

4.6 PARKING AND PASSENGER LOADING ZONES.

4.6.1 MINIMUM NUMBER. 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 ENTRANCE OF THE BUILDING, ACCESSIBLE ENTRANCES WITH ADJACENT PARKING, ACCESSIBLE PARKING SPACES SHALL BE DISPERSED AND LOCATED CLOSEST TO THE ACCESSIBLE ENTRANCES.

4.6.3 PARKING SPACES. PARKING SPACES FOR DISABLED PEOPLE SHALL BE AT LEAST 9'6" (2940 mm) WIDE AND SHALL HAVE AN ADJACENT ACCESS AISLE 6'0" (1829 mm) WIDE MINIMUM. PARKING ACCESS AISLES SHALL BE PART OF AN ACCESSIBLE ROUTE TO THE BUILDING OR FACILITY ENTRANCE AND SHALL COMPLY WITH 4.3. TWO ACCESSIBLE PARKING SPACES MAY SHARE A COMMON ACCESS AISLE. PARKED VEHICLES OVERHANGING SHALL NOT REDUCE THE CLEAR WIDTH OF AN ACCESSIBLE 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 VANS DESIGNED FOR HANDICAPPED PERSONS ARE PROVIDED, EACH SHOULD HAVE AN ADJACENT ACCESS AISLE AT LEAST 9'6" (2940mm) WIDE COMPLYING WITH 4.5, GROUND AND FLOOR SURFACES.

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

4.6.5 PASSENGER LOADING ZONES. PASSENGER LOADING ZONES SHALL PROVIDE AN ACCESS AISLE AT LEAST 6'0" (1829mm) WIDE AND 20' (6096mm) LONG ADJACENT AND PARALLEL TO THE VEHICLE FULL-UP SPACE (SEE FIG. 10). IF THERE ARE CURBS BETWEEN THE ACCESSIBLE AISLE AND THE VEHICLE FULL-UP SPACE, THEN A CURB RAMP COMPLYING WITH 4.7 SHALL BE PROVIDED. VEHICLE STANDING SPACES 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 6'0" (1829mm) WIDE AND 20' (2407) (6100mm) LONG ADJACENT AND PARALLEL TO THE VEHICLE FULL-UP SPACE (SEE FIG. 10). IF THERE ARE CURBS BETWEEN THE ACCESSIBLE AISLE AND THE VEHICLE FULL-UP SPACE, THEN A CURB RAMP COMPLYING WITH 4.7 SHALL BE PROVIDED. VERTICAL STANDING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 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 4.8.2. THE SLOPE SHALL BE SHOWN AS SHOWN IN FIG. 10. IF THERE ARE CURBS BETWEEN THE ACCESSIBLE AISLE AND THE VEHICLE FULL-UP SPACE, THEN A CURB RAMP COMPLYING WITH 4.7 SHALL BE PROVIDED. VERTICAL STANDING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 IN ALL DIRECTIONS.

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 THE RAMP, OR WHERE IT IS NOT PROTECTED BY HANDRAILS OR GUARDRAILS, THEN IT SHALL HAVE FLARED SIDES. THE MAXIMUM SLOPE OF THE FLARE SHALL BE 1:10 (SEE FIG. 12a). CURB RAMPS WITH RETURNED CURBS MAY BE USED WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP (SEE FIG. 12b).

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 OBSTRUCTION BY PARKED VEHICLES.

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

4.7.10 DIAGONAL CURB RAMPS. IF DIAGONAL (OR CORNER TYPE) CURB RAMPS HAVE RETURNED CURBS OR OTHER WELL-DEFINED EDGES, SUCH EDGES SHALL BE PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS ARE PROVIDED AT MARKED CROSSINGS. THE 48" (1219mm) CLEAR SPACE SHALL WITHIN THE MARKINGS. IF DIAGONAL CURB RAMPS HAVE FLARED SIDES, THEY SHALL ALSO HAVE AT LEAST A 24" (610mm) LONG SEGMENT OF STRAIGHT CURB RAMPS AT EACH END OF THE RAMP AND WITHIN THE MARKED CROSSINGS.

4.7.11 ISLANDS. ANY RAISED ISLANDS IN CROSSING SHALL BE CUT THROUGH LEVEL WITH THE STREET OR HAVE CURB RAMPS AT BOTH SIDES AND A LEVEL AREA AT LEAST 48" (1219mm) LONG IN THE PART OF THE ISLAND INTERSECTED BY THE CROSSINGS.

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 & RISE. THE LEAST POSSIBLE SLOPE SHALL BE USED FOR ANY RAMP. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION SHALL BE 1:12. THE MAXIMUM RISE FOR ANY RAMP SHALL BE 30" (762mm). CURB RAMPS AND RAMPS TO BE CONSTRUCTED ON EXISTING SITES OR IN EXISTING BUILDINGS OR FACILITIES MAY HAVE SLOPES AND RISES AS SHOWN IN TABLE 2.

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

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

4.8.4 LANDINGS. RAMPS SHALL HAVE LEVEL LANDINGS AT THE BOTTOM AND TOP OF EACH RUN. LANDINGS 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 DOORWAY 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" (250mm) OR A HORIZONTAL PROJECTION GREATER THAN 27" (686mm), THERE SHALL BE HANDRAILS ON BOTH SIDES. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. HANDRAILS SHALL COMPLY WITH 4.8.6 AND SHALL HAVE THE FOLLOWING FEATURES:

- (1) HANDRAILS SHALL BE PROVIDED 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" (762 mm & 863mm) ABOVE RAMP SURFACE.
- (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 CROSS-SLOPE & SURFACES. THE CROSS-SLOPE OF RAMP SURFACES SHALL BE NO GREATER THAN 1:50. RAMP SURFACES SHALL COMPLY WITH 4.5.

4.8.7 EDGE PROTECTION. RAMPS AND LANDINGS WITH DROP-OFF SIDES SHALL HAVE CURBS, WALLS, BALUNES, OR PROTECTING SURFACES THAT PREVENT PEOPLE FROM SLIPPING OFF THE RAMP. CURBS SHALL BE A MINIMUM OF 2" (50mm) HIGH (SEE FIG. 17).

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 UNIFORM TREADS. STAIR TREADS SHALL BE NO LESS THAN 11" (279mm) AND 28" (711mm) WIDE, MEASURED FROM RISER TO RISER (SEE FIG. 18a). OPEN RISERS ARE NOT PERMITTED ON ACCESSIBLE ROUTES.

