Madison County Building Inspection Department
414 N. Main St, Madison VA 22727; Phone: (540) 948-6102
Website: www.madisonco.virginia.gov

SPECIAL INSPECTIONS PROCEDURES

The Registered Design Professional of Record (RDP) shall prepare a list of the special inspections as required by The Virginia Uniform Statewide Building Code (USBC)/International Building Code Section 1704. This list shall include the specific inspections and the frequency they are to be conducted. The list of special inspections shall be submitted to and approved by the Building Official prior to permit issuance.

The owner or design professional of record shall submit the name of the firms and/or individuals whom will conduct the required inspections to the Building Official for approval. This submission shall include the qualifications of the individuals who will conduct each inspection and the firms' qualifications. Any additional individuals are to be approved by the Building Official prior to performing any inspections.

The firms or individuals shall submit all inspection reports to the owner, contractor, design professional of record and the Building Official in a prompt and timely manner. Any discrepancy from the approved plans and specifications or any code violations shall be reported to the contractor immediately for correction and to the appropriate design professional and the Building Official.

A final report of special inspections documenting the completion of all the specified special inspections and correction of any discrepancies and code violations noted in the inspection and testing reports shall be sealed by the design professional of record. This report shall then be submitted to the Building Official for approval prior to issuance of any Certificate of Occupancy or a Final Inspection.

Please Note: the Madison County Building Inspection Department shall be notified in advance of all special inspections (a min. of 24 hours prior notice is required).

Appendix A

STATEMENT OF SPECIAL INSPECTIONS

PROJECT

PERMIT APPLICANT

PRIMARY RDP OF RECORD

STRUCTURAL ENGINEER OF RECORD

This Statement of Special Inspections is submitted as a condition for permit issuance in accordance with the International Building Code (IBC) as stated in the Virginia Uniform Statewide Building Code (USBC). It includes a Schedule of Special Inspections applicable to this project as well as the name of the Special Inspector, and the identity of other testing laboratories or agencies intended to be retained for conducting these inspections or tests.

The Special Inspector shall keep records of all inspections, and shall furnish inspection reports to the Building Official, appropriate Registered Design Professional(s) (RDP(s)), Owner and Contractor. All discrepancies shall be brought to the immediate attention of the Contractor for correction. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and appropriate RDP(s). Interim reports shall be submitted to the Building Official, Owner, Contractor, and the appropriate RDP(s) according to the Hampton Roads Regional Special Inspection Guidelines and Procedures.

Jobsite safety is solely the responsibility of the contractor. Materials and activities to be inspected are not to incl ude the contractor's equipment and methods used to erect or install the materials listed. All fees/costs related to the performance of Special Inspections shall be the responsibility of the Owner. Additionally, the undersigned (RDP or SER) are only acknowledging that the items enumerated on the Schedule of Special Inspections are consistent with the required design elements, the applicable sections of the Uniform Statewide Building Code, and their area of expertise.

REVIEW, AUTHORIZATION & ACCEPTANCE:

Permit Applicant (General Contractor):

Signature / date:

Printed Name:

Owner's Authorization:

Signature / date:

Printed Name:

Primary RDP of Record:(Review and Acceptance of Schedule)

Signature / date:

Printed Name:

SER of Record:(Review and Acceptance of Schedule)

Signature / date:

Printed Name:

Building Official's Acceptance:

Signature / date:

Printed Name:

SCHEDULE OF SI PREPARED BY:

Virginia RDP Seal of SSI Preparer

Printed Name of the Preparer of the Schedule (on line above)

Special Inspector:

Signature / date:

Printed Name:

SI Company Name:

