

780 CMR 110.R1
CONCRETE TESTING LABORATORIES

(Note: 780 CMR 110.R1 is unique to Massachusetts and the 8th edition 780 CMR 110.R1 is replaced in its entirety as shown below.)

110.R1.1 Title. The Massachusetts Board of Building Regulations and Standards (BBRS) adopts the rules and regulations for concrete testing laboratories contained herein as 780 CMR 110.R1 and hereinafter known as 'R1'.

110.R1.2 Scope. The provisions of R1 shall govern the registration of laboratories that test concrete and concrete aggregates utilized in the construction of buildings and structures falling under *construction control*.

110.R1.3 Definitions. The following words and terms shall, for the purpose of R1, have the meanings shown:

ACCREDITATION AUTHORITY. An entity such as the National Institute of Standards and Technology, the Cement and Concrete Reference Laboratory (CCRL), AASHTO Materials Reference Laboratory (AMRL), registered design professional, or another agency designated by the BBRS that field examines and evaluates concrete testing laboratories. Some accreditation authority such as AMRL may have limited evaluation and testing authority relative to R1.

BRANCH LABORATORY. A concrete testing laboratory physically removed from the principal laboratory. A branch laboratory may have project laboratories.

CONCRETE TESTING LABORATORY. A proprietorship, corporation, partnership or agency which conforms to the requirements of ASTM E 329 as modified by R1. A concrete testing laboratory shall mean the principal laboratory, branch laboratory or project laboratory unless otherwise specified, and shall be capable of testing as a minimum concrete and concrete aggregate.

DPS. The Massachusetts Department of Public Safety.

LABORATORY. A concrete testing laboratory.

PRINCIPAL LABORATORY. A concrete testing laboratory that may have branch and project laboratories.

PROJECT LABORATORY. A temporary onsite concrete testing laboratory for a specific project under the direction of a principal or branch laboratory.

REPORT. A field examination and evaluation of a laboratory which indicates compliance with R1. All findings of non compliance must be resolved as indicated by either the seal of a registered design professional or approval by an accreditation authority.

110.R1.4 Registration. A *laboratory* shall each be registered by the BBRS in accordance with R1. An entity seeking to register as a new *laboratory* or seeking to renew a registration shall

submit a standard application to DPS for approval demonstrating that its facilities, equipment, personnel and procedures meet the requirements of R1. The application will include but not be limited to: a *report(s)* not older than 3 years and a fee. A registration and *laboratory* classification (principal, branch or project) shall be issued for an application that meets the requirements of R1 or DPS shall notify the applicant of the reasons of refusal. Registrations first issued shall be valid for a period of two but not to exceed three years and shall expire on December 31st. Renewals periods of registrations shall be two years and shall expire on December 31st.

110.R1.4.1 Project submittals. A *laboratory* involved with projects having structures subject to *construction control* as required in 780 CMR 1.00 shall submit notice of proof of registration to the project owner for submittal to the building official at the time of the building permit application. Proof of registration shall also be submitted by any new or successor *laboratory* prior to engaging in work during the course of a project. A *laboratory* that plans to terminate services on a project must notify the building official and project owner in writing three days prior to terminating services.

110.R1.5 Qualifications. *Principal laboratory* and *branch laboratories* shall be evaluated by an *accreditation authority* prior to applying for a registration and at least every three years to ensure the *laboratory* equipment, personnel and procedures meet the requirement of R1. The *accreditation authority* shall notify the *laboratory* of the evaluation date. The *accreditation authority* will issue a *report* to the *laboratory* with all audit findings. Reports received by laboratories shall be submitted to BBRS through its designee DPS within ten-days of receipt. Audit findings shall be corrected and approved by an *accreditation authority* within 30-days and evidence of same submitted to DPS.

110.R1.5.1 Standards. *Laboratory* equipment, personnel and procedures shall conform to the standards of ASTM E 329 and R1, narrow to the testing of concrete and its constituent materials only.

110.R1.5.2 Equipment. Compression testing machines shall be calibrated and verified, with equipment traceable to the National Institute of Standards and Technology, at least annually and also when a *laboratory* changes location or as required by the BBRS, and the calibration results submitted to the BBRS.

110.R1.5.3 Personnel. Each principal and *branch laboratory* must have a director of testing services, lab supervisor and field supervisor. An individual that meets all three qualifications may fill more than one position at a *laboratory*, but may not fill positions concurrently at a separate *laboratory*. A *project laboratory* must have a full time lab supervisor. Each individual must submit credentials and qualifications under penalty of perjury with signature notarized. Individuals applying for registration in more than one category must file separate applications for each category. Credentials shall be filed within 30-days of employment. The director of testing shall notify the BBRS within seven days of any vacancy of any position. Any vacant position shall be filled within 30-days. A director of testing shall be a fulltime employee of a *laboratory*, must be able to

interpret the results of tests on concrete and concrete aggregates as stated in ASTM E 329, and shall be qualified in accordance with one of the following requirements:

1. A professional engineer registered in the Commonwealth of Massachusetts with at least five years of experience in responsible charge of work related to structural engineering, construction engineering or construction materials testing; or
2. A bachelor's degree in engineering from an accredited institution and an additional total of three years experience performing tests on concrete and concrete materials which shall include two years as a laboratory technician or supervisor; or
3. At least eight years experience including five years of experience as a lab technician or supervisor.

