City of Rockville
Community Planning & Development Services

STATEMENT OF SPECIAL INSPECTIONS AGREEMENT

To permit applicants of projects requiring special inspection and/or testing per *Section 1704* of the *International Building Code (IBC):*

Project Address: Permit Project Number:

BEFORE A PERMIT CAN BE ISSUED, the **Statement of Special Inspection (Parts 1 and 2)** and the **Schedule of Special Inspections (Part 3)** with the required acknowledgments shall be completed by the owner, or registered design professional in responsible charge acting as the owner's agent. A preconstruction conference with the parties involved may be required to review the special inspection requirements and procedures.

APPROVAL OF SPECIAL INSPECTORS: Special inspectors may have no financial interest in projects for which they provide special inspection. Special inspectors shall be approved by Community Planning & Development Services (CPDS) prior to performing any duties. Special inspectors shall submit their qualifications and are subject to personal interviews for prequalification. Special inspectors shall display approved identification, as stipulated by the building official, when performing the function of special inspector.

Special inspection and testing shall meet the minimum requirements of *Section 1704 through 1707* of the *International Building Code*. The following conditions are also applicable:

A. Duties and Responsibilities of the Special Inspector

1. **General Requirements.** Special inspectors shall review approved plans and specifications for special inspection requirements. Special inspectors will comply with the special inspection requirements of the enforcing jurisdiction found in the Statement of Special Inspections including work and materials.
2. **Signify presence at job-site.** Special inspectors shall notify contractor personnel of their presence and responsibilities at the job- site. If required by the building official, they shall sign in on the appropriate form (Form A4) posted with the building permit.
3. **Observe assigned work**. Special inspectors shall, according to the Statement of Special Inspections, inspect all work for which they are responsible for conformance with the building department approved (stamped) plans and specifications and applicable provisions of *IBC Section 1704.*

4. **Report nonconforming items (discrepancies) (Form A3).** Special inspectors shall bring all nonconforming items to the immediate attention of the contractor. If any such item is not resolved in a timely manner or is about to be incorporated into the work, the engineer or architect of record and the building official shall be notified immediately, and the item noted in the special inspector's written report *(Section 1704.1.2)*. The building official may require this report to be posted in a conspicuous place on the job-site. The special inspector shall include in the report, as a minimum, the following information about each nonconforming item:
    I. Description and exact location.
    II. Reference to applicable detail of approved plans/specifications.
    III. Name and title of each individual notified and method of notification.
    IV. Resolution or corrective action taken.

5. **Provide timely progress reports (Forms A1, A2)**. The special inspector shall complete written inspection reports for each inspection visit and provide the reports on a timely basis as determined by the building official. The special inspector or inspection agency shall furnish these reports directly to the building official and to the design professional in charge *(Section 1704.1.2)*. These reports should be organized on a daily format and may be submitted weekly, or another required interval, at the option of the building official. In these reports, special inspectors shall:
    I. Describe inspections and tests made with applicable locations.
    II. Indicate nonconforming items (discrepancies) and how they were resolved.
    III. List unresolved items, parties notified, and time and method of notification.
    IV. Itemize changes authorized by engineer or architect of record if not included in nonconforming items.

6. **Submit final report (Form A5).** Special inspectors or inspection agencies shall submit a final signed report to the building department stating that all items requiring special inspection and testing by the Statement of Special Inspection were fulfilled and reported and, to the best of their knowledge in conformance with the approved plans and specifications *(Section 1704.1.2)*. The design professional in responsible charge shall sign the report before it is submitted to the building official. Items not in conformance, unresolved items or any discrepancies in inspection coverage (i.e., missed inspections, periodic inspection when continuous was required, etc.) shall be specifically itemized in this report.

B. Owner Responsibilities. The project owner, the engineer or architect of record, or an agent of the owner is responsible for funding special inspection services. Measures should be taken to ensure that the scope of work and duties of the special inspector as outlined in the Statement of Special Inspection are not compromised.

C. Registered Design Professional in Responsible Charge. The design professional in responsible charge should be consenting party by written acknowledgment of special inspection and testing agreements. The design professional in responsible charge has many duties and responsibilities related to special inspection, including the following:

1. Submit a Statement of Special Inspections (**Parts 1 and 2**) with the permit application. The content of the statement contains the following information:

    I. Materials, systems, components and work required to have special inspection. Duties of the special inspector(s) and the registered design professional responsible for each part of the work are to be stated.

    II. Type and extent of each special inspection and the name of individual or firms performing the inspections.

    III. Type and extent of each test.

    IV. Special inspection of required seismic resistance systems and components.

    V. Special inspection of required wind resistance systems and components.

    VI. Provide name and contact information of special inspector or special inspection agency. Subject to the approval of the building official, special inspectors holding current certification by ICC in the discipline in which they will be inspecting can be considered qualified within the appropriate scope of accreditation for the disciplines to be inspected. The choice of special inspectors or special inspection agencies should include the following considerations:

    VII. Project size and complexity – experience with similar projects.

    VIII. Inspection staffing – sufficient qualified inspectors

    IX. Site location – proximity of inspection and testing facilities.

    X. Off-site inspection – capabilities for inspection at remote locations.

2. Completion of a schedule of special inspection (**Part 3**).
3. Respond to field discrepancies. The engineer or architect of record shall respond to special inspector reports of uncorrected non-complying(discrepancies) items and shall approve remedial measures.

4. Review shop drawings and submit revisions to approved plans. The design professional in responsible charge shall acknowledge and approve shop drawings that may detail structural information. The design professional shall submit to the building official, and the special inspector/inspection agency written approval of any verbally approved deviations from the approved plans and shall submit revised plans for building official approval.