SCHEDULE OF SPECIAL INSPECTIONS

MATERIAL/ACTIVITY	TYPE OF INSPECTION	APPLICABLE TO THIS PROJECT			
		Y/C/P/N	EXTENT/REFERENCE	AGENT	COMPLETED
GENERAL					
Pre-construction conference	Meeting with parties listed in Section 6 of HRRSIGP to discuss Special Inspection procedures		Scheduled by SI with the Contractor prior to commencement of work; VCC 113.4		
EARTHWORK					
Site preparation (structure)	Field testing and inspection		Field Review; VCC 1705.6		
Fill material (structure)	Review submittals, field testing and inspection		Field Review; VCC 1705.6		
Fill compaction (structure)	In-place density tests, lift thickness		Field Review; VCC 1705.6		
Excavation	Field inspection and verification of proper depth		Field Review; VCC 1705.6		
Foundation sub-grade (structure)	Field inspection of foundation subgrade prior to placement of concrete		Field Review; VCC 1705.6		
DEEP FOUNDATION ELEMENTS					
Materials	Review product, sizes, and lengths		Submittal and Field Review; VCC 1705.7, 1705.8, 1705.9		
Test piles	Monitor driving of test piles		Field Review; VCC 1705.8, 1704.9 or 1704.10		
Installation	Monitor drilling, placement, plumbness, driving of piles, including recording blows per foot, cut off, and tip elevation		Field Review; VCC 1705.2, 1705.3, 1705.7		
Load test	Monitor pile load test		Field Review; VCC 1705.8, 1704.9 or 1704.10		
CONCRETE					
Materials	Review product supplied versus certificates of compliance and mix design		Submittal & Field Review; ACI 318: Ch. 19, 26.4.3, 26.4.4; VCC 1705.3, 1903.2, 1908.2, 1903.4		
Installation of reinforcing steel, including welding, as well as prestress tendons, anchor bolts, and fiber-reinforcement	Field inspection of placement		Submittal and Field Review; ACI 318: Ch. 20, 25.2, 25.3, 26.5.1-26.5.3; AWS D1.4; VCC 1705.3, 1901.3, 1908.4		
Formwork installation	Field inspection		Field Review; ACI 318; VCC 1705.3		
Concreting operations and placement	Field inspection of placement/sampling		Field Review; ACI 318: 26.5.2, 26.12.3; ASTM C 172, C 31; VCC 1705.3, 1908.6, 1908.7, 1908.8, 1908.10		
Concrete curing	Field inspection of curing process		Field Review; ACI 318: 26.5.3, 26.5.4; VCC 1705.3, 1908.9		
Concrete strength	Evaluation of concrete strength		Laboratory Testing; ACI 318: 26.12; VCC 1705.3		

MATERIAL/ACTIVITY	TYPE OF INSPECTION	APPLICABLE TO THIS PROJECT			
		Y/C/P/N	EXTENT/REFERENCE	AGENT	COMPLETED
Application of forces for prestressed concrete	Field inspection		Field Review; ACI 318: 26.10.2 (c); VCC 1705.3		
Grouting of prestress tendons	Field inspection		Field Review; ACI 318: 19.4.1, 20.6.4, 26.13.3.2(b); VCC 1705.3		
PRECAST CONCRETE					
Verify fabrication/quality control procedures	In-plant inspection of fabrication/quality control procedures**		Submittal or Field Review; VCC 1705.3		
Erection and installation	Review submittals and as-built assemblies; Field inspection of in-place precast		Submittal and Field Review; ACI 318; VCC Table 1705.3		
MASONRY (Level____; Building Risk Category____)					
Materials	Review of products supplied versus certificate of compliance and material submitted		Submittal & Field Review; ACI 530/ASCE 5; ACI 530.1/ASCE 6; VCC 1705.4, 1709		
Strength	Testing/review of strength		Submittal & Field Review; ACI 530/ASCE 5; ACI 530.1/ASCE 6; VCC 1705.4, 2105.		
Mortar and Grout	Inspection of proportioning and mixing. Placement of mortar only.		Submittal & Field Review; VCC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Grout placement, including prestressing grout	Verification to ensure compliance		Field Review; VCC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Grout space	Verification to ensure compliance		Field Review; VCC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6; TMS 602		
Mortar, grout, and prism specimens	Observe Preparation		Field Review; VCC 1705.4, ACI 530.1; ASCE 6		
Reinforcement, prestressing tendons, and connections	Inspect condition, size, location, and spacing		Field Review; VCC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Welding of reinforcing bars	Inspection and testing of welds		Field Review; VCC 1705.3.1, 1705.4; ACI 530/ASCE 5; ACI 530.1/ ASCE 6		
Prestressing force	Verify application and measurement		Field Review; VCC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Protection	Inspect procedures for protection during cold and hot weather		Field Review; VCC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Anchorage	Inspection of anchorages		Field Review; VCC 1705.4;ACI 530.1/ASCE 6; ACI 530/ASCE 5		
Masonry installation	Inspection of placement of masonry and joints		Field Review; VCC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
STRUCTURAL STEEL					
Verify fabrication/quality control procedures	In-plant inspection of fabrication/quality control procedures** or submit Certificate of Compliance		Submittal or Field Review; VCC 1704.2.5, 1704.2.5.1, 1705.2		
Bolts, nuts, and washers –materials	Material identification markings; Review of Certificate of Compliance		Submittal & Field Review; VCC 1705.2.1, 1706; ASTM; AISC 360, Section A3.3		