A lab supervisor shall have at least five years of experience performing tests on construction materials including concrete and concrete aggregates and be ACI-certified as a Concrete Laboratory Testing Technician-Level 1 and shall maintain such certification.

A field supervisor shall have at least five years of experience performing tests on construction materials including concrete and be ACI-certified as a Concrete Field Testing Technician-Grade 1 and shall maintain such certification.

110.R1.6 Deficiencies Any *laboratory* that does not meet the requirements of 780 CMR 110.R1.4 to 110.R1.5 shall notify DPS within ten days of said deficiency. Deficiencies shall be corrected within 30-days as proven by a *laboratory* affidavit sent to DPS on the standard affidavit form. Failure to notify DPS or to correct said deficiencies in the specified time frames shall deem the *laboratory* as non compliant and it shall immediately cease testing of concrete and concrete materials subject to construction control. (Note: AMRL which is an accreditation authority allows up to 60 days to correct deficiencies. Consideration of public comment on the 30 day requirement of this section is recommended.)

110.R1.7 Revocation and Suspension. The BBRS may suspend or revoke the registration of any *laboratory* found to be in noncompliance with 780 CMR, or the standard of good practice. Notice of suspension, revocation or refusal to renew a registration shall be in writing with the reasons clearly stated, and served in accordance 780 CMR 1.00. Prior to issuance of a suspension, revocation or refusal to renew a registration, written notice of such intent shall be served by the BBRS through its designee DPS in accordance 780 CMR 1.00. Upon registration suspension or revocation the *laboratory* shall immediately cease testing of concrete and concrete materials for structures subject to construction control.

110.R1.8 Appeals. Any *laboratory* or individual aggrieved by the suspension or revocation of a registration or by an interpretation, order, requirement, direction or failure to act under R1 may appeal to the Building Code Appeals Board as provided in 780 CMR 1.00. However, entry of an appeal shall not stay such revocation or suspension unless so ordered by the Building Code Appeals Board in a preliminary hearing conducted expressly for the purpose of a stay.

780 CMR 110.R2 CONCRETE FIELD TESTING TECHNICIAN LICENSING

(Note: 780 CMR 110.R2 is unique to Massachusetts and no changes to the 8th edition are proposed, i.e. carry forward current requirements.)

780 CMR 110.R3 MANUFACTURED BUILDINGS

(Note: 780 CMR 110.R3 is unique to Massachusetts and the 8th edition 780 CMR 110.R3 is replaced in its entirety as shown below.)

SECTION 1 ADMINISTRATION

110.R3.1.1 Title. The Massachusetts Board of Building Regulations and Standards (BBRS) adopts the rules and regulations for *manufactured buildings*, *manufactured building components* and *manufactured homes* contained herein as 780 CMR 110.R3 and hereinafter known as 'R3'.

110.R3.1.2 Scope. R3 shall govern the design, manufacture, handling, storage, transportation, relocation, and installation of *manufactured buildings*, *manufactured building components*, and *modular homes*, and hereinafter referred to as *product*, intended for installation in Massachusetts and/or manufactured in Massachusetts for shipment to any other state in which such *product* and the *labels* thereon are accepted. Subject to local zoning ordinances and by-laws, *product* may be sold for, delivered to, or installed on, building sites located in any jurisdiction of Massachusetts if such *products* have been approved and certified pursuant to R3.

110.R3.1.3 Administration and Enforcement. The BBRS through its designee *DPS*, shall administer and enforce the state requirements of R3 and building officials shall administer and enforce the local requirements of R3. The boards which regulate the *specialized codes* shall have enforcement authority of *product* specific to its *specialized code*. No person, firm or corporation shall offer for sale or rental, or sell or rent, any *product* subject to any provisions of R3 unless it conforms with the applicable provisions of R3.

Where an uncertified building was constructed under a manufactured building program of another state and approved under such program, a *TPIA* shall prepare a report based on review of the *plans* and specifications and inspection of the building to assure that said *plans* and specifications meet the requirements of Chapter 13 of the *International Existing Building Code 2015* (IEBC) and submit such to *DPS* for review and approval.

When the occupancy classification of a relocated *manufactured building* is proposed to be changed, a *TPIA* shall inspect the building, including any disassembly necessary, to determine whether compliance may be achieved for a change of occupancy classification in accordance requirements of Chapter 11 of the *International Existing Building Code 2015* (IEBC). If factory *plans* are available, then disassembly is not required to the extent that the factory *plans* can be reasonably verified to reflect the actual construction.

Exceptions:

Relocatable buildings previously approved with a prior MA insignia may be relocated into or within the state, subject to local approval for the design loads for the location, provided that no *plan*, specification, reconfiguration, occupancy type or use group

changes are made. The insignia numbers, design loads, and *plans* based on time of manufacture shall be provided to the building official at time of permit application and prior to *installation*.

110.R3.1.4 Authorization of Third-party Inspections Agencies. The BBRS may register TPIAs based on recommendations by *DPS*.

SECTION 2 DEFINITIONS

110.R3.2.1 General. Unless otherwise expressly stated in 780 CMR the following terms shall, for the purpose of R3, have the meaning as follows:

ALTERATION. Any construction, other than ordinary repairs of *product* that deviate from the approved *product*.

APPLICABLE CODES. 780 CMR and specialized codes if applicable.

