SPECIAL INSPECTION PROCEDURE
IBC CHAPTER 17, 2021 EDITION

When Required
All projects that require a SC Licensed Architect or Engineer per SC Architectural and Engineering Registration Law.

Overview
The program consists of the following forms, which must be filled out and submitted to the building department by the SC Design Professional in Responsible Charge, Contractor, and Individuals and Firms performing special inspections.

The forms are as follows:

Owners Acknowledgement and Identification of the Design Professional in Responsible Charge
Earthquake and Wind Design Form
Contractor's Statement of Responsibility
The Individual and Firms Performing Special Inspections
The Statement "Schedule" of Special Inspections
(All above forms shall be submitted at the time of application for Plan Review)

Final Report of Special Inspections
(Shall be submitted at the time of structural completion)

Owners Acknowledgement and Identification of the Design Professional in Responsible Charge
The owner shall provide the appropriate information and sign the form to acknowledge that he/she is the owner of the project and that he/she has contracted with the Design Professional in Responsible Charge to administer special inspections. This form also provides the general information about the project and identifies the SC Design Professional in Responsible Charge as required by Section 107.1. This form is submitted as a condition for permit issuance and as a commitment to Special Inspections.

Earthquake and Wind Design Data Form
This form is to be completed by the Structural Engineer and must be consistent with the Structural Analysis on the construction documents.

Contractor's Statement of Responsibility
This form is to be filled out by the contractor.

The Individual and Firms Performing Special inspections
The qualifications for the inspector will be specific to the inspection performed. The minimum qualifications will be as listed by the SCDLLR Qualification Requirements for Special Inspectors, or as approved by the Building Official. The forms will be reviewed by Horry County Code Enforcement for Completeness.

Statement "Schedule" of Special Inspections
This form is to be completed by the Design Professional in Responsible Charge. It is a complete list of all required inspections. A "Y" is to be entered in each box where inspections are required for the project and an "N" where they are not.

Final Report of Special Inspections
The SC Design Professional in Responsible Charge shall review all field reports for all inspections performed. The final Report of Special Inspections shall then be completed, sealed, and signed by the Design Professional in Responsible Charge.

Field Reports
All field reports generated from the inspections must be kept on the jobsite in a binder with the Horry County approved drawings and contain the following information:

- The project name and Permit number
- The project address
- The name, address, and phone number of the individual/firm performing the inspection and generating the report.
- The IBC Section referenced on the Statement "Schedule" of Special Inspections. The Criteria for each inspection must be performed as outlined (periodic or continuous).

OWNERS ACKNOWLEDGEMENT AND
IDENTIFICATION OF THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE

Project: _____ Application No. _____

Project location: _____

Project Owner: _____

Address: _____

Email: _____ Phone:_____

I hereby acknowledge that I am the owner of the project referenced above and I have contracted with the design professional listed below to act as my agent in contracting and coordinating the required special inspections for the project.

_____ _____
Owners Signature Date

SC Registered Design Professional in Responsible Charge:

Name: _____ License Number: SC _____

Firm (optional): _____

Phone: _____ E-Mail Address: _____

This *Owners Acknowledgement and Identification of the Design Professional in Responsible Charge* is submitted as a condition for permit issuance in accordance with the Special Inspection requirements of the International Building Code, Chapter 17. It includes a Schedule of Special Inspection Services applicable to this project as well as the name of the Special Inspector(s) and the identity of other approved agencies that are to be retained for conducting these inspections.

The Special Inspector shall keep records of all inspections and shall furnish inspection reports to the Design Professional in Responsible Charge and the Building Official. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Design Professional in Responsible Charge and the Building Official. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

A *Final Report of Special inspections* documenting completion of all required Special inspections and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Design Professional in Responsible Charge:

_____
Signature Date

Reviewed by Code Official

_____
Type or print name

_____
Signature Date

Individual Seal	Firm Seal

Earthquake and Wind Design Data Form
IBC Section 1609 Wind Loads and Section 1613 for Earthquake Loads

