



August 5, 2023

TO: IAS – SPECIAL INSPECTION AGENCIES AND OTHER INTERESTED PARTIES.

SUBJECT: Proposed Revisions to the Accreditation Criteria for Special Inspection Agencies, AC291 -202310-R0 (PR)

Hearing Information:

IAS Accreditation Committee
 Wednesday, October 4, 2023
 8:30 am (Pacific Time Zone)
 WebEx Meeting – Refer to IAS website for details.

Dear Madam or Sir:

Proposed Revisions to the Accreditation Criteria for Proposed Revisions to The Accreditation Criteria for Special Inspection Agencies, AC291 has been placed on the agenda for committee consideration at the above-noted meeting.

Proposed changes include:

Line Number	Change Type	Changes
44-46	Editorial	1.2.10 Publications of the following Standards Development Organizations (SDOs), <u>ICC</u> , AAMA, ACI, ASHRAE, AISC, ANSI, ASCE, ASME, ASTM, AWPA, AWS, AWWA, CSA, NHMA, FEMA, NFPA, NHMA, SDI, SJI, SMACNA, TIA, TPI, UL, <u>FM</u> , and WDMA may also be used, as applicable.
120-121	Editorial	4.0 REQUIRED <u>BASIC INFORMATION MANAGEMENT SYSTEMS (MS) AND TECHNICAL DOCUMENTATION</u>
128-130	Editorial	128 Procedure Documents for each category of inspection. This may also include a checklist, <u>a blank</u> 129 form(s) used by the inspector and a reporting <u>inspection report</u> template (used to make an 130 <u>inspection report submission)</u> , along with the <u>documentation/records addressing</u> relevant 131 requirements of ISO/IEC Standard 17020:2012 and the building code currently adopted by the
135-136	Editorial	4.2 Legal Status: The SIA, or the organization of which it forms a part, shall be legally <u>identifiable entity</u> .

140-149	Editorial	<p>4.4 Risk to Impartiality: The SIA shall identify and document the mechanism and <u>maintain records of-an</u> analysis of <u>actual and</u> perceived risks to impartiality on an on-going basis. <u>Responses to both perceived and actual risks shall be recorded.</u> <u>NOTE: Risks to impartiality can arise from</u> The SIA shall further consider situations where management, staff and special inspectors experience undue pressure from any source, internal or external, that could influence the results of special inspection, project signoff, contract/quote approval, work scheduling or any other related activity. <u>Such pressures may include: threats, inducements, unreasonable time pressures, bonus/salary schemes, productivity incentives, etc.</u></p> <p>4.4.1 Compensation of inspectors must not <u>directly</u> depend on the number of inspections <u>performed they perform</u> and <u>in no case on</u> the results of <u>such</u> inspections.</p>
155-164	Editorial	<p>Edited clause 4.4.3 into 4 parts, 4.4.3.1, 4.4.3.2, 4.4.3.3 and 4.4.3.4</p> <p><u>4.4.3.1</u> The applicant SIA 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 personnel, facility, <u>technology</u> or methodology) which they inspect, or in entities that supply similar competitive items or services.</p> <p><u>4.4.3.2</u> The SIA and its staff shall not engage in any activities that may conflict with their independence of judgment and integrity.</p> <p><u>4.4.3.3</u> The SIA must operate in a nondiscriminatory, transparent manner to allow full access to its services by interested parties.</p> <p><u>4.4.4.4.3.4</u> Rules and regulations of the local jurisdiction regarding Special Inspections shall be adhered to in the performance of Special Inspections.</p>
178	Editorial	<p>The SIA shall maintain an up-to-date organizational chart clearly <u>showing-identifying</u> the functions and lines of authority for its staff. Any relationship between special inspections and other activities within the organization shall also be defined. The position of the technical manager (and deputy technical manager) and quality manager (and deputy quality manager) (however named) shall be clearly shown in the chart.</p>
202	Editorial	<p><u>4.6.5</u> Other positions that could affect the quality of inspection activities, such as manager and inspectors, shall be described.</p>
204-207	Editorial	<p>4.7 Technical Competency of Special Inspectors: A matrix matching inspector qualifications, <u>certifications</u> and relevant experience to categories in which they are authorized to conduct special inspections, shall be maintained and used for dispatch. Inspectors' education, certification(s) and relevant documented experience shall satisfy the requirements of the AHJ or Table 1 (if none are specified). The matrix shall include the date of employment and expiration dates for certifications (if any).</p>

212-214	Editorial	IAS shall assess the appropriateness of the competence requirements, education, training, technical knowledge, hands-on skills as demonstrated onsite or by interview and mock demonstration onsite or at the office . Personnel found to possess inadequate skills and job knowledge will be expected to undertake <u>additional</u> training, mentoring or gain <u>additional needed</u> experience to correct such discrepancies.
218-219	Editorial	The matrix shall also identify staff that are authorized by the SIA to perform technical reviews, final sign-off approvals and release of reports, including any additional requirement of the AHJ. SIA staff that are authorized to perform onsite supervision, and monitoring and onsite training shall also be identified.
232-233	Editorial	4.9.1 Special inspection agencies shall maintain a list of <u>test</u> and measuring equipment used for conducting special inspections under these criteria. This list shall include information on range, accuracy, maintenance, calibration status and frequency of calibration. Wherever possible, calibration services shall be provided by a calibration laboratory accredited by IAS or by an accreditation body that is a <u>mutual signatory of ILAC Mutual Recognition Agreement (MRA)</u> . partner with IAS in a mutual recognition arrangement (MRA) .
240-242	Editorial	It is the SIA's responsibility to ensure that such testing equipment is properly calibrated prior to use, specifically when another entity is responsible for supplying or performing inspections/teststests being witnessed and reviewed for acceptance by the SIA.
289-292	Editorial	4.10.20 Documented policies and procedures on <u>retention and protection (onsite/offsite) of records by SIA</u> . how the SIA shall retain records (electronic record and hard copy record) to have foolproof protection in case of accidental loss (both at facility and remotely) .
297-300	Editorial	Controlled documents include, but are not limited to, the quality manual, standard operating procedures, special inspection procedures, and copies of forms, checklists, <u>regulations, codes</u> etc., relevant to the inspection activities. 4.10.21 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 <u>identified</u> marked .
309-310	Editorial	4.11.2 Contract conditions are agreed to <u>in writing and documented</u> , 4.11.3 Special equipment needs <u>(as appropriate)</u> are identified,

334-342	Editorial	<p>4.13 Subcontracting/Outsourced Inspection Services: Outsourcing part of the SIA's responsibility is permitted only to accredited SIAs (accredited to the same-similar scheme scope by an accreditation body that is a ILAC partner with IAS in an MRA), unless specified otherwise by the AHJ. The outsourced organization (otherwise called subcontractor) must have documentation substantiating that it agrees to operate under the SIA's management system for subcontracting process qualification. A list of current outsourcing vendors-resources must be maintained.</p> <p>Accreditation shall not be granted for special inspection categories where the SIA does not have the demonstrated competence or resources required to perform the inspection or when it intends to subcontract the entire special inspection category on a permanent basis.</p>
344-348	Editorial	<p>Contract inspectors, who work under the SIA's system, are not considered to be subcontractors when they perform inspections in the same manner as regular employees <u>and need to comply</u></p> <p style="text-align: center;">Page 10 of 22</p> <p style="text-align: right;"><i>IAS/SIA/011 AC291 Proposed August 5, 2023</i></p> <hr style="border: 1px solid gray; margin: 10px 0;"/> <p>with the policies and procedures of the SIA...use the SIA's forms and procedures and are managed under the SIA's Management System.</p> <p>Note: The terms "subcontracting" and "outsourcing" are considered to be synonyms. Logistics services provider for measuring and testing equipment is not considered as a subcontractor.</p>
350-354	Editorial	<p>4.14 Complaints & Appeals: Policies and procedures for processing-handling complaints and appeals from clients and regulatory agencies shall be in place and evidence of implementation shall be documented <u>documented and implemented by the SIA</u>. Records of all complaints/<u>appeals</u> and resolutions shall be maintained and evidence of implementation shall be documented.</p>
355-357	Editorial	<p>4.15 Feedback Collection: Policies and procedures for client feedback shall be <u>documented and implemented by the SIA. Records shall be maintained.</u> in place and evidence of implementation shall be documented.</p> <p>Note: Examples of feedback include client satisfaction surveys and review of inspection reports with clients. Jobsite visits or interactions with clients can also generate valuable feedback.</p>
360-364	Editorial	<p>4.16 Internal Audit: Policies and procedures for internal audits shall be <u>documented and implemented by the SIA.</u> in place and evidence of implementation shall be documented. Records of internal audits and corrective actions shall be available for review.</p> <p>Note: For agencies with no additional qualified internal auditors, such internal audits may be performed by an <u>independent qualified individuals</u> qualified in conformity assessment.</p>

