

**RESULTS OF A
BCMC PUBLIC HEARING
June 8, 1992
U.S. Department of Transportation
Washington, D.C.**

The CABO Board for the Coordination of the Model Codes held a public hearing as indicated above to receive written and verbal comments regarding proposed recommendations to CABO for national uniformity in the model codes. This public hearing document combines results of public hearings held on Accessibility for People with Physical Disabilities with reports on Egress for People with Physical Disabilities and "mainstream" provisions taken from various sections of the CABO/ANSI A117.1, an intermediate draft that introduced additional requirements taken from the ADA Accessibility Guidelines and HUD guidelines for multifamily housing, plus additional proposals generated at the BCMC meeting of May 6 and 7, 1992. On approval by CABO, these recommendations will be processed through the code change procedures of each of the BCMC participating organizations.

PART I: ACCESSIBILITY AND EGRESS FOR PEOPLE WITH PHYSICAL DISABILITIES

1.0 SCOPE

1.1 All buildings and structures, including their associated sites and facilities, shall be accessible with accessible means of egress for people with physical disabilities as required in these provisions.

EXCEPTIONS:

- 1. Areas where work cannot reasonably be performed by persons having a severe impairment (mobility, sight or hearing) are not required to have the specific features providing accessibility to such persons.
- 2. Group R3 buildings and accessory structures and their associated site facilities.
- 3. Group U structures.

EXCEPTIONS:

- 1. In Group U agricultural buildings, access is required to paved work areas and areas open to the general public.
- 2. Access is required to private garages or carports which contain accessible parking.
- 4. Temporary structures, sites, and equipment directly associated with the construction process such as construction site trailers, scaffolding, bridging or material hoists.
- 5. Buildings and facilities or portions thereof not required to be accessible in 3.0, 4.0, 5.0 and 6.0.

1.2 This document sets minimum requirements for the application of standards for facility accessibility by people with physical disabilities, which includes those with sight impairment, hearing impairment and mobility impairment. It shall be interpreted to mandate access for all persons, including but not limited to occupants, employees, consumers, students, spectators, participants and visitors.

1.3 Details, dimensions and construction specifications for items herein shall comply with the requirements set forth in the American National Standards Institute standard CABO/ANSI A117.1-1992 "Accessible and Usable Buildings and Facilities."

1.4 Maintenance of Facilities. Any building, facility, dwelling unit, or site which is constructed or altered to be accessible or adaptable under this document shall be maintained accessible and/or adaptable during its occupancy.

2.0 DEFINITIONS

2.1 ACCESSIBLE MEANS OF EGRESS - a path of travel, usable by a mobility impaired person, that leads to a public way.

AREA OF REFUGE - an area with direct access to an exit or an elevator where persons unable to use stairs can remain temporarily in safety to await instructions or assistance during emergency evacuation.

TECHNICALLY INFEASIBLE - an alteration of a building or a facility that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member which is an essential part of the structural frame, or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility.

2.2 The following additional terms are defined in CABO/ANSI A117.1. Where these terms are used in this report, such terms shall have the meaning ascribed to them in CABO/ANSI A117.1.

accessible	accessible route	adaptability
detectable	detectable warning	dwelling unit
element	facility	site

3.0 ACCESSIBLE ROUTES AND PARKING

3.1 Accessible Route

3.1.1 Accessible routes within the site shall be provided from public transportation stops, accessible parking and accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance they serve.

3.1.2 At least one accessible route shall connect accessible spaces, elements, facilities and buildings that are on the same site. Where only one accessible route is provided, it shall not pass through kitchens, storage rooms, restrooms, closets or similar spaces.

EXCEPTIONS:

1. A single accessible route shall be permitted to pass through a kitchen or storage room in an accessible or adaptable dwelling unit.
2. In other than the offices of health care providers, transportation facilities and airports, and multitenant Group M occupancies, floors that are above and below accessible levels, and that have an aggregate area of not more than 3000 square feet, and an aggregate occupant load of not more than 50, need not be served by an accessible route from an accessible level.

3.1.3 Where floor levels are required to be connected by an accessible route, and an interior path of travel is provided between the levels, the accessible route between the levels shall also be interior.