Project _____ Application No. _____

IBC Section 1603.1.5 "The following information related to seismic loads shall be shown, regardless of whether seismic loads govern the design of the lateral-force-resisting system of the building:"

1. Risk Category _____ Importance Factor _____
   IBC 1604.5 (IBC Table 1604.5) 2016 ASCE 7, Table 1.5-2
2. Mapped spectral response accelerations S_s _____ and S_1 _____.
   USGS website, http://earthquake.usgs.gov/, IBC 1613.2.1
3. Site Class: _____.
   IBC Section 1613.2.2 – Verify by soil test 1803.2, 2016 ASCE 7, Table 20.3-1
4. Spectral Response Coefficients S_{DS} _____, S_{D1} _____.
   IBC Table 1613.2.3(1) and 1613.2.3(2), (Equations 16-20 and 16-21)
5. Seismic Design Category _____.
   IBC Section 1613.2.5 and IBC Tables 1613.2.5(1) and 1613.2.5(2) *Note: Most severe shall apply.*
6. Basic Seismic Force Resisting System _____
7. Design Base Shear _____ Seismic Response Coefficient(s) C_s _____
   ASCE 7 Section 12.8.1.1, (equation) 12.8-2
8. Response Modification Factor(s), R _____
9. Analysis procedure used _____
   _____

IBC Section 1603.1.4 "The following information related to wind loads shall be shown, regardless of whether wind loads govern the design of the lateral-force-resisting system of the structure:"

1. Ultimate Design Wind Speed (3-Second Gusts) V_{ult} _____ and (Nominal) V_{asd} _____
   IBC Section 1609.3.1 (Equation 16-17)
2. Risk Category _____ IBC 1604.5 (IBC Table 1604.5)
3. Wind Exposure _____ IBC Section 1609.4.3
4. Applicable Internal Pressure Coefficient _____
5. Design Wind Pressures to be used for exterior component and cladding materials (psf) _____

A SC Licensed Engineer to affix seal on this document and provide phone number.
Name _____
Firm _____
Phone _____
Email _____

Individual Seal	Firm Seal

Contractor Statement of Responsibility

Project_____ Application No._____

IBC 1704.4 Contractor(s) Responsibility: For the construction of a seismic-force-resisting system, designated seismic system, wind or seismic resisting component listed in the Statement of Special Inspections.

Project Name: _____

Project Address: _____

Contractor's Name: _____

Contractor's Phone Number: _____

Contractor's Email Address: _____

Contractor's License Number: _____

Contractor's Address: _____

_____

1. I hereby acknowledge that I have read and am aware of the special requirements contained in the Statement of Special Inspections.
2. I hereby acknowledge that control will be exercised to obtain conformance with the construction documents reviewed by the Building Official.
3. The reports will be put in a 3 ring binder that is kept on the jobsite with the County Reviewed Plans/Documents. The documents in the binder shall be kept in the order referenced in the "Statement of Special inspections."
4. Upon entry of the "Final Report of Inspections" the Special Inspection Binder shall be delivered to:

   Horry County
   Code Enforcement
   1301 Second Ave., Suite 1D09
   Conway, SC 29526

5. Control of this process will be exercised by:

Name: _____ Phone: _____ E-Mail Address: _____

Position in the Organization: _____

_____ _____

Signature Date

_____

Print Name

INDIVIDUALS AND FIRMS PERFORMING SPECIAL INSPECTIONS

(MUST BE LICENSED OR REGISTERED WITH SCDLLR)

Project _____ Application No. _____

SPECIAL INSPECTOR PHONE / EMAIL	LICENSE / REG #	CLASSIFICATION(S)
1 _____		
2 _____		
3 _____		
4 _____		
5 _____		
6 _____		
7 _____		
8 _____		
9 _____		
10 _____		
11 _____		
12 _____		

SPECIAL INSPECTORS REGISTRATION CLASSIFICATIONS

(RC) Reinforced Concrete
(SW) Welding
(HSB) High Strength Bolting
(SF) Steel Frame
(NDT) Non-destructive Testing
(PTC) Post-tension Cables
(FP) Sprayed Fire Resistive Material
(EIFS) Exterior Insulation and Finish System
(SC) Smoke Control
(PCF) Pre-cast Fabrication
(SR) Seismic Resistance
(RB) Retention Basins
(DF) Deep Foundations
(SM) Structural Masonry
(MRW) Modular Retaining Walls
(EW) Earth Work which includes Excavation and Filling, and Verification of Soils

