EMPLOYMENT AND DUTIES OF A REGISTERED DEPUTY INSPECTOR

PURPOSE

Section 1704.1 of the Los Angeles Building Code (LABC) requires the use of a Registered (Licensed) Deputy Inspector for certain conditions of use of higher stress, methods of construction, and for certain grading or foundation earthwork in hillside areas. The purpose of this Information Bulletin is to clarify the employment criteria, duties and responsibilities of the Registered Deputy Inspector.

The Department of Building and Safety (LADBS) currently includes the “Types of Work” found in Section 1704; 1707; 1708 of the LABC in six (6) distinct classifications of Deputy Inspector. More information on the various disciplines is found in Part Two of this bulletin. Due to the product approval requirements involved in the installation of Methane Barriers, the classification of Deputy Methane Barrier Inspector has been added in accordance with Section 1704.15 of 2014 LABC. (See Part Two - “Methane Barriers” for details).

PART ONE

I. EMPLOYMENT

Section 1704.1 requires the owner or the registered design professional in responsible charge who is acting as owner's agent, shall employ one or more deputy inspectors to provide inspection during construction of types of work listed in Sections 1704 and 1707.

This section also requires the Deputy Inspector be approved by and responsible to the registered design professional in charge of the design of the structure.

II. DUTIES & RESPONSIBILITIES

The following forms and procedures are used to insure compliance with applicable sections of the Building Code which relate to duties of a Registered Deputy Inspector.*

A. Notification of the Commencement of Inspection (Code Section 1704.1.4 LABC)

This section requires that Registered Deputies notify LADBS of commencement of inspections of a job and type of inspection. It specifies that the notification be made no later than the last working day preceding the commencement of inspection. This notification should be made to the “Call Center” between 7:00 A.M. and 4:00 P.M. You
may dial (213) 473-3231 for inspection requests only. The Call Center phone number is 3-1-1.

Be prepared to give the operator the following information:

i. The fifteen digit permit number for the project to be inspected
ii. The project address
iii. Your name and phone number (cell phone preferred)
iv. Registration number
v. Type of work to be inspected
vi. The date and time you will be on the job site

III. Registered Deputy Building Inspector's Certificate of Compliance (LADBS INForm.07) [Code Section 1704.1.2 and 1704.1.4]

The requirements in completing the report are as follows:

1. The Registered Deputy Inspector shall report, as directed, to the superintendent of the building, noting all violations (See “IV” section below) of the code and any other information as may be required.
   (a) The approved inspection reporting form, commonly known as the LADBS INForm.07, is only available on the Department web site www.ladbs.org and must be used. The form provides space for listing the work which the Deputy Inspector has inspected, approved and is certifying. No other Deputy Inspector Certificates of Compliance, including copies and computer print-outs by test labs, will be accepted in place of the LADBS INForm.07 form.
   (b) Any Deputy who is on a job for one week or less shall file a LADBS INForm.07 report form immediately upon the conclusion of their tenure on that job, certifying to everything inspected and approved by the Deputy during employment there. The Deputy should give care in filling out the LADBS INForm.07 form by filling it out completely, and carefully reading over and checking each of the entries. The Deputy Inspector shall date, sign and print the name and Deputy Inspector registration number in a readable and legible manner.
   (c) A Deputy whose tenure on a job is longer than a week shall file a report each week covering all work for which the Deputy is responsible and which has been approved by the Deputy for that week.
   (d) A final report shall be filed upon completion of the job or tenure on the job even though less than a week has elapsed since the last report.
   (e) At the conclusion of the duties of the Deputy Inspector on any project which has been completed by the code, the Registered Deputy Inspector shall submit a report of the work inspected to LADBS.
   (f) Nothing shall preclude the Department from requiring daily inspection reports or for each significant portion of the project.
2. When the placement of steel reinforcement bars or tendons in concrete slabs is inspected by one Deputy and the placement of concrete is to be inspected by another deputy, the first Deputy shall fill out a LADBS INForm.07 form for the portion of work approved by the first deputy. A copy shall be posted on the job in the construction site office in which the approved plans are kept. The original shall be sent to the district or branch office of LADBS from which the job is inspected.

3. If the first Deputy does not leave a LADBS INForm.07 on the job, either because the work was not completed or was improperly done, the subsequent Deputy must inspect all steel reinforcement in the area to be covered and not approve concrete to be placed until the reinforcing steel in question can be approved.

4. Each Deputy must certify the work that has been personally inspected and approved by said deputy. All work requiring inspection by a Deputy Inspector must be certified by a deputy. There must be no gaps in certification in cases in which one Deputy succeeds another or in which two or more deputies share inspection responsibilities in any designated area.