D. Contractor Responsibilities

By signing this statement on Page 6 the contractor affirms and agrees:

1. Acknowledgement of awareness of the special requirements contained in the statement of special inspections;
2. Acknowledgement that control will be exercised to obtain conformance with the construction documents approved by the building official;
3. Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of the reports; and
4. Identification and qualifications of the person(s) exercising such control and their position(s) in the organization.

Suggested job-site protocol for special inspection:

1. Notify the special inspector. Adequate notice shall be provided so that the special inspector has time to become familiar with the project.
2. Provide access to approved plans. The contractor is responsible for providing the special inspector with access to approved plans.
3. Retain special inspection records. When required by the building official, the contractor is responsible for retaining at the job-site all special inspection records submitted by the special inspector and providing these records for review by the building department's inspector upon request.

E. Building Department Responsibilities

1. Review submittal documents for compliance with special inspection requirements as outlined in the Statement of Inspection. The building official is charged with the legal authority to review the plans, specifications, special inspection program and other submittal documents for compliance with code requirements.
2. Approve special inspection programs. The building official is responsible for approving the special inspection program submitted by the design professional in responsible charge and may require a preconstruction conference to review the program with all applicable members of the construction team.

3. Monitor special inspection activities. The building official should monitor the special inspection activities at the job-site to assure that qualified special inspectors are performing their duties when work requiring special inspection is in progress.

4. Issuance of stop work orders. The building official is recognized as having the authority to stop work at the job-site.

5. Approval to proceed. There are certain points of completion where work shall not proceed until approval by the building official has been given.

6. Review inspection reports. The building official receives and reviews special inspection progress reports and final reports for conformance with the approved plans, specifications and workmanship provisions of the code.

7. Perform final inspection. The building official will not perform the final inspection and approval for a project until the final special inspection report has been reviewed and approved.

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ACKNOWLEDGEMENTS

Each appropriate representative shall sign below:

Owner: _____	Firm: _____	Date: _____
Contractor: _____	Firm: _____	Date: _____
Architect: _____	Firm: _____	Date: _____
SER: _____	Firm: _____	Date: _____
SI-S: _____	Firm: _____	Date: _____
SI-T: _____	Firm: _____	Date: _____
TA: _____	Firm: _____	Date: _____
F: _____	Firm: _____	Date: _____

If requested by engineer/architect of record or building official, the individual names of all prospective special inspectors and the work they intend to observe shall be identified.

Legend:
SER: Structural Engineer of Record
SI-T: Special Inspector
F: Fabricator
SI-S: Special Inspector – Structural
Technical TA: Testing Agency

Accepted by Community Planning & Development Services, by: _____
Date: _____

Date for Final Report: _____

Frequency of Report Submission: _____

Time for Report Submission: _____

City of Rockville
Community Planning & Development Services

SPECIAL INSPECTION DAILY REPORT

FORM A1

Municipality: City of Rockville, MD Permit #:_____ Date: _____

Project Name: _____ Project Address: _____

Inspection Type(s)/Coverage: _____

_____

☐ Continuous ☐ Periodic; frequency: _____

Inspections made, including locations:

Tests performed:

Items requiring: 1) correction, 2) correction of previously listed items, and 3) previously listed uncorrected items:

Changes to approved plans authorized by engineer or architect of record:

Comments:

To the best of my knowledge, work inspected was in accordance with CPDS approved plans, specifications and applicable workmanship provisions of the IBC except as noted above.

Signed: _____ Inspection Agency*:_____

Printed full name: _____ ID/Certification No.: _____

*Building official may require the signature/stamp of agency responsible for special inspection.

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SPECIAL INSPECTION WEEKLY REPORT

FORM A2

Municipality: City of Rockville, MD Permit #:_____ Date: _____

Project Name: _____ Project Address: _____

Inspection Type(s)/Coverage: _____

_____

☐ Continuous ☐ Periodic; frequency: _____

Total inspection time each day:

Dates							
Hours							
Inspector							

Inspections made, including locations:

Tests performed:

Items requiring: 1) correction, 2) correction of previously listed items, and 3) previously listed uncorrected items:

Changes to approved plans authorized by engineer or architect of record:

Comments:

To the best of my knowledge, work inspected was in accordance with CPDS approved plans, specifications and applicable workmanship provisions of the IBC except as noted above.

Signed: _____ Inspection Agency*:_____

Printed full name: _____ ID/Certification No.: _____

*Building official may require the signature/stamp of agency responsible for special inspection.

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SPECIAL INSPECTION DISCREPANCY REPORT

FORM A3

Municipality: City of Rockville, MD Permit #:_____ Date: _____

Project Name: _____ Project Address: _____

Inspection Type(s)/Coverage: _____

☐ Continuous ☐ Periodic; frequency: _____

Notice delivered to: ☐ Contractor ☐ Engineer/Architect ☐ CPDS

The following discrepancies require correction and inspection approval prior to proceeding with this phase of the work:

Signed: _____ Inspection Agency*:_____

Printed full name: _____ ID/Certification No.: _____

*Building official may require the signature/stamp of agency responsible for special inspection.

City of Rockville
Community Planning & Development Services

DO NOT REMOVE THIS NOTICE
Post with building permit card.

SPECIAL INSPECTION RECORD

FORM A4

Municipality: City of Rockville, MD Permit #:_____ Date: _____

Project Name: _____ Project Address: _____

Note: Each special inspector is to record their presence on the job-site for each day's inspection. Post this card adjacent to building permit card. Weekly reports are to be submitted by each special inspection/inspection agency to the contractor, structural engineer of record, and CPDS.

When attached to the building permit card, this card becomes a part of the inspection record.

