

OFFICE OF EDUCATION AND DATA MANAGEMENT

Type A and Type B Dwelling Units

Presented by
Harwood W. Loomis, BO, RA, Consulting Architect
for the

Office of Education and Data Management Spring 2017 Career Development Series



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

From Connecticut General Statutes:

Sec. 29-269. (Formerly Sec. 19-395a). Standards for construction of buildings to accommodate physically handicapped persons. (a) The State Building Inspector and the Codes and Standards Committee shall revise the State Building Code to be in substantial compliance with the provisions of the Americans with Disabilities Act of 1990, as amended, 42 USC 12101 and the Fair Housing Amendments Act of 1988, as amended, 42 USC 3600. The provisions of this subsection and the State Building Code as from time to time revised pursuant to this section shall control the design, construction and arrangement of all buildings and building elements, constructed under permits issued on or after October 1, 1975, and all buildings or building elements constructed or substantially renovated by the state, any municipality or any other political subdivision of the state, the architectural design of which was commenced on or after October 1, 1977, except buildings which have been approved by the Department of Housing and Urban Development as being in conformance with federal standards for housing for the elderly and physically handicapped and for which a permit was issued prior to June 9, 1976, to ensure accessibility thereto and use by the physically handicapped.



OFFICE OF EDUCATION AND DATA MANAGEMEN

Which Code are we talking about, anyway?

The 2012 International Building Code (as amended)

The 2012 International Residential Code (as amended)

And ICC/ANSI A117.1 – 2009 (as amended)

3



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

Our Accessibility Code

IBC 2012 + IRC 2012 + ICC/ANSI A117.1-2009 + 2016 CT Supplement













OFFICE OF EDUCATION AND DATA MANAGEMENT

From Connecticut General Statutes:

Sec. 29-274. (Formerly Sec. 19-396c). Exemptions from State Building Code standards. (a) The provisions of section 29-269 shall not apply to detached one and two-family dwellings.

Confirmed by the IBC:

1103.2.4 Detached dwellings. Detached one- and two-family *dwellings* and accessory structures, and their associated *sites* and facilities, are not required to be *accessible*.

5



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

From §29-269:

§14-253a – Applies to accessible parking spaces

§29-273 – Applies to accessibility or adaptability requirements for residential buildings and complexes.

§29-274 – Applies to Exemptions from State Building Code standards.



OFFICE OF EDUCATION AND DATA MANAGEMENT

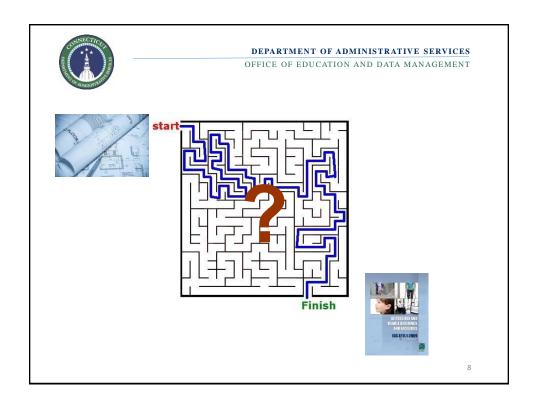
2012 IBC PORTION of the 2016 CSBC and the 2012 IRC PORTION of the 2016 CSBC:

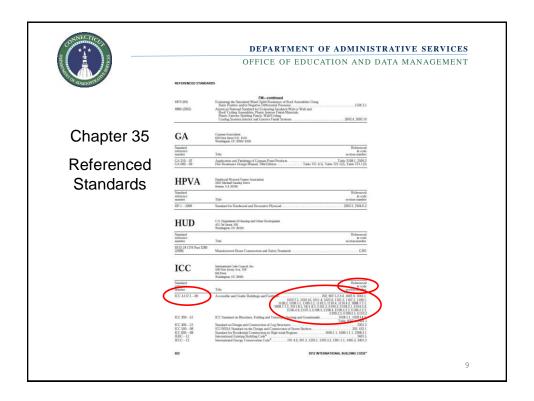
SCOPING



2009 ICC/ANSI A117.1 PORTION OF THE 2016 CSBC:

TECHNICAL REQUIREMENTS







OFFICE OF EDUCATION AND DATA MANAGEMENT

Why are we worried about the IRC if Connecticut General Statutes exempt One- and Two-Family Dwellings from requirements for accessibility?



OFFICE OF EDUCATION AND DATA MANAGEMENT

2012 IRC:

R101.2 Scope. The provisions of the *International Residential Code for One- and Two-family Dwellings* shall apply to the construction, *alteration*, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures*.

11



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT





OFFICE OF EDUCATION AND DATA MANAGEMENT

§29-273 is the section of statute that brings us to Type A and Type B dwelling units.