CERTIFICATION. Any manufacturer or product which meets the provisions of R3 is deemed to be certified.

DEALER. Any individual, organization or firm engaged in the retail selling, or offering for sale, brokering, or distribution of product, primarily to a person who in good faith, purchases or leases such product for purposes other than resale.

DPS. The Massachusetts Department of Public Safety.

INSTALLATION. The process of affixing, or assembling product on the building site, and connecting it to utilities, and/or to an existing building. Installation may also mean the connecting of two or more manufactured building or housing units designed and approved to be so connected.

INSTALLER. An individual who, on the basis of training and experience, has been certified by a manufacturer, as competent to supervise the placement and connection required to install product of that manufacturer. Said *certification* by the manufacturer shall be in writing; additionally, the certified installer shall possess picture identification in the form of a driver's license or other picture identification acceptable to the building official.

LABEL. An approved device or seal evidencing *certification* of product in accordance with R3.

LOCAL ENFORCEMENT AGENCY. A department or agency in a municipality charged with the enforcement of 780 CMR and appropriate specialized codes.

MANUFACTURED BUILDING. Any manufactured building which has concealed elements, such as electrical, mechanical, plumbing, fire protection, insulation, and other systems affecting health and safety, and which is manufactured, constructed, relocated, reconfigured, and/or assembled in accordance with 780 CMR and pertinent regulations, in manufacturing facilities, on or off the building site. Also, any manufactured building as defined above which does not have concealed elements, but which has been approved by the BBRS at the request of the manufacturer.

MANUFACTURED BUILDING COMPONENT. Any manufactured subsystem, manufactured subassembly, or other system designed for use in or as part of a structure having concealed elements such as electrical, mechanical, plumbing and fire protection systems and other systems affecting health and safety.

MANUFACTURER. A business entity approved to manufacture product.

MANUFACTURED HOMES. Manufactured homes regulated under the federal Housing and Urban Development standards as defined in 24 CFR, Part 3280.2 are not within the scope of R3 **MODULAR HOME.** Any R-Use manufactured building.

PLANS. Building plans, specifications and documentation of product, which may include structural, electrical, mechanical, plumbing and fire protection systems and other systems affecting health and safety, including variations which are submitted as part of the building system.

PRODUCT. A manufactured building, manufactured building component, modular home or relocatable building.

QUALITY ASSURANCE MANUAL. The manual as outlined in section 3 of R3 which contains the quality assurance process specific to a manufacturer and approved by a TPIA.

RELOCATABLE BUILDING. A partially or completely assembled building constructed and designed to be reused multiple times and transported to different building sites.

SPECIALIZED CODES. See 780 CMR 1.

THIRD PARTY INSPECTION AGENCY (TPIA). A TPIA registered per the requirements of R3 and retained by the manufacturer and approved by DPS to perform inspection, evaluation, and certification of manufacturers and product.

SECTION 3 CERTIFICATION OF MANUFACTURER

110.R3.3.1 General. An entity which maintains a quality assurance program in conformance with a *quality assurance manual* per this section may apply to *DPS* for *certification* as a *manufacturer*. An entity seeking to become a *manufacturer* or a *manufacturer* seeking to renew a *certification* shall submit an application to *DPS* for approval. These applications will include but not be limited to: a *quality assurance manual* and a fee. A *certification* shall be issued for an application that meets the requirements of R3 or *DPS* shall notify the applicant of the reasons for refusal. *Certifications* first issued and renewals of *certifications* shall be valid for a period of one year.

110.R3.3.2 Quality Assurance Manual. The *quality assurance manual* of a *manufacturer* shall consist of the requirements contained in this section. It is the responsibility of the *manufacturer* to execute every aspect of this manual. The *manufacturer* shall continue to be responsible for all corrective actions required and the contractual relationship between the *manufacturer* and the *TPIA* shall not diminish such responsibility. The *manufacturer* shall cooperate with the *TPIA* by providing all necessary reports, information, documents, records, facilities, equipment, samples and other assistance for assuring compliance with R3. The manual shall be comprehensively indexed, and shall treat the material listed here in detail, as follows.

1. A procedure for periodic revision of the *quality assurance manual*;
2. An organizational structure for implementing and maintaining the quality assurance program and its functional relationship to other elements of the organization structure of the *manufacturer*, which structure shall provide for independence from the production department; Company officers and employees in charge of the quality assurance program must be identified, and their training and qualifications specified;
3. A uniform system of audit (in-depth analysis of program effectiveness and means to identify deficiencies) to monitor the quality assurance program periodically;

