5.3 For situations not covered in this Code, the means of escape will be determined by the Building Authority according to the circumstances of individual cases.

PART II : GENERAL PROVISIONS OF MEANS OF ESCAPE

6. Special Hazard Occupancy

6.1 In a building where an area of special hazard occupancy is directly associated with an occupancy of normal hazard (for example store rooms for combustible material in a hotel; a kitchen attached to a restaurant; a boiler room in a hotel) any opening from such area of special hazard into any exit route should be provided with a protected lobby. The means of escape from an area of normal hazard should not pass through any area of special hazard.

6.2 For the purpose of this paragraph, the hazard of occupancy should be the relative danger of the start and spread of fire, the relative danger of smoke or gases generated and the relative danger of explosion or other occurrence which may endanger the lives and safety of the occupants.

[Note : (a) The requirements for fire resisting construction in areas of special hazard occupancy are contained in the Code of Practice for Fire Resisting Construction.

(b) A kitchen attached to a restaurant is an "industrial undertaking" as defined in the Factories and Industrial Undertakings Ordinance.]

7. Assessment of Accommodation

As a guide to assessing the requirements for means of escape, or the capacity or population of various portions of a building, or the number of persons and population density within a building, the following Table 1 and notes should be the basis of calculation.
# Table 1

<table>
<thead>
<tr>
<th>Intended use of storey</th>
<th>Factor representing usable floor area in m² per person</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Assembly halls, auditoria and stadia without seating or with movable seating</td>
<td>0.5</td>
</tr>
<tr>
<td>(b) Areas accessible to the public in viewing galleries, banking halls, betting centres and places where public service counters are provided</td>
<td>0.5</td>
</tr>
<tr>
<td>(c) Dance halls (calculated on dancing area), disco and reception area for restaurant.</td>
<td>0.75</td>
</tr>
<tr>
<td>(d) Restaurants (calculated on dining area), dining area, lounges, committee rooms, conference rooms, meeting rooms, common rooms, function room and waiting rooms</td>
<td>1</td>
</tr>
<tr>
<td>(e) Kitchens attached to restaurants</td>
<td>4.5</td>
</tr>
<tr>
<td>(f) Museums, exhibition halls, trademarts and display areas</td>
<td>2</td>
</tr>
<tr>
<td>(g) Supermarkets, showrooms, jewellery and goldsmith shops, pawn shops and money changers.</td>
<td>2</td>
</tr>
<tr>
<td>(h) Shopping arcades, department stores and shopping areas</td>
<td></td>
</tr>
<tr>
<td>- basement, G/F, 1/F &amp; 2/F</td>
<td>3</td>
</tr>
<tr>
<td>- 3/F &amp; above</td>
<td>4.5</td>
</tr>
<tr>
<td>(i) Offices</td>
<td>9</td>
</tr>
<tr>
<td>(j) Tenement houses, barracks, dormitories, and self-contained flats comprising a single room or having the main living area subdivided by rooms</td>
<td>3</td>
</tr>
<tr>
<td>(k) Self-contained flats with corridor or balcony access having five or more flats on each floor served by each staircase</td>
<td>4.5</td>
</tr>
<tr>
<td>(l) Flats not covered by (j) or (k)</td>
<td>9</td>
</tr>
<tr>
<td>(m) Flatted factories</td>
<td>4.5</td>
</tr>
<tr>
<td>(n) Warehouses, godowns and storage areas</td>
<td>30</td>
</tr>
<tr>
<td>(o) Classrooms of school not covered by Education Ordinance and other lecture rooms, library, and study rooms</td>
<td>2</td>
</tr>
</tbody>
</table>

Notes:
(i) For definition of "usable floor area" see paragraph 4. For uses in category (g) & (h), the usable floor areas shall include the public circulation space as it normally forms part of the premises, except for shopping arcades where a notional arcade width of 2.5m and 3.0m for single-loaded and double-loaded shopping malls respectively will be used.
(ii) Hospitals, hotels, hostels, places of public entertainment etc. will be assessed by the Building Authority on the basis of detailed layout plans.
(iii) The worst scenario will be adopted in order to calculate the maximum capacity of carpark but in no case less than 1.5 carparking spaces per person. The travel distance in carpark should be measured along the aisle based on the assumption that the carpark is full.
(iv) Single user specialized industrial workplace will be determined by the Commissioner for Labour according to the specialized trade process proposed.
(v) For any use not specified in this table, the Building Authority should determine the factor to be used.
(vi) The Building Authority recognizes actual counting as a reliable way to establish the population of a building.
8. General Requirements of Exit Routes

8.1 Every building to which this Code applies should be so constructed that there are available from each storey of the building such exits and exit routes as will comply with the requirements set out in this Code.