Sec. 29-273. (Formerly Sec. 19-396b). Accessibility or adaptability requirements for residential buildings and complexes. Each residential building or complex constructed, substantially renovated or established by change of use under a building permit application filed on or after October 1, 2004, shall provide accessible or adaptable dwelling units for persons with disabilities as required by the State Building Code.

13



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT



Is this a complex?

You bet it is!



OFFICE OF EDUCATION AND DATA MANAGEMENT

2016 CSBC:

SECTION 1107 DWELLING UNITS AND SLEEPING UNITS

1107.1 General. In addition to the other requirements of this chapter, occupancies having dwelling units or sleeping units shall be provided with accessible features in accordance with this section.

NOTICE -

1107.2 Design. Dwelling units and sleeping units that are required to be Accessible units, Type A units and Type B units

BETTER IS shall comply with the applicable portions of Chapter 10 of ICC A117.1. Units required to be Type A units are permitted to be designed and constructed as Accessible units. Units required to be Type B units are permitted to be designed and constructed as Accessible units or as Type A units.

ALWAYS ALLOWED

15



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

From the 2012 International Residential Code (as amended by Connecticut):

SECTION R320 ACCESSIBILITY

(Add)R320.1 Scope. Detached one- and two-family dwellings shall be exempt from accessibility requirements. Attached multiple single-family dwellings (townhouses) shall comply with Section R320.2 for singlestory townhouses and with Section R320.3 for multi-story townhouses. For the purposes of this section, a one-story above-grade townhouse with a finished basement shall be considered a multi-story townhouse. Required Type B units shall comply with ICC/ANSI A117.1, as amended.



OFFICE OF EDUCATION AND DATA MANAGEMENT

BOTTOM LINE:

REQUIRE THE APPLICANT TO SUBMIT CALCULATIONS JUSTIFYING THEIR ACCESSIBLE, TYPE A, AND TYPE B UNIT COUNTS

17



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

FOUR TYPES OF UNITS:

- ACCESSIBLE
- TYPE A (Adaptable)
- TYPE B (Adaptable)
- TYPE C (Visitable)

Definitions for the first three are found in Chapter 2 of the IBC portion of the CSBC.



OFFICE OF EDUCATION AND DATA MANAGEMENT

CHAPTER 2 DEFINITIONS

ACCESSIBLE UNIT. A *dwelling unit* or *sleeping unit* that complies with this code and the provisions for Accessible units in ICC A117.1.

DWELLING UNIT. A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

TYPE A UNIT. A dwelling unit or sleeping unit designed and constructed for accessibility in accordance with this code and the provisions for *Type A units* in ICC A117.1.

TYPE B UNIT. A dwelling unit or sleeping unit designed and constructed for accessibility in accordance with this code and the provisions for *Type B units* in ICC A117.1, consistent with the design and construction requirements of the federal Fair Housing Act.

19



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

VISITABLE UNIT: A dwelling unit that persons with disabilities can enter, move around the primary (entrance) floor of, and use the bathroom of.

May be referred to as a "Type C dwelling unit."

Not defined by CSBC but technical requirements are included in ICC/ANSI A117.1-2009.

Architects from other jurisdictions may use this term or ask about our requirements.



OFFICE OF EDUCATION AND DATA MANAGEMENT

From the 2012 IBC Commentary:

There are three levels of accessibility that can be required in a dwelling unit or sleeping unit: Accessible units, Type A units, and Type B units. All three types are defined in Chapter 2.

21



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

(Commentary, continued)

An Accessible unit is constructed for full accessibility in accordance with Section 1002 of ICC A117.1. For example, grab bars are in place in the bathrooms, a clear floor space is provided for front approach at the kitchen sink and bathroom lavatories, 32-inch (813mm) clear width doors with maneuvering clearances and lever hardware are provided, etc. None of the elements in the unit are constructed for adaptability. The requirements for an Accessible unit provide a higher level of accessibility than either a Type A unit or a Type B unit.



OFFICE OF EDUCATION AND DATA MANAGEMENT

(Commentary, continued)

A Type A unit has some elements that are constructed accessible [e.g., 32-inch (813mm) clear width doors with maneuvering clearances and lever hardware] and some elements designed to be added or altered when needed (e.g., grab bars can be easily added in bathrooms since blocking in the walls is in place). Type A units follow the technical criteria in Section 1003 of ICC A117.1. This type of unit is less accessible than an Accessible unit and more accessible than a Type B unit.

