

City of Chula Vista
Building Division Inspection Division
Planning and Building Department
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# SPECIAL INSPECTION INSTRUCTIONS TO SPECIAL INSPECTORS/INSPECTION AGENCIES/TESTING LABS/HERS RATERS

#### 1. **PURPOSE**:

The purpose of this document is to inform special inspectors, inspection agencies, material testing labs and HERS raters\_hired for their services on building construction projects in the City of Chula Vista of building code regulations and City requirements related to special inspection and testing of construction material.

**Note:** Throughout this procedure, HERS (Home Energy Rating System) raters are to be considered special inspectors and the instructions outlined below apply to HERS raters as they apply to special inspectors unless noted otherwise.

### 2. **START WORK NOTIFICATION:**

Prior to the first day a special inspector is scheduled to be on the job site, he/she must do the following:

- 1. Notify the Inspection Section of the project, date and approximate time he/she is scheduled to be on the job site, and a phone number that he/she can be reached at (preferably his/her cell phone.) This can be accomplished by either calling in the information (619) 409-5868 or completing Form 4545 and faxing it to the Inspection Section (619) 216-7306. This information is needed to coordinate a time when the City inspector can meet the special inspector on site.
- 2. Fax a copy of his/her qualifications and current driver license/photo ID to the Inspection Section.

The two requirements shown above are also required when a replacement special inspector, other than the originally approved special inspector, takes over the project on a temporary or permanent basis.

Except for grading, smoke control, and other specialty inspections for which a certification is not required by law, special inspectors must be certified in their areas of expertise. The following table indicates required certification for each type of special inspection:

WORK REQUIRING SPECIAL INSPECTION	REQUIRED CERTIFICATION
Concrete, Reinforcing Steel, Special Concrete Moment Frame	ICBO - Reinforced Concrete
Shotcrete	ICBO - Reinforced Concrete
Insulating Concrete Fill, Reinforced Gypsum Concrete	ICBO - Reinforced Concrete
Bolts installed in Concrete (per Section 1701.5, item 2.)	ICBO - Reinforced Concrete
Structural Masonry	ICBO - Structural Masonry
Prestress/Post-Tension Steel Tendons	ICBO - Prestressed Concrete
Structural Welding	ICBO - Structural Steel & Welding or AWS
High-strength Bolting	ICBO - Structural Steel & Welding

Spray-applied Fireproofing	ICBO - Spray-applied Fireproofing
Piling, Drilled Piers and Caissons	Reinforced Concrete + Soils Engineer/Engineering Geologist of record
Grading, Excavation and filing	Soils Engineer/Engineering Geologist or Grading*
Smoke-control System	Certified Air Balancing Technician + Mechanical Engineer of Record
HERS Rating	CHEERS certified HERS rater
Special cases when required by the Building Official or a product evaluation report	Based on the work requiring special inspection

<sup>\*</sup> The soils engineer or engineering geologist of record as an alternative must designate grading Special Inspector

**NOTE:** Design Professional of Record vs Special Inspector. Except for grading, smoke control, and other specialty inspections for which a certification is not required by law, the fact that a person is the architect or engineer of record should not be a factor in determining whether the person is qualified as a Special Inspector. If the architect or engineer is qualified as a Special Inspector by demonstrating satisfactory competence in a particular type of construction, it is acceptable for that architect or engineer to perform special inspection on a project.

## 3. **SCOPE OF AUTHORITY:**

The special inspector's authority is limited to the extent of providing special inspections for the types of work in the category in which he/she is certified for.

# The special inspector is <u>not authorized</u> to:

- A. Inspect or approve any work for which a building permit has not been issued.
- B. Infer/inform others that the special inspection is in lieu of City inspection and approval.
- C. Accept changes, revisions and substitutions to the approved permitted plans that have not been approved **in writing** by the Building Division.

