



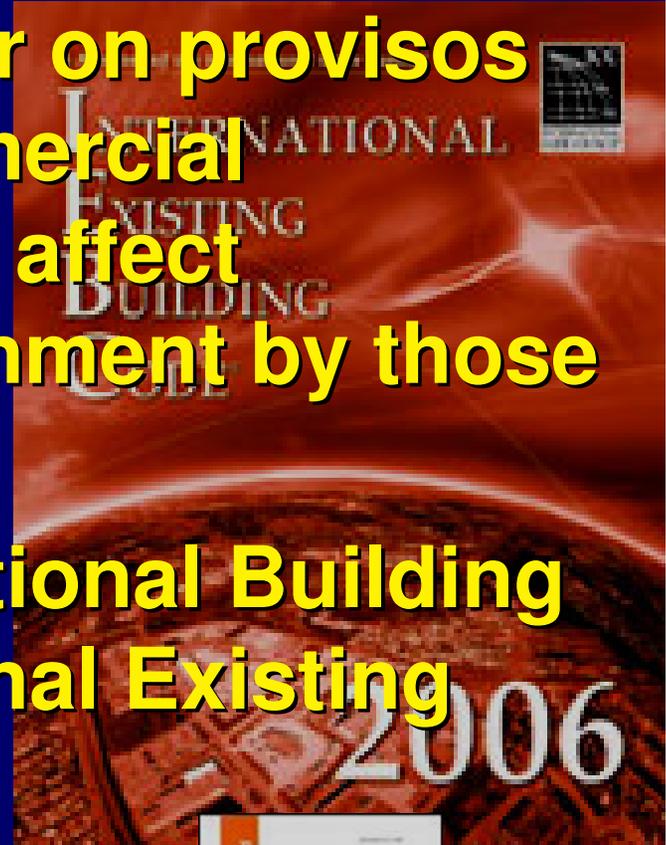
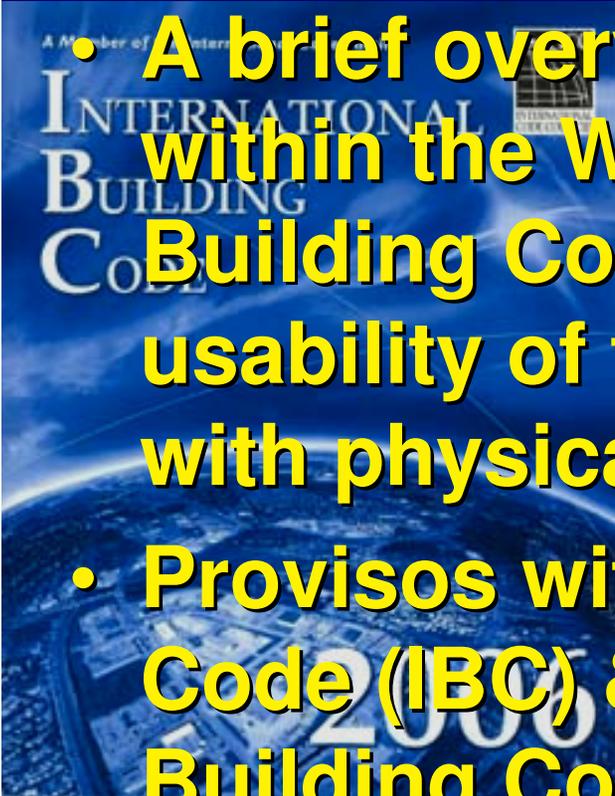
**2009 Wisconsin Building
Inspectors Institute
April 23, 2009
Accessibility - Commercial**

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Jim.Smith@wi.gov**

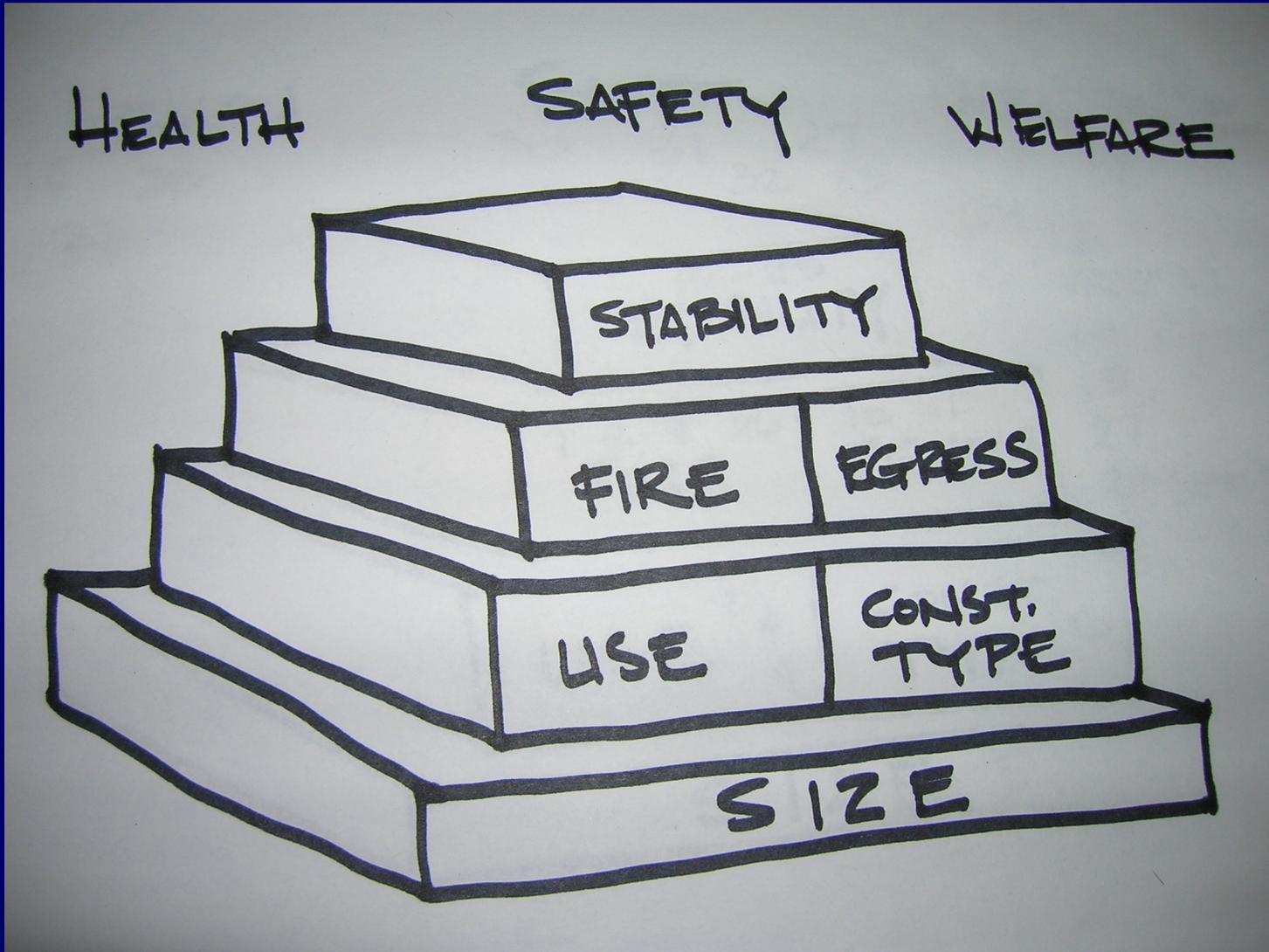
What Is the Session About?

