4.6 PARKING AND PASSENGER LOADING ZONES.

4.6.1 GENERAL GENERAL. PARKING SPACES REQUIRED TO BE ACCESSIBLE BY 4.1 SHALL COMPLY WITH 4.6.2 THROUGH 4.6.4. PASSENGER LOADING ZONES REQUIRED TO BE ACCESSIBLE BY 4.1 SHALL COMPLY WITH 4.6.5 AND 4.6.6.

4.6.2 LOCATION. ACCESSIBLE PARKING SPACES SERVING A PARTICULAR BUILDING SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE ENTRANCE. THAT DO NOT SERVE A PARTICULAR BUILDING, ACCESSIBLE ROUTE OF TRAVEL TO AN ACCESSIBLE PEDESTRIAN ENTRANCE OF THE PARKING. ACCESSIBLE PARKING SPACES SERVING A PARTICULAR BUILDING SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING. ACCESSIBLE PARKING SPACES SHALL BE DISPERSED AND LOCATED CLOSEST TO THE ACCESSIBLE ENTRANCE(S).

4.6.3* PARKING SPACES. PARKING SPACES FOR DISABLED PEOPLE SHALL BE AT LEAST 96" (2440 mm) WIDE AND SHALL HAVE AN ADJACENT ACCESS AISLE 60" (1525 mm) WIDE MINIMUM. PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 IN ALL DIRECTIONS. ACCESSIBLE PARKING SPACES SHALL BE MARKED TO DEFINE THE SPACE AND THE ACCESS AISLE AS PROVIDED IN 4.6. TWO ACCESSIBLE PARKING SPACES MAY SHARE A COMMON ACCESS AISLE. PARKED VEHICLES OVERHANGING CURBS SHALL NOT REDUCE THE CLEAR WIDTH OF AN ACCESSIBLE CIRCULATION ROUTE. PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 IN ALL DIRECTIONS.

EXCEPTION: IF ACCESSIBLE PARKING SPACES FOR USE OBSERVED FOR HANDICAPPED PERSONS ARE PROVIDED, EACH SHOULD HAVE AN ADJACENT ACCESS AISLE AT LEAST 96" (2440mm) WIDE COMPLYING WITH 4.6. GROUND AND FLOOR SURFACE.

4.6.4* SIGNAGE. ACCESSIBLE PARKING SPACES SHALL BE DESIGNATED AS RESERVED FOR THE DISABLED BY A SIGN SHOWING THE SYMBOL OF ACCESSIBILITY (SEE FIG. 4.30.3). SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.

4.6.5 PASSENGER LOADING ZONES. PASSENGER LOADING ZONES SHALL PROVIDE AN ACCESS AISLE AT LEAST 60" (1525mm) WIDE AND 20' (6100mm) LONG ADJACENT AND PARALLEL TO THE VEHICLE PULL-UP SPACE (SEE FIG. 4.1). IF VEHICLES ARE EXPECTED TO ACCESS THE AISLE AND THE VEHICLE PULL-UP SPACE FROM THE REAR, THE AISLE SHALL BE 96" (2440mm) WIDE MINIMUM. ACCESS AISLES SHALL BE MARKED TO DEFINE THE SPACE AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 IN ALL DIRECTIONS.

4.6.6 VERTICAL CLEARANCE. PASSENGER LOADING ZONES SHALL PROVIDE AN ACCESS AISLE AT LEAST 96" (2440mm) WIDE AND VEHICLE PULL-UP SPACE (SEE FIG. 4.1) THAT GIVE WHEELCHAIR USERS ACCESS TO A VEHICLE HAVING A VERTICAL CLEARANCE OF 114" (2895mm). ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 (2%) IN ALL DIRECTIONS.

4.7 CURB RAMPS.

4.7.1 LOCATION. CURB RAMPS COMPLYING WITH 4.7 SHALL BE PROVIDED WHEREVER AN ACCESSIBLE ROUTE CROSSES A CURB.

4.7.2 SLOPE. SLOPES OF CURB RAMPS SHALL COMPLY WITH 4.5.2. THE RAMP SHALL BE [illegible] THE SLOPE OF THE FLARED SIDES OF THE RAMP SHALL BE NO GREATER THAN 10:1. THE SLOPES OF THE FLARED SIDES SHALL BE MEASURED IN A DIRECTION PARALLEL TO THE CURB RAMP. AT ACCESSIBLE ROUTES SHALL NOT EXCEED 1:20.

