

1 RCNY §3314-01

CHAPTER 3300

Safeguards during Construction or Demolition

§3314-01 Mast-climbing work platforms (mast climbers).

- (a) **Scope.** The design, construction, permitting, installation, removal, maintenance, adjustment, repair, use, operation, and inspection of a mast climber shall conform to the requirements of the mast climber manufacturer, ANSI/SIA A92.9-1993, Section 3314.19 of the New York City Building Code (“Building Code”), and this section.

Exception. A mast climber shall be exempt from the requirements of this section where a professional engineer, on behalf of the equipment owner, certifies to the department, supported by plans and calculations, that the installation, removal, and use of the mast climber at the job site meets the following conditions:

- (1) The mast climber is installed, removed, and used within the confines of the job site; and
- (2) The job site is closed to the public by means of a controlled access zone and protected in accordance with section BC 3307 of the Building Code; and
- (3) The mast climber, in all conditions of loading, will not overload the street, ground, foundation, structure, roof, setback, or any subsurface vault, tunnel, or utility; and
- (4) The mast climber is set back from the edge of the job site at a distance that is equal to or more than 125% of the height of the final most vertical member of the mast climber to be installed, as measured from the ground, roof, setback, or structure upon which the mast climber sits; or the mast climber is utilized inside a building or interior court yard, and such area where the mast climber is utilized is closed to the public by means of a controlled access zone and separated from the public by an independent wall or similar solid full height enclosure.

- (b) **Definitions.** In addition to the definitions set forth in Chapter 33 of the Building Code, for the purposes of this section, the following terms shall have the following meanings:

- (1) **Adjustment.** The calibration or modification of equipment, including any part or component, that does not otherwise meet the definition of an installation, removal, repair, or maintenance.
- (2) **Approved plans.** For the purposes of this section, such term shall include the approved mast climber notice application.
- (3) **Critical component.** A mast section, platform section, the drive system, and the high/low limit stops.
- (4) **Equipment owner.** The entity that owns the mast climber.
- (5) **Equipment user.** The contractor or entity operating or utilizing the mast climber.
- (6) **Installation (install).**
 - (i) The initial assembly, set up, or placement of a mast climber at a job site; or
 - (ii) following the initial installation, the addition, relocation, or removal of any part or component, including counterweights, attachments, tie-backs, anchorage, or connection to the structure, which does not otherwise constitute a repair, or does not otherwise occur automatically as part of the normal operation of the mast climber; or

- (iii) any horizontal relocation of the mast climber at the job site.
 - (7) Job site. A construction, alteration, or demolition site within New York City.
 - (8) Maintenance. Regular or periodic upkeep as specified by the manufacturer to keep the mast climber, including all parts and components, in like new condition and safe working order, and that does not otherwise meet the definition of an installation, removal, or repair.
 - (9) Manufacturer. The entity that owns the rights to the design and manufacturing of the mast climber and possesses the capacity to build and service the mast climber, provide replacements parts or components, and provide technical support for the mast climber.
 - (10) Mast climber. A mast-climbing work platform as defined by Chapter 33 of the Building Code.
 - (11) Removal (remove). The disassembly of the mast climber at the job site.
 - (12) Repair. Work performed to restore a piece of equipment, part, or component to like new condition and safe working order following decay, wear, or damage. It shall also include the replacement of a part or component.
 - (13) Valid certificate. A department-issued certificate of approval, operation, or on-site inspection that has not expired or been suspended or revoked.
- (c) **Certificates required.** No equipment owner, equipment user, or other entity shall use or permit the use of a mast climber that does not possess and/or is not in conformance with a valid certificate of approval, certificate of operation, and certificate of on-site inspection. Where a mast climber is found not to be in compliance with one or more certificates, the use of such mast climber shall cease. The mast climber shall not be used until it has been brought into conformance with the certificate(s) or a valid or amended certificate(s) has (have) been granted by the department. The three certificates shall be considered to meet the permitting requirements of section 3314.19 of the New York City Building Code.
- (d) **Certificate of approval.**
- (1) Application for a certificate of approval. To request a certificate of approval, a mast climber prototype application shall be filed with the department by the mast climber manufacturer. The application shall contain the following information:
 - (i) Owner's manual and operator's manuals. The manufacturer's owner's manual and operator's manual shall show all configurations for which approval is sought, general equipment specifications, installation and removal procedures, break and over speed governor test procedures, daily, frequent, and annual inspection requirements, shutdown wind criteria, maintenance procedures, and repair criteria and standards. Such manuals shall be printed in English, provided in an electronic format, and shall be in conformance with the requirements of Section 4.18 of ANSI/SIA A92.9-1993.
 - (ii) Capacity chart. The manufacturer's capacity rating chart(s) shall be printed in English, show each configuration for which approval is sought and contain chart numbers and page numbers for identification.
 - (iii) Brochure. The advertising brochure, or drawing, shall show the general configurations and specifications for which approval is sought.
 - (iv) Manufacturer's affidavit. An affidavit from the manufacturer of the mast climber that shall contain the following information:
 - (A) Design certification. Certification from the manufacturer that the mast climber has been designed in accordance with and meets the requirements of ANSI/SIA A92.9-1993;
 - (B) Free standing height. A listing of the maximum free standing height shall be provided for each configuration for which approval is sought;