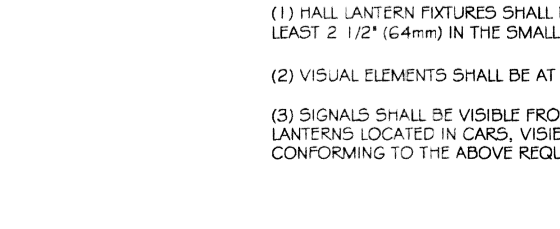
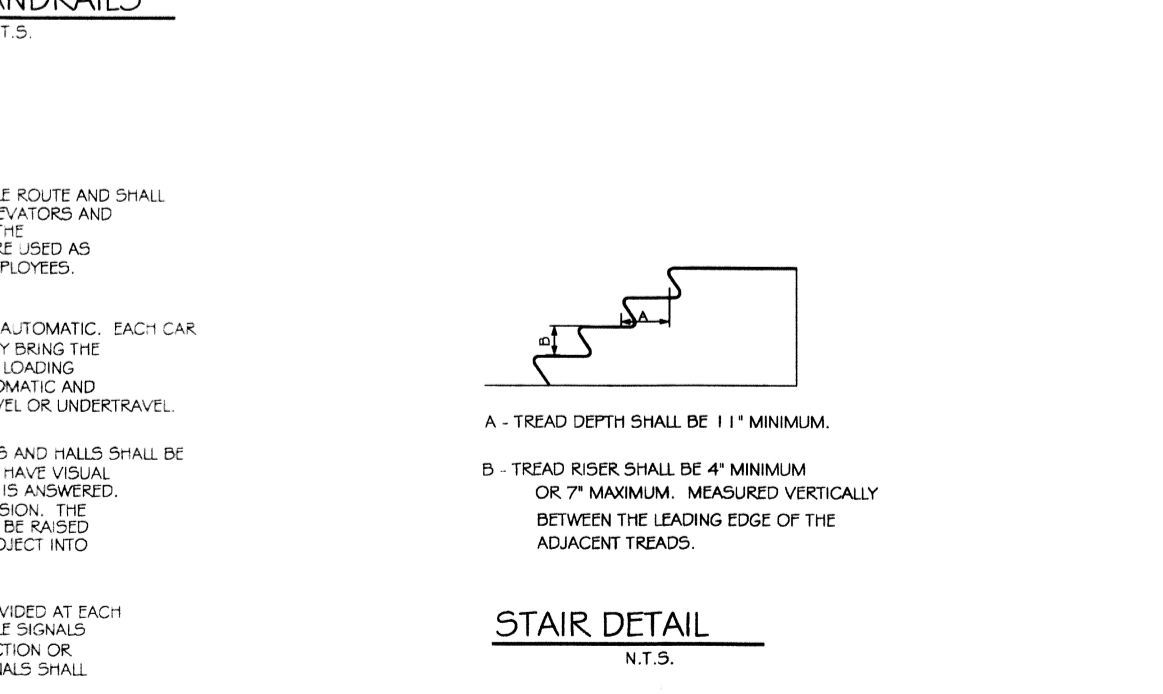
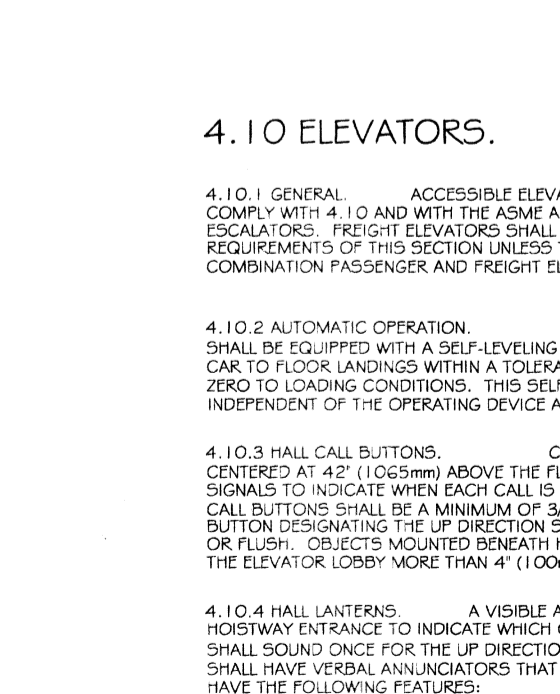
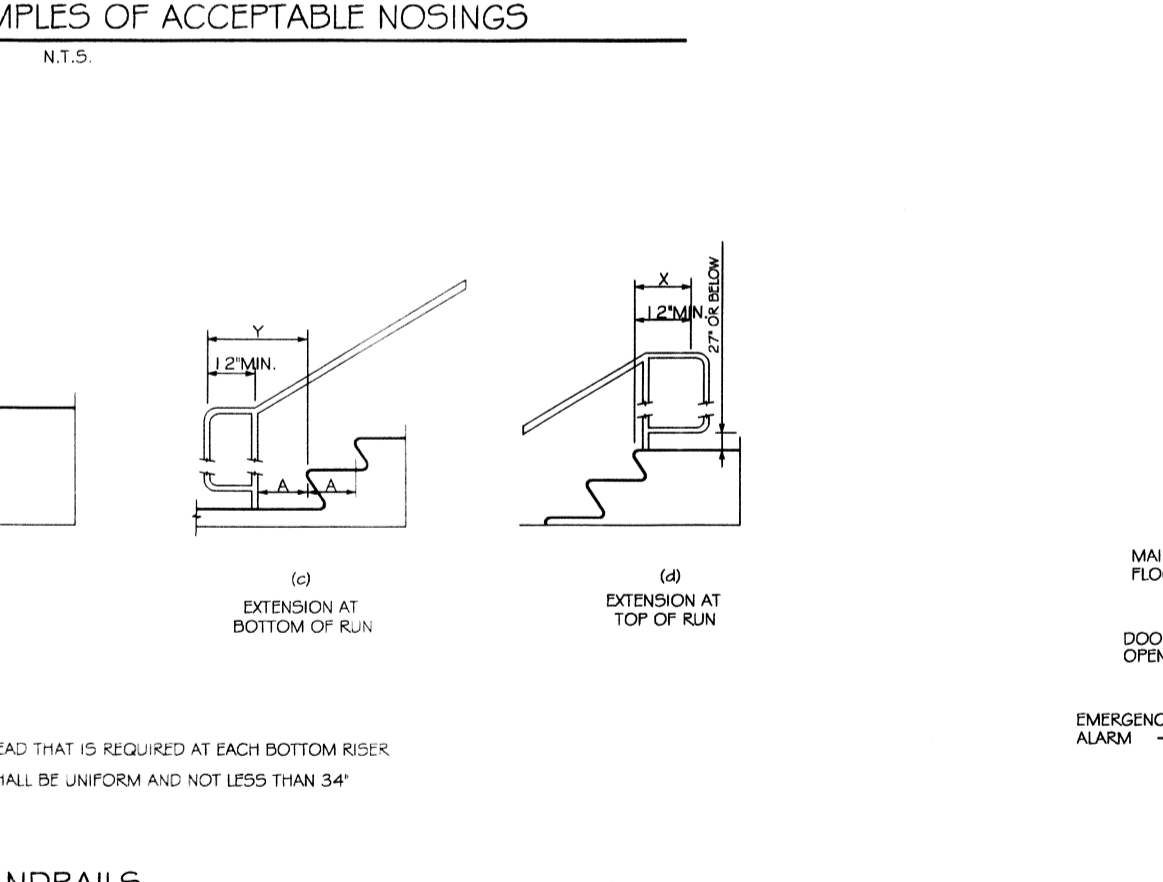
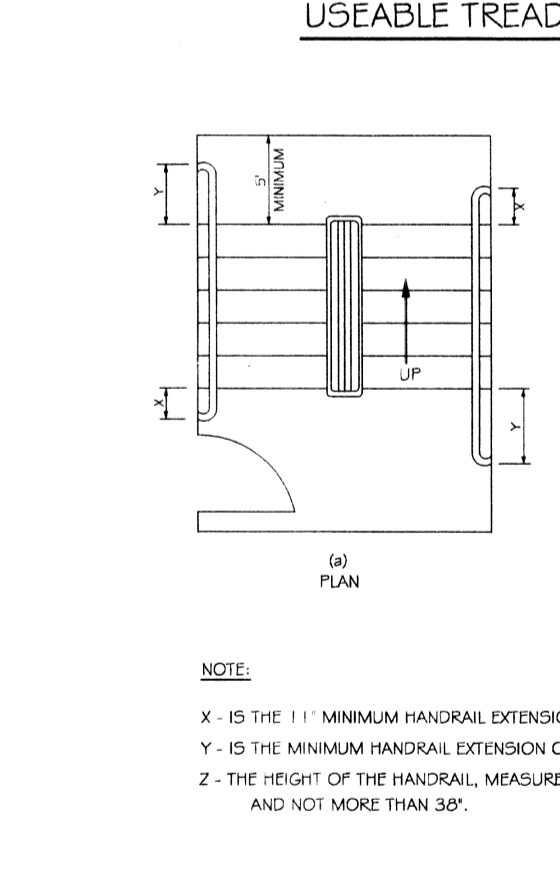
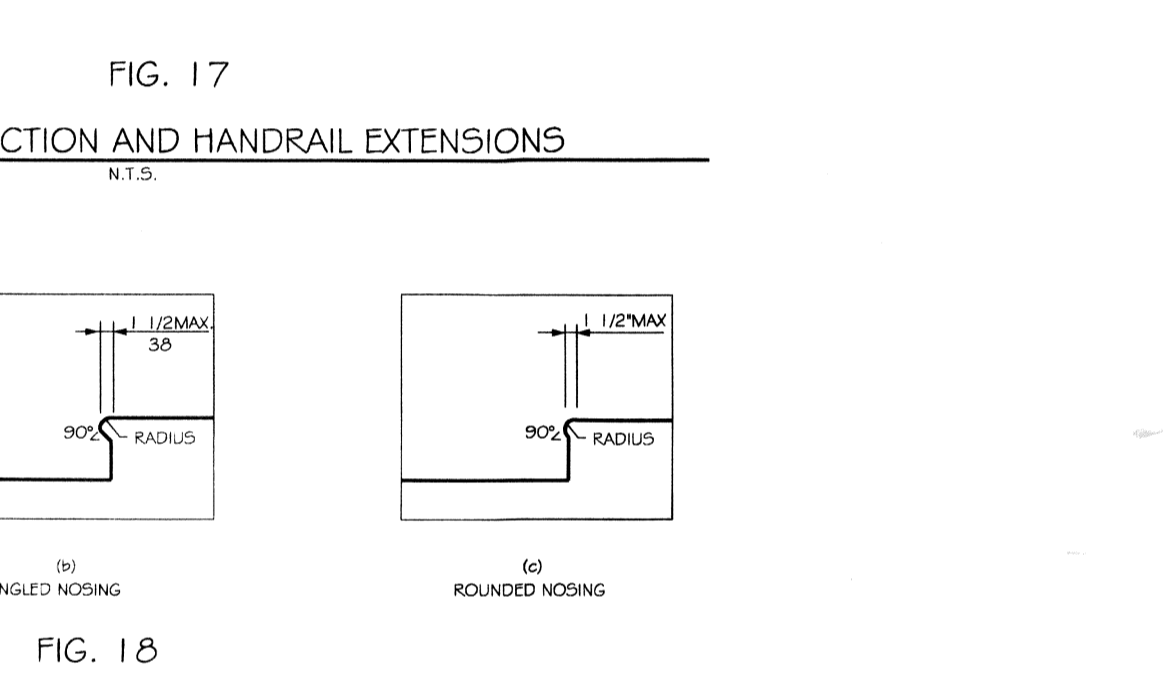
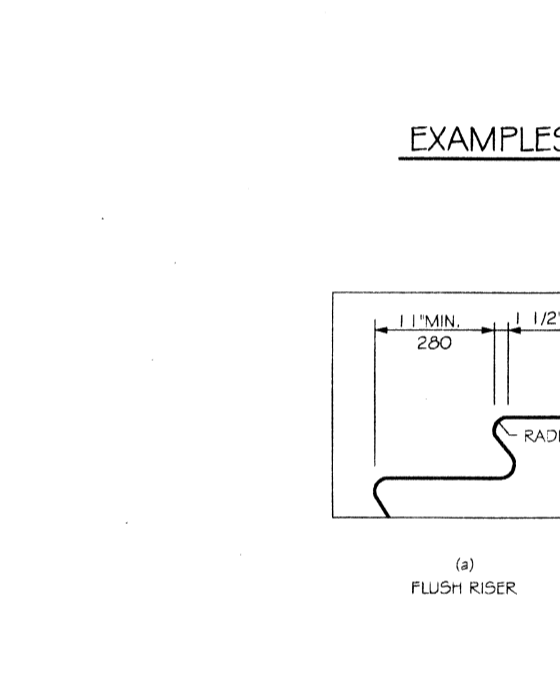
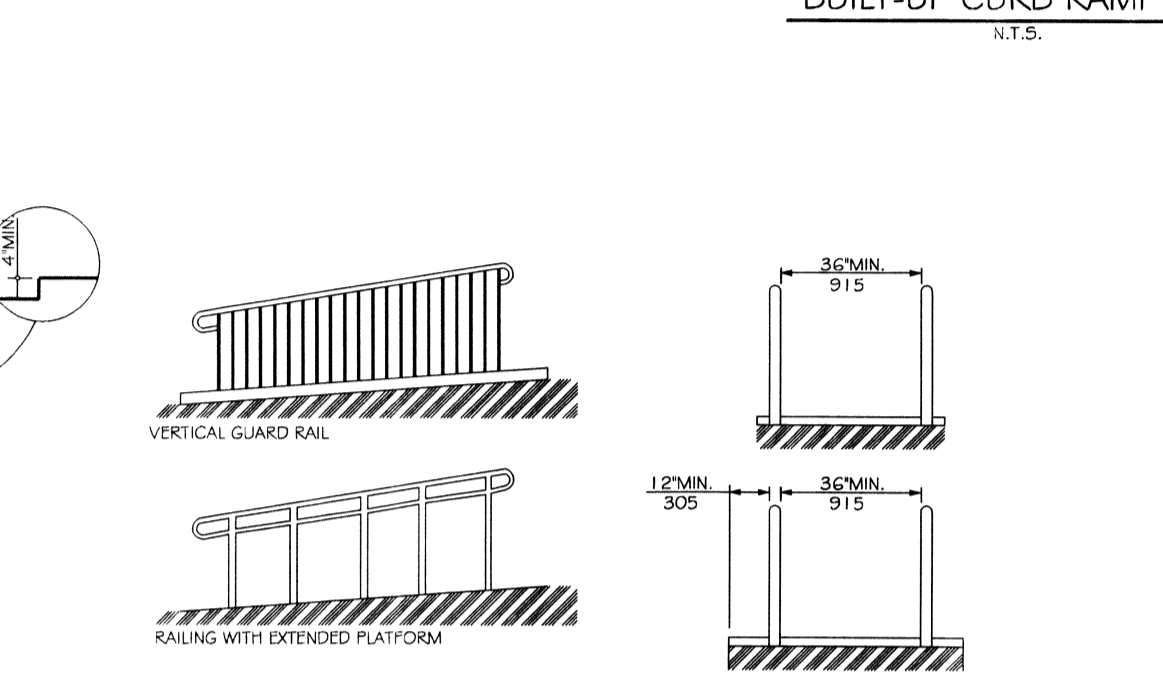
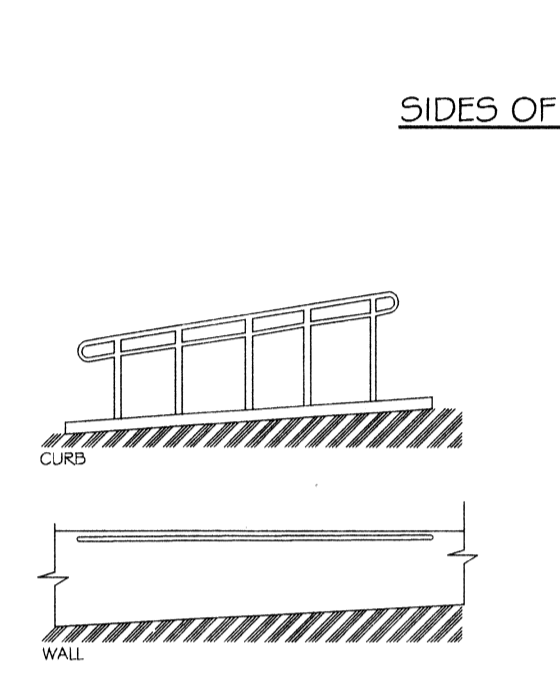
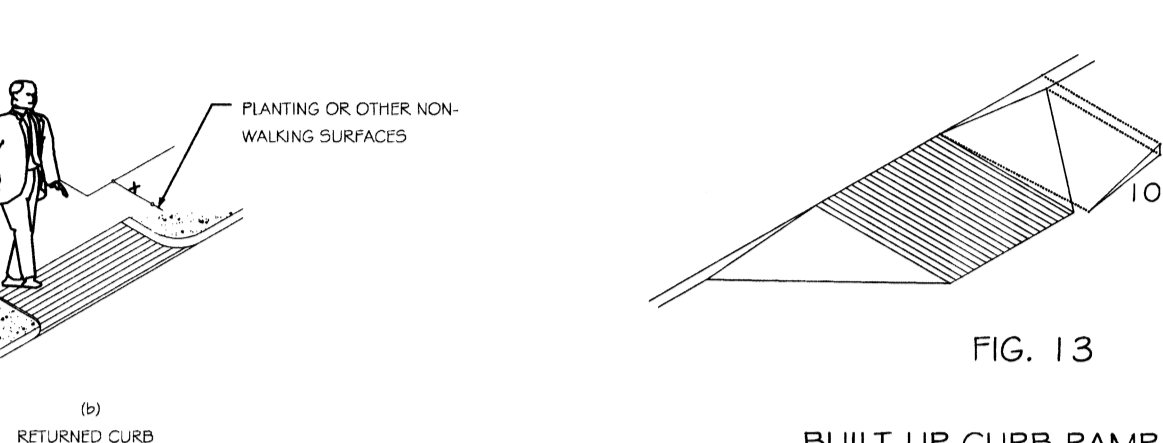
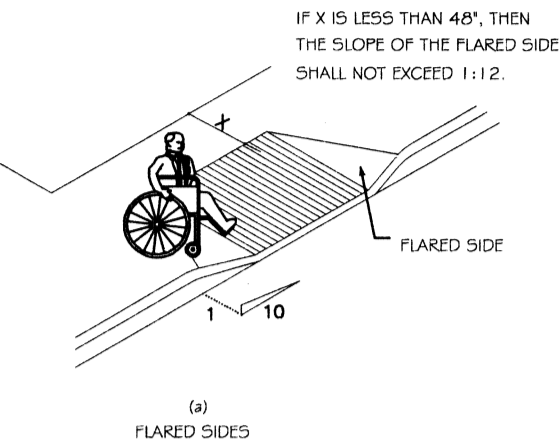