4.7.3 WIDTH. THE MINIMUM WIDTH OF A CURB RAMP SHALL BE 36", EXCLUSIVE OF FLARED SIDES.

4.7.4 SURFACE. SURFACES OF CURB RAMPS SHALL COMPLY WITH 4.5.

4.7.5 SIDES OF CURB RAMPS. IF A CURB RAMP IS LOCATED WHERE PEDESTRIANS MUST WALK across IN THE RAMP, OR WHERE IT IS NOT PROTECTED BY HANDRAILS OR OTHERWISE, SIDES OF THE RAMP SHALL HAVE FLARES. THE MINIMUM SLOPE OF THE FLARE SHALL BE 10:1 (SEE FIG. 12(b)). WHERE THE SIDE OF THE RAMP HAS NO FLARE, THE MINIMUM FLARE SHALL BE 48" (1220mm) WHERE PEDESTRIANS WALK ACROSS THE RAMP (SEE FIG. 12(b)).

4.7.6 BUILT-UP CURB RAMPS. BUILT-UP CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES (SEE FIG. 13).

4.7.7 WARNING TEXTURES. (REMOVED AND RESERVED).

4.7.8 OBSTRUCTIONS. CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT THEIR OBSTRUCTION BY PARKED VEHICLES.

4.7.9 LOCATION AT MARKED CROSSWALKS. CURB RAMPS AT MARKED CROSSWALKS SHALL BE WHOLLY CONTAINED WITHIN THE CROSSWALK, EXCLUDING ANY FLARED SIDES.

4.7.10 DIAGONAL CURB RAMPS. IF DIAGONAL (OR CORNER TYPE) CURB RAMPS HAVE RETURNED [illegible]

4.7.11 TRAPS. ANY GRATE PLACED IN CURBSIDE TRAPS SHALL BE NOT PERPENDICULAR WITH THE RAMP OR THE DIRECTION OF TRAVEL, AND SHALL BE NO LARGER THAN 13" (330mm) LONG IN THE DIRECTION OF TRAVEL.

4.7.12 UNCURBED INTERSECTIONS. (REMOVED AND RESERVED).

4.8 RAMPS.

4.8.1* GENERAL. ANY PART OF AN ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND SHALL COMPLY WITH 4.8.

4.8.2* SLOPE AND RISE. [illegible]

2. IF SPACE LIMITATIONS PREVENT THE USE OF A 1:12 SLOPE OR LESS (SEE 4.1.6).

4.8.3 CLEAR WIDTH. THE MINIMUM CLEAR WIDTH OF A RAMP SHALL BE 36" (915mm).

4.8.4 LANDINGS. EVERY RAMP MUST HAVE LEVEL LANDINGS AT THE BOTTOM AND TOP OF EACH RUN. EACH LANDING SHALL HAVE THE FOLLOWING FEATURES:

(1) THE LANDING SHALL BE AT LEAST AS WIDE AS THE RAMP RUN LEADING TO IT.
(2) THE LANDING LENGTH SHALL BE A MINIMUM OF 60" (1525mm) CLEAR.
(3) IF RAMPS CHANGE DIRECTION AT LANDINGS, THE MINIMUM LANDING SIZE SHALL BE 60" BY 60" (1525mm) BY (1525mm).
(4) IF A DOOWAY IS LOCATED AT A LANDING, THEN THE AREA IN FRONT OF THE DOORWAY SHALL COMPLY WITH 4.13.6.

