

## 2012 VIRGINIA TECH SCHEDULE OF SPECIAL INSPECTIONS

MATERIAL/ACTIVITY	TYPE OF INSPECTION	APPLICABLE TO THIS PROJECT			DATE
		Y/C/P/N	EXTENT/REFERENCE	AGENT	COMPLETED
<b>GENERAL</b>					
Pre-construction conference	Preconstruction meeting		Scheduled by SI with the Contractor, UBO, A/E, and relevant subs prior to commencement of work	ALL	
<b>EARTHWORK</b>					
Site preparation (building)	Field testing and inspection		Field Review; IBC 1705.6		
Fill material (building)	Review submittals, field testing and inspection		Field Review; IBC 1705.6		
Fill compaction (building)	In-place density tests, lift thickness		Field Review; IBC 1705.6		
Excavation	Field inspection and verification of proper depth		Field Review; IBC 1705.6		
Foundation sub-grade	Field inspection of foundation subgrade prior to placement of concrete		Field Review; IBC 1705.6		
<b>DEEP FOUNDATION ELEMENTS</b>					
Materials	Review product, sizes, and lengths		Submittal and Field Review; IBC1705.7, 1705.8, 1705.9		
Test piles	Monitor driving of test piles		Field Review; IBC 1704.8, .9 or .10		
Installation	Monitor drilling, placement, plumbness, driving of piles, including recording blows per foot, cut off, and tip elevation		Field Review; IBC 1705.2, 1705.3, 1705.7		
Load test	Monitor pile load test		Field Review; IBC 1704.8, .9 or .10		
<b>CONCRETE</b>					
Materials	Review product supplied versus certificates of compliance and mix design		Submittal & Field Review; IBC 1705.3; ACI 318: Ch. 4 and 5; IBC 1904.2, 1910.2, 1903.3		
Installation of reinforcing steel, including prestress tendons and anchor bolts as well as welding	Field inspection of placement		Submittal and Field Review; ACI 318:3.5, 3.5.2 3.8.6 & Ch. 7 8.1.3 and 21.2.8; AWS D1.4; IBC 1705.3, 1908.5, 1909.1, 1910.4		
Formwork installation	Field inspection		Field Review; ACI 318: 6.1.1; IBC 1705.3		
Concreting operations and placement	Field inspection of placement/sampling		Field Review; ACI 318: 5.6, 5.8, 5.9-10; ASTM C 172, C 31; IBC 1705.3, 1910.6, 1910.7, 1910.8, 1910.10		
Concrete curing	Field inspection of curing process		Field Review; ACI 318: 5.11-13; IBC 1705.3, 1910.9		
Concrete strength	Evaluation of concrete strength		Laboratory Testing; ACI 318: 6.2; IBC 1705.3		

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Application of forces for prestressed concrete	Field inspection		Field Review; ACI 318: 18.20; IBC 1705.3		
Grouting of prestress tendons	Field inspection		Field Review; ACI 318: 18.18.4; IBC 1705.3		
<b>PRECAST CONCRETE</b>					
Verify fabrication/quality control procedures	In-plant inspection of fabrication/quality control procedures**		Submittal or Field Review; IBC 1705.3		
Erection and installation	Review submittals and as-built assemblies; Field inspection of in-place precast		Submittal and Field Review; ACI 318; Ch. 16; IBC Table 1705.3		
<b>MASONRY (Level ____; Building Risk Category ____)</b>					
Materials	Review of products supplied versus certificate of compliance and material submitted		Submittal & Field Review; ACI 530/ASCE 5; ACI 530.1/ASCE 6; IBC 1705.4, 1708		
Strength	Testing/review of strength		Submittal & Field Review; ACI 530/ASCE 5; ACI 530.1/ASCE 6; IBC 1705.4, 2105.2.2, 2105.3		
Mortar and Grout	Inspection of proportioning and mixing. Placement of mortar only.		Field Review; IBC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Grout placement, including prestressing grout	Verification to ensure compliance		Field Review; IBC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Grout space	Verification to ensure compliance		Field Review; IBC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6; TMS 602		
Mortar, grout, and prism specimens	Observe Preparation		Field Review; IBC 1704.5, ACI 530.1; ASCE 6;		
Reinforcement, prestressing tendons, and connections	Inspect condition, size, location, and spacing		Field Review; IBC 1704.5; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Welding of reinforcing bars	Inspection and testing of welds		Field Review; IBC 1705.4; ACI 530/ASCE 5; ACI 530.1/ ASCE 6		
Prestressing force	Verify application and measurement		Field Review; IBC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Protection	Inspect procedures for protection during cold and hot weather		Field Review; IBC 1705.4.; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Anchorage	Inspection of anchorages		Field Review; ACI 530.1/ASCE 6, ASCE 6; IBC 1705.4; ACI 530/ASCE 5		
Masonry installation	Inspection of placement of masonry and joints		Field Review; ACI 530/ASCE 5; ACI 530.1/ASCE 6; IBC 1705.4		
<b>STRUCTURAL STEEL</b>					
Verify fabrication/quality control procedures	In-plant inspection of fabrication/quality control procedures** or submit Certificate of Compliance		IBC 1704.2.5, IBC 1704.2.5.1, 1704.2.5.2, 1705.2		