3.2 Parking Facilities

3.2.1 Number of Accessible Parking Spaces

3.2.1.1 Two percent of parking spaces provided for R2 occupancies required to have accessible/adaptable dwelling units shall be accessible. Where parking is provided within or beneath a building, accessible parking spaces shall also be provided within or beneath the building.

3.2.1.2 Ten percent of parking spaces provided for medical outpatient facilities shall be accessible. Twenty percent of parking spaces provided for medical facilities that specialize in treatment or services for persons with mobility impairments shall be accessible.

3.2.1.3 In occupancies not included in 3.2.1.1 and 3.2.1.2, accessible spaces shall be provided in conformance with Table 3.2.

3.2.1.4 For every eight or fraction of eight accessible parking spaces, at least one shall be a van accessible parking space.

TABLE 3.2

Total Parking Spaces Provided	Required Minimum Number of Accessible Spaces
1 to 5	1§
6 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2% of total
more than 1000	20 plus one for each 100 over 1000

§ The accessible space shall be provided but need not be designated as reserved for physically disabled. See 7.0.

3.2.2 Accessible parking spaces shall be located on the shortest accessible route of travel from adjacent parking to an accessible building entrance. In parking facilities that do not serve a particular building, accessible parking spaces shall be located on the shortest route to an accessible pedestrian entrance of the parking facility.

3.2.3 In buildings with multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located near the accessible entrances.

EXCEPTION: In multilevel parking structures, accessible van parking spaces shall not be required to be located on more than one level.

4.0 ACCESSIBLE ENTRANCES

4.1 Each building and structure, and each separate tenancy within a building or structure, shall be provided with at least one entrance which complies with the accessible route provisions of CABO/ANSI A117.1. Not less than 50% of the entrances shall be accessible.

EXCEPTION: Loading and service entrances.

4.2 When a building or facility has entrances which normally serve accessible parking facilities, transportation facilities, passenger loading zones, taxi stands, public streets and sidewalks, or accessible interior vertical access, then at least one of the entrances serving each such function shall comply with the accessible route provisions of CABO/ANSI A117.1.

5.0 SPECIAL OCCUPANCY REQUIREMENTS

5.1 General

In addition to the general provisions herein, the following requirements for specific occupancies shall apply.

5.2 Group A Assembly

5.2.1 In Group A1, A2, and A5 occupancies wheelchair spaces for each assembly area shall be provided in accordance with Table 5.2. Removable seats shall be permitted in the wheelchair spaces. When the number of seats exceeds 300, wheelchair spaces shall be provided in more than one location. Dispersion of wheelchair locations shall be based on the availability of accessible routes to

various seating areas, including seating at various levels in multilevel facilities.

**TABLE NO. 5.2
WHEELCHAIR SPACES REQUIRED IN ASSEMBLY AREAS**

Capacity of Seating in Assembly Area	Number of Required Wheelchair Spaces
4 to 25	1
26 to 50	2
51 to 300	4
301 to 500	6
over 500	6 plus 1 for each 200 over 500

5.2.2 Stadiums, theaters, auditoriums, lecture halls and similar areas having fixed seating and which are equipped with audioamplification systems or have an occupant load of 50 or more persons shall have a listening system complying with CABO/ANSI A117.1 (4.32) for at least 4% of the seats, but not less than two receivers. Such assembly areas not equipped with audioamplification systems or with an occupant load less than 50 shall have a permanently installed assistive listening system, or an adequate number of electrical outlets or other supplementary wiring necessary to support a portable assistive listening system. Signage shall be provided to notify patrons of the availability of a listening system.

5.2.3 In Group A3 occupancies the total floor area allotted for seating and tables shall be accessible. EXCEPTIONS:

1. Where necessary for line of sight, requirements of 5.2.1 for number and dispersion of wheelchair spaces shall be applied.
2. In buildings without elevators, an accessible route to a mezzanine dining area is not required, provided that the mezzanine contains less than 25% of the total area and the same services are provided in the accessible area.

5.3 Group I Institutional

5.3.1 In Group I2 general purpose hospitals, psychiatric facilities and detoxification facilities, at least 10%, but not less than one, of the patient sleeping rooms and their bathing and toilet facilities shall be accessible.

