Significant Changes to the ICC/A117.1-2017 Changes
Part - 1

National Association of Theatre Owners™

Code Consultants, Inc.
Objectives

- Overview of the changes to the Technical Requirements

Part 1:
ANSI Background
Chapters 3-4

Part 2:
Chapters 5, 6, 7, 8, & 9
But... before the technical info

- How we got here
A117.1 Standard

• Change Process
  • The ICC/ANSI A117.1 is developed through a public hearing and consensus process supervised by the American National Standards Institute (ANSI).
  • The document is on a five year cycle for development.
  • The most recent edition came out in 2017.
A117.1 Standard

• Change Process
  • NATO is a member of the ANSI A117.1 committee; CCI is the representative.
  • 40+ people are on the committee; divided up between Building Officials, Consumers/Users, Producers/Distributers, Regulatory Representatives, and Individual Experts.
  • Anyone can offer a proposal to the text. There is still time before the deadline for submittals for the next addition.
A117.1 Standard

- Next Steps
  - Work on the 2022 Edition is underway by members of the committee.
  - No model code references the 2017 edition.
  - The next edition of the Building Code is the 2021 edition and will likely reference it.
  - Local jurisdictions can adopt the 2017 through amendment.
  - The 2022 ANSI will also include scoping so it can be a stand alone code for accessibility.
A117.1 Standard

• Scoping Requirements
  • Scoping is the “provide this” and “make it this many.”
  • Found in Chapter 2 of the ADA Standards and Chapter 11 of the Building Code.

• Technical Requirements
  • Technical requirements are the “this big” and “this color.”
  • Found in Chapter 3-10 of the ADA Standards and the ANSI A117.1.
Chapter 3 – Building Blocks
Building Block Changes

- Turning Space
- Clear Floor Space
- Reach Range
Anthropometry of Wheeled Mobility
Existing building and facilities

- The new sizes **will not** apply to existing buildings or facilities
- **Will** apply to new constructions and additions
- The A117.1 definitions:
  - **Existing buildings**: A building erected prior to the date of adoption of this standard, or one for which a legal building permit has been issued.
  - **Existing facility**: A facility completed prior to the date of adoption of this standard, or one for which a legal permit has been issued.
Turning Space - Circular

Existing

- In existing buildings and facilities, the turning space must be a circular space with a 60 inches minimum diameter.
- Turning spaces may be permitted to include knee and toe clearance complying with Section 306.
Turning Space - Circular

New

• The turning space must be a circular space with a 67-inch minimum diameter.
• Turning space must be permitted to include knee and toe complying with Section 306. Where the turning space includes knee and toe clearance under an obstruction, the overlap must comply with all of the following:
  • The depth of the overlap must not be more than 10 inches, and
  • The depth must not exceed the depth of the knee and toe clearance provided, and
  • The overlap must be permitted only within the turning circle area shown shaded in Figure 304.3.1.
T-Shaped space

Existing
T-Shaped space

New

Option 1

Option 2

Option 3
Turning Space Overlap

New

Existing
Clear Floor Space

New

Existing
Reach Range

• 15-48 inches AFF (with exceptions)
• Did not change.
• There were several proposals to change the lower reach to 22 inches where a forward approach was the only possibility. It wasn’t approved.
Chapter 4 – Accessible Route
Accessible Routes

- Exterior/Interior routes
- Passing space
- 180 degree turn
- 90 degree turn
- Doors
- Platform lifts
**Exterior Accessible Route**

The clear width of an exterior accessible route must be 48 inches minimum.

- **New**

- **Existing**
Interior Accessible Route

New

Existing
180 degree turn

Existing

Option 1

Option 2
180 degree turn – Clear Width

New

Option 1

Option 2

Option 3 – new!
90 degree turn

New!

Option 1

Option 2
90 degree turn

Existing
90 degree turn

New!

