

# Housing For Everyone

Promoting Universal and Inclusive Design  
in Residential Environments

2016 AIMHO Annual Conference // Shifting Perspectives // Boulder, Colorado



# Agenda

Introduction

Understanding  
the Law

Concepts and  
Strategies

Avoiding  
Common Mistakes

Name That Barrier!

Lessons Learned

Questions



## Presenters

### **Patrick "PC" Call** **Executive Director**

Housing & Residential Education  
University of Denver

**26 years of housing and  
residence hall life experience**

**Built over 3,500 beds on 3 campuses**

**Former experience:**  
**University of Wyoming,**  
**University of New Mexico,**  
**University of Arizona**

### **Kurt Haapala AIA LEED AP** **Partner**

Mahlum Architects  
Portland, Oregon & Seattle, Washington

**22 years of architectural experience**

**Developed over 15,000 beds on over 28 university &  
college campuses**

**Frequent speaker and author on issues of student housing  
design and student success**

**First LEED Platinum Residence Hall in the Nation  
(Ackerman Hall at Western Oregon University)**



**UNIVERSITY** of  
**DENVER**

**The oldest, independent  
university in the Rocky  
Mountain Region**

**Classified by the  
Carnegie Foundation as  
a research university**

**Rated 64th in the  
country for best value  
among private  
universities (Kiplinger's  
Personal Finance  
magazine, 2015)**

**11,796 students**

**One faculty member to  
every 11 students**

**701 full-time faculty  
members (90% with  
highest degree possible  
in their field)**



# mahlum

**Founded in 1938**

**Offices in Seattle  
and Portland**

**70 professional staff**

**Leaders in sustainable  
and environmental  
responsive design**

**15,000+ student beds  
on over 35 University  
and College campuses**

**Industry leader in the  
planning and design of  
student housing  
facilities**

**Committed to creating  
healthy and enduring  
communities to  
support the lives of  
future generations**



# mahlum

**University of North Dakota  
University of Wyoming  
University of Idaho  
University of San Diego  
San Diego State University  
University of California, Davis  
University of California, Merced  
University of Washington  
Washington State University**

**Central Washington University  
Eastern Washington University  
Western Washington University  
The Evergreen State College  
Seattle University  
University of Puget Sound  
Cornish College of Arts  
University of Oregon  
Oregon State University**

**Portland State University  
Western Oregon University  
Southern Oregon University  
Oregon Institute of Technology  
Pacific University  
Lewis & Clark College  
Linfield College  
Reed College  
Willamette University**

The background of the slide is a dark, grayscale photograph of a person in a wheelchair on a city street. The person is in the foreground, slightly to the right, and is looking towards the camera. The street is lined with buildings, and there are other people and vehicles in the background, though they are out of focus. The overall tone is somber and professional.

# Understanding the Law

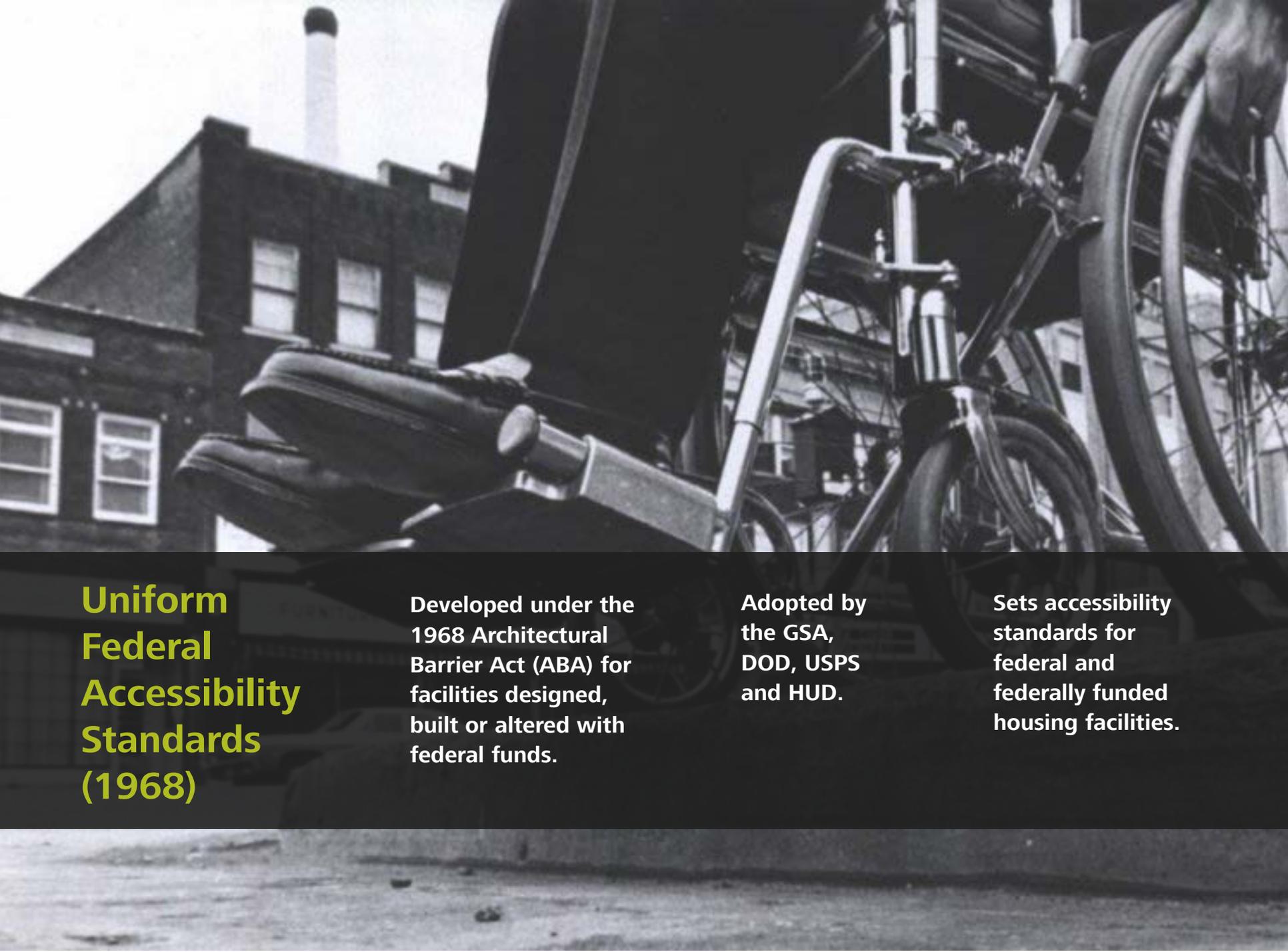
## Civil Rights, Codes & Regulations

**Uniform  
Federal  
Accessibility  
Standards  
(1968)**

**Title IX  
(1972)  
  
Section 504  
of the  
Rehabilitation  
Act (1973)**

**Fair Housing  
Act (1968)  
  
Americans  
with  
Disabilities  
Act (1990)**





## **Uniform Federal Accessibility Standards (1968)**

Developed under the 1968 Architectural Barrier Act (ABA) for facilities designed, built or altered with federal funds.

Adopted by the GSA, DOD, USPS and HUD.

Sets accessibility standards for federal and federally funded housing facilities.

**"INJUSTICE ANYWHERE IS A THREAT  
TO JUSTICE EVERYWHERE."**

*Martin Luther King, Jr.*





**"INJUSTICE ANYWHERE IS A THREAT  
TO JUSTICE EVERYWHERE."**  
*Martin Luther King, Jr.*

## Section 504 of the Rehabilitation Act (1973)

Bans discrimination on the basis of disability by recipients of Federal funds.

Applies to any institution, **private or public**, that has students and/or receives any federal funds.

This civil rights statute is the first time people with disabilities were seen as a minority class.

**WE  
DEMAND!**

**DECENT  
HOUSING  
NOW!**

**WE  
DEMAND  
AN FEPC  
LAW  
NOW!**

**PROHIBIT DISCRIMINATION  
IN HOUSING AND  
COMMERCIAL REAL ESTATE  
BY THE FEDERAL GOVERNMENT**





## Fair Housing Act (1968)

Outlawed refusal to sell or rent to any person because of race, color, religion, sex, national origin or disability.

Covers multi-family housing of four units or more (including university and collegiate housing).

Law is enforced through HUD.







## **Americans with Disabilities Act – ADA (1990)**

Prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, state and local government services, public accommodations, commercial facilities, and transportation.

Mandates establishment of TDD/telephone relay services.

Law is enforced through the US Department of Justice.





Why Brandi Chastain and the U.S. Women's Soccer Team Were Unbeatable

JULY 10, 1999  
www.esnl.com



## Title IX (1972)

Prohibits discrimination on the basis of sex in education programs and activities.

All public and private elementary and secondary schools, school districts, **colleges and universities** receiving any federal funds must comply with Title IX.

Discrimination on the basis of sex can include: sexual harassment or sexual violence, such as rape, sexual assault, sexual battery and sexual coercion.



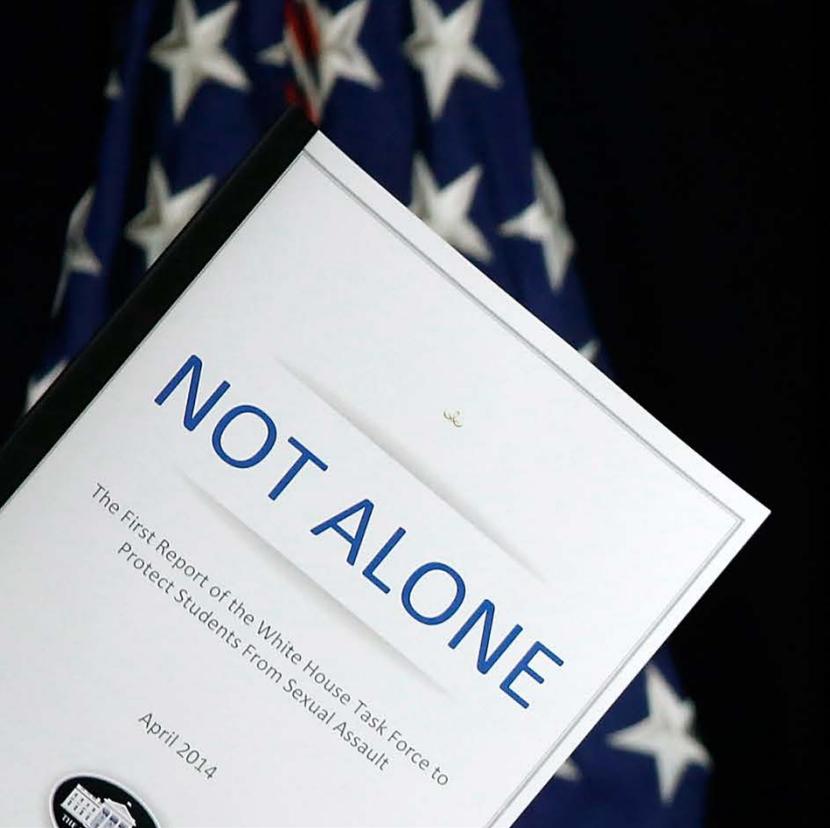


# NOT ALONE

The First Report of the White House Task Force to  
Protect Students From Sexual Assault

April 2014





## Title IX (2014 Update)

B. Students Protected  
by Title IX

B-1. Does Title IX  
protect all students  
from sexual violence?