- A brief overview & refresher on provisos within the Wisconsin Commercial Building Code (WCBC) that affect usability of the built environment by those with physical disabilities
- Provisos within the International Building Code (IBC) & the International Existing Building Code (IEBC)
- Provisions within the 2003 edition of the ICC/ANSI A117.1 standard

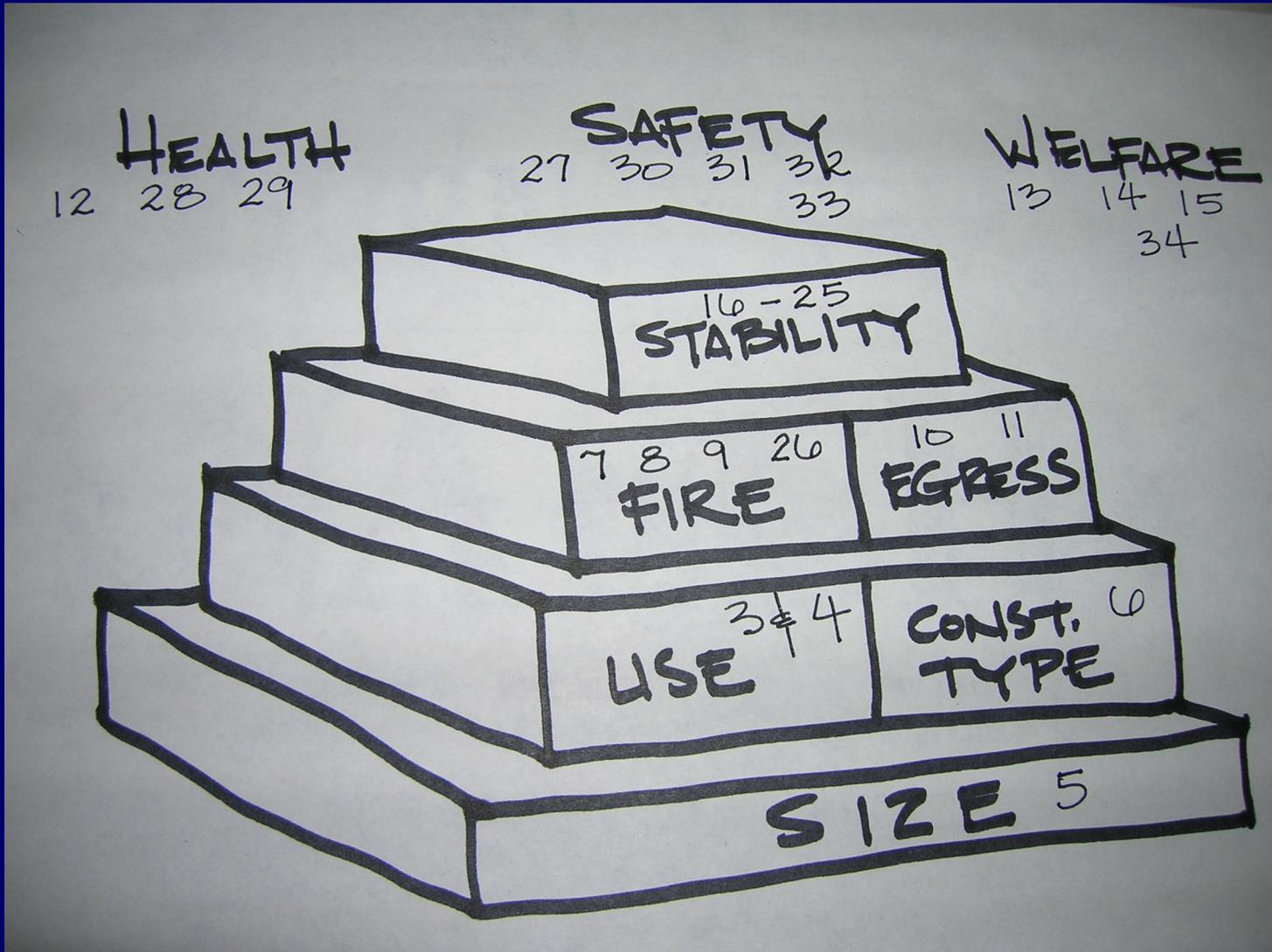


***International
Building
Code***

Building Blocks



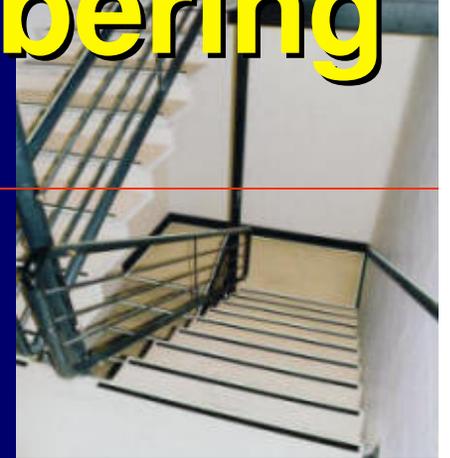
Building Blocks



WSCBC/IBC
CH. 10

WCBC/IBC Ch 10 Numbering

- 1001 Administration
- 1002 Definitions
- 1003 General Means of Egress
- 1004 Occupant Load
- 1005 Egress Width
- 1006 MOE Illumination



Ch 10 Numbering (cont)

- **1007 Accessible MOE**
- **1008 Doors, Gates & Turnstiles**
- **1009 Stairways**
- **1010 Ramps**
- **1011 Exit Signs**
- **1012 Handrails**

Ch 10 Numbering (cont)

- **1013 Guards**
- **1014 Exit Access**
- **1015 Exit & Exit Access Doorways**
- **1016 Exit Access Travel Distance**

Ch 10 Numbering (cont)

- **1017 Corridors**
- **1018 Exits**
- **1019 Number of Exits & Continuity**
- **1020 Vertical Exit Enclosures**
- **1021 Exit Passageways**

Ch 10 Numbering (cont)

- **1022 Exit Discharge**
- **1023 Exterior Exit Ramps and Stairways**
- **1024 Exit Discharge**
- **1025 Assembly**
- **1026 Emergency Escape and Rescue**

WCBVC/IBVC
CH. 11

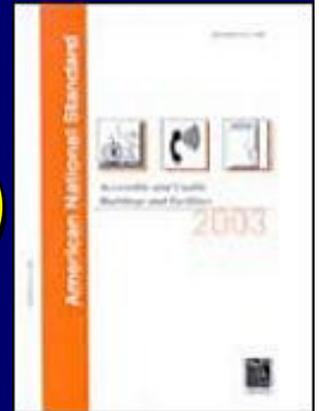
WCBC/IBC Ch 11 Noteworthy Changes [cont.]

