General Requirements

2.1 Design

2.1.1 Loads

All outdoor signs and sign structures shall be designed to resist wind, gust during storm, seismic and other forces as specified in Chapter 2: Loads, Part 6 of this Code. Combination of wind and seismic loads shall not be required. Loading that produces higher stresses shall be used.

2.1.2 Design Consideration

All outdoor signs and sign structures shall be designed fulfilling the design requirements as set out in Chapter 1: General Design Requirements: Structural Design, Part 6 of this Code.

2.2 Construction

All outdoor signs and sign structures shall be constructed and erected in accordance with the requirements of Chapter 1: Constructional Responsibilities and Practices, Part 7 of this Code.

2.2.1 Use of Materials

All materials for outdoor signs and sign structures shall conform to the specification as set out in Part 5: Building Materials of this Code.

2.2.2 Use of Combustible Materials

Ground signs not higher than 6 m may be constructed of any material that meets the requirements of this Code. No combustible material other than approved plastic as defined in Sec 2.2.5, shall be used in the construction of electric signs. Roof, wall, projecting, fin, balcony, marquee and combination signs shall be constructed of noncombustible materials except as provided below:

- a) On roofs of combustible construction, the roof sign may be constructed of combustible materials.
- b) On roofs of any type of construction, roof signs not higher than 1.5 m and not exceeding 5 m² in area may be constructed of combustible materials.
- c) On walls of combustible construction, wall signs not involving the use of electricity may be constructed of combustible materials.

2.2.3 Anchorage

Foundation for all unbraced signs shall be designed to resist horizontal, vertical and overturning forces. All braced ground signs shall be anchored to resist the specified wind and seismic forces in any direction. Anchors shall be designed for safe soil bearing capacity and for an effective uplift force which is 25% more than the force required to resist overturning. Anchorage of signs shall not be connected to an unbraced parapet wall unless the wall is designed for seismic load.

2.2.4 Display Surfaces

Display surfaces of outdoor signs may be made of metal, glass or approved plastic. If the surface of the sign is made of glass, the thickness and area shall be as set forth in Table 10.2.1.

Table 10.2.1: Type, Size and Thickness of Glass Panels Used in Signs

Maximum Size of Glass Panel		Minimum Thickness	Type of Glass
Any dimension	Area (m²)	(mm)	
(m)			
0.75	0.30	3	Plain, Plate or Wired
1.15	0.45	5	Plain, Plate or Wired
3.65	2.30	6	Plain, Plate or Wired
above 3.65	above 2.30	6	Wired Glass

Plastic of approved type may be used for wall signs in sections not exceeding 20 m² in area. Plastics sections on wall signs shall be separated 1 m laterally and 2 m vertically. Approved plastics of unlimited area may be used on any sign other than wall sign, if approved by the Authority

2.2.5 Approved Plastics

Plastic materials which burn at a rate no faster than 65 mm per minute when tested in accordance with ASTM D 635 shall be deemed approved plastic. Only approved plastic shall be used for plastic display surfaces provided for in Sec 2.2.4 above. Approved plastics may also be used for ornamental purposes, decorations, lettering, facings etc. on signs and outdoor display structures.

2.2.6 Draining Arrangements

Signs constructed on ground or at places where possibility of accumulation of water exists shall have adequate provision for proper drainage.

2.3 Use of Glass in Signs

Glass when used in outdoor signs shall be at least 3 mm thick and shall conform to the requirements of Sec 2.16.14: Glass and Glazing, of Part 5 of this Code. The area of each glass panel shall not exceed 6 m² and shall be securely fixed with the frame independently. Appropriate protection against damage by falling objects shall be provided to all glass panels by metal canopies or other approved means. Use of glass may be discouraged or avoided wherever possible for signs placed overhead. For such uses, if permitted, the authority may impose condition of using 'tempered glass' so as to produce no sharp edges or large pieces if broken accidentally.

2.4 Servicing Devices

All servicing devices (ladders, platforms, hooks, rings etc.), used for cleaning, painting, repainting of sign shall have adequate safety devices and shall be of approved type and quality.

2.5 Interference By Signs

Signs shall not be placed at such locations that would obstruct the use of fire hydrants or other fire fighting appliances. Signs in bends and curves shall be placed in such a location so as not to obstruct the view of traffic at intersecting streets.

10-12 Vol. 3

General Requirements Chapter 1

2.6 Hours of Operations

No electric sign or other type of signs using electric power source, other than those necessary in the opinion of the Authority in the interest of public amenity, health and safety, shall be operated between midnight and sunrise.