Title IX protects **ALL STUDENTS** at recipient institutions from sex discrimination, including sexual violence. Any student can experience sexual violence: from elementary to professional school; male and female; straight, gay, lesbian, bisexual and transgender; part-time and full-time; with and without disabilities; and different races and national origins.

A wide, multi-level set of concrete stairs with a metal handrail, set against a dark background. The stairs are made of light-colored concrete and are arranged in several sections, with a handrail running along the right side. The background is dark and out of focus, suggesting an outdoor setting with some foliage on the left.

# Concepts and Strategies

...to implement equity and inclusion

# Concepts and Strategies

...to Implement Equity and Inclusion

**Overlapping Strategies**

**Gender Equity**

**Cultural Equity**

**Universal Design**

**Deaf Space**

**Full Spectrum Housing**

**OVERLAPPING  
STRATEGIES**

**Ambulatory**

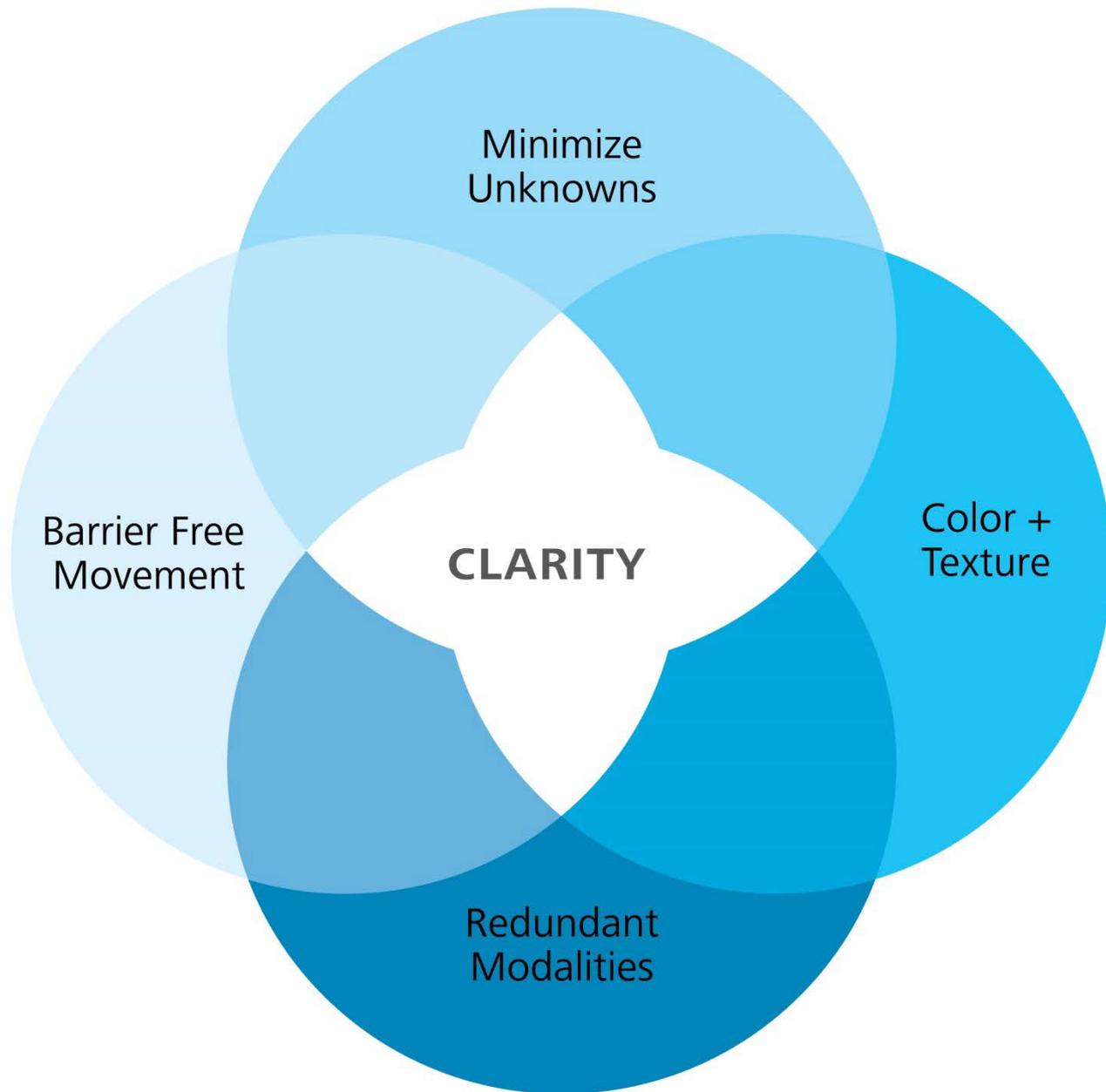
**Visual**

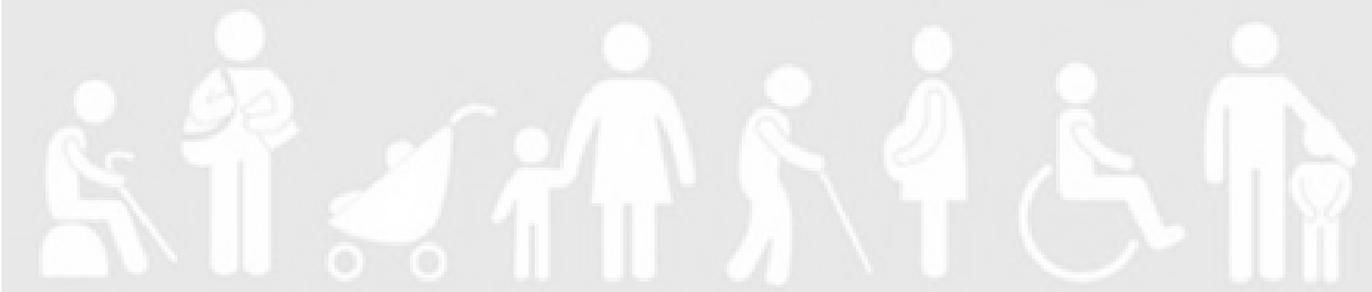
**Hearing**

**Cognitive**

**Mental Health**

**Support Animals**





**OVERLAPPING STRATEGIES**

**Ambulatory**

Clearance / approach

Reach range

Travel distance

Clear, equitable movement

Transitions & crossing paths





**OVERLAPPING  
STRATEGIES**

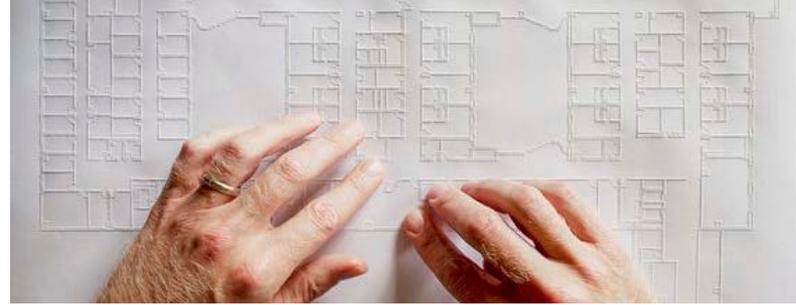
**Visual**

Textural cues

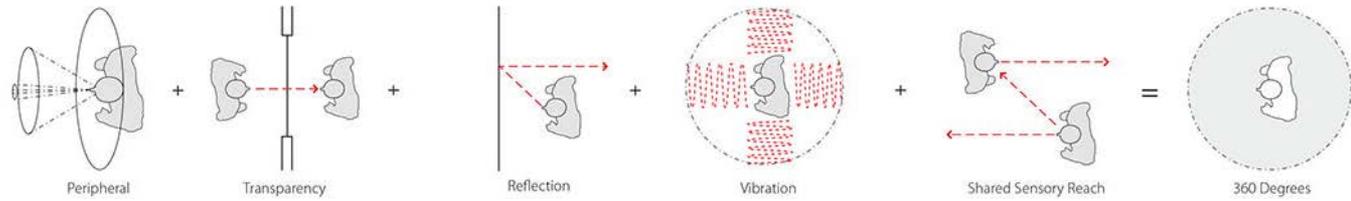
Auditory clarity

Reduced glare

Continuous  
travel paths







**OVERLAPPING STRATEGIES**

**Hearing**

Transparency

Visual contrast

Reduce glare

Space for signing

Vibration generation



**VISUAL RANGE**

**WALKWAYS**

**GROUP SPACE**



**OVERLAPPING  
STRATEGIES**

# Cognitive Mental Health

Being away / unplug

Understandable flow

Fascinate / hold  
attention

Compatibility of  
function





**OVERLAPPING  
STRATEGIES**

# Autism Spectrum

Order and  
predictability

Reduce visual clutter

Acoustic sensitivity

Material durability

Sensory sensitivity





**OVERLAPPING  
STRATEGIES**

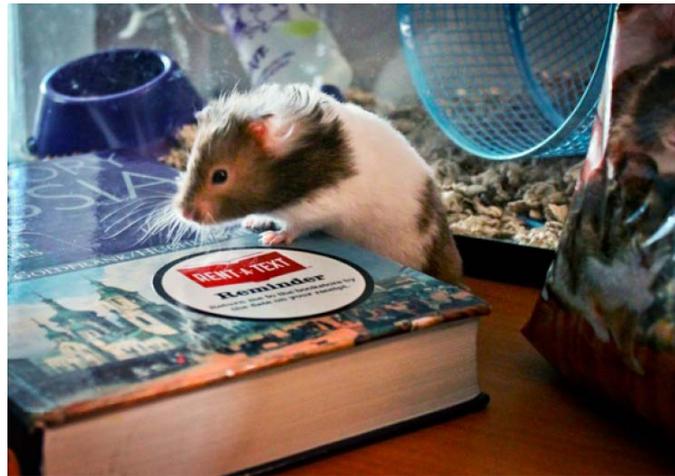
# Support Animals

Access to outdoors

Wash stations

Ventilation/filtration

Appropriate finishes





Dont Let  
Cat  
OUT! 😊  
thanks



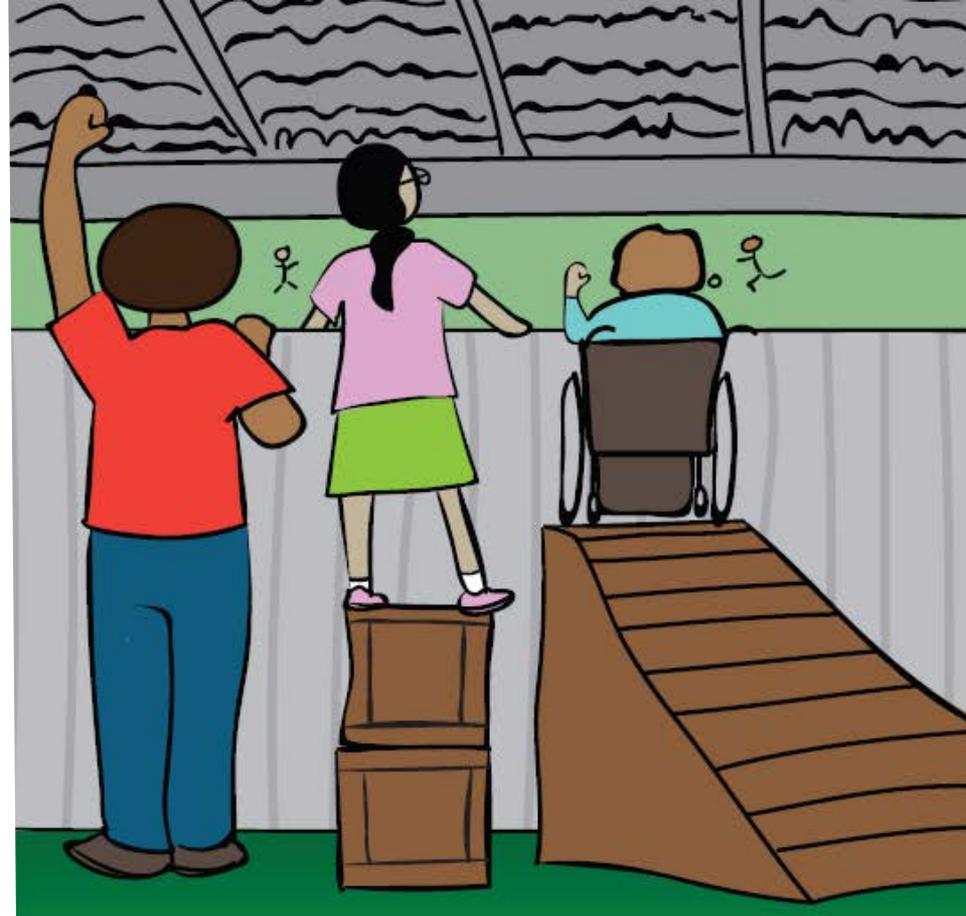
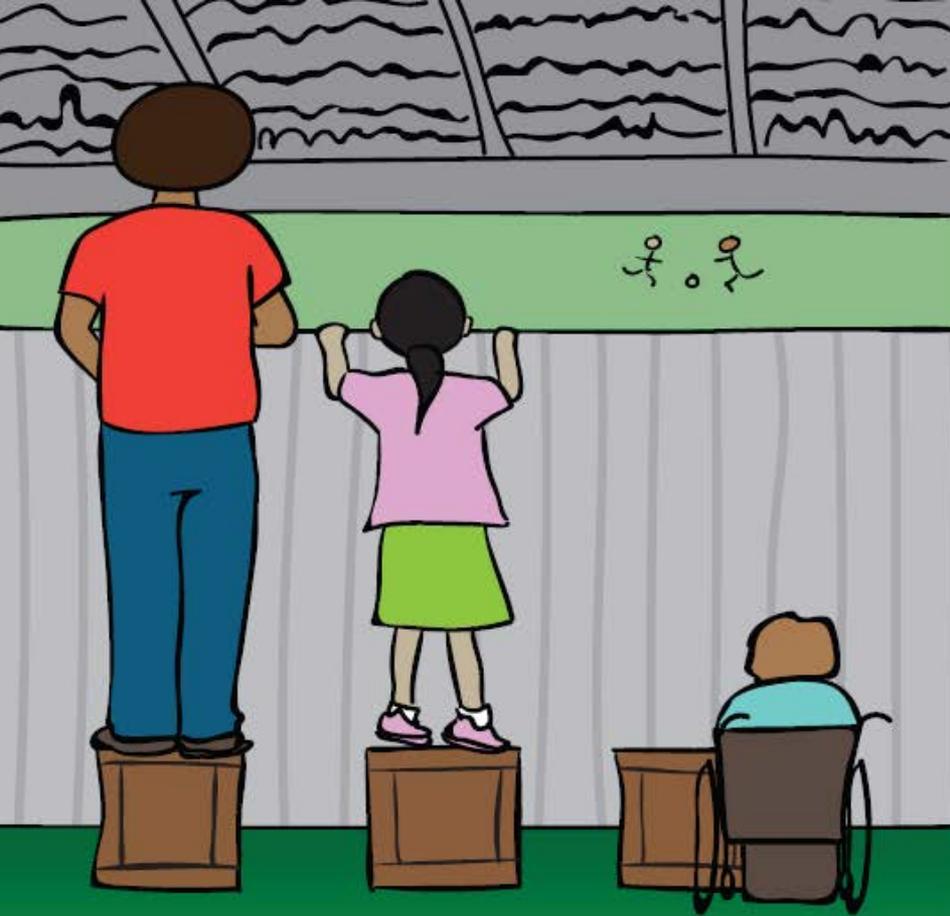
MISSING PET  
SNAKE!!!!

**\*\*HUGE REWARD\*\***

LAST SEEN SATURDAY  
NOVEMBER 5<sup>th</sup> at 7pm in the co op  
(please contact KLC Radio if you find the snake)



With  
**CAUTION CROW / LORD  
BROCKTREE / FAMSMARY**



## Equality = Sameness

Giving everyone the same thing.  
It only works if everyone starts  
from the same place.

## Equity = Fairness

We must ensure equity  
before we can enjoy equality.



## Gender Equity

The process of allocating resources, programs and decision-making fairly to both males and females without discrimination on the basis of sex... and addressing any imbalances in the benefits available to males and females.

### Considerations:

Perceptions

Signage conventions

Safety & security

Enhanced levels of privacy

Hygiene

Acoustics

Plumbing code implications