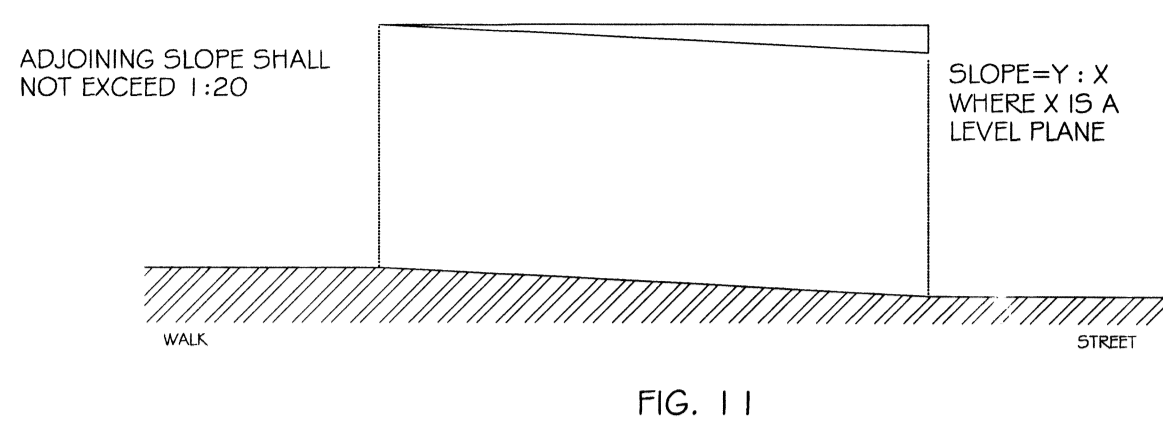
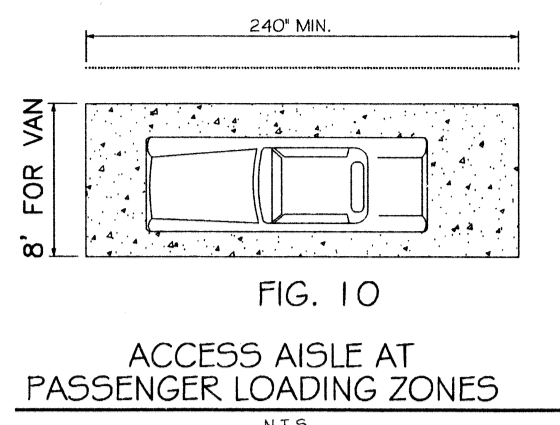
4.9.3 NOSINGS. THE UNDERSIDES OF NOSINGS SHALL NOT BE ABRUPT. THE RADIUS OF CURVATURE AT THE LEADING EDGE OF THE TREAD SHALL BE NO GREATER THAN 12" (305mm). RISERS SHALL BE SLOPED OR THE UNDERSIDE OF THE NOSING SHALL HAVE AN ANGLE NOT LESS THAN 60 DEGREES FROM THE HORIZONTAL. NOSINGS SHALL PROJECT NO MORE THAN 1-1/2" (38mm) (SEE FIG. 18).