MATERIAL/ACTIVITY	TYPE OF INSPECTION	APPLICABLE TO THIS PROJECT			
		Y/C/P/N	EXTENT/REFERENCE	AGENT	COMPLETED
Bolts, nuts, washers – installation	Inspection of in-place high-strength bolts, snug-tight joints, pre-tensioned and bearing type, and slip critical connections		Submittal & Field Review; VCC 1705.2.1, 2204.2; AISC 360 Section M2.5		
Structural steel – materials	Material identification markings and review of Certificate of Compliance		Submittal & Field Review; VCC 1705.2.1, 1706; ASTM A6, A568; AISC 360 Section A3.1		
Structural steel details – installation	Inspection of member locations, structural details for bracing, connections, and stiffening		Submittal & Field Review; VCC 1705.2.1, 1705.2.2, AISC 360		
Open-web steel joists and joist girders – installation	Inspection of end connections and bridging		Submittal & Field Review; VCC 1705.2.3		
Weld filler materials and welder certification	Review of identification markings, certificate of compliance, and welder certifications		Submittal & Field Review; ASTM; AISC 360 A3.5		
Welds	Inspection and testing of welds		Field Review; VCC 1705.2, 2204.1; AWS D1.1, D1.3		
Cold-formed metal deck – materials	Review of identification marking manufacturer's certified test results		Submittal & Field Review; VCC 1705.2.2; ASTM		
Cold-formed metal deck – installation	Review laps and welds		Submittal & Field Review; IBC 1705.2.2, AWS D1.3		
Cold-formed light frame construction – welds	Review welding operation		Field Review; VCC 1705.11, 1705.11.2, 1705.11.3		
Cold form light frame construction wind resistance – screws	Review screw attachment bolting, anchoring hold downs, bracing, diaphragms, struts		Field Review; VCC 1705.11, 1705.11.2, 1705.11.3		
Cold- formed steel trusses spanning 60' or greater	Inspection of temporary and permanent restraints/bracing		Submittal & Field Review; VCC 1705.2.4		
WOOD					
Verify fabrication/quality control procedures	In-plant inspection of fabrication/quality control procedures** or submit Certificate of Compliance		Submittal or Field Review; VCC 1704.2.5, 1704.2.5.1, 1705.5		
Metal plate connected wood/metal trusses spanning 60' or more	Review approved submittal and installation of restraint/bracing		Submittal & Field Review; VCC 1704.2.5, 1704.2.5.1, 1705.5, 1705.5.2		
Joist Hangers – Materials/Installation	Review manufacturer 's material and test standards,		Field Review; ASTM D 1761		
High-Load Diaphragms - Installation	Review submittal and as-built assemblies; Inspection of sheathing, framing size, nail and staple diameter and length, number of fastener lines, and fastener spacing.		Submittal & Field Review; VCC 1705.5, 1705.5.1		
Wood Shear Walls – installation	Review nailing, bolting, anchoring, fastening, diaphragms, struts, braces, and hold downs when fasteners are $\leq$ 4" center.		Field Review; VCC 1705.11.1		