Accessibility (ADA) code implications

# University of Oregon Residential Learning Center



# University of Oregon

## Residential Learning Center, Gender Inclusive Restroom



# University of Oregon

## Residential Learning Center, Gender Inclusive Restroom





## Cultural Equity

To ensure that all people have the right to inherit and develop their intellectual, emotional, material and spiritual traditions.

### Considerations:

English proficiencies

Culture shock /  
depression

Religious support

Food culture

24/7 Technologies

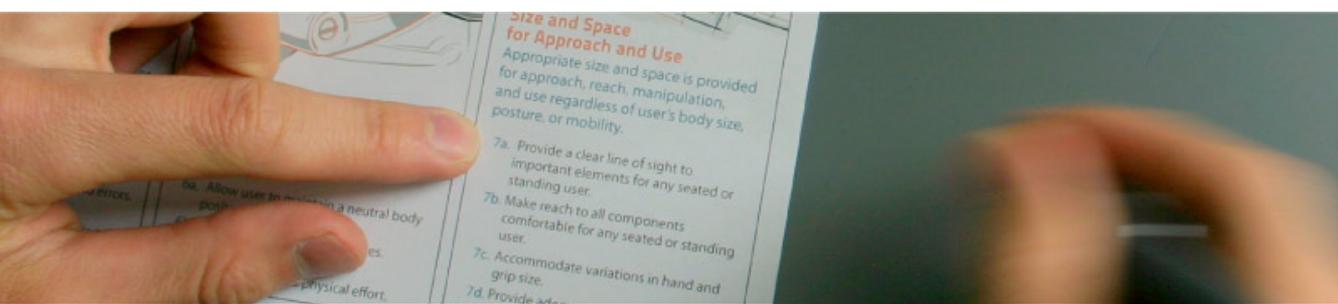
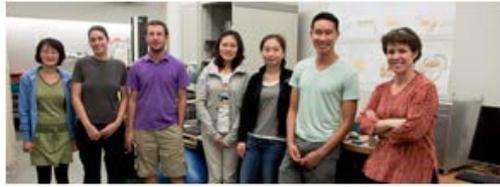
Signage /  
communication

# Oregon State University International Live-Learn (INTO)









## Universal Design

Design standards that  
"go beyond the minimums."

### Seven Principles:

Equitable use

Flexibility in use

Simple and intuitive use

Perceptible information

Tolerance for error

Low physical effort

Size and space for approach and use

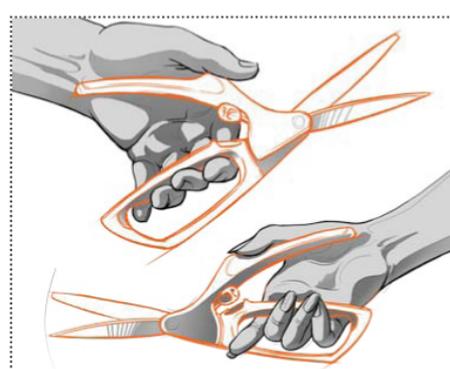
# The Principles of Universal Design



## Equitable Use

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

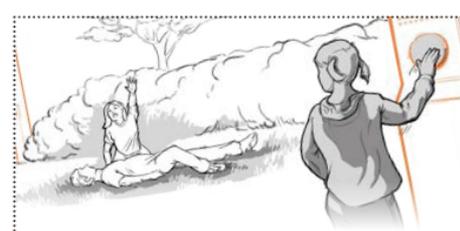
- 1a. Provide the same means of use for all users: identical whenever possible; equivalent when not.
- 1b. Avoid segregating or stigmatizing any users.
- 1c. Provisions for privacy, security, and safety should be equally available to all users.
- 1d. Make the design appealing to all users.



## Flexibility in Use

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

- 2a. Provide choice in methods of use.
- 2b. Accommodate right- or left-handed access and use.
- 2c. Facilitate the user's accuracy and precision.
- 2d. Provide adaptability to the user's pace.



## Simple and Intuitive Use

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

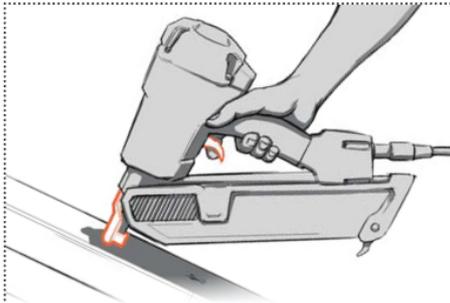
- 3a. Eliminate unnecessary complexity.
- 3b. Be consistent with user expectations and intuition.
- 3c. Accommodate a wide range of literacy and language skills.
- 3d. Arrange information consistent with its importance.
- 3e. Provide effective prompting and feedback during and after task completion.



## Perceptible Information

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

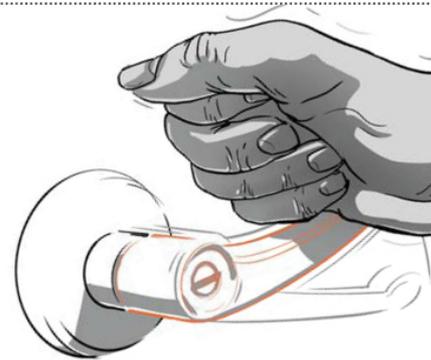
- 4a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
- 4b. Provide adequate contrast between essential information and its surroundings.
- 4c. Maximize "legibility" of essential information.
- 4d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- 4e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.



## Tolerance for Error

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

- 5a. Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
- 5b. Provide warnings of hazards and errors.
- 5c. Provide fail safe features.
- 5d. Discourage unconscious action in tasks that require vigilance.



## Low Physical Effort

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

- 6a. Allow user to maintain a neutral body position.
- 6b. Use reasonable operating forces.
- 6c. Minimize repetitive actions.
- 6d. Minimize sustained physical effort.