365-377	Editorial	<p>4.17 Management Review: Policies and procedures for management review shall be <u>documented and implemented by the SIA, in-place and records of the process shall be available for review.</u></p> <p>The management review shall, at a minimum, take account of:</p> <p>4.17.1 Internal audit <u>reports.</u></p> <p>4.17.2 External assessment <u>reports.</u></p> <p>4.17.3 Complaints/<u>Appeals</u> from <u>clients.</u></p> <p>4.17.4 Adequacy of <u>human-staff</u> and equipment <u>resources.</u></p> <p>4.17.5 Results of client <u>feedback.</u></p> <p>4.17.6 Training <u>needs.</u></p> <p>4.17.7 Results of supervision and monitoring activities of inspectors, including verification of inspector's performance related to ethical and impartial <u>behavior.</u></p> <p>4.17.8 Changes needed in the management <u>system.</u></p> <p>4.17.9 Perceived risk to impartiality.</p>
383-389	Editorial	<p>4.19 Procedures for Dispatching Daily, Intermediate and Final Reports: Issuance of a final inspection report (sign-off documentation or any other applicable contractual deliverable) shall occur only after verification that remaining discrepancies in each special inspection category have been resolved to the satisfaction of the owner or their authorized representative. Evidence of correlation of data shall be made available during onsite assessment.</p> <p>Note: An example is a sign-off letter that is traced back to all related inspection visits performed, with cumulative compilation of status of closure of discrepancies observed/resolved.</p>
396-409	Editorial	<p>4.20 -Contents and Coverage of Inspection Reports</p> <p>4.20.1 Inspection reports issued by the SIA shall accurately and clearly present the results of special inspections. Inspection reports shall comply with the reporting requirements of the building code or AHJ's requirements and contain the following minimum information, as applicable: inspection date, and arrival and departure times (or total duration onsite) of the inspector.</p> <p>4.20.2 Information pertaining to review of material records. (Material certification requirements are included, but not limited to those noted, in Appendix A.)</p> <p>4.20.3 <u>4.20.2</u> Structure/item inspected, including applicable codes, standards, approved construction documents, etc.</p> <p>4.20.4 <u>4.20.3</u> Results of inspection/tests witnessed or performed.</p> <p>4.20.5 <u>4.20.4</u> Resolution of any discrepancies noted during previous inspections.</p> <p>4.20.6 <u>4.20.5</u> Description of samples obtained, if any, including quantity, <u>dimensions</u> and relevant physical characteristics. Samples collected and sent to a test laboratory for evaluation and testing shall have appropriate documents showing an unbroken chain of custody.</p> <p>4.20.7 <u>4.20.6</u> Identification of measurement and monitoring devices used during inspection and measurement/testing, where results are declared and included as part of the inspection report with attestation.</p> <p>4.20.8 <u>4.20.7</u> Names and signatures of the inspector and client's representative (if applicable per contract).</p>

<p>412-422</p>	<p>Editorial</p>	<p><u>4.21.1 Training plan/Calendar:</u> Identification of training needs for each person shall take place at least once per year. This review shall result in documented plans for further training or a statement that no further training is presently required for the individual.</p> <p><u>4.21.2</u> Training records should normally be <u>reviewed and</u> signed by the individual and the reviewer. <u>The training records must include the details of training completed, date it was completed and identity of the reviewer. In case, the staff is noted to be qualified with no additional training required, records reflecting evaluation of competency needs to be maintained by the agency. (If training needs are not signed, they must include the identity of the reviewer and</u></p> <p style="text-align: center;">Page 12 of 22</p> <p style="text-align: right;">IAS/SIA/011 AC291 Proposed August 5, 2023</p> <hr style="border: 1px solid gray;"/> <p style="text-align: center;">the date and nature of training.) A statement that no further training is needed shall be interpreted as an endorsement, by the organization, of the person's competence in all aspects of their role at the date of the review.</p>												
<p>425-426</p>	<p>Editorial</p>	<p>Where records indicate that a member of staff has not maintained current involvement in a particular skill area, the SIA must have documented procedures for <u>evaluating and updating the competency of the staff, as appropriate.</u> managing the progressive reduction of current knowledge, which inevitably results. Procedures must also be in place for providing refresher training where required.</p>												
<p>Table 1</p>	<p>Editorial/ Technical Changes</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;">9</td> <td style="width: 40%;">Post-Installed Structural Anchors in Concrete <u>and Masonry, Prestressed Rock and Soil anchors installation</u></td> <td style="width: 55%;">ICC Reinforced Concrete SI or ACI Concrete/<u>Masonry</u> Construction SI</td> </tr> <tr> <td style="text-align: center;">15</td> <td>Chimneys <u>& Vents</u></td> <td>ICC Commercial Mechanical Inspector or ICC Residential Mechanical Inspector</td> </tr> <tr> <td style="text-align: center;">21</td> <td>Firestop-Fire-resistant Penetrations & Joint Systems</td> <td><u>ICC CLA or</u> UL Firestop Examination or FM Firestop Examination or IFC <u>third party</u> Firestop Special Inspector Examination</td> </tr> <tr> <td style="text-align: center;">24</td> <td>Exterior Insulation and Finish Systems (EIFS) Combustible Exterior Wall Coverings</td> <td>AWCI EIFS Inspector</td> </tr> </table>	9	Post-Installed Structural Anchors in Concrete <u>and Masonry, Prestressed Rock and Soil anchors installation</u>	ICC Reinforced Concrete SI or ACI Concrete/ <u>Masonry</u> Construction SI	15	Chimneys <u>& Vents</u>	ICC Commercial Mechanical Inspector or ICC Residential Mechanical Inspector	21	Firestop-Fire-resistant Penetrations & Joint Systems	<u>ICC CLA or</u> UL Firestop Examination or FM Firestop Examination or IFC <u>third party</u> Firestop Special Inspector Examination	24	Exterior Insulation and Finish Systems (EIFS) Combustible Exterior Wall Coverings	AWCI EIFS Inspector
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		26 Façade Inspection, as per Owner's Contract Provision or AHJ Requirement	ICC Commercial Building Inspector or ICC Residential Building Inspector, having 5 years of experience in high-rise building construction/ maintenance/restoration/ design/engineering, inspection or as per provision of AHJ. Conversant with ASTM E2270 and ASTM E2841 and the following: • Factors relevant to historic buildings • Investigation and data collection techniques • Material and repair techniques	
		Delete Appendix 'A', Material Specifications		

You are cordially invited to submit written comments, or to attend the WebEx committee hearing and present verbal comments. Written comments will be forwarded to the committee, **prior to the hearing**, if received by September 4, 2023. For your convenience, a comment form is provided. The link can be found on the Accreditation Committee meeting page on the IAS website, www.iasonline.org. Comments must be emailed to iasinfo@iasonline.org.

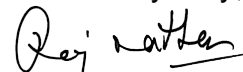
Parties interested in proposed revised criteria may deliver written communications and submissions regarding such proposed criteria to IAS within approximately 30 days of posting of the public notice on the IAS website. The committee shall be informed of all pertinent written communications received by IAS. Any relevant communication and changes to a criteria arising from the written communication/submission shall be posted to the IAS website prior to the meeting.