4.9.4 HANDRAILS. STAIRWAYS SHALL HAVE HANDRAILS AT BOTH SIDES OF ALL STAIRS. HANDRAILS SHALL COMPLY WITH 4.8.6 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 ALWAYS BE CONTINUOUS (SEE FIG. 19a) & (b).
- (2) IF HANDRAILS ARE NOT CONTINUOUS, THEY SHALL EXTEND AT LEAST 12" (305mm) PLUS THE WIDTH OF ONE TREAD BEYOND THE BOTTOM RISER. AT THE TOP, THE EXTENSION SHALL BE PARALLEL WITH THE FLOOR OR GROUND SURFACE. AT THE BOTTOM, THE HANDRAIL SHALL CONTINUE TO SLOPE FOR A DISTANCE OF THE WIDTH OF ONE TREAD FROM THE BOTTOM RISER. THE REMAINDER OF THE EXTENSION SHALL BE HORIZONTAL (SEE FIG. 19c) & (d).
- (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" (762mm & 863mm) 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.



4.10.5 RAISED & BRAILLE CHARACTERS ON HOISTWAY ENTRANCES. ALL ELEVATOR HOISTWAY ENTRANCES SHALL HAVE RAISED AND BRAILLE FLOOR DESIGNATIONS PROVIDED ON BOTH SIDES. THE CENTERLINE OF THE CHARACTERS SHALL BE 60" (1525mm) ABOVE FINISH FLOOR. SUCH CHARACTERS SHALL BE 2" (50mm) HIGH AND SHALL COMPLY WITH 4.30.4. PERMANENTLY APPLIED PLATES ARE ACCEPTABLE IF THEY ARE PERMANENTLY FIXED TO THE JAMBS.