- (C) Tie-in spacing. Maximum and minimum tie-in spacing shall be provided for each configuration for which approval is sought;
 - (D) Wind speed. Maximum safe in-service and out-of-service wind speed information shall be provided for each configuration for which approval is sought;
 - (E) Safety devices. A listing of safety devices included in the mast climber shall be provided;
 - (F) Annual inspection checklist. An annual inspection checklist, based on the requirements of the manufacturer's owner's and operator's manuals;
 - (G) Safety bulletins. Certification shall be provided by the manufacturer that all manufacturer safety bulletins and recall notices related to the mast climber shall be submitted to the department within five (5) business days of issuance; and
 - (H) Service information. Points of contact for technical and service questions shall be provided, including name(s), phone number(s), fax number(s), address(es), and e-mail address(es).
- (v) Additional information. Any supporting data, drawings, or calculations to verify the above-required submissions shall be provided upon request.
- (2) Issuance of the certificate of approval. Upon approval of the mast climber prototype application, the department shall issue a certificate of approval for the mast climber to the manufacturer. The submitted manuals, including the configurations and capacity rating chart(s) shall be considered part of the certificate of approval.
- (3) Amendments. A request to amend a valid certificate of approval shall only be made by the mast climber manufacturer. Upon approval of the amendment(s), the department shall issue an amended certificate of approval. A certificate of approval is required to be amended when:
- (i) Capacity ratings are altered;
 - (ii) Configurations are altered;
 - (iii) Maximum free standing mast height is altered;
 - (iv) Maximum or minimum tie-in spacing is altered;
 - (v) Maximum safe in service or out of service wind speed is altered; or
 - (vi) Any part, component, attachment, extension, or equipment is added that is not authorized by the manufacturer, or not accounted for in the design calculations of the manufacturer, or not provided for in the manufacturer's manual, or is not provided for in the certificate of approval.
- (4) Safety bulletins. Manufacturers of mast climbers with a valid certificate of approval shall provide to the department manufacturer safety bulletins and recall notices related to the mast climber within five (5) business days of issuance. Safety bulletins and recall notices shall not be considered an amendment to the certificate of approval and shall not impact the validity of the certificate of approval. The department may require mast climber manufacturers with a valid certificate of operation or certificate of on-site inspection, or applying for such certificates, to demonstrate compliance with the safety bulletin or recall notice.
- (5) Manuals. Manufacturers shall provide updated manufacturer's owner's and operator's manual(s) to the department within thirty (30) business days of issuance. Updated manuals shall replace the manuals on file with the department for the certificate of approval and shall be considered part of such certificate. No fee shall be charged to update such manuals.

- (6) **Manufacturer support.** When points of contact for technical and/or service questions, including name(s), phone number(s), fax number(s), address(es), and e-mail address(es) change, the manufacturer shall provide updated information to the department within five (5) business days of the change. If the manufacturer of the mast climber changes, the new manufacturer shall notify the department and provide updated information to the department within five (5) business days of the change.

Updated manufacturer information shall replace the information on file with the department for the certificate of approval and shall be considered part of such certificate. No fee shall be charged to update such information.

Where there is no manufacturer to support the mast climber, the certificate of approval shall remain valid. However, no certificate of operation for such mast climber shall be issued or renewed unless the requirements of subparagraph (iv) of paragraph (2) of subdivision (e) of this section are met.

- (7) **Transferability.** Where a mast climber, its configuration(s), and capacity rating chart(s) are identical to equipment already possessing a valid certificate of approval from the department and such mast climber will be configured and operated as provided in that certificate of approval, the certificate of approval issued for the initial mast climber shall be accepted for the duplicate mast climber.
- (8) **2012 Amendment.** Certificates of approval issued prior to the effective date of this section shall be amended by July 1, 2012, in accordance with paragraph (3) of this subdivision (d) to supply any information currently not included in the certificate of approval as required by paragraph (1) of this subdivision (d). Valid certificates of approval that are not amended by July 1, 2012 shall be deemed to be revoked.
- (9) **Suspension or revocation of a certificate of approval.** The department may suspend or revoke a certificate of approval in accordance with Section 105.10 of Title 28 of the New York City Administrative Code (“Administrative Code”).

(e) **Certificate of operation.**

- (1) **Conformity with the certificate of approval.** No certificate of operation or extension, renewal, or amendment of a certificate of operation shall be granted by the department for a mast climber that does not possess a valid certificate of approval or is not in conformance with the valid certificate of approval.
- (2) **Application for a certificate of operation.** To request or renew a certificate of operation, the equipment owner shall sign and file with the department a mast climber device application. The application shall contain the following information:
 - (i) **Listing of critical components.** The equipment owner shall list the critical components of the mast climber, provide information regarding the dimensions and/or capacity of the critical components, and provide a unique identification number, acceptable to the department, for each critical component.

Exception. An identification number is not required for the high/low limit stops.

- (ii) **Owner’s certification.** The equipment owner shall certify that:
 - (A) The mast climber, including all parts and components, has passed an inspection performed by the equipment owner or an authorized person on behalf of the equipment owner who meets the definition of a qualified person. Such inspection shall consist of the inspection as required by section 6.5 of ANSI/SIA A92.9-1993, plus a full visual inspection of all parts and components of the mast climber. Such certification shall be accompanied by an inspection checklist signed and dated by the equipment owner, and shall also be accompanied by photographs in accordance with subdivision (g) of this section showing the mast climber controls, limit stops, platform(s), and typical mast section(s).

- (B) The mast climber, including all parts and components, shall be delivered to the job site in good condition and safe working order, with no known hazardous conditions or maintenance problems that could compromise the safe operation of the mast climber.
 - (C) Inspection, adjustment, maintenance, repair, and installation work required to be performed by or on behalf of the owner shall be performed in accordance with subdivisions (h), (j), and (k) of this section.
- (iii) Disclosure of history. The equipment owner shall disclose if:
- (A) A repair has been made to any critical component by or with the knowledge of the equipment owner within the last five (5) years. If a repair occurred, the nature of the repair shall be disclosed and the equipment owner shall certify the repair was in accordance with the requirements of paragraph (4) of subdivision (j) of this section.
 - (B) The mast climber, including any critical component, has, to the knowledge of the equipment owner, been involved in an accident within the last five (5) years. If an accident occurred, the equipment owner shall disclose the address and nature of the accident.
- (iv) Manufacturer support. Where there is no manufacturer to provide technical or service support for the mast climber, such circumstance shall be disclosed to the department by the equipment owner. Where there is no manufacturer to provide technical support, the equipment owner shall designate a professional engineer, acceptable to the department, to take responsibility for all technical support. Where there is no manufacturer to provide service support, the owner of the mast climber shall take responsibility for all service support. The owner and/or the engineer shall provide point of contact information for questions from the department for the specific mast climber including name(s), phone number(s), fax number(s), address(es), and e-mail address(es). This information shall be updated with the department as changes occur within five (5) business days of such change.
- (3) Issuance of the certificate of operation. Upon approval of the mast climber device application, the department shall issue a certificate of operation for the mast climber to the equipment owner. The mast climber shall not be installed until it possesses a valid certificate of operation.
- (4) Job specific validity. The certificate of operation for a mast climber shall be valid for only one job site and shall expire at the end of the job. The certificate must then be renewed prior to the start of a new job by filling an application in accordance with paragraph (2) of this subdivision (e).
- (5) Amendments. A request to amend a valid certificate of operation shall only be made by the equipment owner. Upon approval of the amendment, the department shall issue an amended certificate of operation to the equipment owner. A certificate of operation is required to be amended when:
- (i) A critical component listed in the original application is adjusted or repaired;
 - (ii) A critical component not listed in the original application is added;
 - (iii) The mast climber, or any part or component, is found not to have been repaired, adjusted, or maintained in accordance with paragraph (4) of subdivision (j) of this section;
 - (iv) A mast climber with a valid certificate of operation is involved in an accident; or
 - (v) A mast climber with a valid certificate of operation is sold to a new equipment owner; or
 - (vi) The manufacturer no longer provides technical or service support for the mast climber.