5.3.2 In Group I2 hospitals and rehabilitation facilities that specialize in treating conditions that affect mobility, or units within either that specialize in treating conditions that affect mobility, 100% of the patient rooms and their bathing and toilet facilities shall be accessible.

5.3.3 In Group I1 occupancies and I2 nursing homes, at least 50%, but not less than one, of the patient sleeping rooms and their bathing and toilet facilities shall be accessible.

5.3.4 In Group I3 occupancies, at least 5%, but not less than one, of the resident units and their bathing and toilet facilities shall be accessible for each 100 resident units or fraction thereof.

5.3.5 In Group I2 occupancies, at least one accessible entrance shall include a passenger loading zone complying with CABO/ANSI A117.1.

5.4 Group R Residential

5.4.1 In Group R1 occupancies containing 6 or more guest rooms, one for the first 30 guest rooms and one additional for each additional 100 guest rooms or fraction thereof shall be accessible. In

hotels with more than 50 sleeping rooms or suites, roll-in type showers shall be provided in one-half, but not less than one, of the required accessible sleeping rooms or suites.

5.4.2 In Group R2 occupancies containing more than 20 dwelling units, at least 2%, but not less than one, of the dwelling units shall be adaptable. All dwelling units on a site shall be considered to determine the total number of adaptable units.

EXCEPTION: In buildings without elevators, multistory dwelling units are not required to be accessible.

5.4.2.1 Rooms and spaces available to the general public and spaces available for the use of residents and which serve Group R2 accessible or adaptable dwelling units shall be accessible.

EXCEPTION: Recreational facilities in 5.4.2.7.

5.4.2.2 At least one accessible route shall connect accessible building or facility entrances with all accessible and adaptable dwelling units within the building or facility and with those accessible exterior and interior spaces and facilities that serve the accessible or adaptable dwelling unit.

EXCEPTION: If the slope of the finished grade between accessible facilities and buildings exceeds 1:12, or where physical barriers prevent the installation of an accessible route, a vehicular route with parking at each accessible facility or building is permitted in place of the accessible route.

5.4.2.3 Where recreational facilities are provided serving Group R2 accessible or adaptable dwelling units, 25% but not less than one of each type in each group of such facilities shall be accessible. All recreational facilities of each type on a site shall be considered to determine the total number of each type which are required to be accessible.

6.0 OTHER FEATURES AND FACILITIES

6.1 Toilet and Bathing Facilities

6.1.1 Toilet rooms and bathing facilities shall be accessible. At least one of each type fixture or element in each accessible toilet room and bathing facility shall be accessible.

EXCEPTIONS:

1. A toilet room or bathing facility for a single occupant and not for common or public use shall be permitted to be adaptable.
2. Dwelling units, guest rooms and patient toilet rooms, unless required by 5.0 to be accessible or adaptable.

6.1.2 Where toilet stalls are provided in a toilet room or bathing facility, a wheelchair accessible toilet stall shall be provided. Where six or more toilet stalls are provided in a toilet room or bathing facility, at least one ambulatory accessible stall shall be provided in addition to the wheelchair accessible stall.

6.2 Elevators, Lifts

6.2.1 All passenger elevators on an accessible route shall be accessible.

EXCEPTION: Elevators within a dwelling unit.

6.2.2 Platform (wheelchair) lifts shall not be part of a required accessible route in new construction.

6.3 Drinking Fountains

At least 50% of drinking fountains, but not less than one, provided on every floor shall be accessible.

6.4 Storage and Locker Facilities

Where storage facilities such as cabinets, shelves, closets, lockers and drawers are provided in required accessible or adaptable spaces, at least one of each type shall contain storage space complying with A117.1 (4.23).

6.5 Detectable Warnings

Transit platform edges bordering a drop-off and not protected by platform screens or guardrails shall have a detectable warning.

EXCEPTION: Bus stops.

6.6 Fixed or Built-in Seating or Tables.

Where fixed or built-in seating or tables are provided, at least 5%, but no fewer than one, shall be accessible. In eating and drinking facilities, such seating or tables shall be distributed throughout the facility.

6.7 Customer Service Facilities

6.7.1 Dressing and Fitting Rooms. Where dressing or fitting rooms are provided, at least 5%, but not less than one, in each group of rooms serving distinct and different functions shall be accessible.

