

Florida Accessibility Code for Building Construction



Accessibility ~~Training~~ Course
^

Florida Building Commission



Introduction

- Course will review the Florida Accessibility Code for Building Construction as contained within the Florida Building Code





Agenda

■ Texts



- Florida Building Code (FBC) – Chapter 11 – Florida Accessibility Code for Building Construction (FACBC)
- Americans with Disabilities Act Accessibility Guidelines (ADAAG)



Agenda

- Overview of Chapter 11
 - Table of contents
 - Identify problematic areas



Overview

- The Florida Accessibility Code for Building Construction (FACBC) Chapter 11 of the Florida Building Code (FBC) was certified by the Department of Justice effective October 1, 1997



Terminology

- General terminology – Section 11-3.4 (FBC)
- Florida Building Code (FBC)
www.floridabuilding.org
- FACBC - Florida Accessibility Code for Building Construction – Chapter 11 of FBC
- ADAAG – Americans with Disabilities Act Accessibility Guidelines UFAS – Uniform Federal Accessibility Standards



Terminology

- ANSI A-17.1, A-117.1 – American National Standards Institute
- Guidelines, standards and codes
- Florida Accessibility Code – all the highlighted areas within the code are specific to Florida and are not contained within the ADAAG
- Fair Housing Accessibility Guidelines – see Chapter 11 FBC, Part B
- American Society of Mechanical Engineers (ASME)



11-4.1 Minimum Requirements

- It is important to fully understand scoping requirements before referring to other specific sections of the code implementing its requirements





Minimum Requirements

- 11-4.1.1 Application
- 11-4.1.2 Accessible Site & Exterior Facilities: New Construction
- 11-4.1.3 Accessible Buildings: New Construction
- 11-4.1.5 Accessible Buildings: Additions



Minimum Requirements

- 11-4.1.6 Accessible Buildings: Alterations
- 11-4.1.7 Accessible Buildings: Historical Preservation
- 11-4.1.8 Accessible Buildings, Structures, and Facilities: Architectural Barrier Removal



Section 11-2 General

- 11-2.2 Equivalent Facilitation
 - Departure from particular technical and scoping requirements of this code by the use of other designs and technologies are permitted where the alternative designs and technologies used will provide substantially equivalent or greater access to and usability of the facility



Section 11-2 General

- 11-2.2 Equivalent Facilitation
 - Departure from the explicit technical and scoping requirements of this code for any element voids any otherwise applicable presumption of rebuttable evidence that the element has been constructed or altered in accordance with the minimum accessibility requirements of the ADA



Section 11-3 Miscellaneous

- Graphic Conventions (11-3.1)
 - Dimensions that are not marked minimum or maximum are absolute, unless otherwise indicated in the text or captions
- Dimensional Tolerances (11-3.2)
 - All dimensions are subject to conventional building industry tolerances for field conditions



Section 11-4.2 Space Allowance and Reach Ranges

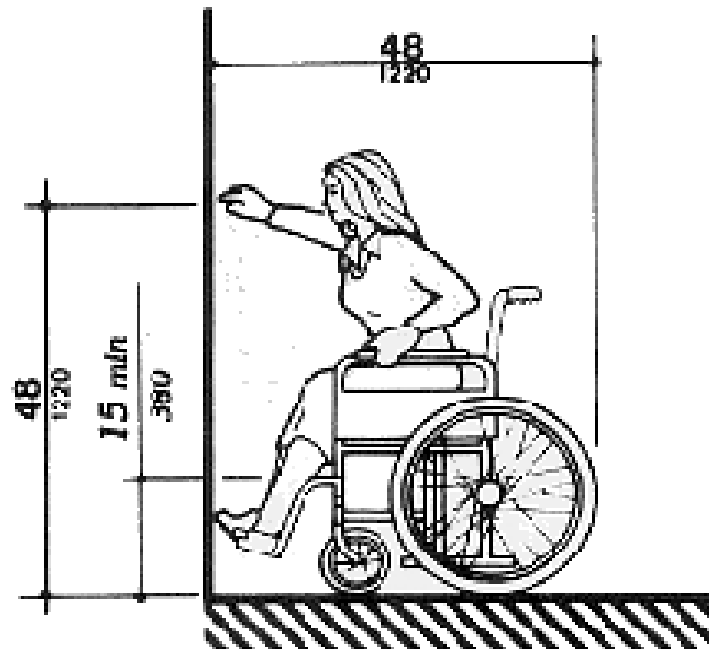
- Minimum clear width for wheelchair passage (32/36 inches)
- Forward reach maximums (48 inches high, 15 inches low) – changes when obstacles in way

Reach Range



Section 11-4.2 Space Allowance and Reach Ranges

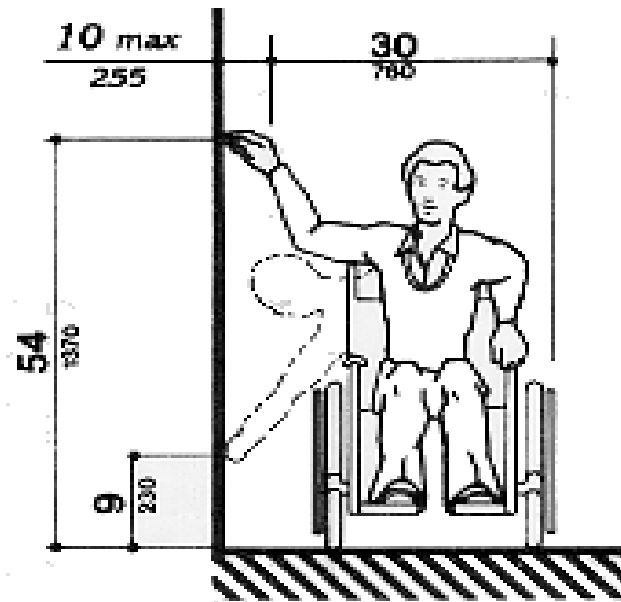
Figure 5a



Section 11-4.2 Space Allowance and Reach Ranges

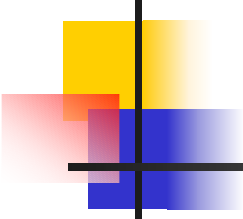
- Side Reach maximums (54 inches high, 9 inches low)

Figure 6b



Reach Range





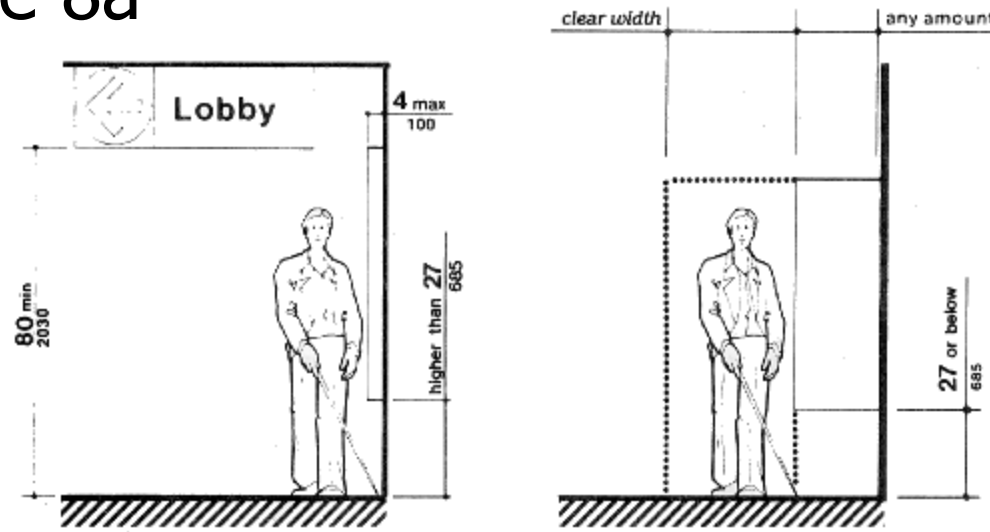
Section 11-4.3 Accessible Route

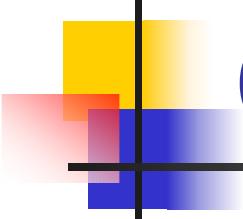
- At least one accessible route within the boundary of the site shall be provided from public transportation stops, accessible parking, and accessible passenger loading zones, and public streets or sidewalks to the accessible entrance they serve
- Accessible routes shall comply with 11-4.4.2 for head room (80 inches clear minimum)