8.2 Every exit route should lead directly to a street or to an open area at ground level having unobstructed access, not less in width than the total required width of exit routes discharging into such an area, to a street. Such access to a street should not be closed with doors or gates unless such doors or gates are capable of being readily opened from inside without the use of key(s) and in the direction of exit.

8.3 If an exit staircase leads to an open area at any upper floor levels of the building such as the podium level, instead of leading directly to a street or to an open area complying with paragraph 8.2, the staircase should lead to an exit route at such floor level which:

(a) should be adequately defined by permanent features e.g. handrail, railing;

(b) should lead to a place of ultimate safety, i.e. a street or an open area complying with paragraph 8.2; and

(c) should be designed and constructed as if it is part of the exit staircase complying with the requirements in this Code and those in the Code of Practice for Fire Resisting Construction.

For the purpose of complying with the requirements in the Code of Practice of Fire Resisting Construction, the roof of the exit route should be regarded as an external wall and the slab of the open area should be regarded as a floor.

8.4 Every part of an exit route should be provided with artificial lighting providing a horizontal illuminance at floor level of not less than 30 lux and backed up by an emergency lighting system providing a horizontal illuminance at floor level of not less than 2 lux. The design of the emergency lighting system should comply with the Code of Practice for Minimum Fire Service Installations and Equipment.

8.5 Exit routes from a building should not discharge into a private lane unless the lane is properly paved and free from any permanent obstruction and the Building Authority is satisfied with the integrity of the lane as a means of escape.
8.6 If the final point of discharge of the exit routes at ground level are so sited that they adjoin each other or any other accommodation, the walls enclosing such exit routes should be returned along the frontage of the final discharge or project from the frontage for a distance of not less than 450 mm, provided that any return should not reduce the effective width of the exit route.

8.7 Every part of an exit route should have a clear height of not less than 2000 mm, provided that sprinkler heads may be installed along the side wall of the exit route and every such sprinkler head should not project:

(a) more than 90 mm from such side wall; and

(b) so as to reduce the clear height of the exit route by more than 105 mm.

8.8 At the final point of discharge of an exit route at ground level where there is a drop in level, any door or gate, if installed, should be set back from the line of drop in level for a distance of not less than the width of the exit route. If the drop in level consists of a single step, it should be so marked that the step is clearly visible.
9. Buildings with a Single Staircase

9.1 Single staircases may be permitted in buildings not exceeding 6 storeys in height and the level of the floor of the uppermost storey is not more than 17 m above the level of the ground at the point of discharge of the staircase.

9.2 No building will be permitted to have a single staircase unless such building complies with the following conditions:

(a) no room or storey of the building may be used for any occupancy other than domestic or offices, except that the ground storey may be used for the purposes of a shop or carparking space provided that the requirements for staircase enclosures in the Code of Practice for Fire Resisting Construction are complied with:

(b) adequate access should be provided at ground level to enable a rescue ladder/appliance to reach at least one window of every separate occupancy on each floor above the ground storey. Such access shall be at least:

(i) 3m wide in the case of a building in which the level of the highest floor is not more than 10 m above ground level; and

(ii) 4.5m wide in the case of a building in which the level of the highest floor is more than 10 m above ground level.

(c) in the case of a building in which the level of the highest floor is not more than 13 m above ground level the usable floor area of any storey above the ground floor should not exceed 250 m²;

(d) in the case of a building in which the level of the highest floor is more than 13 m above ground level the usable floor area of any storey above the ground floor should not exceed 150 m²; and
(e) In the case of a building in which the level of the highest floor is more than 13 m above ground level:-

(i) access to the staircase at each storey should be through a protected lobby. Such lobby should be designed as a common area and an integral part of the staircase so that it could not be readily incorporated as part of any adjacent unit(s) of accommodation;

(ii) the staircase should be continued to the roof;

(iii) there should be available on the roof an area of flat surface for refuge of not less than 0.5 m² per person based on the total population of the building above ground storey determined according to Table 1. Such flat roof should be accessible directly from the staircase, clear of any obstruction, and is so positioned that it is readily accessible for rescue purposes; and

(iv) the roof should comply with the requirements in the Code of Practice for Fire Resisting Construction.

10. Exits from Rooms

10.1 There should be available from every room of a capacity exceeding 3 persons not less than the number of exit doors shown in Table 2 according to the capacity of the room. The width of each exit door and the total width of all the exit doors shall be not less than the width shown in Table 2 according to the capacity and the number of exit doors provided.

10.2 Every exit door so provided should give access to an exit route which complies with paragraph 8 and which is independent of any other exit route to which access may be directly obtained from that room. Provided that where the capacity does not exceed 200 persons the exit doors may give access to a single corridor or balcony approach from which it is possible to escape in more than one direction.