6.7.2 Counters and Windows. Where customer sales and service counters or windows are provided, a portion of the counter, or at least one window, shall be accessible.

6.7.3 Check-out Aisles. Accessible check-out aisles shall be installed in accordance with Table 6.7. Traffic control devices, security devices and turnstiles located in accessible check-out aisles or lanes shall be accessible.

TABLE NO. 6.7
REQUIRED CHECK-OUT AISLES

Total Check-out Aisles	Minimum Number of Accessible Check-out Aisles
1-4	1
5-8	2
9-15	3
Over 15	3 + 1 for ea. add'l 5 over 15

6.8 Controls, Operating Mechanisms and Hardware

Controls, operating mechanisms and hardware, including switches that control lighting, ventilation or electrical outlets, in accessible spaces, along accessible routes or as parts of accessible elements, shall be accessible.

7.0 SIGNS

7.1 Required accessible elements shall be identified by the International Symbol of Accessibility at the following locations:

1. Accessible parking spaces required by 3.2.1, except where the total parking spaces provided are five or less.
2. Accessible passenger loading zones.
3. Accessible areas of refuge. See 9.8.
4. Accessible portable toilet and bathing units.

7.2 Inaccessible building entrances, inaccessible public toilets and bathing facilities and elevators not serving an accessible route shall be provided with directional signage indicating the route to the nearest like accessible element.

8.0 ACCESSIBLE MEANS OF EGRESS

8.1 All required accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress is required from any required accessible space, each accessible portion of the space shall be served by not less than two accessible means of egress.

8.2 Each accessible means of egress shall be continuous from each required accessible occupied area to a public way and shall include accessible routes, ramps, exit stairs, elevators, horizontal exits or smoke barriers.

8.2.1 An exit stair to be considered part of an accessible means of egress shall have a clear width of at least 48 inches between handrails and shall either incorporate an area of refuge within an enlarged story-level landing or shall be accessed from either an area of refuge complying with 9.0 or a horizontal exit.

EXCEPTIONS:

1. Exit stairs serving a single dwelling unit or guest room.
2. Exit stairs serving occupancies protected throughout by an approved automatic sprinkler system.
3. The clear width of 48 inches between handrails is not required for exit stairs accessed from a horizontal exit.

8.2.2 An elevator to be considered part of an accessible means of egress shall comply with the requirements of Section 211 of ASME/ANSI A17.1 and standby power shall be provided. The elevator shall be accessed from either an area of refuge complying with 9.0 or a horizontal exit.

EXCEPTION: Elevators are not required to be accessed by an area of refuge or a horizontal exit in occupancies equipped throughout with an automatic sprinkler system.

8.3 In buildings where a required accessible floor is four or more stories above or below a level of exit discharge serving that floor, at least one elevator shall be provided to comply with 8.2.2 and shall serve as one required accessible means of egress.

EXCEPTION: In fully sprinklered buildings, the elevator shall not be required on floors provided with a horizontal exit and located at or above the level of exit discharge..

8.4 Platform (wheelchair) lifts shall not serve as part of an accessible means of egress.

EXCEPTION: Within a dwelling unit.

9.0 AREAS OF REFUGE

9.1 Every required area of refuge shall be accessible from the space it serves by an accessible means of egress. The maximum travel distance from any accessible space to an area of refuge shall not exceed the travel distance permitted for the occupancy. Every required area of refuge shall have direct access to an exit complying with 8.2.1 or an elevator complying with 8.2.2. Where an elevator lobby is used as an area of refuge, the elevator shaft and lobby provided to comply with 8.2.2 shall be pressurized to comply with the requirements for smokeproof enclosures, except where elevators are in an area of refuge formed by a horizontal exit or smoke barrier.

EXCEPTION: Areas of refuge are not required in open parking garages.

9.2 Each area of refuge shall be sized to accommodate one wheelchair space of 30 by 48 inches for each 200 occupants or portion thereof, based on the occupant load of the area of refuge and all areas served by the area of refuge. Such wheelchair spaces shall not reduce the required means of egress width.

9.3 Access to any of the required wheelchair spaces in an area of refuge shall not be obstructed by more than one adjoining wheelchair space.