Inspection Type	Special Inspector	ID No.	Date	Notes	Time	
					Arrived	Left

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SPECIAL INSPECTION FINAL REPORT

FORM A5

Municipality: City of Rockville, MD Permit #:_____ Date: _____

Project Name: _____ Project Address: _____

Attention: _____

In accordance with *Section 1704* of the *International Building Code*, special inspection has been provided for the following items:

Based upon inspections performed and our (my) sustaining reports, it is our (my) professional judgment that to the best of our (my) knowledge, the inspected work was performed in accordance with the approved plans, specifications and applicable workmanship provisions of the *International Building Code*.

Signed: _____ Inspection Agency*:_____

Printed full name: _____ ID/Certification No.: _____

*Building official may require the signature/stamp of the agency responsible for special inspection.

C: Client/Project Owner
Engineer/Architect

City of Rockville
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PART 2
STATEMENT OF SPECIAL INSPECTIONS AGREEMENT

Before permit issuance, all parties must sign this agreement. Please note that failure to comply with special inspection requirements could be expensive in terms of retrofit design construction as well as delays in the project.

PART 2 – STATEMENT OF SPECIAL INSPECTION

This statement must accompany permit applications for all construction for which special inspections and observations are required in Section 1704 and 1709 of the International Building Code.	
Project Name:	
Project Address:	
Owner:	Telephone:

This is to certify that all the inspections and observations that I have checked on pages 2-3 **and** page 4 of this statement are required for the project named above and will be performed by the designated individuals or firms. By signing this statement, I also acknowledge that:

- These inspections and observations must be performed by competent individuals in accordance with Sections 1704, 1705, and 1709 (as applicable), and the construction work must comply with the approved plans and specifications and all applicable provisions of the City of Rockville.
- Records of all required special inspections and testing observations (including any discrepancies and methods of correction of these discrepancies) will be retained and made available to COR representatives, upon request; and,
- ***The final report section of the statement must be signed by me, and a copy of this statement submitted to the COR inspector, at the time that the final inspection is performed and before a certificate of occupancy is issued.***

Seal and Signature of Design Professional in Responsible Charge

Name of Design Professional in Responsible Charge

MD License Number

Date

CHECK EACH THAT APPLIES	TYPE OF SPECIAL INSPECTION OR OBSERVATION	NAME AND ADDRESS OF INDIVIDUAL AND/OR FIRM PERFORMING INSPECTION OR OBSERVATION	CREDENTIALS (Enter acronym from page 4. If "other", please specify special training or basis for competency to perform work.)
☐	Inspection of Fabricators		
☐	Inspection of Steel Construction		
☐	Inspection of Concrete Construction		
☐	Inspection of Masonry Construction		
☐	Inspection of Wood Construction		
☐	Inspection of Soil Conditions		
☐	Inspection of Pile Foundations		
☐	Inspection of Pier Foundation		
☐	Inspection of Wood Panels and Veneers		
☐	Inspection of Sprayed Fire-Resistant Materials		
☐	Inspection of Smoke Control		

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CHECK EACH THAT APPLIES	**TYPE OF SPECIAL INSPECTION OR OBSERVATION**	**NAME AND ADDRESS OF INDIVIDUAL AND/OR FIRM PERFORMING INSPECTION OR OBSERVATION**	**CREDENTIALS** (Enter acronym from page 4. If "other", please specify special training or basis for competency to perform work.)
☐	Inspection of Exterior Insulation & Finish System (EIFS)		
☐	Structural Observations		
☐	Mastic and Intumescent Fire-Resistant Coatings		
☐	Seismic Resistance		
☐	Fire Resistant Joints and Penetrations		

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- ☐ Inspection of Fabricators
- ☐ Inspection of Steel Construction
- ☐ Inspection of Concrete Construction
- ☐ Inspection of Masonry Construction
- ☐ Inspection of Soil Conditions
- ☐ Structural Observations
- ☐ Inspection of Pile Foundation
- ☐ Inspection of Pier Foundations
- ☐ Inspection of Wood Panels and Veneers
- ☐ Inspection of Spray Fire-Resistant Materials
- ☐ Inspection of Smoke Controls
- ☐ Inspection of Exterior Insulation & Finish System (EIFS)
- ☐ Inspection of Mastic and Intumescent Fire-Resistant Coatings
- ☐ Inspection of Seismic Resistance

I certify that I have reviewed the report on each of the inspections or observations checked. These reports indicate that the covered work is in compliance with the COR-approved plans, specifications, and all applicable provisions of the COR Construction Code.

Signature of Design Professional in Responsible Charge

Date Signed

KEY for use in **CREDENTIALS** COLUMN:
(on pages 2 and 3)

ACI	American Concrete Institute Certified Concrete Field Testing Technician
AWS	American Welding Society Certified Welding Inspector
ASNT	American Society of Non-Destructive Testing
AWCI	Association of Wall and Ceiling Industries
MCA	Model code agency (ICC, BOCA, SBCCI, ICBO) special inspection certification
RA	Registered Architect (currently licensed)
PE	Professional Engineer (currently licensed)
OTHER	Specialized training coursework or other basis for competency deemed acceptable

Seismic Requirements (*Section 1705.3.1*)

Description of seismic-force-resisting system and designated seismic systems subject to special inspections as per Section 1705.3. Describe the Seismic resisting system in the longitudinal and transverse directions.

The extent of the seismic-force-resisting system is defined in more detail in the construction documents.

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PART 3 – SCHEDULE OF SPECIAL INSPECTION

Notation Used In Table: Column headers:

C Indicates continuous inspection is required.
P Indicates periodic inspections are required.
I Required inspection to be performed under this permit per the registered design professional.

Box entries:

X Is placed in the appropriate column to denote either "C" continuous or "P" periodic inspections.
R Review and approve document.
G In accordance with the Geotechnical report or document approved by the Building Official.