10.3 Where two or more exit doors (required by Table 2) vary in width, any width of an exit door in such group in excess of 50% above the width of the narrowest exit door in such group should not be included in the calculation for the minimum total width of exit doors as required in column 3 of Table 2.
11. Exits from Storeys

Every building, except those buildings permitted under paragraph 6 to have a single staircase, should be so constructed that there are available from each storey not less than 2 exit routes or such greater number as may be required by Table 2. The width of each exit route and the total width of all the exit routes should be not less than the width shown in Table 2 according to the capacity and the number of exit route provided. Provided that:

(a) this requirement should apply to only one of the storeys of a maisonette.

(b) where two or more exit routes (required by Table 2 to serve a storey) vary in width, any width of an exit route in such group in excess of 50% above the width of the narrowest exit route in such group should not be included in the calculation for the minimum total width of exit routes as required by column 4 of Table 2.

11.2 Where two or more exit staircases are required, people using one staircase should be able to gain access to at least one of the other staircases at any time without having to pass through other person's private premises. Such access should be provided either at each floor or, where refuge floors are provided, at the refuge floor(s) and the roof. The requirements in this paragraph do not apply to a domestic building or a composite building not exceeding 15 storeys in height above the lowest ground storey.
Table 2

Table showing minimum number of exit doors from a room, or exit routes from a storey, and required minimum width thereof

<table>
<thead>
<tr>
<th>Capacity of room or storey</th>
<th>Min. No. of exit doors (from room) or exit routes (from storey)</th>
<th>Min. Total Width of exit doors</th>
<th>Min. Total Width of exit routes</th>
<th>Min. Width of each exit door</th>
<th>Min. Width of each exit route</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>750 mm</td>
<td>1050 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 - 30</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 - 200</td>
<td>2</td>
<td>1750 mm</td>
<td>2100 mm</td>
<td>850 mm</td>
<td>1050 mm</td>
</tr>
<tr>
<td>201 - 300</td>
<td>2</td>
<td>2500 mm</td>
<td>2500 mm</td>
<td>1050 mm</td>
<td>1050 mm</td>
</tr>
<tr>
<td>301 - 500</td>
<td>2</td>
<td>3000 mm</td>
<td>3000 mm</td>
<td>1050 mm</td>
<td>1050 mm</td>
</tr>
<tr>
<td>501 - 750</td>
<td>3</td>
<td>4500 mm</td>
<td>4500 mm</td>
<td>1200 mm</td>
<td>1200 mm</td>
</tr>
<tr>
<td>751 - 1000</td>
<td>4</td>
<td>6000 mm</td>
<td>6000 mm</td>
<td>1200 mm</td>
<td>1200 mm</td>
</tr>
<tr>
<td>1001 - 1250</td>
<td>5</td>
<td>7500 mm</td>
<td>7500 mm</td>
<td>1350 mm</td>
<td>1350 mm</td>
</tr>
<tr>
<td>1251 - 1500</td>
<td>6</td>
<td>9000 mm</td>
<td>9000 mm</td>
<td>1350 mm</td>
<td>1350 mm</td>
</tr>
<tr>
<td>over 1500</td>
<td>7 or such greater number as the Building Authority may require</td>
<td>to be calculated at the rate of 300mm per 50 persons</td>
<td></td>
<td>1500 mm</td>
<td>1500 mm</td>
</tr>
</tbody>
</table>

Notes:

(i) In the case of Places of Public Entertainment attention is drawn to Part III of this Code, the requirements of which must be followed.

(ii) The width of an exit door should be the least clear width measured between the vertical members of the door frame.

(iii) The width of a staircase, stair landing, passage or corridor comprising an exit route should be measured between the finished surfaces of the walls or of the inner sides of any balustrade and should not be decreased by the introduction of any projections other than handrails the projection of which should not exceed 90 mm.

(iv) The Table shows the minimum requirement on the assumption that doors can be readily and freely opened by occupants in case of fire i.e. no lock.

(v) In case of shopping arcades, department stores and shopping areas at basement, G/F, 1/F & 2/F over 500 persons, minimum no. of exit doors (from room) or exit routes (from storey) may be lesser than that as shown on Table 2 subject to the compliance of minimum total width of exit doors/routes as shown on Table 2.
12. Exits at Ground Storey

12.1 The enclosing walls of every staircase should be so continued at ground storey as to separate from the remainder of the building any passage or corridor leading from the staircase to any ground storey exit door to which the staircase gives access; provided that -

(a) in the case of a building served by two or more staircases, a cloakroom, lavatory, water-closet, caretaker's office, fire control room or caretaker's counter may open off such passage-way; and

(b) in the case of a building served by three or more staircases one in every three such staircases may discharge through fire resisting doors to a hall or shopping arcade and that part of the hall or shopping arcade which forms the actual exit route should comply with the requirements of paragraphs 8.2 and 8.4.

12.2 Where an exit route from a ground storey forms also the exit route from a staircase, the width of such exit route should be not less than the sum of -

(a) half the width required for the exit from the ground storey; and

(b) the width required for the staircase from the upper storeys; and

(c) the width required for the staircase, if any, from the basements.