5. Methane Barrier Inspectors shall indicate that the barrier (or portion inspected) complies with both the Manufacturer's Specifications and the LADBS Research Report number on the LADBS INForm.07.

IV. Registered Deputy Building Inspection CORRECTION NOTICE (Code Section 1704.1.2 LABC)

The Deputy building inspector CORRECTION NOTICE (INForm.02) forms are only available on the department web site www.ladbs.org and must be used. These forms shall be issued in quadruplicate (four copies), whenever the Deputy encounters violations (within the Deputy's jurisdiction) that require correction, but the builder has failed to correct. The distribution of the four (4) copies of this notice is as follows:

Copy 1 - Department of Building and Safety (City building inspector);

Copy 2 - Job engineer or architect responsible for the design of the inspected project, the geologic or soils engineering firm providing technical design data for the inspected project, or the inspection/test firm;

Copy 3 - Contractor or subcontractor that performed the work in violation; and

Copy 4 - Deputy building inspector copy should be kept for the owner records and possible future use.
V. Architect's, Engineer's, or Geologist's CERTIFICATE OF COMPLIANCE (Section 1704.17 LABC)

This section requires the Registered Deputy Building Inspector be approved by and be responsible to the architectural or engineering firm in responsible charge of the design of the structure, or in the case of the Registered Deputy Grading Inspector, be approved by and be responsible to the geologic or soils engineering firm providing technical design data for the project.

The Registered Deputy Building Inspector is also responsible to LADBS to the extent outlined in Section 1704.3 and this Information Bulletin.

To insure compliance, the responsible architectural or engineering firm or the geologic or soils engineering firm must sign the CERTIFICATE OF COMPLIANCE (IN/Form.09) [Code Section 1704; 1707] at the completion of the project stating that the Registered Deputy or Deputies were responsible to them. Therefore, it is important that the responsible architectural or engineering firm or the geologic or soils engineering firm approve the Registered Deputy Inspector prior to the time the Deputy commences the assigned duties, and also that they know when the Deputy first reports to the job.

VI. MAKING FALSE STATEMENT TO LADBS

Section 103.4 LABC states, “It shall be unlawful for any person, authorized by LADBS to perform inspections, to make a false or misleading statement, or misrepresentation in any writing submitted to LADBS. Every violation of this section is punishable as a misdemeanor.”

PART TWO

I. PERFORMANCE

The following information is provided to establish some, but not all, of the tasks and tests that are among the responsibilities of a deputy. Each Deputy classification is unique to a specific type of construction. Regardless of the particular discipline being practiced, it is the duty of the Deputy Inspector to assure that compliance has been obtained. In all cases the Deputy Inspector should arrive on the job in sufficient time to verify the permit information, check for prior inspections and/or approvals by the City Inspector or previous Deputy Inspectors, check the quality of all materials and become familiar with the plans and specifications.
A. CONCRETE

1. All materials shall conform with the Specifications for Tests and Materials shown in Section 1903 of the Los Angeles Building Code.

2. Soil and zoning inspection shall be approved by the City building inspector before placement of reinforcement or concrete in footings. These inspections should be verified in advance to avoid unnecessary delays to the contractor.

3. Check the concrete mix designs when noted on the approved plans and for compliance with LADBS standards for “Concrete Quality and Mix Designs” (Information Bulletin P/BC 2014-031). Delivery slips, or trip tickets, from batch plants should also be checked and compared with the concrete mix design. The trip ticket is required to have specific information, see A.S.T.M. C-94. The mix design designation should appear on the ticket as well as the weights of the cement, fine and coarse aggregates and total water (including free moisture). The maximum water allowed in a mix may not be exceeded unless specifically authorized by the engineer responsible for the mix design.

4. Admixtures must be strictly monitored for acceptability by LADBS and building code. The use of calcium chloride, is prohibited in concrete with permanent galvanized forms (such as decking), prestressed concrete or concrete with embedded aluminum. Slump and cylinder tests shall be taken at the point of discharge from the mixer in conformance with A.S.T.M. C-143 and C-31, respectively. For other tests and frequency of strength tests of concrete and its components refer Information Bulletin P/BC 2014-061.

5. Reinforcing steel (rebar) inspection includes the proper identification of the steel, spacing, supports, and clearances. Specifications for rebar are in A.S.T.M. A-615, A-996 (formerly A-616 and A-617) and A-706.

