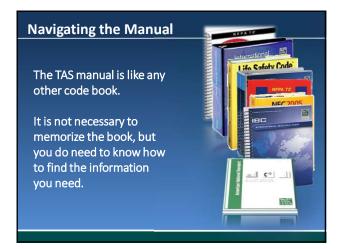
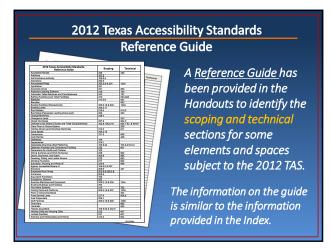
Section 2: Definitions & Building Blocks











101.1 General

The requirements (of the 2012 TAS) are applied during the design, construction, additions to, and alteration of...



101.1 General



These standards are intended to be consistent to those contained in the 2010 Standards for Accessible Design, and are generally the same except

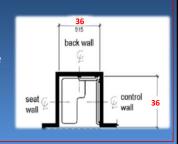


104.1 Conventions

Dimensions that are <u>not</u> stated as "maximum" or "minimum" are absolute.

Example: 608.2.1

"Transfer type shower compartments shall be 36" by 36" clear inside dimensions measured at the center points of opposing sides."



10

Advisory 104.1.1 Construction & Manufacturing Tolerances

Where the requirement states a specified range, such as in Section 609.4 where grab bars must be installed between 33" and 36" above the floor, the range provides an <u>adequate</u> tolerance and there are no tolerances outside of the range at either end point.

11

104.2 Calculation of Percentages

Where the required number of elements or facilities to be provided is determined by calculations of ratios or percentages and remainders or fractions result...

Number of Elements or Facilities: Rounding up is required

...the next greater whole number of such elements or facilities shall be provided.

Example: 104.2 Percentages Number of Elements or Facilities

Where sinks are provided, at least 5%, but no fewer than one of each type provided in each accessible room or space shall comply with 606 (212.3).



25 lab sinks of the same type in the room $25 \times .05 = 1.25$

2 accessible sinks are required

13

104.2 Calculation of Percentages

<u>Size or Dimension of</u> Element or Facility:

Rounding down is permitted for values less than ½ where the determination of the required size or dimension of an element or facility involves ratios or percentages...

Size of Elements or Facilities: Rounding down is permitted

14

104.3 Figures

Unless specifically stated otherwise, figures are provided for <u>information purposes only</u>.

Note: The only standard that will specifically refer to compliance with a figure is 703.7.2 which applies to the international symbols.

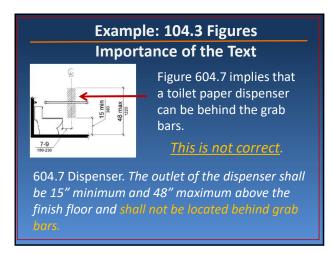








All requirements are in the text, NOT the figures.







Enforceable Advisories

Some advisories specifically state that an element or space "shall" or "must" comply. Based on TAS 106.1, these terms have the indicated meaning which are requirements, not advice.

These terms meet the criteria of "specifically stated otherwise" in establishing an enforceable requirement.

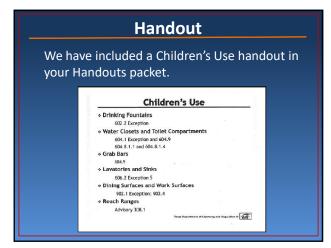


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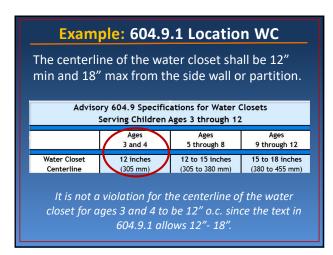




102 Dims for Adults & Children		
This document includes technical requirements based on children's dimensions and anthropometrics, which are permitted but not required.		
Anthropometries For Children Hawaii and Haw		









103 Equivalent Facilitation	
TEAS DEPARTMENT OF LICENSING A REGULATION TO MAN OF THE ARROW HAVE THE STATE OF TH	Nothing in these requirements (TAS) prevents the use of designs, products, or technologies as alternatives to those prescribed, provided they result in substantially equivalent or greater accessibility and usability. Equivalent facilitation requires a variance based on Advisory 103.