- **Significantly reduced the no. of Wisconsinisms regarding Accessibility [Chapter 11] as we are now catching up with the newer editions of the IBC.**



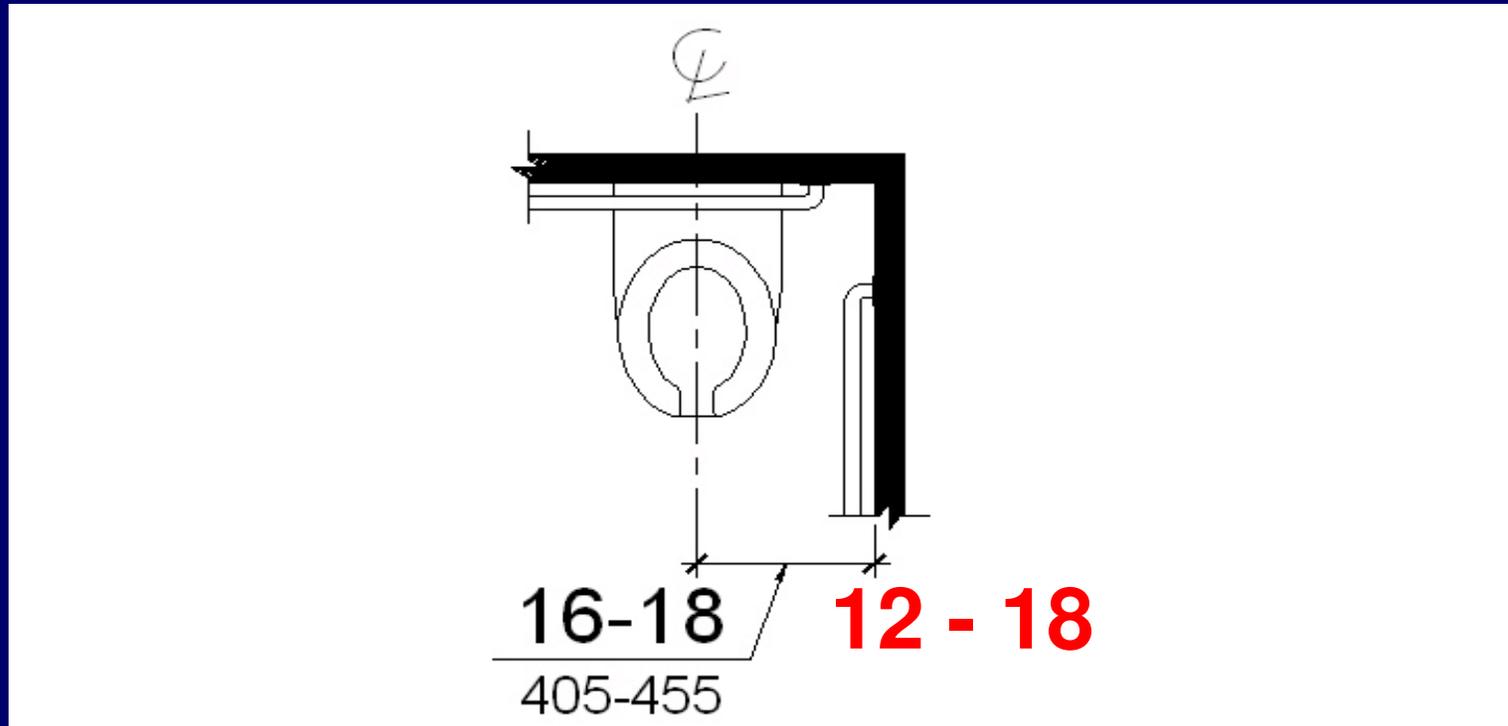
WCBC/IBC Noteworthy Changes Ch 11 [cont.]

- Now reference the newest ICC/ANSI (ICC/ANSI A 117.1) standard [1101.2].
- NOTE: The newer standard recognizes size differences for fixtures and accessories used by children.



