

## **CHAPTER VII**

### **SAFETY AND SECURITY MEASURES DURING CONSTRUCTION**

61. **Site Hoardings.** No person shall start building work on a site abutting on a street without having first provided hoarding or barriers to the satisfaction of PDOHA along the whole length of such site so as to prevent danger or injury to the public or the persons employed in the work provided however that this regulations does not apply in the case of building works in connection with structures situated at least 15 ft away from a public street and being not more than 25 ft in height.
62. **Neighbours Safety.** If the entire plot is excavated for the foundation or basement, it is essential for the owner to ensure that adequate safety measures are taken against damage of neighbouring compound walls, foundations and structures etc. A safety distance of 5 ft is to be left while excavating the basement(s). Any damage occurring due to excavation shall be made good by the owner excavating the basement. Work may be stopped by PDOHA if the owner fails to take remedial action.
63. **Use of Public Streets.** No part of any street shall be used in connection with the construction, repair or demolition of any building except with the written permission of the PDOHA. Any person holding such permission shall put up and maintain to the satisfaction of the PDOHA, fences or barriers in order to separate the building work from such street. Where such separation is not possible he shall make arrangement for the security of public to the satisfaction of the PDOHA.
64. **Caution Lights for Obstructions.** Any person causing any building material or other things to be deposited, any excavation to be made or any hoarding to be erected shall at his own expense cause sufficient and adequate red lights to be fixed upon or near the same while such materials, hoardings, things or excavation remain. In addition to above red flags of reflective material shall be provided during day time.
65. **Utility Services not to be Obstructed.** All materials, hoarding, fences or other obstructions on any street shall be kept clear of any fire hydrants if any and other utility services installation or alternative arrangements shall be made and precautions shall be taken according to the laid down procedure of the utility agencies and to the satisfaction of the PDOHA to divert and to keep clear of obstruction of any roadside or other drain during the period of temporary obstruction.
66. **Removal of Obstruction after Completion of Works.** All obstructions shall be removed within seven days of the completion of the work and the street, all drains and public utility installation shall be left in clean, tidy and in serviceable condition.
67. **Dangerous Obstruction.** If any material, hoarding, excavation or any other thing near or on any street shall be in the opinion of the PDOHA dangerous to the passers-by along such street, the PDOHA shall cause the same to be removed, protected or enclosed so as to prevent danger there from and shall be entitled to recover the expenses thereof from the owner of such materials or from the person who made such hoarding, excavation or other thing to become dangerous.

68. **Stability of Adjacent Building.** No excavation, dewatering, earthwork or demolition of a building which is likely to effect the stability of adjacent building shall be started or continued unless adequate steps are taken before and during the work to prevent the collapse or damage of any adjacent building or the fall or any part of it.

69. **Filling of Excavated Site.** A site once excavated shall not be kept open and idle for a period beyond the validity period of building plan failing which the PDOHA shall not revalidate the plan and in case of any mishap the owner shall be responsible for life and property of the affectees.

70. **Adequate Safety Measures**

- a. Adequate safety measures shall where necessary be provided and used to protect any person from falling on earth, rock, other material or adjacent to any excavation or earth work.
- b. Material shall not be placed or stocked near the edge of any excavation so as to endanger persons working below.
- c. No load shall be placed or moved near the edge or any excavation carried out where it is likely to cause a collapse of the side of excavation and endanger any person.
- d. Where vehicles or machinery is used close to any excavation there shall be measures to prevent the vehicles or machinery from over-running and falling into the excavation or causing collapse of any side of the excavation.
- e. In all buildings of greater than twenty feet height temporary rails, scaffolding or barriers shall be installed during construction at the edge of slabs and around all openings such as lift or stairwell, etc.

71. **Supervision of Demolition Work.** The demolition of a building and the operations incidental thereto shall only be carried out under the direct supervision of a professional.

72. **Safe Loading.** No roof, floor or other part of the building shall be so overloaded during demolition and construction with debris or materials as to render it unsafe.

73. **Scaffolds**

- a. Suitable and sufficient scaffolds shall be provided for all work that cannot safely be done from the ground or from part of the building or from a ladder or other available means support and sufficient safe means of access shall be provided to every place at which any person has to work at any time.
- b. Every scaffold, means of access and every part thereof shall be adequately fabricated with suitable and sound material and of required strength to

ensure stability. All scaffolds, working platforms gangways, runs and stairs shall be maintained to ensure safety and security.

- c. All vertical members of scaffolds on ground level facing roadside should be adequately wrapped with spongy material upto a height of at least seven feet and for any horizontal member if used, upto a height of seven feet from ground, should be wrapped all along its length with such material.

74. **Roadside Protection**

- a. To ensure adequate safety of the pedestrian and other road users, all buildings having a height of over ground + two floors should have adequate arrangement by way of providing protective covering of suitable material.
- b. Adequate provision of safe passage for pedestrian shall be ensured, in case the scaffolding covers part of the road or footpath.

75. **Working Platform**

- a. Every working platform from which a person is liable to fall which is more than seven feet height shall be at least two feet wide provided the platform is used as a working platform only and not for the deposit of any material.
- b. A clear passage-way at least one and half foot wide shall be left between one side of any working platform and any fixed obstruction or deposited materials.

76. **Guard Rails.** Every side of a working platform, gangway and stair shall be provided with a suitable guardrail of adequate strength, upto at least one meter above the platform, gangway or steps.

77. **Ladders**

- a. Every ladder shall be of good construction, sound material and adequate strength for the purpose for which it is used.
- b. Every ladder shall be securely fixed when in use and shall not have any missing or defective rungs.

78. **Work on Sloping Roofs**

- a. Where work is to be done on the sloping surface of a roof, suitable precautions shall be taken to prevent persons employed from falling off.
- b. Suitable and sufficient ladders or boards, securely supported, shall be provided and used to avoid concentration of loads leading to unsafe conditions.

- c. Where persons are employed in a position below the edge of sloping roof and where they are in position of being endangered by work done on the roof, suitable precautions shall be taken to prevent tools or materials falling from such roofs so as to endanger such persons or passers-by.

79. **Precautions for Raising and Lowering Loads.** For raising or lowering loads or for suspending them by either hand or power operation the following precautions shall be observed: -

- a. No broken wire rope shall be used.
- b. No chain shall be used which has been shortened or jointed to another chain by means of bolts and nuts.
- c. No chain or wire rope shall be used which has a knot tied in any part which is under direct tension.
- d. Safe and efficient devices to prevent the displacement of the sling or load from the hook; or of such shape as to reduce the risk of such displacement, shall be used.
- e. All debris and waste material during construction shall be disposed off through well designed chutes from each level of under construction building of height over ground plus two floors or more.
- f. The vertical hoist platform used shall be enclosed or protected by proper barrier. Every opening of lift, shaft or other such vertical voids or openings in slab, etc., where a person is likely to fall shall be protected by safety barrier and properly lit. Any area including basement, where natural light is not available or which is dark shall be so illuminated as to eliminate any risk of life or hazard to users.