

## **BUILDING CODE DIRECTIVE NO. 19**

### **SUBJECT: SPECIAL INSPECTIONS**

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"Special Inspection," when required, is provided in addition to the inspection conducted by this Division, and shall not be construed to relieve the owner or his authorized agent from requesting the periodic and called inspections required by Section 106 of the Tempe Administrative Code as adopted.

**When Required.** "Special Inspection" is required on the types of construction specified in Section 1704 International Building Code, as adopted. **(See attached International Building Code Section 1704.)** "Special Inspector(s)" shall be provided by, or under the supervision of an Architect or Engineer in responsible charge of the structural inspection for which "Special Inspection" is required, subject to the following conditions:

1. **Notification:** (Prior to the Building Permit) The owner or his authorized agent shall notify the Development Services Division in writing on the form provided, the name of the Architect or Engineer who will carry out the required inspection. The responsible Architect or Engineer shall notify the Division of any changes of "Special Inspection(s)" prior to conducting the inspections.
2. **Certificate of Responsibility:** The Architect or Engineer in responsible charge of the "Special Inspection(s)" shall so certify to the Division in writing on the form provided prior to the issuance of the Building Permit, and shall notify the Division immediately if terminated prior to completion of the work, for which "Special Inspection(s)" is required.
3. **Qualification:** No person(s) shall be assigned to carry out the duties of the "Special Inspector(s)" unless thoroughly qualified by knowledge and experience to render full, complete and competent inspection. It shall be the responsibility of the Architect or Engineer in responsible charge of the special inspection to satisfy the duties and responsibilities as stated in Section 106.4 of the Tempe Administrative Code.
4. **Inspection and Reports:** The Architect or Engineer in responsible charge of the "Special Inspection(s)" or the designated "Special Inspector(s)" shall provide continuous, competent and complete inspection on the work for which "Special Inspection(s)" is required in accordance with Sections 1704 and 106.4 and shall submit reports to the Division's Inspection Section stating his/her approval of the work as it progresses, but not less than monthly.  
The "Special Inspector(s)" shall notify the Division immediately upon detection of all discrepancies involved in the "Special Inspections" that have not been corrected in accordance with the approved plans and specifications prior to proceeding with the work.

When it is determined that construction is not in conformance with the approved plan, such construction shall be brought into conformance, and where required, a revision shall be submitted to the Division's Plan Check Section for approval prior to proceeding with the work.

*Inspection reports for items, such as adhesive anchoring systems for bolts and reinforcement bars, designated by an evaluation service as requiring "Special Inspection" shall list and record all the information as outlined in the evaluation service report during installation of the product. Typical requirements include temperature at installation, size of drill bit, depth and cleanliness of hole, edge distance, proper mixing, adhesive product description, including name and expiration date. Check each products-specific report for the required information to be recorded.*

5. **Certificate of Compliance:** Upon completion of the work for which "Special Inspection(s)" is required the Architect or Engineer in responsible charge of the "Special Inspection(s)" shall certify to the Division on the form provided, that the work for which "Special Inspection(s)" is required has been completed in accordance with the requirements of the building code and the approved final plans.

**Note: A City of Tempe Building Safety inspection is not required for adhesive anchoring systems installed with "Special Inspections" that conform to all requirements of their specific evaluation report as designated in items 1-5 listed above.**



## SPECIAL INSPECTION CERTIFICATE

### A. Project Identification

Project: \_\_\_\_\_ Date: \_\_\_\_\_

Address: \_\_\_\_\_ Tracking No: \_\_\_\_\_

Permit No: \_\_\_\_\_

### B. Notification of Special Inspection by Owner

In compliance with Section 106.4 of the Tempe Administrative Code and Chapter 17 of the IBC as adopted, which requires the owner or the registered design professional in responsible charge acting as the owner's agent, but not the contractor or other persons responsible for the work, to employ a Special Inspector to be present at all times during the construction of work, I do hereby designate the (Architect) or (Engineer) noted in Part C to be in responsible charge of the Special Inspection on the above project.

Signature (Owner) (Agent)	Title	Print (Owner) (Agent) name
Address		Phone No.

### C. Special Inspection Responsibility

I certify that I am familiar with the above-named project. In accordance with IBC Chapter 17 and the Tempe Building Codes, I hereby assume full responsibility for the Special Inspection(s)/Inspector(s) for the following type(s) of construction inspections.

WORK WHICH REQUIRES SPECIAL INSPECTION	
1. <input type="checkbox"/> Fabricators	15. <input type="checkbox"/> Smoke Control Systems
2. <input type="checkbox"/> Steel Construction	16. <input type="checkbox"/> Special Cases:
3. <input type="checkbox"/> Concrete Construction	17. <input type="checkbox"/> Special Cases:
4. <input type="checkbox"/> Masonry Construction	18. <input type="checkbox"/> Special Cases:
5. <input type="checkbox"/> Wood Construction	19. <input type="checkbox"/> Special Cases:
6. <input type="checkbox"/> Soils	Arizona Registrant Seal
7. <input type="checkbox"/> Driven deep/Cast-in Place Deep or Helical pile Foundations	
8. <input type="checkbox"/> Special Wind Resistance	
9. <input type="checkbox"/> Special Seismic Resistance	
10. <input type="checkbox"/> Testing & Qualifications – Seismic Resistance	
11. <input type="checkbox"/> Sprayed Fire-Resistive Materials	
12. <input type="checkbox"/> Mastic & Intumescent Fire-Resistive Coatings	
13. <input type="checkbox"/> Exterior Insulation & Finish Systems (EIFS)	
14. <input type="checkbox"/> Fire-Resistant Penetrations & Joints	

Print (Architect) (Engineer) Name	Company Name
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### D. Certificate of Compliance

I certify that, to the best of my knowledge, the special inspections noted above were conducted in accordance with the applicable provisions of Tempe Building Codes, the structural requirements of the Tempe Building Code and the approved plans and specifications insofar as the portion of the work requiring special inspection is concerned, except for those discrepancies previously reported and to the best of my knowledge have been resolved. A guarantee that the building has been constructed in full accord with the plans and specifications is neither intended nor implied.