29

105.1 General Referenced Standards

The standards listed in 105.2* are incorporated by reference in this document and are part of the requirements to the prescribed extent of each such reference.

Copies of the referenced standards may be obtained from the referenced publishers / distributors.

* ANSI/BHMA, ASME, ASTM, ICC/IBC, NFPA

Excerpt from RAS Bulletin 2012-01

"The Department is not the authority having jurisdiction for ensuring compliance with the International Building Code (IBC) or any of the other referenced standards in section 105.2 of the 2012 TAS."



Consequently, a RAS has no authority to verify compliance with the IBC or any of the other referenced standards in section 105.2.

31

106.2 Terms Defined in Referenced Standards



Terms not defined in 106.5 or in regulations issued by TDLR to implement Chapter 469, but specifically <u>defined in a referenced standard</u>, has the specified meaning from the referenced standard unless otherwise stated.

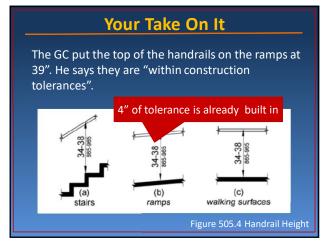
32

106.3 Undefined Terms

The meaning of terms not specifically defined in 106.5 or in regulations issued by TDLR to implement Chapter 469, or in referenced standards, are as defined by collegiate dictionaries in the sense that the context implies.















106.5.5 Alterations

A change to a building or facility that affects or could affect the usability of the building or facility or portion thereof.

Alterations include (but are not limited to):

- Resurfacing of circulation paths or vehicular ways
- Changes or rearrangement of the structural parts or elements
- Changes or rearrangement in the plan configuration of walls and full-height partitions

42

Example: Flooring

The replacement of floor covering affects the usability of the space by persons with mobility impairments. Therefore, it is an alteration.



43

A common misconception is that an element that is replaced with the same type of material is not an alteration (in example, replacing old tile with new tile of the same style).



202.3 Alterations

Where <u>existing</u> elements, spaces, or common use areas are altered, each altered element, space, or common use area must comply with the applicable requirements of Chapter 2.



45

202.3.1 Prohibited Reduction in Access

An alteration that decreases, or has the effect of decreasing, the accessibility of a building or facility below the requirements for new construction at the time of the alteration is prohibited.



For example, knob style door hardware cannot be used to replace lever door hardware.

46

202.3 Alterations - Exception 1

Where elements or spaces are altered,

and the circulation path to the altered element or space is not altered,

an accessible route is <u>not</u> required...



unless required by 202.4 (Alterations affecting Primary Function Areas).

Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the facility by persons with disabilities.

49

What is Normal Maintenance?

Normal maintenance means "keeping something in good condition". The key is, what is "normal"?



Is it "normal" for a building to burn, flood, or be damaged by a natural disaster?

50

SCENARIO

A store was flooded by Hurricane Harvey. The owners are going to remove:

- Carpet, tile, and floor coverings.
- Damaged doors and trim.
- Counters and cabinets for refinishing.
- Sheet rock to 36" a.f.f. on the walls.

SCENARIO- cont.

- All the walls will stay in the same place.
- New wall finishes will be the same as they were.
- All the new flooring will be the same type as the old flooring.
- The counters and cabinets will be refinished and put back in the same place.
- Everything will be put back "the way it was".

52

Reconstruction" is specifically identified in TAS 106.5.5 as being an "alteration."

It is never acceptable to rebuild or replace a subject building, facility, element, or space "like it was before" unless it was in full compliance with TAS.