4. Complete and reliable records of manufacturing and site operations, if any (suitable means of storage, preservation and accessibility of copies of forms to be utilized shall be included);
5. A system to control changes in production or inspection procedures within the manufacturing facility;
6. A system to assure that working drawings and specifications, working instructions and standards, procurement documents, etc. conform to the *approved building system*;
7. A serial number system for buildings or building components; and
8. The method of safekeeping, handling and attaching *labels* and identification of those employees responsible therefore.
9. Materials Control.
 - a. Procedure to assure effective control over procurement sources to ensure that materials, supplies and other items used in production and site operations, if any, conform to the approved *plans*, specifications and quality requirements;
 - b. Procedures for inspection of materials, supplies and other items at the point of receipt;
 - c. Method of protection of materials, supplies and other items against deterioration prior to their incorporation in the certified buildings or building component; and
 - d. Provision for disposal of rejected materials, supplies and other items.
10. Product Control.
 - a. Procedures for timely remedial and preventive measures to assure *product* quality;
 - b. Provision, maintenance and use of testing and inspection;
 - c. Provision for frequency of sampling inspections;
 - d. Provision of necessary authority to reject defective work and carry out compliance assurance functions, notwithstanding any conflict with production department goals and needs;
 - e. A schematic of the manufacturing operation showing the location of inspection stations or areas, and “hold” points for mandatory inspection characteristics;
 - f. Inspection and test procedures, including accept/reject criteria and mandatory inspection characteristics;
 - g. Standards of workmanship; and
 - h. Provision of disposal of rejects.
11. Finished Product Control.
 - a. Procedure for final inspection of all *product* before shipment to the site or storage point, including identification and *labels*;
 - b. Procedures for handling and storing all finished *product* both at the manufacturing plant or other storage point and after delivery to the building site;
 - c. Procedures for packing, packaging and shipping operations and related inspections; and
 - d. Procedures for transportation, including all measures to protect *product* against damage while in transit, and setting forth the modes of transportation to be utilized and the carrying equipment and procedures.
12. Installation Control.
 - a. *Installation* procedures including component placement or set, equipment and procedures, field erection and finishing work, utility connection instructions and all appropriate on-site inspection criteria and test descriptions; and

- b. Organizational provisions for field repair and disposal of rejects.
- 13. Permission for Inspection. The *manufacturer* shall provide *DPS* with written permission, signed and notarized, for *DPS* to inspect manufacturing facilities, his *products*, and building sites under his control at any reasonable time without prior announcement.
- 14. Shall contain detailed *plans* for inspections by *DPS* or the *TPIA*.

SECTION 4 REGISTRATION OF TPIA

110.R3.4.1 General. An entity which seeks to register as a *TPIA* or to renew a registration as a *TPIA* shall submit an application and a fee to *DPS* for approval. Applications will include but not be limited to the requirements of this section. A registration shall be issued for an application that meets the requirements of R3 or *DPS* shall notify the applicant of the reasons for refusal. Registrations first issued and renewals of registrations shall be valid for a period of one year.

110.R3.4.2 Registration requirements. Applications shall contain, but not be limited to, information on the following; corporate structure, employees, inspection programs, test reports and data sheets, insurance, responsibility and liability, and *certification, labels* and *product*. The *TPIA* applicant shall attest that:

1. All submissions are a true and accurate statement of the personnel, equipment, and procedures that will be followed to certify *product*, and
2. The agency's Board of Directors, as a body, and its technical personnel as individuals, shall exercise independent judgment, and
3. The agency's activities shall not result in financial benefit to the agency through stock ownership, or other financial interests in any producer, suppliers, or vendor of *products* involved, other than through standard published fees for services rendered, and
4. The agency shall not perform architectural, mechanical, electrical, plumbing, sprinkler, or structural design or quality assurance program approvals for any *manufacturer* who uses the same agency in whole or in part by members of the agency or any affiliated organization for in-facility inspections or other *TPIA* services, and
5. All inspectors, evaluators, and other technicians are adequately trained and qualified to perform each job assigned to them, and
6. The agency is able to evaluate *product* for compliance with all applicable codes, standards, laws, and rules.

SECTION 5 DEALERS

110.R3.5.1 General. Any *dealer* who contracts for *product* that is installed or intended to be installed in Massachusetts shall, as a minimum, be registered with the Secretary of State and the MA Better Business Bureau. Complaints against a *dealer* received by *DPS* may be forwarded to the MA Better Business Bureau, the MA Office of the State Attorney General, and MA Office of Consumer Affairs and Business Regulations, or other entity for appropriate action.

Exemptions:

- a. Individuals licensed or certified under other state or federal law, when the law provides for specific authority to provide this particular service, or preempts the requirement for such a registration.
- b. Holders of an active license issued by the MA Real Estate Commission
- c. Any CSL who contracts directly with the owner or *dealer*.

SECTION 6 CERTIFICATION OF PLANS

110.R3.6.1 General. *Plans* for newly constructed or recertified *product* shall meet the requirements set forth in this section and are to be evaluated for compliance with R3 and certified accordingly by the *TPIA*. *Certified plans* along with a fee are to be submitted to *DPS* for review and approval.

110.R3.6.2 Construction documents. All documents submitted with the application shall be identified to indicate the *manufacturer's* name, office address and address of the manufacturing facility and shall contain as a minimum the following information:

1. *Plans* shall be submitted showing all elements relating to specific details on properly identifiable sheets.
2. Each *plan* application shall bear the signature and seal of a registered design professional certifying that the *plans* comply with the applicable codes and standards, where applicable.
3. All work to be performed on-site, including connection of all systems, equipment and appliances, shall be identified and distinguished from work to be performed in the manufacturing facility.
4. Grade, quality and identification of all material shall be specified.
5. Design calculations and test reports shall be specified.
6. Drawings shall be drawn to scale and be legible and indicate the location of the data plate and shall be dated and identified. The number of sheets in each set shall be indicated.
7. *Plans* for *product* shall provide or show, but not be limited to, the details listed below including the method of their testing or evaluation, or both. These requirements shall apply to the *plans* for building components only to the extent deemed necessary to permit a proper evaluation of the building component.
 - a. General.
 - i Details and methods of *installation* of *product* on foundations and/or to each other.
 - ii All exterior elevations.
 - iii Cross sections as necessary to identify major building components.
 - iv Details of flashing, such as at openings and at penetrations through roofs and subcomponent connections. Indicate flashing material and gauge to be used.
 - v Attic access and attic ventilation.
 - vi Exterior wall, roof and soffit material as well as finish.
 - vii Interior wall and ceiling finish material.
 - viii Fire separation walls.
 - ix Sizes, locations and types of doors, windows and fire/smoke detectors.
 - x Recommended foundation *plans*, vents and underfloor access.
 - b. Building Classification.
 - i Occupancy or use group
 - ii Area, height, and number of stories.
 - iii Type of construction.
 - iv Fire resistance ratings.
 - c. Space and Fire Safety.
 - i Details of fire resistance rated assemblies for all stairway enclosures, doors, walls, floors, ceilings, partitions, columns, roof and shaft enclosures and how continuity will be maintained at all horizontal and vertical junctions.

- ii Detail of Fire Protection Systems.
- iii Details as to width of all aisles, exits, corridors, passageways and stairway enclosures.
- iv Toxicity and flame spread classification of finished materials.
- d. Structural Detail Requirements.
 - i Engineer's calculations of structural members, where appropriate.
 - ii Structural and framing details of all floors, roof and walls.
 - iii Details and stress diagrams of roof trusses.
 - iv Details of reinforcing steel.
 - v Complete loading schedule.
 - vi Column loads and column schedule.
 - vii Lintel schedule.
 - viii Size, spacing and details of all structural elements.
 - ix Grade or quality of all structural elements (lumber, steel, etc.).
 - x Elevation of structural elements, walls or sections thereof, providing resistance to vertical loads or lateral forces.
 - xi Complete details of all structural connections.
- e. Mechanical Detail Requirements.
 - i Location of all equipment and appliances. Indicate equipment and appliances listed or *labeled* by approved agencies.
 - ii Heat loss and heat gain calculations or approved prescriptive method.
 - iii *Manufacturer's* name, make, model, number, BTU, input and output rating of all equipment and appliances, as appropriate, or the equal thereof.
 - iv Duct and register locations, sizes, and materials.
 - v Clearances from combustible material or surfaces for all ducts, flues and chimneys.
 - vi Method of providing required combustion air and return air.
 - vii Location of flues, vents and chimneys and clearances from air intakes and other vents and flues.
 - viii Details regarding dampers in ducts penetrating fire separations.
 - ix Complete drawings of fire sprinkler system, standpipe system or smoke/fire alarm system as required.
 - x Detail of elevator or escalator system, including method of emergency operation.
 - xi Duct and piping insulation thickness.
 - xii Ventilation air calculations.
- f. Plumbing Detail Requirements.
 - i Plan or schematic drawing of the plumbing layout, including but not limited to, size of piping, fitting, traps and vents, cleanouts and valves, gas, water, and drainage system.
 - ii Plumbing materials, and location of all equipment and appliances to be used. Indicate fixture unit capacity of system(s) and the make, model, and rating/capacity of equipment and appliances. Indicate equipment and appliances listed or *labeled* by approved agencies.
 - iii Make and model of safety controls (such as for water heaters), their location, and whether listed or *labeled* by approved agencies.

- iv How piping is to be supported and intervals of support.
- v Location of vents above roofs and required clearances, including but not limited to clearances from air intakes, other vents and flues.
- vi Methods of testing.
- g. Electrical Detail Requirements.
 - i Plan of service equipment, including service entrance, conductors, service raceway and clearances above ground and above structures.
 - ii Method and detail for grounding service equipment.
 - iii Single line diagram of the entire electrical system.
 - iv Load calculations for service and feeders.
 - v Sizes of all feeders and branch circuits.
 - vi Size, rating and location of main disconnect/overcurrent protective devices.
 - vii Method of interconnection between *product* and location of connections.
 - viii Location of all outlets and junction boxes.
 - ix Method of mounting fixtures and wiring installations.
 - x Lighting power calculations.

SECTION 7 DPS INSPECTIONS

110.R3.7.1 General. *DPS* as it deems necessary may conduct a review of processes a *manufacturer's* processes and/or *TPIA* inspection practices or any other requirement governed by R3. This may include any part of the entire process of manufacturing, certifying, handling, storing and transporting of *product* pursuant to approved *plans*. No inspection entailing disassembly, damage to or destruction of certified *product* shall be conducted except to implement R3.

110.R3.7.2 Damaged Product. Any finding of damage to *product* shall cause immediate notification to be made to *DPS*, *TPIA* and the *manufacturer*. Prior to the issuance of a certificate of occupancy *DPS* shall inspect, or cause to be inspected *product* which it determines to have been sufficiently damaged after *certification* to warrant such inspection and to take such action with regard to such *product* as is authorized hereof, or as is otherwise necessary to eliminate dangerous conditions. The local enforcement agencies may designate *DPS* as the inspection agency.

