

JOBSITE TESTING & INSPECTION REQUIREMENTS - CONCRETE					
Testing / Inspection Type					
1	2	3	4	5	
CAST-IN-PLACE CONCRETE INSPECTION & TESTING					
Before Placing Concrete					
Formwork Dimensional Layout	100%				
Reinforcing Steel Placement	100%				
Bolts & Embedments Placement	100%				
Bolts & Embedments Welding			P		
Reinforcement Welding			C		
Reinforcement Field Bending			P		
Mechanical Connectors			P		
Epoxy or Galvanized Reinforcing	100%				
During Concrete Placement					
Verify Design Mix	100%				
Concrete Mix Testing				C	
Concrete Placement Inspection			C		
Concrete Curing Inspection			P		
After Concrete Placement					
Cold Weather Curing			P		
Form Removal			P		
Floor Flatness (FF) & Levelness (FL)				P	

JOBSITE TESTING & INSPECTION REQUIREMENTS - COLD FORMED STEEL					
Testing / Inspection Type					
1	2	3	4	5	
STRUCTURAL COLD FORMED STEEL INSPECTIONS & TESTING					
Framing					
Members & connections		P			
Bridging & blocking layout & conns		P			
No field cuts / notches through flanges		P			
No member splices except where shown		P			
Punchouts are away from bearings/conns		P			
Studs seated in tracks per details		P			
Floor / roof framing aligned with studs		P			
Cold formed steel truss layout		P			
Cold formed steel truss bridging		P			
Sheathed Walls					
Panel sheathing type & thickness		P			
Attachment type / spacing at boundaries & field		P			
Hold-downs type, size, layout, conns	100%				
Welded Attachments					
Procedures, materials, qualifications	100%				
During welding			P		
After welding			P		
Corrosion resistance treatment			P		
Screwed Attachments					
Type, Ø, length, spacing, edge distance		P			
Penetration		P			
Connected materials drawn together		P			
No popped screw heads/stripped threads		P			
Powder-Actuated Fasteners					
Type, Ø, length, spacing, edge distance		P			
Conformance with ICC-ES Report	P				

JOBSITE TESTING & INSPECTION REQUIREMENTS - WOOD					
Testing / Inspection Type					
1	2	3	4	5	
STRUCTURAL WOOD SPECIAL INSPECTIONS & TESTING					
Connections - Fasteners, Bolts, Metal Plate Connectors, Gluing					
All Fasteners (Nails, Bolts, Screws, etc.)		P			
Type, Ø, length, spacing, edge distance		P			
Sheathing & Diaphragms					
Sheathing type & thickness		P			
Attachment type / spacing at boundaries & field		P			

JOBSITE TESTING & INSPECTION REQUIREMENTS - STEEL					
Steel Testing & Inspection Definitions					
UT	Ultrasonic Testing				
MT	Magnetic Particle Testing				
PT	Penetration Testing				
SFRS	Seismic Force Resisting System				
TTT	Tension Through Thickness				
Testing / Inspection Type					
	1	2	3	4	5
Prior to Bolting					
Verify Manufacturer's Certifications	C				
Preinstallation bolt testing	C				
Verify bolt material, Ø, handling	P				
Verify bolting procedure			P		
Verify connecting element preparation			P		
During Bolting					
Verify bolts in all holes			100%		
Verify bolts positioned as required			P		
After Bolting					
Document acceptance/rejection of joints			C		
Prior to Welding					
Verify welder quals	C				
Verify ID system	P				
Verify WPS available	C				
Verify base material & weld material	P				
Verify weld procedures & weld equipment	P				
Verify joint fit-up, prep, backing, etc.		P			
During Welding					
Use of qualified welders	P				
Handling of welding consumables			P		
No welding over cracked tack welds			P		
Environment conditions (wind/temp, etc)			P		
Verify WPS followed			P		
Welding techniques			P		
After Welding					
Verify welds cleaned			P		
Verify weld size, length & location			C		
Welds meet visual acceptance criteria			C		
Arc strikes			C		
Verify no cracking in k-areas and at weld access holes			C		
Repair activities			C		
Document acceptance/rejection of joints			C		
UT CJP welds, material ≥5/16", I & II				10%	
After Galvanizing					
Inspect exposed cut surfaces and HSS corners for cracks			100%		
After Fabrication/Erection					
Inspect steel members or erected steel frame			100%		

JOBSITE TESTING & INSPECTION REQUIREMENTS - SOILS AND FOUNDATIONS					
Testing / Inspection Type					
1	2	3	4	5	
SOIL INSPECTION & TESTING					
Excavation Extents & Depths		P			
Subgrade Material Verification		P			
Controlled Fill Placement		C			
Bearing Material Verification				P	
Fill Material Verification		C			