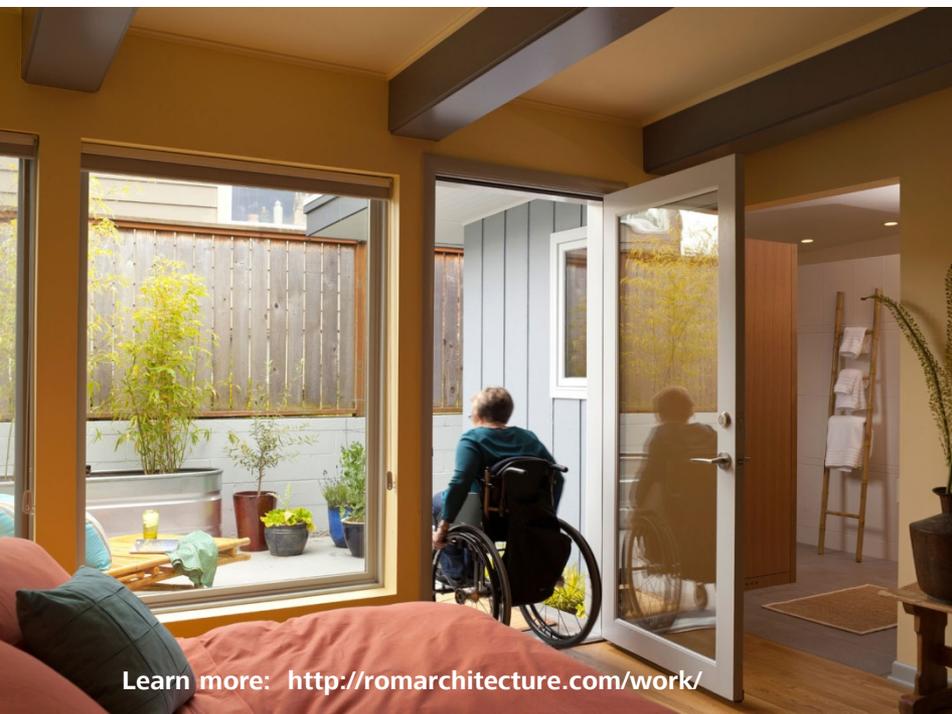
## Size and Space for Approach and Use

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

- 7a. Provide a clear line of sight to important elements for any seated or standing user.
- 7b. Make reach to all components comfortable for any seated or standing user.
- 7c. Accommodate variations in hand and grip size.
- 7d. Provide adequate space for the use of assistive devices or personal assistance.



Learn more: <http://romarchitecture.com/work/>



Learn more: <http://romarchitecture.com/work/>



Learn more: <http://romarchitecture.com/work/>



## Deaf Space

To guide and inspire the design of environments that are completely responsive to, and expressive of, their unique ways of being.

### Design Guidelines:

Space & proximity

Sensory reach

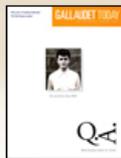
Mobility & proximity

Light & color

Acoustics &  
Electromagnetic  
Impulse (EMI)

## Campus Design and Planning

- ▀ [Services](#)
- ▀ [DeafSpace](#)
- ▀ [Projects](#)
- ▀ [Construction Updates](#)
- ▀ [2012 Facilities Master Plan](#)
- ▀ [2022 Campus Plan](#)
- ▀ [Vendor Information](#)
- ▀ [Contact Us](#)



Article on  
[Deaf Space](#)  
Gallaudet  
Today  
Alumni  
Magazine

Spring 2007

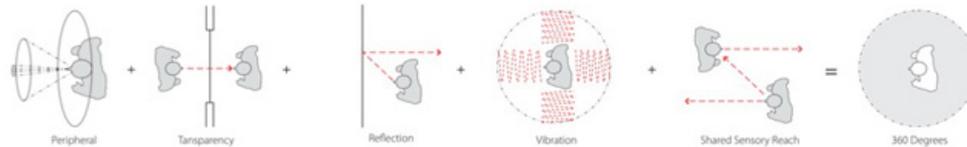
### Contact Information

Director: Hansel Bauman  
Contact: Derrick Behm  
College Hall 303

VP : 202-568-8760

[Email](#)

[Home](#) > [Campus Design](#) > [DeafSpace](#)



## What is DeafSpace?



Deaf people inhabit a rich sensory world where vision and touch are a primary means of spatial awareness and orientation. Many use sign language, a visual-kinetic mode of communication and maintain a strong cultural identity built around these sensibilities and shared life experiences. Our built environment, largely constructed by and for hearing individuals, presents a variety of surprising challenges to which deaf people have responded with a particular way of altering their surroundings to fit their unique ways-of-being. This approach is often referred to as DeafSpace.

# Gallaudet University Residence Hall





Images: Gallaudet University Residence Hall by LTL Architects



Image: Sweetwater Spectrum Housing by Leddy Maytum Stacy Architects

## Full Spectrum Housing

Design standards that “go beyond the minimums”

Learn more:  
<https://sustainability.asu.edu/stardust-new/project-archive/advancing-full-spectrum-housing/>

### Eight Principles:

Ensure safety and security

Maximize familiarity, stability and clarity

Minimize sensory overload

Provide adequate choice and independence

Foster health & wellness

Enhance one’s dignity

Allow opportunities for controlling social interaction & privacy

Ensure accessibility and support in the surrounding neighborhood

# ADVANCING FULL SPECTRUM HOUSING

Designing for Adults with Autism Spectrum Disorders

## BEDROOMS

Individual bedrooms with en-suite bathrooms, adequate storage, and a desk provide residents with privacy and dignity.



### CHOICE & INDEPENDENCE

- Include a desk area with task lighting.
- Closets should be internally lit and outfitted with a built-in organization system to assist residents with their daily dressing and grooming tasks.



### HEALTH & WELLNESS

- Each bedroom should have individual climate control and a ventilation fan.



### DIGNITY

- Residents should have their own bedrooms with en-suite accessible bathrooms for privacy and dignity.



Bedroom storage

#### MATERIALS AND RESOURCES

See "Materials" and "Appliances & Fixtures" section for more information

## SENSORY ROOMS

Providing a separate room that allows residents to control the atmosphere leads to decreased stress and anxiety.



### SENSORY SENSITIVITY

- A room that allows residents to modify the sensory inputs such as lighting and music helps people with autism relax, process the larger environment, and modify behaviors.
- Sensory rooms should be painted white or soft colors to produce a calming effect.
- Texture can be introduced for added sensory engagement.
- The room should have a defined sense of enclosure, to promote feelings of safety and security for the residents.
- The room should be designed to be acoustically contained: do not allow outside noises in and prevent noise from within from escaping.
- Snoezelen Rooms (Dutch for "sniff" and "doze") are an established sensory room model that can be referenced.



Snoezelen sensory room

#### MATERIALS AND RESOURCES

Snoezelen rooms: [http://www.worldwidesnoezelen.com/component/option.com\\_frontpage/Itemid,1/](http://www.worldwidesnoezelen.com/component/option.com_frontpage/Itemid,1/)  
Image above is a file from the Wikimedia Commons, made available by Ciell at <http://en.wikipedia.org/wiki/File:Snoezelruimte.JPG>. This file is licensed under the Creative Commons Attribution ShareAlike 2.5, info at <http://creativecommons.org/licenses/by-sa/2.5/>.

# ADVANCING FULL SPECTRUM HOUSING

Designing for Adults with Autism Spectrum Disorders

## BATHROOMS

At least one bathroom per unit should be fully accessible to accommodate residents with varying levels of mobility.



### SAFETY & SECURITY

- Install nonslip tile flooring.



### HEALTH & WELLNESS

- In units with multiple residents, there should be one or more bathrooms for general use.
- In multistory units include a main floor bathroom for accessibility.
- Bathrooms should have ample room for staff to assist residents.
- Sinks should be wall hung for accessibility.
- Grab bars should be installed by the toilet and in the shower and bath.



### DURABILITY

- Toilets should have concealed cisterns and use a push panel flush system for durability and ease of use.
- Install tile or waterproof panels on all walls to minimize possible water damage.



Wall-mounted sink

### MATERIALS AND RESOURCES

See "Materials" and "Appliances & Fixtures" section for more information

## LAUNDRY ROOM

Each unit should include a bright laundry room with a large folding area and accessible appliances.



### FAMILIARITY & CLARITY

- Include ample counter space to accommodate sorting, stain prep, and folding.
- Provide storage for laundry supplies.



### SENSORY SENSITIVITY

- Provide adequate ventilation through inclusion of operable windows and ducted fans.
- Provide adequate acoustic insulation to contain noise.



### HEALTH & WELLNESS

- Include a laundry sink or commercial hopper to contend with heavily soiled items.
- Install frontload washers and dryers for ease of accessibility; if necessary, raise the appliances to accommodate wheelchair riders.



Laundry room with storage and folding area



### DURABILITY

- Install a floor drain to accommodate spills.
- Flooring should be a continuous, durable surface.

### MATERIALS AND RESOURCES

Information on accessible washers & dryers: <http://www.afb.org/afbpress/Pub.asp?DocID=aw080303>  
Shake absorber pads for washing machines: [http://www.kelletent.com/vib\\_isol.html](http://www.kelletent.com/vib_isol.html)



Images: Sweetwater Spectrum Housing by Leddy Maytum Stacy Architects



# Avoiding Common Mistakes

Top 10 Design and Operational Challenges

# Avoiding Common Mistakes

## Top 10 Design and Operational Challenges

### Design Challenges

- Bathroom & Shower Configurations
- Entrances (Door & Thresholds)
- Slopes & Cross-slopes
- Reach Ranges
- Data & Electrical Outlets/Switches

### Operational Challenges

- Floor Materials & Transitions
- Signage & Way finding
- Toilet Accessories (location & heights)
- Protruding Objects & Obstructions
- Maintaining Path of Travel, Including Furnishings

A photograph of a public restroom with three white stalls. Each stall contains a toilet and a hand sanitizer dispenser. The walls are white with horizontal lines, and the floor is dark wood-look tile. The image is dimly lit, with the text overlaid in bright yellow and green.

# Avoiding Common Mistakes

## Top 10 Design and Operational Challenges

### Design Challenges

Bathroom & Shower  
Configurations

Entrances (Door & Thresholds)

Slopes & Cross-slopes

Reach Ranges

Data & Electrical Outlets/Switches

**DESIGN  
CHALLENGE**

# Bathroom and Shower Configurations

Accessible baths require 60" clear turning space.

Type B baths require 30" x 48" clear floor space beyond door swing.

Accessible toilet and bathing rooms must have clear maneuvering space at doors.