110.R3.7.2.1 Repairing Damaged Components. *DPS* or a *TPIA* shall require *product* which are so damaged as to no longer comply with the applicable codes and R3 to be repaired and made to comply within 14 days of discovery and after proper written notice to the *manufacturer*, *installer* and owner; or if they are so damaged that they cannot be brought into compliance, *DPS* or a *TPIA* shall order that the *labels* be removed and voided from such *product*. A report shall be filed with the *TPIA* and *DPS*. Irreparably damaged *product* shall be disposed of by the *manufacturer*, the licensed construction supervisor (CSL) and/or owner.

110.R3.7.3 TPIA Review. *DPS* or their designated agents shall audit a *TPIA*, at any reasonable time, and without prior announcement, in order to monitor the reliability of each *TPIA* and of its monitoring of *quality assurance manuals*. Each such audit shall investigate the adequacy of all procedures used by the agency in monitoring compliance assurance programs including inspection, tests, production methods, process controls, operator performance, materials, receipts,

storage and handling, workmanship standards, records and all other activities which implement the quality assurance program in the manufacturing facility, during transport, or on-site (as applicable), and at subcontractors' facilities. The results of such audit shall be filed with *DPS* and sent to the *TPIA* in writing, within 14 days of discovery. The *TPIA* shall be notified of any deficiencies and of the manner and time by which such deficiencies must be eliminated. If deemed necessary by the *DPS*, a *TPIA* registration may be suspended or revoked. An audit may also be conducted by *DPS* before approving an inspection agency for first issuance of a registration.

SECTION 8 LOCAL AGENCY ENFORCEMENT

110.R3.8.1 Permits. Upon application and in conformity with the provisions of 780 CMR and R3, the building official shall issue building permits for installation of *product*.

110.R3.8.1.1 Owner's agent. A licensed construction supervisor (CSL), duly licensed in accordance with 780 CMR 110.R5, shall, in accordance with 780 CMR 1, be hired by and act as the agent for the owner for the purpose of applying for and obtaining any and all permits required for the field installation of all *product*. The CSL shall be responsible for the construction of the foundation system, the attachment to the foundation, and completion of the *product*, and all pertinent site work required as part of 780 CMR 105 and shall provide at least 48 hours notice to *DPS* and the building official before the placement and connection of such units shall begin.

110.R3.8.1.2 Submittal documents. As part of the permit application process, the CSL shall submit to the building official, in writing,

- a. the name of the *installer*, who shall be duly certified by the *manufacturer* to install said *manufacturer's product*, and is identified as an *installer* of *product*. The *installer* shall be responsible for the safe and proper placement and connection of the *product* in accordance with 780 CMR, R3 and the *specialized codes*.
- b. A statement that the work to be performed under such permit is to include the installation of the specific type of *product* in accordance with the provisions of the applicable codes, the statement is to be signed by the applicant or his agent, with the appropriate address.
- c. A true copy of the approved *product* and where it was manufactured or is to be manufactured, where one has not previously been furnished to that *local enforcement agency*.
- d. Site specific *plans* and specifications.
- e. Plan Identification Number Assignment Form for newly constructed or recertified units with BBRs number. This is to confirm *plans* have been approved by the State and must include a stamp approval and signature.
- f. *Plans* must be stamped on every page by a *TPIA*.
- g. Every page showing calculations by a registered design professional must be provided with their stamp and signature.
- h. Energy compliance certificate.
- i. Set manuals are required to be on site at time of project set.

Exception: If all connection details are provided on the *plans* then the set manual is not required.

- j. Set crew information must accompany the *plan* submittal package with approved *certification* from *manufacturer*.

110.R3.8.2 Inspection of Site Preparation and Service Connections. Appropriate local enforcement agencies shall inspect site preparation work including foundations, not within the scope of the approval and *certification*, and the structural, mechanical, plumbing, sprinkler, and electrical connections among units or components, for compliance with applicable law, rules and regulations.

110.R3.8.3 Compliance with Instructions. Appropriate *local enforcement agencies* shall inspect all *product* upon, or promptly after, installation at the building site to determine whether all instructions in the Set Connection Details Report or conditions listed on the *manufacturer's* data plate have been followed. This may include inspections for exterior weather-tightness and protection, tests for tightness of plumbing and mechanical systems, and for malfunctions in the electrical system and a visual inspection for obvious nonconformity with the approved building *plans*.

110.R3.8.3.1 Disassembly Prohibited. Destructive disassembly of *product* shall not be performed in order to conduct such tests or inspections, nor shall there be imposed standards or test criteria different from those adopted by *DPS* or specified in the approved *plans*.

110.R3.8.3.2 Opening Panels. Nondestructive disassembly may be performed only to the extent of opening access panels and cover plates.

110.R3.8.4 Noncomplying New or recertified Units. Local enforcement agencies shall report to the BBRS in accordance with R3 any noncomplying *product*.

110.R3.8.5 Certificates of Occupancy. Building officials shall issue certificates of occupancy for *product* as applicable if such *product* has been installed and inspected pursuant to the applicable codes and R3 and complies with the approved building specifications and *plans*. Any non compliant items must be brought into compliance before such certificate of occupancy shall be issued.

110.R3.8.6 Reporting of Violations to Department of Public Safety. When any *local enforcement agency* is making an inspection and finds violations or suspected violations, it shall report the details of the violations in writing to the BBRS. Where violations are hazardous to occupants, a certificate of occupancy shall not be issued and the building shall not be occupied before such hazards are corrected.

If the violations are not hazardous, a temporary certificate of occupancy may be issued.

