

Storey County Community Development Permit Services



SPECIAL INSPECTION AND TESTING AGREEMENT INTERNATIONAL BUILDING CODE

PROJECT NAME

PROJECT ADDRESS

PERMIT NUMBER

Instructions:

BEFORE A PERMIT CAN BE ISSUED:

The owner, the engineer or architect of record, acting as the owner's agent, shall complete two (2) copies of this agreement and the attached Special-inspection and Testing Schedule, including the required acknowledgments. A pre-construction conference with the parties involved may be required to review the special inspection requirements and procedures.

APPROVAL OF SPECIAL INSPECTORS:

Special inspectors may have no financial interest in projects for which they provide special inspection. Special inspectors shall be approved by the building division prior to performing any duties. Special inspectors shall submit their qualifications and are subject to personal interviews for pre-qualification. Special inspectors shall display approved identification, as stipulated by the building official, when performing the function of special inspector.

Special inspection and testing shall meet the minimum requirements of the International Building Code Section 1704. The following conditions are also applicable:

A. Duties and Responsibilities of the Special Inspector:

1. **Signify presence at job site.** Special inspectors should notify contractor personnel of their presence and responsibilities at the job site. If required by the building official, they shall sign in on the appropriate form posted with the building permit.

2. **Observe assigned work.** The special inspector shall observe assigned work for conformance with building division approved (stamped) design drawings and specifications and applicable workmanship provisions of the International Building Code. Architect/engineer-reviewed shop drawings may be used only as an aid to inspection.

For continuous special inspections, the special inspector shall be on site at all times observing the work requiring special inspection. Periodic inspections, if any, must have prior approval based on a separate written plan reviewed and approved by the building division and the engineer or architect of record.

3. **Report nonconforming items.** The special inspector shall bring nonconforming items to the immediate attention of the contractor and note all such items in the daily report. If any item is not resolved in a timely manner or is about to be incorporated in the work, the special inspector shall immediately notify the building division by telephone or in person, notify the engineer or architect, and post a discrepancy notice.
4. **Provide timely reports.** The special inspector should complete written inspection reports for each inspection visit and provide the reports on a timely basis determined by the building official. The special inspector or inspection agency shall furnish these reports directly to the building official, engineer or architect of record, and others as designated. [IBC Section 1704.1.2] These reports should be organized on a daily format and must be submitted weekly to building@storeycounty.org. These reports should include:
 - a. Description of daily inspections and tests made with applicable locations,
 - b. Listing of all nonconforming items,
 - c. Report on how nonconforming items were resolved or unresolved as applicable,
 - d. Itemized changes authorized by the architect, engineer, and building official if not included in nonconforming items.
5. **Submit final report.** The special inspector or inspection agency shall submit a final signed report to the building official stating that all items requiring special inspection and testing were fulfilled and reported and, to the best of his/her knowledge, in conformance with the approved design drawings, specifications, approved change orders, and applicable workmanship provisions of the International Building Code. Items not in conformance, unresolved items, or any discrepancies in inspection coverage (i.e., missed inspections, periodic inspections when continuous inspections were required, etc.) shall be specifically itemized in this report.

B. Owner Responsibilities:

1. The project owner, the engineer or architect of record or an agent of the owner is responsible for employing special inspection services. The special inspector/agency shall not be in the employ of the contractor, subcontractor or material supplier. [IBC Sec. 1704.1] In the case of an owner/contractor, the special inspector/agency shall be employed as specified by the building official.

2. The project owner/agent hereby agrees that he/she shall not terminate his/her contract for special inspection services with the below named firm until he/she has obtained the services of another inspection firm and submitted a new Special Inspection Agreement Form for approval and acceptance by the building official.

C. Engineer or Architect of Record Responsibilities:

1. **Prepare special inspection program.** The engineer or architect of record shall list the items for which special inspection is required; and shall indicate any items for which the IBC or the building official approves periodic inspection and the frequency of such inspection.
2. **Respond to field discrepancies.** The engineer or architect of record shall respond to uncorrected field discrepancies in design, material, or workmanship observed by the special inspector.
3. **Review shop drawings and submit design changes.** The engineer or architect of record shall acknowledge and approve shop drawings that may detail structural information, shall submit to the building official and to the special inspection agency written approval of any verbally approved deviations from the approved plans, and shall submit revised plans for building official approval as required.