Option 3

Option 4
90 degree turn

• Exceptions:
  • Where an accessible route makes a 90-degree turn at doors, doorways and gates complying with Section 404.2.3, the route is not required to comply with this section.
  • Where an accessible route makes a 90-degree turn at an elevator or platform lifts comply with Sections 407 through 410, the accessible route is not required to comply with this section.
Passing Space

New

Existing
Passing Space

New

Existing

T-turn complying with Section 304.3.2.1

T-turn complying with Section 304.3.2.2
Door maneuvering size

New

Existing

*If both closer and latch are provided

(b) Front Approach, Push Side – New Buildings

(c) Front Approach, Push Side – Existing Buildings

Footnote 5
Sliding and Folding Door
Maneuvering Clearance

New

Existing
Doorways without Doors or Gates
Maneuvering Clearance

New

Existing

(a) [Diagram showing new maneuvering clearance with dimensions 52 min 1320]

(b) [Diagram showing existing maneuvering clearance with dimensions 48 min 1220]
Recessed Doors and Gates

New and Existing Buildings
Recessed Doors and Gates

New

Existing

\[ X > \frac{8}{205} \]

52 min 1320

48 min 1220
Two doors or gates in series

New

Existing
Two doors or gates in series

New

Existing

[Diagram showing two sets of doors or gates in series with dimensions and labels]
Two doors or gates in series

New

Existing
Door and Gate Hardware

The operational force to retract latches or disengage devices that hold the door or gate in a closed position must be as follows:

- Hardware operation by a forward, pushing or pulling motion: 15 pounds maximum.
- Hardware operation by a rotational motion: 28 inch-pound maximum.
Door and Gate Hardware

- Hardware operation by a forward, pushing or pulling motion: 15 pounds maximum.
Door and Gate Hardware

- Hardware operation by a rotational motion: 28 inch-pound maximum.
Door and Gate Hardware

4 inches x 7 pounds = 28 inch-pounds
Curb Ramps and Blended Transitions

• The 2017 A117.1 borrowed heavily from the proposed Public Rights Of Way Guidelines (PROWAG) published by the Access Board.
• Applies to private roads and other vehicular areas not in the public right of way.
• The section of the standard is totally rewritten.
• Detectable warnings are still not required except in a few specific cases.
Perpendicular Curb Ramps

- Specific language regarding landing slope and the flare requirement is new.
Perpendicular Curb Ramps

- Where the landing is constrained at the back-of-sidewalk, the landing must be 48 inches minimum by 60 inches minimum.
- The 60-inch dimension must be provided in the direction of the curb ramp run.
Parallel Curb Ramps

• A landing 48 inches minimum by 48 inches minimum must be provided at the bottom of the curb ramp.
• The landing is permitted to overlap pedestrian routes and clear spaces.
Parallel Curb Ramps

- Where the landing is constrained on two or more sides, the landing must be 48 inches minimum by 60 inches minimum.
- The 60 inches dimension must be provided in the direction of the pedestrian street crossing.
Blended Transition

- The running slope of blended transitions must be 1:20 maximum.
Detectable Warnings

- Detectable warning surfaces must be provided at the following locations on pedestrian access routes and at transit stops:
  - Curb ramps and blended transitions at pedestrian street crossings,
  - Pedestrian refuge islands at street crossings,
  - Pedestrian at-grade rail crossings not located within a street or highway.
Platform Lifts – Clear Floor Space

Platform lifts with a single door or doors on opposite ends must provide a clear floor width of 36 inches minimum and a clear floor depth of 52 inches minimum.

**Exception**: Incline platform lifts with passenger restraining arms, are permitted to provide a clear floor width of 36 inches minimum and a clear floor depth of 48 inches minimum.
Platform Lifts – Clear Floor Space

New

Platform lifts with doors on adjacent sides must provide a clear floor width of 42 inches minimum and a clear floor depth of 60 inches minimum.

Existing

Platform lifts with doors on adjacent sides are permitted to provide a clear floor width of 36 inches and a clear floor depth of 60 inches.
Questions?