Section 11-4.4 Protruding Objects

- Walks, halls, corridors, passageways, aisles, or other circulation spaces shall have 80 inches clear head room

Figure 8a





Section 11-4.4 Protruding Objects

- Objects projecting from walls with their leading edges between 27 inches and 80 inches above finished floor shall protrude no more than 4 inches into walks, halls, corridors, passageways, or aisles

Protruding Object

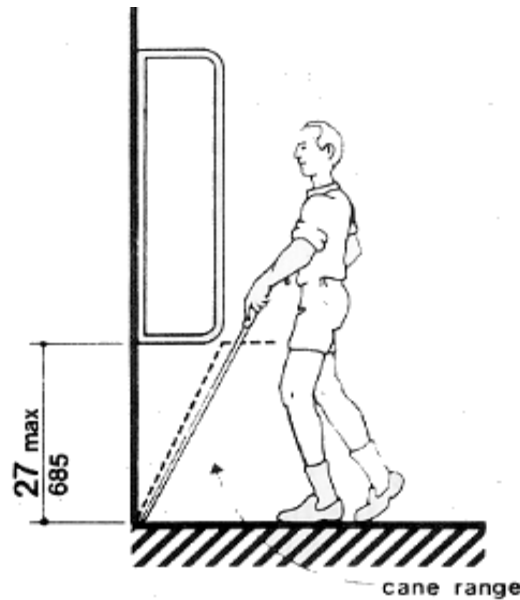


Protruding Object



Section 11-4.4 Protruding Objects

Figure 8b

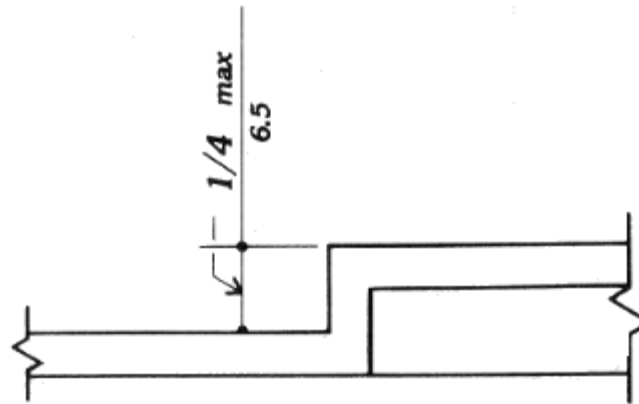


Walking Perpendicular to a Wall

Section 11-4.5 Ground & Floor Surfaces

- Changes in Level
- Changes up to $\frac{1}{4}$ inches may be vertical and without edge treatment

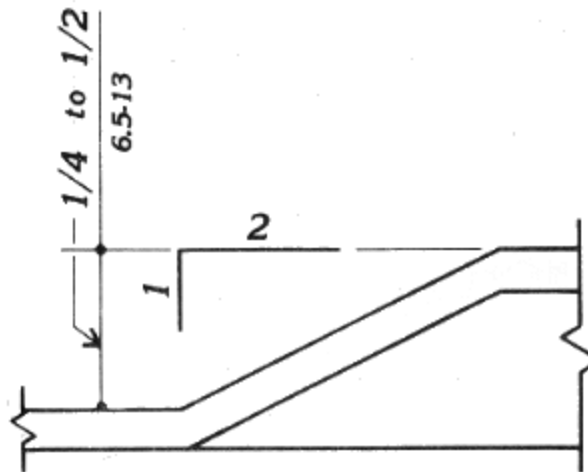
Figure 7c



Section 11-4.5 Ground & Floor Surfaces

- Changes between $\frac{1}{4}$ inches and $\frac{1}{2}$ inches shall be beveled with a slope no greater than 1:2

Figure 7d





Section 11-4.5 Ground & Floor Surfaces

- Changes greater than $\frac{1}{2}$ inches shall be accomplished by a ramp that complies with 11-4.7 or 11-4.8

Parking & Passenger Loading Zones



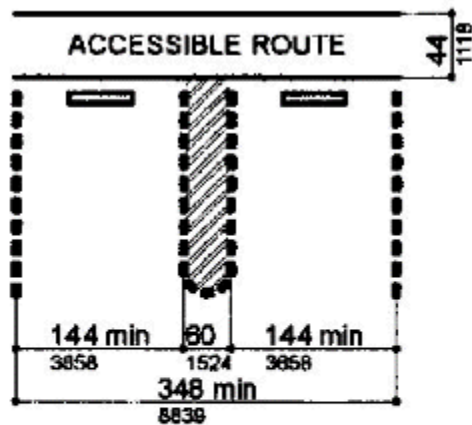
Section 11-4.1.2(5) Parking & Passenger Loading Zones

- Minimum number of spaces
 - 1 to 25 = 1
 - 26 to 50 = 2
 - 51 to 75 = 3
 - 76 to 100 = 4
 - 501 to 1000 –2% of total
 - 1001 and over, 20 plus 1 for each 100 over 1000



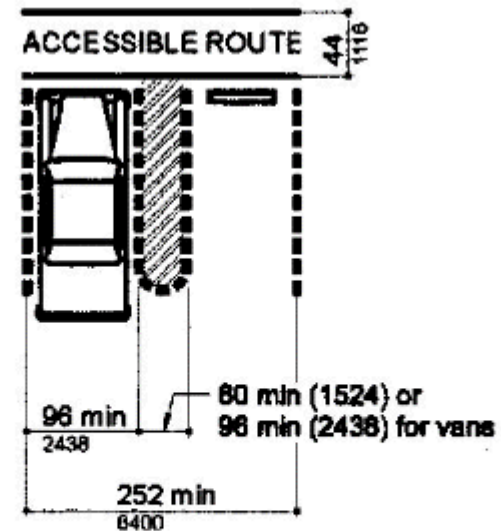
Section 11-4.1.2(5) Parking & Passenger Loading Zones