Amendments shall be granted by the department following provision of the information required in paragraph (2) of this subdivision (e), if requested, or performance and certification of repair(s), adjustment(s), or maintenance in

accordance with paragraph (4) of subdivision (j) of this section, or passage of an inspection in accordance with subdivision (k) of this section.

(6) Sale of equipment.

(i) Valid certificate of operation. When a mast climber possessing a valid certificate of operation is sold to a new equipment owner, the department shall be notified, in writing, by such new equipment owner within fourteen (14) days following the date of sale. Such notification shall include a copy of the bill of sale. The mast climber shall not be operated until the new equipment owner has filed an application to amend the certificate of operation in accordance with paragraph (5) of this subdivision (e) containing all the information required by paragraph (2) of this subdivision (e) and the department has approved an amended certificate of operation for the mast climber.

(ii) Expired certificate of operation. Where a mast climber with an expired certificate of operation is sold to a new equipment owner, the department shall be notified, in writing, by such new equipment owner when the new owner renews the certificate of operation. Such notification shall include a copy of the bill of sale.

(7) Multiple mast climbers. Where multiple mast climbers are combined together, a separate certificate of operation shall be required for each drive system.

(8) Suspension or revocation of a certificate of operation. The department may suspend or revoke a certificate of operation in accordance with Section 105.10 of Title 28 of the Administrative Code.

(f) **Certificate of on-site inspection.**

(1) Conformity with the certificate of approval and certificate of operation. An application for a certificate of on-site inspection may be filed with the department for a mast climber that does not possess a valid certificate of approval or certificate of operation. However, no certificate of on-site inspection or amendment to such certificate shall be granted by the department for a mast climber that does not possess a valid certificate of approval and certificate of operation, or is not in conformance with the certificate of approval and certificate of operation.

(2) Application for a certificate of on-site inspection. To apply for a certificate of on-site inspection, a professional engineer on behalf of the equipment owner shall file a mast climber notice application with the department. Accompanying plans and calculations shall include the proposed project address and be signed and sealed by the engineer. The application shall contain the following information:

(i) Ground and subsurface conditions.

(A) Certification from the engineer that he/she has inspected the ground conditions at the proposed location of the mast climber and accounted for them in his or her design;

(B) Identification of all pertinent ground and subsurface conditions, including but not limited to: elevations and slopes, all sheeting, shoring, retaining walls or excavations, all vaults, foundations, utilities, or other subsurface structures that could be impacted by the presence of the mast climber, along with identification of assumed soil, street, or sidewalk bearing values; and

(C) Certification from the engineer, supported by calculations, demonstrating that the mast climber, in all in-service and out-of-service conditions of loading, including those due to wind conditions, will not overload the street, soil, sidewalk, or any ground, utility, vault, or subsurface condition identified in subparagraph (B) above.

(ii) Footing. Plans showing the footing and any ground anchorage, outriggers, or dunnage of the mast climber, including matting necessary to support and distribute the loads of the mast climber. The engineer shall certify, supported by calculations, the adequacy of the footing for all in-service and out-of-service conditions of loading, including those due to wind conditions.

- (iii) Foundations and structures. Where a foundation or structure is to support the mast climber, including but not limited to tie-in connections or setting the mast climber on a foundation, setback, or roof:
 - (A) Plans showing the connection of the mast climber to the foundation or structure, including tie-ins, any foundation or structure to be constructed to support the mast climber and any modifications to be made to an existing foundation or structure to support the mast climber;
 - (B) For tie-in connections, specification of the materials to support the loads of the tie-in connections, identification of assumed bearing values, and pull out calculations;
 - (C) Where the building is under construction, a copy of the mast climber plans stamped “reviewed for loads imposed” by the registered design professional for the building, or a letter from the registered design professional for the building stating that he or she has reviewed the mast climber plan(s) for the loads it will impose on the building and attesting to the adequacy of the building to support such loads;
 - (D) Where the mast climber is used on or connected to an existing structure, certification from the engineer that he or she has inspected the structure at the proposed location of the mast climber and accounted for it in his or her design; and
 - (E) Certification from the engineer, supported by calculations, of the adequacy of the foundation or structure to support the mast climber and of the adequacy of all connections, including tie-ins, to support the mast climber in all in-service and out-of-service conditions of loading, including those due to wind conditions.