Particular care should be taken at in-swinging doors to provide both 18" on the pull side but depth of maneuvering clearance as well.

reinforced wall areas for future installation of grab bars around toilet and bathtub

additional inaccessible receptacle permitted

specifically designated clear floor space at bathtub allows greater access to the bathtub and its controls, see page 7.55

receptacle required in an accessible location

lever handles not required, but recommended

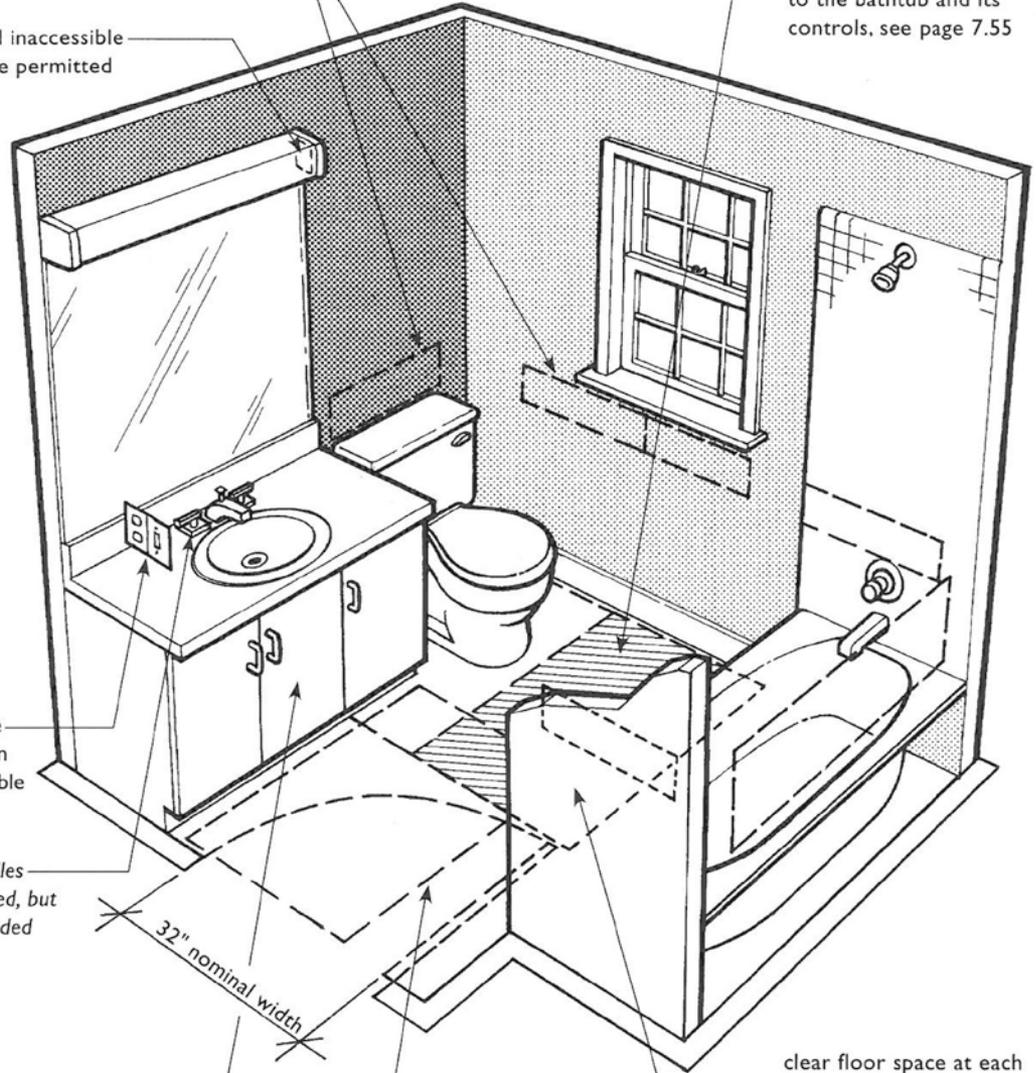
32" nominal width

fixed base cabinet acceptable since parallel approach centered on basin is possible

30" X 48" clear floor

clear floor space at each fixture required

30" X 48" min. clear floor space outside swing of door required



**DESIGN  
CHALLENGE**

## Entrances (Doors and Thresholds)

### Door Opening and Opening Force

All public exterior door forces shall meet 8-½ lbs of force or less.

Interior door forces shall meet 5 lbs or less.

Interior door hardware in all but Type B dwelling units shall be easily usable with one hand and not require tight gripping or twisting.

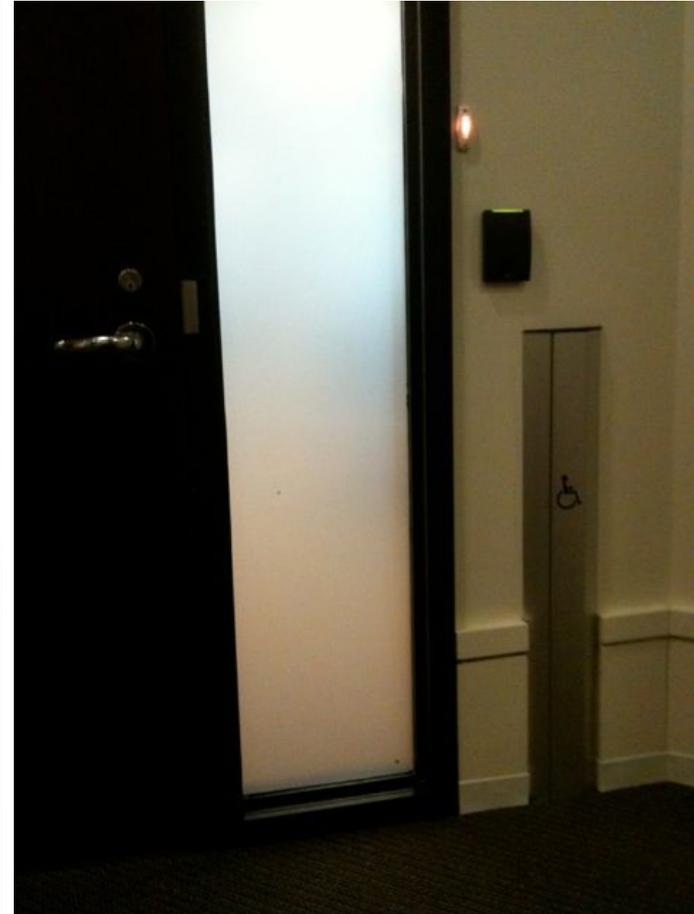


Image: [taylorlashell.blogspot.com/2011/10/wheelchair-adventure.html](http://taylorlashell.blogspot.com/2011/10/wheelchair-adventure.html)

**DESIGN  
CHALLENGE**

## **Entrances (Doors and Thresholds)**

### **Door Thresholds at Units**

Exterior door thresholds in both Accessible and Type B units shall be accessible up to a max of ½" for swing doors and up to ¾" for sliding doors.

Type B unit decks and balconies with impervious surfaces may have a transition of up to 4" drop from the interior unit level to the deck and be designed to allow a raised platform to be installed in the future.



Image: [www.greenbuildingadvisor](http://www.greenbuildingadvisor)

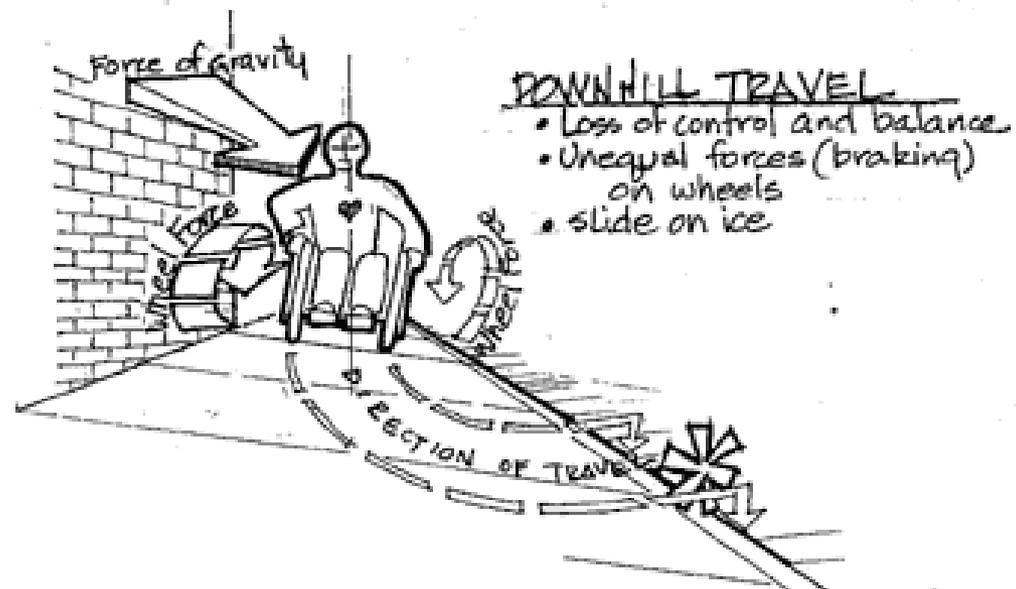
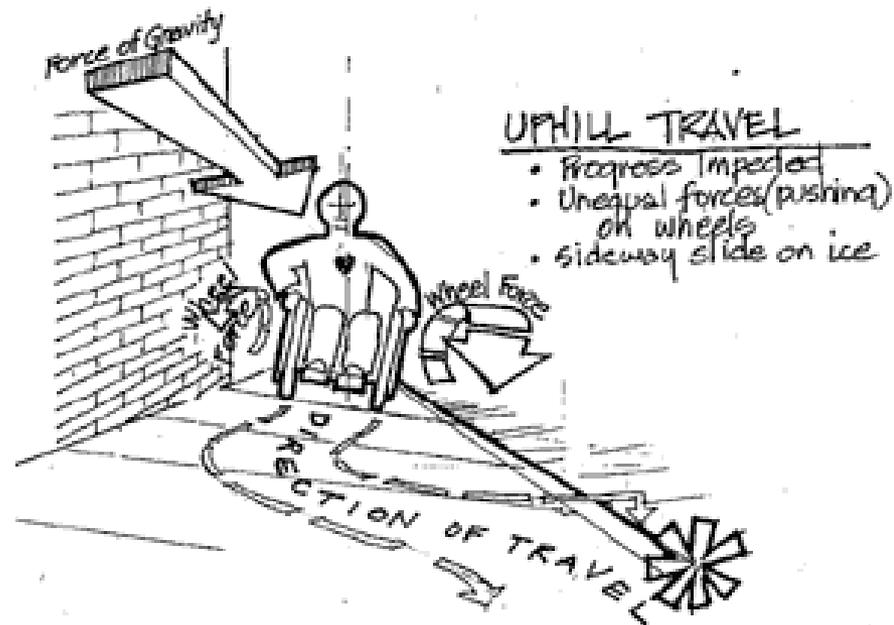
**DESIGN  
CHALLENGE**

# Slopes and Cross Slopes

Cross slope 2%  
(1:48) maximum.

Slopes between  
5% and 8.33% are  
considered ramps and  
must have handrails and  
edge protection.

8.33% slope is the  
maximum, requires effort  
by mobility device user.