6. Mixing and placing equipment shall be in good condition and inspected to assure that the concrete is thoroughly consolidated, conveyed to the location of final deposit and placed without segregation. Concrete with coarse aggregates may require the use of a tremie when drops over six feet are involved.

7. Deputy Inspectors for prestressed or post-tensioned concrete require a separate qualification examination and certification. The general concrete inspection requirements apply except that the specification for stranded reinforcement is A.S.T.M. A-416.

8. Shotcrete, is a premixed concrete discharged into equipment capable of delivering the mix under high velocity air pressure through a nozzle and depositing it against forms or earth. Inspection of shotcrete is considered a separate qualification and requires additional certification.
B. MASONRY

1. All structural masonry requires a prism test to be completed at least 28 days prior to the beginning of construction or a record of 30 prism tests approved by the building official. The exception is if the design engineer has used the "Unit Strength Method" or the design is adjusted for half stress.

2. All materials shall conform with the Material Standards shown in section 2103 of the Los Angeles Building Code.

3. Verify mortar aggregate is clean, washed sand conforming with ASTM Standard C-144

4. Check cement bags for cement type; only Portland cement and blended cement is acceptable in seismic site classifications. Type N mortar and masonry cement mortar shall not be used. Section 11.17.4.4.2.2 TMS 402-08/ACI 530-08/ASCE 5-08. Table . SC-1 TMS 602-08/ACI 530.1-08 / ASCE 6-08-08. Plastic cement and masonry cement are not to be used in mortar or grout mixes.

5. Water supplied from city service lines should be used. Water from other sources should be tested before use to verify that it contains no deleterious amounts of acids, alkalies or organic substances.

6. Additives (including colors) and admixtures (including air entrainment) shall not be used without prior approval from LADBS and design engineer. Antifreeze compounds and aluminum grouting equipment are prohibited. General construction requirements for masonry are found in section 2104 LABC. Section 2105 describes quality assurance and testing. Specific requirements for various masonry types and seismic site classification A, B, C, D, E, an F shall be reviewed, determined and compared with site conditions. If soils reports are not available, class D is used. See section 1613.5.2 and Table 1613.5.2.

7. In filled cell construction the continuity of cells to be filled must be maintained. When walls are not solid grouted and offsets in cells occur the effectiveness of the reinforcement is eliminated. Care should be taken when grouting to assure full coverage of both horizontal and vertical reinforcement.

8. All grout shall be consolidated using mechanical vibration equipment during placing before loss of plasticity. Suitable methods shall be used to secure reinforcement to prevent displacement during grouting. When cleanouts are used they shall be at the bottom of all cells containing reinforcement and large enough to permit removal of all debris. Cleanouts shall be effectively sealed after inspection and before grouting.
C. STRUCTURAL STEEL AND WELDING

1. Check structural steel delivered to the jobsite from an offsite fabricator to determine if it is currently licensed as a fabricator by LADBS. Identification of materials used in offsite fabrication should be verified according to section 2203 of the LAMC and compared to the approved plans and specifications. Department standards require an approved fabricator to label each piece with the shop name and license number.

2. Inspection of fabricated material, for an onsite deputy, may include visual checking of shop welds, joint preparation, faying surfaces, high strength steel identification and color codes of high strength steel, excessive mill scale or lamination, and dimensional conformity with the plans.

3. Welding shall be done in conformity with regulations established by the American Welding Society as adopted by the Building Code. Onsite inspection before any welding begins includes, but is not necessarily limited to, joint preparation, fit-up, condition of surfaces to be welded, correct storage and use of electrodes, current license of all welders, and correct voltage/amperage of welding machines. During welding the special inspector shall provide continuous inspection particularly on multiple pass welds to assure that each pass has been prepared correctly, preheat and interpass temperatures are maintained and that finished welds are of the proper size without flaws, cracks, undercuts, inclusions or porosity.

4. High strength bolting inspection includes verification of type and size of bolts and washers, checking mill certificates for bolts, inspection of faying surfaces to see that they are free of burrs, scale, rust, grease or anything that may inhibit full contact. Connections using high strength bolts and welding are permitted, under specific conditions, however a sequence of erection may be required. Welding and/or preheating of high strength bolts may affect the bolt's strength and should be avoided. Washers are always installed under the turned element, except A-490 bolts which require washers under both elements. See A.I.S.C. Part 16 regarding size and shape of bolt holes.

5. Weld joints not conforming to Chapter 3 of A.W.S. D1.1 (structural steel) and D1.3 (sheet steel) are not pre-qualified and require a welding procedure specification (WPS/PQR). All welding of reinforcing steel, except fillet welds, requires procedure qualification A.W.S.D1.4. The welding procedure must be tested by an approved testing agency and accepted by both the design engineer and LADBS before the weld is performed.