4.10.6 DOOR PROTECTIVE REOPENING DEVICE. ELEVATOR DOORS SHALL OPEN AND CLOSE AUTOMATICALLY. THEY SHALL BE PROVIDED WITH A REOPENING DEVICE THAT WILL STOP AND REOPEN A CAR DOOR AND HOISTWAY DOOR AUTOMATICALLY IF THE DOOR BECOMES OBSTRUCTED BY AN OBJECT OR PERSON. THE DEVICE SHALL BE CAPABLE OF COMPLETING THESE OPERATIONS WITHOUT REQUIRING CONTACT FOR AN OBSTRUCTION PASSING THROUGH THE OPENING AT HEIGHTS OF 5'4" (1626mm) & 7'3\"/>

4.10.7 DOOR & SIGNAL TIMING FOR HALL CALLS. THE MINIMUM ACCEPTABLE TIME FROM NOTIFICATION THAT A CAR IS ANSWERING A CALL UNTIL THE DOORS OF THAT CAR START TO CLOSE SHALL BE CALCULATED FROM THE FOLLOWING EQUATION:

$$T = D / (1.5/5) \text{ OR } T = D / (445 \text{ mm} / 5)$$

WHERE T TOTAL TIME IN SECONDS AND D DISTANCE IN FEET OR MILLIMETERS FROM A POINT TO THE LEVEL OR CORRIDOR 60" (1525mm) DIRECTLY IN FRONT OF THE FASTEST CALL BUTTON CONTROLLING THAT CAR TO THE CENTERLINE OF ITS HOISTWAY DOOR. FOR CARS WITH IN-CAR LANTERNS, T BEGINS WITH THE 250mm CLEARANCE BETWEEN THE CAR PLATFORM SILL AND AN HOISTWAY LANDING SHALL BE NO GREATER THAN 1-1/4" (32mm).