Additional detail regarding inspections and tests are provided in the project specifications or notes on the drawings. Items marked as continuous inspection may be approved for periodic inspection upon documentation submittal from a nationally recognized laboratory or ICC report that allows periodic inspection and approved by the Building Official.

SCHEDULE OF SPECIAL INSPECTIONS

SPECIAL CASES	C	P	I
1705.1.1- Testing procedures used and evaluation of test results, by an engineer registered in MD, shall be submitted to the City for review and approval prior to the commencement of the work.			
1. Construction materials and systems that are alternatives to materials and systems prescribed by this code. 2. Unusual design applications of materials described in this code. 3. Materials and systems required to be installed in accordance with additional manufacturer's instructions that prescribe requirements not contained in this code or in standards referenced by this code.			
OPEN-WEB STEEL JOISTS AND JOIST GIRDERS			
1. Installation of open-web steel joists and joist girders. a. End connections-welding or bolted. SJI specifications 2207.1			
b. Bridging-horizontal or diagonal.			
1. Standard bridging. SJI specifications 2207.1			
2. Bridging that differs from the SJI specifications listed in 2207.1			
TESTS OF CONCRETE			
1. Inspect reinforcement, including prestressing tendons, and verify placement. ACI 318: Ch. 20, 25.2, 25.3, 26.6.1-26.6.3			
2. Reinforcing bar welding: a. Verify weldability of reinforcing bars other than ASTM A706; b. Inspect single-pass fillet welds, maximum $^{5}/_{16}$"; and c. Inspect all other welds.			
3. Inspect anchors cast in concrete. ACI 318: 17.8.2			
4. Inspect anchors post-installed in hardened concrete members. a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads. ACI 318: 17.8.2.4 b. Mechanical anchors and adhesive anchors not defined in 4.a. ACI 318: 17.8.2			

TESTS OF CONCRETE (CONT.)	C	P	I
5. Verify use of required design mix. ACI 318: Ch. 19, 26.4.3, 26.4.4; IBC 1904.1 1904.2			
6. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete. ASTM C31 ASTM C173; ACI 318:26.5 26.12			
7. Inspect concrete and shotcrete placement for proper application techniques. ACI 318: 26.5			
8. Verify maintenance of specified curing temperature and techniques. ACI 318: 26.5.3-26.5.5			
9. Inspect prestressed concrete for: a. Application of prestressing forces; and ACI 318: 26.10 b. Grouting of bonded prestressing tendons. ACI 318: 26.10			
10. Inspect erection of precast concrete members. ACI 318: 26.9			
11. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to Seismic Design Category C, D, E, or F, inspect such connections reinforcement in the field for: ACI 318: 26.13.1.3 a. Installation of the embedded parts b. Completion of the continuity of reinforcement across joints. ACI 550.5 c. Completion of connections in the field.			
12. Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5, ACI 318: 26.13.1.3			
13. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs. ACI 318: 26.11.2			
14. Inspect formwork for shape, location and dimensions of the concrete member being formed. ACI 318: 26.11.1.2(b)			
1705.3.1- Welding of reinforcing bars. AWS D1.4			
1705.3.2-Material tests. ACI 318			
1705.4 Masonry construction-TMS402 602			
1705.4.1- Glass unit masonry and masonry veneer in Risk Category IV TMS 602 Level 2			
1705.5- Wood construction-prefabricated wood structural element and assemblies; site-built assemblies. 1704.2.5			
1705.5.2- Metal-plate-connected wood truss spanning 60 feet or greater. Truss submittal package.			

MASS TIMBER CONSTRUCTION				
1.	Inspection of anchorage and connections of mass timber construction to timber deep foundation systems.			
2.	Inspect erection of mass timber construction.			
3.	Inspection of connections where installation methods are required to meet design loads. Threaded fasteners: a. Verify use of proper installation equipment. b. Verify use of pre-drilled holes where required. c. Inspect screws, including diameter, length, head type, spacing, installation angle and depth. d. Adhesive anchors installed in horizontal or upwardly inclined orientation to resist sustained tension loads. Adhesive anchors not defined in preceding cell. Bolted connections. Concealed connections.			
TESTS OF SOIL				
1.	Verify materials below *shallow foundations* are adequate to achieve the design bearing capacity.			
2.	Verify excavations are extended to proper depth and have reached proper material.			
3.	Perform classification and testing of compacted fill materials.			
4.	During fill placement, verify use of proper materials and procedures in accordance with the provisions of the approved geotechnical report. Verify densities and lift thicknesses during placement and compaction of compacted fill.			
5.	Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.			
TESTS OF DRIVEN DEEP FOUNDATION ELEMENTS				
1.	Verify element materials, sizes and lengths comply with the requirements.			
2.	Determine capacities of test elements and conduct additional load tests, as required.			
3.	Inspect driving operations and maintain complete and accurate records for each element.			
4.	Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element.			
5.	For steel elements, perform additional special inspections in accordance with **Section 1705.2.**	**1705.2**		
6.	For concrete elements and concrete-filled elements, perform tests and additional special inspections in accordance with **Section 1705.3**	**1705.3**		
7.	For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge.	In accordance with Statement of Special Inspections		