23



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

(Commentary, continued)

A Type B unit is constructed to a lower level of of accessibility than either an Accessible unit or a Type A unit. While a person who uses a wheelchair could maneuver in a Type B unit, the technical requirements are geared more towards persons with lesser mobility impairments. Type B units follow the technical requirements in Section 1004 of ICC A117.1. Areas of a Type B unit are allowed to be totally nonaccessible (e.g., sunken living room, extra bedrooms on a mezzanine level). Side approach is permitted to sinks in the kitchen and lavatories in the bathroom rather than planning for a front approach. Some elements are constructed with a minimum level of accessibility [e.g., doors within the unit have a 31¾-inch (806mm) clear width but do not require maneuvering clearances], while some elements are designed to be altered when needed (e.g., blocking in the walls of the bathroom for future installation of grab bars.)



OFFICE OF EDUCATION AND DATA MANAGEMENT

WHAT'S REQUIRED, WHEN, and WHERE?

25



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

From the 2012 International Residential Code:

(Add) **R320.2 Single-story townhouses.** Where there are four or more townhouses in a single structure, <u>each</u> single-story townhouse shall be a Type B unit.

Exception: The number of Type B units shall be permitted to be reduced in accordance with Section R320.4.

What if there are THREE units in one structure?

???



OFFICE OF EDUCATION AND DATA MANAGEMENT

(Add) **R320.3 Multi-story townhouses.** Buildings or complexes that contain 10 or more multistory townhouses shall have at least 10 per cent Type B units. This requirement shall be met by providing a sufficient number of single-story Type B units or by providing a sufficient number of multi-story townhouses that incorporate a Type B unit on the street floor or by a combination of the two. Multi-story townhouses that incorporate a Type B unit on the street floor shall not be required to provide accessibility to floors above or below the street floor. The Type B unit on the street floor shall include provisions for living, sleeping, eating, cooking and a complete toilet and bathing facility on that floor.

Exceptions:

- 1. Structures with fewer than four dwelling units.
- 2. The number of Type B units shall be permitted to be reduced in accordance with Section R320.4.

27



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

(Add) **R320.4 General exceptions.** Where permitted by Sections R320.2 and R320.3, the required number of Type B units shall be permitted to be reduced in accordance with Sections R320.4.1 and R320.4.2.

(Add) **R320.4.1 Site impracticality.** On a site with multiple buildings, the number of units required by Sections R320.2 and R320.3 to be Type B units may be reduced to a percentage which is equal to the percentage of the entire site having grades, prior to development, which are less than 10 percent, provided not less than 20 percent of the Type B units required by Sections R320.2 and R320.3 on the site are provided.



OFFICE OF EDUCATION AND DATA MANAGEMENT

(Add) **R320.4.2 Design flood elevation.** The required number of Type B units shall not apply to a site where the lowest floor is required to be at or above the design flood elevation resulting in:

- 1. A difference in elevation between the minimum required floor elevation at the primary entrance and the closest vehicular and pedestrian arrival points, and;
- 2. A slope exceeding 10 percent between the minimum required floor elevation at the primary entrance and the closest vehicular and pedestrian arrival points.

29



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

From an OSBI Code Interpretation dating back to the BOCA-based Connecticut State Building Code:

Question 2: In a Use Group R-3 complex of attached one family dwelling units (townhouses) is there a requirement to provide 10% accessible units of each type of unit available (i.e.: one bedroom, two bedroom. three bedroom) or is the requirement to simply provide 10% accessible units of the total number of units available?



OFFICE OF EDUCATION AND DATA MANAGEMENT

Answer 2: Section 1107.4.2.3 of the BOCA National Building Code/1996 portion of the 1999 State Building Code, which governs construction of Use Group R-3 buildings, states that where dwelling units differ in the number of bedrooms provided, Type A dwelling units shall conform generally to the percentages of the unit types as a whole. The referenced section goes on to say that this requirement shall not be construed so as to require a greater number of Type A units than as computed by Section 1107.4.2.2, which requires one Type A unit for every 10 units or substantial fraction thereof in every Use Group R-3 project with 10 or more dwelling units. One would therefore set the total number of accessible units by requiring one for every 10 units or substantial fraction thereof, and one would then divide the distribution up in accordance with the percentages of each type of unit available, by bedroom number. For instance, in a project with 106 total units, twenty-six of which are three bedrooms, forty of which are two bedrooms and forty of which are one bedrooms, a total of 11 accessible units are required: 3 three bedrooms; 4 two bedrooms and 4 one bedrooms.

31



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

From the 2012 International Building Code:

GROUP I

1107.5 Group I. *Accessible units* and *Type B units* shall be provided in Group I occupancies in accordance with Sections 1107.5.1 through 1107.5.5.



OFFICE OF EDUCATION AND DATA MANAGEMENT

What's Group I-1?

308.3 Institutional Group I-1. This occupancy shall include buildings, structures or portions thereof for more than 16 persons who reside on a 24 hour basis in a supervised environment and receive *custodial care*. The persons receiving care are capable of self preservation.