Is it acceptable to reconstruct a building using the electrical, plumbing, or fire safety code that was in effect when the building was built?

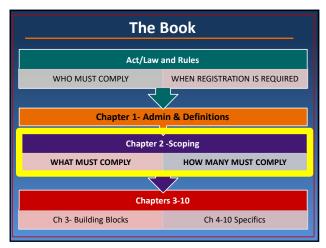


53

Maintenance or Alteration?







These requirements apply to all areas of newly designed and newly constructed buildings and facilities, and altered portions of existing buildings and facilities unless exempted... ...or where scoping limits the number of multiple elements required to be accessible. In some instances, there may be a "5%" rule provided in the scoping.

201.2 Application Based on Building or Facility Use

Scoping is applied based on the type of facility/use of space.

"Where a site, building, facility, room, or space contains more than one use, each portion shall comply with the applicable requirements for that use"

58

Example: 201.2 Transient Lodging

If a hotel has guest rooms, a restaurant, and a sales and service counter...

Each space and element would be subject to applicable provisions of TAS, including, but not limited to:

- 224 Transient Lodging
- 226 Dining Surfaces
- 227 Sales and Service Counters



59

201.1 Scope - Exception

Those portions of a residence used in the operation of a commercial facility or public accommodation, or that portion used for both the business and for residential, must comply with the Standards.



201.1 Scope - Exception

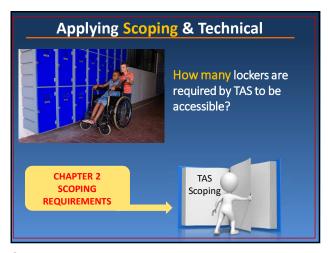
The portion of the residence used in the operation of the commercial facility or public accommodation includes to the following elements:

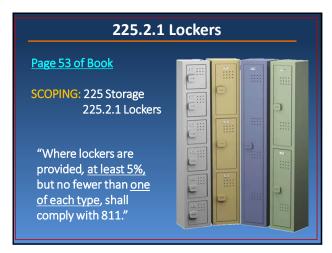
- Means of entry, (including the homeowner's front sidewalk, if any)
- The door or entryway, and hallways
- Restrooms (if available to employees or visitors)
- Those portions of the residence, interior or exterior, available to or used by employees or visitors.

62



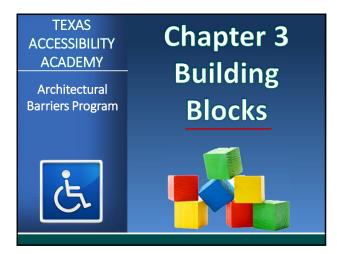
63

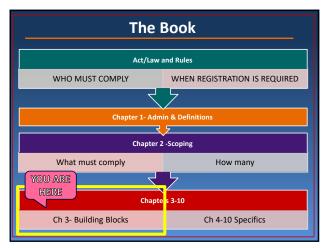


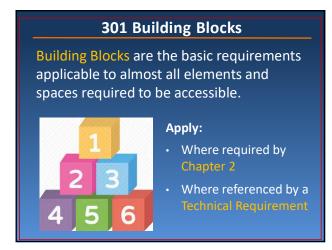




811 Storage (Page 174) 811.1 General. Storage shall comply with 811 811.2 Clear Floor or Ground Space. A clear floor or ground space complying with 305 shall be provided 811.3 Height. Storage elements shall comply with at least one of the reach ranges specified in 308 811.4 Operable Parts. Operable parts shall comply with 309 These are the Technical Requirements.







811 Storage

811.1 General. Storage shall comply with 811

811.2 Clear Floor or Ground Space. A clear floor or ground space complying with 305 shall be provided

811.3 Height. Storage elements shall comply with at least one of the reach ranges specified in 308

811.4 Operable Parts. Operable parts shall comply with 309

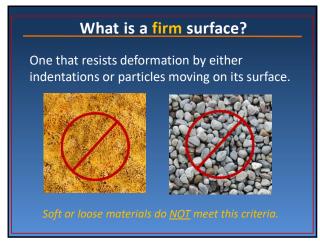
These are the Building Blocks.