Participants at the accreditation committee meetings shall have the opportunity to speak on the proposed criteria to provide information to the committee. Committee meetings are generally held by electronic means. Participants are responsible to ensure access to appropriate computer equipment, software, and internet connectivity to ensure effective participation during the meeting.

Your cooperation is requested in forwarding to IAS, as noted above, all material directed to the committee. Prior to the hearing, parties interested in the deliberations of the committee should refrain from communicating, whether in writing or verbally, with committee members regarding agenda items. The committee reserves the right to refuse communications that do not comply with this request.

If you have any questions, please contact IAS at 562-364-8201. You may also reach us by e-mail at iasinfo@iasonline.org.

Yours very truly,



Raj Nathan
President

Enclosures: Proposed Revised AC291
cc: Accreditation Committee



1 **PROPOSED REVISIONS TO THE ACCREDITATION CRITERIA FOR SPECIAL**
2 **INSPECTION AGENCIES**

3
4 **AC291**

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7 **Proposed October 4, 2023**

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11 **PREFACE**

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14 The attached accreditation criteria have been proposed to provide all interested parties with an
15 opportunity to comment. These criteria may be further revised as needed. The criteria are developed
16 and adopted following public hearings conducted by the International Accreditation Service, Inc. (IAS),
17 Accreditation Committee and are effective on the first of the month following approval by the
18 Accreditation Committee, but no earlier than 30 days following the approval.

PROPOSED REVISIONS TO THE ACCREDITATION CRITERIA FOR SPECIAL INSPECTION AGENCIES

1.0 INTRODUCTION

1.1 **Scope:** These criteria set forth the requirements for obtaining and maintaining International Accreditation Service, Inc. (IAS), Special Inspection Agency accreditation. These criteria supplement the IAS Rules of Procedure for Special Inspection Agencies.

1.2 **References and Normative Documents:** Publications listed below refer to current editions (unless otherwise stated).

1.2.1 *International Building Code*® (IBC) or applicable codes currently adopted by the jurisdiction in which the project is to be constructed.

1.2.2 ISO/IEC Standard 17020, Conformity assessment – Requirements for the operation of various types of bodies performing inspection.

1.2.3 ISO/IEC Standard 17024, Conformity assessment – General requirements for bodies operating certification of persons.

1.2.4 IAS Rules of Procedure for Special Inspection Agency Accreditation.

1.2.5 IAS AC371, Accreditation Criteria for Training Agencies for Workforce Qualification Programs.

1.2.6 IAS AC478, Accreditation Criteria for Inspection Practices of Metal Building Assemblers.

1.2.7 ICC/IAS *Model Program for Special Inspection*

1.2.8 ILAC P10, ILAC Policy on Traceability of Measurement Results.

1.2.9 ILAC P15, Application of ISO/IEC 17020:2012 for the Accreditation of Inspection Bodies.

1.2.10 Publications of the following Standards Development Organizations (SDOs), [ICC](#), AAMA, ACI, ASHRAE, AISC, ANSI, ASCE, ASME, ASTM, AWPA, AWS, AWWA, CSA, NHMA, FEMA, NFPA, NHMA, SDI, SJI, SMACNA, TIA, TPI, UL, [FM](#), and WDMA may also be used, as applicable.

2.0 DEFINITIONS

Applicable definitions of ISO/IEC Standard 17000 series apply.

2.1 **Approved:** Acceptable to the building official or authorized representative of the local AHJ.

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

- 54 2.3 **Authority Having Jurisdiction (AHJ)/Authorizing Agency (AA):** An organization, office, or
55 individual responsible for enforcing the requirements of a code or standard, or for approving
56 equipment, materials, an installation, or procedure.
- 57 2.4 **Extending Accreditation:** Process of enlarging the scope of accreditation.
- 58 2.5 **Fabricated Item:** Structural load-bearing or lateral load-resisting assemblies consisting of
59 materials assembled prior to installation in a building or structure, or subjected to operations
60 such as heat treatment, thermal cutting, cold working or reforming after manufacture and prior to
61 installation in a building or structure. Materials produced in accordance with standard
62 specifications referenced by the building code, such as rolled structural steel shapes, steel-
63 reinforcing bars, masonry units, and wood structural panels or in accordance with a standard
64 listed in the IBC that provides requirements for quality control done under the supervision of a
65 third-party quality control agency shall not be considered “fabricated items.”
- 66 2.6 **Fire Protection Engineer (F.P.E.):** An individual with specialized training in fire protection
67 systems for building construction, as evidenced by a bachelor’s or higher degree in fire
68 protection engineering from an accredited college, university or engineering school.
- 69 2.7 **Fire-resistant Materials:** Cementitious or fibrous materials, intumescent or thin films that are
70 applied to provide fire-resistant protection of the substrates.
- 71 2.8 **Firestop System:** An assemblage of materials including fire-resistance-rated assembly;
72 penetrating item(s); gap size; the fill, void or cavity materials installed as a system in the breach
73 of the assembly to extend the fire; smoke or other resistance rating of the assembly at the
74 breach due to penetration by electrical, plumbing or mechanical items tested to ASTM E814/UL
75 1479, by expansion and construction joints tested to UL 2079/ASTM E1966, and by perimeter
76 joints tested to ASTM E2307 in buildings.
- 77 2.9 **Intumescent Fire-resistant Coatings:** Thin film liquid mixture applied to substrates by brush,
78 roller, spray or trowel that expands into a protective foamed layer to provide fire-protection of
79 substrates when exposed to flame or intense heat.
- 80 2.10 **Label:** An identification applied on a product by the manufacturer that contains the name of the
81 manufacturer, the function and performance characteristics of the product or material, and the
82 name and identification of an approved agency; and that indicates that a representative sample
83 of the product or material has been tested and evaluated by an approved agency.
- 84 2.11 **Management System Documentation:** Documentation, inclusive of operating process and
85 technical work instructions, such as the inspection procedures/methods/checklists/forms/report
86 templates, etc., on the requirements stated in these criteria (AC291) and ISO/IEC Standard
87 17020, including policies and objectives for effective implementation at all levels of operation.
- 88 2.12 **Manufacturer’s Designation/Mark:** An identification applied on a product by the manufacturer
89 indicating that a product or material complies with a specified standard or criteria.

- 90 2.13 **Mastic Fire-resistant Coatings:** Liquid mixture applied to a substrate by brush, roller, spray or
91 trowel that provides fire-resistant protection of a substrate when exposed to flame or intense
92 heat.
- 93 2.14 **Professional Engineer (P.E.):** An engineer licensed to practice the applicable discipline in the
94 jurisdiction where the project is to be constructed.
- 95 2.15 **Qualified:** Meeting the minimum requirements of Table 1, unless otherwise determined by the
96 AHJ.
- 97 2.16 **Registered Architect (R.A.):** An architect licensed to practice the applicable discipline in the
98 jurisdiction where the project is to be constructed.
- 99 2.17 **Registered Design Professional:** An individual who is registered or licensed to practice their
100 respective design profession as defined by the statutory requirements of the professional
101 registration laws of the jurisdiction where the project is to be constructed.
- 102 2.18 **Scope of Accreditation:** Specific conformity assessment services for which accreditation is
103 sought or has been granted.
- 104 2.19 **Special Inspection:** Inspection as herein required of the materials, installation, fabrication,
105 erection or placement of components and connections requiring special expertise to ensure
106 compliance with approved construction documents and referenced standards. Reference the
107 *International Building Code* Chapter 17, Section 1702, or the code most currently adopted by the
108 AHJ in the jurisdiction where the project is to be constructed.
- 109 2.20 **Special Inspection Agency (SIA):** A third-party entity approved by the building official to
110 perform special inspections.
- 111 2.21 **Special Inspector:** A qualified person employed by an SIA, who shall demonstrate competence
112 to the satisfaction of the building official, for the inspection of the particular type of construction
113 or operation requiring special inspection.
- 114 2.22 **Witnessing:** Observation of the approved agency carrying out conformity assessment services
115 within its scope of accreditation.