SECTION 9 COMPLIANCE ASSURANCE

110.R3.9.1 Grounds. The BBRS may suspend or revoke the registration of any *TPIA* or *certification* of any *manufacturer*, if the approval was issued in error; was issued on the basis of incorrect information; was issued in violation of any of the *applicable codes* or R3; if examination discloses that the entity failed to perform properly; or for such other cause as may be deemed sufficient by *DPS* to warrant such action. If there is a violation of the *specialized codes* *DPS* shall notify the authority having jurisdiction.

110.R3.9.2 Notice. If the BBRS suspends or revokes the registration of a *TPIA*, the *TPIA* shall be given notice in writing from *DPS* of the suspension or revocation with the reasons therefore set forth therein. *Manufacturers* being evaluated or inspected by such agencies and all *local enforcement agencies* within MA shall also be notified in writing of such suspension or revocation. Such notices shall contain instructions to the *manufacturer* and to the *local enforcement agency* as to the procedures to be followed regarding *product* previously certified by the *TPIA* whose approval has been suspended or revoked.

If the BBRS suspends or revokes the *certification* of a *manufacturer*, the *manufacturer* shall be given notice in writing from *DPS* of the suspension or revocation with the reasons therefore set forth therein. Such notices shall contain instructions to the *TPIA* and to the *local enforcement agency* as to the procedures to be followed regarding *product* produced by the *manufacturer* whose *certification* has been suspended or revoked.

110.R3.9.3 Records. If an entity whose registration or *certification* has been suspended or revoked shall within 90 days of the suspension or revocation deliver to the custody of *DPS* the originals of all records required to be maintained during the course of its operations pursuant to the applicable codes and R3.

110.R3.9.4 Appeal. Any entity aggrieved by a revocation or suspension stemming from a violation of R3 or 780 CMR may appeal to the BBRS as allowed by 780 CMR 1. For appeals to *specialized code* requirements the authority having jurisdiction shall administer the appeal.

780 CMR 110.R4

LICENSING REGISTRATION OF NATIVE LUMBER PRODUCERS

(Note: 780 CMR 110.R4 is unique to Massachusetts and changes to the 8th edition 780 CMR 110.R4 are shown below.)

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110.R4.3 REVOCATION AND SUSPENSION PROCEDURES

110.R4.3.1 Revocation and Suspension. The BBRS on its own initiative or upon the recommendation of the State Inspector may suspend or revoke the registration of any mill registered in accordance with 780 CMR 110.R4, 780 CMR or the standards of good practice. Notice of suspension or revocation of such registration shall be in writing with the reasons for suspension or revocation clearly set forth, and served in accordance with 780 CMR 114.0.

110.R4.3.2 Notice and Conference. Prior to suspension or revocation of a registration, written notice of such intent shall be served by the State Inspector in accordance with section 114.0 of the International Building Code 2009 with Massachusetts Amendments (780 CMR 114.0). Within ten calendar days of receipt of such notice, the affected mill may request a conference with the State Inspector who will hear facts and make their recommendations to the BBRS.

110.R4.3.3 Effect of. Upon suspension or revocation of mill registration, the mill shall immediately cease engaging in the stamping or certifying of native lumber. The filing of an appeal with the Building Code Appeals Board shall stay such suspension or revocation subject to Chapter 1 of the International Building Code 209 with Massachusetts Amendments (780 CMR 1.00).

110.R4.4 APPEALS

~~110.R4.4.1 Building Code Appeals Board. Anyone aggrieved by the decision of the BBRS, or others may appeal to the Building Code Appeals Board.~~

110.R4.3.1 Revocation and Suspension. The BBRS may suspend or revoke the registration of any *native lumber producer* found to be in noncompliance with 780 CMR, or the standard of good practice. Notice of suspension, revocation or refusal to renew a registration shall be in writing with the reasons clearly stated, and served in accordance 780 CMR 1.00. Prior to issuance of a suspension, revocation or refusal to renew a registration, written notice of such intent shall be served by the BBRS through its designee DPS in accordance 780 CMR 1.00. Upon registration suspension or revocation the *native lumber producer* shall immediately cease production of native lumber.

110.R4.3.2 Appeals. Any *native lumber producer* or individual aggrieved by the suspension or revocation of a registration or by an interpretation, order, requirement, direction or failure to act under R4 may appeal to the Building Code Appeals Board as provided in 780 CMR 1.00. However, entry of an appeal shall not stay such revocation or suspension unless so ordered by the Building Code Appeals Board in a preliminary hearing conducted expressly for the purpose of a stay.

780 CMR 110.R5

LICENSING OF CONSTRUCTION SUPERVISORS

(Note: 780 CMR 110.R5 is unique to Massachusetts and changes to the 8th edition 780 CMR 110.R5 are shown below.)

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5.2 REGISTRATION AND LICENSING

110.R5.2.1 Qualifications. A construction supervisor license candidate shall demonstrate that he or she has had at least three years of experience in their field. This experience must have been completed within the ten-year period prior to the date of application. Successful completion of certain educational programs may satisfy one to two years of required experience. In addition, all applicants are required to successfully pass an examination in order to receive a license. For a list of the pre exam qualifications access the examination application noted in 780 CMR 110.R5.2.2.

Exception: An individual holding a current certification per the requirements of 780 CMR 110.R7 shall be allowed to submit an application for an unrestricted construction supervisor license without the need for examination.