EFFECT OF EXCESSIVE CROSS SLOPE

**DESIGN  
CHALLENGE**

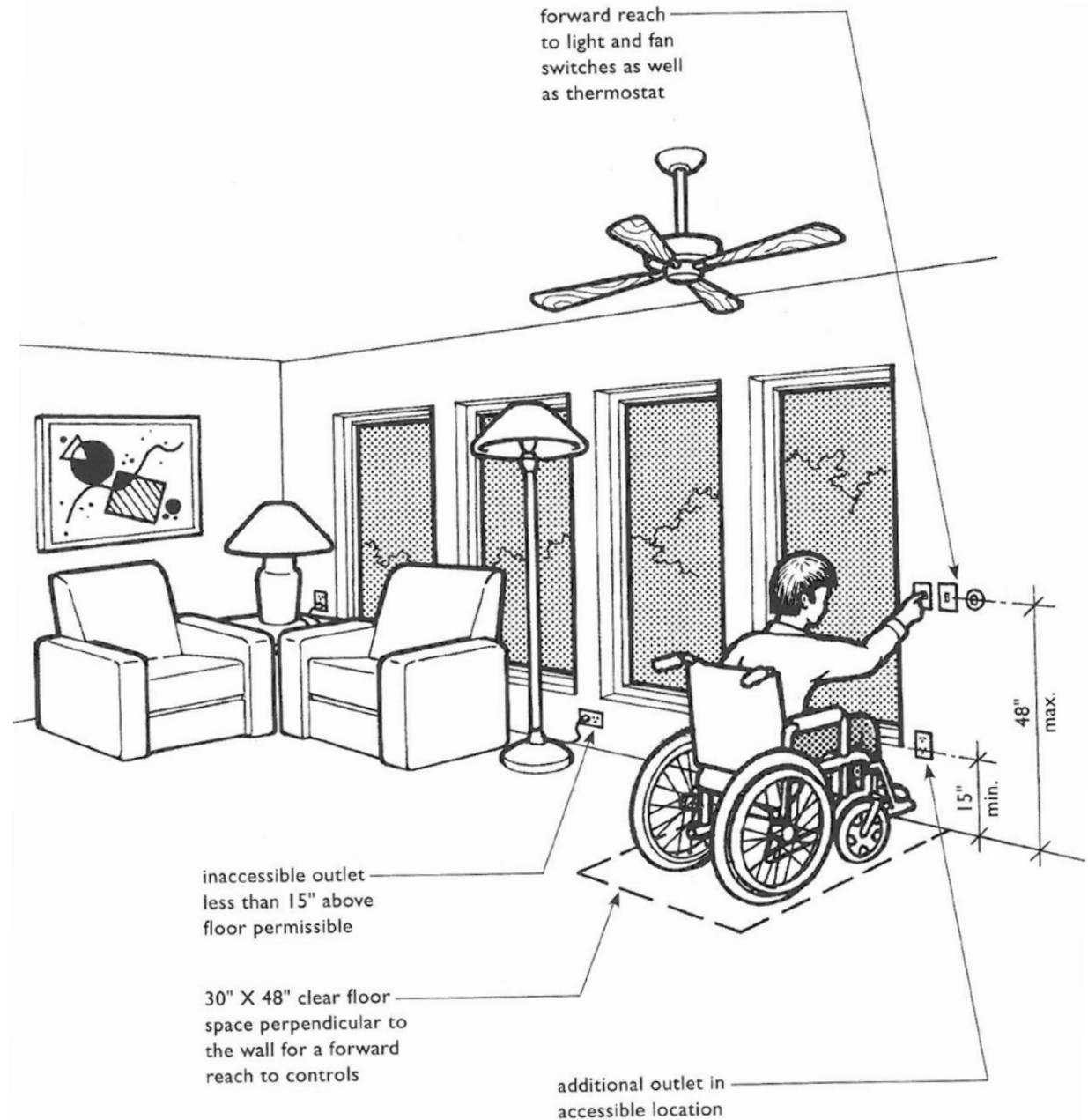
# Reach Ranges

User operated controls in all units are covered including panel box.

Appliance controls are covered in Accessible units.

Outlets and switches shall be placed with the top of the box at 48" and the bottom of the lowest box at 15" to ensure all outlets and controls are within the reach range.

Clear floor space for approach and use.



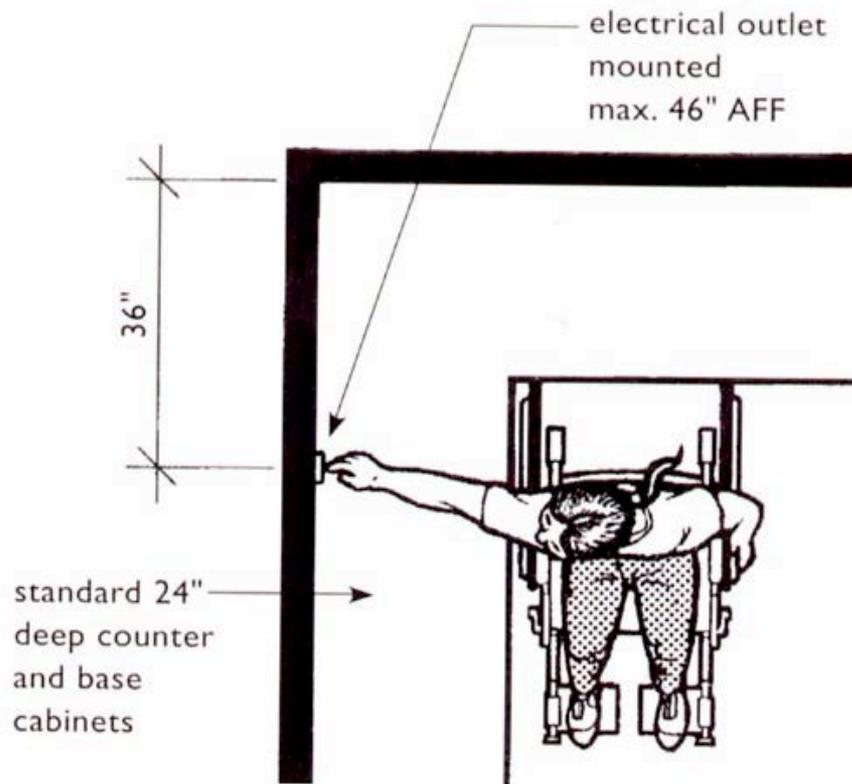
**DESIGN  
CHALLENGE**

## Data and Electrical Outlets/Switches

Electrical outlets in Accessible and Type B kitchens and baths shall have clear floor space for either forward or parallel approach.

General rule of thumb is to place outlets no closer than 36" from interior corners of kitchens.

Outlets over counters shall be 44" maximum AFF.



**Electrical Outlets on Walls  
Over Cabinets Must be a  
Minimum of 36" from a Corner**

# Avoiding Common Mistakes

## Top 10 Design and Operational Challenges

### Operational Challenges

Floor Materials & Transitions

Signage & Way finding

Toilet Accessories (location & heights)

Protruding Objects & Obstructions

Maintaining Path of Travel,  
Including Furnishings

**OPERATIONAL  
CHALLENGE**

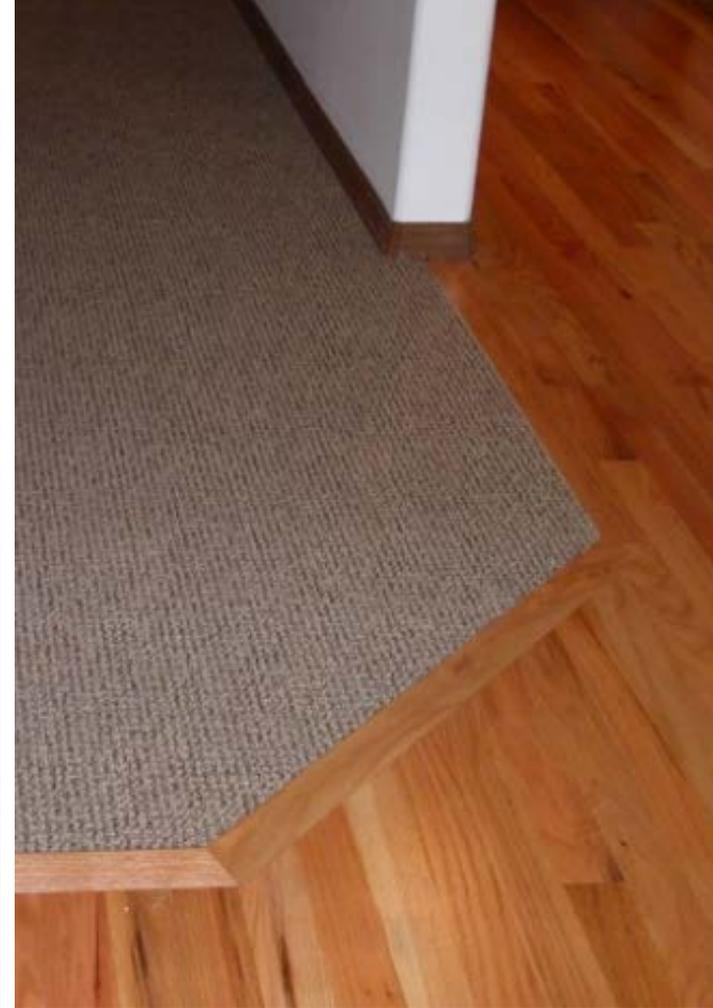
## Floor Materials and Transitions

Floor textures in public areas and Type A dwelling units must be firm, stable and slip-resistant.

Pay careful attention to walk-off mats.

Joints between exterior materials and openings in floor surfaces shall not allow a 1/2" sphere to enter (comply with 2003 ICC/ANSI A117.1 Section 302).

Transitions between floor materials shall be level, vertical up to 1/4" or beveled 1:2 up to 1/2".

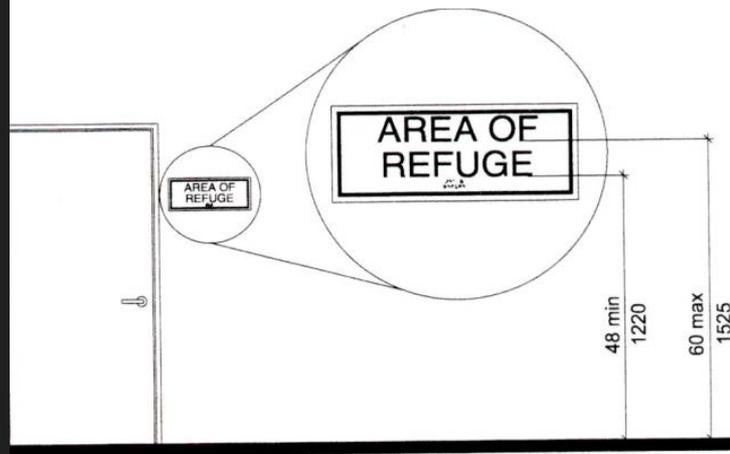


**OPERATIONAL  
CHALLENGE**

## Signage and Wayfinding

Signs that identify permanent rooms and spaces shall have tactile, raised and Braille characters and pictograms.

These signs shall be mounted 48" to 60" AFF to the bottom of the tactile lettering on the latch side of the door, approximately 9" from the jamb.



**Height of Tactile Characters  
Above Floor or Ground**



**OPERATIONAL  
CHALLENGE**

# Toilet Accessories (Location & Heights)

Even if installed originally, new vendor products can cause once-compliant space to become non-compliant.