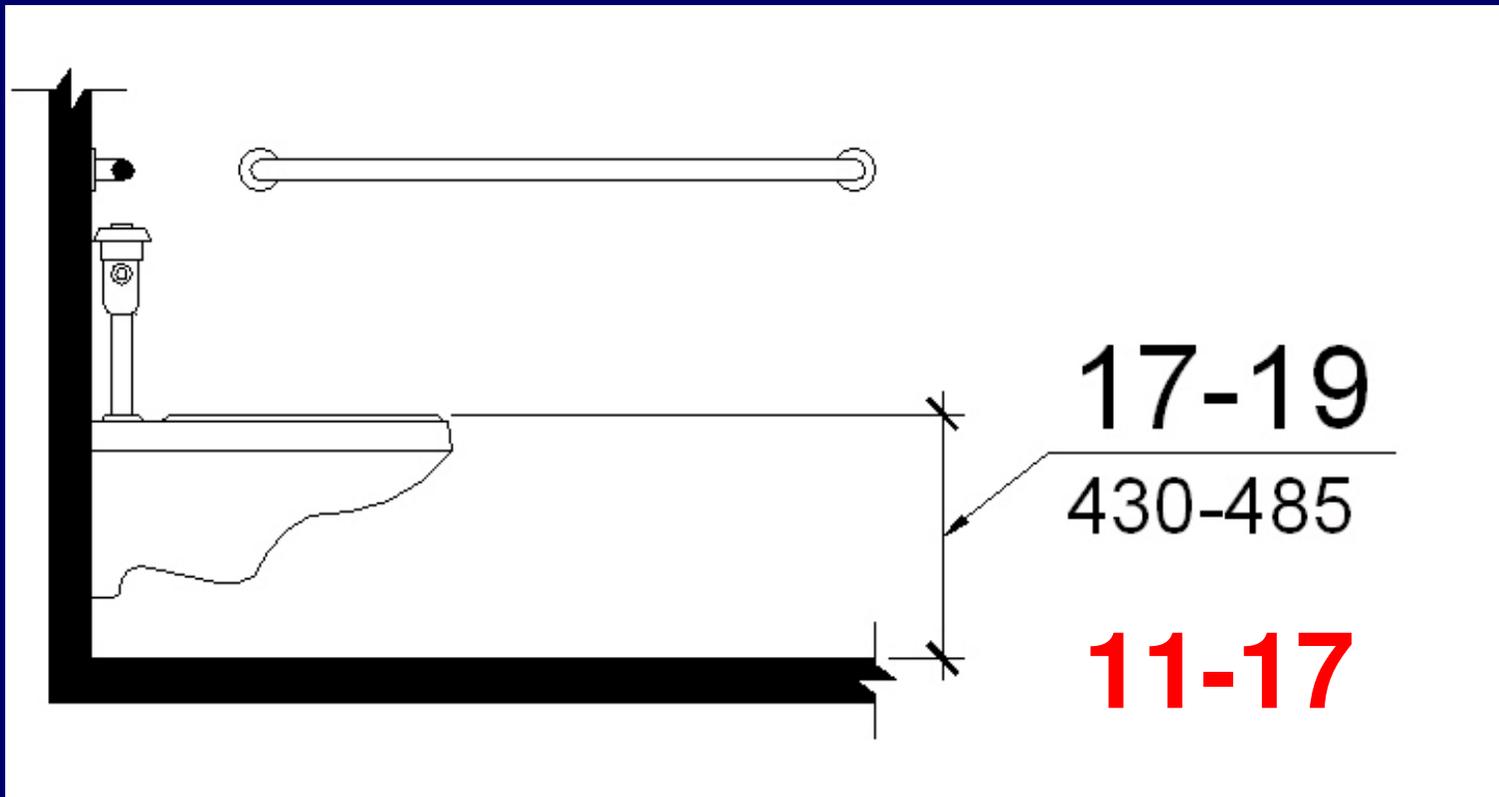
ICC/ANSI A117.1 - WC LOCATION

604.2 vs 610.10.2



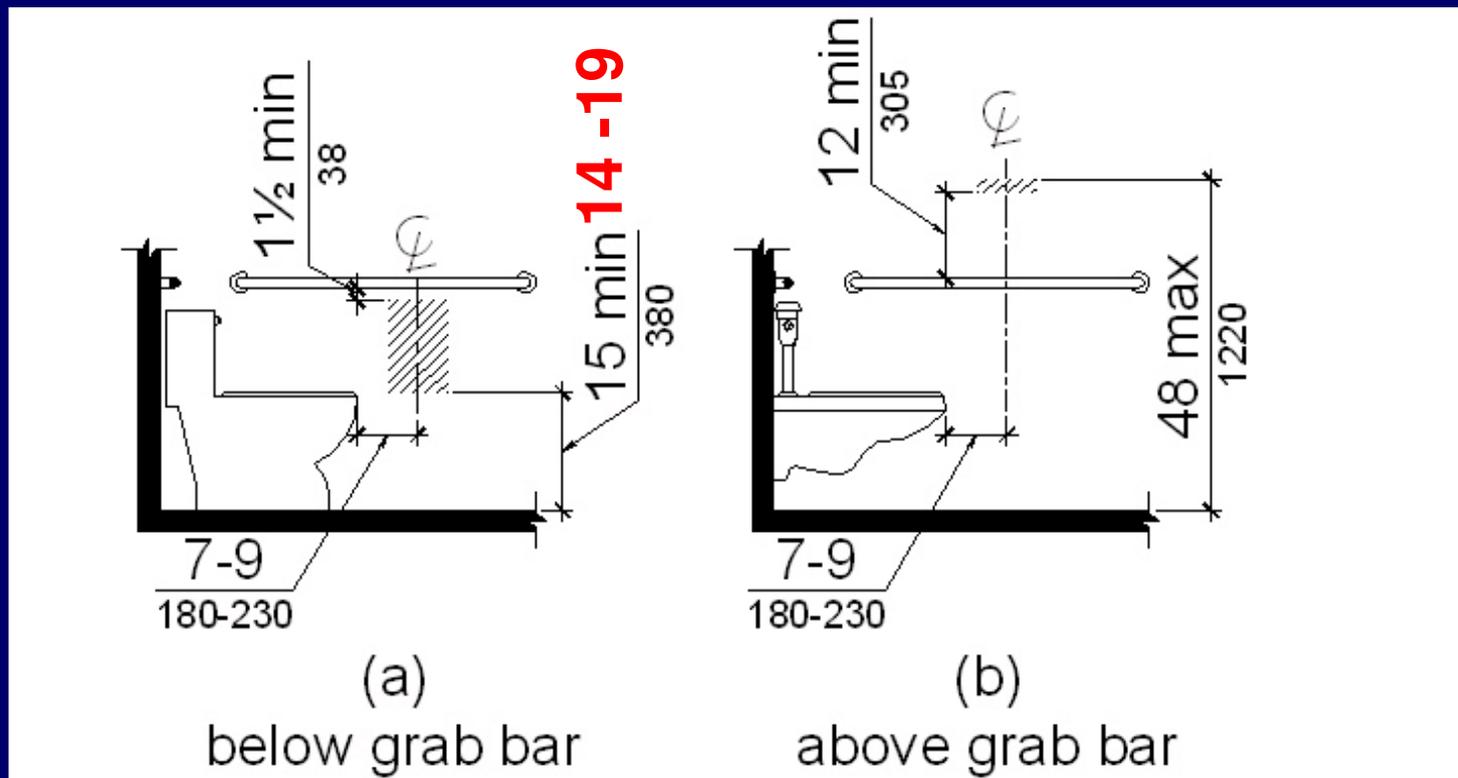
ICC/ANSI A117.1 - WC HGHT

604.4 vs. 604.10.4



ICC/ANSI A117.1 – DISPENSERS

604.7 vs. 604.10.4



WCBC/IBC Noteworthy Changes Ch 11 [cont.]

- The provisions associated with Wheelchair Space Clustering are dropped [used to be Comm 62.1108(2)(b)1.].
- Expanded reqmt's. for drinking fountains are included [1109.5]
Note: 2 fountains or one shared



WCBC/IBC Noteworthy Changes Ch 11 [cont.]

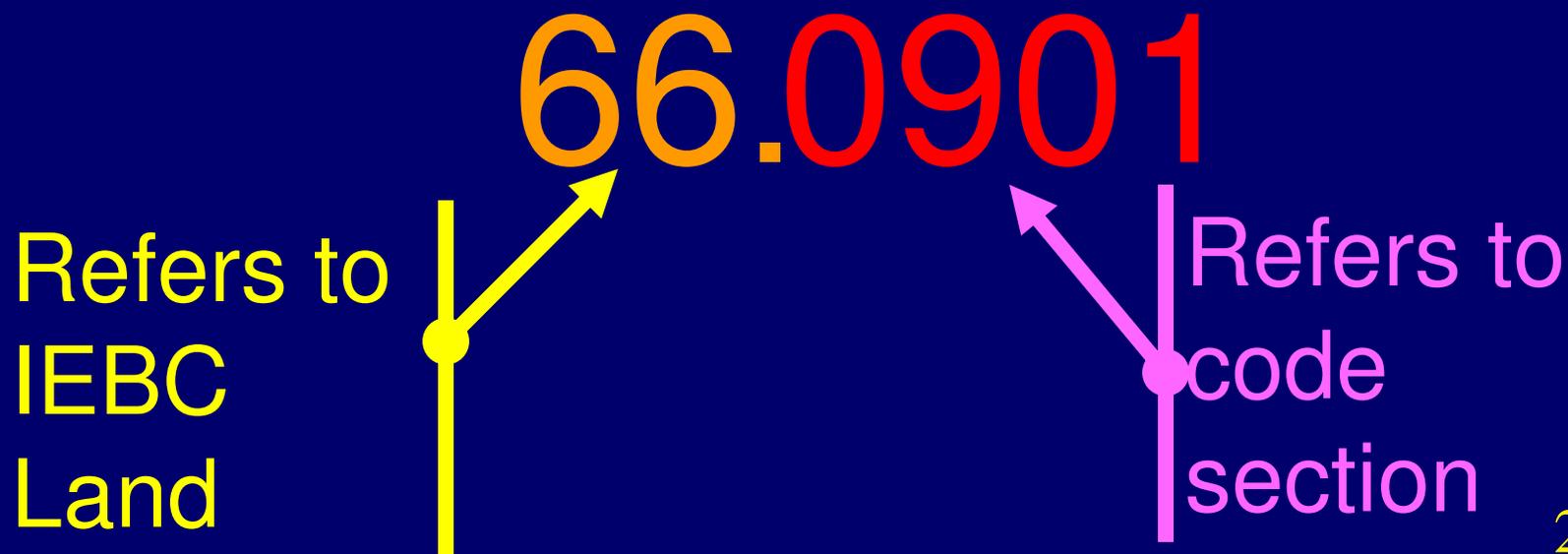
- Added a number of accessibility exceptions (i.e. raised judging or scoring, raised diving boards & platforms, etc) are added for recreational and sport facilities [IBC s. 1109.14.4].