71



72

302.1 General Floor or Ground Surfaces Floor or ground surfaces must be Firm Stable Slip resistant



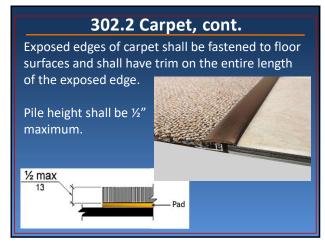
What is stable and slip-resistant?

- A surface that remains unchanged by contaminants or applied force.
- A surface that provides sufficient frictional counterforce to permit safe ambulation.



75









302.3 Openings

Openings that are more than ½" are allowed at elevator hoistways, platform lift sills, rail station platforms, and track crossings.



80

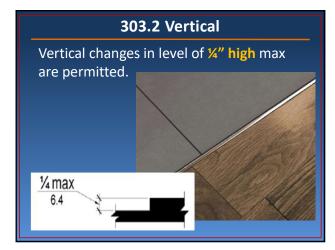
303.1 General Changes in Level

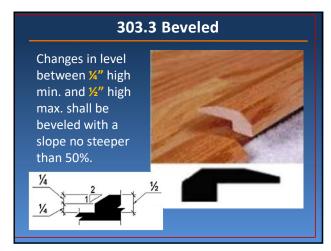


Where changes in level in floor or ground surfaces are not permitted, the surface must be level (slope of 2% max).

Where changes in level *are* permitted, they must comply with TAS 303.

81









There are 12 accessible rooms and spaces that specifically require a turning space:

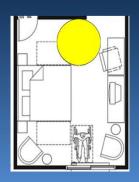
- 1. Toilet and bathing facilities (603.2.1)
- 2. Saunas and steam rooms (612.3)





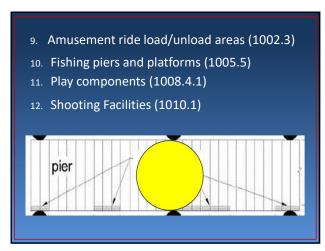
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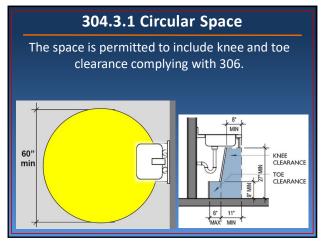
- 4. Transient lodging guest rooms (806.2.6)
- 5. Residential dwelling units (809.2.2)
- 6. Medical and longterm care patient rooms (805.2)

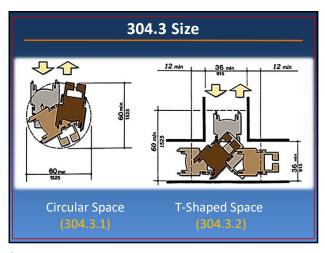


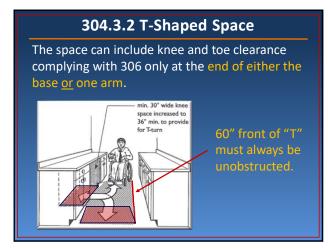
- 7. Courtroom stations accessed by ramps or lifts (808.2)
- 8. Holding and housing cells (807.2.1)















A theater uses unpaid actors that are hoping for a "big break". A dressing room is provided in a renovated furnace room. The floor of the room slopes 2.8% toward a floor drain. Is this OK?

