

**SECTION 01 54 23.01**  
**SCAFFOLDING, HOISTING AND LIFTING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Scaffolding
- B. Pipe Scaffolding
- C. Hoisting and Lifting

**1.02 SCAFFOLDING, HOISTING AND LIFTING**

- A. Scaffolding
  1. Furnish and erect adequate scaffolding, as and where required for the execution of all Work specified in this Contract. The Contractor shall make the necessary arrangements for, and obtain all permits required for his/her Work, paying the costs and expenses thereof.
  2. Erect and operate all scaffolding by or under the supervision of a licensed rigger. Present original rigger's license to the Authority's Representative for verification prior to installation.
  3. Scaffolding shall conform to the Building Code, OSHA regulations, and to all requirements of public agencies having jurisdiction thereof.
  4. Scaffolding shall be erected in such a manner as not to disturb any parts of the building under construction, or in any way affect the guarantee of the roofing, exterior cladding, or any other material and/or equipment being installed as part of the Work.
  5. The Contractor shall notify NYCHA's Field Representative and the Development Superintendent 48 hours prior to the erection of any scaffolding, and shall coordinate his/her efforts so as not to interfere with normal activities of the development staff and residents.
  6. The Contractor shall be responsible to coordinate in advance with the other Sub-Contractors and the Contractor's Supervisor so as not to interfere with the overall progress of the Work.
  7. Scaffolding shall be safe, secure, and properly maintained at all time. All necessary provisions shall be made to protect the Workers and the public against any hazard or injury, and all property from damage. The Contractor shall be held fully and solely liable for any harm, injury or damage resulting from faulty, damaged, or weak scaffolding.
  8. Erect scaffolding so as not to disturb any parts of the existing buildings, including TV cables. Do not penetrate or damage building facades.
  9. Upon completion of Work, dismantle and remove scaffolding immediately.
  10. File necessary Forms with the Department of Buildings. Submit a copy to NYCHA's Field Representative.
  11. The Workers on the scaffold must possess a certificate of fitness and completion of safety training courses as per N.Y.C. Building Rigging Rule 9-03. Their photo I.D. shall be presented to NYCHA field Representative for verification.
  12. Electrical hook-up for electrical devices at scaffolding shall be performed only by a licensed electrician and at the location approved by the Development Superintendent. Install electrical cabling to the roof, a circuit breaker for scaffold in the basement, and two circuit breaker boxes at the roof for scaffold and power tools. All wiring shall comply with N.Y.C. Electrical Code.
  13. Ensure that scaffolding is inaccessible to the public at all times and cannot be utilized to gain entry into the building.
  14. Provide a copy of the monthly scaffold service report to the Authority's Representative.
  15. Provide toe boards and safety netting on all exterior sides of the scaffolds. Safety netting shall include a structural mesh lined with a fine mesh of a size and strength sufficient to retain falling tools and materials. The Contractor is liable for any injuries or damages resulting from the materials or tools dropped to the ground.
- B. Pipe Scaffolding

1. The Contractor shall build necessary pipe scaffolds to complete the work. Scaffold shall conform to the N.Y.C. Building Code Chapter 33.
2. Pipe Scaffold shall be heavy-duty pipe scaffold and is to be used for loads up to 75 psf. The members of the scaffold shall be adequately braced and connected to prevent displacement or distortion of the framework.
3. All exterior scaffolding shall be designed by a Professional Engineer hired by the Contractor. Submit design calculations for the Authority's approval. Design Drawings shall be prepared and approved by a Professional Engineer having valid license in State of New York.
4. The Contractor shall obtain and maintain necessary permits for the pipe scaffold from the Building Department and submit copies of the permits and Design Drawing for the Authority's approval. In addition, copies of all permits shall be prominently posted at the job site and renewed as necessary at no cost to the Authority.
5. No standard scaffold shall be loaded in excess of the maximum load. Loads shall not be concentrated so as to cause stresses in excess of allowable value. Provide load combinations which include dead, live, wind, and snow loading. Snow and ice loads must be included in design calculations during winter months. Tieback design must include wind factors created when netting and screen are used. Scaffold must meet code requirements for overturning and sliding. All scaffold members shall be designed to be capable of withstanding maximum loads without collapse. Provide cross horizontal. Diagonal braces as required or a combination thereof, which secure vertical members together laterally. Do not excessively concentrate load at any given time.
6. The supports and anchorage for scaffold shall be sound and rigid, capable of carrying maximum load without settlement or deformation, and secure against movement in any directions.
7. The minimum width of every plank shall be 18", 2" in thickness and permissive span shall be 5'-0" maximum. Planks shall overhang their end supports at least 6" or they shall be fastened to prevent dislodgment. In no case shall the overhang exceed 18".
8. Only workers with experience in erecting or removing scaffolds shall be employed. They shall work under the supervision of a designated superintendent or foreman who shall enforce such measures as necessary for the protection of public and property. Provide fence enclosure at bottom part of scaffold for preventing unauthorized access as directed by Authority's representative. Follow the limit per DOB for number of platforms that can be planked with two working platforms as any elevation at a given time.
9. All scaffolds shall be maintained in safe condition. No scaffold shall be altered, removed or partially dismantled while it is in active use. Every damaged or weakened scaffold shall be immediately repaired and shall not be used until such repairs have been completed. A grounding conductor shall be installed as required by DOB.
10. Except for scaffolds ten feet or less above the ground the open sides and ends of every scaffold platform shall be provided with a standard guard rail and toe board.
11. Provide toe boards and safety netting on all exterior sides of the scaffolds. Safety netting shall include a structural mesh lined with a fine mesh of a size and strength sufficient to retain falling tools and materials. The Contractor is liable for any injuries or damages resulting from the materials or tools dropped to the ground.
12. Erect scaffolding so as not to disturb any parts of the existing buildings; including TV cables, security and lighting system related conduits, cables, equipment, fixtures, etc. Protect roof areas including those under the scaffold frame by laying ½" thick plywood boards or as

#### C. Hoisting and Lifting

1. The Contractor must meet with the Development Superintendent and the Authority's Representative to agree on for designated areas for staging and hoisting materials to and from the roof. The Contractor shall then prepare a site safety plan which shall indicate those areas and submit to the Authority's Representative for approval prior to beginning the Work. The approved copies shall be sent to NYCHA Program Unit for documentations.

2. Hoisting and lifting of any materials shall be performed in the safest manner possible and shall conform to the requirements of all public agencies having jurisdiction thereof. Where required by law, the holder of a valid rigger's license shall perform all hoisting.
3. Areas designated for hoisting shall be pre-approved by the Development Superintendent and the Authority's Representative and shown on the sidewalk shed Shop Drawing.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**