4.10.8 DOOR DELAY FOR CAR CALLS. THE MINIMUM TIME FOR ELEVATOR DOORS TO REMAIN FULLY OPEN IN RESPONSE TO A CAR CALL SHALL BE 3 SECONDS.

4.10.9 FLOOR PLAN OF ELEVATOR CARS. THE FLOOR AREA OF ELEVATOR CARS SHALL PROVIDE SPACE FOR WHEELCHAIR ACCESS TO ENTER THE CAR, MANUEVER WITH REACH OF CONTROLS, AND EXIT FROM THE CAR. ACCEPTABLE DOOR OPENING AND INSIDE DIMENSIONS SHALL BE AS SHOWN IN FIG. 22. THE CLEARANCE BETWEEN THE CAR PLATFORM SILL AND THE EDGE OF AN HOISTWAY LANDING SHALL BE NO GREATER THAN 1-1/4" (32mm).

4.10.10 ILLUMINATION LEVELS. THE LEVEL OF ILLUMINATION AT THE CAR CONTROLS, PLATFORM, AND CAR THRESHOLD AND LANDING SHALL BE AT LEAST 5 FOOT-CANDLES (50.6 LUX).

4.10.12 CAR CONTROLS. ELEVATOR CONTROL PANELS SHALL HAVE THE FOLLOWING FEATURES:

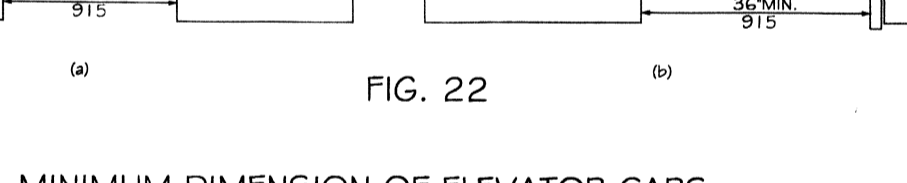
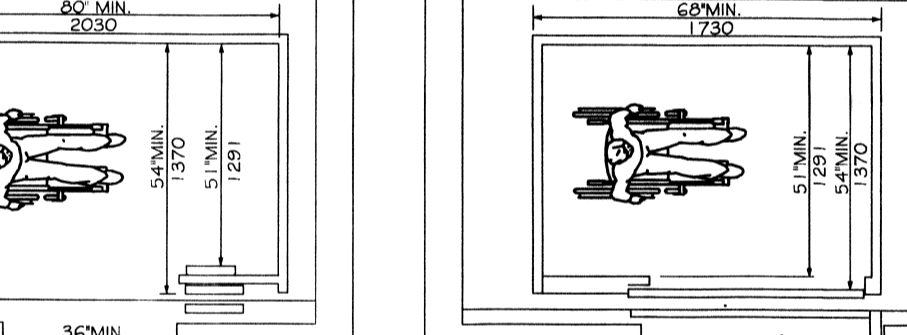
- (1) BUTTONS. ALL CONTROL BUTTONS SHALL BE AT LEAST 3/4" (19mm) IN THEIR SMALLEST DIMENSION. THEY SHALL BE RAISED OR FLUSH.
- (2) TACTILE, BRAILLE AND VISUAL CONTROL INDICATORS. ALL CONTROL BUTTONS SHALL BE DESIGNATED BY BRAILLE AND BY RAISED STANDARD ALPHABET CHARACTERS FOR LETTERS, NUMERIC CHARACTERS FOR NUMERALS, OR STANDARD SYMBOLS AS SHOWN IN FIG. 23(a) AND AS REQUIRED IN ASME A17.1, 1990. RAISED AND BRAILLE CHARACTERS AND SYMBOLS SHALL COMPLY WITH 4.1.6. THE CALL BUTTON FOR THE MAIN ENTRY FLOOR SHALL BE DESIGNATED BY A RAISED STAR AT THE LEFT OF THE FLOOR DESIGNATION (SEE FIG. 23a). ALL RAISED DESIGNATIONS FOR CONTROL BUTTONS SHALL BE PLACED IMMEDIATELY TO THE LEFT OF THE BUTTON TO WHICH THEY APPLY. APPLIED PLATES, PERMANENTLY ATTACHED, ARE AN ACCEPTABLE MEANS TO PROVIDE RAISED CONTROL DESIGNATIONS. FLOOR BUTTONS SHALL BE PROVIDED WITH VISUAL INDICATORS TO SHOW WHICH CALL IS REGISTERED. THE VISUAL INDICATORS SHALL BE DISTINGUISHED WITH EACH CALL AS INDICATED.

(3) HEIGHT. ALL FLOOR BUTTONS SHALL BE NO HIGHER THAN 54" (1370mm) ABOVE THE FINISH FLOOR FOR SIDE APPROACH AND 48" (1219mm) FOR FRONT APPROACH. EMERGENCY CONTROLS INCLUDING THE EMERGENCY ALARM AND EMERGENCY STOP SHALL BE GROUPED AT THE BOTTOM OF THE PANEL AND SHALL HAVE THEIR CENTERLINES NO LESS THAN 35" (890mm) ABOVE THE FINISH FLOOR (SEE FIG. 23a) & (b).

(4) LOCATION. CONTROLS SHALL BE LOCATED ON A FRONT WALL IF CARS HAVE CENTER SWINGING DOORS, AND AT THE SIDE WALL OR AT THE FRONT WALL NEXT TO THE DOOR IF CARS HAVE SIDE SWINGING DOORS (SEE FIG. 23b) & (d).

4.10.13 CAR POSITION INDICATORS. IN ELEVATOR CARS, A VISUAL CAR POSITION INDICATOR SHALL BE PROVIDED ABOVE THE CAR CONTROL PANEL OR OVER THE DOOR TO SHOW THE POSITION OF THE ELEVATOR IN THE HOISTWAY. AS THE CAR PASSES OR STOPS AT A FLOOR SERVED BY THE ELEVATOR, THE CORRESPONDING NUMERALS SHALL ILLUMINATE, AND AN AUDIBLE SIGNAL SHALL SOUND. NUMERALS SHALL BE A MINIMUM OF 1/2" (13mm) HIGH. THE AUDIBLE SIGNAL SHALL BE NO LESS THAN 60 DEGREES WITH A FREQUENCY HIGHER THAN 1500Hz. THE FLOOR NUMBER AT WHICH A CAR STOPS OR WHICH A CAR PASSES MAY BE SUBSTITUTED FOR AN AUTOMATIC VOICE ANNOUNCEMENT THE ABOVE.