Figure 9a



**FIGURE 9(A)
STANDARDS PARKING SPACE DESIGN**

Figure 9b



**FIGURE 9(B)
ALTERNATIVE PARKING SPACES FOR
THEME PARK AND ENTERTAINMENT COMPLEX ONLY**



Passenger Loading Zone

Parking Area

Compliant



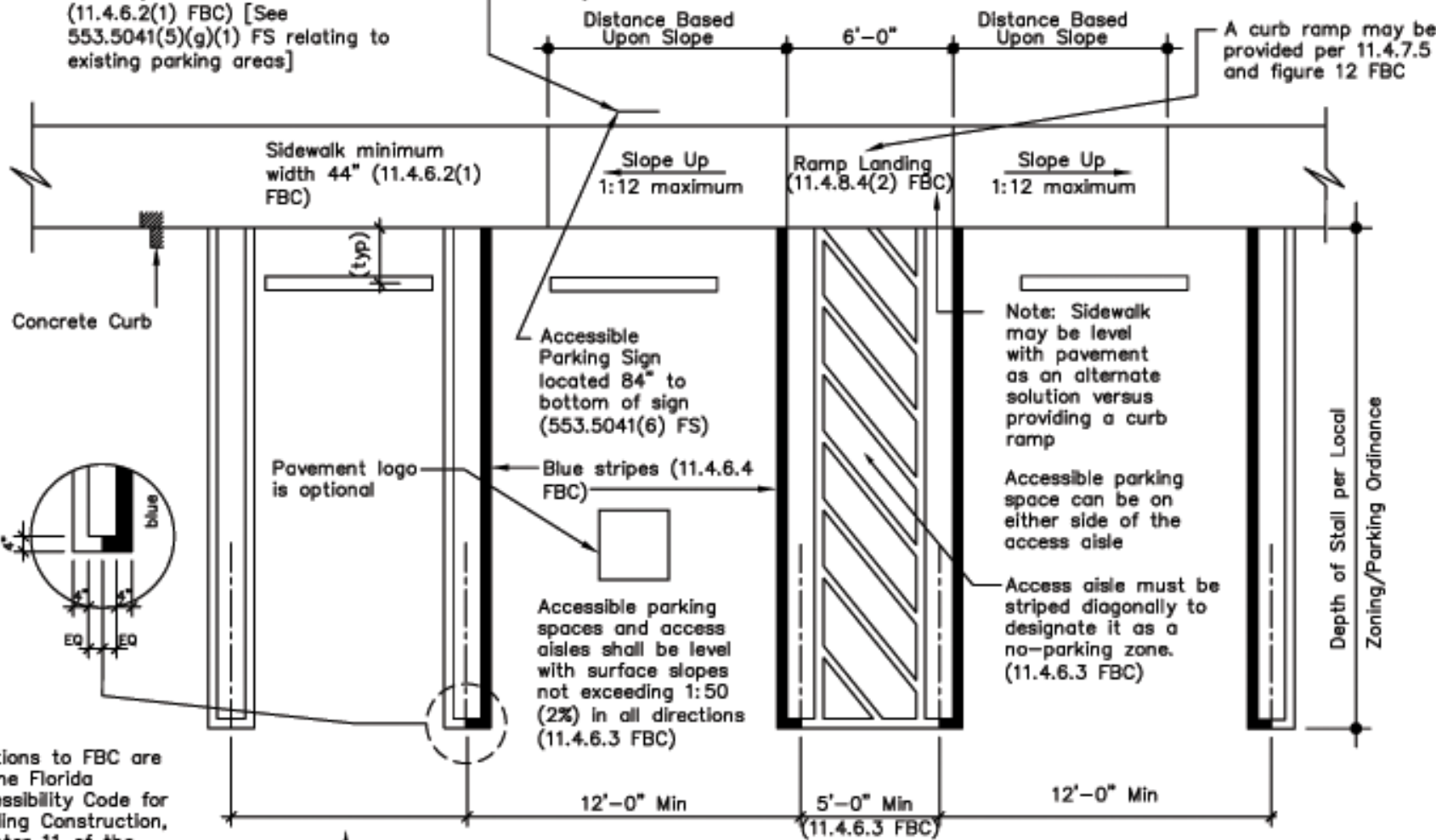
Parking Area

Non-Compliant



All spaces must be located on an accessible route no less than 44" wide so that users will not be compelled to walk or wheel behind parked vehicles. (11.4.6.2(1) FBC) [See 553.5041(5)(g)(1) FS relating to existing parking areas]

Signage to bear the international symbol of accessibility per 11.4.30.7 FBC and the caption "Parking by Disabled Permit Only". Signs erected after 10/01/96 must indicate the penalty for illegal use of the space (11.4.6.4 FBC)

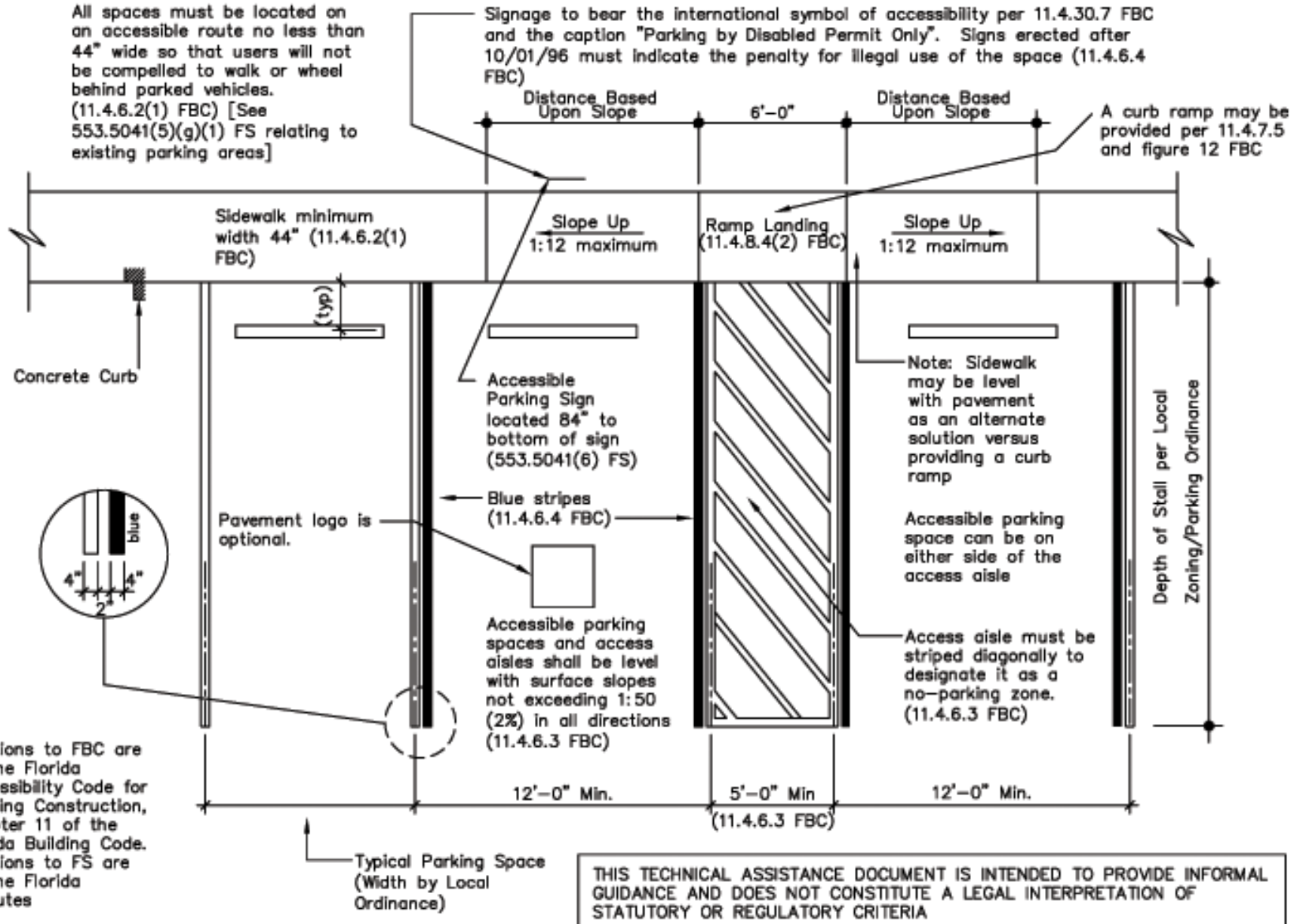


Citations to FBC are to the Florida Accessibility Code for Building Construction, Chapter 11 of the Florida Building Code. Citations to FS are to the Florida Statutes

THIS TECHNICAL ASSISTANCE DOCUMENT IS INTENDED TO PROVIDE INFORMAL GUIDANCE AND DOES NOT CONSTITUTE A LEGAL INTERPRETATION OF STATUTORY OR REGULATORY CRITERIA

Recommended Accessible Parking Space(s) Design

All spaces must be located on an accessible route no less than 44" wide so that users will not be compelled to walk or wheel behind parked vehicles. (11.4.6.2(1) FBC) [See 553.5041(5)(g)(1) FS relating to existing parking areas]



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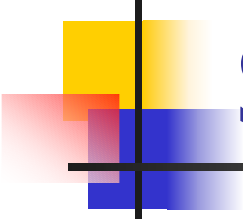
THIS TECHNICAL ASSISTANCE DOCUMENT IS INTENDED TO PROVIDE INFORMAL GUIDANCE AND DOES NOT CONSTITUTE A LEGAL INTERPRETATION OF STATUTORY OR REGULATORY CRITERIA

Recommended Accessible Parking Space(s) Design



Section 11-4.7 Curb Ramps

- Curb ramps and parking spaces and access aisles
- Curb ramps must be located outside of accessible parking spaces and access aisles
- Maximum slope of flared sides shall be 1:12