TESTS OF CAST-IN-PLACE DEEP FOUNDATION ELEMENTS			
1. Inspect drilling operations and maintain complete and accurate records for each element.			
2. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes.			
3. For concrete elements, perform tests and additional *special inspections*.	**Section 1705.3**.		
1705.9-Helical pile foundations-*Continuous special inspection*			
1705.10-Structural integrity of deep foundation elements. ASTM D4945, ASTM D5882, ASTM D6760 or ASTM D7949	Engineering assessment		
1705.11- Fabricated items-shall be performed in accordance with IBC Section **1704.2.5** (The requirements of IBC Section **1704.2.5.1 Fabricator approval** may apply subject to City approval). **1704.2.5**- Inspect the fabricator's fabrication and quality control procedures. **1704.2.5** - Special inspections during fabrication are not required where the work is done on the premises of a fabricator approved to perform such work without special inspection. Approval shall be based on a review of the fabricator's written fabrication procedures and quality control manuals that provide a basis for control of materials and workmanship, with periodic auditing of fabrication and quality control practices by an approved agency or the building official. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the owner or the owner's authorized agent for submittal to the building official as specified in **Section 1704.5** stating that the work was performed in accordance with the approved construction documents.			
1705.12- Wind Resistance- Special inspections for wind resistance specified in Sections 1705.12.1 through 1705.12.3, unless exempted by the exceptions to Section 1704.2, are required for buildings and structures constructed in the following areas: 1. In wind Exposure Category B, where V is 150 miles per hour (67 m/sec) or greater. 2. In wind Exposure Category C or D, where V is 140 mph (62.6 m/sec) or greater.			
1705.12.1- Structural wood- Continuous special inspection is required during field gluing operations of elements of the main windforce-resisting system. Periodic special inspection is required for nailing, bolting, anchoring and other fastening of elements of the main windforce-resisting system, including wood shear walls, wood diaphragms, drag struts, braces and hold-downs.			
1705.12.2-Cold-formed steel light frame construction- Periodic special inspection is required for welding operations of elements of the main windforce-resisting system. Periodic special inspection is required for screw attachment, bolting, anchoring and other fastening of elements of the main windforce-resisting system, including shear walls, braces, diaphragms, collectors (drag struts) and hold-downs.			

1705.12.3-Wind-resisitng components- Periodic special inspection is required for fastening of the following systems and components:

1.Roof covering, roof deck and roof framing connections.

2.Exterior wall covering and wall connections to roof and floor diaphragms and framing.

1705.13-Seismic resistance- Special inspections for seismic resistance shall be required as specified in Sections 1705.13.1 through 1705.13.9, unless exempted by the exceptions of Section 1704.2.

Exception: The special inspections specified in Sections 1705.13.1 through 1705.13.9 are not required for structures designed and constructed in accordance with one of the following:

1.The structure consists of light-frame construction; the design spectral response acceleration at short periods, S_{DS}, as determined in Section 1613.2.4, does not exceed 0.5; and the building height of the structure does not exceed 35 feet (10 668 mm).

2.The seismic force-resisting system of the structure consists of reinforced masonry or reinforced concrete; the design spectral response acceleration at short periods, S_{DS}, as determined in Section 1613.2.4, does not exceed 0.5; and the building height of the structure does not exceed 25 feet (7620 mm).

3.The structure is a detached one- or two-family dwelling not exceeding two stories above grade plane and does not have any of the following horizontal or vertical irregularities in accordance with Section 12.3 of ASCE 7:

3.1.Torsional or extreme torsional irregularity.

3.2.Nonparallel systems irregularity.

3.3.Stiffness-soft story or stiffness-extreme soft story irregularity.

3.4.Discontinuity in lateral strength-weak story irregularity.

1705.13.1.1-Seismic force-resisting systems-Structural steel- Special inspections of structural steel in the seismic force-resisting systems in buildings and structures assigned to Seismic Design Category B, C, D, E or F shall be performed in accordance with the quality assurance requirements of AISC 341.

Exceptions:

1. In buildings and structures assigned to Seismic Design Category B or C, special inspections are not required for structural steel seismic force-resisting systems where the response modification coefficient, R, designated for "Steel systems not specifically detailed for seismic resistance, excluding cantilever column systems" in ASCE 7, Table 12.2-1, has been used for design and detailing.

2. In structures assigned to Seismic Design Category D, E, or F, special inspections are not required for structural steel seismic force-resisting systems where design and detailing in accordance with AISC 360 is permitted by ASCE 7, Table 15.4-1.

1705.13.1.2- Seismic force-resisting systems-Structural steel elements- Special inspections of structural steel elements in the seismic force-resisting systems of buildings and structures assigned to Seismic Design Category B, C, D, E, or F other than those covered in Section 1705.13.1.1, including struts, collectors, chords and foundation elements, shall be performed in accordance with the quality assurance requirements of AISC 341.

Exceptions:

1. In buildings and structures assigned to Seismic Design Category B or C, special inspections of structural steel elements are not required for seismic force-resisting systems with a response modification coefficient, R, of 3 or less.

2. In structures assigned to Seismic Design Category D, E, or F, special inspections of structural steel elements are not required for seismic force-resisting systems where design and detailing other than AISC 341 is permitted by ASCE 7, Table 15.4-1. Special inspection shall be in accordance with the applicable referenced standard listed in ASCE 7, Table 15.4-1.

1705.13.2- Structural wood- For the seismic force-resisting systems of structures assigned to Seismic Design Category C, D, E or F:

1 . Continuous special inspection shall be required during field gluing operations of elements of the seismic force-resisting system.

2. Periodic special inspection shall be required for nailing, bolting, anchoring, and other fastening of elements of

1705.13.2- Structural wood- For the seismic force-resisting systems of structures assigned to Seismic Design Category C, D, E or F:

1 . Continuous special inspection shall be required during field gluing operations of elements of the seismic force-resisting system.

2. Periodic special inspection shall be required for nailing, bolting, anchoring, and other fastening of elements of the seismic force-resisting system, including wood shear walls, wood diaphragms, drag struts, braces, shear panels, and hold-downs.