QUALITY ASSURANCE GENERAL NOTES	
STATEMENT OF STRUCTURAL SPECIAL INSPECTIONS AND TESTING	
1) GENERAL 1A) SCOPE OF WORK - THE OWNER WILL ENGAGE A QUALIFIED INSPECTION AND TESTING AGENCY(S) TO PERFORM SPECIAL INSPECTIONS AND TESTING FOR ALL STRUCTURAL MEMBERS AND ASSEMBLIES AS NOTED HEREIN. SUBMIT DOCUMENTATION OF QUALIFICATIONS, INCLUDING COMPETENCE AND RELEVANT WORK EXPERIENCE OR TRAINING OF SPECIAL INSPECTORS TO THE AUTHORITY HAVING JURISDICTION PRIOR TO THE START OF WORK. - SPECIAL INSPECTIONS ARE IN ADDITION TO INSPECTIONS BY THE AUTHORITY HAVING JURISDICTION REQUIRED BY IBC 2021 SECTION 110. - REFER TO THE SPECIFICATIONS FOR REPORTING AND PROCEDURAL REQUIREMENTS FOR QUALITY ASSURANCE AND QUALITY CONTROL. - REFER TO ARCH/MECH/ELEC/CIVIL SPECIFICATIONS AND DRAWINGS FOR ADDITIONAL SPECIAL INSPECTION AND TESTING THAT MAY BE REQUIRED. 1B) SPECIAL INSPECTIONS AND TESTING ARE APPLICABLE TO ALL REVISIONS AND/OR FUTURE WORK ADDED BY AMENDMENTS TO THESE DOCUMENTS. 1C) DEFINITIONS - SPECIAL INSPECTOR: THE AGENCY ENGAGED BY THE OWNER AND APPROVED BY THE AUTHORITY HAVING JURISDICTION TO ACT AS THE DESIGNATED REPRESENTATIVE TO PERFORM INSPECTIONS. SPECIAL INSPECTION: INSPECTION PERFORMED BY THE SPECIAL INSPECTOR ACCORDING TO IBC 2021 SECTION 1704 TO ENSURE COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS - AND REFERENCED STANDARDS. (P) PERIODIC INSPECTION: THE PART-TIME OR INTERMITTENT OBSERVATION BY THE SPECIAL INSPECTOR OF WORK BEING PERFORMED. SPECIAL INSPECTOR SHALL BE PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. OBSERVATION OF ALL WORK (100% VISUAL) SHALL BE MADE AT THE COMPLETION OF THE WORK. (C) CONTINUOUS INSPECTION: THE FULL-TIME OBSERVATION BY THE SPECIAL INSPECTOR OF WORK - BEING PERFORMED. SPECIAL INSPECTOR SHALL BE PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. OBSERVATION OF ALL WORK (100% VISUAL) SHALL BE MADE AT THE COMPLETION OF THE WORK. 1D) DEFICIENCIES IN WORK - CORRECT DEFICIENCIES IN WORK THAT TESTS AND INSPECTIONS INDICATE DO NOT COMPLY WITH THE CONTRACT DOCUMENTS AND EFERENCED STANDARDS. - ALL COST OF ADDITIONAL TESTING AND/OR INSPECTIONS FOR CORRECTIVE WORK SHALL BE BORNE BY THE CONTRACTOR. 2) SHOP FABRICATIONS: 2A) GENERAL - PERFORM INSPECTIONS AND TESTING FOR ALL SHOP FABRICATED STRUCTURAL MEMBERS AND ASSEMBLIES AS NOTED HEREIN. SPECIAL INSPECTOR SHALL PERFORM SPECIAL INSPECTIONS AND TESTING UNLESS THE FABRICATOR IS REGISTERED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. - SPECIAL INSPECTOR SHALL VERIFY THE FABRICATOR MAINTAINS AND FOLLOWS DETAILED SHOP FABRICATION AND QUALITY CONTROL PROCEDURES. UNLESS FABRICATOR IS REGISTERED AND APPROVED. AT THE COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE AUTHORITY HAVING JURISDICTION ACCORDING TO IBC 2021 SECTION 1704.2.5.1. - APPROVED FABRICATORS MAY PERFORM TESTING NOTED HEREIN EXCEPT THAT NONDESTRUCTIVE TESTING (NDT) SHALL ONLY BE PERFORMED BY PERSONNEL WITH QUALIFICATIONS THAT MEET OR EXCEED THE CRITERIA OF AWS DI .1 SUBCLAUSE 6.14.6 AND AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (ASNT) SNT-TC-IA OR ASNT CP-189. 2B) SHOP FABRICATIONS INCLUDED - SHOP FABRICATED STRUCTURAL STEEL - SHOP FABRICATED COLD FORMED STEEL ELEMENTS	

JOBSITE TESTING & INSPECTION REQUIREMENTS - GENERAL	
Inspection / Testing General Notes:	
1. Special inspections & testing indicated in the attached tables will be completed by the Owner's 3rd party testing & inspection agency.	
2. Contractor shall request and coordinate testing & inspection activities with the 3rd party agency to meet the requirements of the attached tables, notes and specifications.	
3. See specifications section 014010 for additional information and requirements of each inspection / test.	
TESTING & INSPECTION TYPES	
1	Material Verification & Workman Certifications
2	Site Inspection for Layout & Quantities
3	Site Inspection for Procedures & Workmanship
4	Site Testing for Material Properties & Workmanship
5	Fabrication Facility Inspection & Testing for Workmanship
TESTING & INSPECTION FREQUENCY DEFINITIONS	
C	Continuous Inspection - Full-time observation by the special inspector of the work being performed.
P	Periodic Inspection - The part-time or intermittent observation by the special inspector of the work being performed. 100% visual observation of all work at the completion of the work.
###%	###% observation / testing prior to concealment of indicated element