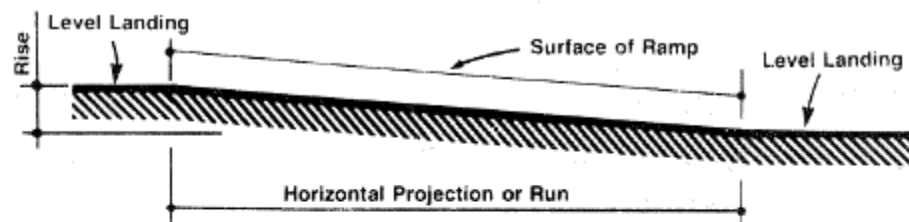
Section 11-4.8 Ramps

- Any part of an accessible route with a slope greater than 1:20 shall be considered a ramp and shall comply with 11-4.8

Section 11-4.8 Ramps

- The least possible slope shall be used for any ramp. The maximum slope of a ramp in new construction shall be 1:12

Figure 16

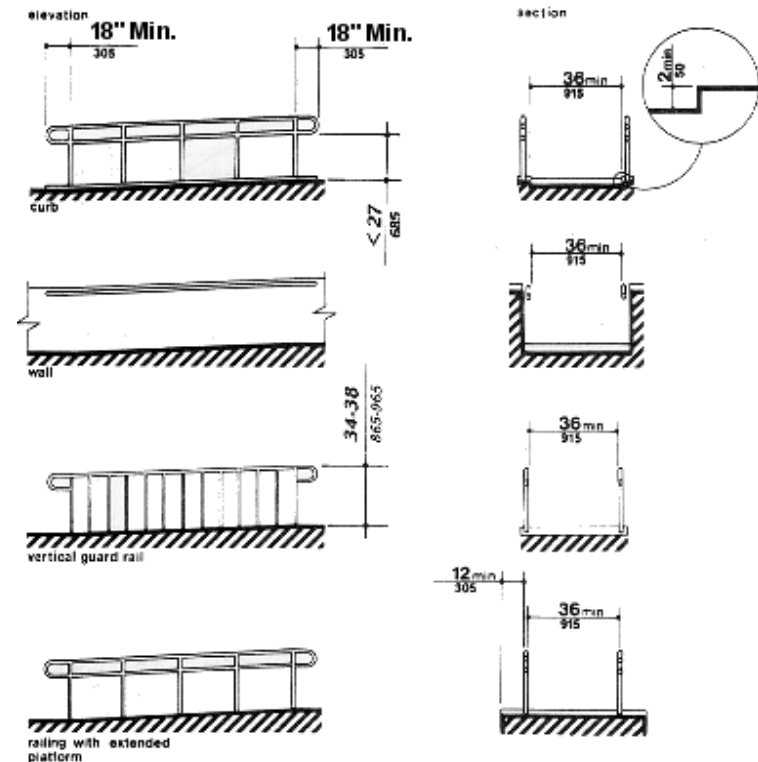


Slope	Maximum Rise		Maximum Horizontal Projection	
	in	mm	ft	m
1:12 to < 1:16	30	760	30	9
1:16 to < 1:20	30	760	40	12

Section 11-4.8 Ramps

- Handrails – 34 inches to 38 inches (11-4.8.5) and shall extend 18 inches at top and bottom (11-4.8.2)

