Leading the Charge: Universities, Title II, and Universal Design

Fred Tepfer
March 2010

In the beginning, there was no access...

THREE QUICK QUESTIONS:

Where did disability rights movements come from?

What is the Rehabilitation Act of 1973, and what was its effective date?

Why are research universities "leading the charge"?

Universal Design: Where we are coming from

In the beginning, there was no access...

A brief history of accessible schools

1920s-1950s: no access...front door or rear

A brief history of accessible schools

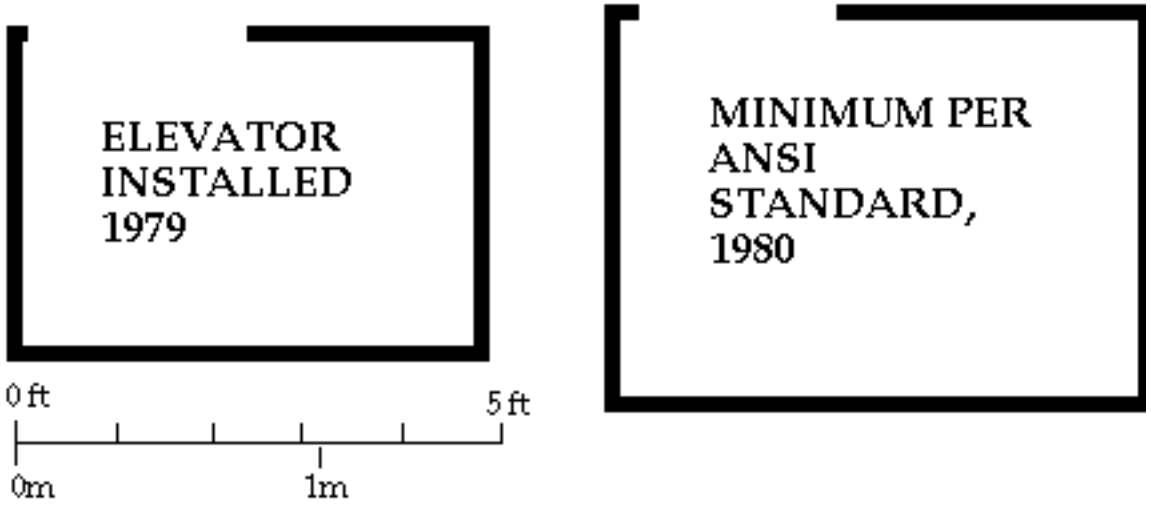
1960s: some feeble...and dangerous...attempts

A brief history of accessible schools

1970s Rehabilitation Act:

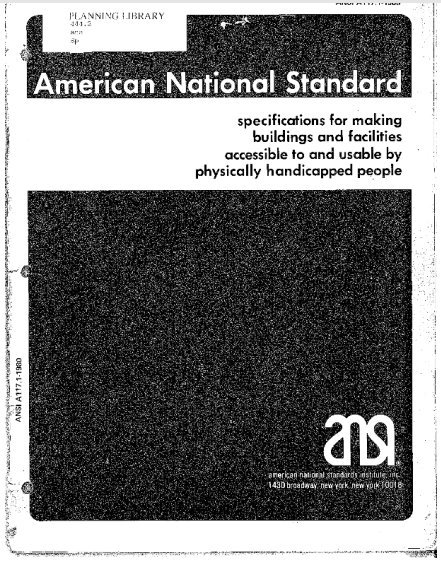
A brief history of accessible schools

1980s: change happens!

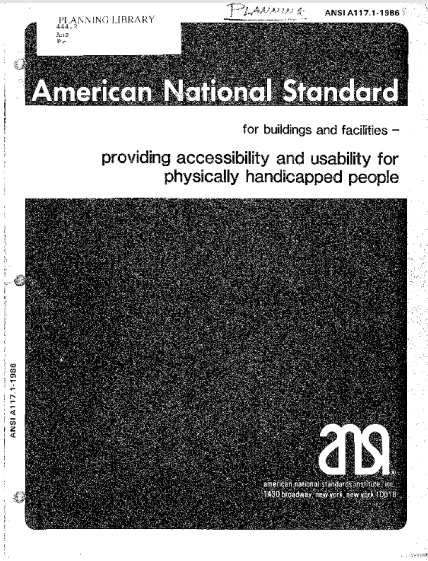


The ever-changing landscape of Federal accessibility standards

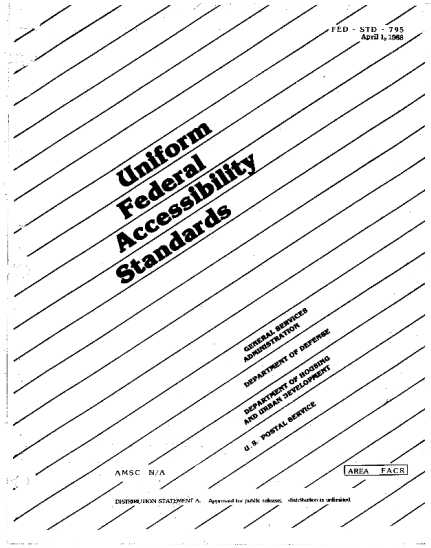
1977



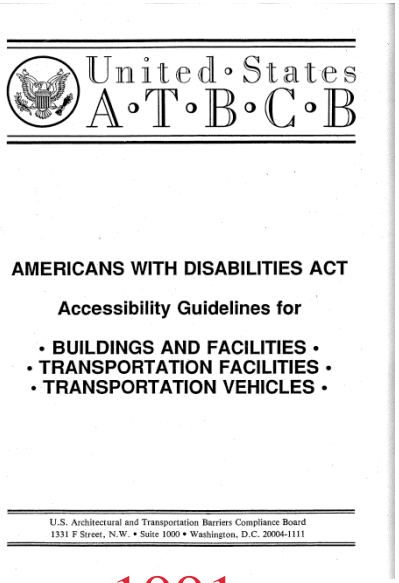
1980



1986



1988



1991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PART 36 -- NONDISCRIMINATION ON THE BASIS OF DISABILITY BY PUBLIC ACCOMMODATIONS AND IN COMMERCIAL FACILITIES