STATEMENT “Schedule” OF SPECIAL INSPECTIONS

2021 IBC SECTION 1704.3

Project _____ Application No. _____

Design Professional _____ License No. _____

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
1704.2.4 Report Requirement								
Rep.	1	Special Inspector to keep record of special inspections and furnish inspection reports to the building official and to the Registered Design Professional in responsible charge.	•	--			1704.2.4	
1704.2.5 Inspection of Fabricated Items								
Fab.	1	Work done in fabricator shop requires the inspector unless the fabricator is registered and approved according to IBC 1704.2.5.1. Where fabricator is approved, **provide fabricator certification document.**	--	•			1704.2.5 Document Required	
Fab.	2	At completion of fabrication, submit certificate of compliance to building official stating the work was performed in accordance with the approved construction documents	--	•			1704.2.5.1 Document Required	
1704.3 Statement of Special Inspections								
Rep.		A registered design professional in responsible charge shall prepare a statement of special inspections	--	•			1704.3 (THIS DOCUMENT)	
1704.4 Contractor Responsibility								
Rep.		Each contractor responsible for the construction of a main wind- or seismic force-resisting component listed in this statement of special inspections shall submit a written statement of responsibility.	--	•			1704.4 (Page 4 Document required)	
1704.5 Submittals to the Building Official								
Rep.		In addition to the submittal reports of special inspections and tests in accordance with Section 1704.2.4, reports and certificates shall be submitted by the owner or owner’s authorized agent to the building official for each of the following:	•	-			1704.5	
Rep.	1	Certificates of compliance for the fabrication of structural, load-bearing or lateral load-resisting members or assemblies on the premises of an approved fabricator in accordance with Section 1704.2.5.1	•	--		Section 1704.2.5.1 (Fabricator)	1704.5	
Rep.	2	Certificates of compliance for the seismic qualifications of nonstructural components, supports and attachments in accordance with Section 1705.14.2	•	--		Section 1705.14.2	1704.5	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
Rep.	3	Certificates of compliance for designated seismic systems in accordance with Section 1705.14.3	•	--		Section 1705.13.4 and 1705.14.3	1704.5 and 1704.3.2	
Rep.	4	Reports of preconstruction tests for shotcrete in accordance with Section 1908.1	•	--		ACI 318	1704.5	
Rep.	5	Certificates of compliance for open web steel joist and joist girders in accordance with Section 2207.5	•	--		Section 2207.5	1704.5	
Rep.	6	Reports of material properties verifying compliance with the requirements of AWS D1.4 for weldability as specified in Section 26.6.4 of ACI 318 for reinforcing bars in concrete complying with a standard other than ASTM A 706 that are to be welded	•	--		AWS D1.4 Section Section 26.6.4 of ACI 318 ASTM A 706	1704.5	
Rep.	7	Reports of mill tests in accordance with Section 20.2.2.5 of ACI 318 for reinforcing bars complying with ASTM A615 and used to resist earthquake-induced flexural or axial forces in the special moment frames, special structural walls or coupling beams connecting special structural walls of seismic force-resisting systems in structures assigned to Seismic Design Category B, C, D, E, or F.	•	--		Section 20.2.2.5 of ACI 318 ASTM A 615	1704.5	
1704.6 Structural Observation								
Rep.		Where required by the provisions of Section 1704.6.1, the owner shall employ a registered design professional to perform structural observations. Prior to commencement of observation, the structural observer shall submit to the building official a written statement identifying frequency and extent of structural observations. At the conclusion of the permitted work, structural observer shall submit to the building official a written statement that site visits have been made and report any deficiencies that, to the best of the observer's knowledge, remain unresolved.	--	•		Risk Category III or IV, High-Rise Building, Seismic Design Category E over 2 Stories above grade	1704.6	
