

PART – VI

STRUCTURAL SAFETY AND SERVICES

47. STRUCTURAL DESIGN:

The structural design of foundations, elements made of masonry, timber, plain concrete, reinforced concrete, prestressed concrete and structural steel shall be carried out in accordance with part VI –Structural Design, Section 1 - Loads, Section 2 – Foundation, Section 3 – Wood, Section 4 – Masonry, Section 5 – Concrete, Section 6 – Steel of National Building Code of India.

48. QUALITY OF MATERIALS AND WORKMANSHIP:

- i) All materials and workmanship shall be of good quality conforming generally to accepted standards of Public Works Department of Government of Maharashtra and Indian Standard Specifications and Codes as included in Part V – Building Materials and Part VII – Constructional Practices and Safety of National Building Code of India.
- ii) All borrow pits dug in the course of construction and repair of buildings, roads or embankments, shall be deep and connected with each other in the formation of a drain directed towards the lowest level and properly stepped for discharge into a river, stream, channel or drain and no person shall create any isolated borrow pit which is likely to cause accumulation of water which may breed mosquitoes.

49. ALTERNATIVE MATERIALS, METHODS OF DESIGN AND CONSTRUCTION AND TESTS:

- i) The provisions of these regulations are not intended to prevent the use of any material or method of design or construction not specifically prescribed by

these regulations provided any such alternative has been approved by the Municipal Commissioner.

- ii) The provisions of these regulations are also not intended to prevent the adoption for architectural planning and layout conceived as an integrated development scheme.
- iii) The Municipal Commissioner may approve any such alternative, provided it is found that the proposed alternative is satisfactory and conforms to the provisions of relevant parts regarding material, design and construction, and that material, method of work offered is, for the purpose intended, atleast equivalent to that prescribed in these regulations in quality, strength, compatibility, effectiveness, fire and water resistance, durability and safety.

50. TESTS :

- i) Whenever there is insufficient evidence of compliance with the provisions of these regulations or evidence that any material or method of design or construction does not conform to the requirements of these regulations, in order to substantiate claims for alternative materials, design and construction and that material, method or work offered is, for the purpose intended, at least equivalent to that a prescribed in these regulations in quality, strength, compatibility, effectiveness, fire and water resistance, durability and safety.
- ii) Test method shall be as specified by the regulations for the materials or design or construction in question. If there are no appropriate test methods specified in such regulations, the Municipal Commissioner shall determine the test procedure. For methods of tests for building materials, reference may be made to relevant Indian Standards as given in the National Building Code of India, published by the Indian Standards Institutions. The latest version of the National Building Code of India shall be taken into account at the time of enforcement of this regulation.
- iii) Copies of the results of all tests shall be retained by the Municipal Commissioner for a period of not less than two years after the acceptance of the alternative materials.

51 BUILDING SERVICES:

- i) The planning, design and installation of electrical installations, air-conditioning and heating work shall be carried out in accordance with part VIII Building Service Section 2 – Electrical installations, Section 3 Air conditioning and Heating of National Building Code of India.
- ii) The planning, design including the number of lifts, type of lifts, capacity of lifts, depending on occupancy of building, population on each floor based on occupant load and height of building shall be in accordance with Section –5 – Installation of lifts and Escalators of National Building Code of India.

52. PLUMBING SERVICES:

The planning, design, construction and installation of water supply, drainage and sanitation and gas supply systems shall be in accordance with the provisions of the Water Supply and Drainage Byelaws of Navi Mumbai Municipal Corporation and part IX – plumbing Services, Section 1 – Water supply, section 2 – Drainage and sanitation 3 - Gas Supply of National Building Code of India.

53. SIGNS AND OUTDOORS DISPLAY STRUCTURES:

- i) The display of advertising signs on buildings and lands shall be in accordance with part X – Signs and Outdoor Display Structures of National Building Code of India.
- ii) In addition to provisions of sub-regulation (i), the following provisions shall be complied with for permitting advertising signs in different land use zones: -
 - a) Residential Zone –The following non-flashing and non-neon signs with illumination not exceeding 10 ft. candles:
 - i) One nameplate with an area of not exceeding 0.1 sq.m for each dwelling unit.

- ii) For other users permissible in the zones, one identification sign or bulletin board with an area not exceeding 1.6 sq.m
- iii) “For Sale” or “For Rent” signs for real estate not exceeding 2 sq.m. in area provided they are located on the premises offered for sale or rent.

(b) Commercial zones – Flashing or non-flashing business signs placed flat against the wall, not exceeding 5 sq.m in area and covering not more than 15% of the area of such wall including door and windows and overhanging signs which project not more than 0.9 m. from the wall:

Provided that, such signs shall not face residential building and shall be in conformity with the following:

- i) Not more than one overhanging sign may be permitted for each 4.5m, of plot frontage; and
- ii) The area of such overhanging signs shall not be more than 1 sq.m. except that for each 0.9 m. plot frontage above first 4.5m. an increase in area of 0.2 sq.m. shall be permitted.
- iii) Prohibition of advertising signs and outdoor display structures in certain cases –

No advertising sign or outdoor display structures shall be permitted on buildings of architectural, aesthetical, historical or heritage importance as may be decided by the Municipal Commissioner, or on Government buildings, save that in the case of Government buildings only advertising signs or outdoor display structures may be permitted if they relate to the activities for the said buildings own purposes of related programmers.

- iv) The Municipal Commissioner may, with the approval of the Corporation, add, alter or amend the provisions of these regulations.

54. OTHER ASPECTS OF DEVELOPMENT

54.1 The following aspects of development shall be governed by the provisions of the National Building Code of India -1970. Indian Standard Institution or any modifications thereof.

1. Fire Protection
2. Building Materials
3. Structural Designs
4. Constructional Practice & Safety
5. Building Services
 - a. Electrical Services
 - b. Airconditioning and Heating
 - c. Installation of lifts and escalators
6. Plumbing Services
 - a. Water Supply
 - b. Drainage and Sanitation
7. Lightning Protection.

54.2 Notwithstanding anything contained in the preceding clauses the Navi Mumbai Municipal Corporation Fire Protection [Control in Navi Mumbai Municipal Corporation] Regulations, contained in Appendix - V shall apply to any development of land as specified therein.

55. Interpretation: -

- i) In these Regulations, the use of the present tense includes the future tense, the masculine gender includes the feminine and neutral genders, the singular number includes the plural number and the plural number includes the singular number. The word "Person" includes a Corporation as well as an individual; "Writing" includes printing and typing and: signature" includes thumb impression of a person unable to sign, provided that his name is written below such impression.

- ii) Sizes and Dimensions. – Whenever sizes and dimensions of rooms and spaces within buildings are specified; they mean the clear dimensions, unless otherwise specified in these Regulations.
- iii) In any question or dispute arises with regard to interpretation of any of these regulations the matter shall be referred to the State Government which, after considering the matter and, if necessary, after giving hearing to the parties, shall give a decision on the interpretation of the provisions of these regulations. The decision of the Government on the interpretation of these regulations shall be final and binding on the concerned party or parties.