***International
Existing
Building
Code***

WCBC Navigating Wisconsin Modifications

- Deciphering the Numbering of
Adm. Rule Ch's Comm 62 - 66



WCBC/Exist'g Bldg. [IEBC] (cont.)

- Ch 2 – Definitions (W)
- ~~Ch 3 – Presc. Compl. Methods (W)~~
- Ch 4 – Classification of Work
- Ch 5 – Repairs (W)
- CH 6, 7 & 8 – Altn's (Lev 1, 2 & 3) (W)
- CH 9 – Change of Occupancy (W)

WCBC/Exist'g Bldg. [IEBC] (cont.)

- **Ch 10 – Additions**
- **Ch 11 – Historic Buildings (W)**
- **Ch 12 – Relocated/Moved Bldgs**
- **Ch 13 – Perf. Compl. Methods (W)**
- **CH 14 – Construction Safegaurds**
- **CH 15 – Referenced Standards**

IEBC Wisconsinisms CH 1

Note on State Fair Housing Law

- Note: The requirements of s. 101.132, Stats., may be more restrictive than the administrative rules when a project involves the remodeling of housing. The term "remodeled" has the meaning given in s. 101.132 (1) (h), Stats., and the term "housing" has the meaning given in s. 106.50 (1) (L), Stats.**

IEBC Wisconsinisms CH 1

State Fair Housing Law Scenarios

- **Section 101.132 Stats., incl's 4 basic reqmt's for housing:**
 - 1. An accessible entrance**
 - 2. Accessible public/common use areas**
 - 3. Accessible doors & int. passage**
 - 4. Accessible features like accessible controls, grab bar reinf. & lever handles**

IEBC Wisconsinisms CH 1 State Fair Housing Law and Remodeling

- **Section 101.132 (2) (b), Stats., provides requirements for 3 different remodeling scenarios based on the percentage of the floor areas being physically altered**

Fair Housing Law

Remodeling Scenario 1

- **1. If more than 50% of the interior square footage of any housing with 3 or more dwelling units (D.U.'s) is to be remodeled, the entire housing shall conform to the standards in par. (a), regardless of when first intended for occupancy.**

Fair Housing Law

Remodeling Scenario 2

- **2. If 25% to 50% of the interior square footage of any housing with three or more (D.U.'s) is to be remodeled, that part of the housing that is to be remodeled shall conform to the standards in par. (a), regardless of when first intended for occupancy.**

Fair Housing Law

Remodeling Scenario 3

- **3. If less than 25% of the int. square footage of any housing with three or more D.U.'s is to be remodeled, the remodeling is not subject to the standards in par. (a) unless the alt'n involves work on doors, entrances, exits or toilet rooms, in which case the doors, entrances, exits or toilet rooms shall conform to the standards in par. (a) regardless of when first intended for occupancy.**

IEBC Ch 2 Definitions

Chapter 2 includes 21 definitions, but some are more significant than others when it comes to accessibility

- **Primary Function . . .**
- **Technically Infeasible . . .**

Def. – Primary Function

PRIMARY FUNCTION. A primary function is a major activity for which the facility is intended. Areas that contain a primary function include, but are not limited to, the customer services lobby of a bank, the dining area of a cafeteria, the meeting rooms in a conference center, as well as offices and other work areas in which the activities of the public accommodation or other private entity using the facility are carried out. Mechanical rooms, boiler rooms, supply storage rooms, employee lounges or locker rooms, janitorial closets, entrances, corridors and restrooms are not areas containing a primary function.

Def. – Technically Infeasible

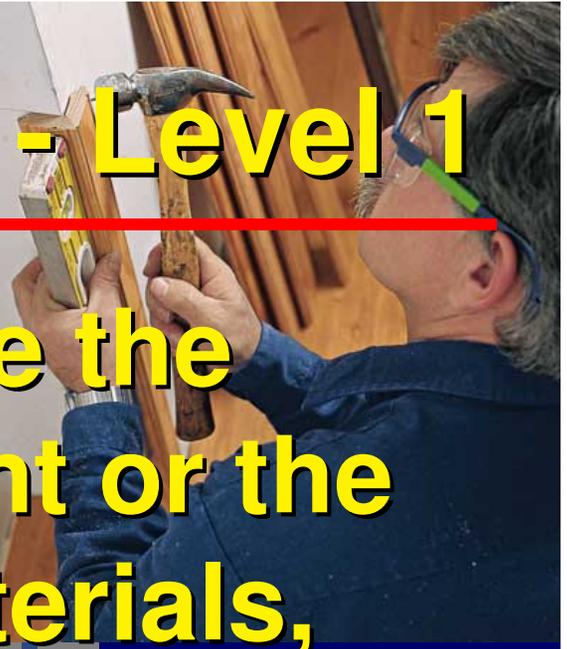
An alteration of a building or a facility that has little likelihood of being accomplished because the existing structural conditions require the removal or alteration of a load-bearing member that is an essential part of the structural frame or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements for new construction and that are necessary to provide accessibility.

IEBC Ch 5 - Repairs

- SECTION 501 GENERAL
- SECTION 502 BUILDING ELEMENTS AND MATERIALS
- SECTION 503 FIRE PROTECTION
- SECTION 504 MEANS OF EGRESS
- SECTION 505 ACCESSIBILITY
- SECTION 506 STRUCTURAL [WI]
- SECTION 507 ELECTRICAL
- SECTION 508 MECHANICAL
- SECTION 509 PLUMBING [WI]

IEBC Ch 6 Alterations - Level 1

Level 1 alterations include the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.



IEBC Ch 6 - Level 1 Alt's (cont)

Level 1 alterations are commonly the type of minor alteration being referred to in Comm 61.30(4). Plan submittal may not be needed.



IEBC Ch 6 - Level 1 Alt's (cont)

Direction Given on subjects of:

- **Bldg elements/Matl's [602 & WI]**
- **Fire Protection [603]**
- **Means of Egress [604]**
- **Accessibility [605]**
- **Structural [606]**
- **Energy Cons'n [607 & WI]**

Section 605.1 Accessibility

- **Altered Buildings are to comply with the applicable provisions in Section 605.1.1 through 605.1.12, chapter 11 of the IBC and ICC A117.1... “unless technically infeasible”. In which case... “to the maximum extent feasible”.**
- **...access to be maintained during occupancy.**

Section 605.1 Accessibility



Four Exceptions...