1705.2.1 Steel Construction Inspection								
Stl.	1	Structural Steel shall be in accordance with the quality assurance inspection requirements of AISC 360.	--			AISC 360	1705.2.1	
1705 Steel Construction other than Structural Steel Inspection								
Stl.	1	Material verification of high-strength bolts, nuts, and washers				Where required by approved construction documents.	1705.2	
Stl.	2	Identification markings to conform to ASTM standards specified in the approved construction documents					1705.2	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
Stl.	3	Manufacturer's certificate test reports					1705.2	
Stl.	4	Inspection of welding				SDI QA/QC	1705.2.2	
Stl.	2a	Cold-formed steel floor and roof deck					1705.2.2	
Stl. (str)	2a (1)	Floor and roof deck welds	-	•		AWS D1.3	1705.3	
	2b	Reinforcing steel		--			1705.3	
Stl. (reinf)	2b (1)	Verification of weldability of reinforcing steel other than ASTM A 706		•		AWDS D1.4 ACI 318: 3.5.2	1705.2	
Stl. (reinf)	2b (2)	Reinforcing steel-resisting flexural and axial forces		--		AWDS D1.4 ACI 318: 3.5.2	1705.2	
Stl. (reinf)	2b (3)	Shear reinforcement	•	--		AWDS D1.4 ACI 318: 3.5.2	1705.2	
Stl. (reinf)	2b (4)	Other reinforcing steel	--	•		AWDS D1.4 ACI 318: 3.5.2	1705.2	
1705.2.3 Inspection of Open-web Steel Joist and Joist Girders								
Stl.	1	Installation of open-web steel joist and joist girders				SJI specification listed in Section 2207.1	Table 1705.2.3	
Stl.	1a	End connections – welding or bolted	--	•			Table 1705.2.3	
Stl.	1b	Bridging – horizontal or diagonal				SJI specification listed in Section 2207.1	Table 1705.2.3	
Stl.	1b (1)	Standard bridging	--	•			Table 1705.2.3	
Stl.	1b (2)	Bridging that differs from the SJI specifications listed in Section 2207.1	--	•			Table 1705.2.3	
1705.3 Concrete Construction								
Conc.	1	Inspection of reinforcing steel including prestressed tendons, and placement	--	•		ACI 318 Ch. 20, 25.2, 25.3, 26.6.1-26.6.3, 35 and IBC 1905	1705.3	
Conc.	2	Reinforcing bar welding					Table 1705.3	
Conc.	2a	Verify weldability of reinforcing bars other than ASTM A 706	--	•		IBC 1905 AWS D1.4 ACI 318: 26.6.4	Table 1705.3	
Conc.	2b	Inspect single-pass welds, maximum 5/16"	--	•			Table 1705.3	
Conc.	2c	Inspect all other welds	--	•			Table 1705.3	
Conc.	3	Inspection of anchors cast in concrete	--	•		IBC 1905 ACI 318: 17.8.2	Table 1705.3	
Conc.	4	Inspection of anchors post-installed in hardened concrete members						
Conc.	4a	Adhesive anchors installed in horizontally or upwardly inclined	•			ACI 318: 17.8.2.4	Table 1705.3	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
Conc.	4b	Mechanical anchors and adhesive anchors not defined in 4a	--	•		ACI 318: 17.8.2	Table 1705.3	
Conc.	5	Verifying use of required design mix	--	•		ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, Table 1705.3	
Conc.	6	Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete	•	--		ASTM C172 ASTM C31 ACI 318: 26.5, 26.12	1908.10 & Table 1705.3	
Conc.	7	Inspection of concrete and shotcrete placement for proper application techniques	•	--		ACI 318:26.5	1908.6, 1089.7, 1908.8, Table 1705.3	
Conc.	8	Verify maintenance of specified curing temperature and techniques	--	•		ACI 318:26.5.3 – 26.5.5	1908.9 & Table 1705.3	
Conc.	9	Inspection of pre-stressed concrete						
Conc.	9a	Application of pre-stressing forces	•	--		ACI 318:26.10	Table 1705.3	
Conc.	9b	Grouting of bonded pre-stressing tendon	•	--		ACI 318:26.10	Table 1705.3	
Conc.	10	Inspect erection of precast concrete members	--	•		ACI 318: Ch. 26.9	Table 1705.3	
Conc	11	For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformity elements (MDE or HDE) in structures assigned to Seismic Design Category C, D, E, or F, inspect such connections and reinforcement in the field for:				ACI 318:26.13.13	Table 1705.3	