- (iv) Setup plan. The notice application shall include a site plan(s) and elevation plan(s) showing the following:
 - (A) The proposed location of the mast climber;
 - (B) The setup and configuration of the mast climber, including dimensions of mast sections and platforms and maximum weight-bearing capacity for each section;
 - (C) All phases of the installation and removal of the mast climber;
 - (D) Plans detailing the installation and removal of the mast climber, based on the requirements of the manufacturer;
 - (E) Optimal platform location when the mast climber is out of service, for all phases;
 - (F) Certification from the engineer, supported by calculations, that the mast climber, in all proposed configurations and phases, will be stable and able to support all conditions of loading, including those due to wind conditions;
 - (G) The final proposed height of the mast climber;
 - (H) Maximum and minimum tie-in spacing;
 - (I) Requirements for all bolted connections of the tie-in connections, foundation, and anchorages, including bolt grade and torque values;
 - (J) Netting, weather protection, or overhead protection to be installed on the mast climber;
 - (K) Any material or article intended to overhang from the mast climber, including building materials, or equipment including but not limited to hoisting machines or winches;

- (L) The façade of the building or structure along which the mast climber will travel, including items such as balconies, and setbacks; temporary construction such as runback structures, sidewalk sheds, scaffolds, and hoists; and surrounding trees and above ground utilities including street lights, traffic lights, antennas, electrical lines with voltage values indicated, phone or other lines, bridges, viaducts, and overhead infrastructure; and
 - (M) Certification from the engineer that the mast climber will clear all site obstructions.
 - (v) Pull out test. Where the mast climber attaches to masonry or concrete, criteria developed by the engineer for the pull out test(s).
- (3) Approval. Upon approval of the mast climber notice application, a copy of such approval shall be given to the applicant. The mast climber shall not be installed until the department has given such approval. A copy of the approved notice application, along with copies of the approved plans shall be kept at the job site and shall be made available to the department upon request.
- (4) Issuance of the certificate of on-site inspection.
- (i) Inspections. Following the installation of the mast climber at the job site, it shall be inspected as follows:
 - (A) Owner's inspection for the certificate of on-site inspection. The equipment owner, or an authorized representative of the equipment owner who meets the definition of a qualified person, shall inspect the mast climber, including all parts and components, in accordance with sections 6.4 of ANSI/SIA A92.9-1993, and shall also verify the critical components installed match those listed in the certificate of operation.
 - (B) Engineer's inspection for the certificate of on-site inspection. The engineer who filed the mast climber notice application, or an authorized representative of the engineer who meets the definition of a qualified person, shall inspect the mast climber to verify the mast climber has been installed in accordance with the approved plans; verify the tie-in connections, anchorages, footing, ground conditions, and the foundation and any structural support(s) are in accordance with the approved plans; perform pull out test(s) where required by approved plans; and survey the mast climber to ensure plumbness in accordance with approved plans.
 - (ii) Inspection reports for a certificate of on-site inspection.
 - (A) Owner's inspection report for a certificate of on-site inspection. Upon passing such owner's inspection required by subparagraph (A) of subparagraph (i) of this paragraph (4), the owner, or the authorized representative of the owner who performed the inspection, shall complete, sign, and date an inspection report verifying passage of the owner's inspection and detailing the results of the owner's inspection.
 - (B) Engineer's inspection report for a certificate of on-site inspection. Upon passing such engineer's inspection required by subparagraph (B) of subparagraph (i) of this paragraph (4), the engineer who filed the mast climber notice application, or the authorized representative of the engineer who performed the inspection, shall complete, sign, and date an inspection report verifying passage of the engineer's inspection and detailing the results of the engineer's inspection. Such report shall subsequently be sealed by the engineer who filed the mast climber notice application.

In addition, the engineer's inspection report shall also contain the results of the survey for plumbness, a torque report for the tie-in, foundation, and/or anchorage bolts, the results of the pullout test, where required by approved plans, and photographs of the mast climber installed at the job site, along with photographs of the foundation, and typical tie-in connection(s), in accordance with subdivision (g) of this section.

- (C) Record of failing an initial inspection for a certificate of on-site inspection. If the mast climber failed the owner's inspection or the engineer's inspection before subsequently passing an additional inspection, this shall be detailed in the passing inspection report, along with a description of any adjustment, maintenance, or repairs made to the mast climber.
- (iii) Temporary certificate of on-site inspection. The mast climber may begin operation once the mast climber passes both the owner's inspection and the engineer's inspection, both inspection reports are completed, signed, and dated, and the engineer's inspection report is sealed. Such reports shall be deemed a temporary certificate of on-site inspection. Copies of both reports shall be kept at the job site, and made available to the department upon request.
- (iv) Submittal of reports to the department. Within two business days following the completion of the inspection reports, a completed, signed, and dated copy of the owner's inspection report shall be submitted to the department by the equipment owner, and a completed, signed, dated, and sealed copy of the engineer's inspection report shall be submitted to the department by the engineer who filed the mast climber notice application. If one or both reports are not submitted to the department within the required timeframe, the temporary certificate of on-site inspection shall be deemed expired and the mast climber shall not resume operation until the department issues a certificate of on-site inspection.
- (v) Certificate of on-site inspection. Upon the department's acceptance of both the owner's inspection report and the engineer's inspection report, the department shall issue a certificate of on-site inspection for the mast climber. A copy of the certificate of on-site inspection shall be maintained at the job site.
- (vi) Rejection of the inspection report. If one or both of the inspection reports are rejected by the department, the mast climber shall cease operation and shall not resume operation until a new owner's inspection report, engineer's inspection report, or both, are accepted by the department and a certificate of on-site inspection is issued by the department.
- (5) Amendments. An approved mast climber notice application and/or a valid certificate of on-site inspection shall only be amended by a professional engineer on behalf of the equipment owner, and shall be approved by the department. Amendments shall be approved in the order in which they were received. Amendments shall be required where the mast climber is proposed to be or has been installed, removed, located, or configured in a manner not provided for in or beyond the tolerances provided in the approved plans and cannot be brought into conformance with the approved plans.
- (6) Job specific validity. The certificate of on-site inspection shall be valid for only one (1) job site and shall expire at the end of the job.
- (7) Installation in phases. Where a mast climber is to be installed in phases, the continued validity of the certificate of on-site inspection shall be contingent upon the following.
 - (i) Inspections.
 - (A) Owners inspection for a phase. Following installation work subsequent to the initial installation, the equipment owner, or an authorized representative of the equipment owner who meets the definition of a qualified person, shall inspect the components added during the subsequent installation to verify their safety, correct installation, and to verify that any critical components added match those listed in the certificate of operation; run the mast climber to verify its safe operation; and inspect the safety devices and limit switches.
 - (B) Engineer's inspection for a phase. Where the subsequent installation work included the attachment of a new tie-in connection, anchorage, or structural support, the engineer who submitted the mast climber notice application, or an authorized representative of the engineer who meets the definition of a qualified person, shall inspect the added tie-in connection(s), anchorage(s), or structural support(s) to verify they are in accordance with the approved plans;

perform pull out test(s) where required by approved plans; and survey the mast climber to ensure plumbness in accordance with approved plans.