9.4 Each area of refuge shall be separated from the remainder of the story by a smoke barrier having at least a 1-hour fire resistance rating. Smoke barriers shall extend to the roof/floor deck above. Doors in the smoke barrier shall have a 20-minute fire resistance rating, except those in horizontal exits and exit enclosures. Doors shall be self-closing or automatic closing by smoke detection. HVAC openings in smoke barriers where 20-minute doors are permitted shall be ducted and provided with a smoke-actuated damper designed to resist the passage of smoke.

9.5 Every area of refuge shall be provided with a two-way communication system between the area of refuge and a central control point.

EXCEPTION: Buildings four stories or less in height.

9.6 In each area of refuge provided with a two-way emergency communication system, instructions on the use of the area under emergency conditions shall be posted adjoining the communication system. The instructions shall include:

1. Directions to other means of egress,
2. Advice that persons able to use the exit stairs do so as soon as possible unless they are assisting others,
3. Information on planned availability of assistance in the use of stairs or supervised operation of elevators and how to summon such assistance, and
4. Directions for use of the emergency communication system.

9.7 Each area of refuge shall be identified by a sign stating AREA OF REFUGE and the International Symbol of Accessibility. The sign shall be located at each door providing access to the area of refuge. The sign shall be illuminated as required for exit signs where exit sign illumination is required. Tactile signage complying with CABO/ANSI A117.1 (4.28) shall be located at each door to an area of refuge.

9.8 At all exits and elevators serving a required accessible space, but not providing an approved accessible means of egress, signage shall be installed indicating the location of accessible means of egress.

9.9 Every area of refuge that is not protected by an automatic sprinkler system shall be designed to prevent the intrusion of smoke.

EXCEPTION: Areas of refuge located within a stair enclosure.

10.0 ALARM SYSTEMS

In Group R1 occupancies, all required accessible guest rooms plus an additional number of guest rooms in accordance with the table below shall be provided with a visible and audible alarm-indicating appliance, activated by both the in-room smoke detector and the building fire protective signaling system.

Number of Rooms	Rooms w/ Visual and Audible Alarms
6 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2% of total
1001 & over	20 + 1 for ea. 100 over 1000

11.0 EXISTING BUILDINGS

11.1 Alterations

11.1.1 Each element or space of a building or facility that is altered shall comply with these provisions, unless technically infeasible. Where full compliance is technically infeasible, the element or space shall be made accessible to the extent to which it is not technically infeasible.

EXCEPTION: Where these provisions require that an element or space be on an accessible route, the altered element or space is not required to be on an accessible route, unless required by 11.1.2.

11.1.2 Where an alteration affects the usability of, or access to, an area containing a primary function, an accessible route to the primary function area shall be provided. The accessible route to the primary function area shall include any restrooms or drinking fountains serving the primary function area.

EXCEPTIONS:

1. The costs of providing the accessible route need not exceed 20% of the costs of the alterations affecting the primary function area.
2. Alterations to windows, hardware, operating controls, electrical outlets and signage.
3. Alterations to mechanical systems, electrical systems, installations or alteration of fire protection systems, and abatement of hazardous materials.
4. Alterations undertaken for the primary purpose of increasing the accessibility of an existing building, facility or element.

11.1.3 The following scoping provisions shall apply for alterations to existing buildings and facilities:

1. Where it is technically infeasible to alter existing toilet rooms or bathing facilities to be accessible, at least one accessible unisex toilet/bathroom shall be provided and shall be located on the same floor and in the same area as the existing toilet/bathrooms. Each unisex toilet/bath room shall contain one accessible water closet and lavatory, and the door shall be lockable from within the room.

2. Where existing toilet or bathing facilities are being altered and are not made accessible, directional signage shall be provided indicating the location of the nearest accessible toilet or bathing facility within the facility.
3. Where it is technically infeasible to disperse accessible seating throughout an altered assembly area, accessible seating areas may be clustered. Each accessible seating area shall have provisions for companion seating and shall be located on an accessible route that also serves as an accessible means of egress.
4. Where it is technically infeasible to alter all performing areas to be on an accessible route, at least one of each type of performing area shall be made accessible.
5. Platform (wheelchair) lifts, installed in accordance with ASME/ANSI A17.1, Part 20, may be used as part of an accessible route.
6. Where it is technically infeasible to alter existing dressing rooms to be accessible in accordance with 6.7.1, not less than one accessible dressing room shall be provided on the same level as the inaccessible dressing rooms. Where separate dressing rooms are provided for each sex, not less than one accessible dressing room for each sex shall be provided.
7. Where sleeping rooms in R1 occupancies are being altered, at least one per 25 altered sleeping rooms shall be accessible, and at least one additional per 25 altered sleeping rooms shall comply with 10.0, until the building conforms to the tables in 5.4.1 and 10.0.
8. Accessible means of egress are not required in alterations to existing buildings and facilities.