4.8.5* HANDRAILS. IF A RAMP RUN HAS A RISE GREATER THAN 6" (152mm) OR A HORIZONTAL PROJECTION GREATER THAN 72" (1830mm) THEN HANDRAILS SHALL BE PROVIDED ON BOTH SIDES. HANDRAILS SHALL COMPLY WITH 4.26 AND SHALL HAVE THE FOLLOWING FEATURES:

(1) HANDRAILS SHALL BE CONTINUOUS ALONG BOTH SIDES OF RAMP SEGMENTS. THE INSIDE HANDRAIL ON SWITCHBACK OR DOGLEG RAMPS SHALL BE CONTINUOUS.
(2) IF HANDRAILS ARE NOT CONTINUOUS, THEY SHALL EXTEND AT LEAST 12" (305mm) BEYOND THE TOP AND BOTTOM OF THE RAMP SEGMENT AND SHALL BE PARALLEL WITH THE FLOOR OR GROUND SURFACE.
(3) THE CLEAR SPACE BETWEEN THE HANDRAIL AND THE WALL SHALL BE 1-1/2" (38mm).
(4) GRIPPING SURFACES SHALL BE CONTINUOUS.
(5) TOP OF HANDRAIL GRIPPING SURFACES SHALL BE MOUNTED BETWEEN 30" & 34" (760 mm & 865mm) ABOVE RAMP SURFACES.
(6) ENDS OF HANDRAILS SHALL BE EITHER ROUNDED OR RETURNED SMOOTHLY TO FLOOR, WALL, OR POST.
(7) HANDRAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

4.8.6 TOP & BOTTOM RISE SURFACES. THE CROSS SLOPE OF RAMP SURFACES SHALL BE NO GREATER THAN 1:50. THE SURFACES SHALL COMPLY WITH 4.5.

4.8.7 EDGE PROTECTION. RAMPS AND LANDINGS WITH DROP-OFFS SHALL HAVE CURBS, WALLS, RAILINGS, OR PROJECTING SURFACES THAT PREVENT PEOPLE FROM SLIPPING OFF THE RAMP.

4.8.8 OUTDOOR CONDITIONS. OUTDOOR RAMPS AND THEIR APPROACHES SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.

4.9 STAIRS.

4.9.1 MINIMUM NUMBER. STAIRS REQUIRED TO BE ACCESSIBLE BY 4.1 SHALL COMPLY WITH 4.9.

4.9.2 TREADS & RISERS. ON ANY GIVEN FLIGHT OF STAIRS, ALL STEPS SHALL HAVE UNIFORM RISE HEIGHTS AND TREADS WIDTHS. RISER HEIGHTS SHALL BE NO LESS THAN 4" (100mm) AND NO GREATER THAN 7" (180mm). OPEN RISERS ARE NOT PERMITTED ON ACCESSIBLE ROUTES.

4.9.3 TREAD WIDTH. [illegible] 1-1/2" (38mm) (SEE FIG. 18).

4.9.4 HANDRAILS. HANDRAILS SHALL HAVE EXTENSIONS AT BOTH ENDS OF ALL STAIRS. HANDRAILS SHALL COMPLY WITH 4.26 AND SHALL HAVE THE FOLLOWING FEATURES:

(1) HANDRAILS SHALL BE CONTINUOUS ALONG BOTH SIDES OF STAIRS. THE INSIDE HANDRAIL ON SWITCHBACK OR DOGLEG STAIRS SHALL ALSO BE CONTINUOUS (SEE FIG. 19(a) & (b)).
(2) IF HANDRAILS ARE NOT CONTINUOUS, THEY SHALL EXTEND 12" (305mm) BEYOND THE TOP AND BOTTOM OF THE STAIRS SEGMENT AND SHALL BE PARALLEL WITH THE FLOOR OR GROUND SURFACE. EXTENSIONS SHALL NOT INTERFERE WITH PASSAGE ON THE WALKING SURFACE. EXTENSIONS SHALL BE DESIGNED AND LOCATED SO AS NOT TO BE A HAZARD. (SEE FIG. 19(a) & (b)). HANDRAIL EXTENSIONS SHALL COMPLY WITH 4.4.
(3) THE CLEAR SPACE BETWEEN HANDRAILS AND WALLS SHALL BE 1-1/2" (38mm).
(4) GRIPPING SURFACES SHALL BE UNINTERRUPTED BY NEWEL POSTS, OTHER CONSTRUCTION ELEMENTS, OR OBSTRUCTIONS.
(5) TOP OF HANDRAIL GRIPPING SURFACE SHALL BE MOUNTED BETWEEN 30" & 34" (760mm) & 865mm) ABOVE STAIR NOSINGS.
(6) ENDS OF HANDRAILS SHALL BE EITHER ROUNDED OR RETURNED SMOOTHLY TO FLOOR, WALL, OR POST.
(7) HANDRAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