Figure 17



Ramp Handrails

Compliant

Level



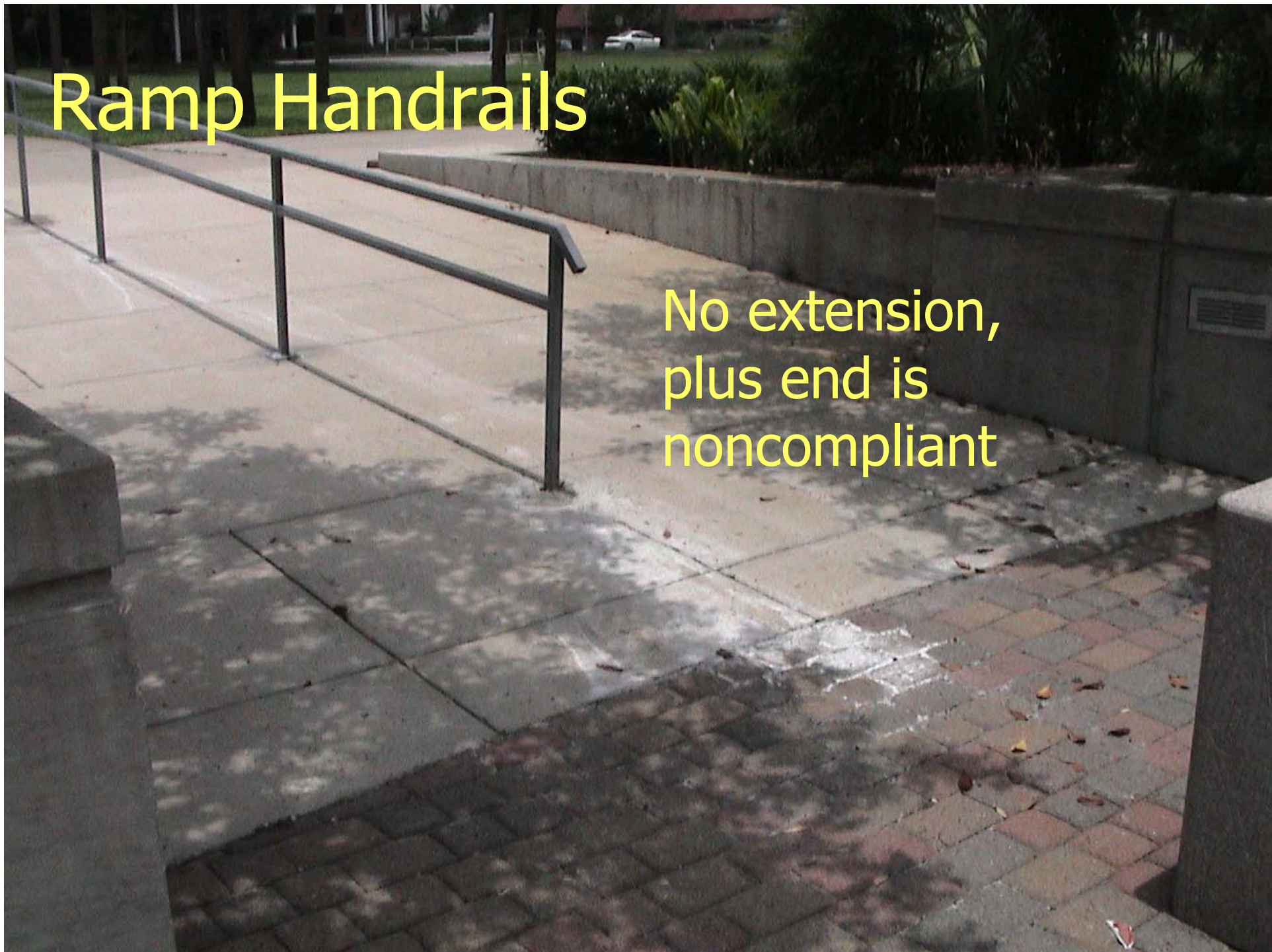
Ramp Handrails

Noncompliant – no extension



Ramp Handrails

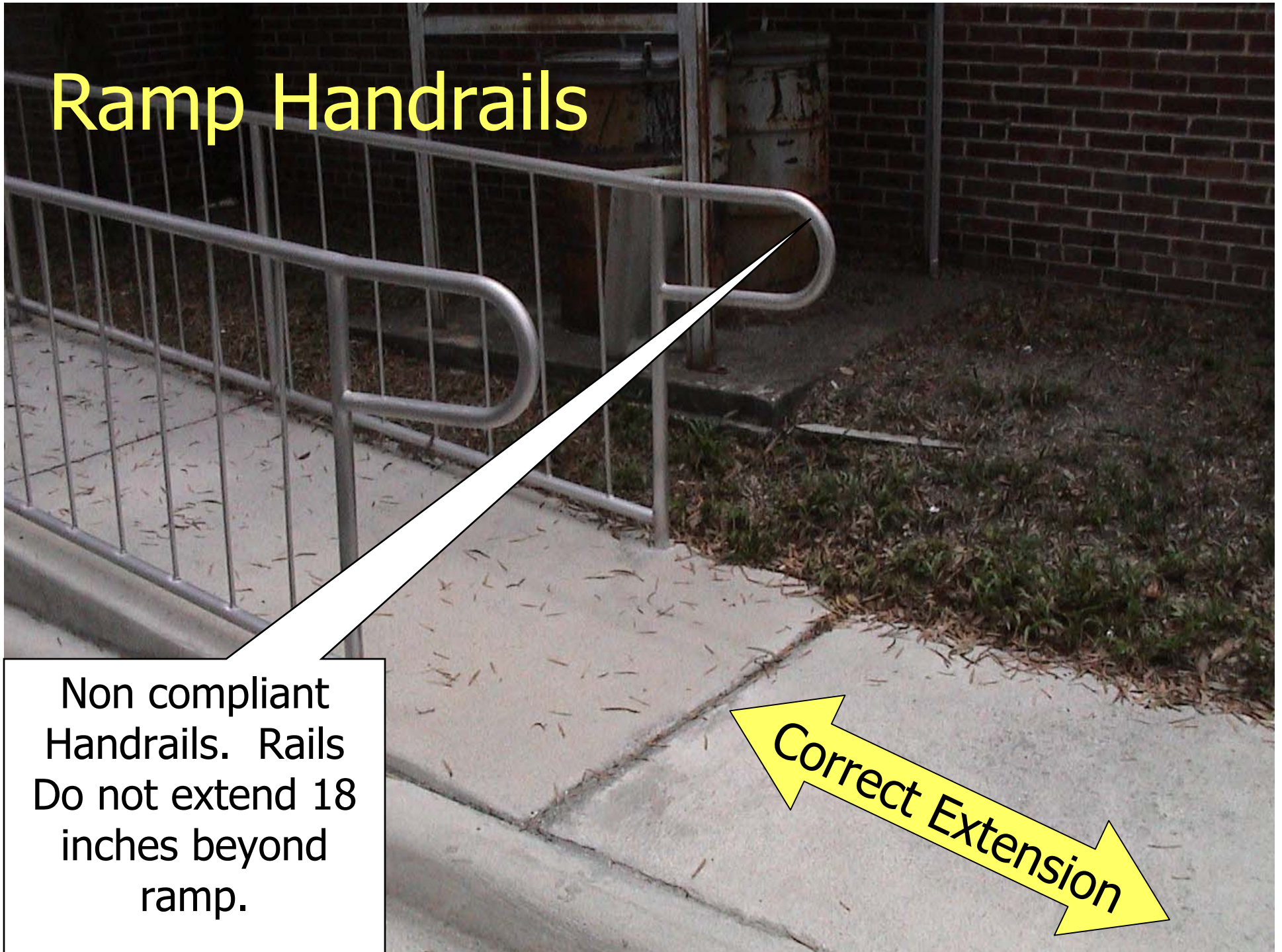
No extension,
plus end is
noncompliant

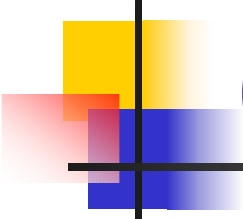


Ramp Handrails

Non compliant Handrails. Rails Do not extend 18 inches beyond ramp.

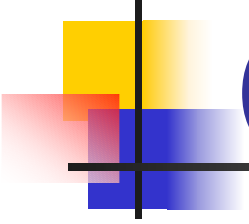
Correct Extension





Section 11-4.8 Ramps (Landings)

- Landings shall be at least as wide as the ramp run leading to it
- All landings on ramps shall be not less than 60 inches clear, and the bottom of each ramp shall have not less than 72 inches of straight and level clearance.
 - Landings (60 x 60 inch min., 11-4.8.4.2)



Section 11-4.8 Ramps (Landings)

- If a doorway is located at a landing, then the area in front of the doorway shall comply with 11.4.13.6



Section 11-4.9 Stairs

- All steps shall have uniform riser heights and uniform tread widths. Stair treads shall be no less than 11 inches wide and open risers are not permitted (11-4.9.2)
- Top of handrails – 34 inches to 38 inches (11-4.8.5)



Section 11-4.9 Stairs

- Handrails shall extend 12 inches at top and 12 inches plus the width of the tread at the bottom (11-4.9.4.2)
- Interior and exterior stairs connecting levels that are not connected by an elevator, ramp, or other accessible means of vertical access shall comply with 11-4.9

Section 11-4.9 Stairs

Figure 19a

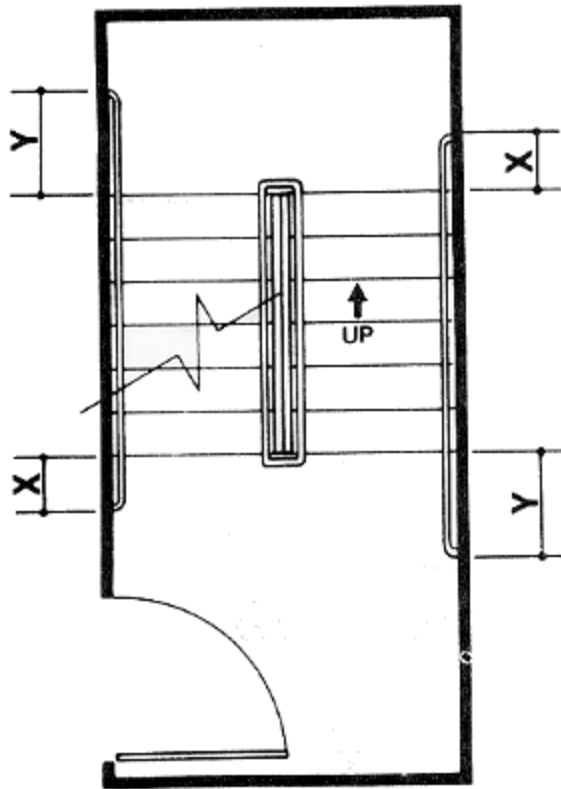
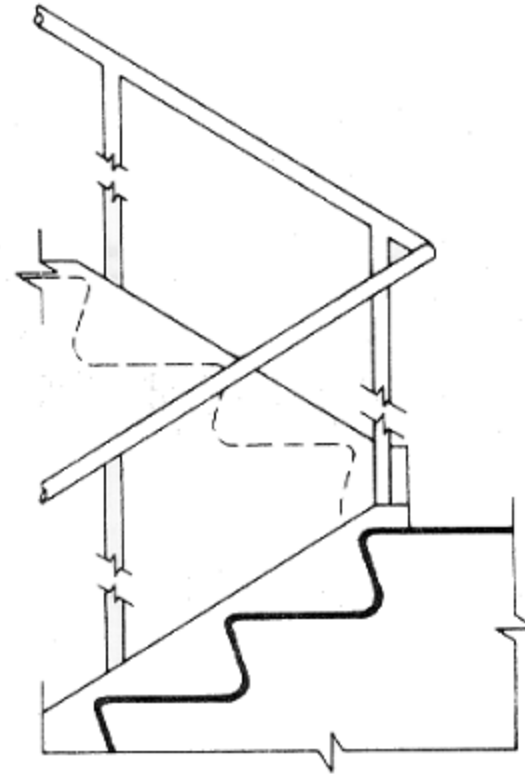