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36.103 Relationship to other laws.
36.104 Definitions.
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Subpart B -- General Requirements

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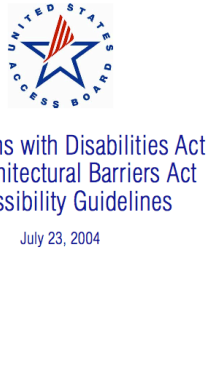
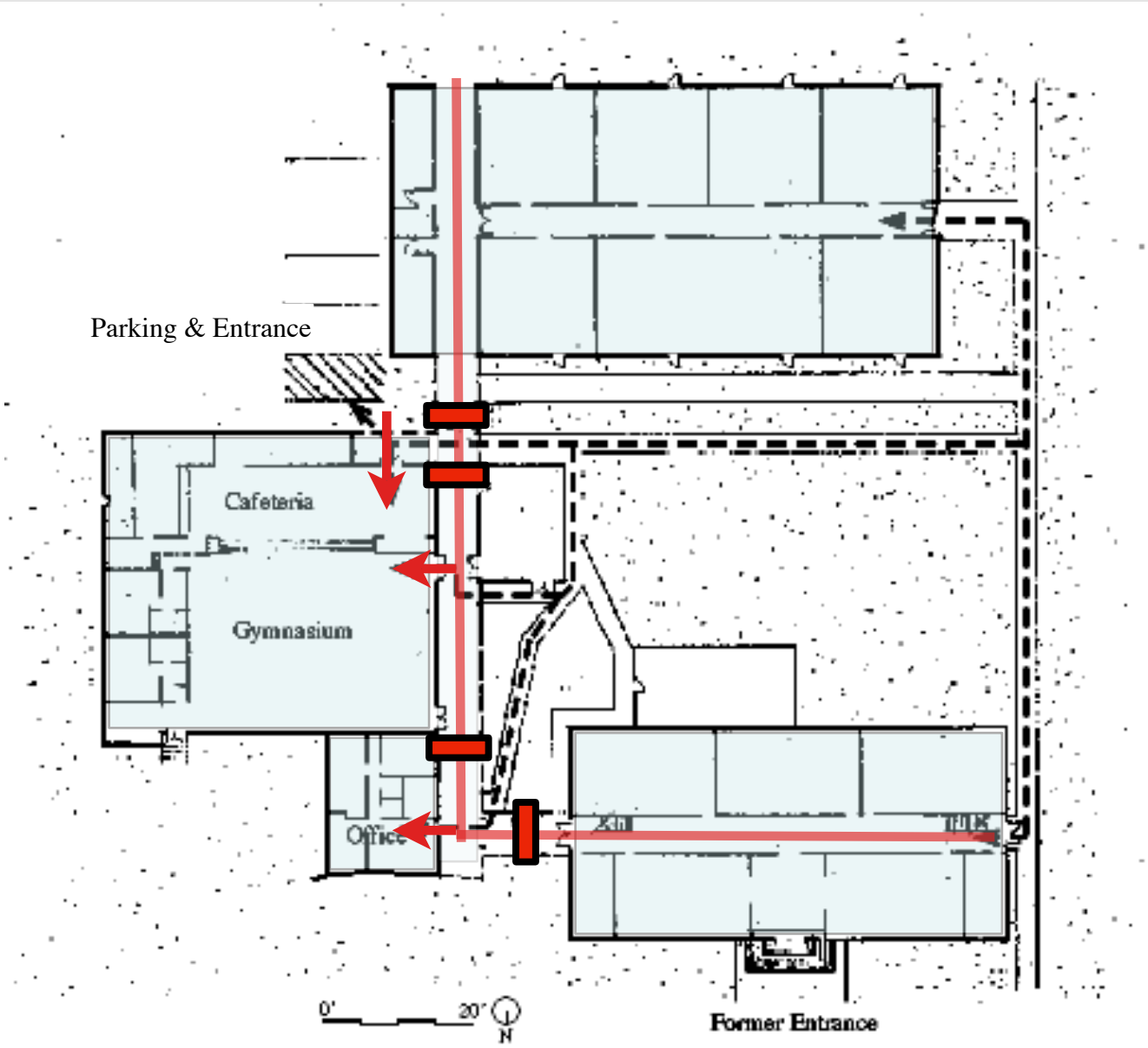
1992



