

## NEW YORK CITY DEPARTMENT OF BUILDINGS

### **Notice of Public Hearing and Opportunity to Comment on Proposed Rules**

**What are we proposing?** The Department of Buildings (DOB) is proposing this rule to establish regulations for rigging equipment and rigging operations. Rigging consists of the system of ropes, slings, hooks, and other hardware used to secure loads while they are being lifted or lowered by a crane or other hoisting machine.

**When and where is the hearing?** DOB will hold a public hearing on the proposed rule. The public hearing will take place at 2pm on 9/6/18. The hearing will be in the 3<sup>rd</sup> floor conference room at 280 Broadway.

**How do I comment on the proposed rules?** Anyone can comment on the proposed rules by:

- **Website.** You can submit comments to the DOB through the NYC rules website at <http://rules.cityofnewyork.us>.
- **Email.** You can email comments to [dobrules@buildings.nyc.gov](mailto:dobrules@buildings.nyc.gov).
- **Mail.** You can mail comments to the New York City Department of Buildings, Office of the General Counsel, 280 Broadway, 7<sup>th</sup> floor, New York, NY 10007.
- **Fax.** You can fax comments to the New York City Department of Buildings, Office of the General Counsel, at 212-566-3843.
- **Speaking at the hearing.** Anyone who wants to comment on the proposed rule at the public hearing must sign up to speak. You can sign up in the hearing room before the hearing begins on 9/6/18. You can speak for up to three minutes.

**Is there a deadline to submit comments?** Yes, you must submit comments by 9/6/18.

**What if I need assistance to participate in the hearing?** You must tell the Office of the General Counsel if you need a reasonable accommodation of a disability at the hearing. You must tell us if you need a sign language interpreter. You can tell us by mail or email at the addresses given above. You may also tell us by telephone at 212-393-2085. Advance notice is requested to allow sufficient time to arrange the accommodation. Please tell us by 8/23/18.

This location has the following accessibility option(s) available: Wheelchair accessibility.

**Can I review the comments made on the proposed rules?** You can review the comments made online on the proposed rules by going to the website at <http://rules.cityofnewyork.us/>. A few days after the hearing, copies of all comments submitted online, copies of all written comments and a summary of oral comments concerning the proposed rule will be available to the public at the Office of the General Counsel.

**What authorizes DOB to make this rule?** Sections 643 and 1043(a) of the City Charter and sections 3316.9 and 3319.9 of the Building Code authorize DOB to make this proposed rule. This proposed rule was not included in DOB's regulatory agenda for this Fiscal Year because it was not contemplated when DOB published the agenda.

**Where can I find DOB's rules?** DOB's rules are in Title 1 of the Rules of the City of New York.

**What laws govern the rulemaking process?** DOB must meet the requirements of Section 1043 of the City Charter when creating or changing rules. This notice is made according to the requirements of Section 1043(b) of the City Charter.

## **Statement of Basis and Purpose of Proposed Rule**

The Department of Buildings (DOB) is proposing this rule to establish regulations for rigging equipment and rigging operations. Rigging consists of the system of ropes, slings, hooks, and other hardware used to secure loads while they are being lifted or lowered by a crane or other hoisting machine.

The proposed rule adopts national model standards published by the American Society of Mechanical Engineers (ASME) for rigging hardware, hooks, below-the-hook lifting devices, and slings. Additional New York City specific provisions are also proposed. Provisions for inspections, record keeping, and equipment identification are proposed to create a framework to verify compliance with the ASME standards. Restrictions on repairs, alterations, and modifications are provided to ensure these activities are performed in accordance with manufacturer requirements. Other specific precautions for rigging operations and certain types of rigging equipment are proposed to prohibit practices that have led to past rigging failures in New York City.

Adoption of ASME rigging standards, with New York City modifications, was recommended by the Crane Safety Technical Working Group ("TWG"), appointed by Mayor Bill de Blasio and Buildings Commissioner Rick Chandler following the February 2016 crane collapse in Tribeca (TWG recommendation #8).

The Department of Buildings' authority for these rules is found in sections 643 and 1043 of the New York City Charter and sections 3316.9 and 3319.9 of the New York City Building Code.

New material is underlined.

[Deleted material is in brackets.]

"Shall" and "must" denote mandatory requirements and may be used interchangeably in the rules of this department, unless otherwise specified or unless the context clearly indicates otherwise.

Chapter 3300 of Title 1 of the Rules of the City of New York is amended by adding a new Section 3316-01, to read as follows:

### **§3316-01 Rigging operations and rigging equipment**

**(a) Applicability.** This section applies to rigging operations performed in connection with the hoisting or lowering of articles on the outside of a building and all rigging equipment utilized in connection with such operations.

**(b) Definitions.** For the purposes of this section, terms defined in Chapter 33 of the New York City Building Code and section 3319-01 of these rules have the same meaning here.

**(c) Manufacturer specifications, design, and capacity restrictions.** Rigging operations must be performed, and rigging equipment utilized, in accordance with specifications and rated capacities established by the manufacturer of the rigging

equipment and the manufacturer of the object to be hoisted or lowered. In addition, where plans or design documents are provided, the rigging operations must be performed in accordance with such plans or design documents.