13. Access to Staircase(s) within a Building

13.1 Every staircase should be separated from the remainder of the building in accordance with the requirements of the Code of Practice for Fire Resisting Construction.

(see diagram 1)

13.2 In the case of a building with a single staircase attention is drawn to the requirements in paragraph 9.
13.3 In the case of a building with two or more staircases, the access to the staircases should be so arranged that:

(a) each staircase is approached from a different direction provided that deadends will be permitted in accordance with paragraph 14.3(b);

(b) the door of one staircase, or the nearest point in the perimeter of the landing to the staircase where there is no door, should not be nearer than 6m from the door or a similar point of any other staircase measured in a straight line along the wall.

13.4 The means of escape from any part of a building should be so arranged that it is not necessary to pass through one staircase enclosure or the landing of one staircase, as the case may be, in order to reach an alternative staircase.

13.5 Where internal access is provided,

(a) no door opening on to an internal common corridor should at any part of its swing reduce the minimum required width of such corridor;

(b) a protected lobby should be provided to each and every staircase unless the staircase is:

(i) a staircase of which at least 50% of its perimeter, measured on plan, is open, from the top of the balustrade or parapet to the underside of the flight of the staircase immediately above, to the external air; or

(ii) a staircase in a single staircase building in which the level of the highest floor is not more than 13m above ground level.

(iii) a staircase in a building which is provided with two or more stairs and the level of the highest floor is not more than 20m above ground level.

Such lobby shall be designed as a common area and an integral part of the staircase so that it could not be readily incorporated as part of any adjacent unit(s) of accommodation.
13.6 Where balcony approach is provided,

(a) a balcony approach should be protected in accordance with the requirements of the Code of Practice for Fire Resisting Construction;

(b) the landing of any staircase should not form part of the balcony approach;

(c) no door opening on to the balcony approach should at any part of its swing reduce the minimum required width of the balcony approach; and

(d) every window opening on to the balcony approach should be so arranged that it should not be possible to fix any such window in an open position in such a manner as will reduce the minimum required width of the balcony. The sill of such window should be not less than 1000 mm above the balcony level. Provided that nothing in this paragraph should prevent a window from opening through 180 degrees and being fixed open in such position, or the use of fanlights at a height of not less than 2000 mm above the balcony level.

14. Direct Distance and Travel Distance

14.1 The direct distance within a room which is provided with an alternative exit door leading to an alternative staircase or an alternative point of discharge to a street or to an open area at ground level complying with paragraph 8.2, as the case may be, should not exceed 18m except in exhibition hall, concert hall, transport terminal and similar buildings. Where such alternative exit door is not provided, the direct distance should not exceed 15m.

(see diagrams 2, 3 and 4)

14.2 In a storey of a single-staircase building, the travel distance and the sum of the direct distance and travel distance should not exceed the limitations stipulated in Table 3.
### Table 3  Limitation on Direct Distance and Travel Distance for Single-staircase Buildings

<table>
<thead>
<tr>
<th>Type of exit route*</th>
<th>Maximum travel distance</th>
<th>Maximum sum of the direct distance and travel distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>18 m</td>
<td>24 m</td>
</tr>
<tr>
<td>(B)</td>
<td>12 m</td>
<td>24 m</td>
</tr>
<tr>
<td>(C)</td>
<td>18 m</td>
<td>18 m</td>
</tr>
</tbody>
</table>

*Notes: (A) exit route along balcony approach or internal corridor with ventilation and complying with the requirements of the Code of Practice for Fire Resisting Construction.

(B) exit route along internal corridor without ventilation and complying with the requirements of the Code of Practice for Fire Resisting Construction.

(C) storey partitioned into rooms but exit route is not along balcony approach or internal corridor which complies with the requirements of the Code of Practice for Fire Resisting Construction.

14.3 In a storey which is served by two or more staircases or points of discharge to a street or to an open area at ground level complying with paragraph 8.2, as the case may be, -

(a) the travel distance and the sum of the direct distance and travel distance should not exceed the limitations stipulated in Table 4.
Table 4  Limitation on Direct Distance and Travel Distance for Buildings with Two or More Staircases

<table>
<thead>
<tr>
<th>Use of the premises or part of the premises</th>
<th>Type of exit route*</th>
<th>Maximum travel distance</th>
<th>Maximum sum of the direct distance and travel distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) offices, schools and shops</td>
<td>(A) 36 m</td>
<td>45 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(B) 24 m</td>
<td>36 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(C) 30 m</td>
<td>30 m</td>
<td></td>
</tr>
<tr>
<td>(ii) all other cases</td>
<td>(A) 30 m</td>
<td>36 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(B) 24 m</td>
<td>36 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(C) 30 m</td>
<td>30 m</td>
<td></td>
</tr>
</tbody>
</table>

*Notes: (A) exit route along balcony approach or internal corridor with ventilation and complying with the requirements of the Code of Practice for Fire Resisting Construction.