117 3.0 ELIGIBILITY

118 Accreditation services are available to organizations that provide special inspection services
119

120 4.0 REQUIRED BASIC INFORMATION MANAGEMENT SYSTEMS (MS) AND TECHNICAL 121 DOCUMENTATION

122 The criteria requirements and documented information that must be submitted by special inspection
123 agencies applying for Special Inspection Agency accreditation are noted below:

124 **Note:** An electronic format is preferred.

- 125 4.1 **Documented Information Submission:** The submission of management system
126 documentation shall comply with all requirements stated in this document – Policy Document

127 complying with each clause/subclause of AC291 listed in this section 4.0, and Inspection
128 Procedure Documents for each category of inspection. This may also include a checklist, a blank
129 form(s) used by the inspector and a reporting [inspection report](#) template ~~(used to make an~~
130 ~~inspection report submission)~~, along with the [documentation/records addressing](#) relevant
131 requirements of ISO/IEC Standard 17020:2012 and the building code currently adopted by the
132 AHJ in the jurisdiction where the project is to be constructed. This includes all additional
133 requirements (technical guides, local laws, bulletins, regulations, directives, executive orders,
134 etc.) promulgated by the AHJ.

135 4.2 **Legal Status:** The SIA, or the organization of which it forms a part, shall be legally
136 [identifiable entity](#).

137 4.3 **Liability Insurance:** The SIA organization or organization of which it forms a part shall provide
138 evidence of liability insurance per contractual requirement or the local requirements [as](#) enforced
139 by the AHJ.

140 4.4 **Risk to Impartiality:** The SIA shall identify and document the mechanism and [maintain records](#)
141 ~~of an~~ analysis of [actual and](#) perceived risks to impartiality on an on-going basis. ~~Responses to~~
142 ~~both perceived and actual risks shall be recorded.~~ [NOTE: Risks to impartiality can arise from](#)
143 ~~The SIA shall further consider~~ situations where management, staff and special inspectors
144 experience undue pressure from any source, internal or external, that could influence the results
145 of special inspection, project signoff, contract/quote approval, work scheduling or any other
146 related activity. ~~Such pressures may include: threats, inducements, unreasonable time~~
147 ~~pressures, bonus/salary schemes, productivity incentives, etc.~~

148 4.4.1 Compensation of inspectors must not [directly](#) depend on the number of inspections
149 [performed they perform](#) and ~~in no case on~~ the results of [such](#) inspections.

150 4.4.2 A company-wide Ethics Procedure and Conduct shall be documented and
151 implemented.

152 4.4.3 An affidavit signed by the principal owners/stakeholders of the SIA and acknowledged
153 by all employees whose job responsibilities are related to special inspection functions,
154 attesting to compliance with the third-party requirements described below:

155 [4.4.3.1](#) The applicant SIA and its inspection staff shall not be part of or have a financial or other
156 interest in the construction, manufacture, representation, supply, installation or
157 maintenance of the structures or components (including personnel, facility, technology
158 or methodology) which they inspect, or in entities that supply similar competitive items
159 or services.

160 [4.4.3.2](#) The SIA and its staff shall not engage in any activities that may conflict with their
161 independence of judgment and integrity.

162 [4.4.3.3](#) The SIA must operate in a nondiscriminatory, transparent manner to allow full access
163 to its services by interested parties.

164 4.4.44.4.3.4 Rules and regulations of the local jurisdiction regarding Special Inspections shall
165 be adhered to in the performance of Special Inspections.

166 4.5 **Confidentiality:** The SIA shall have a policy that ensures confidentiality of the customer
167 information by the SIA and/or by any subcontractors, taking into account any relevant legal and
168 statutory requirements. Implementation of Sections 4.4 and 4.5 must provide objective evidence
169 that the SIA personnel have read and understood these requirements. Appropriate objective
170 evidence may be in a form referencing the requirement, or any other method appropriate to
171 ensure personnel understand and attest they are in compliance with the requirements.

172 4.6 **Organization and Independence:** The SIA size, structure and composition shall be suitable for
173 competent performance of the tasks within the SIA's scope. A single person (1 inspector)
174 agency (SPA) may be accredited provided all relevant requirements of this document are
175 effectively implemented. Categorization of the SIA shall match the requirement of ISO/IEC
176 Standard 17020, Clause 4.1.6 (Type-A, B or C).

177
178 The SIA shall maintain an up-to-date organizational chart clearly ~~showing~~ identifying the
179 functions and lines of authority for its staff. Any relationship between special inspections and
180 other activities within the organization shall also be defined. The position of the technical
181 manager (and deputy technical manager) and quality manager (and deputy quality manager)
182 (however named) shall be clearly shown in the chart.

183
184 Job descriptions and responsibilities of key personnel shall be defined including:

185 4.6.1 A technical manager (however named) with the necessary qualifications and
186 experience and who has overall responsibility for the technical operations.

187 4.6.2 A quality manager (however named) with the necessary qualifications and experience
188 and who has the responsibility for the management system and its implementation.

189 This person shall have direct access to the highest level of authority within the
190 organization. Necessary qualifications and experience must be sufficient to effectively
191 perform their responsibilities.

192 4.6.3 Field supervisor(s) who is (are) responsible for the results of inspections, and the
193 training and monitoring of inspectors for each field of inspection. If the field inspection
194 supervisor covers more than one field of inspection, he/she shall be suitably qualified in
195 each field.

196 4.6.4 Deputies in the absence of technical manager, quality manager and/or field
197 supervisor(s).

198 **Note:** The purpose of nominating a deputy is to satisfy the need for competent
199 management in the absence of the manager. In an organization where the absence of

200 a key person causes the cessation of work, the requirement for deputies may be
201 waived.

202 4.6.5 Other positions that could affect the quality of inspection activities, such as manager
203 and inspectors, shall be described.

- 204 4.7 **Technical Competency of Special Inspectors:** A matrix matching inspector qualifications,
205 ~~certifications~~certifications and relevant experience to categories in which they are authorized to
206 conduct special inspections, shall be maintained ~~and used for dispatch~~. Inspectors' education,
207 certification(s) and relevant documented experience shall satisfy the requirements of the AHJ or
208 Table 1 (if none are specified). The matrix shall include the date of employment and expiration
209 dates for certifications (if any).

210
211 IAS shall assess the appropriateness of the competence requirements, education, training,
212 technical knowledge, hands-on skills as demonstrated onsite or by interview and mock
213 ~~demonstration onsite or at the office~~. Personnel found to possess inadequate skills and job
214 knowledge will be expected to undertake additional training, mentoring or gain additional-needed
215 experience to correct such discrepancies.

216
217 The matrix shall also identify staff that are authorized by the SIA to perform technical reviews,
218 ~~final sign-off~~approvals and release of reports, including any additional requirement of the AHJ.
219 SIA staff that are authorized to perform onsite supervision, ~~and~~ monitoring and onsite training
220 shall also be identified.

- 221 4.8 **Jobsite Safety:** Safety procedures addressing perceived risks in each field of inspection, along
222 with measures for mitigating such unsafe conditions during field inspections and testing, shall be
223 implemented by the SIA. Special conditions applied to each project/installation by local, state
224 and Federal authorities shall be binding.

- 225 4.9 **Measuring and Monitoring Resources:** The SIA shall document policies and procedures on
226 equipment maintenance, including equipment used to perform special inspections and/or verify
227 testing under special inspections in the field.

228 4.9.1 Special inspection agencies shall maintain a list of test and measuring equipment used
229 for conducting special inspections under these criteria. This list shall include
230 information on range, accuracy, maintenance, calibration status and frequency of
231 calibration. Wherever possible, calibration services shall be provided by a calibration
232 laboratory accredited by IAS or by an accreditation body that is a mutual signatory of
233 ILAC Mutual Recognition Agreement (MRA). ~~partner with IAS in a mutual recognition~~
234 arrangement (MRA).