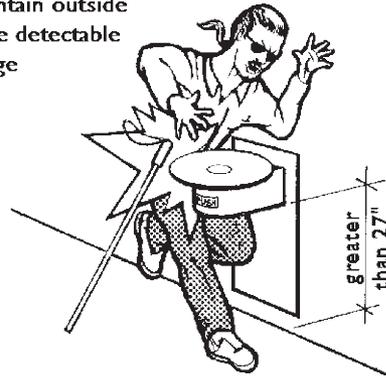


**OPERATIONAL  
CHALLENGE**

# Protruding Objects and Obstructions

Objects protruding into the accessible route, greater than 4" in the zone of 27" to 84" AFF.

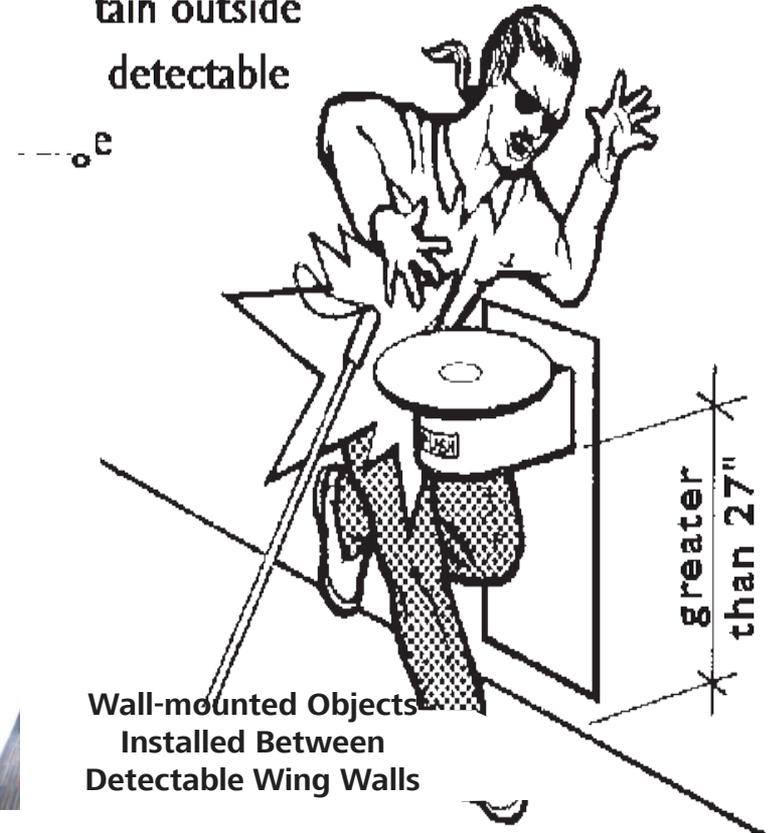
bottom edge of  
fountain outside  
cane detectable  
range



**Hazardous,  
Protruding Objects**



om edge of  
tain outside  
detectable



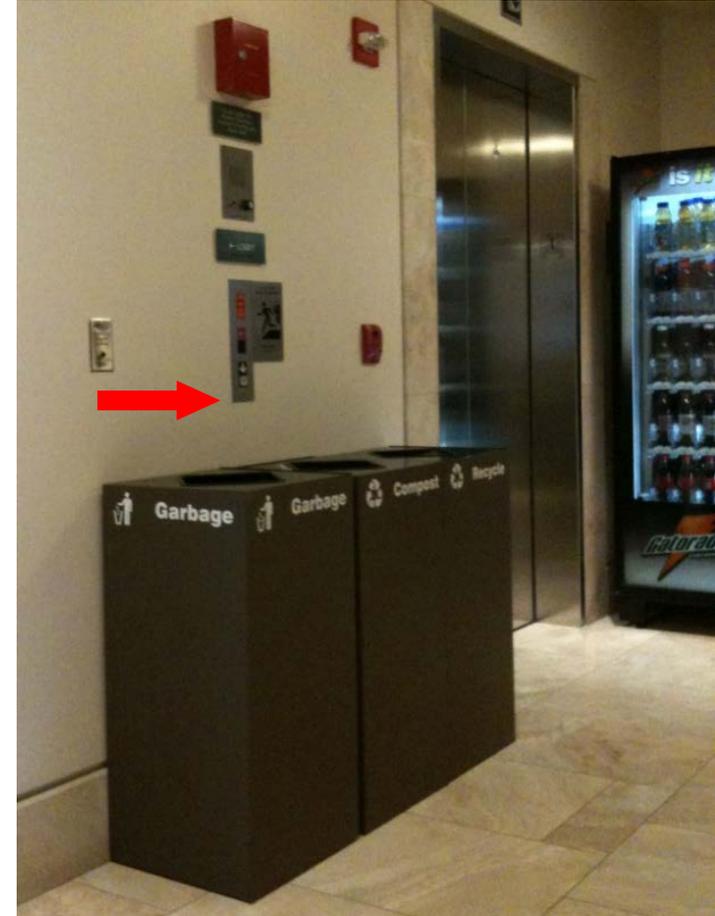
**Wall-mounted Objects  
Installed Between  
Detectable Wing Walls**

**OPERATIONAL  
CHALLENGE**

## Maintaining Path of Travel

Avoid adding furnishings that obstruct features that must be accessible.

Plan ahead for movable items such as furnishings to maintain accessible route.



**OPERATIONAL  
CHALLENGE**

**Furniture**

Plan to provide seating for wheelchair users in fixed and movable furnishings.

Layout furnishings to maintain 36" minimum aisle between tables/chairs.





# Name that Barrier!

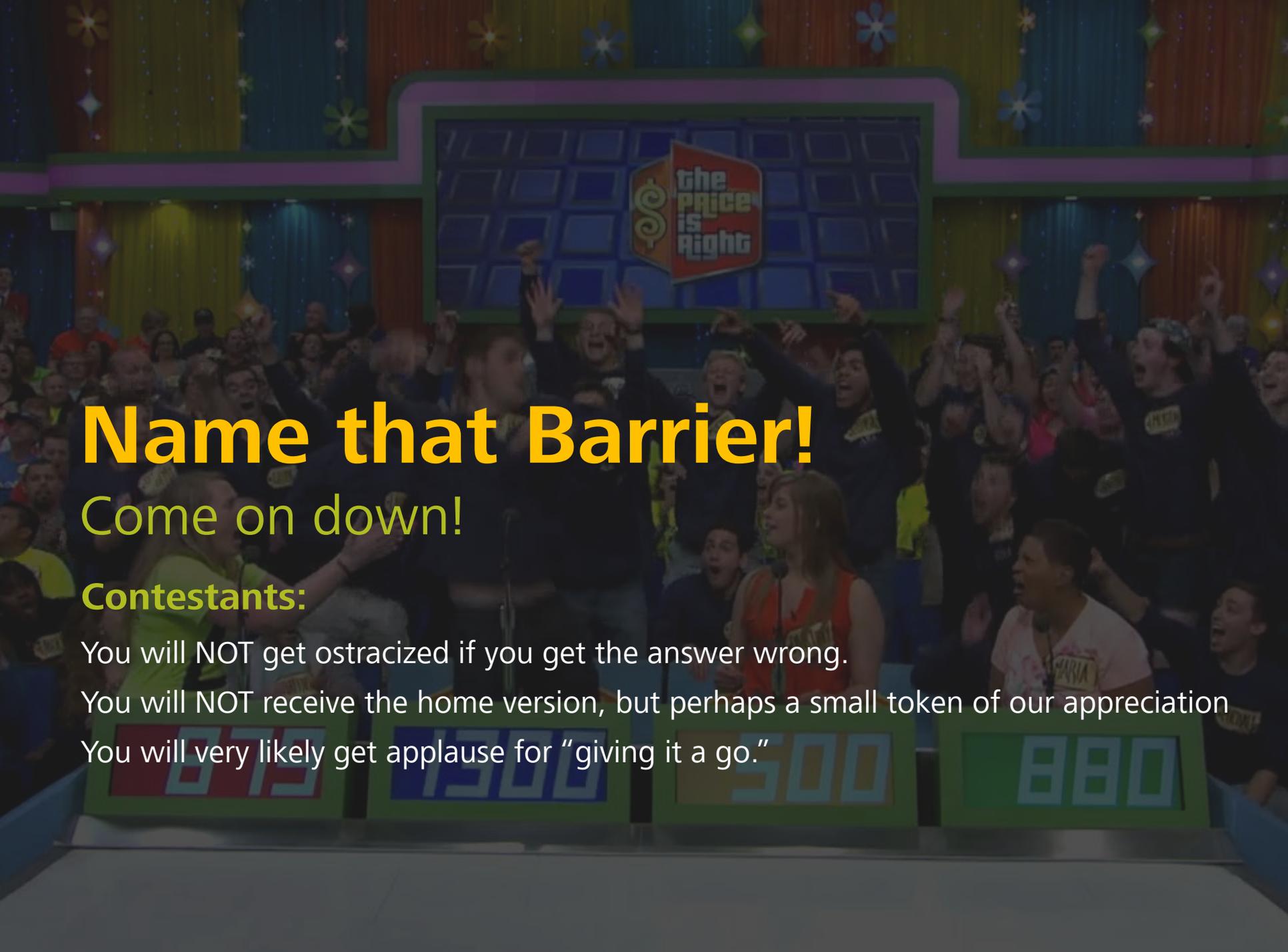
Come on down!

879

1300

500

880



# Name that Barrier!

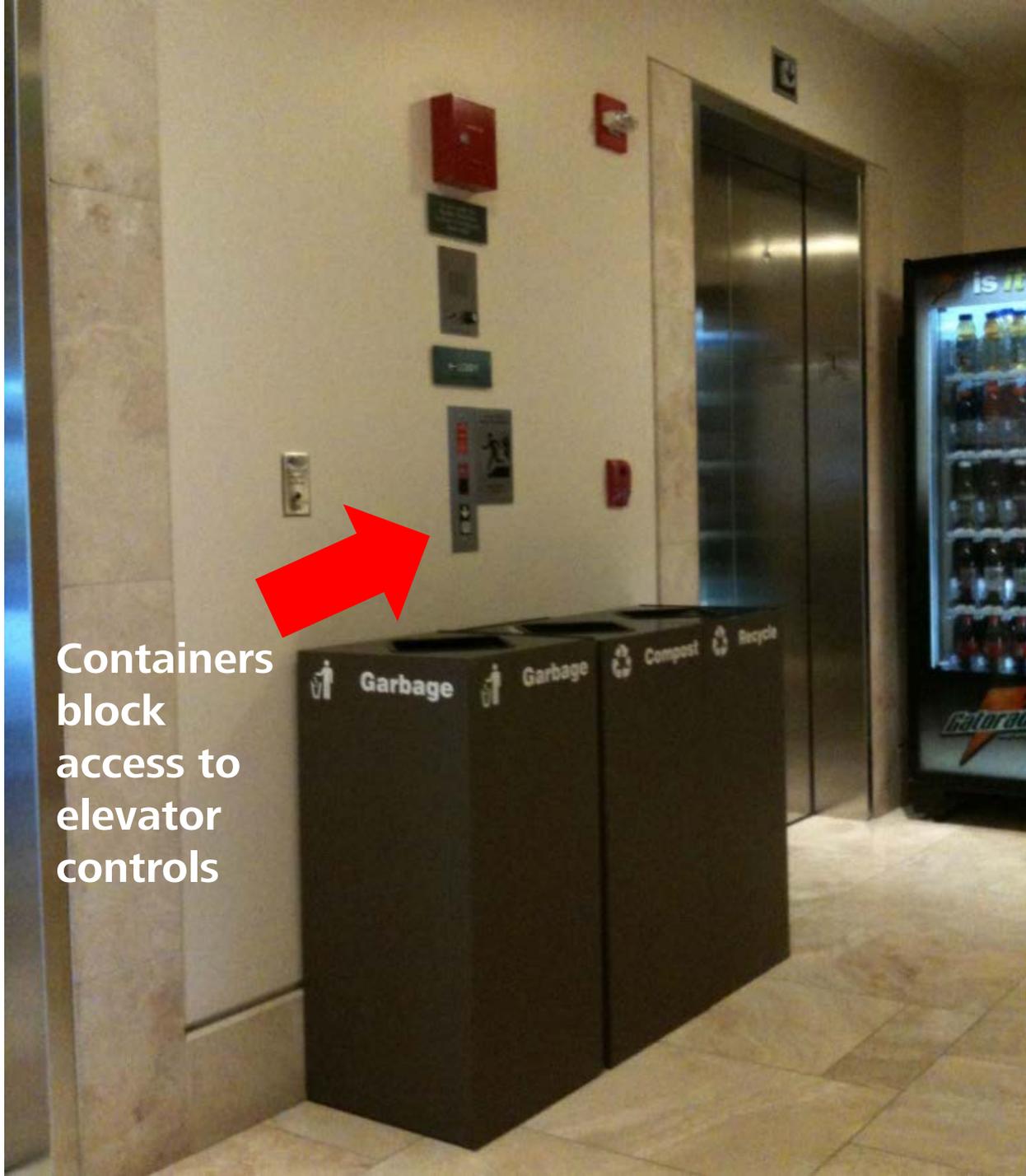
Come on down!