Conc	11a	Installation of the embedded parts	•	--		ACI 550.5	Table 1705.3	
Conc	11b	Completion of the continuity of reinforcement across joints	•	--			Table 1705.3	
Conc	11c	Completion of connections in the field	•	--			Table 1705.3	
Conc	12	Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5.	--	•		ACI 318:26.13.1.3	Table 1705.3	
Conc.	13	Verification of 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 318:26.10.2	Table 1705.3	
Conc.	14	Inspect formwork for shape, location and dimensions of the concrete member being formed	--	•		ACI 318:26.10.1(b)	Table 1705.3	
1705.4 Masonry Construction								
Mas.		Masonry construction shall be inspected and verified per standards	--	•		TMS 402 and TMS 602	1705.4	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
Mas.	1	Glass unit masonry and masonry veneer in Risk Category IV designed in accordance with Section 2110 or Chapter 14, respectively, where they are part of a structure classified as Risk Category IV shall be performed in accordance with TMS 602 Level 2	•	--		Section 2110, Chapter 14, TMS 602 Level 2	1705.4.1	
Mas.	2	Vertical masonry foundation elements	--	•		IBC 1705.4	1705.4.2	
1705.5 Wood Construction								
Wd	1	High-Load Diaphragms	--	•		IBC Sec. 2306.2, Sec. 1704.2, approved construction drawings	1705.5.1	
Wd	2	Metal plate-connected wood trusses spanning 60 feet or greater	--	•		Approved Truss submittal package (bracing)	1705.5.2	
1705.5.3 Mass Timber Construction								
MT		Special inspections of mass timber elements in Types IV-A, IV-B, and IV-C construction:					1705.5.3	
MT	1	Anchorage and connections of mass timber construction to timber deep foundation systems	--	•			Table 1705.5.3	
MT	2	Erection of mass timber construction	--	•			Table 1705.5.3	
MT	3	Connections where installation methods are required to meet design loads					Table 1705.5.3	
MT	3a	Threaded fasteners: Proper installation equipment used	--	•			Table 1705.5.3	
MT	3b	Threaded fasteners: Pre-drilled holes used where required	--	•			Table 1705.5.3	
MT	3c	Threaded fasteners: Screw diameter, length, head type, spacing, installation angle, and depth correct	--	•			Table 1705.5.3	
MT	3d	Adhesive anchors installed in horizontal or upwardly inclined orientation to resist sustained tension loads	•	--			Table 1705.5.3	
MT	3e	Adhesive anchors not defined in preceding cell	--	•			Table 1705.5.3	
MT	3f	Bolted connections	--	•			Table 1705.5.3	
MT	3g	Concealed connections	--	•			Table 1705.5.3	
1705.6 Soils								
Soil	1	Verify materials below shallow foundations are adequate to achieve the design bearing capacity	--	•			Table 1705.6	
Soil	2	Verify excavations are extended to proper depth and have reached proper material.	--	•			Table 1705.6	
Soil	3	Perform classification and testing of compacted fill materials	--	•			Table 1705.6	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
Soil	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	•	--			Table 1705.6	
Soil	5	Prior to placement of compacted fill, observe sub-grade and verify that site has been prepared properly	--	•			Table 1705.6	
1705.7 Driven Deep Foundation								
DDF	1	Verify element materials, sizes and lengths comply with the requirements	•	--			Table 1705.7	
DDF	2	Determine capacities of test elements and conduct additional load tests, as required	•	--			Table 1705.7	
DDF	3	Inspect driving operations and maintain complete and accurate records for each element	•	--			Table 1705.7	
DDF	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	•	--			Table 1705.7	
DDF	5	For steel elements, perform additional special inspections in accordance with Section 1705.2	--	--			Sec. 1705.7 & Table 1705.7	
DDF	6	For concrete elements and concrete filled elements, perform tests and additional special inspections in accordance with Section 1705.3	--	--			Sec. 1705.7 & Table 1705.7	
DDF	7	For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge	--	--			Table 1705.7 & Table 1704.3	
1705.8 Cast-in –Place Deep Foundation								