6. Materials not listed in Chapters 22 and 35 of the building code are not permitted without specific approval of LADBS. Steel having dual ASTM designation shall be clearly identified on the plans for the location where it is to be used.
D. GRADING

1. Review and become familiar with the geotechnical reports, approved plans, Department approval letters. Check the survey map, verify property lines and boundaries with respect to cut and fill areas. Zoning and property line setbacks shall be inspected and approved by LADBS prior to placement of fills or beginning construction of piles or walls.

2. On mass grading projects monitor and/or verify volume and condition of soil during removals, observe condition of all bottoms, check condition of fill for debris and/or large rocks, monitor fill placement, compaction and testing by Department approved Soils Technicians, verify grades and pad or slope gradients, monitor placement or construction of erosion control devices (temporary or permanent).

3. On shoring systems monitor volume and condition of material being removed during drilling, angle of boring, progress of temporary cuts, testing of anchor rods and notify the engineer of any condition that is not consistent with the geotechnical reports and recommendations. Placement of high strength concrete (over 2500 psi) requires a Deputy Inspector for concrete. When the Deputy holds a dual registration he/she may not inspect concrete placement and grading at the same time unless authorized to do so by the City Inspector.

4. On driven piles monitor the condition of soil when/if pilot holes are drilled, verify that piles were fabricated in the shop of an approved fabricator, inspect condition of piles prior to driving and monitor during driving for compliance with reports and recommendations.

5. On gravity wall construction (such as crib walls) verify all prior approvals from geotechnical consultant and city grading inspector of footing bottom and angle, fabricated concrete units shall be from an approved fabricator, inspect condition of concrete units (cracked or broken units shall not be used), monitor erection of wall for compliance with design for specific conditions (asphalt shingles may be used as shims or spacers if they provide full bearing contact), monitor placement and compaction of soil within the wall units.

6. On slot cut inspection verify sequence of construction prior to first slot cut, check width and depth of cuts, inspect soil condition for conformance with geotechnical report, check back drains and gravel prior to placement of fill, monitor compaction and testing of fill, verify backfill of "A" slots before proceeding with "B" and/or "C" cuts.
E. METHANE BARRIER INSPECTION

1. Review and become familiar with approved methane mitigation plans, geotechnical reports, site testing reports and research reports specific to the product being utilized.

2. Prior to membrane installation verify all mechanical inspections required below the membrane have been completed and signed by the appropriate City Inspectors.

3. Verify the gravel blanket thickness under the membrane and surrounding perforated horizontal pipes meets requirements.

4. Verify all surfaces to receive membrane are clear of debris and meet manufacturers requirements.

5. Verify all thickness tests and leakage tests are completed and meet manufacturers requirements.

6. Verify that all penetrations of the Methane Barrier are made and sealed in an approved manner.

F. SPRAYED FIRE-RESISTANT MATERIALS

Effective September 1, 2008, as per Section 1704.12 of the 2014 Los Angeles Building Code (2014 LABC), a special inspection shall be performed for sprayed fire-resistant materials applied to structural elements and decks. The previously known Deputy Certification “Spray-Applied Fire Resistive Materials” (referred to as Fireproofing) is changed to “Sprayed Fire-Resistant Materials” or abbreviated as (SFRM).

The examination for a SFRM license will cover sprayed fire-resistant materials as well as mastic and intumescent fire-resistant coatings requirement per section 1704.13, 2014 LABC.

II. CONDUCT

Section 1704.1.3 of the LABC states in part, “Upon evidence, satisfactory to the Superintendent of Building, of incompetence, of willful or negligent failure to observe or report violations of this Code, or of any other failure to perform properly and effectively the duties assumed by a Registered Deputy Inspector, the Superintendent of Building may revoke, suspend or refuse to renew any Certificate of Registration, but prior to that action, the holder shall be given an opportunity to appear before the Superintendent of Building and be heard.

All registered deputies are required to be knowledgeable of and abide by the Departments policy on deputy monitoring and discipline.
Section 1704.1.4 of the LABC states in part, “During the execution of the work, the Deputy Inspector shall not undertake or engage in any other task or occupation which will interfere with the proper performance of the duties of such inspection.”

The provisions of the code which requires the presence of Deputy Inspector states that the inspector shall provide continuous inspection. In order to do that the Deputy should not allow himself/herself to be otherwise engaged, employed or to act in a manner that would not allow full concentration of the task at hand.