

**SPECIAL INSPECTION, MATERIAL TESTING & STRUCTURAL  
OBSERVATION REQUIRED BY CHAPTER 17 OF THE 2012 IBC**

Indicate items requiring special inspection, structural testing, or structural observations by checking the appropriate box. The design professional in responsible charge should revise the requirements as needed on a project-specific basis.

**FABRICATORS (IBC 1704.2.5)**

\_\_\_ **Approved** Fabricator : \_\_\_ Yes \_\_\_ No      \_\_\_ **Unapproved** Fabricator: \_\_\_ Yes \_\_\_ No

Fabricators Name:			
Fabricators plant location			
Required In-plant Inspections	Steel construction	Concrete	Wood
	Cold-formed construction	Other:	Other:

TYPE OF INSPECTION	APPLICABLE	Continuous	Periodic	DETAILED INSTRUCTIONS AND FREQUENCIES
<b>Special Cases (IBC 1705.1.1)</b>				
Alternate materials or construction / unique design				
Manufacturer required				
<b>Structural Steel (IBC 1705.2.1, 1705.11.1, 1705.12.2)</b>				
Welding				
Bolts – High Strength				
Structural steel details				
Anchor rods, embeds, etc.				
Reinforcing steel			x	
Other				
<b>Steel construction other than structural steel (IBC 1705.2.2)</b>				
Material verification of cold-formed steel deck			x	
Floor and roof deck welds			X	
Verification of reinforcing steel weldability			X	
Reinforcing steel in intermediate or special moment frames, and boundary elements of special structural walls		X		
Shear reinforcing steel		X		
Other reinforcing steel			x	
<b>Cold-formed steel construction (IBC 1705.2.2.1.1, 1705.2.2.2, 1705.10.2, 1705.11.3)</b>				
Trusses spanning >60 feet			x	
Wind-force or seismic force resisting systems			x	
<b>Concrete (IBC 1705.3, 1705.12.1)</b>				
Reinforcing steel, including prestressing tendons, and placement			x	
Reinforcing steel welding Table 1705.2.2, item 2b				

TYPE OF INSPECTION	APPLICABLE	Continuous	Periodic	DETAILED INSTRUCTIONS AND FREQUENCIES
Anchors cast in concrete where allowable loads have been increased or where strength design is used			x	
Anchors post-installed in hardened concrete member			x	
Use of required design mix			X	
Fabricate specimens for strength tests, slump and air content tests, temperature of concrete		x		
Concrete and shotcrete placement		X		
Specified curing temperature and techniques			x	
Prestressed concrete: Prestressing forces; grouting of bonded prestressing tendons in seismic force-resisting system		x		
Erection of precast concrete members			X	
Verification of in-situ concrete strength prior to stressing of tendons in post-tensioned concrete			x	
Concrete formwork			x	
<b>Masonry construction (IBC 1705.4)</b>				
Review material certificates, mix designs, test results, construction procedures			x	
Proportions of site-prepared mortar			x	
Construction of mortar joints			x	
Grade and size of prestressing tendons and anchorages			X	
Location of reinforcement, connectors, prestressing tendons, anchorages			x	
Prestressing technique			x	
Properties of thin-bed mortar for AAC masonry			x	
Grout space			X	
Grade, type, size of reinforcement, anchor bolts, prestressing tendons, and anchorages			X	
Placement of reinforcement, connectors, prestressing			X	

TYPE OF INSPECTION	APPLICABLE	Continuous	Periodic	DETAILED INSTRUCTIONS AND FREQUENCIES
tendons, anchorages				
Proportions of site-prepared grout and prestressing grout of bonded tendons			x	
Construction of mortar joints			X	
Size and location of structural elements			x	
Type, size, location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction			x	
Welding of reinforcement		x		
Preparation, construction, protection of masonry during cold weather (<40 degree F or hot weather (>90 degree F)			x	
Application and measurement of prestressing force		x		
Placement of grout and prestressing grout for bonded tendons is in compliance		x		
Placement of AAC masonry units and construction of thin-bed mortar joints			x	
Observation/verification of grout specimens, mortar specimens, prisms, etc.			x	
<b>Wood Construction (IBC 1705.5, 1705.10.1, 1705.11.2)</b>				
High-load diaphragms			x	
Wood trusses spanning >60 feet			X	
Structural wood (wind or seismic resisting system)			x	
<b>Soils Construction (IBC 1705.6)</b>				
Verify materials below shallow foundations are adequate to achieve design bearing capacity			x	
Verify excavations are extended to property depth and material			x	
Perform classification and testing of compacted fill			x	

TYPE OF INSPECTION	APPLICABLE	Continuous	Periodic	DETAILED INSTRUCTIONS AND FREQUENCIES
materials				
Verify proper materials, densities and lift thicknesses during placement and compaction		x		
Observe subgrade and verify that site has been properly prepared			x	
<b>Driven deep foundations (IBC 1705.7)</b>				
Verify materials, sizes, lengths		x		
Determine capacities and conduct necessary load tests		x		
Observe drilling operations		x		
Verify placement locations & plumbness, confirm type & size of hammer, record number of blows per foot, record tip and butt elevations and document any damage to element		x		
Perform additional inspections for steel, concrete or other specialty elements				
<b>Cast-In-Place deep foundations (IBC 1705.8)</b>				
Observe drilling operation and reporting		x		
Verify placement locations & plumbness, confirm element diameters, lengths, embedment and adequate end-bearing capacity. Record concrete or grout volumes.		x		
Perform additional inspections for concrete elements				
<b>Other</b>				
Helical pile foundations (IBC 1705.9)		x		
Wind Resistance (IBC 1705.10)				
Seismic Resistance (IBC 1705.11 & 1705.12)				

TYPE OF INSPECTION	APPLICABLE	Continuous	Periodic	DETAILED INSTRUCTIONS AND FREQUENCIES
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Storage racks 8' in height or greater (1705.11.7)			x	
Sprayed Fire-Resistant Materials (IBC 1705.13)			x	
Mastic and Intumescent Fire-Resistant Coatings (IBC 1705.14)			x	
Exterior Insulation and Finish System (EIFS) (IBC 1705.15)			x	
Fire-Resistant penetrations and joists (IBC 1705.16)			x	
Smoke Control (IBC 1705.17)			x	
Architectural Components (IBC 1705.11.5)			x	