**Exceptions:** Deviations from the manufacturer specifications and rated capacities are allowed provided they are in accordance with design drawings prepared by a registered design professional who has demonstrated knowledge and experience with rigging. Such design drawings must clearly indicate the deviations from the manufacturer specifications and rated capacities.

**(d) Precautions.** The following precautions must be observed during rigging operations.

**(1) Tag lines.** A tag or restraint line must be used where a load could be subject to rotation that would pose a hazard.

**(2) Releasing the load.** The rigging supervisor required by Section 3316.9.1 of the New York City building code is required to ensure that no load is released from the hoisting line or otherwise deposited until either:

- (i) The load is securely attached in place to the building or structure; or
- (ii) The load has been placed on a surface or structure capable of supporting the load.

**(3) Shock loading.** Precautions must be taken to avoid shock loading.

**(4) Makeshift links or fasteners.** Makeshift links or fasteners formed from bolts or rods, or other such attachments are prohibited.

**(5) Job built equipment.** Job built rigging equipment must be designed by a registered design professional who has demonstrated knowledge and experience with rigging. Signed and sealed drawings for the job built rigging equipment must be kept at the site at all times.

**(e) Slings.** Slings must be utilized in accordance with the requirements of this subdivision and ASME B30.9. Where differences occur between the provisions of this section and referenced standards, the provisions of this section apply.

**(1) Repairs, alterations, and modifications.** Slings may only be repaired, altered, or modified by the manufacturer of the sling, or an entity authorized by the manufacturer.

**Exception:** Missing or illegible identification tags may be replaced by a qualified person in accordance with the requirements of the manufacturer of the sling.

**(2) Inspections.** The frequent inspection required by ASME B30.9 must be performed prior to each shift by the individual responsible for supervising the rigging operation in accordance with Section 3316.9 of the New York City Building Code. Where synthetic slings are utilized, the softening mechanisms

must also be inspected as part of the frequent inspection. The periodic inspection and other inspections required by ASME B30.9 must be performed by a competent person designated by the owner of the sling at the intervals prescribed by ASME B30.9.

(i) **Additional inspection for synthetic slings.** Synthetic materials can be degraded by exposure to sunlight or ultraviolet light. Manufacturer recommendations for the inspection of synthetic slings to determine the damage from sunlight or ultraviolet light must be followed.

(3) **Records.** Where ASME B30.9 requires a record or documentation of an inspection or test, such record or documentation must be signed and dated by the individual who performed the inspection or test, and must be maintained by the owner of the sling.

(4) **Identification.** Tags or similar identification on the sling must be legible.

(5) **Discarded rope.** Discarded rope cannot be used for slings.

(6) **Weakest component.** Hooks, rings, oblong links, pear shaped links, welded or mechanical coupling links, or other attachments must have a rated capacity at least equal to that of the sling with which they are used.

(7) **Protection of synthetic slings from edges, corners, or protrusions.** Synthetic slings cannot be used unless softening mechanisms have been applied to all edges, corners, or protrusions.

(8) **Use of synthetic slings in conjunction with climber or tower crane erection, jumping, climbing, and dismantling.** Synthetic slings can only be used in conjunction with climber or tower crane erection, jumping, climbing, and dismantling if the manufacturer's manual specifically states or recommends the use of synthetic slings.

(f) **Below-the-hook lifting devices.** Below-the-hook lifting devices must be utilized in accordance with the requirements of this subdivision and ASME B30.20. Where differences occur between the provisions of this section and referenced standards, the provisions of this section apply.

(1) **Repairs, alterations, and modifications.** Below-the-hook lifting devices may only be repaired, altered, or modified by the manufacturer of the device, or an entity authorized by the manufacturer.

**Exception:** Missing or illegible identification tags may be replaced by a qualified person in accordance with the requirements of the manufacturer of the below-the-hook lifting device.

(2) **Inspections.** The frequent inspection required by ASME B30.20 must be performed prior to each shift by the individual responsible for supervising the rigging operation in accordance with Section 3316.9 of the New York City Building Code. The periodic inspection and other inspections required by ASME

B30.20 must be performed by a competent person designated by the owner of the below-the-hook lifting device at the intervals prescribed by ASME B30.20.

**(3) Records.** Where ASME B30.20 requires a record or documentation of an inspection or test, such record or documentation must be signed and dated by the individual who performed the inspection or test, and must be maintained by the owner of the below-the-hook lifting devices.

**(4) Identification.** Tags or similar identification on the below-the-hook lifting device must be legible.

**(g) Rigging hardware.** Rigging hardware described in ASME B30.26 must be utilized in accordance with the requirements of this subdivision and ASME B30.26. Where differences occur between the provisions of this section and referenced standards, the provisions of this section apply.

**(1) Repairs, alterations, and modifications.** Rigging hardware may only be repaired, altered, or modified by the manufacturer of the rigging hardware, or an entity authorized by the manufacturer.