- 236 It is recognized there may not be nationally recognized standards available for unique
237 inspection equipment. When such instances exist, calibration procedures must be in
238 compliance with manufacturer's recommendations to the extent that such inspection
239 equipment is calibrated to ensure consistency with the required measuring capabilities.
240 It is the SIA's responsibility to ensure that such ~~testing~~ equipment is properly calibrated
241 prior to use, specifically when another entity is responsible for supplying or performing
242 ~~inspections/teststests~~ being witnessed and reviewed for acceptance by the SIA.
- 243 4.9.2 The SIA shall have policies and procedures for handling defective equipment. The SIA
244 shall examine the effect of test and/or measuring equipment found to be defective on
245 previous inspections and, when necessary, take appropriate corrective action.
- 246 4.9.3 All testing and measurement equipment (SIA owned, SIA leased/rented or supplied by
247 others) used at job sites shall be sorted into different categories, depending upon the
248 precision of measurement and complexity of process, as follows:
- 249 4.9.3.1 Equipment calibrated by an external source (accredited partner with IAS in an MRA).
- 250 4.9.3.2 Equipment for which verification of calibration is done internally by SIA or others.
251 Verifiable documents shall be readily available before final acceptance of results of
252 tests/measurements.
- 253 4.9.3.3 Equipment that does not require ongoing calibration, but verification before use.
- 254 4.10 **Record and Document Control:** All documented information issued to personnel in the SIA as
255 part of the management system documentation shall be reviewed and approved for use by
256 authorized personnel prior to issue. A master list or an equivalent document control procedure
257 (in any form) identifying the current revision status and distribution of documents in the
258 management system shall be established and be readily available to preclude the use of invalid
259 and/or obsolete documents. Records shall be maintained by the SIA for a period specified by the
260 AHJ or a period, as per a contractual requirement, whichever is longer, and shall include, at
261 least the following but not limited to:
- 262 4.10.1 Legal entity status and AHJ's registration requirement, if any;
- 263 4.10.2 Human resources record for confidentiality, impartiality and conflict of interest;
- 264 4.10.3 Liability insurance;
- 265 4.10.4 Perceived risk analysis and mitigation records;
- 266 4.10.5 Signed quotes/contracts;
- 267 4.10.6 Record of inspection schedules/dispatch record;
- 268 4.10.7 Inspector's competency matrix (for each category of inspection and for contract
269 employees, if any);
- 270 4.10.8 List of subcontractors (for inspection, testing and calibration, if any);
- 271 4.10.9 Special inspection reports with discrepancy logs and all resolutions, if any;

- 272 4.10.10 Calibration record of measuring and monitoring equipment (owned, rented, witnessed
273 and/or supplied by others);
- 274 4.10.11 Chain of custody of samples (created or supervised), if kept separately;
- 275 4.10.12 List of controlled documents (including: management system manual, process
276 documents, inspection procedures, worksheets prepared by the inspector, templates
277 and other forms);
- 278 4.10.13 Internal audit, corrective measures, preventive actions and plans for improvement;
- 279 4.10.14 Customer complaints with record of resolution;
- 280 4.10.15 Feedback analysis;
- 281 4.10.16 Training plan(s) and/or training records;
- 282 4.10.17 Supervision and monitoring plan for special inspectors, including a report of evaluation.
- 283 4.10.18 Uniquely identified management system documents generated by the SIA. Such
284 identification shall include: the date of issue and/or revision identification, page
285 numbering, total number of pages, a mark to signify the end of the document and the
286 issuing authority.
- 287 4.10.19 Procedures established to describe the process for changing and controlling electronic
288 documents.
- 289 4.10.20 Documented policies and procedures on retention and protection (onsite/offsite) of
290 records by SIA. how the SIA shall retain records (electronic record and hard copy
291 record) to have foolproof protection in case of accidental loss (both at facility and
292 remotely).
- 293 **Note:** Some records need not be maintained separately if they are part of, or subparts
294 of, other records.
- 295 Controlled documents include, but are not limited to, the quality manual, standard
296 operating procedures, special inspection procedures, and copies of forms, checklists,
297 regulations, codes etc., relevant to the inspection activities.
- 298 4.10.21 Invalid or obsolete documents must be promptly removed from all points of issue or
299 use. Obsolete documents retained for either legal or knowledge-preservation purposes
300 must be suitably identified ~~marked~~.
- 301 **4.11 Quotation and Contract:** Contracts or work orders (RFQ or agreement of similar intent) for
302 special inspections shall ensure a clear and demonstrable understanding between the SIA and
303 its customer (owner or their authorized representative). The scope of the inspection work to be
304 undertaken by the SIA shall be clearly defined and agreed to in writing. Where appropriate each
305 contract or request should be reviewed by the SIA to ensure that:
- 306 4.11.1 The SIA has the capability and only conducts work within its area of expertise
307 (manpower and other resources to perform inspection) to meet the customer's
308 requirements,

309 4.11.2 Contract conditions are agreed to ~~in writing~~ and documented,
310 4.11.3 Special equipment needs ~~(as appropriate)~~ are identified,
311 4.11.4 Personnel training needs, if any, are identified,
312 4.11.5 Regulatory and statutory requirements are identified,
313 4.11.6 Special safety requirements are identified,
314 4.11.7 The extent of subcontracting arrangements required are identified and communicated,
315 4.11.8 Documentation needs are identified, report submission schedule/modes are
316 communicated,
317 4.11.9 The final contract or request accepted by the SIA agrees with the original version that
318 was reviewed,
319 4.11.10 Perceived risk analysis is done for a specific quote, as applicable,
320 4.11.11 All records of contract review are retained.
321 4.11.11.1 For routine or repeat work requests, review may be limited to considerations of
322 time and human resources and an acceptable record in such cases would be a
323 signed acceptance of the contract by an appropriately authorized person.
324 4.11.11.2 In situations where verbal agreements are acceptable, the SIA should keep a
325 record of all requests and instructions received verbally, dates and the identity of
326 the customer's representative.

327 4.12 **Sample Handling:** Procedures for the preparation, acquisition, handling and storage of material
328 samples or field-prepared specimens in accordance with applicable codes and/or standards
329 shall be documented by the SIA. Traceability of samples prepared by SIA or other agencies
330 involved in preparation, storage and transportation of samples, must be maintained.
331

332 In the absence of such information, the SIA must have procedures for ~~documenting~~-sampling,
333 handling, storage and transportation techniques.

334 4.13 **Subcontracting/Outsourced Inspection Services:** Outsourcing part of the SIA's responsibility
335 is permitted only to accredited SIAs (accredited to the ~~same-similar scheme-scope~~ by an
336 accreditation body that is a ~~ILAC partner with IAS in an~~ MRA), unless specified otherwise by the
337 AHJ. The outsourced organization (otherwise called subcontractor) must have documentation
338 substantiating that it agrees to operate under the SIA's management system for subcontracting
339 process qualification. A list of current outsourcing ~~vendors-resources~~ must be maintained.
340 ~~Accreditation shall not be granted for special inspection categories where the SIA does not have~~
341 ~~the demonstrated competence or resources required to perform the inspection or when it intends~~
342 ~~to subcontract the entire special inspection category on a permanent basis.~~
343

344 Contract inspectors, who work under the SIA's system, are not considered to be subcontractors
345 when they perform inspections in the same manner as regular employees ~~and need to comply~~

346 with the policies and procedures of the SIA., use the SIA's forms and procedures and are
347 managed under the SIA's Management System.

348 **Note:** ~~The terms "subcontracting" and "outsourcing" are considered to be synonyms.~~ Logistics
349 services provider for measuring and testing equipment is not considered as a subcontractor.

350 4.14 **Complaints & Appeals:** Policies and procedures for processing handling complaints and
351 appeals from clients and regulatory agencies shall be in place and evidence of implementation
352 shall be documented ~~documented and implemented by the SIA.~~ Records of all
353 complaints/appeals and resolutions shall be maintained ~~and evidence of implementation shall be~~
354 documented.

355 4.15 **Feedback Collection:** Policies and procedures for client feedback shall be documented and
356 implemented by the SIA. Records shall be maintained. ~~in place and evidence of implementation~~
357 shall be documented.

358 **Note:** Examples of feedback include client satisfaction surveys and review of inspection reports
359 with clients. Jobsite visits or interactions with clients can also generate valuable feedback.