110.R5.2.1.1 Evaluation of exam scores. The authorized testing agent of the BBRS shall determine a successful exam score. BBRS may evaluate multiple unsuccessful exam scores of an applicant if the applicant has:

- a. received and utilized testing accommodation through the authorized testing agent, and
- b. taken the exam at least 3 times in the past 5 years and not received a successful score on any one exam, and
- c. received a exam score 5% greater than the successful exam score authorized by the testing agent using a weighted average of the highest scores from each section of any 2 of the 3 exams, and

- d. provided a letter of recommendation from any two (2) of the following individuals:

- building official and/or
- registered design professional and/or
- construction supervisor licensee

If the requirements of this section are met then the exam applicant has '*successfully passed an examination*' per R5.

110.R5.2.2 Examinations. Examinations shall be held only by appointment. All exam applications must be filed in accordance with the construction supervisor license examination application found at www.mass.gov/dps.

110.R5.2.3 License Approval. A majority vote of the members of the BBRS shall be required to grant a license. ~~A license issued by DPS pursuant to the requirements of R5 shall be considered approved by the BBRS. A license which does not meet the requirements of this section shall not be issued unless approved by the BBRS.~~ (Proposed change in strike out because of conflict with statute.)

110.R5.2.4 Expiration. Licenses issued pursuant to these rules and regulations shall expire three years from the date of issuance, which shall be noted on said license and may be renewed. A renewal of an original license shall be for periods of two years and a renewal license shall expire two years from the date of issuance, which shall be noted on said license and may be renewed. A renewal license shall not be issued unless application therefore is made within one year of the date of expiration of the most recently issued license. If a licensee fails to renew his license within one year of the expiration date, such license may thereafter be renewed within two years of its expiration date upon the payment of a fee per 780 CMR.

Exceptions: For applications meeting any of these four exception requirements, where applicable the license shall be renewed for a minimum of 1 year to a maximum of 3 years.

1. **Medical reactivation.** Applicants who seek license reactivation and a waiver of the retesting and/or continuing education requirements must:
 - a. notify DPS in writing via email or US mail, within 4 years of expiration date of the license, and
 - b. have evidence of personal illness*, or illness or death of a parent, sibling, spouse, or child in a 4 year window from date of DPS written notification, and
 - c. not have DOR tax, child support, Home Improvement Contractor or Construction Supervisor complaint, or DPS civil fine issues, and
 - d. submit the following:
 - i DPS application form, and
 - ii DPS form letter stating how illness or death contributed to loss of focus on personal or business affairs, and
 - iii Medical evidence of illness or death, and
 - iv a fee.

*illness must be one of the internationally recognized causes of mortality or one of the recognized mental health related illnesses.
2. **Military reactivation.** Applicants who seek license reactivation and a waiver of the retesting and/or continuing education requirements must:
 - a. notify DPS in writing via email or US Mail, within 4 years of expiration date of the license, and

- b. have evidence of personal military service or of military service of spouse, and
 - c. not have DOR tax, child support, Home Improvement Contractor or Construction Supervisor complaint, or DPS civil fine issues, and
 - d. submit the following:
 - i DPS application form , and
 - ii evidence of honorable military service within the expiration period, and
 - iii a fee.
3. **Valor Act.** If a license holder is on active duty with the armed forces of the United States, as defined in M.G.L. c. 4, § 7, clause forty-third, the certificate shall remain valid until the license holder is released from active duty and for a period of not less than 90 days following that release. For this exception to apply, the license holder must be given an Honorable Discharge, a General Discharge, or an Under Other than Honorable Conditions (UOTHC) Discharge, as noted on their discharge and separation papers.
- The BBRS may accept education, training, or service completed by an individual as a member of the armed forces, as defined in M.G.L. c. 4 § 7, clause 43, or the United States military reserves as an alternative or in addition to submission of required documentation pursuant to continuing education requirements. The applicant shall submit a license renewal application along with a Verification of Military Experience and Training form and any other supporting documentation. The education, training, or service submitted to the BBRS shall have been completed within 24 months of submission.
4. **Age reactivation.** Applicants who seek license reactivation and a waiver of the retesting requirement must:
- a. Notify DPS in writing via email or US Mail a desire to reactivate the license and be at least 62 years of age on the date of DPS notification, and
 - b. not have DOR tax, child support, Home Improvement Contractor or Construction Supervisor complaint, or DPS civil fine issues and,
 - c. submit the following:
 - i DPS renewal application, and
 - ii certificates of continuing education from expiration date of the license to date of DPS notification, and
 - iii a fee.

Note: The continuing education waiver can be utilized only once per licensee.

110.R5.2.5. Practice of construction supervision is prohibited with an expired license.

110.R5.2.5 Fees. Reserved

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780 CMR 110.R6 REGISTRATION AND ENFORCEMENT OF HOME IMPROVEMENT CONTRACTOR PROGRAM

(Note: 780 CMR 110.R6 is unique to Massachusetts and no changes to the 8th edition are proposed, i.e. carry forward current requirements.)

780 CMR 110.R7
CERTIFICATION OF INSPECTORS OF BUILDINGS, BUILDING COMMISSIONERS
AND LOCAL INSPECTORS

(Note: 780 CMR 110.R7 is unique to Massachusetts and no changes to the 8th edition are proposed, i.e. carry forward current requirements.)

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