- •Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- Convalescent facilities
- •Group homes
- •Halfway houses
- •Residential board and custodial care facilities
- Social rehabilitation facilities

33



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.5.1 Group I-1. Accessible units and Type B units shall be provided in Group I-1 occupancies in Accordance with Sections 1107.5.1.1 and 1107.5.1.2.

1107.5.1.1 Accessible units. At least 4 percent, but not less than one, of the *dwelling units* and *sleeping units* shall be *Accessible units*.

NOTICE -

1107.5.1.2 Type B units. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

NO TYPE A UNITS

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.



OFFICE OF EDUCATION AND DATA MANAGEMENT

What's Group I-2?

308.4 Institutional Group I-2. This occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self preservation.

- Foster care facilities
- Detoxification facilities
- Hospitals
- Nursing homes
- Psychiatric hospitals

35



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.5.2 Group I-2 nursing homes. Accessible units and Type B units shall be provided in nursing homes of Group I-2 occupancies in accordance with Sections 1107.5.2.1 and 1107.5.2.2.

1107.5.2.1 Accessible units. At least 50 percent but not less than one of each type of the dwelling units and sleeping units shall be Accessible units.

NOTICE – 1107.5.2.2 Type B units. In structures with four or more

dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B **NO TYPE A UNITS**

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7



OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.5.3 Group I-2 hospitals. *Accessible units* and *Type B units* shall be provided in general-purpose hospitals, psychiatric facilities and detoxification facilities of Group I-2 occupancies in accordance with Sections 1107.5.3.1 and 1107.5.3.2.

1107.5.3.1 Accessible units. At least 10 percent, but not less than one, of the *dwelling units* and *sleeping units* shall be *Accessible units*.

1107.5.3.2 Type B units. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7

NOTICE – NO TYPE A UNITS

37



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.5.4 Group I-2 rehabilitation facilities. In hospitals and rehabilitation facilities of Group I-2 occupancies which specialize in treating conditions that affect mobility, or units within either which specialize in treating conditions that affect mobility, 100 percent of the *dwelling units* and *sleeping units* shall be *Accessible units*.

NOTICE -

NO TYPE A
UNITS OR
TYPE B
UNITS



OFFICE OF EDUCATION AND DATA MANAGEMENT

What's Group I-3?

308.5 Institutional Group I-3. This occupancy shall include buildings and structures that are inhabited by more than five persons who are under restraint or security. An I-3 facility is occupied by persons who are generally *incapable of self preservation* due to security measures not under the occupants' control. This group shall include, but not be limited to, the following:

- · Correctional centers
- Detention centers
- Jails
- Prerelease centers
- Prisons
- Reformatories

39



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.5.5 Group I-3. *Accessible* units shall be provided in Group I-3 occupancies in accordance with sections 1107.5.5.1 through 1107.5.5.3.

1107.5.5.1 Group I-3 sleeping units. In Group I-3 occupancies, at least 2 percent, but not less than one, of the *dwelling units* and *sleeping units* shall be *Accessible units*.

1107.5.5.2 Special holding cells and special housing Cells or rooms. In addition to the *Accessible units* required by Section 1107.5.5.1, where special holding cells or special housing cells or rooms are provided, at least one serving each purpose shall be an *Accessible unit*. Cells or rooms subject to this requirement include, but are not limited to, those used for purposes of orientation, protective custody, administrative or disciplinary detention or segregation, detoxification and medical isolation.

Exception: Cells or rooms specially designed without protrusions and that are used solely for purposes of suicide prevention shall not be required to include grab bars.



OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.5.5.3 Medical care facilities. Patient *sleeping units* or cells required to be *Accessible units* in medical care facilities shall be provided in addition to any medical isolation cells required to comply with Section 1107.5.5.2.

?

??? So ... medical isolation cells are required in addition to medical isolation cells???

Not exactly, but ... yes. Stay tuned.

41



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

2012 ICC COMMENTARY:

1107.5.5.3 Medical care facilities. Patient sleeping units or cells required to be *Accessible units* in medical care facilities shall be provided in addition to any medical isolation cells required to comply with Section 1107.5.5.2.

When medical care facilities are provided within a detention or correctional facility, 10 percent of the units are required to be Accessible units. The intent is to be consistent with the hospital requirements found in Section 1107.5.3.1.



OFFICE OF EDUCATION AND DATA MANAGEMENT

GROUP I-3 SUMMARY

General Population 2 percent accessible

Special Cells At least 1 of each function accessible

Infirmary 10 percent accessible

43



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

GROUP R

1107.6 Group R. Accessible units, Type A units and Type B units shall be provided in Group R occupancies in accordance with Sections 1107.6.1 through 1107.6.4.

NOTICE –

No Type C or "Visitable" Units



OFFICE OF EDUCATION AND DATA MANAGEMENT

What's Group R-1?