(B) exit route along internal corridor without ventilation and complying with the requirements of the Code of Practice for Fire Resisting Construction.

(C) storey partitioned into rooms but exit route is not along balcony approach or internal corridor which complies with the requirements of the Code of Practice for Fire Resisting Construction.

(b) where the direction of travel from an exit door of a room to a staircase or a point of discharge to a street or to an open area at ground level complying with paragraph 8.2, as the case may be, is possible in one direction only (i.e. deadend), the sum of the direct distance and travel distance should not exceed 18 m.
(c) the horizontal distance along the corridor measured on the floor along the centre line of the exit route between a staircase or a point of discharge and any one of the other staircases or points of discharge, as the case may be, should not exceed 48m. In the case of staircases, the distance should be measured between -

(i) the centre of the fire resisting doors to the enclosures of the staircases;

(ii) if there is no such door, the landings of the staircases; or

(iii) in the case of an open podium floor, the points as described in (i) or (ii) above, or the first staircase treads nearest to the podium.

14.4 If the storey is not partitioned into rooms or the internal layout of partitions, fittings, etc. is not known when plans are submitted (i.e. open plan layout), the direct distance should not exceed 30m for all cases where a secondary exit door is provided and should not exceed 18m if a secondary exit door is not provided.

(see diagram 5)

14.5 An inner room, i.e. a room from which the only exit route is through another room, should not be acceptable unless the following conditions are satisfied:

(a) the capacity of the inner room does not exceed 30;

(b) the exit route from the inner room does not pass through more than one other room;

(c) the escape distance from any point in the inner room to the exit of the room giving access to the inner room does not exceed the direct distance stipulated in paragraph 14.1 above:

(d) the room giving access to the inner room is not an area of special hazard and is under the control of the same occupant; and

(e) a vision panel, except in the case of a toilet, is located in the door or walls of the inner room.
14.6 In any room where two or more exit doors are required to be provided under Table 2, the line of the direct distance from any point in the room to one of the exit doors should form an angle of not less than 30° with the line of the direct distance from the same point to any of the other exit doors.

14.7 For the purposes of paragraphs 14.1 and 14.4, a secondary exit door is not considered to be provided unless the line of the direct distance from any point in the room to one of the exit doors forms an angle of not less than 30° with the line of the direct distance from the same point to the other exit door.

14.8 For the purposes of paragraphs 14.2 and 14.3, an internal corridor with ventilation should be one which is -

(a) cross ventilated by permanent openings which may be fitted with ventilator(s) provided that such ventilator(s) should be triggered to open by automatic smoke detector located in the space to be ventilated and fitted with a manual override. The openings should have a total free area of at least 6.25% of the floor area of the corridor to be ventilated and each opening should have a free area of at least 1.5 m²; or

(b) provided with a static or a dynamic smoke extraction system to the satisfaction of the Director of Fire Services.

15. **Discharge Value and Width of Staircase**

15.1 The staircases serving the storeys of a building above the ground storey should have a total discharge value of not less than the total capacity of those storeys assessed in accordance with paragraph 7.

15.2 The staircases serving the basements of a building should have a total discharge value of not less than the total capacity of those basements assessed in accordance with paragraph 7.

15.3 The discharge value of a staircase in a non-sprinklered building should be assessed from Table 5 according to the width of the staircase and the number of storeys it serves.
Table 5: Discharge Value of a Staircase in a Non-sprinklered Building

<table>
<thead>
<tr>
<th>No. of Storey served</th>
<th>Width of Staircase</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1050mm but under 1200mm</td>
<td>1200mm but under 1350mm</td>
<td>1350mm but under 1500mm</td>
<td>1500mm but under 1600mm</td>
<td>1600mm but under 1700mm</td>
<td>1700mm but under 1800mm</td>
<td>1800mm but under 1900mm</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>210</td>
<td>240</td>
<td>270</td>
<td>300</td>
<td>320</td>
<td>340</td>
<td>360</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>242</td>
<td>278</td>
<td>315</td>
<td>351</td>
<td>377</td>
<td>402</td>
<td>428</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>274</td>
<td>316</td>
<td>360</td>
<td>402</td>
<td>434</td>
<td>464</td>
<td>496</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>306</td>
<td>354</td>
<td>405</td>
<td>453</td>
<td>491</td>
<td>526</td>
<td>564</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>338</td>
<td>392</td>
<td>450</td>
<td>504</td>
<td>548</td>
<td>588</td>
<td>632</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>370</td>
<td>430</td>
<td>495</td>
<td>555</td>
<td>605</td>
<td>650</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>402</td>
<td>468</td>
<td>540</td>
<td>606</td>
<td>662</td>
<td>712</td>
<td>768</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>434</td>
<td>506</td>
<td>585</td>
<td>657</td>
<td>719</td>
<td>774</td>
<td>836</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>466</td>
<td>544</td>
<td>630</td>
<td>708</td>
<td>776</td>
<td>836</td>
<td>904</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>498</td>
<td>582</td>
<td>675</td>
<td>759</td>
<td>833</td>
<td>898</td>
<td>972</td>
<td></td>
</tr>
<tr>
<td>Each additional storey add</td>
<td>32</td>
<td>38</td>
<td>45</td>
<td>51</td>
<td>57</td>
<td>62</td>
<td>68</td>
<td></td>
</tr>
</tbody>
</table>