360 4.16 **Internal Audit:** Policies and procedures for internal audits shall be documented and
361 implemented by the SIA. ~~in place and evidence of implementation shall be documented.~~ Records
362 of internal audits and corrective actions shall be available for review.

363 **Note:** For agencies with no additional qualified internal auditors, such internal audits may be
364 performed by an independent qualified individual ~~s-qualified in conformity assessment.~~

365 4.17 **Management Review:** Policies and procedures for management review shall be documented
366 and implemented by the SIA. ~~in place and records of the process shall be available for review.~~

367 The management review shall, at a minimum, take account of:

368 4.17.1 Internal audit reports;

369 4.17.2 External assessment reports;

370 4.17.3 Complaints/Appeals from clients;

371 4.17.4 Adequacy of human staff and equipment resources;

372 4.17.5 Results of client feedback;

373 4.17.6 Training needs;

374 4.17.7 Results of supervision and monitoring activities of inspectors, including verification of
375 inspector's performance related to ethical and impartial behavior;

376 4.17.8 Changes needed in the management system;

377 4.17.9 Perceived risk to impartiality.

378 4.18 **Status Review and Notification/Reporting Discrepancy:** Policies and procedures shall be in
379 place to notify the building official(s) and registered design professional(s) if corrective actions
380 arising from special inspections remain unresolved. These must be consistent with the building
381 code requirements and those stipulated by the AHJ in the area where the project is to be
382 constructed.

383 4.19 **Procedures for Dispatching Daily, Intermediate and Final Reports:** Issuance of a final
384 inspection report (~~sign-off documentation or any other applicable contractual deliverable~~) shall
385 occur only after verification that remaining discrepancies in each special inspection category
386 have been resolved to the satisfaction of the owner or their authorized representative. Evidence
387 of correlation of data shall be made available during onsite assessment.

388 ~~Note: An example is a sign-off letter that is traced back to all related inspection visits performed,~~
389 ~~with cumulative compilation of status of closure of discrepancies observed/resolved.~~

390 4.20 **Contents and Coverage of Inspection Reports**

391 4.20.1 Inspection reports issued by the SIA shall accurately and clearly present the results of
392 special inspections. Inspection reports shall comply with the reporting requirements of
393 the building code or AHJ's requirements and contain the following minimum
394 information, as applicable: inspection date, and arrival and departure times (or total
395 duration onsite) of the inspector.

396 ~~4.20.2 Information pertaining to review of material records. (Material certification requirements~~
397 ~~are included, but not limited to those noted, in Appendix A.)~~

398 ~~4.20.34.20.2~~ Structure/item inspected, including applicable codes, standards, approved
399 construction documents, etc.

400 ~~4.20.44.20.3~~ Results of inspection/tests witnessed or performed.

401 ~~4.20.54.20.4~~ Resolution of any discrepancies noted during previous inspections.

402 ~~4.20.64.20.5~~ Description of samples obtained, if any, including quantity, dimensions and
403 relevant physical characteristics. Samples collected and sent to a test laboratory for
404 evaluation and testing shall have appropriate documents showing an unbroken chain of
405 custody.

406 ~~4.20.74.20.6~~ Identification of measurement and monitoring devices used during inspection and
407 measurement/testing, where results are declared and included as part of the inspection
408 report with attestation.

409 ~~4.20.84.20.7~~ Names and signatures of the inspector and client's representative (if applicable
410 per contract).

411 4.21 **Training**

412 ~~4.21.1 Training plan/Calendar:~~ Identification of training needs for each person shall take place at
413 least once per year. This review shall result in documented plans for further training or a
414 statement that no further training is presently required for the individual.

415 ~~4.21.2~~ Training records should ~~normally~~ be reviewed and signed by ~~the individual and~~ the reviewer.
416 The training records must include the details of training completed, date it was completed
417 and identity of the reviewer. In case, the staff is noted to be qualified with no additional
418 training required, records reflecting evaluation of competency needs to be maintained by the
419 agency. (If training needs are not signed, they must include the identity of the reviewer and

~~the date and nature of training.) A statement that no further training is needed shall be interpreted as an endorsement, by the organization, of the person's competence in all aspects of their role at the date of the review.~~

Where records indicate that a member of staff has not maintained current involvement in a particular skill area, the SIA must have documented procedures for evaluating and updating the competency of the staff, as appropriate. managing the progressive reduction of current knowledge, which inevitably results. Procedures must also be in place for providing refresher training where required.

4.22 Supervision/Monitoring of Inspectors

To ensure consistency in inspections and compliance with accreditation requirements, SIAs shall have an effective supervision/monitoring system for their inspectors. The extent, nature and level of supervision/monitoring exercised shall consider the qualifications, experience, training and technical knowledge of the SIA staff and the inspections being undertaken. Regular review of inspection reports by supervisory personnel shall include:

4.22.1 Desk Top Review

4.22.1.1 Review of the inspection reports for adequacy and completeness, at periodicity commensurate with project needs, but at least once during each calendar year.

4.22.1.2 Technical review by supervisors with the authority and acquired knowledge/expertise in specific area of inspection. For inspections by licensed professionals, the SIA shall determine whether technical reviews are warranted.

4.22.1.3 Completeness reviews to ensure all required information is included in the final report prior to its release.

4.22.1.4 Competence of the inspector with the SIA's policies, operating procedures and regulatory/statutory requirements to be compiled for specific job responsibility.

4.22.1.5 Compliance with requirements imposed by the jurisdiction in which inspections are conducted.

4.22.1.6 Review of feedback from the clients (and building department staff, if applicable).

In the event that no inspection activities were performed in a given situation, the supervisor must formally make an attempt to simulate the inspection environment and authorize the inspector to perform inspections on demand.

Note: In case of a single special inspector, random review by peer group or client may be essential, at the discretion of the agency.

Note: In case of inspection performed by a primary inspector and no other equally (at least) qualified personnel are available in the agency, such reports could be self-certified by performing inspector.

- 457 4.22.2 **Onsite Review**
- 458 4.22.2.1 Review of records maintained of the monitoring of inspectors at least once during
- 459 their first month of employment.
- 460 4.22.2.2 Review of records of periodic monitoring of inspectors in the field not less than
- 461 once every four years for each field of inspection by the SIA. A **rolling**-plan shall be
- 462 made available at the initial stage of implementation and continuity shall be
- 463 demonstrated.
- 464 4.22.2.3 Review of the quality of inspection activities established by the SIA which may
- 465 include, but are not limited to:
- 466 4.22.2.3.1 **Comparison of findings:** Several inspectors (drawn from one or several
- 467 sites) may inspect an item (either concurrently or over a time interval such
- 468 that the stability of the inspected item is assured) and the findings are then
- 469 compared. Comparisons may be numerical or qualitative and a statistical
- 470 analysis of outcomes may highlight whether the findings from each inspector
- 471 are satisfactory. Comparison is against the consensus of the group.
- 472 4.22.2.3.2 **Measurement audits:** An object of inspection with known reference values
- 473 or qualities may be used in a manner similar to that described in Section
- 474 4.22.2.3.1 above. The extent of variance between the reported results from
- 475 the inspector and the reference value/quality may be used as a performance
- 476 valuation tool.
- 477 4.22.2.3.3 **Technical witnessing:** An inspector may observe another inspector during
- 478 an inspection, to confirm the coverage and application of judgment. This
- 479 technique is frequently used as a measure of the effectiveness of training.
- 480 4.22.3 **Authorization and Identification of Special Inspectors:** Documentation of the start
- 481 date of authorization of each special inspector.

482

483 **5.0 ADDITIONAL INFORMATION (AS APPLICABLE)**

484 **Minimum Qualifications for Special Inspectors**

485 Qualification requirements for special inspectors are as specified in Table 1, unless otherwise

486 stipulated by the AHJ/Scheme Owner. Where professional licensing is NOT a local AHJ requirement

487 to perform duties, other equivalent education, qualification and professional experience shall be

488 considered as equivalent, as determined in the Table and application for specified economy or AHJ

489 only. Similarly, where relevant personnel certification courses are not available in the economy (or

490 web-based certification programs are not available), other equivalent personnel certification shall be

491 applied based on relevant and AHJ/Scheme Owner's requirement.