CIP	1	Inspect drilling operations and maintain complete and accurate records for each element	•	--			Table 1705.8	
CIP	2	Verify placement locations and plumbness; confirm element diameters, bell diameters (if applicable) and adequate end bearing strata capacity. Record concrete or grout volumes	•	--			Table 1705.8	
CIP	3	For concrete elements, perform additional inspections in accordance with Section 1705.3	--	--			Sec. 1705.3 & Table 1705.8	
1705.9 Helical Pile Foundations								
HPF	1	Installation of helical pile foundations	•	--		Approved Geotechnical report and registered design professional	1705.9	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
1705.10 Structural Integrity of deep foundation elements								
DF		Whenever there is a reasonable doubt as to the structural integrity of a deep foundation element, an engineering assessment shall be required. The engineering assessment shall include tests for defects performed in accordance with ASTM D4945. ASTM D5882, ASTM D6760, or ASTM D7949, or another approved method.	--	•		ASTM D4945. ASTM D5882, ASTM D6760, or ASTM D7949	1705.10	
1705.11 Special Inspections for Fabricated Items								
Fab		Special inspections of fabricated items shall be performed in accordance with Section 1704.2.5					1705.11	
1705.12 Special Inspections for Wind Resistance								
Wind		Wind requirements for buildings and structures per 1705.11					1705.12	
Wind	1	Structural Wood	•	--			1705.12.2	
Wind	2	Cold-formed steel light-frame construction	--	•			1705.12.2	
Wind	3	Wind-resisting components. 1. Roof covering, roof deck, and roof framing connections 2. Exterior wall covering and wall connections to roof and floor diaphragms and framing	--	•			1705.12.3	
1705.13 Special Inspections for Seismic Resistance								
Seis	1	Structural steel seismic resistance shall be in accordance with Section 1705.13.1.1 or 1705.13.1.2 as applicable				Section 1705.13.1.1 Section 1705.13.1.2	1705.13.1	
Seis	1a	Seismic force-resisting systems of structural steel in the seismic force-resisting systems of 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.	•	--		AISC 341	1705.13.1.1	
Seis	1b	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.	•	--		Section 1705.13.1.1 AISC 341	1705.13.1.2	
Seis	2	Structural wood for the seismic force-resisting systems of structures assigned to Seismic Design Category C, D, E, or F					1705.13.2	
Seis	2a	Structural wood field gluing operations of element of seismic force-resisting system	•	--			1705.13.2	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
Seis	2b	Structural wood fastening for nailing, bolting, anchoring and other fastening of elements of the seismic force-resisting system, including woo shear walls, wood diaphragms, drag struts, braces, shear panels and hold downs	--	•			1705.13.2	
Seis	3	Cold-formed steel light-frame construction for seismic force resisting systems of structures assigned to Seismic Design Category C, D, E or F					1705.13.3	
Seis	3a	For welding operations of elements of the seismic force resisting system	--	•			1705.13.3	
Seis	3b	For 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	--	•			1705.13.3	
Seis	4	Designated seismic system verifications 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	--	•		Section 13.2.2 ASCE 7	1705.13.4	
Seis	5	Erection and fastening of exterior cladding, interior and exterior nonbearing walls, and interior and exterior veneer in structures assigned to D, E, or F **Except** exterior cladding, interior and exterior nonbearing walls and interior and exterior veneer 30 feet or less in height above grade or walking surface; Exterior cladding and interior and exterior veneer weighing 5 psf or less; interior nonbearing walls weighing 15 psf or less.	--	•			1705.13.5	
Seis	5.1	Anchorage of access floors in structures assigned to D, E, or F	--	•			1705.13.5.1	
Seis	6	Plumbing, Mechanical, and Electrical Components					1705.13.6	