- (ii) Inspection reports for a phase.
 - (A) Owner's inspection report for a phase. Upon passing such owner's inspection required by subparagraph (A) of subparagraph (i) of this paragraph (7), the owner, or the authorized representative of the equipment owner who performed the inspection, shall complete, sign, and date an inspection report verifying passage of the owner's inspection and detailing the results of the owner's inspection.
 - (B) Engineer's inspection report for a phase. Upon passing such engineer's inspection where required by subparagraph (A) of subparagraph (i) of this paragraph (7), the engineer who filed the mast climber notice application, or the authorized representative of the engineer who performed the inspection, shall complete, sign, and date an inspection report verifying passage of the engineer's inspection and detailing the results of the engineer's inspection. Such report shall subsequently be sealed by the engineer who filed the mast climber notice application.

In addition, the engineer's report shall also contain the results of the survey for plumbness, a torque report for the tie-in, foundation, and/or anchorage bolts, the results of the pullout test, where required by approved plans, and photographs of the mast climber installed at the job site, along with close up photographs of the foundation, and typical tie-in connection(s), in accordance with subdivision (g) of this section.

- (C) Record of failing the initial inspection for a phase. If the mast climber failed the owner's inspection or the engineer's inspection before subsequently passing an additional inspection, this shall be detailed in the relevant inspection report, along with a description of any adjustment, maintenance, or repairs made to the mast climber.
- (iii) Temporary extension of the certificate of on-site inspection. Following subsequent installation work, the mast climber shall not resume operation until the mast climber passes both the owner's inspection and the engineer's inspection, where required, and the inspection report(s) are completed, signed, and dated, and where required, sealed. The previously existing certificate of on-site inspection shall be deemed temporarily valid for the new configuration until an amended certificate of on-site inspection is issued, and the mast climber may resume operation. Copies of both reports shall be kept at the job site, and made available to the department upon request.
- (iv) Submittal of reports to the department. Within two business days following the completion of the inspection report(s), a completed, signed, and dated copy of the owner's inspection report shall be submitted to the department by the equipment owner, and, where required, a completed, signed, dated, and sealed copy of the engineer's inspection report shall be submitted to the department by the engineer who filed the mast climber notice application. If one or both reports, where required, are not submitted to the department within the required timeframe, the temporarily extended certificate of on-site inspection shall be deemed expired and the mast climber shall not resume operation until the department renews the certificate of on-site inspection.
- (v) Certificate of on-site inspection. Upon the department's acceptance of the owner's inspection report and the engineer's inspection report, where required, the department shall issue an amended certificate of on-site inspection for the mast climber in the new configuration. A copy of the amended certificate of on-site inspection shall be maintained at the job site.
- (vi) Rejection of the inspection report. If one or both of the inspection reports are rejected by the department, the mast climber shall cease operation and shall not resume operation until a new owner's inspection report, engineer's inspection report, or both, are accepted by the department and an amended certificate of on-site inspection for the new configuration is issued by the department.

- (8) Relocation. Where a mast climber is horizontally relocated during the course of the job, this shall not be considered a phase or amendment to a certificate of on-site inspection. Such relocation shall require a new mast climber notice application and a new certificate of on-site inspection.
- (9) Suspension or revocation of a certificate of on-site inspection. The department may suspend or revoke a certificate of on-site inspection in accordance with the provisions of Section 28-105.10 of the Administrative Code.
- (g) **Photographs.** Where photographs are required to accompany an inspection report for a certificate of operation or on-site inspection, such photographs shall be taken at the time of the inspection and shall have sufficient resolution and lighting to clearly show the objects photographed.
- (h) **Installation and removal.** Mast climbers shall be installed and removed in accordance with the requirements of ANSI/SIA A92.9-1993, the requirements of the manufacturer of the mast climber, approved plans, and the following:
 - (1) Owner's responsibility. The equipment owner, or an entity authorized by the equipment owner, shall be responsible for the installation and removal of a mast climber. All violations stemming from the actions taken, or not taken, by those installing or removing a mast climber shall be issued to the equipment owner, or the entity authorized by the equipment owner, not to an individual worker or supervisor.
 - (2) Insurance. All individuals involved in the installation or removal of a mast climber shall be covered by workers' compensation and general liability insurance of the equipment owner, or the entity authorized by the equipment owner, and shall be insured by the equipment owner, or the entity authorized by the equipment owner, to the minimum requirements specified by law.
 - (3) Supervisor. The installation and removal of a mast climber shall be supervised by a representative of the equipment owner, or the entity authorized by the equipment owner, who is both a competent person and a qualified person. Such individual shall be present at the job site during all installation and removal work and shall have the ability to directly communicate with all individuals involved in the installation or removal work.
 - (4) Training. On and after July 1, 2012, individuals who install or remove a mast climber, including the person supervising such installation or removal, shall be trained in accordance with the requirements of paragraph (1) of subdivision (m) of this section.
 - (5) Safety meeting. Within twenty four (24) hours prior to the commencement of installation or removal operations, a safety meeting with all individuals involved in such work shall be conducted. The following topics shall be discussed during the safety meeting:
 - (i) Scope of work;
 - (ii) Roles and responsibilities;
 - (iii) The specific sequence of work;
 - (iv) Inspection of all equipment, materials, and tools to be used during the installation or removal work;
 - (v) Review of all mast climber equipment to be installed;
 - (vi) Permit validity;
 - (vii) Qualifications and training of personnel;
 - (viii) Relevant weather warnings; and
 - (ix) Compliance with ANSI/SIA A92.9-1993, requirements of manufacturer of the mast climber, and the approved plans.