4.9.5 TACTILE WARNINGS AT STAIRS. (REMOVED & RESERVED).

4.9.6 OUTDOOR CONDITIONS. OUTDOOR STAIRS AND THEIR APPROACHES SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.

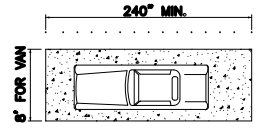


FIG. 10

ACCESS AISLE AT PASSENGER LOADING ZONES
N.T.S.

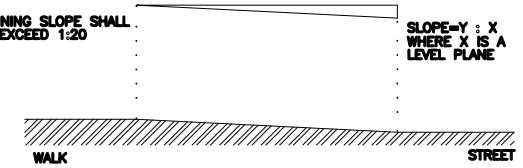


FIG. 11

MEASUREMENT OF CURB RAMP SLOPES
N.T.S.

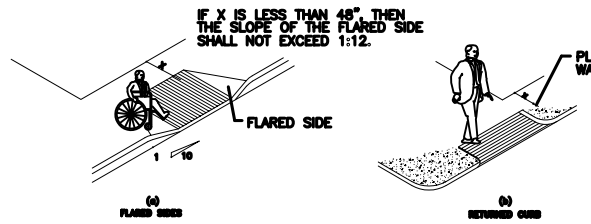


FIG. 12

SIDES OF CURB RAMPS
N.T.S.

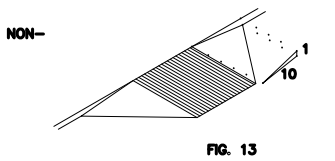


FIG. 13

BUILT-UP CURB RAMP
N.T.S.

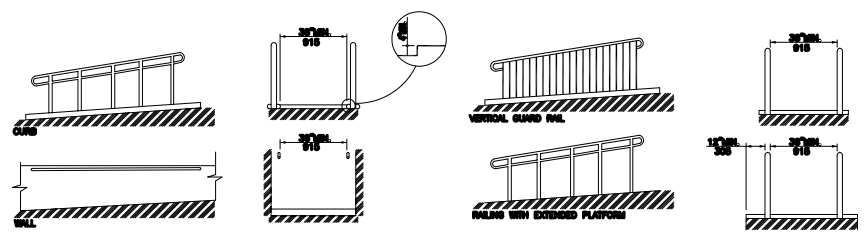


FIG. 17

EXAMPLES OF EDGE PROTECTION AND HANDRAIL EXTENSIONS
N.T.S.

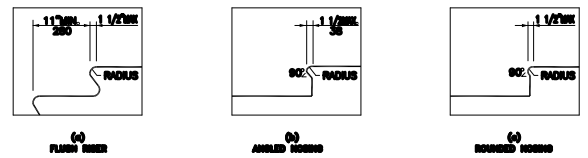
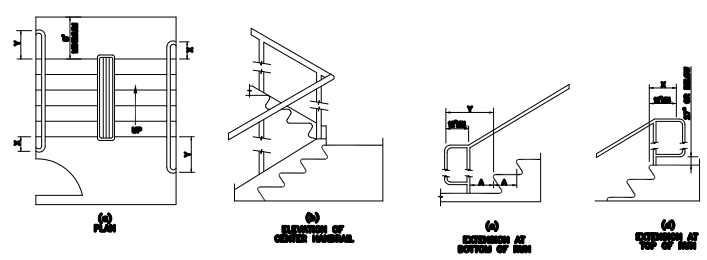


FIG. 18

USEABLE TREAD WIDTH AND EXAMPLES OF ACCEPTABLE NOSINGS
N.T.S.



