

# **VBCOA REGION VII**

## **SPECIAL INSPECTIONS PROCEDURES**

The Design Professional of record shall prepare a list of the special inspections as required by The 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 submitted and approved by the design professional of record. This report shall then be submitted to the Building Official for approval prior to issuance of a Certificate of Occupancy.

### **VBCOA REGION VII LOCALITIES:**

CAROLINE  
HANOVER  
KING WILLIAM  
MIDDLESEX  
RICHMOND

ESSEX  
KING GEORGE  
LANCASTER  
NEW KENT  
WESTMORELAND

GLOUCESTER  
KING & QUEEN  
MATHEWS  
NORTHUMBERLAND  
WEST POINT

# Special Inspection Guidelines and Procedures

## Appendix A

### STATEMENT OF SPECIAL INSPECTIONS

<u>PROJECT</u>	<u>PERMIT APPLICANT</u>
<u>ARCHITECT OF RECORD</u>	<u>STRUCTURAL ENGINEER OF RECORD</u>

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.

The Special Inspector shall keep records of all inspections, and shall furnish inspection reports to the Building Official, RDP of Record, 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 structural engineer or architect of record. Interim reports shall be submitted to the Building Official, Owner, Contractor and RDP of Record.

Jobsite safety is solely the responsibility of the contractor. Materials and activities to be inspected are not to include the contractors' equipment and methods used to erect or install the materials listed.

**All fees and costs related to the performance of special professional services shall be the responsibility of the owner.**

### PREPARED BY:

\_\_\_\_\_  
(Type or Print name of RDP)

\_\_\_\_\_  
Special inspector (Type or Print)

\_\_\_\_\_  
Preparer's Seal and Signature

\_\_\_\_\_  
Special Inspector (Signature) Applicant's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
RDP of Record (Signature) Owners Authorization (if other than applicant) Date

\_\_\_\_\_  
(Signature) Building Officials Acceptance

\_\_\_\_\_  
Date

**Special inspection Guidelines and Procedures**

**SCHEDULE OF SPECIAL INSPECTIONS**

MATERIAL/ACTIVITY	TYPE OF INSPECTION	APPLICABLE TO THIS PROJECT			
		Y/ N	EXTENT/REFERENCE	AGENT	COMPLETE
<b>GENERAL</b>					
Pre-construction conference	Meeting to discuss Special Inspection procedures		Scheduled by SI with the Contractor prior to commencement of work		
<b>EARTHWORK</b>					
Site preparation (building)	Field testing & inspection		Field review, IBC 1704.7.1		
Fill placement (building)	Review submittals, field testing and inspection		Field review, IBC 1704.7.2		
Fill compaction (building)	In-place density tests		Field review, IBC 1704.7.3		
Fill compaction (building)	In-place density tests		Field review, IBC 1704.7.3		
Foundation sub-grade	Field inspection of foundation sub grade prior to placement of concrete		Field review		
<b>PILE FOUNDATIONS</b>					
Test piles	Monitor driving of test piles		IBC 1704.8		
Pile installation	Monitor driving of piles		IBC 1704.8		
Pile load test	Monitor pile load test		IBC 1704.8		
Pile survey	Review as-driven survey		IBC 1704.8		
<b>CONCRETE</b>					
Materials	Review product supplied versus certificates of compliance and mix design		Submittal & Field Review BC 1904, 1905.2-1905.4, 1914.2, 1914.3, CI 318:Ch.4		
Reinforcing steel	Field inspection of placement		Field Review, IBC 1903.5, 1907.1, 1907.7, 1914.4, ACI 318:3.5		
Formwork installation	Field inspection		Field Review, IBC 1906, ACI 318:6.1, 6.2		
Concreting operations & placement	Field inspection of placement and curing		Field Review ACI 318; 5.9-10, IBC 1905.9, 1905.10, 1914.6, 1914.7, 1914.8		
Concrete curing	Field inspection of curing process		Field Review, ACI 318; 5.11-13, IBC 1905.11, 1905.13, 1914.9		
Concrete strength	Evaluation of concrete strength		Laboratory Testing, CI 318:5.6, IBC 1906.2		