Note: The discharge value of a staircase having a width more than 1900 mm may be obtained by using linear projection from the table.
15.4 The discharge value of a staircase in a sprinklered building should be assessed from Table 6 according to the width of the staircase and the number of storeys it serves.

Table 6: Discharge Value of a Staircase in a Sprinklered Building

<table>
<thead>
<tr>
<th>No. of Storey served</th>
<th>Width of Staircase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1050mm</td>
</tr>
<tr>
<td></td>
<td>but under 1200mm</td>
</tr>
<tr>
<td>1</td>
<td>420</td>
</tr>
<tr>
<td>2</td>
<td>452</td>
</tr>
<tr>
<td>3</td>
<td>484</td>
</tr>
<tr>
<td>4</td>
<td>516</td>
</tr>
<tr>
<td>5</td>
<td>548</td>
</tr>
<tr>
<td>6</td>
<td>580</td>
</tr>
<tr>
<td>7</td>
<td>612</td>
</tr>
<tr>
<td>8</td>
<td>644</td>
</tr>
<tr>
<td>9</td>
<td>676</td>
</tr>
<tr>
<td>10</td>
<td>708</td>
</tr>
<tr>
<td>Each additional storey add</td>
<td>32</td>
</tr>
</tbody>
</table>

Note: The discharge value of a staircase having a width more than 1900 mm may be obtained by using linear projection from the table.
15.5 The discharge value of a staircase where the direction of exit is upwards should be that assessed from Table 5 for non-sprinklered building or Table 6 for sprinklered building as the case may be, and multiplied by a reduction factor of 0.8.

15.6 The discharge value of a scissors staircase without any intermediate landing between 2 consecutive floors should be that assessed from Table 5 for non-sprinklered building or Table 6 for sprinklered building as the case may be, and multiplied by a reduction factor of 0.7.

15.7 For the purpose of this paragraph, sprinklered buildings are those where the whole building is protected by sprinklers. Where part of a building is protected by sprinklers and other part is not and the staircases serving these different parts are not separated, the discharge value of such staircases should be assessed from Table 5.

15.8 The total width of staircases serving a building having a total capacity of not less than 10,000 persons for sport arenas, stadia, convention centres, passenger terminals or similar uses should be 1.2 times the total width of exit routes required by Table 2 according to the capacity of the area concerned. Where part of the exits lead directly to a place of ultimate safety which means a street or the open area referred to in paragraph 8.2 and part of the exits lead to staircases, the total width of the staircases should be 1.2 times the width of the exit routes calculated by deducting the total width of exits leading directly to the place of ultimate safety from the total width of exit routes required by Table 2 according to the capacity of the area concerned.

15.9 A building having a total capacity of not less than 10,000 persons may necessitate special consideration. Fire engineering approach may be the only viable means to a satisfactory standard of a fire safety.
16. Doors in Relation to Exits

16.1 Every door across an exit, or into an exit route from a room or storey the capacity of which exceeds 30, should -

(a) open in the direction of exit;

(b) if constructed to open both ways, have a transparent upper view panel.

16.2 If it is necessary to secure an exit door against entry from outside, the locking device shall be of the type which is capable of being readily opened from the inside without the use of a key. A locking device which is electrically operated is acceptable provided that such lock is capable of automatic release upon actuation of a smoke detection system or the operation of an alarm system or a central manual override, installed to the satisfaction of the Director of Fire Services. Upon power failure, the electrical locking device shall also be released automatically. In the case of a door to a staircase or a protected lobby of the staircase, the security mechanism should not affect compliance with the requirements in paragraph 11.2.

16.3 Every door opening on to a landing between flights of a staircase should not at any point of its swing, reduce the effective radius of the landing to less than the width of the staircase.

16.4 Exit door from a room or storey having a capacity in excess of 3 persons should not be less than 750mm in width. In the case of a double leaf door, no leaf of such door should be less in width than 600 mm and, where the meeting stiles are rebated, a checking device to control the closing order of the doors should be installed. Such checking device should ensure that both leaves of door are closed in the correct order and position.