NOTE:
X IS THE 11" MINIMUM HANDRAIL EXTENSION REQUIRED AT EACH TOP RISER.
Y IS THE MINIMUM HANDRAIL EXTENSION OF 12" PLUS THE DEPTH OF ONE TREAD THAT IS REQUIRED AT EACH BOTTOM RISER

FIG. 19

STAIR HANDRAILS
N.T.S.

4.10 ELEVATORS.

4.10.1 GENERAL. ACCESSIBLE ELEVATORS SHALL BE ON AN ACCESSIBLE ROUTE AND SHALL COMPLY WITH 4.3. THE ELEVATOR CAR AND ITS DOORS SHALL BE DIMENSIONED TO ACCOMMODATE A WHEELCHAIR. ELEVATORS SHALL BE CONSIDERED PART OF AN ACCESSIBLE ROUTE. THE ELEVATOR CONTROLS AND HARDWARE SHALL BE ACCESSIBLE TO AND USABLE BY PERSONS WITH DISABILITIES.

4.10.2 AUTOMATIC OPERATION. ELEVATOR OPERATION SHALL BE AUTOMATIC. EACH CAR SHALL BE EQUIPPED WITH A SELF-LEVELING FEATURE THAT WILL AUTOMATICALLY BRING THE CAR TO A FLOOR WITHIN EIGHT A MAXIMUM OF 1/2" (13mm) WITHIN THREE MINUTES. INDEPENDENT OF THE OPERATING DEVICE AND SHALL CORRECT THE OVERRUNS OR UNDERRUNS.

4.10.3 HALL CALL BUTTONS. CALL BUTTONS IN ELEVATOR LOBBIES AND HALLS SHALL BE CONSIST OF A 3/4" (19mm) [illegible] ABOVE THE FLOOR. EACH CALL BUTTONS SHALL HAVE VISUAL SIGNALS TO ANNOUNCE THAT A CALL HAS BEEN ANSWERED. [illegible] CALL BUTTONS SHALL NOT PROJECT INTO THE ELEVATOR CAR MORE THAN 1" (13mm).

4.10.4 HALL ARRIVAL. A VISUAL AND AUDIBLE SIGNAL SHALL BE PROVIDED AT EACH HOISTWAY ENTRY TO INDICATE THAT THE ELEVATOR HAS ARRIVED. THE VISUAL SIGNAL SHALL BE A LIGHT IN THE HOISTWAY ADJACENT TO THE ELEVATOR CAR. THE AUDIBLE SIGNAL SHALL BE A CHIME OR ONE MESSAGE. THE VISUAL SIGNAL SHALL BE VISIBLE FROM THE PLACE OF THE HALL CALL BUTTON UNTIL THE ELEVATOR CARRIER THAT FLOOR IS ANSWERED.

4.10.5 HALL ARRIVAL SIGNALS. [illegible]
(1) HALL LANTERN FIXTURES SHALL BE MOUNTED SO THAT THEIR CENTERLINE IS AT LEAST 2 1/2" (64mm) IN THE SMALLEST DIMENSION.
(2) VISUAL ELEMENTS SHALL BE AT LEAST 2-1/2" (64mm) IN THE SMALLEST DIMENSION.
(3) SIGNALS SHALL BE VISIBLE FROM THE VICINITY OF THE HALL CALL BUTTON. ON-OFF OR STEADY ILLUMINATION OF ALL LIGHTS IN A GIVEN HOISTWAY SHALL INDICATE THAT A CALL HAS BEEN ANSWERED. [illegible] CONFORMING TO THE ABOVE REQUIREMENTS, SHALL BE ACCEPTABLE.

4.10.6 HOISTWAY DOORS. THE MINIMUM ACCEPTABLE TIME FROM NOTIFICATION THAT A CAR IS ANSWERING A CALL UNTIL THE DOORS OF THAT CAR BEGIN TO CLOSE SHALL BE CALCULATED FROM THE FOLLOWING EQUATION:

T=D/(1.5'/S) OR T=D/(445mm/S)

WHERE T = TIME, THE ELEVATOR AND A DISTANCE OF TRAVEL OF DISPATCHING CAR A TIME [illegible] THE DOORS OF THE CAR AT THE FLOOR OF THE CALL. THE DISTANCE OF TRAVEL IS