(Add)**310.3 Residential Group R-1.** Residential occupancies containing *sleeping units* where the occupants are primarily *transient* in nature, including:

- Bed and breakfast establishments
- Boarding houses with more than 10 occupants
- Congregate living facilities with more than 10 occupants
- Hotels
- Motels

Connecticut added Bed and Breakfast Establishments, and deleted the word (transient) from the other four use types. NOTICE -

No Type C or "Visitable" Units

45



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.6.1 Group R-1. Accessible units and Type B units shall be provided in Group R-1 occupancies in accordance with sections 1107.6.1.1 and 1107.6.1.2.

NOTICE –

No Type A Units

1107.6.1.1 Accessible units. Accessible dwelling units and sleeping units shall be provided in accordance with Table 1107.6.1.1. All dwelling units and sleeping units on a site shall be considered to determine the total number of Accessible units. Accessible units shall be dispersed among the various classes of units. Roll-in showers provided in Accessible units shall include a permanently mounted folding shower seat.



OFFICE OF EDUCATION AND DATA MANAGEMENT

TABLE 1107.6.1.1 ACCESSIBLE DWELLING UNITS AND SLEEPING UNITS

TOTAL NUMBER OF UNITS PROVIDED	MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITHOUT ROLL-IN SHOWERS	MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITH ROLL-IN SHOWERS	TOTAL NUMBER OF REQUIRED ACCESSIBLE UNITS
1 TO 25	1	0	1
26 TO 50	2	0	2
51 TO 75	3	1	4
76 TO 100	4	1	5
101 TO 150	5	2	7
151 TO 200	6	2	8
201 TO 300	7	3	10
301 TO 400	8	4	12
401 TO 500	9	4	13
501 TO 1,000	2% of total	1% of total	3% of total
Over 1,000	20, plus 1 for each 100 or fraction thereof over 1,000	10, plus 1 for each 100 or fraction thereof over 1,000	30, plus 2 for each 100 or fraction thereof over 1,000



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

What's Group R-2?

(Amd) **310.4 Residential Group R-2** Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

- Apartment houses
- Boarding houses with more than six occupants
- Congregate living facilities with more than six occupants
- Convents
- Dormitories
- Fraternities and sororities
- Hotels
- Live/work units
- Monasteries
- Motels
- Vacation timeshare properties



OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.6.2 Group R-2. *Accessible units, Type A units* and *Type B units* shall be provided in Group R-2 occupancies in accordance with Sections 1107.6.2.1 and 1107.6.2.2.

1107.6.2.1 Apartment houses, monasteries and convents. *Type A units* and *Type B units* shall be provided in apartment houses, monasteries and convents in accordance with Sections 1107.6.2.1.1 and 1107.6.2.1.2.

(Amd)1107.6.2.1.1 Type A Units. In occupancies in Group R-2 containing more than 20 dwelling units or sleeping units, at least 10 percent of the units shall be a Type A unit in accordance with ICC/ANSI A117.1-2003. All R-2 units on the site, within the building or within the complex, shall be considered to determine the total number of units and the required number of Type A units. Type A units shall be dispersed among the various classes of units.

49



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

Exceptions:

- 1. The number of Type A units is permitted to be reduced in accordance with Section 1107.7.
- 2. Existing structures on a site shall not contribute to the total number of units on a site.



OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.6.2.2 Group R-2 other than apartment houses, monasteries and convents. In Group R-2 occupancies, other than apartment houses, monasteries and convents, *Accessible units* and *Type B units* shall be provided in accordance with Sections 1107.6.2.2.1 and 1107.6.2.2.2.

1107.6.6.2.1 Accessible units. Accessible dwelling units and sleeping units shall be provided in accordance with Table 1107.6.1.1.

1107.6.6.2.2 Type B units. Where there are four or more *dwelling units* or *sleeping units intended to be occupied as a residence* in a single structure, every *dwelling unit* and every *sleeping unit intended to be occupied as a residence* shall be a Type B unit.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

51



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

What's Group R-3?

(Amd) **310.5 Residential Group R-3.** Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

- Buildings that do not contain more than two dwelling units
- Boarding houses with six or fewer occupants where personal care services are not provided
- Care facilities in accordance with section 308.3.1, 308.4.1, or 308.6.4
- Congregate living facilities with six or fewer occupants where personal care services are not provided



OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.6.3 Group R-3. In Group R-3 occupancies where there are four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and every sleeping unit intended to be occupied as a residence shall be a Type B unit.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

53



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

What's Group R-4?

310.6 Residential Group R-4. This occupancy shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive *custodial care*. The persons receiving care are capable of self preservation. This group shall include, but not be limited to, the following:

- · Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- Convalescent facilities
- · Group homes
- Halfway houses
- Residential board and custodial care facilities
- Social rehabilitation facilities



OFFICE OF EDUCATION AND DATA MANAGEMENT

(310.6 Continued)

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.