Arizona Registrant Seal

## INSTRUCTIONS FOR PREPARATION

Special Inspection Certificates shall be completed as instructed below. Submit the original form or a legible copy to the Development Services Division.

### A. PROJECT IDENTIFICATION

1. Legibly print the project name and address, date completed and tracking number where specified. (*Tracking # example: DS090000*)

### B. NOTIFICATION OF SPECIAL INSPECTION BY OWNER

1. Signature of the project owner or owner's legal agent (circle one) required
2. Legibly print the name of the project owner or agent (circle one), title and provide contact information.

### C. SPECIAL INSPECTION RESPONSIBILITY

The designated registrant shall:

1. Check off the special inspection(s) required by the Building Official, International Building Code Chapter 17 and approved plans. See page three (3) & four (4) to see subcategories or requirements under each main category.
  - a. Special inspections not listed; such as, adhesive anchors or other inspections deemed necessary by the Building Official, shall be indicated under inspection #16, 17, 18 or 19 and noted after "Special Cases."
2. Print name of Architect/Engineer (circle one) overseeing the special inspections and company name
3. Seal, sign, date and include registration expiration date.

### D. CERTIFICATE OF COMPLIANCE

DO **NOT** COMPLETE THIS SECTION YET. This portion is to be completed *after* the required special inspection(s) has been performed. Submit completed form prior to final inspection approval.

### **CHANGES OF RESPONSIBLE PARTY OR SPECIAL INSPECTOR**

*The Engineer or registered design professional shall notify the Development Services Division in writing immediately if terminated prior to completion of the work, for which "Special Inspection(s)" is required.*

**NOTE:** *If the change of responsible party occurs within the same firm, a letter from a principal of the firm identifying the new responsible party shall be submitted to the Development Services Division within two business days of the change. **A new Special Inspection Certificate form will not be required to be completed.***

*If the change in responsible party is **not within** the same firm, **a new Special Inspection Certificate form must be completed** and submitted to the Development Services Division within two business days of the change.*

# Main Special Inspection Categories and Subcategories

1. Fabricator
  - Fabrication and implementation procedures.
  - Fabricator approval.
2. Steel construction. See Table.
  - Structural steel.
  - Steel construction other than structural steel.
  - Welding.
    - Cold-formed steel.
    - Reinforcing steel.
  - Cold-formed steel trusses spanning 60 feet or greater.
3. Concrete construction. See Table.
  - Materials.
4. Masonry construction. See Table.
  - Empirically designed masonry, glass unit masonry and masonry veneer in Risk Category IV.
  - Vertical masonry foundation elements.
5. Wood construction.
  - High-load diaphragms.
  - Metal-plate-connected wood trusses spanning 60 feet or greater.
6. Soils. See Table.
7. Driven deep foundations/Cast-in-place deep foundations/ Helical pile foundations See Tables.
8. Special inspections for wind resistance - Seismic Design Category C, D, E or F
  - Structural wood.
  - Cold-formed steel light-frame construction.
  - Wind-resisting components.
9. Special inspections for seismic resistance.
  - Structural steel.
  - Structural wood.
  - Cold-formed steel light-frame construction.
  - Designated seismic systems.
  - Architectural components - Seismic Design Category D, E or F
    - Access floors - Seismic Design Category D, E or F
  - Mechanical and electrical components - Seismic Design Category C, D, E or F
  - Storage racks - Seismic Design Category D, E or F
  - Seismic isolation systems.
10. Testing and qualification for seismic resistance.
  - Concrete reinforcement.
  - Structural steel.
  - Seismic certification of nonstructural components.
  - Seismic isolation systems.
11. Sprayed fire-resistant materials.
  - Physical and visual tests.
  - Structural member surface conditions.
  - Application.

- Thickness.
    - Minimum allowable thickness.
    - Floor, roof and wall assemblies.
    - Cellular decks.
    - Fluted decks.
    - Structural members.
    - Beams and girders.
    - Joists and trusses.
    - Wide-flanged columns.
    - Hollow structural section and pipe columns.
  - Density.
  - Bond strength.
    - Floor, roof and wall assemblies.
    - Structural members.
    - Primer, paint and encapsulant bond tests.
12. Mastic and intumescent fire-resistant coatings.
13. Exterior insulation and finish systems (EIFS).
- Water-resistive barrier coating.
14. Fire-resistant penetrations and joints.
- Penetration firestops.
  - Fire-resistant joint systems.
15. Special inspection for smoke control.
- Testing scope.
  - Qualifications.
16. 17, 18 & 19. Special cases. Special inspections shall be required for proposed work that is, in the opinion of the Building Official, unusual in its nature, such as, but not limited to, the following examples:
- Adhesive/expansion anchors or other special anchoring systems.
  - Construction materials and systems that are alternatives to materials and systems prescribed by this code.
  - Unusual design applications of materials described in this code.
  - Materials and systems required to be installed in accordance with additional manufacturer's instructions that prescribe requirements not contained in this code or in standards referenced by this code.
  - Mechanical, Electrical or Plumbing systems or components as required by the Building Official