individual (DRI) Firestop Examination and a minimum of one year of experience in the on-site quality control of installed firestops, fire-resistive joint systems, and perimeter fire barriers; or

6.11.3 Qualification as a Firestop Systems Inspector through training or certification by an agency which is accredited under ISO/IEC 17024, AC371, ASTM E 2659-09, or ANSI/NOCA 1100, and meet 6.11.1 or 6.11.2; or

6.11.4 P.E., R.A., or F.P.E. and a minimum of one year of experience in the on-site quality control of installed firestops, fire-resistive joint systems, and perimeter fire barriers, and meet 6.11.1 or 6.11.2.

6.12 Special Cases

6.12.1 Current ICC certification as a Special Inspector and a minimum two years of experience related to the activity being inspected.

6.12.2 Bachelors degree in Civil or Structural Engineering from an accredited institution and a minimum two years of experience related to the activity being inspected. Inspector must be qualified under Section 6.11.1 within 12 months of accreditation; or

6.12.3 P.E. and a minimum one year of experience related to the activity being inspected. Inspector must be qualified under Section 6.11.1 within 12 months of accreditation.

Exception: Individuals who have proven expertise in a specialty field, either through education or field experiences of not less than five years, may be

considered as meeting criteria to conduct one or more classes of specialty inspections.■

APPENDIX A — Material Certifications

ELEMENT	MATERIAL	PRESENT PRACTICE	ADDITIONAL REQUIREMENTS
Concrete	Mix	Structural engineer approves mix design based upon submittals, verifies approved mix design supplied based upon batch ticket, sample and test cylinders	Batch plant inspection
	Cement		Manufacturer certification
	Coarse Aggregate		ASTM Standards C 33 and C 330 yearly compliance submittal, sample and test
	Fine Aggregate		ASTM Standards C 33 and C 330 yearly compliance submittal, sample and test
	Admixtures		Manufacturer certification
	Water		Supplier test result submittal, sample and test
	Reinforcing and Prestressing Steel	Verify grade, size and type by mill stamps on bar	Match bundle tags to mill certification submittal, sample and test
	Misc. Chairs, Anchors, etc.		Manufacturer certification
Bolts in Concrete	Bolts	Verify grade and size by bills of lading	Match bills of lading to mill certification submittal, sample and test
	Epoxy	Observe material packaging and labels, verify compliance with project specs or approvals, observe batching per manufacturer instructions, occasionally sample and test	Manufacturer certification, sample and test
Masonry	Block or Brick	Occasionally sample and test	Manufacturer certification, sample and test
	Grout Mix	Structural engineer approves mix design based upon submittals, verifies approved mix design supplied based upon batch ticket, occasional sampling and testing	Batch plant inspection
	Cement		Manufacturer certification, sample and test
	Grout, Coarse Aggregate		Yearly compliance testing, sample and test
	Grout, Fine Aggregate		Yearly compliance testing, sample and test
	Admixtures		Manufacturer certification
	Water		Supplier test result submittal, sample and test

ELEMENT	MATERIAL	PRESENT PRACTICE	ADDITIONAL REQUIREMENTS
	Mortar Mix	Structural engineer approves mix design based upon submittals, verifies approved mix design supplied based upon batch ticket, occasional sampling and testing	Observe field batching, verify mix design compliance, sample and test
	Mortar, Fine Aggregate		Yearly compliance testing, sample and test
	Composite	Test prisms	
	Misc. Centering Devices, Screens, etc.		Manufacturer certifications
	Reinforcing Steel	Verify grade, size and type by mill stamps on bar	Match bundle tags to mill certification submittal, sample and test
Structural Steel	Structural Steel		Match delivery information with mill certifications
	Bolts		Match delivery information with certificate of compliance
	Non-shrink Grout	Observe material packaging and labels, verify compliance with project specs or approvals, observe batching per manufacturer instructions, occasionally sample and test	Manufacturer certification, sample and test
	Anchor Bolts		Match delivery information with certificate of compliance
	Weld-filler Materials	Observe material packaging and labels, verify on-site storage	Match delivery information with certificate of compliance
Firestop Systems	Penetration Firestop Systems	Visual or destructive inspection to ASTM E 2174-05, verifying installation conformance to classified ASTM E 814 or UL 1479 design parameters as published in directories.	ASTM Standard E 2174-05 View testing laboratory labels and classified systems designs. When appropriate, verify that installing contractors are certified to FM 4991, or to UL Qualified Firestop Contractor Program.
	Expansion and Construction Joint Firestop Systems	Inspected visually or destructively, verifying installation conformance to the classified UL 2079 or ASTM E 1966 System Design parameters as published in directories.	ASTM Standard E 2393-04 View testing laboratory labels and classified systems designs. When appropriate, verify that installing contractors are certified to FM 4991, or to UL Qualified Firestop Contractor Program:
	Building Perimeter Fire Barrier Joint Firestop Systems	Inspected visually or destructively, verifying installation conformance to the classified ASTM E 2307 design parameters as published in directories.	ASTM Standard E 2393-04 View testing laboratory labels and classified systems designs. When appropriate, verify that installing contractors are certified to FM 4991, or to UL Qualified Firestop Contractor Program.

[1] Published by International Code Council, Washington, D.C.: www.iccsafe.org
[2] Published by International Organization for Standardization, Geneva, Switzerland: www.iso.org
[3] Published by International Accreditation Service, Whittier, California: www.iasonline.org