



BUILDINGS BULLETIN 2015-033

OTCR

Supersedes: None

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Issuance Date: November 06, 2015

Purpose: This document establishes requirements for developing and applying for acceptance of an equivalent adhesive anchor installer certification program.

Related Code/Zoning Section(s): BC 1912

Related Bulletins: BB 2014-018
BB 2015-027

Subject(s): Adhesive anchor, installer certification program; Adhesive anchor, equivalent adhesive anchor installer certification program

Buildings Bulletin 2014-018 requires post-installed adhesive anchors installed in concrete to be designed in accordance with ACI 318. Subsequently ACI 318 D.9.2.2 through D.9.2.4 provides specific requirements for adhesive anchoring systems installed horizontally or upwardly inclined and supporting sustained tension loads, including requirements for installers to be certified in accordance with the ACI/CRSI Adhesive Anchor Installer Certification program or equivalent. This bulletin establishes requirements for equivalent adhesive anchor installer certification programs.

A. ACI/CRSI Adhesive Anchor Installer Certification program. The ACI/CRSI Adhesive Anchor Installer Certification program accepted under ACI 318 Appendix D is administered by local ACI chapters. For more information on the ACI/CRSI Adhesive Anchor Installer Certification program visit the [ACI webpage for Adhesive Anchor Installer Certification Program](#). Alternatively, [Buildings Bulletin 2015-027](#) (Section (C)) identifies alternative procedures for installer certification requirements accepted prior to September 10, 2017.

B. Equivalent Adhesive Anchor Installer Certification Program. All equivalent adhesive anchoring certification programs (equivalent certification programs) must be evaluated and approved by the Office of Technical Certification and Research (OTCR).

1. Application Process.

- i. Proposed equivalent certification programs must be forwarded to OTCR (NYC Department of Buildings, 280 Broadway, 7th Floor, New York, NY 10007). Program providers must submit all

- required documents in accordance with sections (B)(2) of this bulletin.
- ii. Incomplete or inaccurate applications will be rejected.
- iii. A listing of the each approved equivalent certification program will be available through the [Department's website](#).

2. Submittal Requirements. The proposed program provider must provide the following to OTCR:

- i. Exams and Training:
 - a. Written exam. Provide 1 copy of each written exam. Written exams may be offered in hard copy or electronic format. Program providers must specify pass/fail criteria with their submission to OTCR. Each written exam must demonstrate that the installer has the proper knowledge for acceptable installations covered under the following topics:
 - 1. Using the Manufacturer's Printed Installation Instructions (MPII)
 - 2. Equipment used with adhesive anchoring installations.
 - 3. Storage of adhesive cartridges and capsules
 - 4. Proper installation conditions
 - 5. Hole cleaning procedures
 - 6. Delivery of adhesive to the hole and rod placement
 - 7. Handling during and after cure time
 - 8. Horizontal and overhead installations
 - b. Performance exams. Provide 1 copy of an outline for the proposed installation exam. The outline must include a complete description of each test, including apparatus and pass/fail criteria. The performance exam must demonstrate that the installer is competent with the following installations:
 - 1. Downward vertical (top of slab installations).
 - 2. Overhead piston-plug method, or over-head end-cap method, or both overhead piston-plug and end-cap method.
 - c. Training Program (Optional). Provide a description and copies of all training program materials if offered by the program provider.
 - d. Installer Certification Criteria. Issuance of an adhesive anchor installer certificate is dependent upon a passing grade on both the written and performance exams.
- ii. Accreditation. The program provider must submit a copy of a valid accreditation certificate to the Department. Acceptable equivalent programs, including previously approved programs, must be accredited by an approved accrediting body accrediting to ISO/IEC 17024-12 – *Conformity assessment – General Requirements for Bodies Operating Certification of Persons* and the requirements of this bulletin by the accreditation deadline of November 06, 2016. Accrediting bodies other than federal agencies are required to operate in accordance with ISO 17011-04 and must be members of an internationally recognized cooperation of laboratory and inspection accreditation bodies subject to a mutual recognition agreement. Programs not accredited by the accreditation deadline will no longer be recognized as an approved equivalent certification program and will be removed from the Department's website as an approved equivalent certification program.
- iii. Notification of Approved Equivalent Certification Programs.
 - a. Providers of approved equivalent certification programs (program providers) must have a website and must publish program schedules on its website, including dates, times, and locations, and otherwise make all program schedules available in writing to the Department upon request. The program provider must also notify the Department of a scheduled program offering at least three (3) business days prior to it being offered. All information on the program provider's website, including the location of program, must be current. The program provider must provide a link to the appropriate section of their website.
 - b. The program provider must notify the Department of any substantive changes to the program within fourteen (14) days of such change.
- iv. Proctors. Provide a list and resume of all proctors and trainers to be used during the written and

performance exams, and training program. Proctors must possess at least 5 years relevant experience with installation of adhesive anchors.

- v. Program completion, Certification Options and Identification. Provide a description of the following certification requirements:
 - a. Certification options: End cap, piston plug, or both end cap and piston plug methods.
 - b. Database management.
 - c. ID Cards (optional, provide card sample).
- vi. Re-testing and Appeals. Provide details for permitting re-testing after a failed written and/or performance exam.
- vii. Re-certification. Provide outline for re-certification including the following:
 - a. Outline of written and performance exams, if required
 - b. Frequency for re-certification

3. Additional Program Requirements

- i. Program Facilities. The program's facilities must:
 - a. Have sufficient room to accommodate all expected attendees and the equipment needed to perform hands-on exercises, conduct performance exams (see Section (B)(2)(i)(b));
 - b. Make provisions for the presentation of training material in all media types (computer, projectors, video/DVD players, etc) where required as part of the program; and
 - c. Comply with all applicable laws, rules and regulations relating to occupancy, zoning, egress, fire detection, fire suppression, light, ventilation, cleanliness, sanitary facilities, emergency notification and evacuation procedures.
- ii. Attendance Record.
 - a. The program provider must have in place fraud-resistant procedures for confirming the identity and attendance of individuals participating in the equivalent certification program, including logs reflecting those in attendance at different times during the program, and be able to produce the logs and any other documentation demonstrating that an attendee attended the program(s).
 - b. The program provider must maintain a record of all the names of certification attendees and the program they completed for a period of seven (7) years from the date of completion. The program provider must make these records available to the Department upon request.
- iii. Program providers must continuously maintain the qualifications required by this bulletin. The program provider must immediately notify the Department of any accreditation lapse or non-conformance with program requirements.
- iv. Department Observation and Evaluation. The Department may observe any approved program without prior notification to the program provider. The Department may evaluate programs taught by program providers through audit or other means at such intervals as it deems necessary and may require additional information as it deems necessary.
- v. The individual program provider, the principals or partners of the program provider corporation or partnership and all program instructors must comply with all applicable Federal, State and local laws, rules and regulations.
- vi. The program provider must notify the Department of any changes to the program provider's name within fourteen (14) days of such change.

4. Suspension and Revocation of Approval

- i. Following notice and an opportunity to be heard, the Department may suspend or revoke approval of a program provider's courses based on the failure to comply with a Department requirement. However, when the public safety may be imminently jeopardized, the Commissioner may, pending an opportunity to be heard and Department determination, suspend approval for a period not exceeding thirty (30) days.
- ii. The Department will post on its website that the approval of a program has been suspended or revoked.