492

493 **6.0 LINKS TO ADDITIONAL REFERENCES**

- 494 6.1 Asia Pacific Accreditation Cooperation – www.apac-accreditation.org
- 495 6.2. International Laboratory Accreditation Cooperation – www.ilac.org
- 496 6.3. International Organization for Standardization – www.iso.org
- 497 6.4. International Electrotechnical Commission – www.iec.ch
- 498 6.5. International Accreditation Service – www.iasonline.org
- 499 6.6 International Code Council – www.iccsafe.org

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502 *These criteria were previously issued: January 2005 as Requirements; May 2005, August 2006, May 2007, April 2008, September*
503 *2008, October 2009, May 2010, April 2011, October 2011, August 2012, June 2013, February 2016, August 2016 and September*
504 *2017 and September 2019.*

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CREDENTIAL REQUIREMENT FOR SPECIAL INSPECTORS
(where AHJ/AA does not prescribe a specific requirement)

Professional License: A professional engineering or architecture license issued by any of the State Licensing Boards within the U.S. (only applicable to a U.S. domiciled agency). Professional Credentials from other countries may be accepted on a case-by-case basis upon establishment of technical equivalency to licenses issued by U.S. entities.

Recognized Education: The following degreed programs are acceptable (ABET recognition is NOT criteria unless the AHJ/AA wants it mandated in written law/regulation/bulletin or similar other statement):

Engineering Degree: An engineering degree (four or more years) which results in a Bachelor of Science designation from a post-secondary institution accredited by accredited agencies or state approval agencies recognized by the U.S. Secretary of Education.

Architecture Degree: An architecture degree which results in a Bachelor of Architecture designation from a post-secondary institution accredited by accredited agencies or state approval agencies recognized by the U.S. Secretary of Education.

Any other Technical Degree from another Economy: Professional credentials from other countries may be accepted on a case-by-case basis upon establishment of technical equivalency to licenses issued by U.S. entities.

Demonstrable Experience: To qualify as a special inspector based on experience, an inspector needs to demonstrate to the assessor that his/her knowledge and experience are relevant to the inspection tasks being performed.

The following are used as an acceptable means:

- Self-maintenance of a log of national certifications from a third-party training service provider; example: FCIA, IFC, AWS, ICC.
- An inspector is expected to demonstrate skill-based, hands-on competence to the satisfaction of the assessor(s) at the site or similar environment.

Training and Certification

In-house Training: Documented in-house training **could be** considered, provided it includes structured class room or semi-structured web-based training followed by an individual evaluation of skills acquired. Class room/web-based instruction, onsite instruction, and hands-on training by supervisors/qualified inspectors, as determined by each SIA management could be accepted subject to compliance with AHJ/AA requirements.

Documentation shall include project or location of training, type of training, name and signature of training service (name of individual with identity, name of organization may not be sufficient, if no accreditation status could be verified) who provided such training, topics discussed, areas inspected, and other necessary information. The documentation of the in-house training shall be signed by the participant and the instructor(s).

IAS Recognized Certification/Training: Certifications from the following third-party training service and certification service providers (both ISO/IEC 17024 accredited and otherwise) are recognized for special inspection, subject to approval from the respective AHJ/AA:

- **AABC (Air Balance Testing/Mechanical/smoke Control, Stairwell Pressurization):** Certified Test and Balance Technician (AABC-CTBT), Test and Balance Engineer (AABC-TBE)
- **ACG (Air Balance Testing):** Certified Commissioning Technician CxT (ACG-CCT), and Commissioning Authority CxA (ACG-CA)

- 554 • **ACI (Concrete):** Field personnel, ACI Concrete Construction Special Inspector (ACI-CCSI)
- 555 • **ACI (Concrete and Masonry):** Field personnel: ACI Field Testing Technician-Grade I (ACI-I-F).
- 556 • **ACI-CRSI (Adhesive Anchors):** Adhesive Anchor Installer (ACI-CRSI)
- 557 • **ACIL:** Construction Materials Engineering and Testing Section Soil Testing Technician Certification
- 558 • **ASNT (Structural Steel: Non-Destructive Testing):** NDT II (Radiographic Testing, RT; Magnetic Particle
- 559 Testing, MT; Liquid Penetrant Testing, PT; and Ultrasonic Testing, UT) qualified in accordance with
- 560 American Society of Nondestructive Testing (ASNT) document SNT-TC-1A (current edition). NDT III (RT,
- 561 MT, PT, and UT) certified by ASNT. In-house certification of NDT II is acceptable. In-house certification of
- 562 NDT III is not acceptable. Program qualification to other documents will be considered on a case-by-case
- 563 basis
- 564 • **AWCI (Exterior Wall System):** Exterior Insulated Finish System Inspector (EIFS-I)
- 565 • **AWS (Structural Steel: Welding):** CWI, according to AWS guidelines or CSA Standard W178.2; SCWI
- 566 according to AWS guidelines
- 567 • **CSWIP as administered by TWI Certification Ltd:** For Welding Inspectors
- 568 • **FCIA Training Program to FCIA Manual of Practice, (MOP):** The Firestop Standard – The FCIA Firestop
- 569 Industry Manual of Practice, developed to be the basis for the FM 4991 Approved Firestop Contractor and
- 570 UL Qualified Firestop Contractor Exam. Once a person passes the exam and is employed / appointed by an
- 571 FM 4991 Approved or UL Qualified Firestop Contractor they become a Designated Responsible Individual
- 572 (DRI)
- 573 • **FM:** A certification for fire penetration inspectors issued by FM Global
- 574 • **ICC (Concrete, Masonry, Structural Steel & Welding, Fireproofing, Soils, and Building):** Reinforced
- 575 Concrete Special Inspector (47); Pre-stressed Concrete Special Inspector (92); Structural Masonry Special
- 576 Inspector (84); Structural Steel and Bolting Special Inspector (S1); Structural Welding Special Inspector
- 577 (S2); Soil Special Inspector (EC); Spray-applied Fireproofing Special Inspector (86)
- 578 • **NEBB:** National Environmental Balancing Bureau
- 579 • **NFPA (Smoke Control):** Certified Fire Protection Specialist (CFPS) or Certified Fire Inspector (CFI) to NFPA
- 580 1031
- 581 • **NICET (Earthwork, Shallow Foundations, and Deep Foundations):** Field Personnel, Geotechnical
- 582 Engineering Technology-Construction Subfield Levels I, II, III, and IV (N-I-GET, N-II-GET, N-III-GET, and N-
- 583 IV-GET). Laboratory Personnel, Construction Materials Testing-Soils Subfield levels I, II, III, and IV (N-I-
- 584 CMT, N-II-CMT, N-III-CMT, and N-IV-CMT)
- 585 • **NICET (Smoke-Control /Fire Protection):** Level II in; Fire Protection Engineering Technology, Water Based
- 586 Fire Protection Systems Layout Subfield (N-II-FPSL); Fire Alarm Systems Subfield (N-II-FPFA), Inspection
- 587 and Testing of Water Based Systems Subfield (N-II-FPIT), and Special Hazards Suppression Systems
- 588 Subfield (N-II-FPSHS)
- 589 • **NPCA (National Precast Concrete Association):** As applicable
- 590 • **Portland Cement Association (PCA):** As Applicable
- 591 • **PTI (Concrete):** Level 2 Unbonded Post-Tensioning Inspector (PTI-L2)
- 592 • **TABB (Air Balance Testing):** Certified Technician (TABB-CT), Supervisor (TABB-S)

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594 AHJ/AA – Authority Having Jurisdiction/Authorizing Authority
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Table 1 — Minimum Acceptable Technical Competency for a Special Inspector
(the below table shall be used in absence of any specified requirement by AHJ/AA)