16.5 Every door giving access to a protected lobby from a staircase enclosure or from a storey should be provided with a transparent upper view panel of the requisite fire resistance.
16.6 In the case of factories and industrial undertakings that are required to be notified to the Commissioner for Labour, i.e. notifiable workplaces,

(a) every exit door leading out of a notifiable workplace, and the doors of every room in a notifiable workplace in which 10 persons or more are employed, should be constructed so as to open outwards;

(b) every exit door leading out of a notifiable workplace should be fitted with an effective self-closing device.

16.7 Every door to a staircase or a protected lobby of the staircase should comply with the following requirements:

(a) the self-closing mechanism should not be capable of allowing a check action to hold the door open and

(b) appropriate notices should be fixed to both sides of the doors to remind building users that the doors should normally be kept closed.

16.8 Every door across an exit or into an exit route from a room, except a door to a staircase or a protected lobby of the staircase, if required to be self-closing, may be held open in normal times provided that the hold-open device can be released to allow the door to become self-closing again manually and automatically upon actuation of a smoke detection system or the operation of an alarm system designed, installed to the satisfaction of the Director of Fire Services.
17. Construction of Staircases

17.1 Every staircase to which this Code applies should be constructed in accordance with the requirements of the Code of Practice for Fire Resisting Construction.

17.2 Staircases should be arranged in straight flights without winders, each flight should consist of not more than 16 risers nor less than 2 risers. Treads should be not less than 225 mm wide, measured clear of nosings and the risers should be not more than 175 mm high. Provided that :-

(a) in schools treads should be not less than 250 mm wide and the risers should be not more than 150 mm nor less than 75 mm high, and

(b) in places of public entertainment treads should be not less than 280 mm wide and not more than 150 mm high.

17.3 Landings should be provided at the top and bottom of each flight not less in width and length than the staircase width, and no exit door should at any part of its swing reduce the effective width or effective radius of such landing as the case may be.

17.4 Every staircase should have a clear width of not less than that required by paragraph 11.1 and a clear height of not less than 2000 mm.

17.5 No staircase should exceed 1800 mm in width unless it is divided by a central handrail into separate sections, each of which should be not less than 1050 mm in width.

17.6 There should be provided a handrail on each side of the staircase. Every such handrail should :-

(a) be at a height not less than 850 mm nor more than 1100 mm;

(b) not project so as to reduce the clear width of the stair by more than 90 mm, for each handrail; and

(c) be continuous throughout each flight, but need not be carried round a landing or half landing except in the case of a place of public entertainment.
18. **Ramps**

The gradient of every ramp forming part of an exit route should not at any part be steeper than 1:12.

19. **Lift Lobbies**

Every lift lobby should have access, without any obstruction and lockable door, to an exit route. Such access should be available at all times to any person who may come out from a lift car to the lift lobby. The provision of a direct intercom link connecting a lift lobby with the management office of the building will be accepted as an adequate alternative if the building is provided with good management.

20. **Basements**

20.1 Every basement should have not less than 2 exits excepting a basement -

(a) the floor of which is not more than 3000 mm below the level of the ground to which the exit serving such basement gives access;

(b) the area of which does not exceed 150 m²; and

(c) which is used solely for a lavatory or plantroom.

20.2 No staircase serving the storeys of a building above the ground storey should be continued direct to a basement.

20.3 Sufficient directional and exit signs, in English and Chinese, to indicate the direction of exit should be displayed in each staircase serving the basement(s). Such signs should be illuminated by a light on two systems as the lighting referred to in paragraph 8.4 and be -

(a) in rectangular shape and should be in either one of the following forms:

```
出EXIT 路 -----> or <------ 出EXIT 路
```
All words and characters should be in block letters not less than 50 mm high. The wording should be in white and the background in green or the wording in green with the background in white or black.

(b) not easily defaced or damaged; and

c) displayed on the central part of the side wall of each flight of the staircase(s) at a height of 1500 mm from and parallel to the nosing line of the flight.

20.4 In the case of a basement, except a basement used solely as a lavatory, which is below the lowest ground storey and from which all the required exit routes discharge in an upward direction, at least one exit from such basement should discharge independently of any other exit into a street or area having access to a street in accordance with the requirements of paragraph 8.2.

21. Refuge Floors

21.1 Subject to paragraph 21.5, refuge floors should be provided in all buildings exceeding 25 storeys in height above the lowest ground storey, at not more than 20 storeys and 25 storeys respectively for industrial and non-industrial buildings from any other refuge floor, or above the street or the open area referred to in paragraph 8.2. For the purpose of this paragraph the number of storeys may exclude storeys which contain solely mechanical plants.