<b>PRECAST CONCRETE</b>					
Quality Control	In-plant review**		ACT 318:18.18		
Erection and installation	Field inspection of in-place precast		ACT 3 18:Ch. 16		
<b>MASONRY</b>					
Materials	Review of submittals		Submittal & Field Review ACI 530.1; 2.3, IBC 1704.5		
Strength	Testing/review of strength		Submittal & Field Review ACI 530. 1; 1.4, IBC 1704.5		
Mortar and grout	Inspection of proportioning and mixing		Field Review ACT 530. 1; 2.6, IBC 1704.5		
Masonry operations & installation	Inspection of application and installation		Field Review ACI 530. 1; 32 and 3.5, IBC 1704.5		
Reinforcement	Inspect condition, size, location and spacing		Field Review ACI 530Ch.8, IBC1704.5		
Protection	Inspect procedures for protection during cold and hot weather		Field Review ACI 530. 1; 1.8, IBC 1704.5		
Anchorage	Inspection of anchorages		Field Review, ACI 530; 4.2, 5. 14, IBC 1704.5		
<b>STRUCTURAL STEEL</b>					
Quality Control	In-plant inspection of quality control procedures**		IBC 1704.2		
Bolts, nuts, washers	Material identification markings		Submittal & Field Review AISC ASD A3.4		
Bolts, nuts, washers	Review certificate of compliance		Submittal & Field Review IBC 1704.3, AISC ASD A3.4		
Structural steel	Material identification markings		Submittal & Field Review IBC 1708.4, ASTM A6		
Structural steel	Review certificate of compliance		Submittal & Field Review IBC 1708.4, ASTM A6		
Weld filler materials & welder certification	Review certificate of compliance		Submittal & Field Review AISC ASD A3.6		
Bolts, nuts, & washers	Inspection of in-place high-strength bolts		Field Review, IBC 1704.3.3,AISC Section A3.4, RCSC, Sec.9		
Welds	Inspection of welds		Field Review, IBC 1704.3.1, AWS, DI.1		
Structural details	Inspection of structural details		Field Review, mc 1704.3.2		
<b>WOOD</b>					
Verify fabrication /quality control procedures	Review submittal and installation		IBC 1704.6		
<b>SPRAYED CEMENTITIOUS AND MINERAL FIBER FIRERESISTIVE MATERIALS</b>					
Structural members surface conditions	Field review of surface conditions prior to application		IBC 1704.11.1		
Application	Field review of application operations		IBC 1704.11.2		
Thickness	Field review of applied thickness		IBC 1704.11.3		

## *Special Inspection Guidelines and Procedures*

### **Wind and Seismic Quality assurance Plans**

Wind and/or seismic Requirements	As required and specified by design	IBC 1705, 1706, 1707, 1708
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### **Smoke Control**

Special Inspection of smoke Control Systems	Leakage testing and recording of device location Pressure difference testing and direction and control verification	IBC 1704.14
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INSPECTION AGENTS	FIRM	ADDRESS	TELEPHONE
1. Special Inspector			
2. Special Inspector			
3. Special Inspector			
4. Special Inspector			
5. Testing Laboratory			
6. Testing Laboratory			

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 independent inspection agency.

*Special Inspection Guidelines and Procedures*

**FINAL REPORT OF SPECIAL INSPECTION**

PROJECT	PERMIT APPLICANT
ARCHITECT 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.**

The following discrepancies that were outstanding since the last interim report dated \_\_\_\_\_, have been corrected:

\_\_\_\_\_

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 : \_\_\_\_\_

Seal of SI

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

# Special Inspection Guidelines and Procedures

## 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

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
R-3	2 FAMILY ATTACHED	—	—	—	—	YES
R-4	RESIDENTIAL ASSISTED LIVING	—	—	—	—	YES

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 NE seal is not present, the plans must have the name of 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 NE 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 NE 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 require 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 NE seal.
7. One exit and three stories or less Group R-2 buildings would normally be exempted from an NE 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 NE seals for the construction documents.