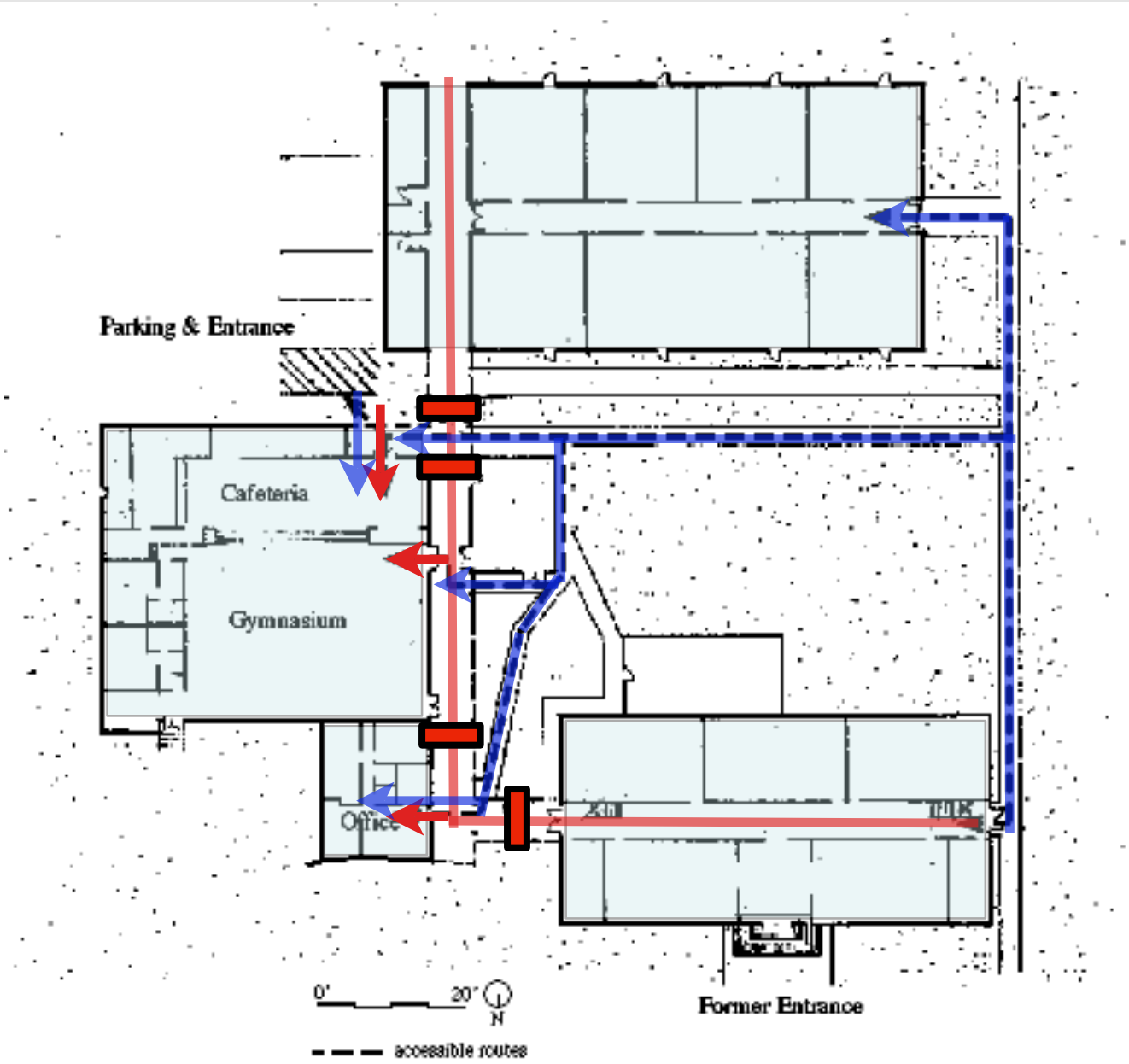
2005*

A brief history of accessible schools



1980s: effective standards

A brief history of accessible schools



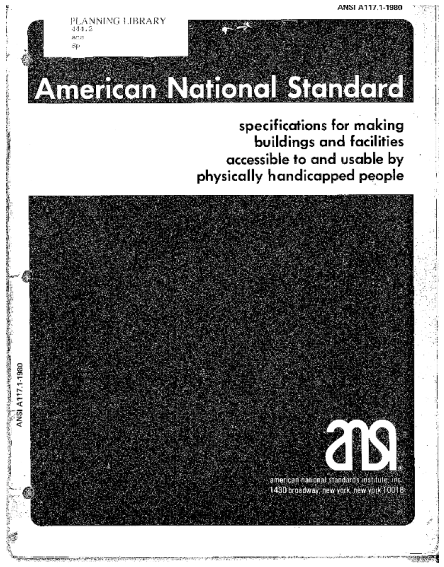
1980s: effective standards: **but does this work?**

A brief history of accessible schools

1995 to present: accessible design

The ever-changing landscape of Federal accessibility standards

1977



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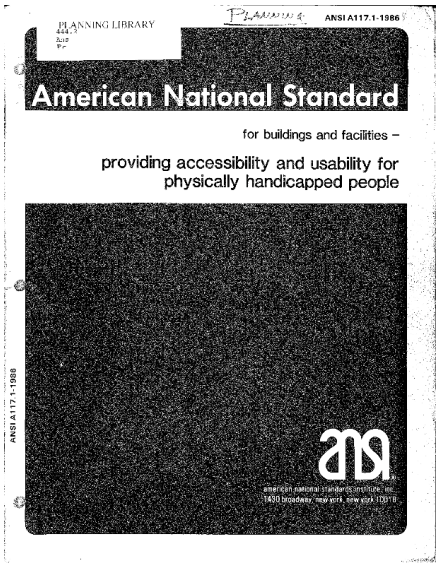

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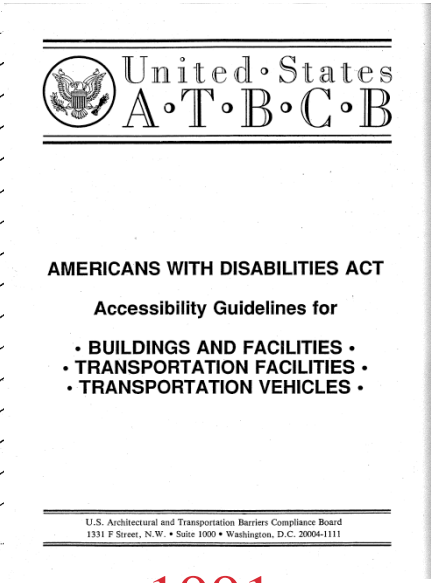

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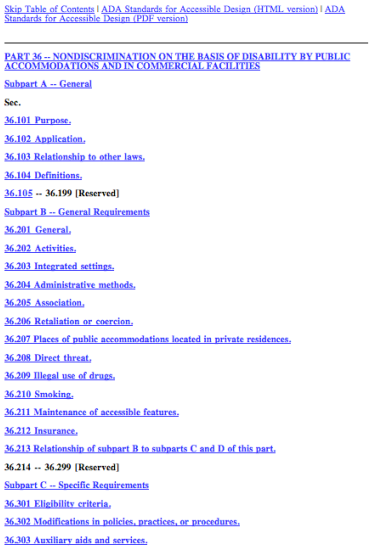