Exception: Special inspections are not required for wood shear walls, shear panels, and diaphragms, including nailing, bolting, anchoring, and other fastening to other elements of the seismic force-resisting system, where the lateral resistance is provided by structural sheathing, and the specified fastener spacing at the panel edges is more than 4 inches (102 mm) on center.

1705.13.3 -Cold-formed steel light-frame construction- For the seismic force-resisting systems of structures assigned to Seismic Design Category C, D, E, or F, periodic special inspection shall be required for both:

1. Welding operations of elements of the seismic force-resisting system.

2. Screw attachment, bolting, anchoring and other fastening of elements of the seismic force-resisting system, including shear walls, braces, diaphragms, collectors (drag struts) and hold-downs.

Exception: Special inspections are not required for cold-formed steel light-frame shear walls and diaphragms, including screw installation, bolting, anchoring, and other fastening to components of the seismic force-resisting system, where either of the following applies:

1. The sheathing is gypsum board or fiberboard.

2. The sheathing is wood structural panel or steel sheets on only one side of the shear wall, shear panel, or diaphragm assembly and the specified fastener spacing at the panel or sheet edge is more than 4 inches (102 mm) on center

1705.13.4-Designated seismic systems- For structures assigned to Seismic Design Category C, D, E or F, the special inspector shall examine designated seismic systems requiring seismic qualification in accordance with Section 13.2.2 of ASCE 7 and verify that the label, anchorage and mounting conform to the certificate of compliance.

1705.13.5-Architectural components- Periodic special inspection is required for the erection and fastening of exterior cladding, interior and exterior nonbearing walls, and interior and exterior veneer in structures assigned to Seismic Design Category D, E or F.

Exception: Periodic special inspection is not required for the following:

1. Exterior cladding, interior and exterior nonbearing walls, and interior and exterior veneer 30 feet (9144 mm) or less in height above grade or walking surface.

2. Exterior cladding and interior and exterior veneer weighing 5 psf (0.24 kN/m^2) or less.

3. Interior nonbearing walls weighing 15 psf (0.72 kN/m^2) or less

1705.13.6-Access floors- Periodic special inspection is required for the anchorage of access floors in structures assigned to Seismic Design Category D, E, or F.

1705.13.6-Plumbing, mechanical, and electrical components- Periodic special inspection of plumbing, mechanical and electrical components shall be required for the following:

1. Anchorage of electrical equipment for emergency and standby power systems in structures assigned to Seismic Design Category C, D, E or F.

2. Anchorage of other electrical equipment in structures assigned to Seismic Design Category E or F.

3. Installation and anchorage of piping systems designed to carry hazardous materials and their associated mechanical units in structures assigned to Seismic Design Category C, D, E or F.

4. Installation and anchorage of ductwork designed to carry hazardous materials in structures assigned to Seismic Design Category C, D, E, or F.

5. Installation and anchorage of vibration isolation systems in structures assigned to Seismic Design Category C, D, E or F where the approved construction documents require a nominal clearance of 1/4 inch (6.4 mm) or less between the equipment support frame and restraint.

6. Installation of mechanical and electrical equipment, including duct work, piping systems and their structural supports, where automatic sprinkler systems are installed in structures assigned to Seismic Design Category C, D, E or F to verify one of the following:

6.1. Minimum clearances have been provided as required by Section 13.2.3 ASCE/SEI 7.

6.2. A nominal clearance of not less than 3 inches (76 mm) has been be provided between automatic sprinkler system drops and sprigs and: structural members not used collectively or independently to support the sprinklers; equipment attached to the building structure; and other systems' piping.

Where flexible sprinkler hose fittings are used, special inspection of minimum clearances is not required.

STORAGE RACK SYSTEMS			
	C	**P**	**I**
1. Materials used, to verify compliance with one or more of the material test reports in accordance with the approved construction documents.			
2. Fabricated storage rack elements. 1704.2.5			
3. Storage rack anchorage installation. ANSI/MH16.1 Section 7.3.2			
4. Completed storage rack system, to indicate compliance with the approved construction documents.			
1705.14-Testing for seismic resistance-Testing for seismic resistance shall be required as specified in Sections 1705.14.1 through 1705.14.4, unless exempted from *special inspections* by the exceptions of Section 1704.2.	**1705.14**		
1705.14.1-Structural steel-Nondestructive testing for seismic resistance shall be in accordance with Section 1705.14.1.1 or 1705.14.1.2, as applicable.	**1705.14.1**		
1705.14.1.1-Seismic force-resisting systems**-**Nondestructive testing of structural steel in the seismic force-resisting systems in buildings and structures assigned to Seismic Design Category B, C, D, E, or F shall be performed in accordance with the quality assurance requirements of AISC 341. **Exceptions:** 1.In buildings and structures assigned to Seismic Design Category B or C, nondestructive testing is not required for structural steel seismic force-resisting systems where the response modification coefficient, R, designated for "Steel systems not specifically detailed for seismic resistance, excluding cantilever column systems" in ASCE 7, Table 12.2-1, has been used for design and detailing. 2.In structures assigned to Seismic Design Category D, E, or F, nondestructive testing is not required for structural steel seismic force-resisting systems where design and detailing in accordance with AISC 360 is permitted by ASCE 7, Table 15.4-1.	**1705.14.1.1**		