55



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.6.4 Group R-4. Accessible units and Type B units shall be provided in Group R-4 occupancies in accordance with Sections 1107.6.4.1 and 1107.6.4.2.

1107.6.4.1 Accessible units. At least one of the *dwelling units* or *sleeping units* shall be an Accessible unit.

1107.6.4.2 Type B units. In structures with four or more *dwelling units* or *sleeping units intended to be occupied as a residence*, every *dwelling unit* and *sleeping unit intended to be occupied as a residence* shall be a *Type B unit*.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

NOTICE:

No Type A Units





OFFICE OF EDUCATION AND DATA MANAGEMENT

LOTS of exceptions to where Accessible, Type A and Type B units are required.

(Remember all those references to Section 1107.7?)

1107.7 General exceptions. Where specifically permitted by Section 1107.5 or 1107.6, the required number of *Type A units* and *Type B units* is permitted to be reduced in accordance with Sections 1107.7.1 through 1107.7.5.



OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.7.1 Structures without elevator service. Where no elevator service is provided in a structure, only the *dwelling units* and *sleeping units* that are located on stories indicated in Sections 1107.7.1.1 and 1107.7.1.2 are required to be *Type A units* and *Type B units*, respectively. The number of *Type A units* shall be determined in accordance with Section 1107.6.2.1.1.

1107.7.1.1 One story with Type B units required. At least one story containing dwelling units or sleeping units intended to be occupied as a residence shall be provided with an accessible entrance from the exterior of the structure and all units intended to be occupied as a residence on that story shall be Type B units.

59



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.7.1.2 Additional stories with Type B units. On all other stories that have a building entrance in proximity to arrival points intended to serve units on that story, as indicated in Items 1 and 2, all dwelling units and sleeping units intended to be occupied as a residence served by that entrance on that story shall be Type B units.

1. Where the slopes of the undisturbed *site* measured between the planned entrance and all vehicular or pedestrian arrival points within 50 feet (15,240 mm) of the planned entrance are 10 percent or less, and



OFFICE OF EDUCATION AND DATA MANAGEMENT

2. Where the slopes of the planned finished grade measured between the entrance and all vehicular or pedestrian arrival points within 50 feet (15, 240 mm) of the planned entrance are 10 percent or less.

Where no such arrival points are within 50 feet (15,240 mm) of the entrance, the closest arrival point shall be used unless that arrival point serves the *story* required by Section 1107.7.1.1.

61



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.7.2 Multistory units. A *multistory dwelling* or *sleeping unit* which is not provided with elevator service is not required to be a *Type B unit*. Where a *multistory unit* is provided with external elevator service to only one floor, the floor provided with elevator service shall be the primary entry to the unit, shall comply with the requirements for a *Type B unit* and a toilet facility shall be provided on that floor.

1107.7.3 Elevator service to the lowest story with units.

Where elevator service in the building provides an accessible route only to the lowest story containing dwelling or sleeping units intended to be occupied as a residence, only the units on that story which are intended to be occupied as a residence are required to be Type B units.



OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.7.4 Site impracticality. On a *site* with multiple nonelevator buildings, the number of units required by Section 1107.7.1 to be *Type B units* is permitted to be reduced to a percentage which is equal to the percentage of the entire *site* having grades, prior to development, which are less than 10 percent, provided that all of the following conditions are met:

- 1. Not less than 20 percent of the units required by Section 1107.7.1 on the *site* are *Type B units*;
- 2. Units required by Section 1107.7.1, where the slope between the building entrance serving the units on that *story* and a pedestrian or vehicular arrival point is no greater than 8.33 percent, are *Type B units*;
- 3. Units required by Section 1107.7.1, where an elevated walkway is planned between a building entrance serving the units on that *story* and a pedestrian or vehicular arrival point and the slope between them is 10 percent or less are *Type B units*; and
- 4. Units served by an elevator in accordance with Section 1107.7.3 are *Type B units*.

63



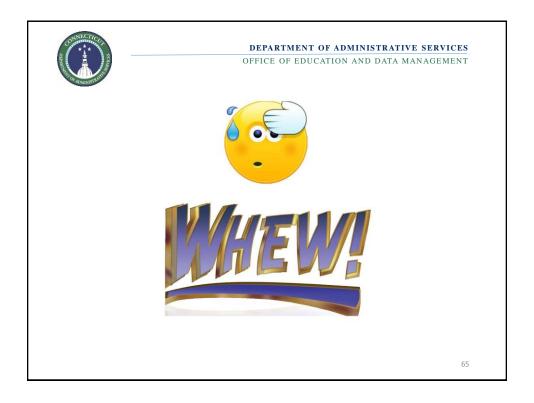
DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

1107.7.5 Design flood elevation. The required number of *Type A units* and *Type B units* shall not apply to a *site* where the required elevation of the lowest floor or the lowest horizontal structural building members of nonelevator buildings are at or above the *design flood elevation* resulting in:

- A difference in elevation between the minimum required floor elevation at the primary entrances and vehicular and pedestrian arrival points within 50 feet (15 240 mm) exceeding 30 inches (762 mm), and
- 2. A slope exceeding 10 percent between the minimum required floor elevation at the primary entrances and vehicular and pedestrian arrival points within 50 feet (15 240 mm).