PLENSING RIME: Flan Plan

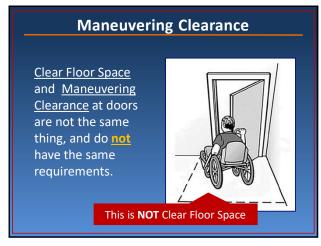
Entering Tolk
1. Islan Draing Tolk
2. Islan Draing Tolk
3. Islan Draing Tolk
4. Island Draing Tolk
5. Island Draing Tolk
6. Island Drain

95



96

Clear spaces are required at accessible elements, fixtures, and controls so that people with disabilities, including those who use wheelchairs, can approach and use them.







CFS Centering

Clear floor space must be centered on the element it serves only when specifically stated, otherwise centering is not required.

- 602.2 Drinking Fountains
- 611.2 Washing Machines & Dryers
- 703.4.2 Tactile Signs
- 804.3.1 Residential Kitchen Work Surfaces
- 904.4 Exception 24" Sales & service Counters
- 1009.4.1 Pool Transfer Walls

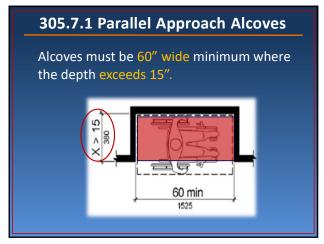
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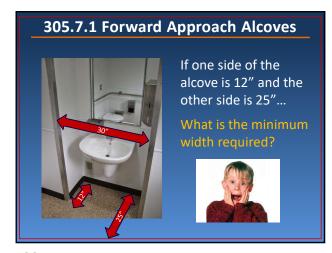


102

When a CFS is confined on all or part of 3 sides, and the depth exceeds 24", an alcove is created and the CFS must be 36" wide.





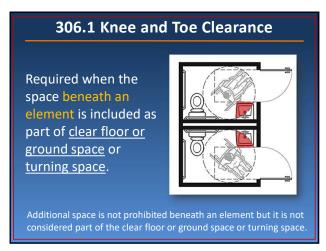


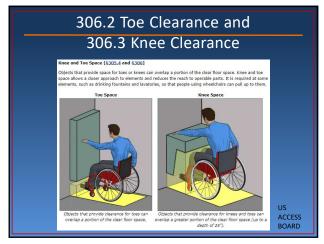


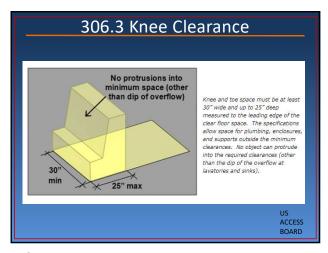


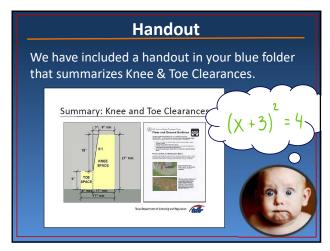
108

Knee & Toe Clearances Required Drinking Fountains Lavatories & Sinks Dining & Work Surfaces Sales & Service Counters When using a forward approach





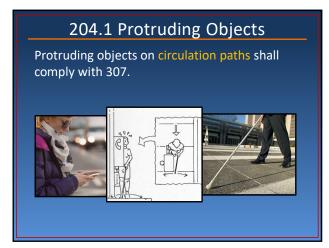












An exterior or interior way of passage provided for pedestrian travel, including but not limited to, walks, hallways, courtyards, elevators, platform lifts, ramps, stairways, and landings.

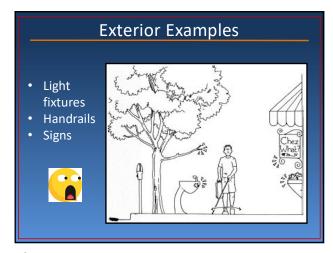
Objects with leading edges more than 27" and not more than 80" above the finish floor or ground shall protrude 4" maximum horizontally into the circulation path.