Figure 19b



Section 11-4.9 Stairs

Figure 19c

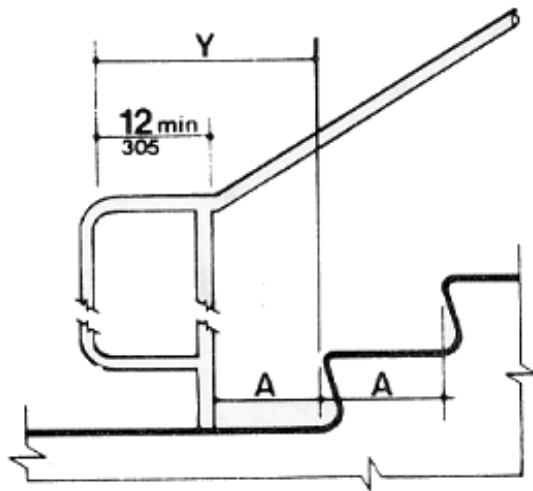
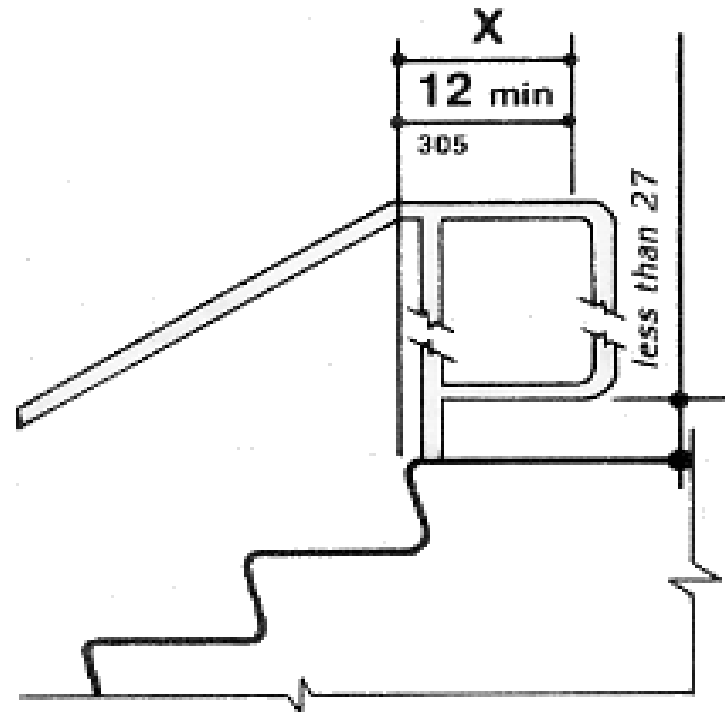


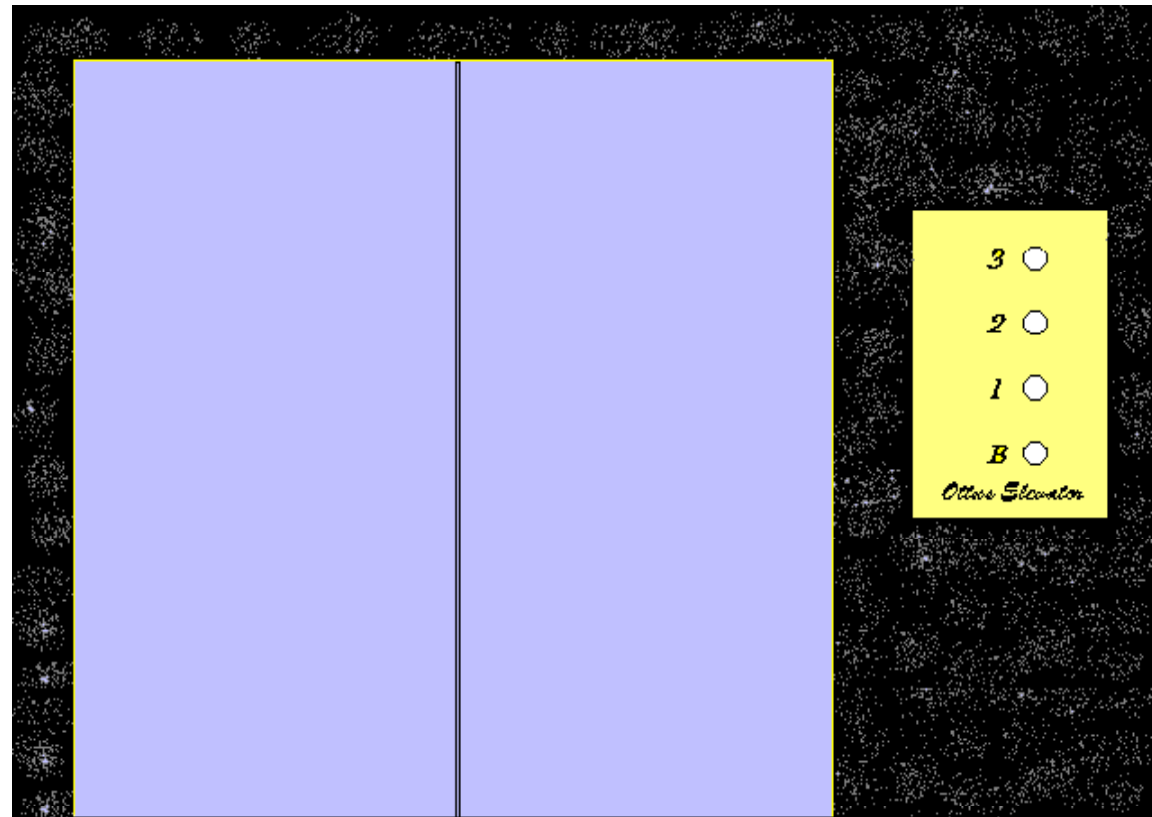
Figure 19d



Compliant Handrail



Vertical Accessibility



6/18/03



Vertical Accessibility

Section 553.509, Florida Statutes, requires that all levels in buildings, structures or facilities shall be vertically accessible



Vertical Accessibility

Examples of Vertical Accessibility:

Elevators

Inclined Lifts

Platform Lifts

LULAs

Ramps



Vertical Accessibility

- Exceptions – Refer to 11-4.1.3
- Elevator pits, Lubrication pits, mechanical rooms
- Unoccupiable spaces
- Non-public occupiable spaces
- Non-public occupiable spaces with not more than 5 persons



Section 11-4.10 Elevators

- Vertical accessibility shall be provided to all levels above and below occupiable grade level, regardless of whether the code requires an elevator to be installed in such buildings, structure or facility 11-4.1.3(5), unless the level meets one of the vertical accessibility exemptions



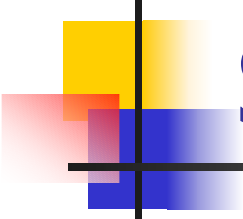
Section 11-4.11 Platform Lifts

- If platform lifts are used, they shall comply with 11-4.2.4, 11-4.5 and 11-4.27
- 11-4.27.4 – controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist
- 11-4.11.3 – If platform lifts are used then they shall facilitate unassisted entry, operation, and exit from the lift



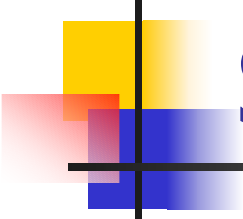
Accessible Doors





Section 11-4.13 Doors

- Doorways shall have a minimum clear opening of 32 inches (11-4.13.5)
- The minimum maneuvering clearances at doors shall be as shown in fig. 25 (11-4.13.6).– understand and know the approaches as shown