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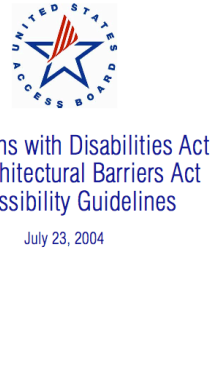
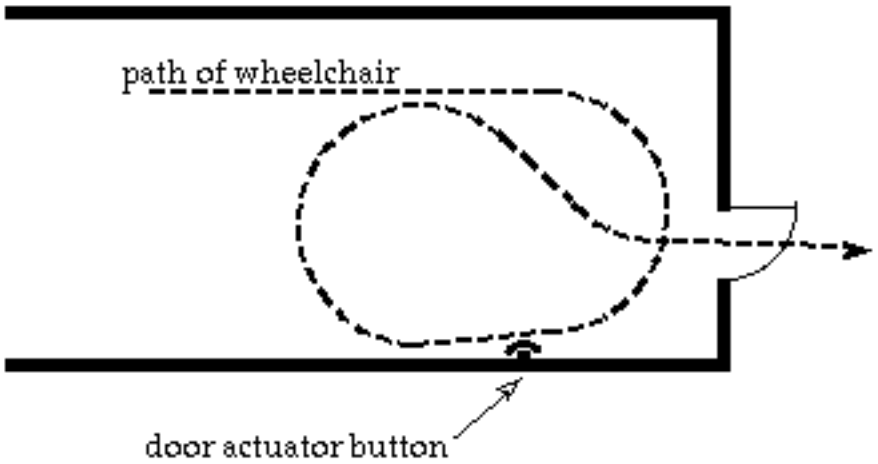


2005*

Universal Design



Where now? Going beyond the standards...

Seven Principles of Universal Design

1. Equitable Use:

The design is useful and marketable to people with diverse abilities.

2. Flexibility in Use:

The design accommodates a wide range of individual preferences and abilities.

3. Simple and Intuitive:

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

4. Perceptible Information:

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

5. Tolerance for Error:

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

6. Low Physical Effort:

The design can be used efficiently and comfortably and with a minimum of fatigue.

7. Size and Space for Approach and Use:

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

(from http://www.design.ncsu.edu/cud/univ_design/princ_overview.htm and other sources)

These don’t always apply well in design fields. Perhaps follow them up...

Universal Design:
Four Questions to Test a Design

- **Is it universal?**
  - Is it designed for a wide range of abilities and needs?

- **Is it effective?**
  - Does it actually work for the specific needs?
  - Has it been tested or at least reviewed by representatives of a wide range of users?
  - Is it supported by research, design standards, or other sources?

- **Is it welcoming?**
  - Does it feel natural and comfortable for all users?
  - Does it discriminate unnecessarily on the basis of ability?
  - Does it give the impression of disability-based discrimination?

- **Will the design solution be durable over time?**
  - Can it accommodate change through flexibility, adaptability, or adjustability?

ADA Title II vs. Title III

or: Is program accessibility dead?

and: What can be inaccessible?

ADA Title II vs. Title III

or: Is program accessibility dead?

no: Rehabilitation Act/Section 504 and ADA still apply

ADA Title II vs. Title III

ADA Title II: What can be inaccessible?

ADA Title II vs. Title III

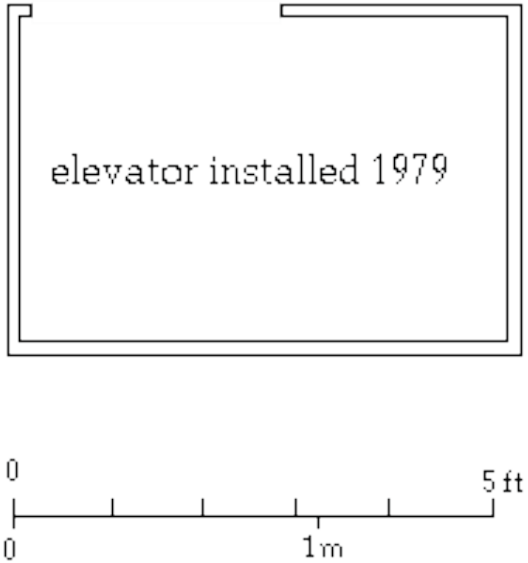
ADA Title II: What can be inaccessible?

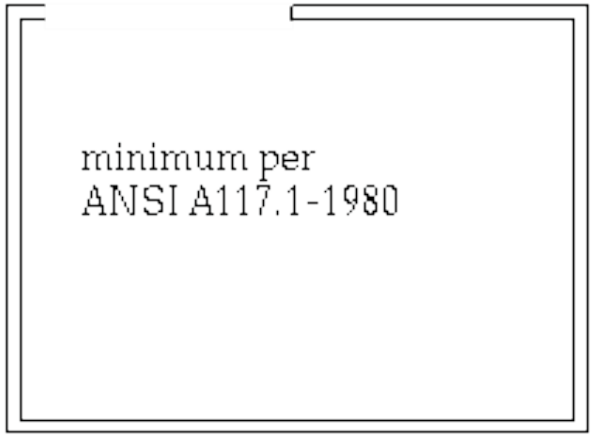
Almost nothing: just mechanical rooms, etc.

Other issues for the Title II owner

Am I grandfathered?

What's prudent?



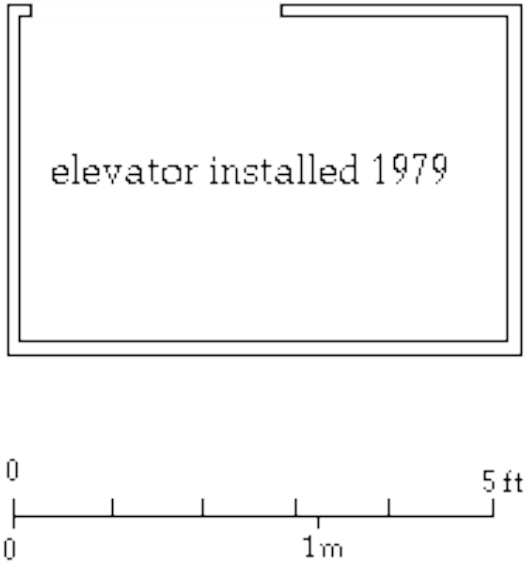


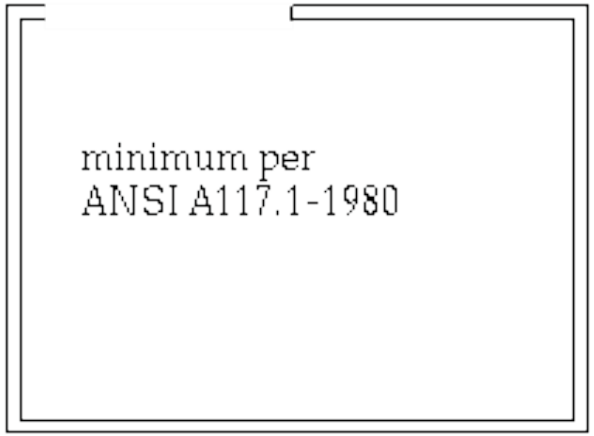
Other issues for the Title II owner

Am I grandfathered?