4.10.14 EMERGENCY COMMUNICATIONS. IF PROVIDED, EMERGENCY TWO-WAY COMMUNICATION SYSTEMS BETWEEN THE ELEVATOR AND A POINT OUTSIDE THE HOISTWAY SHALL COMPLY WITH ASME A17.1, 1990. THE HIGHEST OPERABLE PART OF A TWO-WAY COMMUNICATION SYSTEM SHALL BE A MINIMUM OF 48" (1219mm) FROM THE FLOOR OF THE CAR. IF THE SYSTEM IS IDENTIFIED BY A RAISED SYMBOL AND LETTERING COMPLYING WITH 4.30 AND LOCATED ADJACENT TO THE REAR WALL, THE SYSTEM SHOULD BE IDENTIFIED BY A RAISED SYMBOL AND LETTERING COMPLYING WITH 4.30 AND LOCATED ADJACENT TO THE REAR WALL.



4.11 PLATFORM LIFTS (WHEELCHAIR LIFTS).

4.11.1 LOCATION. PLATFORM LIFTS (WHEELCHAIR LIFTS) PERMITTED BY 4.1.1 SHALL COMPLY WITH THE REQUIREMENTS OF 4.1.1.

4.11.2 OTHER REQUIREMENTS. IF PLATFORM LIFTS (WHEELCHAIR LIFTS) ARE USED, THEY SHALL COMPLY WITH 4.1.3.4, 4.3, 4.5, 4.7, 4.8, 4.9, 4.11.1, SAFETY CODE FOR ELEVATORS AND ESCALATORS, SECTION XX, 1990.

4.11.3 ENTRANCE. IF PLATFORM LIFTS ARE USED THEN THEY SHALL FACILITATE UNASSISTED ENTRY, OPERATION, AND EXIT FROM THE LIFT IN COMPLIANCE WITH 4.1.1.2.

4.12 WINDOWS.

4.12.1 GENERAL. (RESERVED).

4.12.2 WINDOW HARDWARE. (RESERVED).

4.13 DOORS.

4.13.1 GENERAL. DOORS REQUIRED TO BE ACCESSIBLE BY 4.1 SHALL COMPLY WITH THE REQUIREMENTS OF 4.1.3.

4.13.2 REVOLVING DOORS & TURNSTILES. REVOLVING DOORS OR TURNSTILES SHALL NOT BE THE ONLY MEANS OF PASSAGE AT AN ACCESSIBLE ENTRANCE OR ALONG AN ACCESSIBLE ROUTE. AN ACCESSIBLE GATE OR DOOR SHALL BE PROVIDED ADJACENT TO THE TURNSTILE OR REVOLVING DOOR AND SHALL BE SO DESIGNED AS TO FACILITATE THE SAME USE PATTERN.

4.13.3 GATES. GATES, INCLUDING TICKET GATES, SHALL MEET ALL APPLICABLE SPECIFICATIONS OF 4.1.3.

4.13.4 DOUBLE LEAF DOORWAYS. IF DOORWAYS HAVE TWO INDEPENDENTLY OPERATED DOOR LEAVES, BE AN ACTIVE LEAF. LEAF SHALL MEET THE SPECIFICATIONS IN 4.1.3.5.4 & 4.1.3.6. THAT LEAF SHALL BE AN ACTIVE LEAF.

4.13.5 CLEAR WIDTH. DOORWAYS SHALL HAVE A MINIMUM CLEAR OPENING OF 32" (813mm) WITH THE DOOR OPEN 90 DEGREES, MEASURED BETWEEN THE FACE OF THE DOOR AND THE OPPOSITE STOP. OPENINGS MORE THAN 24" (610mm) IN HEIGHT SHALL COMPLY WITH 4.2.1.4.3.3. EXCEPTION: DOORS NOT REQUIRING FULL RANGE OF PASSAGE, SUCH AS SHOWER CLOSETS, MAY HAVE CLEAR OPENING REDUCED TO 20" (508mm) MINIMUM.

4.13.6 MANEUVERING CLEARANCES AT DOORS. THE FLOOR OR GROUND AREA WITHIN THE REQUIRED CLEARANCES SHALL BE LEVEL AND CLEAR.

EXCEPTION: ENTRY DOORS TO ACUTE CARE HOSPITAL BEDROOMS FOR IN-PATIENTS SHALL BE EXEMPTED FROM THE REQUIREMENT FOR SPACE AT THE LATCH SIDE OF THE DOOR IF THE DOOR IS AT LEAST 48" (1219mm) HIGH.

4.13.7 TWO DOORS IN SERIES. THE MINIMUM SPACE BETWEEN TWO HINGED OR PIVOTED DOORS IN SERIES SHALL BE 48" (1219mm) PLUS THE WIDTH OF ANY DOOR SWINGING INTO THE SPACE. DOORS IN SERIES SHALL SWING EITHER IN THE SAME DIRECTION OR AWAY FROM THE SPACE BETWEEN THE DOORS.

4.13.8 THRESHOLDS AT DOORWAYS. THRESHOLDS AT DOORWAYS SHALL NOT EXCEED 3/4" (19mm) IN HEIGHT FOR EXTERIOR SLIDING DOORS OR 1/2" (13mm) FOR OTHER TYPES OF DOORS. RAISED THRESHOLDS AND FLOOR LEVELS CHANGED AT ACCESSIBLE DOORWAYS SHALL BE REVEALED WITH A SLOPE NO GREATER THAN 1:2 (SEE 4.5.3).

4.13.9 DOOR HARDWARE. HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TIGHT GRIPPING TO OPERATE. LEVER OPERATED MECHANISMS, INCLUDING THE MECHANISMS AND ASSOCIATED HARDWARE ARE ACCEPTABLE DESIGNS. WHEN SLIDING DOORS ARE FULLY OPEN, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES. HARDWARE REQUIRED FOR ACCESSIBLE DOOR PASSAGE SHALL BE MOUNTED NO HIGHER THAN 48" (1219mm) ABOVE FINISHED FLOOR.

4.13.10 DOOR CLOSERS. IF A DOOR HAS A CLOSER, THEN THE SWEEP PROTRUSION OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" (75mm) FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.