1. The Altered Element or space is not involving a primary function or affecting the accessible route to a primary function
2. IBC Accessible Means of Egress not required in existing buildings

Section 605.1 Accessibility

Four Exceptions (cont'd)...

3. Type B DU's/sleeping units need not be provided within existing buildings
4. When altering a Type A individually Owned DU's within an R-2, the unit needs to meet Type B provisions of IBC Ch. 11 & ICC ANSI A117.1.

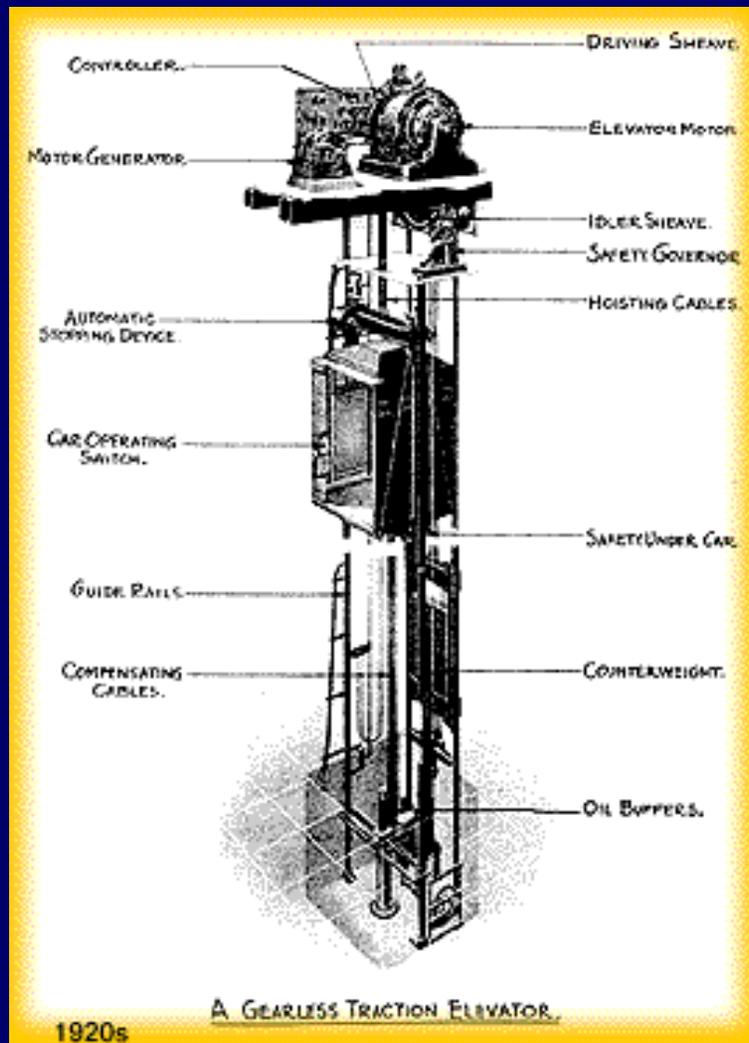


Section 605.1.1 Entrances

...when altering an entrance and the building already has an accessible entrance on an accessible route, the altered entrance need not be made accessible unless called for by s. 605.2 ...[Alterations Affecting an Area Containing a Primary Function.]



Section 605.1.2 Elevators



...altered elements shall comply with ASME A17.1 and ICC/ANSI A117.1...

Section 605.1.3 Platform Lifts

...complying with ICC A117.1 and installed in accordance with ASME A18.1 shall be permitted as component of accessible route.



Section 605.1.4 Ramps

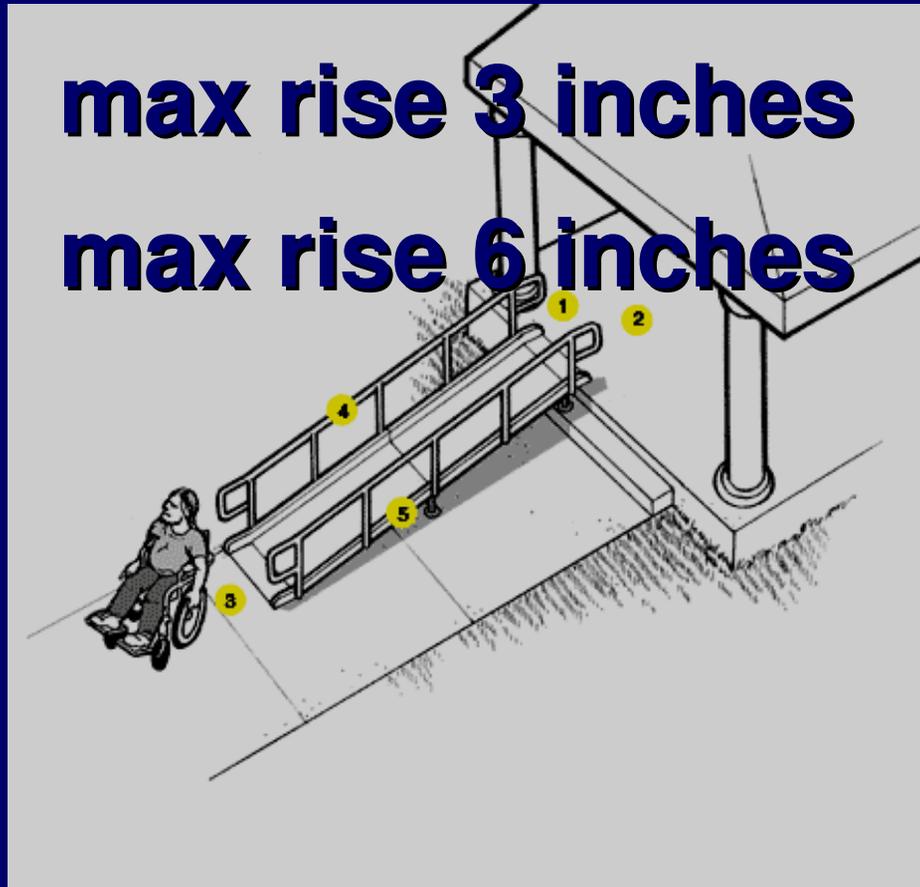
...steeper than allowed in IBC
1010, reference table 605.1.4...

1:10 – 1:8

1:12 – 1:10

max rise 3 inches

max rise 6 inches



Section 605.1.5 Dining Areas

...unlike new const.,
access is NOT
required to raised or
sunken dining areas
or outdoor seating
areas provided the
same service and
decor exists in an
accessible space.



Section 605.1.6

Performance Areas

...where technically infeasible to alter performance areas...at least one of each type shall be made accessible.



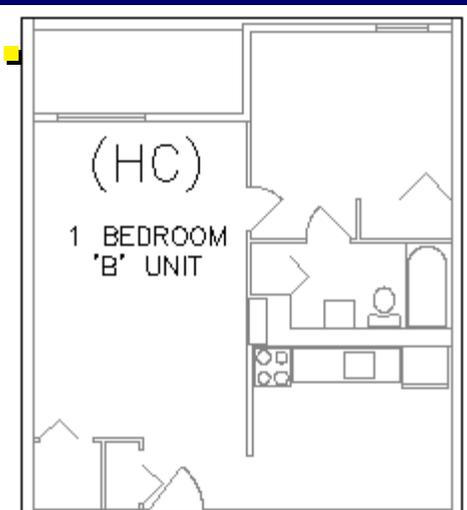
Section 605.1.7 Jury boxes

...access not required within defined area of jury or witness stand where ramp or lift poses a hazard or restricts egress.