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Bolts, nuts, and washers – materials	Material identification markings Review of Certificate of Compliance		Submittal & Field Review; IBC 1705.2.1; IBC 1705.2.2; IBC 1706; ASTM; AISC 360, Section A3.3		
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; IBC 1705.2.1, 1705.2.2; AISC 360 Section M2.5		
Structural steel – materials	Material identification markings and review of Certificate of Compliance		Submittal & Field Review; IBC 1705.2.1, 1705.2.2, 1706; ASTM A6, A568		
Structural steel details – installation	Inspection of member locations, structural details for bracing, connections, stiffening		Submittal & Field Review; IBC 1705.2.1, 1705.2.2, AISC 360		
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; IBC 1705.2.2.1; AWS D1.1, D1.3		
Cold-formed metal deck – materials	Review of identification marking manufacturer's certified test results		Submittal and Field Review; IBC 1705.2.2; ASTM		
Cold-formed metal deck – installation	Review laps and welds		Submittal and Field Review; IBC 1705.2.2, AWS D1.3		
Cold-formed light frame construction – welds	Review welding operation		IBC 1705.10, 1705.10.2, 1705.10.3		
Cold form light frame construction wind resistance – screws	Review screw attachment bolting, anchoring hold downs, bracing, diaphragms, struts		Field Review; IBC 1705.10, 1705.10.2, 1705.10.3		
Cold-formed steel trusses spanning 60' or greater	Inspection of temporary and permanent restraints/bracing		Field review IBC 1705.2.2.2		
<b>WOOD</b>					
Verify fabrication/quality control procedures	In-plant inspection of fabrication/quality control procedures** or submit Certificate of Compliance		Submittal or Field Review; IBC 1704.2.5, 1705.5, 1705.5.2		
Metal plate connected wood/metal trusses spanning 60' or more	Review approved submittal and installation of restraint/bracing		Field Review; IBC 1704.2.5, 1705.5, 1705.2		
Joist Hangers – Materials/Installation	Review manufacturer's material and test standards,		Field Review; IBC 1711, 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.		IBC 1705.5, 1705.5.1		
Wood Shear Walls – installation	Review nailing, bolting, anchoring, fastening, diaphragms, struts, braces, and hold downs when fasteners are ≤ 4" on center.		Field Review; IBC 1705.10.1		

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<b>MAIN WIND FORCE RESISTING SYSTEM</b>					
Wind requirements	Review of the system components and installation for wood construction, cold-formed steel light frame construction, components, and cladding		Submittal and Field Review; IBC 1609, 1705, 1710		
<b>SEISMIC FORCE RESISTING SYSTEMS</b>					
Seismic requirements	Review of the designated seismic systems and seismic force resistance systems		Submittal and Field Review; IBC 1613, 1704.5.1, 1705.11, 1705.12; ASCE 7		
<b>SMOKE CONTROL</b>					
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; IBC 1705.17, 1705.17.1, 1705.17.2		
<b>SPRAYED FIRE RESISTIVE MATERIAL, FIRE RESISTANT PENETRATIONS; JOINTS, MASTIC AND INTERMESCENT FIRE RESISTANT COATING</b>					
Structural member surface conditions	Field Review of surface conditions prior to application		AWCI 12-B; IBC 1705.13, 1705.13.2		
Application/thickness/density/bond strength	Field review of application operations, thickness, and density		ASTM E605, AWCI 12-B; IBC 1705.13.2; 1705.13.1, 1705.13.3, 1705.13.4; IBC 1705.13.5, 1705.13.6		
Mastic & Intumescent Fire Resistant Coating	Field review of application operations and thickness		AWCI 12-B; IBC 1705.14		
<b>EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)</b>					
Application	Field Review of application/installation		ASTM E2570, IBC 1705.15		
<b>SPECIAL CASES</b>					
Alternative Materials and Systems	As requested by Building Official, review system and installation		IBC 1705.1.1		

<b>INSPECTION AGENTS</b>	<b>FIRM</b>	<b>Address and Telephone</b>
1. Special Inspector:		
2. Materials and Testing Laboratory:		
3. Special Inspector Smoke Control System:		
4. (Additional Agents)		

- Note:
1. The Qualifications of the Special Inspector and Testing Laboratories are subject to the Approval of the Building Official.
  2. Inspection of quality control procedures required only if fabricator is not regularly inspected by an independent inspection agency approved by the A/E and AHJ.
  3. 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 INC Section 1705.11
  4. Continuing Inspection (C)
  5. Periodic Inspection (P)
  6. Yes (use for a single vent such as a meeting) (Y)
  7. No (use for a single vent such as a meeting) (N)