4.13.11 DOOR OPENING FORCE. THE MAXIMUM FORCE FOR PUSHING OR PULLING OPEN A DOOR SHALL BE AS FOLLOWS:

- (1) FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY.
- (2) OTHER DOORS:
 - (a) EXTERIOR HINGED DOORS: (RESERVED).
 - (b) INTERIOR HINGED DOORS: 5 LBF (22.2N)
 - (c) SLIDING OR FOLDING DOORS: 5 LBF (22.2N)

THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISengage OTHER DEVICES THAT MAY HOLD THE DOOR IN A CLOSED POSITION.

4.14 ENTRANCES.

4.14.1 MINIMUM NUMBER. ENTRANCES REQUIRED TO BE ACCESSIBLE BY 4.1 SHALL BE PART OF AN ACCESSIBLE ROUTE COMPLYING WITH 4.3. SUCH ENTRANCES SHALL BE CONNECTED TO AN ACCESSIBLE ROUTE TO PUBLIC TRANSPORTATION STOPS, TO ACCESSIBLE PARKING AND PASSENGER LOADING ZONES, AND TO PUBLIC STREETS OR SUBURBALS IF AVAILABLE (SEE 4.3.2)(3). THEY SHALL ALSO BE CONNECTED BY AN ACCESSIBLE ROUTE TO ALL ACCESSIBLE SPACES OR ELEMENTS WITHIN THE BUILDING OR FACILITY.

4.14.2 SERVICE ENTRANCES. A SERVICE ENTRANCE SHALL BE THE SOLE ACCESSIBLE ENTRANCE UNLESS IT IS THE ONLY ENTRANCE TO A BUILDING OR FACILITY (FOR EXAMPLE, IN A FACTORY OR GARAGE).

4.15 DRINKING FOUNTAINS AND WATER COOLERS.

4.15.1 MINIMUM NUMBER. DRINKING FOUNTAINS OR WATER COOLERS REQUIRED TO BE ACCESSIBLE BY 4.1 SHALL COMPLY WITH 4.1.5.

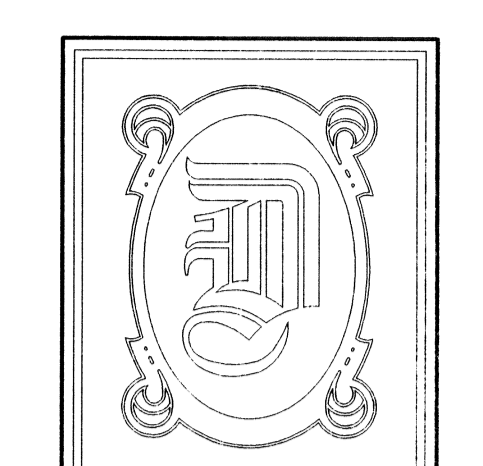
4.15.2 SPOUT HEIGHT. SPOUTS SHALL BE NO HIGHER THAN 36" (915mm), MEASURED FROM THE FLOOR OR GROUND SURFACES TO THE SPOUT OUTLET.

4.15.3 SPOUT LOCATION. THE SPOUTS OF DRINKING FOUNTAINS AND WATER COOLERS SHALL BE AT THE FRONT OF THE UNIT AND SHALL DIRECT THE WATER FLOW IN A TRAJECTORY THAT IS PARALLEL OR NEARLY PARALLEL TO THE FRONT OF THE UNIT. THE SPOUT SHALL PROJECT AT A FLOW OF WATER AT LEAST 4" (100mm) HIGH SO AS TO ALLOW THE INSERTION OF A CUP OR GLASS UNDER THE FLOW OF WATER ON AN ACCESSIBLE DRINKING FOUNTAIN WITH A ROUND OR OVAL BOWL. THE SPOUT MUST BE POSITIONED SO THE FLOW OF WATER IS WITHIN 3" (75mm) OF THE FRONT EDGE OF THE FOUNTAIN.

4.15.4 CONTROLS. CONTROLS SHALL COMPLY WITH 4.27.4.1. UNIT CONTROLS SHALL BE FRONT MOUNTED OR SIDE MOUNTED NEAR THE FRONT EDGE.

4.15.5 CLEARANCES.

- (1) WALL- AND POST-MOUNTED CANTILEVERED UNITS SHALL HAVE A CLEAR KNEE SPACE BETWEEN THE BOTTOM OF THE APRON AND THE FLOOR OR GROUND AT LEAST 27" (686mm) HIGH, 30" (762mm) WIDE, AND 17" TO 19" (430mm TO 485mm) DEEP. SUCH UNITS SHALL ALSO HAVE A MINIMUM CLEAR FLOOR SPACE 30" BY 48" (762mm BY 1219mm) TO ALLOW A PERSON IN A WHEELCHAIR TO APPROACH THE UNIT FACING FORWARD.
- (2) FREE STANDING OR BUILT-IN UNITS NOT HAVING A CLEAR SPACE UNDER THEM SHALL HAVE A CLEAR FLOOR SPACE AT LEAST 30" BY 48" (762mm BY 1219mm) THAT ALLOWS A PERSON IN A WHEELCHAIR TO MAKE A PARALLEL APPROACH TO THE UNIT. THIS CLEAR FLOOR SPACE SHALL ALSO HAVE A MINIMUM CLEAR FLOOR SPACE 30" BY 48" (762mm BY 1219mm) TO ALLOW A FLOOR THAT SHALL COMPLY WITH 4.2.4.



DAMMON ENGINEERING, INC.

CHIEF ENGINEER
EMMETT DAMMON, P.E.

CHIEF ARCHITECT
ROBERT WILTSE

554 OLD SPANISH TRAIL
SLIDELL, LA. 70458
OFFICE: 985-649-5832
FAX: 985-641-5950

WEBSITE:
WWW.DAMMONENGINEERING.COM

EMAIL:
DAMMONENG@BELLSOUTH.NET

ARCHITECTURE
ENGINEERING
STUDIES
PLANNING
INVESTIGATION
EXPERT WITNESS

PAUL REES
OFFICE BUILDING
2275 8TH. ST.
MANDEVILLE, LA
70471

HANDICAP REQUIREMENTS

REV: Robert Wiltse

SCALE: AS NOTED
JOB#: 2104
DATE: 05-20-11
SHEET 15

REVIEWED FOR STATE FIRE MARSHAL AS PER REQUIREMENTS BY COREY THOMPSON, FIRE AND LIFE SAFETY

H-1
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