11.2 Change of Occupancy

Provisions for new construction shall apply to existing buildings that undergo a change of use group, unless technically infeasible.

11.3 Historic Buildings

These provisions shall apply to buildings and facilities designated as historic structures that undergo alterations or a change in use group, unless technically infeasible. If the historic character of the building is adversely affected, alternate provisions may be accepted.

PART II: GENERAL BUILDING REQUIREMENTS

(Following are requirements for basic functional considerations to be incorporated into main code text relative to each issue. For purposes of this part, the exceptions in Part I Section 1.1 shall not apply.)

14.0 PROTRUDING OBJECTS

14.1 Horizontal Projections. Objects projecting from walls with their leading edges located more than 27 and not more than 80 inches above the finished floor shall protrude no more than 4 inches into walks, corridors, passageways, or aisles. Free-standing objects mounted on posts or pylons may overhang 12 inches maximum where located more than 27 and not more than 80 inches above the ground or finished floor.

14.2 Headroom. There shall be a minimum headroom of 6 ft 8 inches from the walking surface to the lowest part of any structural member, fixture or furnishing.

15.0 DOORS

15.1 Doorway Width. Doorways shall have a minimum clear width of 32 inches.

EXCEPTIONS:

1. Doorways not required for means of egress in Group R2 and R3 occupancies.
2. Group I3 occupancies.
3. Storage closets less than 10 sq ft in area.

4. Revolving doors.

5. Interior egress doorways within a dwelling unit not required to be adaptable or accessible shall have a minimum clear width of 29 3/4 inches.

15.2 Hardware.

15.2.1 Door handles, pulls, latches, locks and other operating devices shall be at a maximum height of 48 inches.

15.2.2 The operating devices shall be capable of operating with one hand and shall not require tight grasping, tight pinching, or twisting of the wrist to operate.

EXCEPTION: Hardware for doors within or serving a single dwelling unit that is not required to be accessible or adaptable by 5.0.

15.2.3 Opening forces shall not exceed the following:

1. Interior side-swinging doors without closers - 5 lb.
2. Sliding or folding doors - 5 lb.
3. Other side-swinging doors:
 - Latch release 15 lb.
 - Static opening 30 lb.
 - Swing opening 15 lb.
4. Special locking: 15 lb.

15.3 Floor Elevation.

15.3.1 The floor surface on both sides of a door shall be at the same elevation. The floor surface over which the door swings shall extend from the door in the closed position a distance equal to the door width.

EXCEPTIONS:

1. Exterior doors not on an accessible route.
2. Variations in elevation due to differences in finish materials, but not more than 1/2 inch.

15.3.2 Thresholds at doorways shall not exceed 3/4 inch in height for exterior residential sliding doors or 1/2 inch for other doors. Raised thresholds and floor level changes greater than 1/4 inch at doorways shall be beveled with a slope no greater than 1:2.

16.0 STAIRS

16.1 Treads and Risers. In Group R3 occupancies, riser heights shall be 7 inches maximum and 4 inches minimum. Tread depths shall be 11 inches minimum. The minimum depth of a winder is limited to 6 inches and the tread shall have a minimum depth of 11 inches at 12 inches from the narrower end.

Circular stairways shall be permitted as an egress element providing the minimum tread depth measured 12 inches from the narrower end of the tread is not less than 11 inches and the smaller radius is not less than twice the width of the stairway.

[Other tread/riser provisions in the BCMC Means of Egress Report remain unchanged.]