Seis	6a	Anchorage of electrical equipment for emergency or standby power systems, in C, D, E or F	--	•			1705.13.6	
Seis	6b	Anchorage of other electrical equipment in E or F	--	•			1705.13.6	
Seis	6c	Installation and anchorage of piping systems designed to carry hazardous materials in C, D, E or F	--	•			1705.13.6	
Seis	6d	Installation of HVAC ductwork designed to carry hazardous materials in C, D, E or F	--	•			1705.13.6	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
Seis	6e	Installation and anchorage of vibration isolation systems in C, D, E, or F where approved construction documents require a nominal clearance of 0.25 inch or less between equipment support frame and restraint.	--	•			1705.13.6	
Seis	6f	Minimum clearances are provided as required by Section 13.2.3 of ASCE/SEI 7 for installation of mechanical and electrical equipment, including duct work, piping systems and their structural supports, where automatic fire sprinkler systems are installed in structures assigned to Seismic Design Category C, D, E, or F				Section 13.2.3 ASCE/SEI 7	1705.13.6	
Seis	7	Steel storage racks and steel cantilevered storage racks 8 feet or greater in height in D, E or F					1705.13.7	
Seis	7a	Materials used, to verify compliance with one or more of the material test reports in accordance with the approved construction documents	--	•			1705.13.7	
Seis	7b	Fabricated storage rack elements	--	•			1705.13.7 1704.2.5	
Seis	7c	Storage rack anchorage installation	--	•		ANSI/MH 16.1 Section 7.3.2	1705.13.7	
Seis	7d	Completed storage rack system, to indicate compliance with the approved construction documents	--	•			1705.13.7	
Seis	8	Seismic Isolation Systems in seismically isolated structures in B, C, D, E, or F during fabrication and installation of isolator units and energy dissipation devices	--	•			1705.13.8	
Seis	9	Cold-formed steel special bolted moment frames in the seismic force-resisting systems of structures assigned to seismic Design Category D, E or F	--	•			1705.13.9	
1705.14 Testing for Seismic Resistance								
Test	1	Structural Steel					1705.14.1	
Test	2	Seismic force-resisting systems in B, C, D, E, or F	•	--		AISC 341	1705.14.1.1	
Test	3	Structural steel elements	•	--		AISC 341	1705.14.1.2	
Test	4	Nonstructural components in in B, C, D, E, or F as specified in ASCE 7 Section 13.2.1	--	*		Per the registered design professional's requirements on the construction documents & Sec. 13.2.1 of ASCE 7	1705.14.2 1704.5	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
Test	5	Seismic certification of nonstructural components and designated seismic systems	•	--		Per the registered design professional's requirements on the construction documents & Sec. 13.2.2 of ASCE 7	1705.14.3 1704.5	
Test	6	Seismic isolation systems in B, C, D, E, or F	•	--		Section 17.8 of ASCE 7	1705.14.4	
1705.15 Sprayed Fire Resistant Materials								
FRM	1	Physical and visual tests during construction and visual test after rough installation of electrical, automatic sprinkler, mechanical, and plumbing systems and suspension systems for ceilings and before concealment. Inspection and test to include Condition of substrates; Thickness of application; Density in pounds per cubic foot; Bond strength adhesion/cohesion; and Condition of finished application	•	--			1705.15.1	
FRM	2	Structural member surface conditions in conformance with approved fire-resistance design and manufacturers instructions	•	--			1705.15.2	
FRM	3	Application per manufacturers instructions	•	--			1705.15.3	
FRM	4	Thickness	•	--		ASTM E605	1705.15.4	
FRM	4a	Minimum allowable thickness	•	--		ASTM E605	1705.15.4.1	
FRM	4b	Floor, roof and wall assemblies. Not less than four measurements for each 1,000 sq. ft. of the sprayed area in each story or portion thereof	--	•		ASTM E605	1705.15.4.2	
FRM	4c	Cellular decks. Thickness measurements shall be selected from a square area, 12 inches x 12 inches in size. A minimum of four measurements shall be made, located symmetrically within the square area	--	•		ASTM E605	1705.15.4.3	