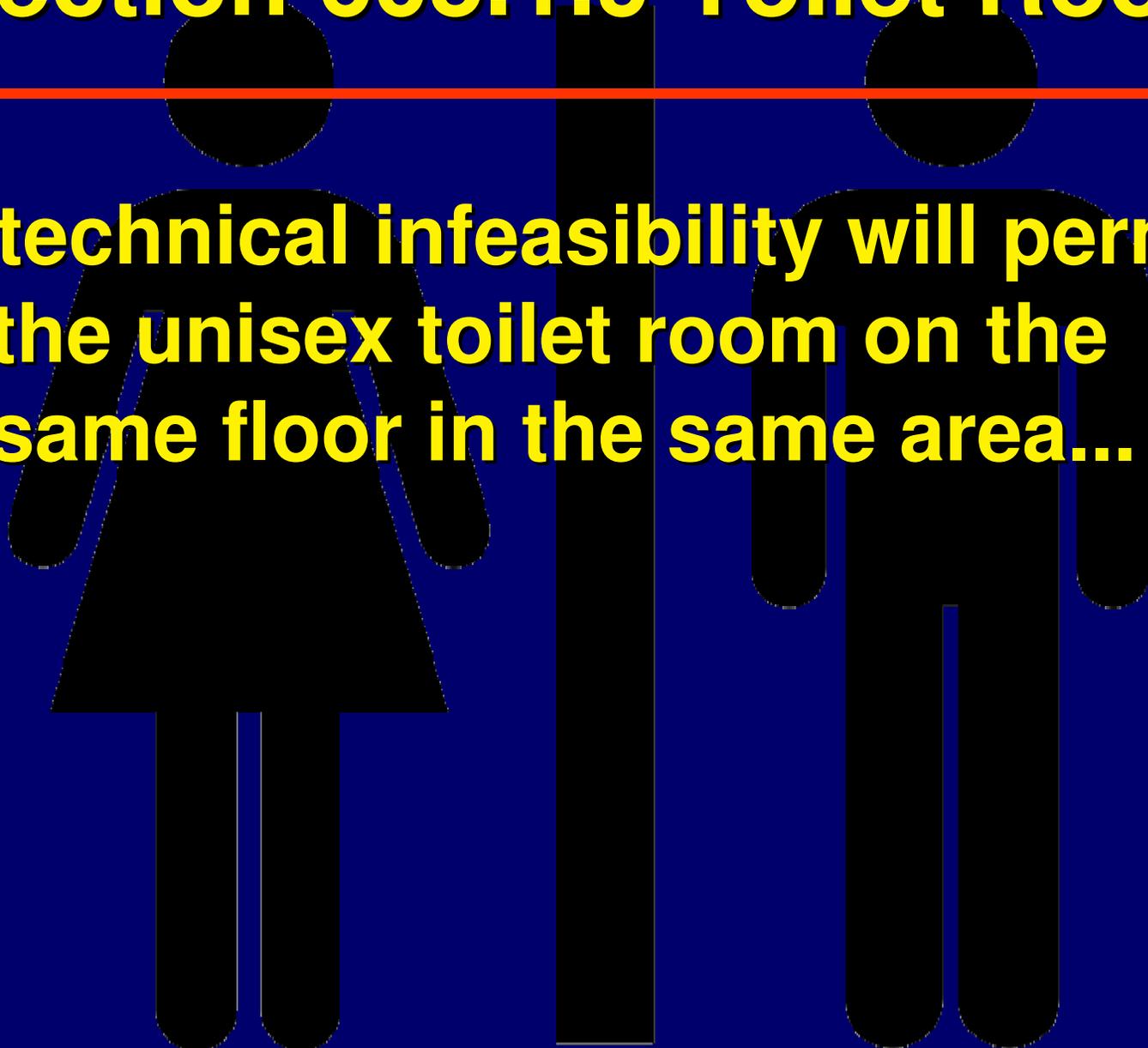
Section 605.1.8 Dwelling Unit

When altering I-1, I-2, I-3, R-1, R-2 or R-4 . . . provisos of IBC 1107 for Accessible or Type A units and alarm provisos of IBC Ch. 9 apply only to the quantity of the spaces being altered.



Section 605.1.9 Toilet Rooms

**...technical infeasibility will permit
the unisex toilet room on the
same floor in the same area...**



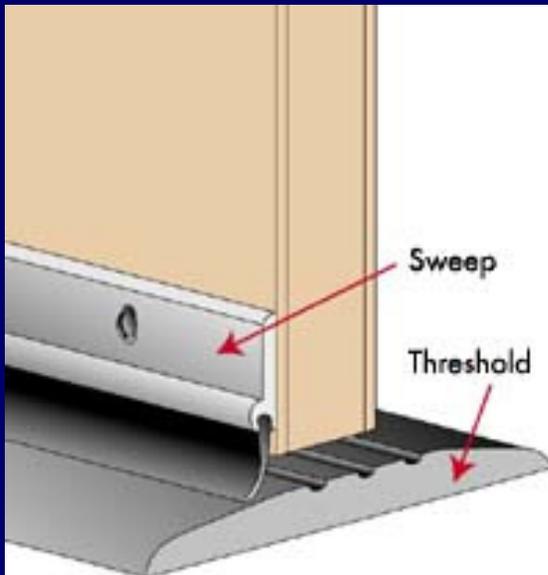
Section 605.1.10 Fitting Room

**...technical infeasibility will permit one accessible room on same floor in same area permitted...
When fitting rooms provided for separate sex, each to have access as well.**



Section 605.1.11 Thresholds

...3/4" maximum height with
beveled edges.



Section 605.1.12 Extent of Application ...

... Not to impose requirement for greater accessibility than that required for new construction

... Conversely, not to reduce accessibility.

Section 605.2 Alterations Affecting Areas of Primary Function

...access to or areas containing a **primary function**...that route shall be accessible.

Exceptions...

- Disproportionate cost - 20%
- Alts to windows, hardware, controls, etc.
- Alts to syst's like mech, elect, fire, etc
- alterations to increase accessibility

Section 605.2 Alt'ns Affecting Primary Funct'n Area (cont)

Before moving to the 4 exceptions, do not forget the main exception . . . Without the alteration of an area containing a **primary function** . . . none of the exceptions even need probing.

Section 605.2 Alt'ns Affecting Primary Funct'n Area (cont)

Getting back to those 4 exceptions

- Disproportionate cost - 20%**
- Alts to windows, hardware, controls, etc.**
- Alts to syst's like mech, elect, fire, etc**
- alterations to increase accessibility**

Section 605.2 Alt's Primary Funct'n Area Except's (cont)

First to dispose of the no brainers . . .