#### 4. DUTIES AND RESPONSIBILITIES:

- A. The special inspector shall observe the work assigned for conformance to the approved permitted design drawings and specification.
- B. The special inspector shall verify compliance with the requirements of the California Building Code and other code related publications pertaining to special inspection. HERS raters shall verify compliance with the requirements of the California Energy Efficiency Standards.
- C. The special inspector shall bring all "discrepancies" to the immediate attention of the contractor for correction, then if uncorrected, to the Building Inspection Section, the engineer or architect of record, and the owner. The written report may be submitted by fax or delivered in person.
- D. The special inspector shall submit written inspection reports to the Building Inspection Section, to the engineer or architect of record and to other designated person(s).
- E. Prior to "Final" inspection, the special inspector shall submit to the Building Inspection Section a final signed report (Form 4543 Special Inspector/Inspection Agency/Testing Laboratory Final Report) stating that the work requiring special inspection is, to the best of his knowledge, in conformance to the approved plans and specifications and the applicable workmanship provisions of the California Building Code.
- F. Prior to "Final" inspection, HERS raters shall submit a completed and signed "CERTIFICATE OF FIELD VERIFICATION AND DIAGNOSTIC TESTING" (CF-4R) to the Building Inspection Section.

#### 5. SPECIAL INSPECTION AND MATERIAL TEST REPORT

For writing and submitting special inspection reports and for construction materials testing reports, the following information must be included (not applicable to HERS raters):

- A. The building permit number.
- B. Street Address
- C. **Scope of work Performed**. The reports must **clearly** and **legibly** state the scope of work performed. The reports must also define the area of work inspected/tested by physical location and/or grid lines, stories, etc., and the type of special inspection/testing performed at each location.
- D. **Statement of Compliance**. The report must clearly state work performed "was in compliance with the City approved permitted plans, details and specifications" or "was not in compliance with the City approved permitted plans, details and specifications".
- E. **Date & Time**. The reports must state the date of inspection and the time of arrival and departure from the job site. Also the date the material was sampled and the date it was tested.
- F. Reports must be consecutively numbered.
- G. Name & Signature with the certification number.
- H. Report Submittal Date. The Building Inspection Section and the engineer/architect of record must receive weekly inspection reports within five (5) calendar days after the date when special inspection was performed. The Building Inspection Section must receive material test reports within five (5) calendar days after the date when testing was performed. A copy of material test reports shall also be submitted to the architect/engineer of record.
- I. Deviations When the special inspector becomes aware of a deviation from the Building Code, the City approved permitted plans and specifications, or the standard construction practice, he/she shall bring this to the attention of the project superintendent and/or to the attention of the person responsible for doing the work immediately for corrective action. If no corrective action is taken the special inspector must report such deviations or non-compliance to the Building Inspection Section no later than the next business day by calling and submitting a written report. The written report may be submitted by fax or delivered in person.
- 6. **FIELD REPORT(S) SHOULD INCLUDE BUT NOT LIMITED TO (EXAMPLE OF DETAILED REPORTS):** (Not applicable to HERS raters)
  - A. Concrete Rebar grade, mix design, location of placed concrete, yardage, quantity of samples, time spent in truck drum, slump, temperature of concrete, location of samples taken, pumped or tailgated, consolidated, detail(s)/sheet numbers from approved set of plans, batch plant ticket number, concrete supplier, lap and clearances and general weather conditions.
  - B. **Epoxy** Hole depth, diameter, evaluation report number, expiration and batch number, location, approximate air temperature, detail(s)/sheet numbers from approved set of plans.