D. Contractor Responsibilities:

1. **Notify the special inspector.** The contractor is responsible for notifying the special inspection agency regarding individual inspections for items listed on the attached schedule and as noted on the building department approved plans. Adequate notice shall be provided so the special inspector has time to become familiar with the project.
2. **Provide access to approved plans.** The contractor is responsible for providing the special inspector access to approved plans on the jobsite.
3. **Retain special inspection records.** Upon request, the contractor is also responsible for retaining at the job site all special inspection records completed by the special inspector.

E. Building Division Responsibilities:

1. **Approve special inspection program.** The building division shall approve all special inspectors and special inspection requirements.
2. **Enforce special inspection.** Work requiring special inspection and the performance of special inspectors shall be monitored by the building inspector. His/her approval, in addition to that of the special inspector, must be obtained prior to placement of concrete, covering of structural steel, or other similar activities.
3. **Review inspection reports.** The building official should review special inspection progress and final reports.

4. **Perform final inspection.** The building official should perform the final inspection and approval for a project [IBC Sec. 109.3.10] after the final special inspection report has been reviewed and approved. The building official may issue a certificate of occupancy after all special inspection reports and the final report have been submitted and accepted.

ACKNOWLEDGMENTS

I have read and agree to comply with the terms and conditions of this agreement.

Owner: (printed name and title)

(Signature and date)

Project Engineer/Architect: (printed name and title)

(Signature and date)

Soils Engineer: (printed name and title)

(Signature and date)

Contractor: (printed name and title)

(Signature and date)

Special Inspection Agency:
(printed name and title)

(Signature and date)

ACCEPTED FOR THE BUILDING DIVISION:

By: (printed name)

(Signature and date)

**REGISTERED PROFESSIONAL
SPECIAL INSPECTION AGENCY
QUALIFICATION FORM**

Project Name: _____

Project Address: _____

STATEMENT OF UNDERSTANDING

I, _____
(print name of Registered Professional)

hereby affirm that I have been employed by _____

(name of Special Inspection Agency)

(address, city, state and zip code)

to supervise the performance of special inspection at the above stated project and that I am aware that in supervising this inspection, I am acting as an agent for the jurisdiction and responsible to the Building Official. I am aware that my duties include assurance of compliance with the approved (stamped) plans, specifications, the International Building Code and local ordinances and recognized construction practices which do not conflict with any of the aforementioned documents. I will submit written reports to the Building Official as required.

(Registered Professional signature)
(Affix professional wet seal and date)

INDIVIDUAL SPECIAL INSPECTOR QUALIFICATION FORM

Project Name: _____

Project Address: _____

Each special inspector shall complete this form and enclose a photocopy of their current special inspection pocket certificate card(s) for each inspection category desired.

STATEMENT OF UNDERSTANDING

I, _____
(print individual's name)

hereby affirm that I have been employed by _____

(print name of Special Inspection Agency)

(address, city, state and zip code)

to perform special inspection at the above stated project and that I am aware that in performing this inspection, I am acting as an agent for the jurisdiction and responsible to the Building Official, I am aware that my duties include assurance of compliance with the approved (stamped) plans, specifications, the International Building Code and local ordinances and recognized construction practices which do not conflict with any of the aforementioned documents. I will submit written reports to the Building Official as required.