- **Disproportionate cost - 20%**
- **Alts to windows, hardware, controls, etc.**
- **Alts to syst's like mech, elect, fire, etc**
- **alterations to increase accessibility**

Section 605.2 Alt's Primary Funct'n Area Except's (cont)

**What's so different about that first
exception . . .**

- **Disproportionate cost - 20%**
- **Alts to windows, hardware, controls,
etc.**
- **Alts to syst's like mech, elect, fire, etc**
- **alterations to increase accessibility**

Section 605.2

“Disproportionality” (cont)

Disproportionate cost - 20%

- Wisconsin tools . . .**
- Does not demand that one spend 20%**

DISPROPORTIONALITY WORKSHEET
 Comm 62 and IBC section 3408
ALTERATIONS TO A PRIMARY FUNCTION AREA

A. TOTAL COST OF ALTERATION TO PRIMARY FUNCTION AREA. (Excluding costs in B.)		\$ _____
MINIMUM COSTS FOR ACCESSIBLE ROUTE: (When the cost of providing an accessible route exceeds 20% of the total cost of the alteration, the cost is considered disproportionate)		\$ _____
B. COSTS REQUIRED TO PROVIDE AN ACCESSIBLE ROUTE: (Listed in order of suggested priority in the event the cost is disproportionate)		
1. Costs associated with providing an accessible route to the altered area: (Route is from exterior to the altered area, including entrance and parking):		\$ _____
<ul style="list-style-type: none"> • Costs associated with providing an accessible entrance: 		\$ _____
<ul style="list-style-type: none"> • Costs associated with providing components of an accessible route (Ramps, elevators, platform lifts): 		\$ _____
<ul style="list-style-type: none"> • Costs associated with providing accessible elements such as parking: 		\$ _____
2. Costs associated with making toilet rooms accessible:		\$ _____
3. Costs associated with relocating an inaccessible drinking fountain:		\$ _____
TOTAL COSTS TO PROVIDE AN ACCESSIBLE ROUTE:		\$ _____
C. DISPROPORTIONATE COSTS: If the total cost of the expenditures in B. is greater than 20% of the total cost of the alteration in A., list the elements and spaces being provided that will equal or exceed 20% of the total cost of the alteration. If a non-accessible item exceeds 20% and all other elements and spaces along the accessible route comply with the current accessibility requirements, the additional expenditure is not required.		_____ _____ _____

SBD-10218 (R. 4/03)

DISPROPORTIONALITY WORKSHEET
Comm 62 and IBC section 3408
ALTERATIONS TO A PRIMARY FUNCTION AREA
DISPROPORTIONATE COSTS TO PROVIDING AN ACCESSIBLE ROUTE

Division of Safety and Buildings form, SBD 10219, Disproportionate Costs In Alterations, shall be submitted with the SBD-118 Plan Application form and plans at the time of building plan review.

The plan reviewer will determine compliance with the alteration requirements specified in chapter Comm 62 and IBC section 3408.

Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04(1)(m)].

PROJECT INFORMATION

Project Transaction Number _____

BUILDING LOCATION:

STREET ADDRESS _____

CITY, VILLAGE, TOWNSHIP _____

OWNER'S NAME (PLEASE PRINT) _____

OWNER'S SIGNATURE _____

DATE OF ALTERATION: _____

SBD-10219 (R: 4/03)

The intent of this requirement is for the owner and designer to analyze the exist'g bldg's accessible route features to the altered area against the current code requirements and to then remove existing barriers to people with disabilities, provided the cost is not disproportionate. If the cost to provide an accessible route to the altered area is greater than 20 percent of the total cost of the altered area, the cost is deemed disproportionate. However, if the total cost of the alteration is greater than 20 percent, the owner is required to spend up to 20 percent of the total cost to provide accessible route features. If a non-accessible item exceeds the 20 percent and all other elements and spaces along the accessible route comply with the current accessibility requirements, the owner is not required to spend the additional money to make spaces outside of the altered area accessible.

IEBC Ch 7 - Level 2 Alt's Direction

Direction Given on subjects of:

- **General [701 & WI]**
- **Special Use/Occ'y [702]**
- **Build'g Elements/Matl's [703 & WI]**
- **Fire Protection [704]**
- **Means of Egress [705]**

IEBC Ch 7 – Direction (cont)

- **Accessibility [706]**
- **Structural [707]**
- **Electrical [708]**
- **Mechanical [709 & WI]**
- **Plumbing [710 & WI]**
- **Energy Cons'n [711 & WI]**

IEBC Ch 8 - Level 3 Alt's Direction

Direction Given on subjects of:

- **General [801]**
- **Special Use/Occ'y [802 & WI]**
- **Build'g Elements/Matl's [803]**
- **Fire Protection [804]**
- **Means of Egress [805]**

IEBC Ch 8 – Direction (cont)

- **Accessibility [806]**
- **Structural [807]**
- **Energy Cons'n [808 & WI]**
- **Plumbing [Wisconsinism on the State law dealing with the subject commonly referred to as “Potty Parity”]**

Ch. 9 – Change of Occupancy

What's in 901 to 911?

- **GENERAL [901 & WI]**
- **SPECIAL USE & OCCUPANCY [902]**
- **BLD'G ELEMENTS & MATL'S [903]**
- **FIRE PROTECTION [904]**
- **MEANS OF EGRESS [905]**
- **ACCESSIBILITY [906]**

Ch. 9 – 901 to 911? (cont)

- **STRUCTURAL [907]**
- **ELECTRICAL [908]**
- **MECHANICAL [909]**
- **PLUMBING [910 & WI]**
- **OTHER REQMT'S [911 & WI] (only light & vent'n)**

Ch. 10 – What's in 1001 to 1005?

- GENERAL [1001]
- HEIGHTS AND AREAS [1002]
- STRUCTURAL [1003]
- SMOKE ALARMS [1004]
- ACCESSIBILITY [1005]

NO

WISCONSINISMS

Ch. 11 – Historic Buildings

What's in 1101 to 1106?

- GENERAL [1101 & WI]
- REPAIRS [1102]
- FIRE SAFETY [1103]
- ALTERATIONS [1104]
- CHANGE OF OCCUPANCY [1105]
- STRUCTURAL [1106]

Section 1101 - General

- 1101.2 - Be prepared to have owners asking if you would be willing to pull together a report on their behalf for submission to the local code official.



Section 1104 Alterations

- **Section 1104.1 Accessibility requirements ...Section 605 shall apply unless technically infeasible**
- **Where historic significance threatened...alternative requirements...**
 - **1104.1.1 Site arrival**
 - **1104.1.2 Multi-level buildings**
 - **1104.1.3 Entrances**
 - **1104.1.4 Toilet and bathing facilities**

Section 1105.15 Accessibility

The provisos of s. 912.8 apply unless technically infeasible. Where the CO determines compliance with the reqmt's for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the bld'g, the alternatives of ss. 1104.1.1 - 1104.1.5 are to be allowed

7 Specific Const. Safeguards

- **Prot'n of Adjoining Property**
- **Temp. Use of Public Ways and Prop.**
- **Fire Extinguishers**
- **Exits**
- **Standpipe Systems**
- **Automatic Sprinkler Systems**
- **Accessibility**

Questions ???