## Contestants:

You will NOT get ostracized if you get the answer wrong.

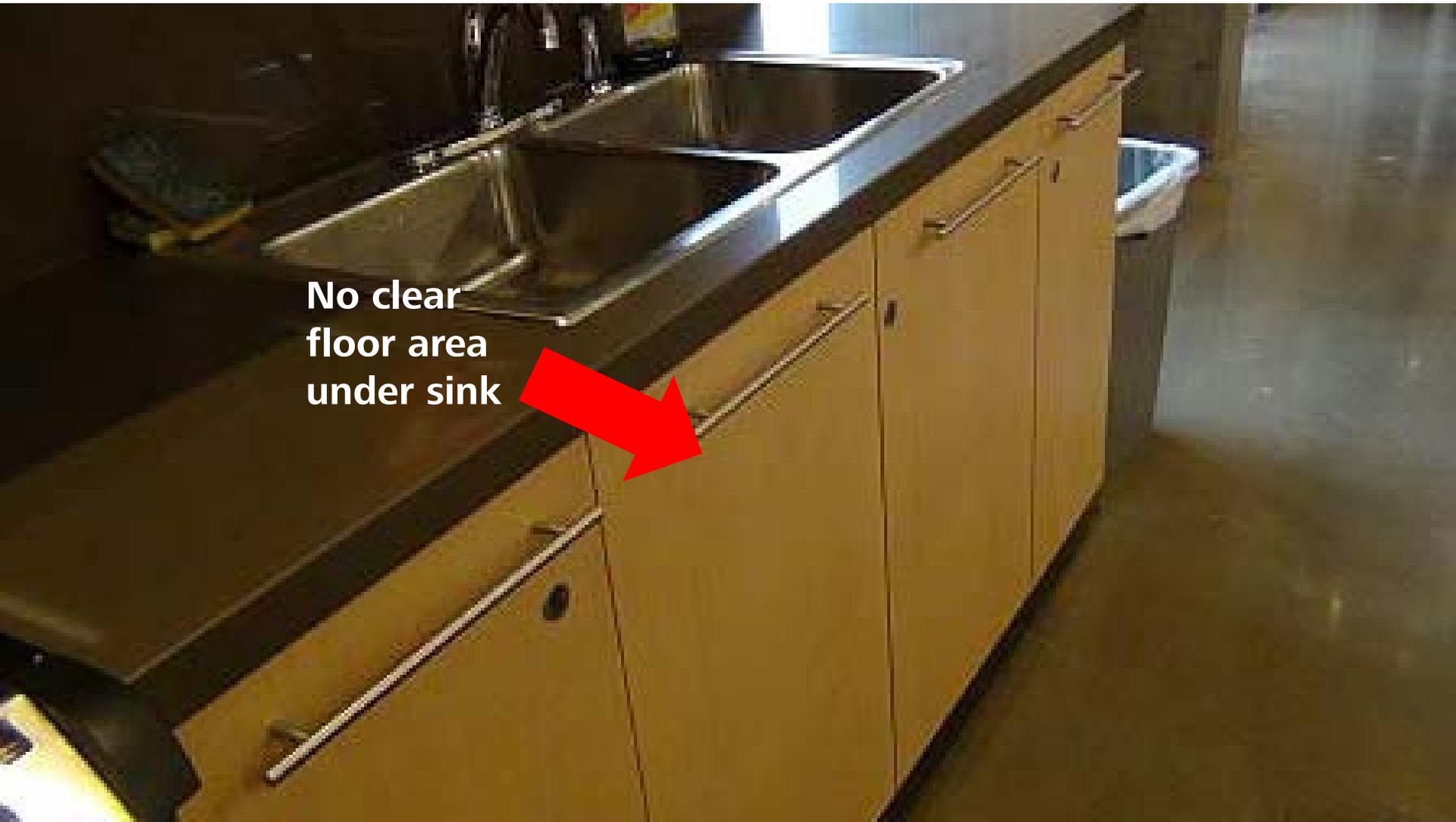
You will NOT receive the home version, but perhaps a small token of our appreciation

You will very likely get applause for "giving it a go."



Containers  
block  
access to  
elevator  
controls

No clear  
floor area  
under sink





Position  
of soap  
dispenser



**Drinking fountain is a protruding object**

**It's also located in the path of travel**



**Product displays  
block accessible  
transaction counters**



**Whoops,  
here too !**

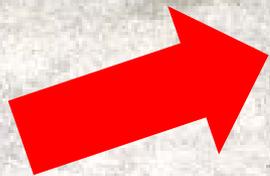


**Where is the clear wayfinding signage for the visually impaired?**

**Gender Inclusive ?**



**Nice try but table  
leg in clear floor  
area/approach**





**Too much  
visual and  
audible  
stimulus!**

One month later ...



Another product display blocks access to elevator controls!



Product display blocks access to elevator controls

Meanwhile upstairs in the parking garage . . .

Geez, they really don't want you to shop here!

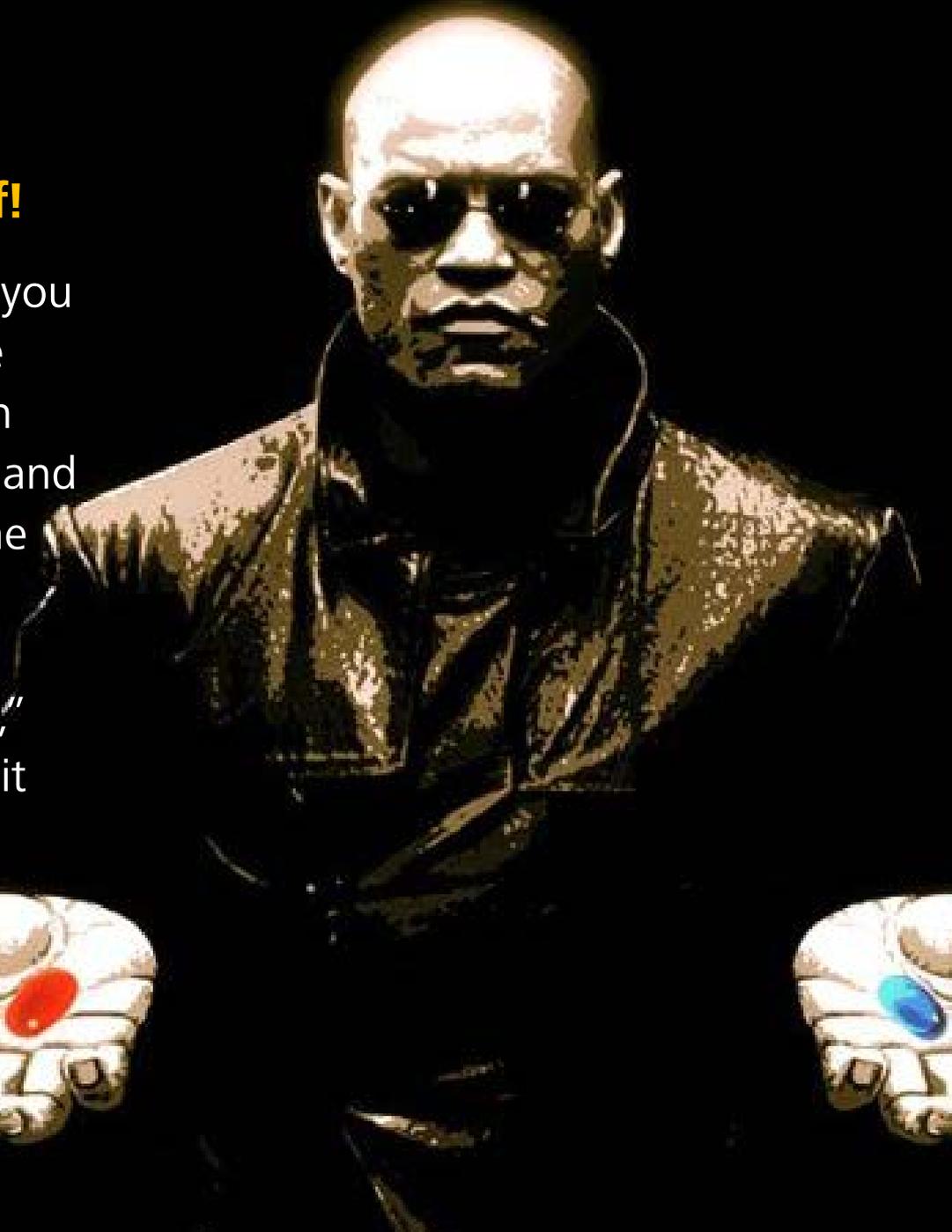


# Lessons Learned

...to promote universal design in residential facilities

## Take the Blinders Off!

What if I told you  
that if you are  
living equity in  
your daily life and  
understand the  
barriers to  
promoting  
“access for all,”  
you WILL see it  
everywhere.



# Lessons Learned

...to promote universal design in residential facilities

## Understanding the Law

Local building codes

**and** Federal standards apply to **you** (and your campus).

Make sure there is a 'best practices' policy that addresses design compliance and barrier removal.

## Design & Operational

Design with tolerances in mind.  
(Do not design to minimum compliance.)

Review campus purchasing policies for compliant products

Consider peer review to ensure compliance

Watch out for common mistakes

Ensuring equity and compliance is **everyone's** responsibility

# Questions

# Contact



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