MATERIAL/ACTIVITY	TYPE OF INSPECTION	APPLICABLE TO THIS PROJECT			
		Y/C/P/N	EXTENT/REFERENCE	AGENT	COMPLETED
MAIN WIND FORCE RESISTING SYSTEM					
Wind requirements	Review of the system components and installation for wood construction, cold-formed steel light frame construction, components, and cladding		Submittal & Field Review; VCC 1609.1.2, 1704.6.2, 1705.11, 1709		
SEISMIC FORCE RESISTING SYSTEMS					
Seismic requirements	Review of the designated seismic systems and seismic force resistance systems		Submittal & Field Review; VCC 1613, 1704.6.1, 1705.12, 1705.13; ASCE 7		
SMOKE CONTROL					
Special Inspection of smoke control systems	Leakage testing and recording of device location; pressure difference testing, flow measurement and detection, and control verification		Field Review; VCC 1705.18, 1705.18.1, 1705.18.2		
SPRAYED FIRE RESISTIVE MATERIAL, FIRE RESISTANT PENETRATIONS; JOINTS, MASTIC AND INTERMESCENT FIRE RESISTANT COATING					
Structural member surface conditions	Field review of surface conditions prior to application		AWCI 12-B; VCC 1705.14, 1705.14.1, 1705.14.2		
Application/thickness/density/bond strength	Field review of application operations, thickness, and density		ASTM E605, AWCI 12-B; VCC 1705.14.1, 1705.14.2, 1705.14.3, 1705.14.4, 1705.14.5, 1705.14.6		
Mastic & Intumescent Fire Resistant Coating	Field review of application operations and thickness		AWCI 12-B; VCC 1705.15		
EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)					
Application	Field Review of application/installation		ASTM E2570, VCC 1705.16		
SPECIAL CASES					
Retaining Walls	Field review of installation of pre-manufactured structural components		Field Review; VCC 113.4, 1705.1.1		
Sprinkler system hangers/supports	Field review of placement and anchorage		Field Review; VCC 903.3.1.1, 1705.1.1; NFPA 13: 9.2		
Alternative Materials and Systems	As requested by Building Official, review system and installation		VCC 113.4, 1705.1.1		

INSPECTION AGENTS	FIRM	ADDRESS	TELEPHONE
1. Special Inspector:			
2. Materials and Testing Laboratory:			
3. Special Inspector Smoke Control System:			
4. (Additional Agents)			

Note: * The Qualifications of the Special Inspector and Testing Laboratories are subject to the Approval of the Building Official.
** Inspection of quality control procedures required only if fabricator is not regularly inspected by an Approved independent inspection agency.
***For construction projects in seismic regions, the Schedule of Special Inspections shall be expanded to include Architectural, Mechanical, and Electric components, as well as Storage Racks and Isolation Systems. Items in VCC Section 1705.12

FINAL REPORT OF SPECIAL INSPECTIONS

PROJECT	PERMIT APPLICANT
_____	_____
_____	_____
_____	_____
_____	_____

PRIMARY RDP OF RECORD	STRUCTURAL ENGINEER OF RECORD
_____	_____
_____	_____
_____	_____

To the best of my information, knowledge, and belief, the Special Inspections required for this project, and itemized in the Statement of Special Inspections submitted for permit, have been completed. Attached to this final report are the Certificates of Compliance for shop fabricated load bearing members and assemblies. (Include this statement only if applicable).

Interim reports submitted prior to this final report, and numbered _____ to _____, form a basis for, and are to be considered an integral part of this final report.