What's prudent?

Depends on whether it meets program access needs





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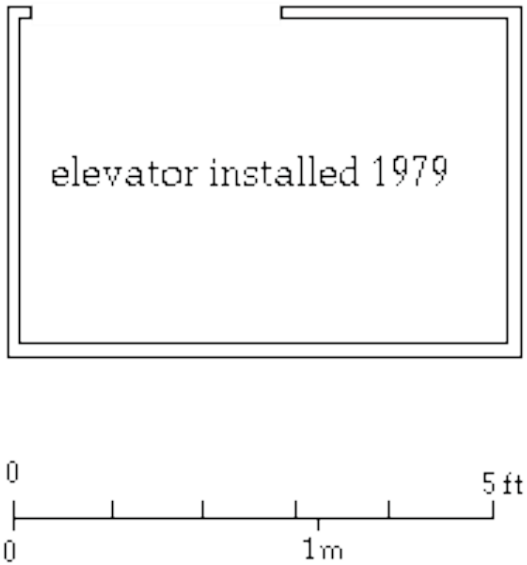
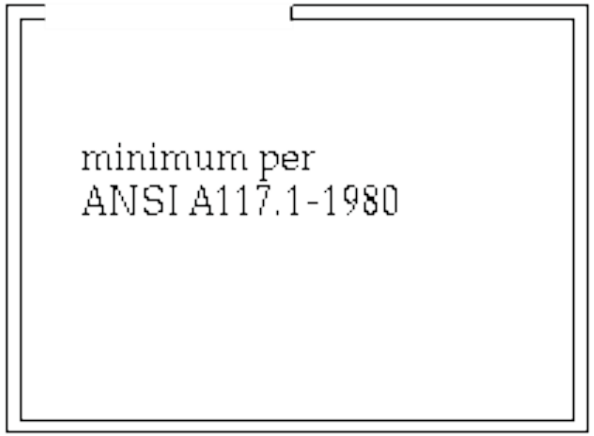


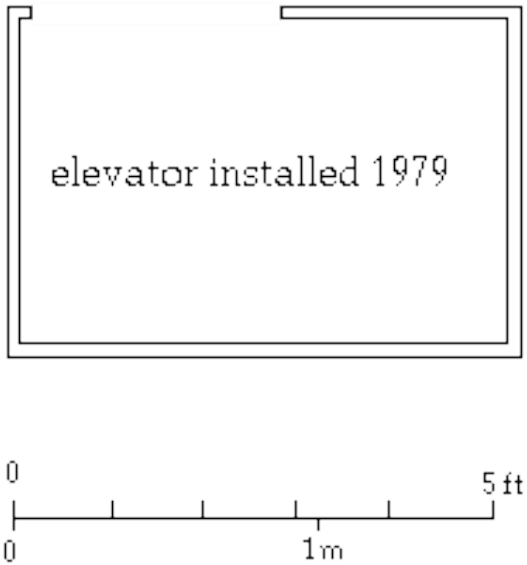


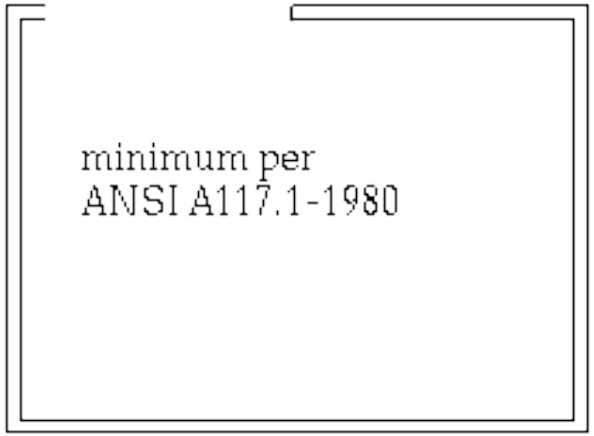
Other issues for the Title II owner

Am I grandfathered?

What's prudent?