(Signature)

Structural Masonry	_____ ICC (certificate no.)	_____ (expiration date)
Structural Steel & Welding	_____ ICC (certificate no.)	_____ (expiration date)
Spray-Applied Fireproofing	_____ ICC (certificate no.)	_____ (expiration date)
Reinforced Concrete	_____ ICC (certificate no.)	_____ (expiration date)
Pre-stressed Concrete	_____ ICC (certificate no.)	_____ (expiration date)
Other:	_____ ICC (certificate no.)	_____ (expiration date)

TASK LISTS FOR SPECIAL INSPECTORS

A. GENERAL REQUIREMENTS (FOR ALL INSPECTION DISCIPLINES)

Includes the general duties and responsibilities of the special inspector as follows:
Review approved plans and specifications for special-inspection requirements. Comply with special-inspection requirements of the enforcing jurisdiction. Notify the contractor of deviations from approved plans and specifications. If the deviations are uncorrected, notify the architect or engineer of record and the Building Official. Submit progress reports to the architect or engineer of record and the Building Official, describing tests which were performed and compliance of work. Submit final summary report stating whether work requiring special inspection was in conformance with the approved plans and applicable provisions of the building code.

B. REINFORCED CONCRETE

1) General Requirements (See item A above)

2) Concrete Quality

Verify that individual batch tickets indicate delivery of the approved mix as specified. Verify time limits of mixing, total water added, and proper consistency and workability for placement. Determine the required type, quantity, and frequency of tests to be performed on fresh and hardened concrete. Observe sampling of concrete, field testing of fresh concrete, and making of test specimens. Provide or arrange for proper specimen identification, site storage and protection, and transportation to the testing laboratory. Provide or arrange for communication of field-testing results to the architect or engineer of record and to the Building Official.

3) Reinforcement

Verify that reinforcing steels are of the type, grade, and size specified and are in conformance with acceptable quality standards. Ensure that reinforcing steel is free of oil, dirt, and rust, and that steel is properly coated and/or sheathed as specified. Verify that reinforcing steels are located within acceptable tolerances, and are adequately supported and secured to prevent displacement during concrete placement. Verify that minimum concrete cover is provided. Verify that placement of reinforcing steel (or ducts) complies with required spacing, profile and quantity requirements, as indicated by both the approved plans and installation drawings. Verify that hooks, bends, ties, stirrups, and supplemental reinforcement are fabricated and placed as specified. Verify that required lap lengths, stagger, and offsets are provided. Verify proper installation of approved mechanical connections per the manufacturer's instruction and/or evaluation reports. Ensure that all welds of reinforcing steel and other weldments are as specified, and have been inspected and approved by an approved welding inspector.

4) Formwork, Joints, and Embeds

Verify that formwork will provide concrete elements of the specified size and shape. Verify that the location and preparation of construction joints are in accordance with the approved plans, specifications, and building code requirements. Verify that the type, quantity, size, spacing, and location of embedded items are as specified.

5) Concrete Placement, Protection, and Curing

Verify acceptable condition of the place of deposit before the concrete is placed. Verify that methods of conveying and depositing concrete avoid contamination and segregation of the mix. Verify that concrete is being properly consolidated during placement. Verify that concrete is protected from temperature extremes and determine that proper curing is initiated.

C. PRESTRESSED CONCRETE (All items listed above under Reinforced Concrete are considered prerequisite to the knowledge for special inspection of prestressed concrete.)

1. General Requirements (See item A above)

2. Concrete Quality

Includes verification of concrete ingredients, delivery of the approved mix, mix-time limits and water content; determination of the required type, quantity, and frequency of tests to be performed; sampling and field testing of fresh concrete; making and handling of test specimens; and verification of concrete strength prior to tendon stressing.

3. Reinforcement

Includes verification of pre-stressing steel type, grade, size and quality; tendon system fabrication; pre-stressing steel condition; location and placement of pre-stressing steel, tendons or ducts; fabrication and placement of hooks, bends, ties, stirrups and supplemental reinforcement; and lap splices, proper installation of mechanical connections, weldments, and rock and soil anchors.

4. Pre-stressing and Grouting

Includes inspection for proper equipment calibration, stressing/tensioning sequences, jacking forces and acceptable elongation; requirements for protection of tendons and anchorages; size and placement of post-tensioning ducts; and compliance with specifications for grout materials, strength, and grouting pressures.

5. Formwork, Joints and Embeds

Verification that formwork will provide concrete elements of specified size and shape; location and preparation of construction joints are as specified and comply with the building code; and the type, quantity, size, spacing, and location of embedded items are as specified.