FRM	4d	Fluted decks. Thickness measurements shall be selected from a square area, 12 inches x 12 inches in size. A minimum of four measurements shall be made, located symmetrically within the square area, including one of each of the following: valley, crest and sides	--	•		ASTM E605	1705.15.4.4	
FRM	4e	Structural members. Thickness testing shall be performed on not less than 25 percent of the structural members on each floor	--	•		ASTM E605	1705.15.4.5	
FRM	4f	Beams and girders. Thickness measurements shall be made at nine locations around the beam or girder at each end of a 12-inch length	--	•		ASTM E605	1705.15.4.6	
FRM	4g	Joints and trusses. Thickness measurements shall be made at seven locations around the joist or truss at each end of a 12-inch length	--	•		ASTM E605	1705.15.4.7	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
FRM	4h	Wide-flanged columns. Thickness measurements shall be made at twelve locations around the column at each end of a 12-inch length	--	•		ASTM E605	1705.15.4.8	
FRM	4i	Hollow structural section and pipe columns. Thickness measurements shall be made at minimum of four locations around the column at each end of a 12-inch length	--	•		ASTM E605	1705.15.4.9	
FRM	5	Density				ASTM E605	1705.15.5	
FRM	5a	From each floor, roof and wall assembly at the rate of not less than one sample for every 2,500 square feet or portion thereof of the sprayed area in each story	--	•		ASTM E605	1705.15.5	
FRM	5b	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 of floor area or portion thereof in each story	--	•		ASTM E605	1705.15.5	
FRM	6	Bond strength (cohesive/adhesive)				ASTM E736	1705.15.6	
FRM	6a	Floor, roof and wall assemblies. Not less than one sample from each floor, roof and wall assembly for each 2,500 square feet of the sprayed area in each story or portion thereof	--	•		ASTM E736	1705.15.6.1	
FRM	6b	Structural members. Not less than one sample from each beam, girders, trusses, columns and other structural members for each type of structural member for each 2,500 square feet of the floor area in each story or portion thereof	--	•		ASTM E736	1705.15.6.2	
FRM	6c	Primer, paint and encapsulate bond tests	--	•		ASTM E736	1705.15.6.3	
1705.16 Mastic and Intumescent Fire-Resistant Coatings								
FRC	1	Verification and inspection of fire-resistance design designated in approved construction documents performed during construction and after rough installation and, where applicable, before concealment of electrical, automatic sprinkler, mechanical, and plumbing systems.	--	•		AWCI 12-B	1705.16	
1705.17 Exterior Insulation and Finish System (EIFS)								
EIFS	1	Field application (Special inspection not required where EIFS is installed over water resistant barrier with drainage system or over masonry or concrete)	•	--			1705.17	
EIFS	2	Water-Resistive Barrier Coating	•	--		ASTM E2570	1705.17	
1705.18 Fire-Resistant Penetrations and Joints								
FRPJ	1	Verification in high-rise buildings, Risk Category III or IV buildings, or in fire areas containing Group R occupancies with occupant load over 250.					1705.18	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req. Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
FRPJ	1a	Penetration Firestops tested and listed in accordance with Sections 714.4.1.2 and 714.5.1.2	•	--		ASTM E2174	1705.18.1	
FRPJ	1b	Fire-Resistant Joint Systems tested and listed in accordance with Sections 715.3.1 and 715.4.	•	--		ASTM E2393	1705.18.2	
1705.19 Smoke Control								
Smoke	1	Smoke Control Inspection prior to concealment	•	--			1705.19.1(1)	
Smoke	2	Smoke Control Testing prior to occupancy after sufficient completion for purposes of testing	--	•			1705.19.1(2)	
Smoke	3	Qualifications of Inspector	--	--			1705.19.2	
1705.20 Sealing of Mass Timber								
MT		Special inspections of sealants or adhesives required by Section 703.7as designated in the approved construction documents	--	•			1705.20 703.7	