- (6) Notification to department. The equipment owner shall notify the department of the upcoming installation or removal of the mast climber within one business day, but not more than two business days, prior to the commencement of the safety meeting required by paragraph (5) of this subdivision (h).
 - (7) Removal of tie-ins. Tie-ins shall not be removed unless the removal is expressly authorized by the person supervising the work in accordance with paragraph (3) of this subdivision (h).
 - (8) Inspection. Following installation work, the mast climber shall be inspected in accordance with subdivision (f) of this section.
- (i) **Use and operation.** Mast climbers shall be used and operated in accordance with the requirements of ANSI/SIA A92.9-1993, the requirements of the manufacturer of the mast climber, approved plans, and the following requirements of this subdivision.
- (1) Responsibility of owner. Following the installation of the mast climber, the equipment owner shall not be responsible for its use or operation, except where the equipment owner also meets the definition of the equipment user. The responsibility for the safe use and operation of the mast climber shall rest with the equipment user.
 - (2) Equipment users. The equipment user shall only use the mast climber for work related to its trade. Where a separate trade or contractor uses the mast climber, such trade or contractor shall assume responsibility for the use and operation mast climber as the equipment user. A change in equipment user during the course of the day shall be considered a new shift for the purposes of paragraph (4) of subdivision (k) of this section.
 - (3) Training. On and after July 1, 2012, individuals who use or operate a mast climber, including the person supervising such use and operation, shall be trained in accordance with the requirements of paragraph (2) of subdivision (m) of this section.
 - (4) Safety talk. Prior to their first use of the mast climber at the job site, any individual who uses or operates the mast climber shall be given a safety talk by the equipment owner, an authorized agent of the owner, or the equipment user when so authorized by the equipment owner. The safety talk shall include, but not be limited to, the following topics:
 - (i) Controls of the mast climber;
 - (ii) Emergency descent procedures; and
 - (iii) Site specific safety considerations.
 - (5) Supervision of use and operation. The equipment user shall designate a competent person to supervise the use and operation of the mast climber. Such supervisor does not need to be on the mast climber, but shall remain on site at all times the mast climber is in use or operation and shall have the ability to directly communicate with the individuals on the mast climber. Such supervisor shall also:
 - (i) Ensure all individuals using or operating the mast climber on and after July 1, 2012 have completed the training required by paragraph (2) of subdivision (m) of this section and have received the safety talk in accordance with paragraph (4) of this subdivision (i).
 - (ii) Ensure the pre-shift inspection is performed in accordance with paragraph (4) of subdivision (k) of this section.
 - (iii) Ensure the mast climber log is maintained in accordance with paragraph (1) of subdivision (n) of this section.

The designation of a person to supervise the use and operation of a mast climber shall not relieve the liability of the equipment user for all aspects of mast climber use and operation, including but not limited to the actions of the person supervising the use and operation of the mast climber and those using or operating the mast climber. All

violations stemming from actions taken or not taken by such personnel shall be issued to the equipment user, not the person supervising the use and operation of the mast climber or those using or operating the mast climber.

- (6) Safe travel speeds. Safe travel speeds established by the manufacturer of the mast climber shall be followed at all times by the equipment user. Safe travel speed information shall be prominently displayed on the mast climber.
- (7) Loads and capacities. The equipment user shall ensure no use or operation of a mast climber exceeds the rated load capacity of the mast climber or any part or component of the mast climber. Load capacities shall be prominently displayed on the mast climber.
- (8) Stable and secure. The equipment user shall ensure the mast climber, all parts and components of the mast climber, and all materials, tools, and other articles located on and/or used from the mast climber are kept secure and stable at all times to prevent the mast climber from losing balance, overturning, collapsing, or any part, component, material, tool, or other article from falling from the mast climber.
- (9) Overhang. The equipment user shall ensure no material or article overhangs from a mast climber unless provided for in plans submitted with the application for a certificate of on-site inspection and approved by the department.
- (10) Rigging. Where a hoisting machine or winch located on a mast climber is used to hoist or lower materials, the mast climber shall remain stationary throughout the hoisting or lowering operation, and the requirements of the building code for rigging, hoisting, or lowering operations shall apply. Such hoisting machine or winch shall be located and installed on the mast climber in accordance with the engineer's approved plans for the mast climber.
- (11) Wind. Where sustained winds or wind gusts at the jobsite exceed 30 miles per hour, the use and operation of the mast climber shall cease. If the manufacturer of the mast climber recommends work to cease at a lower wind speed, such recommendation shall instead apply. Wind shutdown criteria from the manufacturer shall be maintained on the mast climber.

Wind speed shall be determined based on data from the nearest United States weather bureau reporting station, or an anemometer located at the job site, freely exposed to the wind, and calibrated in accordance with ASTM D5096-02, 2007.

- (12) Wheels. Equipment users shall not use or operate a mast climber while the mast climber is resting on wheels. It is permissible to relocate a mast climber, while it is not being used or operated, on wheels.
- (13) Failsafe. No mast climber shall be used or operated that does not have a failsafe method of lowering the platform in the event of a power failure.
- (14) Signs. No sign, information, pictorial representation, business, or advertising message(s), other than the name of the manufacturer or equipment owner where normally provided on the mast climber, shall be posted or displayed on a mast climber.
- (15) End of shift. At the end of each shift, the mast climber shall be secured in accordance with the manufacturer's recommendations, and lowered in accordance with the engineer's approved plans.

(j) **Mast climber equipment requirements.** Mast climbers shall meet the requirements of ANSI/SIA A92.9-1993 and the following.