No.	Special Inspection Category	Required Certification(s)
1	Reinforced Concrete	ICC Reinforced Concrete Special Inspector (SI) or ACI Concrete Construction Special Inspector
2	Concrete Construction (Pre-stressed/Precast)	ICC Pre-stressed SI and ICC Reinforced Concrete SI
3	Soils	ICC Soils SI (ICC-EC) or NICET II (geotechnical or construction or construction material testing or soils)
4	Masonry	ICC Structural Masonry SI
5	Structural Steel (Welding), High-Pressure Steam Piping (Welding), Gas Piping (Welding), Hot Water Piping (Welding)	AWS CWI or ICC Structural Welding SI, CSWIP (WI 6/92 where admissible)
6	Nondestructive Testing (NDT) (All applicable Methods)	Hours of field experience as per -CP-189 NDT or SNT-TC-1a NDT, or ACCP or equivalent
7	Structural Cold-formed Steel	ICC Commercial Building Inspector or ICC Residential Building Inspector
8	Steel (High-Strength Bolting)	ICC Structural Steel and Bolting SI
9	Post-Installed Structural Anchors in Concrete and Masonry, Prestressed Rock and Soil anchors installation	ICC Reinforced Concrete SI or ACI Concrete/ Masonry Construction SI
10	Structural Safety - Stability and Mechanical Demolition, Underpinning, Excavation - Sheeting, Shoring, and Bracing	RDP, PE, or BS Engineering / Architecture where licensing is not practiced or Valid Site Safety Manager Certification. NICET II (geotechnical or construction or construction material testing or soils)
11	Seismic Isolation Systems	RDP, PE, or BS Engineering with Civil/Structural, where licensing is not practiced
12	Pier and Pile Foundations	NICET II (geotechnical or construction or construction material testing or soils)
13	Wood Construction	ICC Commercial Building Inspector or ICC Residential Building Inspector
14	Wall Panels, Curtain Walls, and Veneers	ICC Commercial Building Inspector or ICC Residential Building Inspector
15	Chimneys & Vents	ICC Commercial Mechanical Inspector or ICC Residential Mechanical Inspector
16	Smoke Control Systems	AABC, NEBB or other equivalent Balancing Technician Certification for personnel, and if subcontracted NEEB/AABC or another equivalent accreditation for agency subcontractor
17	Mechanical Systems	ICC Commercial Mechanical Inspector or ICC Residential Mechanical Inspector
18	Heating Systems	ICC Commercial Mechanical Inspector or ICC Residential Mechanical Inspector

19	Fuel-oil Storage and Piping Systems	ICC Commercial Mechanical Inspector or ICC Residential Mechanical Inspector or API Aboveground Storage Tank Inspector
20	Spray-applied Fire-resistant Materials / Intumescent Fire-resistant Coatings / Mastic Fire-resistant Coatings	ICC Spray-Applied Fireproofing SI or ICC Fire Inspector I or Certified Fire Inspector (NFPA 1031, where admissible)
21	Firestop Fire-resistant Penetrations & Joint Systems	<u>ICC CLA or</u> UL Firestop Examination or FM Firestop Examination or IFC <u>third party</u> Firestop Special Inspector Examination
22	Sprinkler Systems	ICC Commercial Building Inspector or ICC Residential Building Inspector, or ICC Fire Inspector I or Certified Fire Inspector (NFPA 1031, where admissible)
23	Standpipe Systems	ICC Commercial Building Inspector or ICC Residential Building Inspector, or ICC Fire Inspector I or Certified Fire Inspector (NFPA 1031, where admissible)
24	Exterior Insulation and Finish Systems (EIFS) Combustible Exterior Wall Coverings	AWCI EIFS Inspector
25	Site Storm Drainage Disposal and Detention/Retention System	ICC Soils SI or NICET II (geotechnical or construction or construction material testing or soils)
26	Façade Inspection, as per Owner's Contract Provision or AHJ Requirement	ICC Commercial Building Inspector or ICC Residential Building Inspector, having 5 years of experience in high-rise building construction/maintenance/restoration/ design/engineering, inspection or as per provision of AHJ. <u>Conversant with ASTM E2270 and ASTM E2841 and the following:</u> <ul style="list-style-type: none"> • <u>Factors relevant to historic buildings</u> • <u>Investigation and data collection techniques</u> • <u>Material and repair techniques</u>
27	Metal Building Assembly Inspection	<ul style="list-style-type: none"> • OSHA 10 certificate for employees with more than one year of experience; and Metal Buildings Institute Quality and Craftsmanship Training Series or Ironworker Quality Construction Practices Metal Building Systems training
28	Special Cases	ICC Commercial Building Inspector or ICC Residential Building Inspector

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Note(s): Required Minimum Educational Qualification and Required Relevant Experience

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1. When qualifications for special inspectors are locally defined by statute, ordinance or rule, and vary from the requirements outlined in these criteria, these local requirements may be recognized for work within the Authorizing AHJ.

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2. Professional Development of Special Inspectors requires those individuals to obtain onsite experience performing inspections of actual work to acquire the skills, under supervision and the duration of such training varies with time spent on actual inspection tasks. SIAs need to have defined their own written Professional Development Program to use apprentice/provisional inspectors and will limit their use based upon the level of supervision and the complexity of the special inspection assignment. The complexity of an assignment for newer inspectors should be minimal and task specific. All documents related to work by an associate or apprentice inspector must be co-signed by a qualified special inspector. The written program documentation must establish compliance with the program.

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3. An Apprentice Special Inspector having higher educational degree (masters degree, earned PhD, having relevance of subject matters) could reduce the number of years of experience before becoming fully qualified

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614 and authorized to perform independent work. A masters degree or an earned PhD may reduce the numbers of
615 years of experience by 1 and 2 years, respectively.

616 4. Special Inspection Agency shall comply with one of the following education and experience requirements, unless
617 stipulated by the AHJ with an additional requirement(s):

618 a. Professional Engineer (P.E.), licensed Architect, or Registered Design Professional (RDP) and a minimum
619 of three months of relevant work experience; or

620 b. 4 Years of verified Bachelor of Science Degree (BS) in Engineering, Architecture, or Physical Science and a
621 minimum of six months of relevant work experience; where licensing is not practiced, minimum experience
622 period may be extended at the discretion of the AHJ; or

623 c. Two years of verified college or technical school (copy of diploma or transcript required) and a minimum of
624 one year of relevant work experience; or

625 d. High school or equivalent graduate (copy of diploma or certificate required) and a minimum of two years of
626 verified relevant work experience; or

627 e. A minimum of two years structural design/engineering experience, or a minimum of two years in
628 manufacturing/testing

629 f. A minimum of three years of verified relevant work experience.

630 5. RDPs, PEs, or RAs are exempt from *Required Certification(s)* listed in Table 1 above unless required by AHJ,
631 but are subject to following:

632 a. Onsite assessment of competence during assessment, and

633 b. Objective evidence of professional development hours (PDH) in relevant category of inspection specific
634 discipline.

635 Where licensing is not practiced, Bachelor of Science Degree (BS) in Engineering, Architecture, or Physical Science
636 shall be used as equivalent educational need. ■

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■APPENDIX A — Material Certifications

(Standards listed in Appendix A are Reference Documents; typical reference and other equivalent National standards or norms referenced in contract shall be binding)

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 C33 and C330 yearly compliance submittal, sample and test
	Fine Aggregate		ASTM Standards C33 and C330 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
	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

ELEMENT	MATERIAL	PRESENT PRACTICE	ADDITIONAL REQUIREMENTS
	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 onsite storage	Match delivery information with certificate of compliance
Firestop Systems	Penetration Firestop Systems	Visual or destructive inspection to ASTM E2174-05, verifying installation conformance to classified ASTM E814 or UL 1479 design parameters as published in directories	ASTM Standard E2174-10ae-1 Verify certification agency 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 E1966 System Design parameters as published in directories	ASTM Standard E2393-10a Verify certification agency 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 E2307 design parameters as published in directories	ASTM Standard E2393-10a Verify certification agency labels and classified systems designs. When appropriate, verify that installing contractors are certified to FM 4991, or to UL-Qualified Firestop Contractor Program.

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