Section 11-4.13 Doors

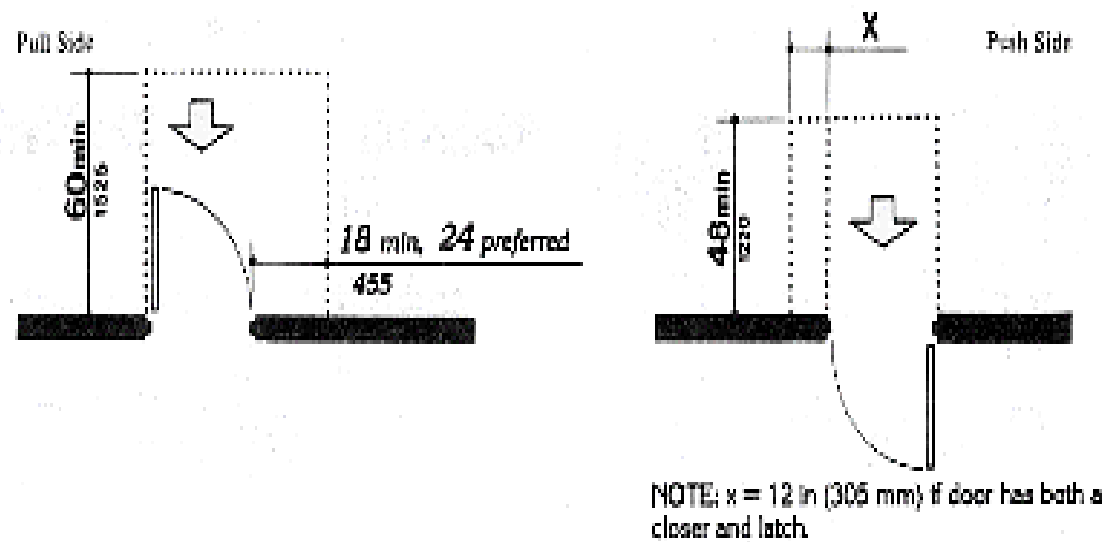
- Door opening force – exterior hinged doors shall be pushed or pulled open with a force not exceeding 8.5lbf. Interior hinged doors: 5lbf. (11-4.13.11.2)

Accessible Door



Section 11-4.13 Doors

Figure 25a

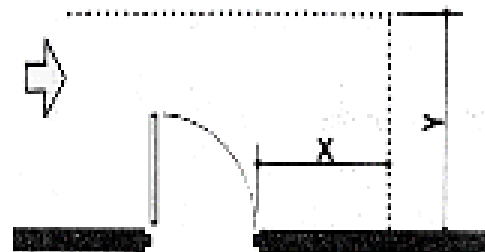


(8)
Front Approaches — Swinging Doors

Section 11-4.13 Doors

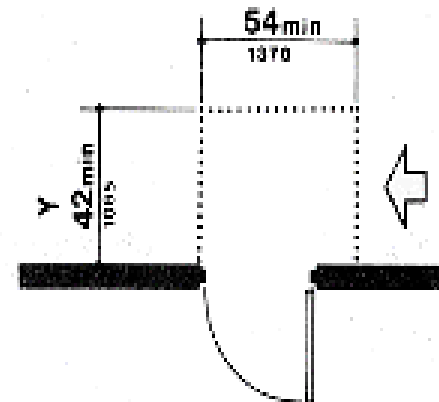
Figure 25b

Pull Side



NOTE: $x = 36$ in (915 mm) minimum if $y = 60$ in (1525 mm); $x = 42$ in (1065 mm) minimum if $y = 54$ in (1370 mm).

Push Side



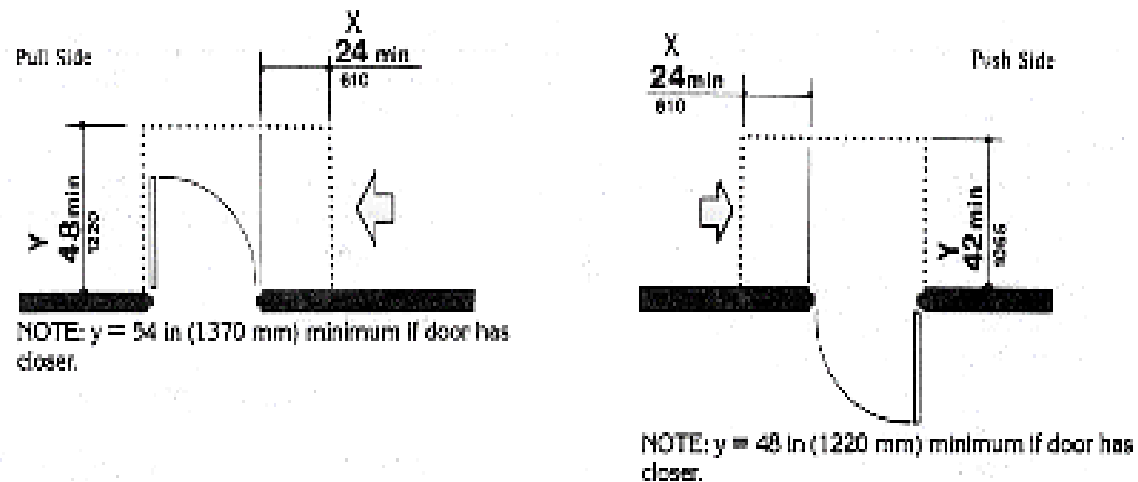
NOTE: $y = 48$ in (1220 mm) minimum if door has both a latch and closer.

(b)

Hinge Side Approaches — Swinging Doors

Section 11-4.13 Doors

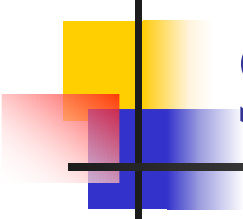
Figure 25c



(c)

Latch Side Approaches — Swinging Doors

NOTE: All doors in alcoves shall comply with the clearances for front approaches.



Section 11-4.13 Doors

- Fire doors – there are no accessibility requirements for fire door pressure

Note: Fire door pressure requirements are governed by the Florida Fire Prevention Code.

Section 11-4.13 Doors

- 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 twisting of the wrist to operate





Section 11-4.14 Entrances

- At least 50% of all public entrances ... must be accessible. At least one must be a ground floor entrance (11-4.1.3.8.a.i)
- Entrances which are not accessible shall have directional signage ... which indicates the location of the nearest accessible entrance (11-4.1.3.8.d)



Section 11-4.14 Entrances

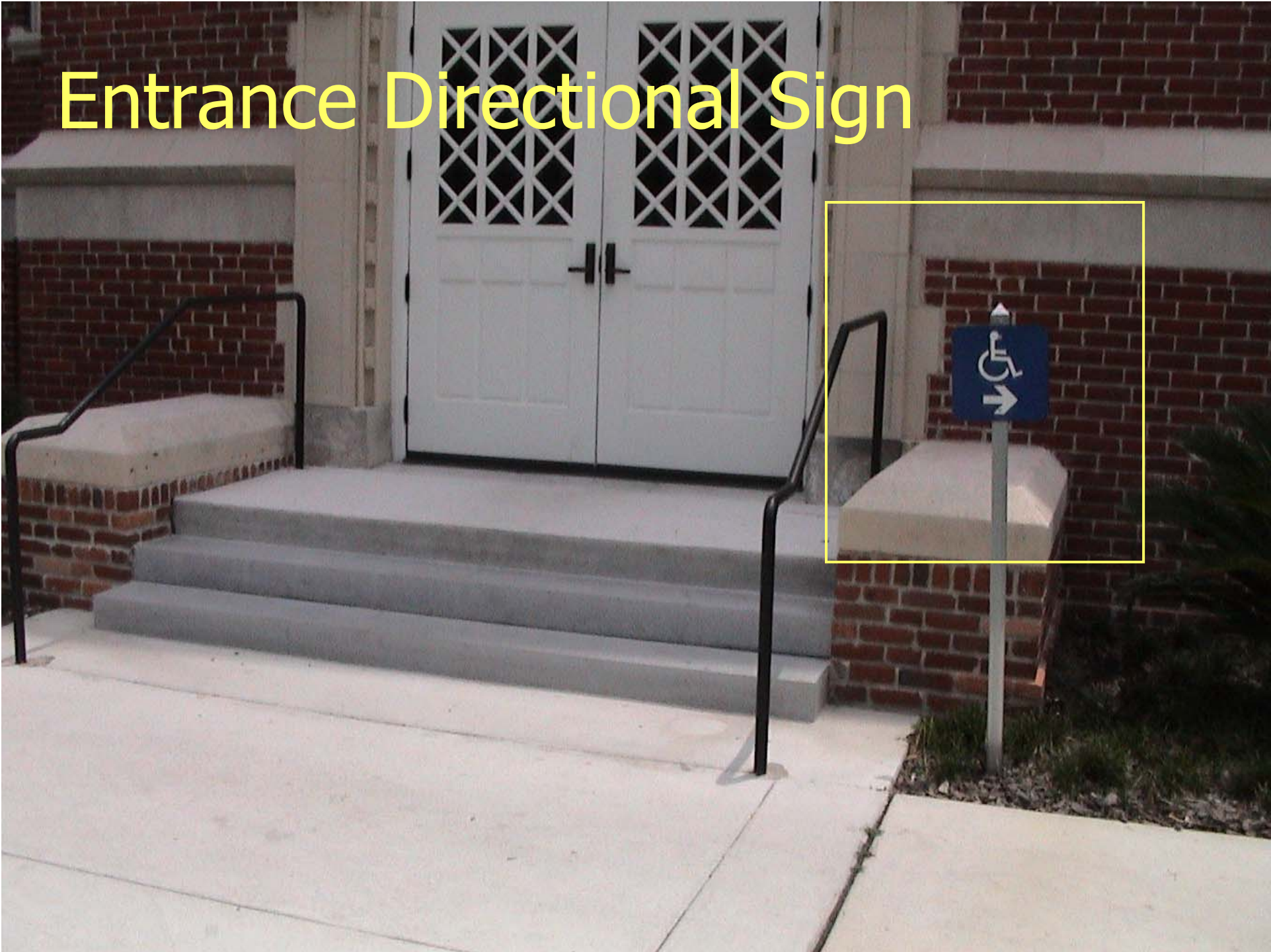
- Entrances shall be connected by an accessible route to public transportation stops, to accessible parking and passenger loading zones, and to public streets or sidewalks (11-4.14.1)