6. Concrete Placement, Protection, and Curing

Includes verification of acceptable preplacement condition; methods of conveying and depositing concrete avoid contamination and segregation of the mix; concrete is being properly consolidated during placement; concrete is protected from temperature extremes; and proper curing is initiated.

D. STRUCTURAL MASONRY

1. General Requirements (See item A above)

2. Masonry Quality

Verification that masonry materials are the type specified; mortar and grout are properly mixed, placed within time limits and properly stored; masonry unit prism strength meets specifications and that appropriate type and frequency of material strengths tests are performed; and field testing and sampling are observed and samples are correctly identified, stored, protected and transported to the laboratory.

3. Reinforcement

Inspects to ensure quality, tolerances, clearances, placement, spacing, and quantity of reinforcing steel comply with codes and specifications; verifies reinforcement details are fabricated and placed as specified; and verifies approved lap splices are installed as specified.

4. Masonry Placement

Includes substrate condition, mortar joints, masonry unit placement per approved plans; type, quantity, size, spacing, and location of embedded items; weldment inspection; location and preparation of construction joints; and protection of masonry from temperature extremes and adverse weather conditions.

5. Grout Placement

Inspection of grout spaces prior to placement, provision of cleanouts, masonry unit condition; utilization of proper methods of conveying and depositing grout; grout lift and time limit requirements; and adequate consolidation of grout.

F. STRUCTURAL STEEL AND WELDING

1. General Requirements (See item A above)

2. Material Sampling, Testing, and Verification

Includes identification and inspection of structural steel and welding materials; determination of type, quantity and frequency of destructive and nondestructive tests to be performed; and sampling.

3. High-strength Bolting

Verification that faying surfaces at connection utilizing high-strength bolts are in compliance with applicable standards; correct type, size and location of bolts and bolt holes, nuts and washers are specified for type of connection; bolts are installed using approved method and sequence of tightening; and bolt tension tests are performed per applicable standards.

4. Structural, Reinforcing, and Sheet Steel Welding

Includes job safety, welding qualification requirements, welding types and locations, joint preparation and fit-up, welding procedures and processes, welding equipment calibration, inspection of weld repairs and heat straightening of structural members, and verification of weld quality and that fabricated elements are within tolerances.

5. Erection (plan reading)

Verify that structural steel erection sequence tolerances, orientation and frame member sizes comply with plans and specifications; column base plates are seated and fastened correctly; and specified clearance is provided for grouting.

G. SPRAY-APPLIED FIREPROOFING

1. General Requirements (See item A above)

2. Materials, Preparation, Application, and Testing

Verification that materials are of type specified, properly stored and approved; verification that the substrate has been properly prepared and free of conditions that may prevent adhesion; identification of members to be fireproofed, the minimum required coverage and thickness of the fireproofing, and the condition of the finished application; and determination of the required tests and observation of sampling, field testing, and fabrication of test specimens.

EXPRESS FORM FOR RESIDENTIAL SPECIAL INSPECTION
 To be completed by project design Engineer or Architect

REQUIRED		CONTINUOUS	PERIODIC	IBC
	STRUCTURAL STEEL			1705.2
	HIGH STRENGTH BOLTS			AISC 360
	WELDING			AISC 360 1705.2.2.1
	MASONRY			1705.4
	STRUCTURAL WOOD			1705.10.1
	EPOXY ANCHORS			1705.1.1
	SIPS			PER MANUFAC.
	PREMANUFACTURED SHEAR WALLS			PER MANUFAC.
	INTUMESCENT COATINGS			1705.14
	EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)			1705.15
	SOILS			1705.6

PLEASE SIGN AND WET SEAL.