1705.14.1.2-Structural steel elements**-**Nondestructive testing of structural steel elements in the seismic force-resisting systems of buildings and structures assigned to Seismic Design Category B, C, D, E or F other than those covered in Section 1705.14.1.1, including struts, collectors, chords and foundation elements, shall be performed in accordance with the quality assurance requirements of AISC 341. **Exceptions:** 1. In buildings and structures assigned to Seismic Design Category B or C, nondestructive testing of structural steel elements is not required for seismic force-resisting systems with a response modification coefficient, R, of 3 or less. 2. In structures assigned to Seismic Design Category D, E or F, nondestructive testing of structural steel elements is not required for seismic force-resisting systems where design and detailing other than AISC 341 is permitted by ASCE 7, Table 15.4-1. Nondestructive testing of structural steel elements shall be in accordance with the applicable referenced standard listed in ASCE 7, Table 15.4-1.	**1705.14.1.2**
1705.14.2-Nonstructural components-For structures assigned to Seismic Design Category B, C, D, E, or F, where the requirements of Section 13.2.1 of ASCE 7 for nonstructural components, supports or attachments are met by seismic qualification as specified in Item 2 therein, the registered design professional shall specify on the approved construction documents the requirements for seismic qualification by analysis, testing or experience data. Certificates of compliance for the seismic qualification shall be submitted to the building official as specified in Section 1704.5.	**1705.14.2**
1705.14.3-Designated seismic systems- For structures assigned to Seismic Design Category C, D, E, or F and with designated seismic systems that are subject to the requirements of Section 13.2.2 of ASCE 7 for certification, the registered design professional shall specify on the approved construction documents the requirements to be met by analysis, testing or experience data as specified therein. Certificates of compliance documenting that the requirements are met shall be submitted to the building official as specified in Section 1704.5.	**1705.14.3**
1705.14.4-Seismic isolation systems-Seismic isolation systems in seismically isolated structures assigned to Seismic Design Category B, C, D, E, or F shall be tested in accordance with Section 17.8 of ASCE 7	**1705.14.4**
1705.15-Sprayed fire-resistant materials-special inspections and tests of sprayed fire-resistant materials applied to floor, roof, and wall assemblies and structural members shall be performed in accordance with Sections 1705.15.1 through 1705.15.6. Special inspections shall be based on the fire-resistance design as designated in the approved construction documents. The tests set forth in this section shall be based on samplings from specific floor, roof, and wall assemblies and structural members. Special inspections and tests shall be performed during construction with an additional visual inspection after the rough installation of electrical, automatic sprinkler, mechanical, and plumbing systems and suspension systems for ceilings, and before concealment where applicable. The required sample size shall not exceed 110 percent of that specified by the referenced standards in Sections 1705.15.4.1 through 1705.15.4.9.	**1705.15**
1705.15.1-Physical and visual test- special inspections and tests shall include the following to demonstrate compliance with the listing and the fire-resistance rating: 1. Condition of substrates. 2. Thickness of application. 3. Density in pounds per cubic foot (kg/m^3). 4. Bond strength adhesion/cohesion. 5. Condition of finished application	**1705.15.1**
1705.15.2-Structural member surface conditions-The surfaces shall be prepared in accordance with the approved fire-resistance design and the written instructions of approved manufacturers. The prepared surface of structural members to be sprayed shall be inspected by the special inspector before the application of the sprayed fire-resistant material.	**1705.15.2**
1705.15.3-Application-The substrate shall have a minimum ambient temperature before and after application as specified in the written instructions of approved manufacturers. The area for application shall be ventilated during and after application as required by the written instructions of approved manufacturers.	**1705.15.3**

1705.15.4-Thickness-Not more than 10 percent of the thickness measurements of the sprayed fire-resistant materials applied to floor, roof and wall assemblies and structural members shall be less than the thickness required by the approved fire-resistance design, and none shall be less than the minimum allowable thickness required by Section 1705.15.4.1.	**1705.15.4**
1705.15.4.1-Minimum allowable thickness-For design thicknesses 1 inch (25 mm) or greater, the minimum allowable individual thickness shall be the design thickness minus 1/4 inch (6.4 mm). For design thicknesses less than 1 inch (25 mm), the minimum allowable individual thickness shall be the design thickness minus 25 percent. Thickness shall be determined in accordance with ASTM E605. Samples of the sprayed fire-resistant materials shall be selected in accordance with Sections 1705.15.4.2 and 1705.15.4.3**.**	**1705.15.4.1**
1705.15.4.2-Floor, roof, and wall assemblies-The thickness of the sprayed fire-resistant material applied to the floor, roof, and wall assemblies shall be determined in accordance with ASTM E605, making not less than four measurements for each 1,000 square feet (93 m^2) of the sprayed area, or portion thereof, in each story.	**1705.15.4.2**
1705.15.4.3-Cellular decks-Thickness measurements shall be selected from a square area, 12 inches by 12 inches (305 mm by 305 mm) in size. Not fewer than four measurements shall be made, located symmetrically within the square area**.**	**1705.15.4.3**
1705.15.4.4-Fluted decks-Thickness measurements shall be selected from a square area, 12 inches by 12 inches (305 mm by 305 mm) in size. Not fewer than four measurements shall be made, located symmetrically within the square area, including one each of the following: valley, crest, and sides. The average of the measurements shall be reported	**1705.15.4.4**
1705.15.4.5-Structural members-The thickness of the sprayed fire-resistant material applied to structural members shall be determined in accordance with ASTM E605. Thickness testing shall be performed on not less than 25 percent of the structural members on each floor**.**	**1705.15.4.5**
1705.15.4.6-Beams and girders-At beams and girders thickness measurements shall be made at nine locations around the beam or girder at each end of a 12-inch (305 mm) length.	**1705.15.4.6**
1705.15.4.7-Joist and trusses-At joists and trusses, thickness measurements shall be made at seven locations around the joist or truss at each end of a 12-inch (305 mm) length.	**1705.15.4.7**
1705.15.4.8-Wide-flanged columns-At wide-flanged columns, thickness measurements shall be made at 12 locations around the column at each end of a 12-inch (305 mm) length	**1705.15.4.8**
1705.15.4.9 Hollow structural section and pipe columns-At hollow structural section and pipe columns, thickness measurements shall be made at not fewer than four locations around the column at each end of a 12-inch (305 mm) length.	**1705.15.4.9**
1705.15.5-Density-The density of the sprayed fire-resistant material shall be not less than the density specified in the approved fire-resistance design. Density of the sprayed fire-resistant material shall be determined in accordance with ASTM E605. The test samples for determining the density of the sprayed fire-resistant materials shall be selected as follows: 1. From each floor, roof and wall assembly at the rate of not less than one sample for every 2,500 square feet (232 m^2) or portion thereof of the sprayed area in each story. 2. From beams, girders, trusses, and columns at the rate of not less than one sample for each type of structural member for each 2,500 square feet (232 m^2) of floor area or portion thereof in each story.	**1705.15.5**
1705.15.6-Bond strength-The cohesive/adhesive bond strength of the cured sprayed fire-resistant material applied to floor, roof, and wall assemblies and structural members shall be not less than 150 pounds per square foot (psf) (7.18 kN/m^2). The cohesive/adhesive bond strength shall be determined in accordance with the field test specified in ASTM E736 by testing in-place samples of the sprayed fire-resistant material selected in accordance with Sections 1705.15.6.1 through 1705.15.6.3.	**1705.15.6**
1705.15.6.1-Floor, roof, and wall assemblies-The test samples for determining the cohesive/adhesive bond strength of the sprayed fire-resistant materials shall be selected from each floor, roof and wall assembly at the rate of not less than one sample for every 2,500 square feet (232 m^2) of the sprayed area, or portion thereof, in each story.	**1705.15.6.1**
1705.15.6.2-Structural members-The test samples for determining the cohesive/adhesive bond strength of the sprayed fire-resistant materials shall be selected from beams, girders, trusses, columns and other structural members at the rate of not less than one sample for each type of structural member for each 2,500 square feet (232 m^2) of floor area or portion thereof in each story.	**1705.15.6.2**
1705.15.6.3-Primer paint, and encapsulated bond tests-Bond tests to qualify a primer, paint or encapsulant shall be conducted where the sprayed fire-resistant material is applied to a primed, painted or encapsulated surface for which acceptable bond-strength performance between these coatings and the fire-resistant material has not been determined. A bonding agent approved by the SFRM manufacturer shall be applied to a primed, painted or encapsulated surface where the bond strengths are found to be less than required values.	**1705.15.6.3**