Where no such arrival points are within 50 feet (15 240 mm) of the primary entrances, the closest arrival points shall be used.





OFFICE OF EDUCATION AND DATA MANAGEMENT

TECHNICAL REQUIREMENTS

Dwelling and Sleeping Units

ICC/ANSI A117.1 Chapter 10



OFFICE OF EDUCATION AND DATA MANAGEMENT

ELEMENT	ACCESSIBLE	TYPE A	TYPE B
Accessible entrance	Req'd	Req'd	Req'd
Accessible route w/in unit*	Req'd	Req'd	Req'd
Exceptions	Unfinished Attics & Basements	Unfinished Attics & Basements	1.Unfinished Attics & Basements 2. One of the following: 2.1 Raised portion of room 2.2 Sunken portion of room 2.3 Mezzanine w/o plumbing or enclosed habitable space



DEPARTMENT OF ADMINISTRATIVE SERVICES

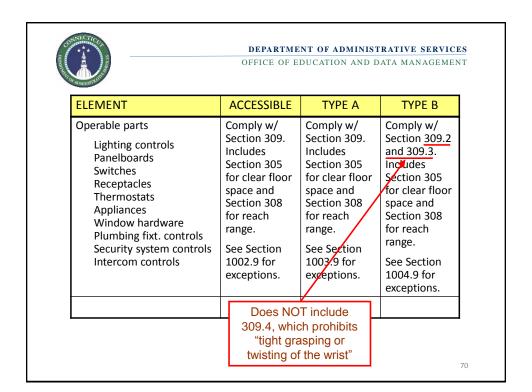
OFFICE OF EDUCATION AND DATA MANAGEMENT

ELEMENT	ACCESSIBLE	TYPE A	TYPE B
	Connecticut supplement provides that other stories w/in unit are not required to be accessible/adaptable if all elements are provided on primary story		
Turning space in each room	Req'd	Req'd	-
Exceptions	1. Additional bathrooms 2. Closets & pantries <48" deep	1. Additional bathrooms 2. Closets & pantries <48" deep	-
Level walking surfaces	Req'd (Slopes <1:20 allowed)	Req'd (Slopes <1:20 allowed)	Req'd (Slopes <1:20 allowed)



OFFICE OF EDUCATION AND DATA MANAGEMENT

ELEMENT	ACCESSIBLE	TYPE A	TYPE B
Doors			
Clear width	32" Min.	32" Min.	32" Entrance 31¾" Other
Maneuvering clearance	See 1002.5 for exceptions	See 1003.5 for exceptions	Not Req'd
Ramps	Allowed – Comply w/ Section 405	Allowed – Comply w/ Section 405	Allowed – Comply w/ Section 405
Elevators	Allowed – Comply with Section 407, 408 or 409	Allowed – Comply with Section 407, 408 or 409	Allowed – Comply with Section 407, 408 or 409
Platform lifts	Allowed – Comply w/ Section 410	Allowed – Comply w/ Section 410	Allowed – Comply w/ Section 410





OFFICE OF EDUCATION AND DATA MANAGEMENT

What about keys, and pinching and twisting of the wrist?

U.S. Access Board clarification:

Are locks operated by keys prohibited due to the pinching or twisting of the wrist their operation typically requires?

No, non-fixed portions of door or gate hardware, including keys and access cards, are not covered by the Standards, but those that can be used without pinching or turning will provide easier access. Non-fixed portions can be modified or adapted as needed for accessibility.

71



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

ELEMENT	ACCESSIBLE	TYPE A	TYPE B
Laundry equipment	Comply w/ Section 611. Includes Section 305 for clear space, and Section 309 for controls	Comply w/ Section 611. Includes Section 305 for clear space, and Section 309 for controls	Comply w/ Section 1004.10. Includes Section 305.3 for clear space



OFFICE OF EDUCATION AND DATA MANAGEMENT

ELEMENT	ACCESSIBLE	TYPE A	TYPE B
Toilet and bathing facilities	Comply w/	Comply w/	Comply w/
Primary bathroom	603	1003.11.2	1004.11
Other bathrooms	Not regulated	1003.11.1	1004.11 (Exc.)
Primary bathroom	603	1003.11.2	1003.11.2
Door swing cannot overlap fixture clear space	Req'd	Req'd	Req'd
Fixture clear spaces	Req'd	Req'd	Req'd
Grab bars installed	Req'd	Blocking	Blocking
Vanity cabinet	Not permitted	Removable	Removable
Mirror	40" Max. ht.	40" Max. ht.	40" Max. ht.
Water Closet	Adj. to wall	Adj. to wall	Option A or B