16.2 Walking Surface. The walking surface of treads and landings of a stairway shall not be sloped steeper than 1:48.

16.3 Leading Edge of Tread. The radius of curvature at the leading edge of the tread shall be no greater than 1/2 inch. Bevelling of nosings shall not exceed 1/2 inch. Risers shall be vertical or sloped

from the underside of the leading edge of the tread above at an angle not more than 30 degrees from the vertical. The leading edge of tread shall project not more than 1 1/2 inches beyond the tread below.

16.4 Handrails.

16.4.1 Stairways shall have handrails on each side.

EXCEPTIONS:

1. Aisle stairs in accordance with Item 96 of the BCMC Means of Egress Report provided with a handrail either at the side or within the aisle width.
2. Stairs within dwelling units, spiral stairs and aisle stairs serving seating only on one side may have a handrail on one side only.

16.4.2 Handrails shall have either a circular cross section with a diameter of 1 1/4 inches to 2 inches, or shall provide equivalent graspability. Handrails with other shapes shall be permitted if they have a perimeter dimension of at least 4 inches but not greater than 6 1/4 inches and if their largest cross section dimension does not exceed 2 1/4 inches. Edges shall have a minimum radius of 1/8 inch.

16.4.3 Gripping surfaces shall be continuous, without interruption by newel posts or other obstructions.

16.4.4 At locations where handrails are not continuous between flights, the handrails shall extend horizontally at least 12 inches beyond the top riser and continue to slope for the depth of one tread beyond the bottom riser.

EXCEPTIONS:

1. Handrails within a dwelling unit shall extend from the top riser to the bottom riser.
2. Aisle handrails in Group A occupancies in accordance with Item 96 of the BCMC Means of Egress Report.

16.4.5 Clear space between handrail and wall shall be a minimum of 1 1/2 inches.

16.5 Stair Sign

Each door to an exit stairway shall have tactile signage stating EXIT and complying with CABO/ANSI A117.1 (4.28).

17.0 RAMPS

17.1 Slope. Maximum slope in the direction of travel shall be 1:12. Maximum cross slope shall be 1:48.

EXCEPTIONS:

1. Maximum slope in direction of travel shall be 1:8 for a 3-inch rise maximum and 1:10 for a 6-inch rise maximum.
2. Aisles in Group A occupancies in accordance with Item 95 of the BCMC Means of Egress Report.

17.2 Rise. Maximum rise for a single ramp run shall be 30 inches.

EXCEPTION: Aisles in Group A occupancies in accordance with Item 95 of the BCMC Means of Egress Report.

17.3 Landings. Ramps shall have landings at the top, bottom and at doors opening onto the ramp. Slope of landings shall not be steeper than 1:48.

17.4 Handrails. Ramps steeper than 1:20 shall be provided with handrails along both sides of a ramp segment and shall conform with the requirements in 16.4.1, 16.4.2 and 16.4.3. If handrails are not continuous, they shall extend at least 12 inches beyond the top and bottom of the ramp segment and shall be parallel with the floor or ground surface.

EXCEPTIONS:

1. Handrails are not required when the total rise is 6 inches or less.
2. Aisles in Group A occupancies in accordance with Item 96 of the BCMC Means of Egress Report.

17.5 Drop-Offs. Ramps and landings with drop-offs shall have a curb with a minimum 4-inch height, wall, railing or a guardrail.

17.6 Slip Resistance. Ramps shall have a slip resistant surface.

17.7 Water Accumulation. Exterior ramps and landings shall be designed so water will not accumulate on their surfaces.

18.0 ELEVATORS

Passenger elevators shall comply with ASME/ANSI A17.1 and CABO/ANSI A117.1 (4.10).

19.0 ALARM SYSTEMS

Required fire protective signalling systems shall include visible alarm-indicating appliances in public and common areas.

PART III: NON-CODE ITEMS

The following list includes basic functional considerations which are not appropriate for incorporation into a building code.

- *Accessible* escalators in transportation stations
- Automatic Teller Machines
- Express check-out aisles
- Library magazine displays
- Permanent signage for emergency information, general circulation directions and identification of rooms and spaces
- Public telephones
- Raised platforms (temporary) in banquet rooms
- Refrigerator/freezer styles
- Self-service shelves and display units
- Smoking/nonsmoking dining areas
- Telecommunication Devices for the Deaf
- Transient lodging notification devices