21.2 Every refuge floor, except that provided under paragraphs 21.3 and 21.5, should comply with the following requirements:

(a) there is no occupied accommodation or accessible mechanical plant room, except fire services water tanks and associated fire service installation plant room, at the same level as the refuge floor;

(b) the net area for refuge should be not less than 50% of the total gross floor area of the refuge floor and should have a clear height of not less than 2300 mm;
(c) the minimum dimension of the area for refuge should be at least 50% greater than the width of the widest staircase passing through the refuge floor;

(d) the area for refuge should be separated from the remainder of the building in accordance with the requirements in the Code of Practice for Fire Resisting Construction;

(e) the area for refuge should be open-sided above safe parapet height on at least two opposite sides to provide adequate cross ventilation; the open sides should comply with the requirements in the Code of Practice for Fire Resisting Construction;

(f) any staircase passing through a refuge floor should be discontinued at such level so that the exit route is diverted to pass over part of the refuge area before it is continued to exit downwards;

(g) every part of the area for refuge should be provided with artificial lighting providing a horizontal illuminance at floor level of not less than 30 lux and backed up by an emergency lighting system providing a horizontal illuminance at floor level of not less than 2 lux. The design of the emergency lighting system should comply with the Code of Practice for Minimum Fire Service Installations and Equipment;

(h) a refuge floor should be provided with such fire services installation and equipment as may be required by the Director of Fire Services; and

(i) a refuge floor should be served by a fireman's lift. The lift doors should not open onto the refuge floor in normal operation and should be locked at all times until automatically released on actuation of the fireman's switch.

(see diagram 6)
21.3 The main roof of a building may be regarded as a refuge floor for the purpose of paragraphs 21.1 and 21.5 provided that:

(a) it should be of flat surface and should comply with the requirements in the Code of Practice for Fire Resisting Construction;

(b) the net area for refuge should be not less than 50% of the gross floor area of a typical floor below the main roof;

(c) any staircase serving the floors immediately below the main roof should be continued to give access to the main roof without any obstruction at all times:

(d) the minimum dimension of the area for refuge should be at least 50% greater than the width of the widest staircase serving the roof; and

(e) every part of the area for refuge should be provided with artificial lighting providing a horizontal illuminance at floor level of not less than 30 lux and backed up by an emergency lighting system providing a horizontal illuminance at floor level of not less than 2 lux. The design of the emergency lighting system should comply with the Code of Practice for Minimum Fire Service Installations and Equipment.

(see diagram 7)

21.4 At each refuge floor, notices and signs should be provided in the following manners:

(a) a sign indicating the staircase number and a sign indicating the entrance to the refuge floor should be displayed inside each staircase at a position immediately before entering the refuge floor at a height of 1500mm above the landing or the step immediately below the staircase number;

(b) a notice in rectangular shape and in the following form should be displayed at a position immediately after entering the refuge floor from each staircase at a height of 1500mm above the floor level;
REFUGE FLOOR 避火層

For Temporary Rest During Emergency Escape

緊急逃生時供暫時歇腳用

EXITS TO STREET LEVEL

<----- 往街道出口 ---->

<table>
<thead>
<tr>
<th>staircase (no.)</th>
<th>staircase (no.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ) 号樓梯</td>
<td>( ) 号樓梯</td>
</tr>
</tbody>
</table>

(c) sufficient directional signs in the following form should be displayed at appropriate positions at the refuge floor at a height of 1500mm above the floor level, to indicate the direction of travel in order to enter the respective staircase number;

(d) all signs and notices provided under (a), (b) and (c) should -

(i) be in English and Chinese;

(ii) be illuminated by a light on two systems as the lighting referred to in paragraph 8.4;

(iii) have words and characters in block letters not less than 50mm high in white colour on a background in green or the words and characters in green on a background in white or black; and

(iv) not be easily defaced or damaged;
appropriate notices in English and Chinese in letters and characters not less than
25mm high should be provided in a conspicuous part at the main entrance of the
building to indicate where the refuge floors are situated.

21.5 This paragraph does not apply to a domestic building or a composite building not
exceeding 40 storeys in height above the lowest ground storey. In a domestic
building or a composite building exceeding 25 storeys but not exceeding 40 storeys
in height above the lowest ground storey, the main roof of the building should be a
refuge floor and should comply with the requirements in paragraphs 21.3 and 21.4.

PART III : PROVISIONS OF MEANS OF ESCAPE IN PLACES OF PUBLIC
ENTERTAINMENT

In addition to the general requirements in Part II, all places of public entertainment should
comply with the requirements in this part.

22. Site

22.1 The site of a place of public entertainment should abut upon and have frontages to
2 or more thoroughfares.

22.2 The frontages of a building having a place of public entertainment should, subject to
paragraph 22.7, form at least one-half of the total boundaries of the site on which
the building is situated, excluding recesses and projections which do not prejudi-
cially affect exit routes, and should permit of the provision of exit routes in
accordance with this Code from each tier or floor direct to 2 or more thoroughfares.

22.3 The thoroughfares referred to in paragraph 22.2 should be of such widths as will
enable the persons who are to be accommodated in the place of public entertainment
to disperse rapidly in the event of fire or panic and as will afford reasonable facilities
for the approach of fire appliances.