- (1) Good condition. Equipment owners shall only provide to the job site mast climbers, including all parts and components, that are in good condition and safe working order with no known hazardous conditions or maintenance problems that will compromise the safe operation of the mast climber.
- (2) Locking. Mast climbers shall be provided with a positive means for preventing the unauthorized operation of such mast climber.
- (3) Parts and components. All parts and components of a mast climber, including netting, wind protection, or overhead projection, shall be:

- (i) Authorized by the manufacturer, or accounted for in the design calculations of the manufacturer, or provided for in the manufacturer's manual, or provided for in the certificate of approval; and
 - (ii) Covered by the owner's certification for the certificate of operation; and
 - (iii) Accounted for in the certificate of on-site inspection.
- (4) Repairs, adjustments, and maintenance. All repairs, adjustments, or maintenance made to a mast climber, including any part or component, shall be made by a qualified person(s) in accordance with the specifications of the equipment manufacturer and the requirements of ANSI/SIA A92.9-1993, and shall provide at least the manufacturer's original factor of safety and shall conform to the following.
- (i) Job site repairs. While at the job site, equipment users shall not perform repair(s). Equipment users shall immediately notify the equipment owner of any need for a repair.

The mast climber shall not resume operation until a qualified person on behalf of the equipment owner has inspected the mast climber in accordance with the requirements of the manufacturer to verify the adequacy of the repair.

A description of such repair, and the results of such inspection shall be recorded in the mast climber log in accordance with paragraph (1) of subdivision (n) of this section by the person who performed the inspection, with the log entry signed and dated by such person.

- (ii) Job site adjustments. While at the job site, equipment users shall not perform adjustments(s) unless so authorized, in writing, by the equipment owner. Where not so authorized by the equipment owner, the equipment user shall immediately notify the equipment owner of any need for an adjustment.

The mast climber shall not resume operation until a qualified person on behalf of the equipment owner, or where the equipment user has been authorized to perform the adjustment, a qualified person on behalf of the equipment user, has inspected the mast climber in accordance with the requirements of the manufacturer to verify the adequacy of the adjustment, and the mast climber has passed such inspection.

A description of such adjustment, and the results of such inspection shall be recorded in the mast climber log in accordance with paragraph (1) of subdivision (n) of this section by the person who performed the inspection, with the log entry signed and dated by such person.

- (iii) Job site maintenance. Mast climbers at the job site shall be maintained in accordance with the specifications of the manufacturer and Section 6.3 of ANSI/SIA A92.9-1993.

Equipment users shall not perform maintenance work on mast climbers unless so authorized, in writing, by the equipment owner. Where not so authorized, the equipment user shall immediately notify the equipment owner of any need for maintenance.

The equipment owner shall develop a maintenance checklist based on the specifications of the manufacturer and Section 6.3 of ANSI/SIA A92.9-1993. Such checklist shall be maintained at the job site, and shall be signed, dated, and completed by the person who performed the maintenance.

- (iv) Critical components. Where a critical component is repaired or adjusted, the certificate of operation for the mast climber shall be considered invalid. The mast climber shall not resume operation until the equipment owner discloses the work to the department and the certificate of operation is amended in accordance with paragraph (5) of subdivision (e) of this section.

(k) **Inspection of mast climbers.**

- (1) Inspection for a certificate of operation. Mast climbers shall be inspected in accordance with the requirements of subdivision (e) of this section.

- (2) Inspection(s) for a certificate of on-site inspection. Mast climbers shall be inspected in accordance with the requirements of subdivision (f) of this section.
- (3) Inspection(s) following repairs or adjustments. Following a repair or adjustment, the mast climber shall be inspected in accordance with paragraph (4) of subdivision (j) of this section.
- (4) Pre-shift inspection.
 - (i) Inspection checklist. The equipment owner shall provide the equipment user a pre-shift inspection checklist for the mast climber. Such checklist shall be based on the manufacturer requirements for the inspection of the mast climber, as well as Section 7.4.3 of ANSI/SIA A92.9-1993, and shall also include a verification that the mast climber is located in accordance with approved plans. Such checklist shall be maintained at the job site, available for inspection by the department upon request.
 - (ii) Inspection performance. Inspections required by the checklist shall be performed by, and the checklist signed, dated, and completed by the person supervising the use and operation of the mast climber in accordance with paragraph (5) of subdivision (i) of this section prior to the start of each shift. A change in equipment user during the course of the day shall be deemed to be a new shift and shall require a new pre-shift inspection prior to the use of the mast climber.
 - (iii) Failing inspection. If the mast climber fails the inspection, it shall cease operation and shall not resume until it has been adjusted, repaired, or maintained and passed a follow up inspection. Such failure shall be detailed in the mast climber log required by paragraph (1) of subdivision (n) of this section, along with a description of any adjustment, maintenance, or repair made to the mast climber.
- (5) Three-month and annual inspection.
 - (i) Three-month inspection. Where a mast climber remains at a job site for three months or longer, it shall be inspected by a qualified person authorized by the equipment owner. Such inspection shall be in accordance with Section 6.4 of ANSI/SIA A92.9-1993, and shall also verify that the mast climber remains installed in accordance with approved plans. Such inspection shall be performed between two and a half to three months following the issuance of the initial certificate of on-site inspection by the department for the mast climber at the job site, and every two and a half to three months thereafter.
 - (ii) Annual inspection. Where a mast climber remains at a job site for one year or longer, the mast climber shall be inspected by a qualified person authorized by the equipment owner. Such inspection shall be in accordance with Sections 6.4 and 6.5 of ANSI/SIA A92.9-1993, and shall also verify that the mast climber remains installed in accordance with approved plans. Such inspection shall be performed between eleven months to one year following the issuance of the initial certificate of on-site inspection by the department for the mast climber at the job site, and every eleven months to one year thereafter.
 - (iii) Inspection report. Upon passing such three-month or annual inspection, a report detailing the inspection results shall be signed, dated, and completed by the person who performed the inspection, and shall be maintained at the job site, and made available to the department upon request.
 - (iv) Failing inspection. If the mast climber fails a three-month or annual inspection, it shall cease operation and shall not resume until it has been adjusted, repaired, or maintained and passed a subsequent inspection. Such failure shall be detailed in the inspection report and the mast climber log required by paragraph (1) of subdivision (n) of this section, along with a description of any adjustment, maintenance, or repairs made to the mast climber.
- (1) **Hazardous conditions.** When a hazardous condition associated with a mast climber that could impact the public or adjoining property is identified, or where the mast climber fails an inspection required by subdivision (k) of this section, the use and operation of such mast climber shall cease. The mast climber shall not resume operation until the hazardous

condition has been corrected and, where necessary, passed a subsequent inspection and/or has been repaired, adjusted, or maintained in accordance with paragraph (4) of subdivision (j) of this section.