Do the right thing: Universal Design

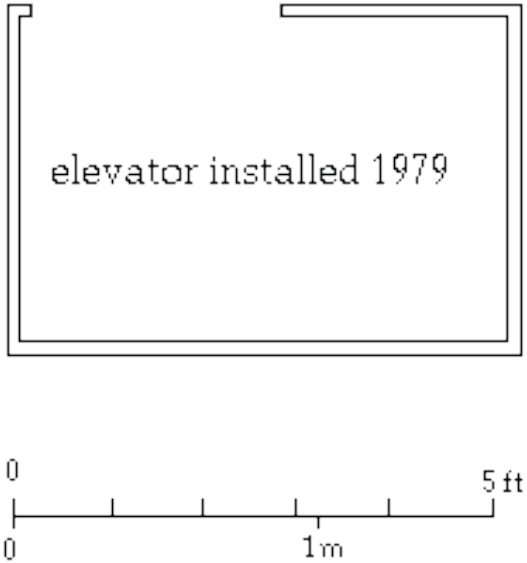


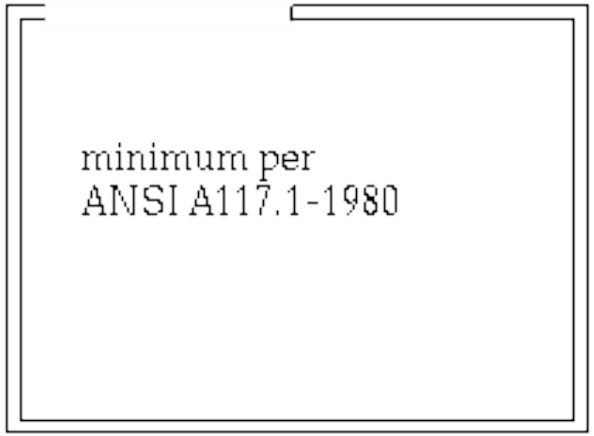


Issues for the owner Title II owner

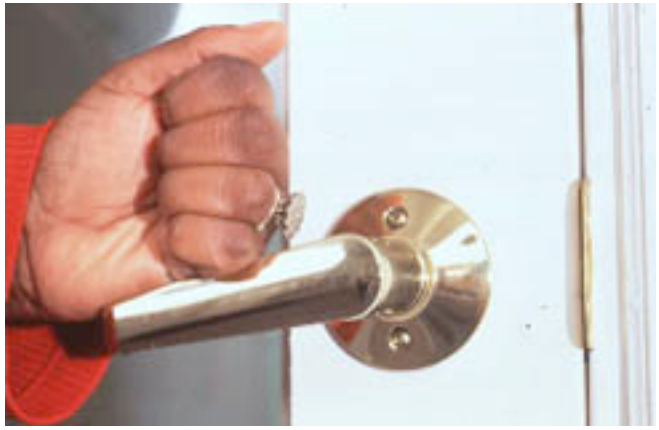
Am I grandfathered?
What's prudent?

Is it effective?
Is it safe?





Universal Design: The Closed Fist Test for Controls



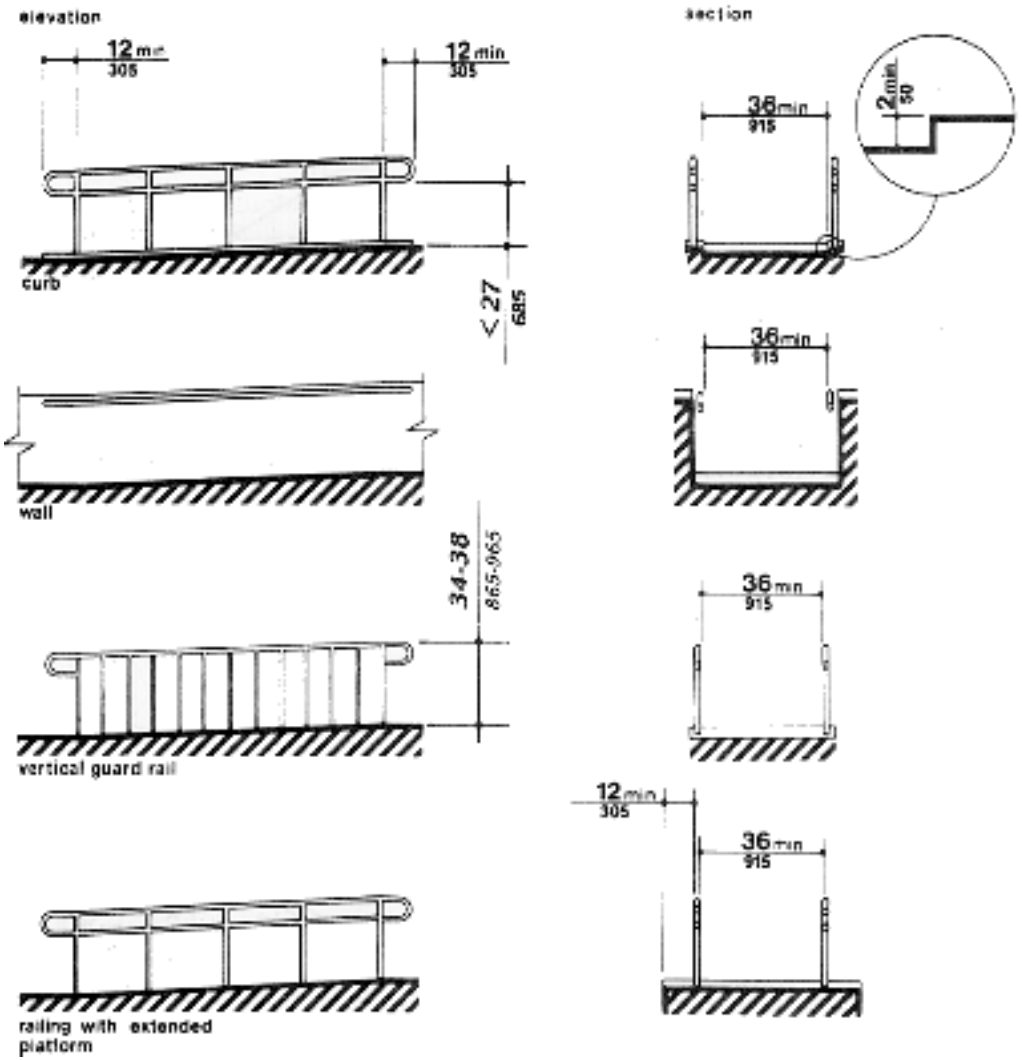
Pattern:

Can the control be operated with a closed fist?

Many standard plumbing, electrical, and hardware controls can be. However, others can't, in particular door knobs, thumb latch locks, faucets that require grip, and so forth.

Compliance: ramps

The standard uninspired solution to grade differences is to pick a ramp from the building code or from the ADA Standards. The results are seldom beautiful and sometimes don't work well for almost anyone.



Universal Design: site mobility

PATTERNS:

Integrated Path

Make sure that accessible routes are a meaningful main route used by all.