**Exceptions:**

1. Missing or illegible identification tags may be replaced by a qualified person in accordance with the requirements of the manufacturer of the rigging hardware.
2. Safety latches may be replaced by a qualified person in accordance with the requirements of the manufacturer of the rigging hardware.

**(2) Inspections.** The frequent inspection required by ASME B30.26 must be performed prior to each shift by the individual responsible for supervising the rigging operation in accordance with Section 3316.9 of the New York City Building Code. The periodic inspection and other inspections required by ASME B30.26 must be performed by a competent person designated by the owner of the rigging hardware at the intervals prescribed by ASME B30.26.

**(3) Records.** Where ASME B30.26 requires a record or documentation of an inspection, calibration, or test, such record or documentation must be signed and dated by the individual who performed the inspection, calibration, or test, and must be maintained by the owner of the rigging hardware.

**(4) Identification.** Tags or similar identification on the rigging hardware must be legible.

**(h) Hooks.** Hooks must be utilized in accordance with the requirements of this subdivision and ASME B30.10. Where differences occur between the provisions of this section and referenced standards, the provisions of this section apply.

**(1) Repairs, alterations, and modifications.** Hooks may only be repaired, altered, or modified by the manufacturer of the hook, or an entity authorized by

the manufacturer. Repairs, alterations, or modifications by welding or reshaping are not acceptable unless prior written approval of the department is obtained.

**Exception:** Safety latches may be replaced by a qualified person in accordance with the requirements of the manufacturer of the hook.

**(2) Inspections.** The frequent inspection required by ASME B30.10 must be performed prior to each shift by the individual responsible for supervising the rigging operation in accordance with Section 3316.9 of the New York City Building Code. The periodic inspection and other inspections required by ASME B30.10 must be performed by a competent person designated by the owner of the hook at the intervals prescribed by ASME B30.10.

**(3) Records.** Where ASME B30.10 requires a record or documentation of an inspection or test, such record or documentation must be signed and dated by the individual who performed the inspection or test, and must be maintained by the owner of the hook.

**(4) Identification.** Tags or similar identification on the hook must be legible.

**(5) Latches and self-locking mechanisms.** Hooks without a latch or self-locking mechanism are prohibited.

**(i) Documents made available upon request.** Where this section or a referenced standard requires inspection records, design drawings, or other documentation to be maintained, such record, design drawing, or documentation must be made available to the commissioner upon request.

**(j) Referenced standards.** The standards referenced in this section are considered part of the requirements of this section to the prescribed extent of each such reference. Where differences occur between provisions of this section and referenced standards, the provisions of this section apply.

<b>Standard</b>	<b>Name</b>	<b>Year</b>
American Society of Mechanical Engineers (ASME)		
<u>ASME B30.9</u>	<u>Slings</u>	<u>2014</u>
<u>ASME B30.10</u>	<u>Hooks</u>	<u>2014</u>
<u>ASME B30.20</u>	<u>Below-the-hook lifting devices</u>	<u>2013</u>
<u>ASME B30.26</u>	<u>Rigging hardware</u>	<u>2015</u>

**NEW YORK CITY LAW DEPARTMENT  
DIVISION OF LEGAL COUNSEL  
100 CHURCH STREET  
NEW YORK, NY 10007  
212-356-4028**

**CERTIFICATION PURSUANT TO  
CHARTER §1043(d)**

**RULE TITLE:** Amendment of Rules Relating to Rigging Equipment

**REFERENCE NUMBER:** 2018 RG 074

**RULEMAKING AGENCY:** Department of Buildings

I certify that this office has reviewed the above-referenced proposed rule as required by section 1043(d) of the New York City Charter, and that the above-referenced proposed rule:

- (i) is drafted so as to accomplish the purpose of the authorizing provisions of law;
- (ii) is not in conflict with other applicable rules;
- (iii) to the extent practicable and appropriate, is narrowly drawn to achieve its stated purpose; and
- (iv) to the extent practicable and appropriate, contains a statement of basis and purpose that provides a clear explanation of the rule and the requirements imposed by the rule.

/s/ STEVEN GOULDEN  
Acting Corporation Counsel

Date: July 19, 2018



**NEW YORK CITY MAYOR'S OFFICE OF OPERATIONS  
253 BROADWAY, 10<sup>th</sup> FLOOR  
NEW YORK, NY 10007  
212-788-1400**

**CERTIFICATION / ANALYSIS  
PURSUANT TO CHARTER SECTION 1043(d)**

**RULE TITLE: Amendment of Rules Relating to Rigging Equipment**

**REFERENCE NUMBER: DOB-114**

**RULEMAKING AGENCY: Department of Buildings**

I certify that this office has analyzed the proposed rule referenced above as required by Section 1043(d) of the New York City Charter, and that the proposed rule referenced above:

- (i) Is understandable and written in plain language for the discrete regulated community or communities;
- (ii) Minimizes compliance costs for the discrete regulated community or communities consistent with achieving the stated purpose of the rule; and
- (iii) Does not provide a cure period because a violation of such rule could pose an immediate risk to public health and safety.

/s/ Lindsay Fuller  
Mayor's Office of Operations

July 17, 2018  
Date