- (m) **Training.** Training shall be required for all individuals who install, remove, use, or operate a mast climber.
- (1) Installation or removal. Beginning July 1, 2012, individuals who install or remove a mast climber, including the person supervising such individuals, shall have completed manufacturer provided training for the installation and removal of the specific make and model of the mast climber.
 - (2) Operation or use. Beginning July 1, 2012, individuals who operate or use a mast climber, including the person supervising such individuals, shall have completed a department-approved training course that is at least four (4) hours long, and a department-approved four (4) hour refresher course every (4) years thereafter that covers areas including, but not limited to, mast climber use and operation, hazards associated with such work, pre-use inspections, start up and shut down procedures, emergency descent procedures, fall protection, mast climber stability and balance, and storage of materials on a mast climber.
 - (3) Examinations. Successful completion of a four (4) hour mast climber training or refresher course required by paragraph (2) of this subdivision (m) shall be dependent upon passing a written examination conducted by the training provider.
 - (4) Training providers. Mast climber training and refresher courses required by paragraph (2) of this subdivision (m) shall be approved by the department and conducted by a provider approved by the department. A provider shall either be:
 - (i) A registered New York State Department of Labor apprenticeship training program;
 - (ii) An educational institution or school chartered, licensed or registered by the New York State Department of Education;
 - (iii) The mast climber manufacturer;
 - (iv) The mast climber owner; or
 - (v) An entity otherwise acceptable to the department.
 - (5) Instructors. Instructors of training courses required by paragraphs (1) or (2) of this subdivision (m) shall meet the definition of a qualified person with regard to the course material being taught.
 - (6) Records. The training provider of training courses required by paragraphs (1) or (2) of this subdivision (m) shall maintain records of all who attended the course(s) for a period of not less than seven (7) years. Such records shall be made available to the department upon request.
 - (7) Identification cards. Upon successful completion of a mast climber training or refresher course required by paragraphs (1) or (2) of this subdivision (m), the individual shall be issued a wallet size identification card acceptable to the department. Such card shall be kept on the person during the course of work and shall be presented to the department upon request. Such card shall contain the following information:
 - (i) The name of the individual to whom it was issued;
 - (ii) A photograph of the individual to whom it was issued;
 - (iii) The name and address of the issuing organization;
 - (iv) The date of issuance;
 - (v) An indication of the type of training completed (installer, user, operator); and

(vi) The signature of the course administrator.

(n) **Documents.** A copy of the operators manual, the manufacturer's capacity charts for the mast climber, approved plans, the valid certificate of operation, valid temporary or full certificate of on-site inspection, inspection reports and checklists, the maintenance checklist, and the log required by paragraph (1) of this subdivision (n) shall be kept at the job site, available for inspection by the department upon request. All such documents shall be in English.

In addition to the above, where the equipment owner authorizes the equipment user to provide the safety talk in accordance with paragraph (4) of subdivision (i) of this section, or perform adjustments or maintenance to the mast climber in accordance with paragraph (4) of subdivision (j) of this section, a copy of such written authorization shall be kept at the jobsite, available to inspection by the department upon request. Such authorization shall be in English and signed and dated by the equipment owner.

(1) **Log.** A log for each mast climber shall be maintained at the job site and shall be made available to the department upon request. All log entries shall be legible and written in English. The equipment user is responsible for ensuring the log is signed, dated, and completed. The log shall be kept up to date and contain the following information:

(i) The name and contact information of the person supervising installation or removal of the mast climber per paragraph (3) of subdivision (h) of this section;

(ii) A record of the meeting held prior to installation or removal work in accordance with paragraph (5) of subdivision (h) of this section, including the date and time of the meeting; the names, titles and company affiliations of all present at the meeting; a summary of what was discussed, including specific tasks and the name of the person to whom they were assigned; a list of the decisions made at the meeting; and a certification that all workers have completed the required training per paragraph (1) of subdivision (m) of this section;

(iii) The logging in, prior to each shift, of the person supervising the use and operation of the mast climber in accordance with paragraph (5) of subdivision (i) of this section, including the date and time, the name and signature of the person, and the business name, address, and phone number of the equipment user. Where this information changes during the day, the new person supervising the use and operation of the mast climber shall sign in;

(iv) The date, time, and names of the individuals who received a safety talk in accordance with paragraph (4) of subdivision (i) of this section, along with the name and signature of the person who conducted the safety talk;

(v) A record of any accidents involving the mast climber at the job site;

(vi) Record of repairs and adjustments made to the mast climber in accordance with paragraph (4) of subdivision (j) of this section; and

(vii) A record of any hazardous conditions discovered with the mast climber at the job site.

(2) The log shall be turned over by the equipment user to the equipment owner at the end of the job.

(o) **Accident and incident reporting.** When a mast climber operating in New York City and requiring a certificate of operation is involved in an accident or incident, the department shall be immediately notified, and use and operation of the mast climber shall cease. Following an accident or incident, no person shall permit any of the following without the permission of the department or under the lawful order of the New York City Police or Fire Department:

(1) Use or operation of such mast climber;

(2) Removal of the mast climber or any part thereof from the area of the job site; or

(3) Removal of any debris, objects or evidence involved in the accident or incident.

- (p) **Open applications.** Applications shall be deemed abandoned, and the fee forfeited, one (1) year after the date of their filing pursuant to the provisions of Section 28-105.7 of the Administrative Code.
- (q) **Waiver.** Where the equipment owner or equipment user can demonstrate practical hardship in complying with a requirement of this section, but can provide alternative means of compliance that do not compromise the safety of the public or property, the department may grant a waiver from such requirement of this section, provided the alternative means are complied with.