- C. **Welding** Welders to be certified by name and qualified welding positions, verified welding procedure specification (WPS), amps, volts, electrode(s), type of welds, location, preheat, interpass, fit-up, detail(s)/sheet numbers, mill certification(s); changes to procedure qualification record (PQR) may require re-qualification.
- D. **Structural masonry** location of C.M.U. wall, lift location, size of C.M.U., working stress design, reinforcing steel for size, grade, lap, clearance, location, cleanouts, consolidated and reconsolidate, location of samples prisms, grout, mortar, grout supplied by, ticket #, truck #, detail(s)/sheet numbers from approved set of plans.
- E. **Pre-stressed/post-tension concrete** see applicable requirements for reinforced concrete, concrete reached a compressive strength of \_\_?\_\_ PSI prior to tensioning operations, gauge and ram number were used with a recent calibration date of \_\_?\_\_, tendons stressed to a gauge pressure of \_\_? \_\_ PSI corresponding to \_\_? \_\_% of the tendons ultimate strength and anchored at \_\_? \_\_% of ultimate strength, individual tendon elongations, detail(s)/sheet numbers from approved set of plans ...etc.
- F. **Sprayed fireproofing** verify thickness, density and adhesion/cohesion strength of the sprayed fire-resistive material (SFRM) in accordance with approved plans, specifications and applicable ASTM standards, where a fireproofing schedule is not included in the approved plans and specifications, prepare a schedule and submit it to the Building Division. Document the names of SFRM applicators. Applicators shall be approved by the manufacturers of the materials specified, unless specifically approved by the design professional of record. Verify that the SFRM is as specified, verify that if primer is required, it is of the type recommended by the SFRM manufacture. Detail(s)/sheet numbers from approved set of plans...etc.
- G. **High strength bolting** verify type of joint specified (i.e. slip critical, non-slip critical) bolts, nuts and washers are in compliance to project specifications, installation procedures meet minimum bolt tensions required by code, faying surfaces are free from dirt. When applicable, verify bolt tensioning torque with a tensioning device such as the skidmore wilhelm at least once a day, once a shift and each time a new batch is opened. Bolts other than the snap-off variety or the direct tension indicator shall have tension/torque verified, detail(s)/sheet numbers from approve set of plans...

# 7. **SUB-CONTRACTING AND TESTING:**

- A. Special inspectors are strictly prohibited from employing, delegating and/or subcontracting their services to another special inspector after having been approved by the Building Inspection Section to work on a project. Substitute Special Inspectors, temporary or permanent, must be approved by the Building Inspection Section prior to performing special inspection.
- B. Concrete cylinder test specimen sampling slump test and other field related work associated with the concrete at the point of truck delivery may be preformed by an ACI-GRADE 1 field technician, provided: the approved special inspector for concrete is on the job site when the concrete truck arrives "and" the field technician's work is performed under supervision of the approved concrete special inspector.
- C. All construction materials and test specimen shall be tested by a testing laboratory listed on the City of San Diego or the City of Los Angeles most current list of approved testing laboratories. Testing laboratories are permitted to employ, delegate to and or sub-

contract their material testing services to another approved construction materials testing laboratory.

- D. Non-destructive testing of materials are considered to be testing and shall be performed by qualified/certified technicians employed by and under the approved construction materials testing laboratories supervision. Laboratories shall be on a current approved list from the City of San Diego or the City of Los Angeles.
- E. Special inspectors are strictly prohibited from performing non-destructive testing or testing of construction material or assemblies unless they are employed by an approved construction materials testing laboratory and are properly certified/qualified to perform such testing.
- F. The soils engineer or engineering geologist of record is deemed qualified as a special inspector for excavation and filling. As an alternative, the soils engineer or engineering geologist of record may designate another soils engineer or engineering geologist, or a certified grading inspector, to be the special inspector.

## 8. CONTINUOUS vs. PERIODIC SPECIAL INSPECTION:

# **Continuous Special Inspection:**

Continuous special inspection means that the special inspector is **on site at all times observing** the work requiring special inspection.

# **Periodic Special Inspection:**

Some inspections may be made on a periodic basis and satisfy the requirements of continuous inspection, provided the periodic scheduled inspection is performed as outlined in the project plans and specifications and approved by the Building Official.

#### NOTES:

- A. If there is no periodic inspection schedule outlined on the project permitted plans, Special inspections are required to be performed on a continuous basis.
- B. Periodic special inspection will **only** be permitted to be performed for the types of work which are allowed by the Building Code to be performed on a periodic basis in lieu of continuous basis.
- C. Periodic special inspections **must** include initial inspections, inspections of work in progress in accordance with the schedule outlined in the project plans and final inspections.

# 9. **SUSPEND OR TERMINATE:**

The Building Official or the Deputy Building Official may disqualify a special inspector, inspection agency, testing lab or HERS rater from working on projects in the City Of Chula Vista when he/she determines that the special inspector, inspection agency, testing lab or HERS rater is incompetent or in violation of building code regulations and/or City requirements. A special inspector, inspection agency, testing lab or HERS rater may appeal the decision of the Building Official or the Deputy Building Official to the Board of Appeals and Advisors.