Section 11-4.14 Entrances

- If a door has a closer, then the sweep period 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 inches (75 mm) from the latch, measured to the leading edge of the door

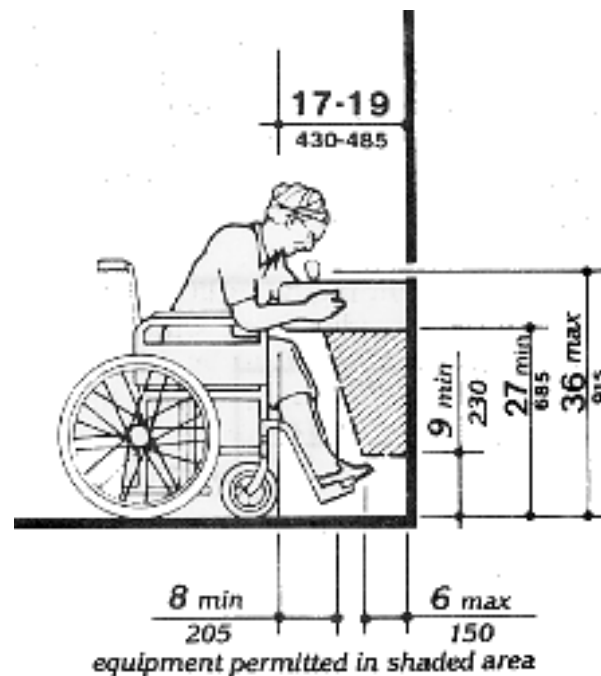
Entrance Directional Sign

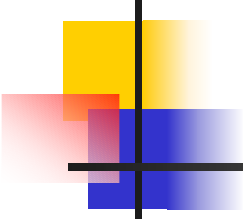


Section 11-4.15 Drinking Fountains & Water Coolers

- Spout height (36 inches maximum)
11-4.15.2
- Leg clearance (27 inches minimum)
11-4.15.5.1

Figure 27a





Section 11-4.15 Drinking Fountains & Water Coolers

- Drinking fountains and protruding objects – discuss 11-4.4.1 (look at leg clearances for coolers above 27 inches)

Water Fountain



FIRE EXTINGUISHER

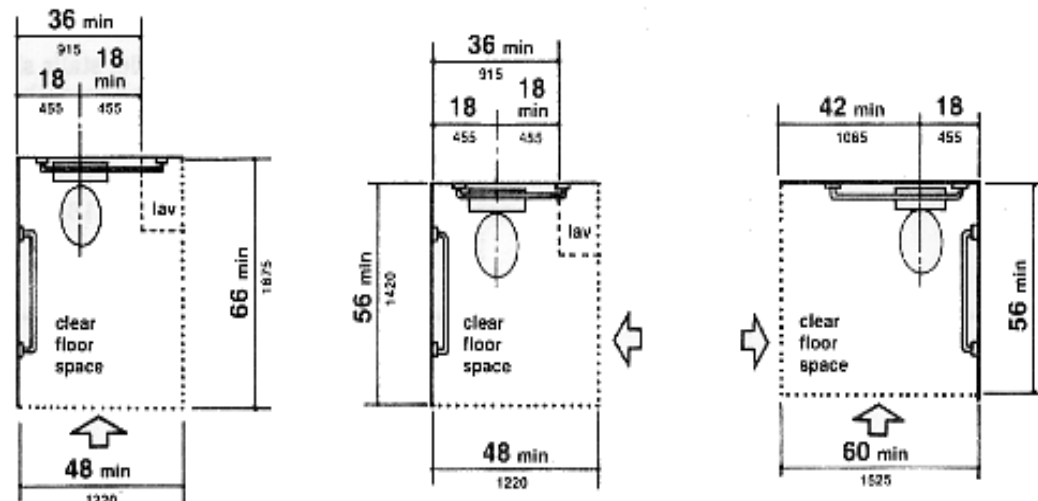


Hi-Lo design
27 inches from floor to
apron

Section 11-4.16 Water Closets

- Clear floor space for accessible water closets not in stalls shall comply with Figure 28 (11-4.16.2)

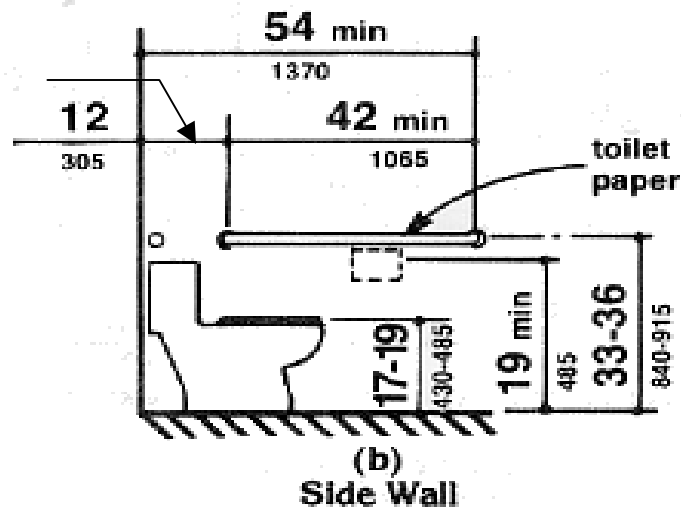
Figure 28



Section 11-4.16 Water Closets

- Height of accessible water closets shall be 17 inches to 19 inches measured to the top of the toilet seat (11-4.16.3)

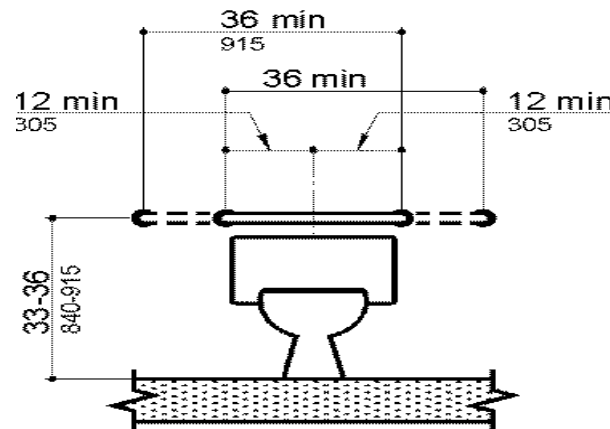
Figure 29b



Section 11-4.16 Water Closets

- Flush valve is on wide side of the accessible water closet
- Grab bars are required per Section 11-4.16.4

Figure 29a



(a)
BACK WALL



End of Session 1

Break Time!