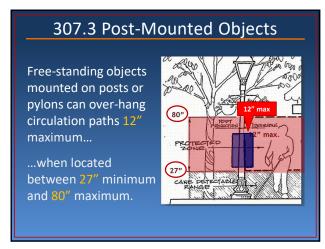




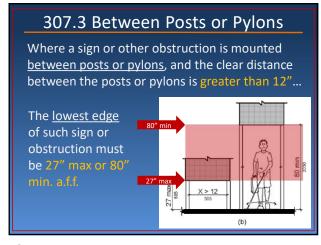


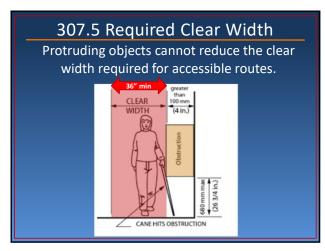


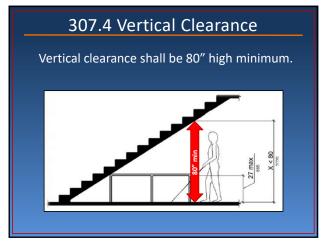












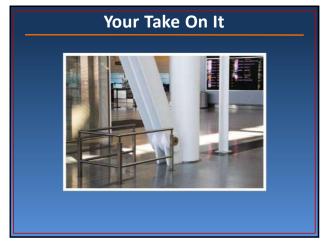
129

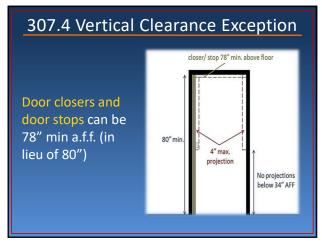
307.4 Vertical Clearance

Vertical clearance must be 80" high minimum.

- Guardrails or other barriers must be provided where the vertical clearance is less than 80" high.
- The leading edge of the guardrail or barrier must be located 27" a.f.f. maximum.









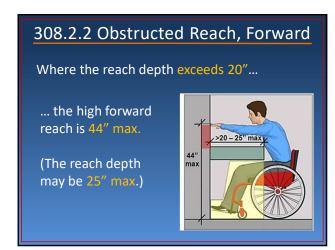






308.2.1 Unobstructed Forward Reach Where a forward reach is unobstructed: • High forward reach shall be 48" max a.f.f. • Low forward reach shall be 15" min a.f.f.





308.2.2 Obstructed High Reach Forward Reach

...the clear floor space must extend beneath the element for a distance not less than the required reach depth over the obstruction.



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308.3.1 Unobstructed Side Reach

Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed...

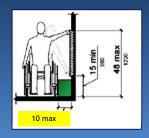
- High side reach is 48" max a.f.f.
- Low side reach is 15" min a.f.f.

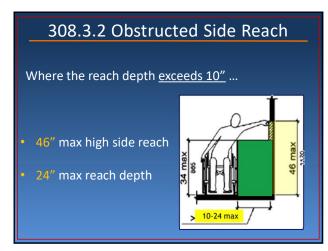


141

308.3.1 Unobstructed Exception 1

An obstruction is permitted between the clear floor or ground space and the element where the depth of the obstruction is 10" max.









106.5.40 Operable Part

A component of an element used to...

- Insert objects
- Withdraw objects

or to

- Activate
- Deactivate
- Adjust the element



The actual operation of a key, padlock, or other device or element that is not fixed is not subject to compliance.

146

Operable Parts

- Light switches
- Circuit breakers
- Plumbing fixture controls



- Duplex and other convenience receptacles
- Environmental and appliance controls

147

205.1 General Exceptions

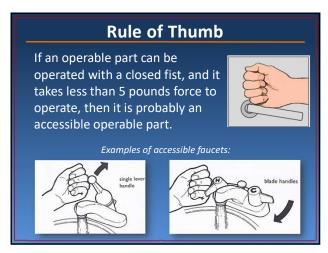
- Operable parts intended for use only by service or maintenance personnel
- Electrical or communication receptacles serving a dedicated use















Next: SECTION 3 Primary Function Areas Employee Work Areas Kitchens