Respectfully submitted,

_____
Signature

_____
Date

_____
Type or Print Name (Agent 1)

Seal of SI

Upon completion of all Special Inspections and testing, the SI shall submit a Final Report of Special Inspections to the Building Official for review and approval. The Building Official review and approval is required prior to final building inspection approval and-or issuance of a Certificate of Occupancy.

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Appendix B

A/E SEAL ON DRAWINGS

The purpose of these charts and notes is for quick reference to determine in accordance with § 54.1 - 402 of the Code of Virginia if an architect's or engineer's (A/E) seal is required on documents for proposed construction.

CHART A - GENERAL DESIGN THIS CHART NO LONGER EXISTS IN THE SEPTEMBER 2018 VIRGINIA BUILDING AND FIRE CODE RELATED LAWS PACKAGE (FOR CORRELATION WITH THE 2015 STATE BUILDING AND FIRE CODES)

A proposed structure which is classified within any of the categories marked "Yes" requires an A/E seal on the documents. Separate requirements apply as to when the electrical, plumbing or mechanical systems in such structures require an A/E seal (see Charts B and C).

GROUP	BRIEF DESCRIPTION	AREA (SQ. FT.)			HEIGHT (STORIES)	
		5,000 OR LESS	5,001 TO 15,000	OVER 15,000	3 OR LESS	OVER 3
A[1]	ASSEMBLY	YES	YES	YES	YES	YES
B	BUSINESS	-	YES	YES	-	YES
E	SCHOOLS & DAY CARE CENTERS	YES	YES	YES	YES	YES
F	FACTORY & INDUSTRIAL	-	-	YES	-	YES
H	HIGH HAZARD	YES	YES	YES	YES	YES
I	INSTITUTIONAL	YES	YES	YES	YES	YES
M	MERCANTILE	-	YES	YES	-	YES
R-1	HOTEL, MOTEL & DORMITORY	YES	YES	YES	YES	YES
R-2[7]	MULTI-FAMILY RESIDENTIAL	-	-	YES	-	YES
R-3	2 FAMILY ATTACHED	-	-	YES	-	YES
R-4	RESIDENTIAL ASSISTED LIVING	-	-	YES	-	YES
R-5	1 AND 2 FAMILY DWELLINGS	-	-	YES	-	YES
S	STORAGE (NON_FARM)	-	-	YES	-	YES
U	UTILITY & MISCELLANEOUS	-	-	YES	-	YES
ALL	INTERIOR DESIGN	SEE NOTE #4				

Notes: (Apply the following notes to all categories as applicable.)

1. Churches are exempt if building does not exceed 5,000 square feet or three stories, and the occupant load does not exceed 100.

2. **A local building code official may require an A/E seal even if not required to do so by this chart.**

3. The law requires that, where an A/E seal is not present, the plans must be signed by the individual (not company) responsible for the design, including the individual's occupation and address.

4. Additions, remodeling or interior design defined under § 54.1-400 of the Code of Virginia might not require an A/E seal. For construction, additions or remodeling resulting in a change in occupancy, occupancy load, modification to the structural system, change in access or egress or an increase in the fire hazard an A/E seal is required in accordance with § 54.1-400, although notes 1 and 2 still apply.

5. Any unique design of structural elements for floors, walls, roofs or foundations requires an A/E seal, regardless of whether or not the remainder of the plans requires such certification.

6. Buildings, structures, or electrical and mechanical installations which are not otherwise exempted but which are of standard design, provided they bear the certification of a professional engineer or architect registered or licensed in another state, and provided that the design is adapted for the specific location and conformity with local codes, ordinances and regulations, and is so certified by a professional engineer or architect licensed in Virginia may not require an A/E seal.

7. One exit and three stories or less Group R-2 buildings would normally be exempted from an A/E seal except where required by Note 2. Most all other three stories or less Group R-2 multi-family buildings are required by the building officials to have A/E seals for the construction documents.