Design Engineer _____ Date _____

REQUIRED SPECIAL INSPECTIONS PER 2012 IBC 1704

2012 IBC SECTION	TYPE OF INSPECTION	APPLICABLE	SPECIFIC INSPECTION TYPES REQUIRED
1705.1.1	SPECIAL CASES SEISMIC RESISTANCE		
1705.2	STEEL CONSTRUCTION		
1705.2(a) AISC 360	WELDING		
1705.2(b) AISC 360	HIGH STRENGTH BOLTS		
1705.2(c) AISC 360	FABRICATORS		
1705.3	CONCRETE:		
1705.4	MASONRY:		
1705.5	WOOD CONSTRUCTION		
1705.6	SOILS		
1705.7	DRIVEN DEEP FOUNDATIONS		
1705.8	CAST IN PLACE, DEEP FOUNDATIONS		
1705.9	HELICAL PILE FOUNDATIONS		
1705.10	WIND RESISTANCE		
1705.11-1705.11.8	SEISMIC RESISTANCE		
1705.12	TESTING AND QUALIFICATION FOR SEISMIC RESISTANCE		
1705.13	SPRAYED FIRE- RESISTANT MATERIALS		
1705.14	MASTIC & INTUMESCENT COATINGS		
1705.15	EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)		
1705.16	FIRE-RESISTANT PENETRATIONS & JOINTS		
1705.17	SMOKE CONTROL		

CONCRETE; VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	IBC REFERENCE
INSPECTION OF REINFORCING STEEL,INCLUDING PRESTRESSING TENDONS AND PLACEMENT		X	1910.4
INSPECTION OF REINFORCING STEEL WELDING SEE IBC T-1705.2.2 (2b)			
INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED		X	1908.5, 1909.1
INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS		X	1909.1
VERIFYING USE OF REQUIRED DESIGN MIX		X	1904.2, 1910.2, 1910.3
FABRICATE SPECIMENS FOR STRENGTH TESTS, PREFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE TEMPERATURE OF CONCRETE	X		1910.10
INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUE	X		1910.6 1910.7 1910.8
INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		X	1910.9
INSPECTION OF PRESTRESSED CONCRETE: a) APPLICATION OF PRESTRESSING FORCES b) GROUTING OF BONDED PRESTRESSING TENDONS IN THE 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	
INSPECTION OF FORM WORK FOR SHAPE, LOCATION AND DIMENSIONS		X	

MASONRY	CONTINUOUS	PERIODIC	TMS 402/ ASCE 5 ACI 530/ASCE 5	TMS 402/ ASCE 6 ACI 530.1/ASCE6	CHECK IF REQUIRED
VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS		X		ART. 1.5	
AS MASONRY BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:					
a) PROPORTIONS OF SITE-PREPARED MORTAR		X		ART. 2.1, 2.6A	
b) CONSTRUCTION OF MORTAR JOINTS		X		ART. 3.3 B	
c) GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 2.4 B, 2.4H	
d) LOCATION OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 3.4, 3.6	
e) PRESTRESSING TECHNIQUE		X		ART. 3.6 B	
f) PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X(b)	X(c)		ART 2.1 C	
PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:					
a)GROUT SPACE		X		ART. 3.2 D, 3.2 F	
b) GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 1.16	ART. 2.4, 3.4	
c) PLACEMENT OF REINFORCEMENT,CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 1.16	ART. 3.2 E, 3.4, 3.6 A	
d) PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS		X		ART. 2.6 B, 2.4 G.1.b	
e) CONSTRUCTION OF MORTAR JOINTS		X		ART. 3.3 B	
VERIFY DURING CONSTRUCTION					
a) SIZE AND LOCATION OF STRUCTURAL ELEMENTS		X		ART. 3.3 F	

b) TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION		X	SEC. 1.16.4.3, 1.17.1		
c) WELDING OF REINFORCEMENT	X		SEC. 2.1.8.7.2' 3.3.3.4(c) 8.3.3.4(b)		
d) PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER <40 OR HOT WEATHER >90		X		ART.1.8 C, 1.8 D	
e) APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	X			ART. 3.6 B	
f) PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	X			ART. 3.5, 3.6.C	
g) PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X(b)	X(c)		ART. 3.3 B.8	
OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		X		ART. 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3 1.4 B.3, 1.4 B.4	

(b) REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY

(c) REQUIRED AFTER THE FIRST 5000 SQUARE FEET OF AAC MASONRY