1705.16-Mastic and intumescent fire-resistance coatings-special inspections and tests for mastic and intumescent fire-resistant coatings applied to structural elements and decks shall be performed in accordance with AWCI 12-B. Special inspections and tests shall be based on the fire-resistance design as designated in the approved construction documents. Special inspections and tests shall be performed during construction. Additional visual inspection shall be performed after the rough installation and, where applicable, prior to the concealment of electrical, automatic sprinkler, mechanical, and plumbing systems**.**	**1705.17**
1705.17-Exterior insulation and finish system(EIFS)- special inspections shall be required for all EIFS applications. **Exceptions**: 1. Special inspections shall not be required for EIFS applications installed over a water-resistive barrier with a means of draining moisture to the exterior. 2. Special inspections shall not be required for EIFS applications installed over masonry or concrete walls.	**1705.17**
1705.17.1-Water-resistive barrier coating- a water-resistive barrier coating complying with ASTM E2570 requires special inspection of the water-resistive barrier coating where installed over a sheathing substrate.	**1705.17.1**
1705.18-Fire-resistant penetrations and joints-In high-rise buildings, in buildings assigned to Risk Category III or IV, or in fire areas containing Group R occupancies with an occupant load greater than 250, special inspections for through-penetrations, membrane penetration firestops, fire-resistant joint systems and perimeter fire containment systems that are tested and listed in accordance with Sections 714.4.1.2, 714.5.1.2, 715.3.1 and 715.4 shall be in accordance with Section 1705.18.1 or 1705.18.2**.**	**1705.18**
1705.18.1-Penetration firestops-inspections of penetration firestop systems that are tested and listed in accordance with Sections 714.4.1.2 and 714.5.1.2 shall be conducted by an approved agency in accordance with ASTM E2174.	**1705.18.1**
1705.18.2-Fire-resistant joint systems-inspection of fire-resistant joint systems that are tested and listed in accordance with Sections 715.3.1 and 715.4 shall be conducted by an approved agency in accordance with ASTM E2393.	**1705.18.2**
1705.19-Testing for smoke control-Smoke control systems shall be tested by a special inspector**.**	**1705.19**
1705.19.1-Testing Scope-The test scope shall be as follows: 1. During erection of ductwork and prior to concealment for the purposes of leakage testing and recording of device location. 2. Prior to occupancy and after sufficient completion for the purposes of pressure difference testing, flow measurements, and detection and control verification.	**1705.19.1**
1705.19.2-Qualifications-Approved agencies for smoke control testing shall have expertise in fire protection engineering, mechanical engineering, and certification as air balancers.	**1705.19.2**
1705.20-Sealing of mass timber-Periodic special inspections of sealants or adhesives shall be conducted where sealant or adhesive required by Section 703.7 is applied to mass timber building elements as designated in the approved construction documents.	**1705.20**

Special Instructions:

INSTRUCTION TO THE SPECIAL INSPECTOR:

1. Provide daily field reports to the building inspector on site as construction progresses.
2. A copy of all special inspection test laboratory reports shall be uploaded to the MGO Connect customer portal and the architect or engineer of record.
3. Upon completion of special inspections and testing work, upload to the MGO Connect customer portal a final report documenting the completion of special inspections and correction of any discrepancies.