Cascade Court, UO

long zig zag ramp

Low Slopes / Short Ramps

Keep slopes at 5 percent or less except for short ramps (up to 12 – 15 feet long)

Shortest Path

Make accessible routes a direct and as short as possible (within the context of Low Slopes / Short Ramps). This suggests integrating grade changes into the direction of desired travel. [add UHCC examples]

Inaccessible ext. stair, Johnson Hall, UO

Universal Design: vision

Shoreline

Safe crossing

Wayfinding

Universal Design: vision

Shoreline

Safe crossing

Wayfinding

Universal Design: vision

Shoreline

Safe crossing

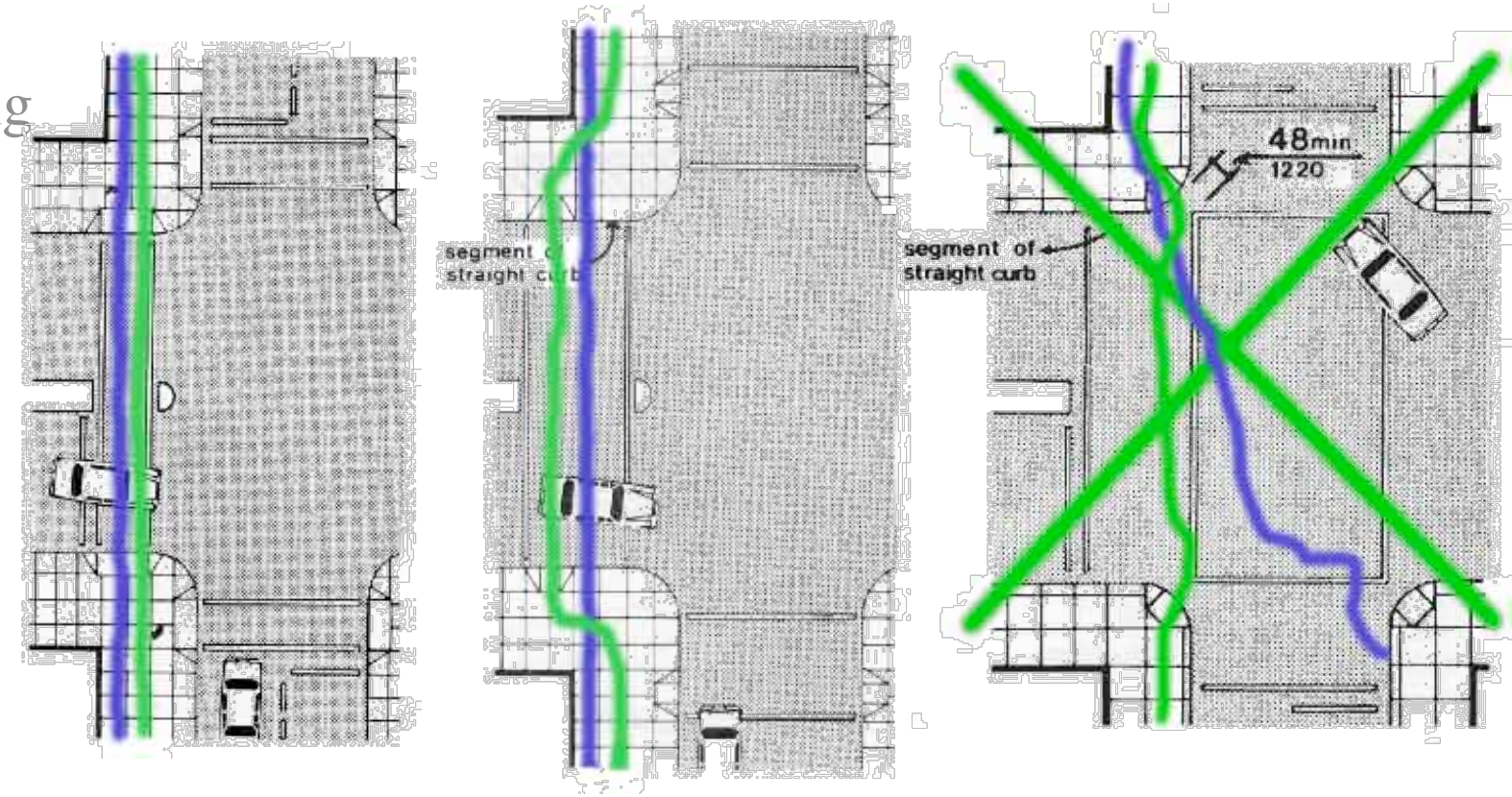
Wayfinding

Universal Design: vision

Shoreline

Safe crossing

Wayfinding

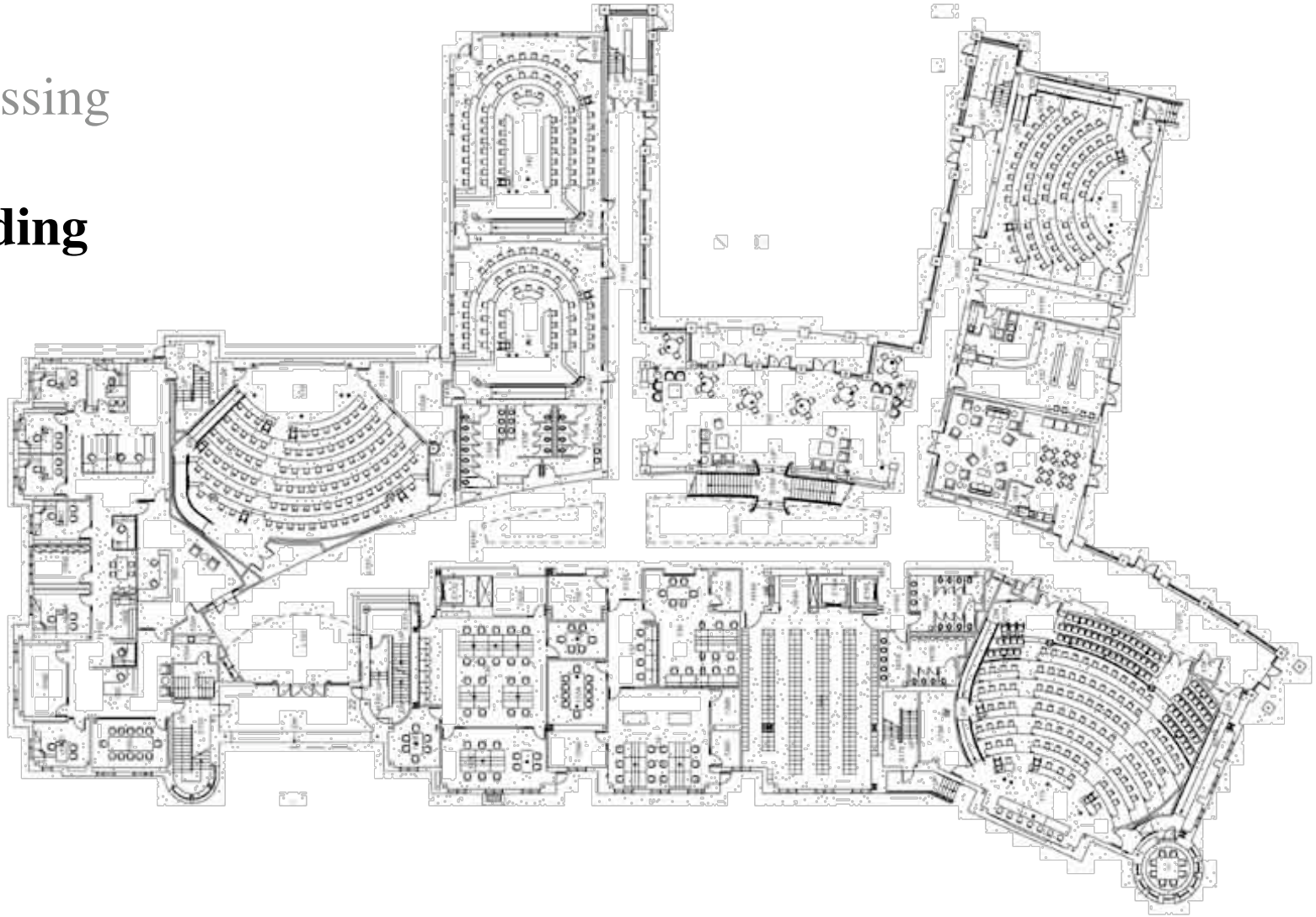


Universal Design: vision

Shoreline

Safe crossing

Wayfinding



Universal Design: vision

Shoreline

Safe crossing

Wayfinding

STANDARDS: generation of new approaches through

- user involvement
- research

Do-It-Yourself Architectural Barrier Evaluation Kit

Controls: usable with a closed fist
Side reach*: 54” max height, 9” min
    * best to just use front reach
Front reach 48” max height, 15” min
Protrusion hazards protrude into an accessible route
    more than 4”
    above 27” (better to use 24”)
    below 80”

Do-It-Yourself Architectural Barrier Evaluation Kit

Parking

Oregon stds. vs. ADA stds.

Stall width 9’

Sign on pavement and at stall

Aisle width 8’ for van-accessible, 5’ otherwise

Accessible route from access aisle to building that

- doesn’t pass behind parked cars
- crosses travel lanes in crosswalks

Sidewalks (and accessible routes in general):

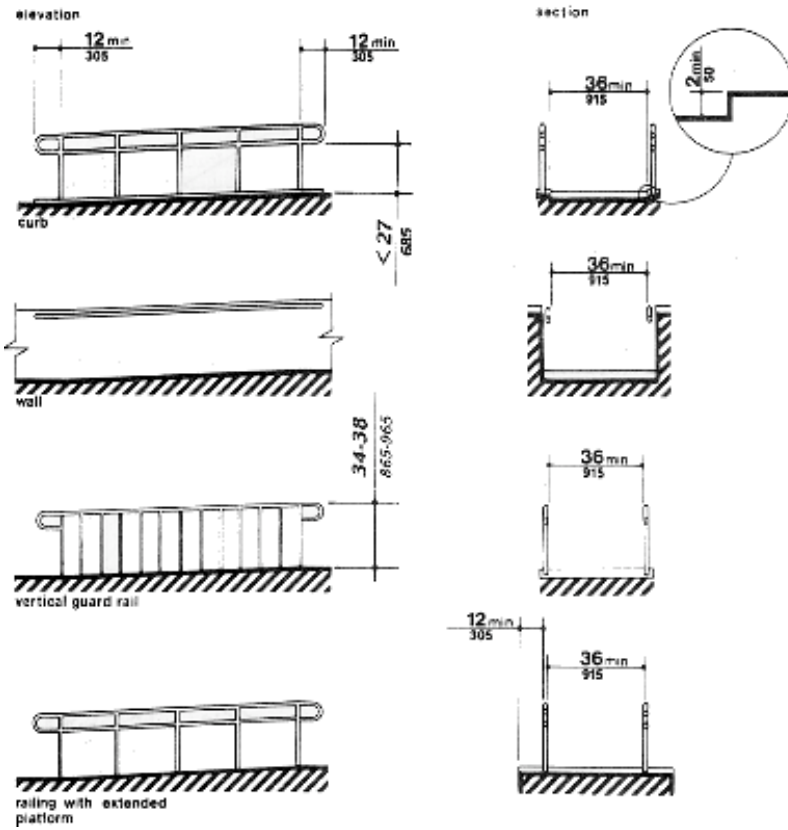
width min = 36”, turnouts or wide for long lengths

running slope max = 5%

slope>5%: see ramps

cross slope max = 2%

Do-It-Yourself Architectural Barrier Evaluation Kit



Ramps

- maximum slope 1:12
- minimum width 36”
- maximum length between landings 30’
- minimum landing length 5’
- minimum landing width 5’ if ramp turns
- handrails both sides, continuous through landings
- level handrail extensions top and bottom, 12” minimum
- edge protection through curbs or other devices

Do-It-Yourself Architectural Barrier Evaluation Kit

Entrances and doors:

- width min = 32” clear not counting door hardware
- door pressure and delay requirements
- 50% minimum of entrances accessible
- entrances provide adequate fire exits
- 18” pull-side latch-side clearance
- 12” push-side latch-side clearance (if latch and closer)

Toilet rooms

- toilet stall 60” wide, 56” or 59” deep
- stall door 32” wide, clear, not counting door hardware
- toilet 18” from side wall
- 42” long grab bar at side of toilet
- 36” long grab bar at rear of toilet
- sink with kneespace under
- bottom reflecting surface of mirror no higher than 40” minimum
- edge protection through curbs or other devices

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web home: http://uoregon.edu/~ftepfer/
accessibility page: http://uoregon.edu/~ftepfer/access/
Oregonized version of ADA Standards:
http://uoregon.edu/~ftepfer/access/ADAAGuplan/adaag.htm