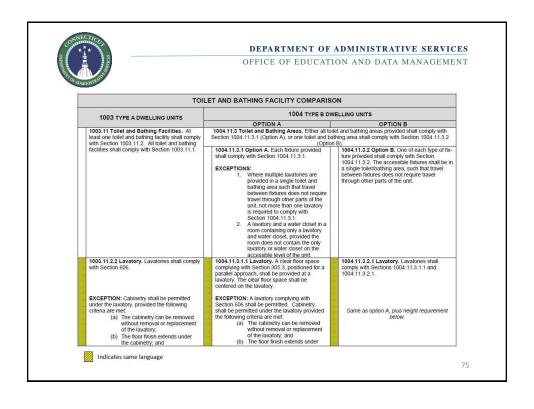
73

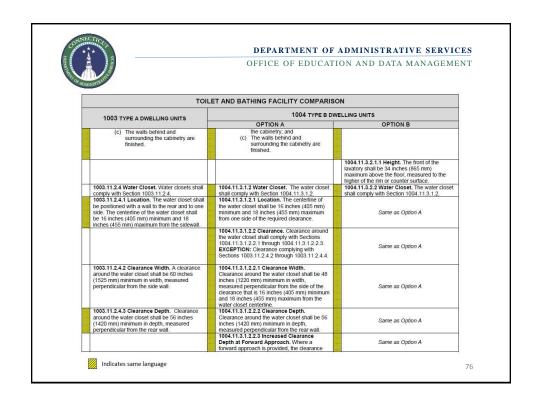


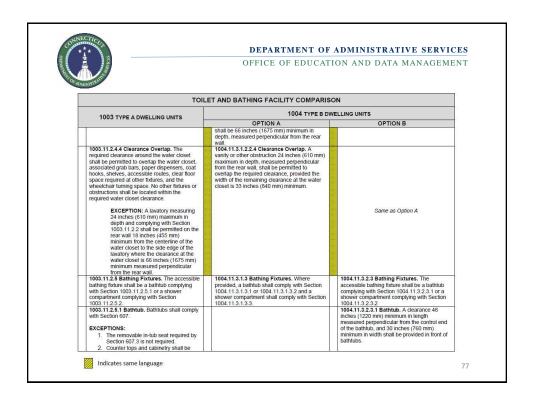
DEPARTMENT OF ADMINISTRATIVE SERVICES

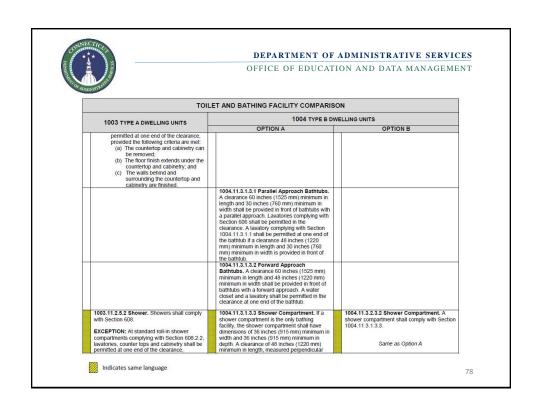
OFFICE OF EDUCATION AND DATA MANAGEMENT

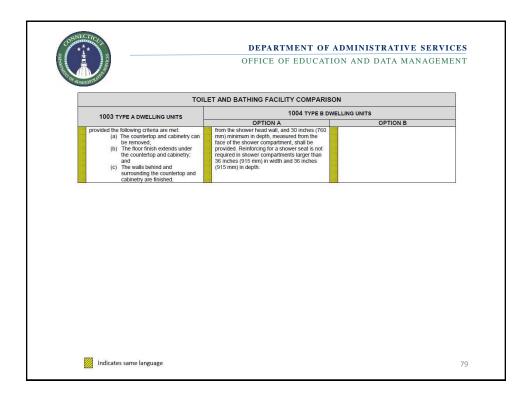
ELEMENT	ACCESSIBLE	TYPE A	TYPE B
Other bathrooms Door swing cannot overlap fixture clear space	1002.11.1 NOT Req'd	1003.11.1 NOT Req'd	1004.11.1 (Exc. On non- access Floors) NOT Req'd
Fixture clear spaces	Req'd	Req'd	Option A or
Grab bars installed	Blocking (Exc.)	Blocking (Exc.)	Option B
Vanity cabinet	Removable	Removable	
Mirror	40" Max. ht.	40" Max. ht.	
Water Closet	Adj. to wall	Adj. to wall	+

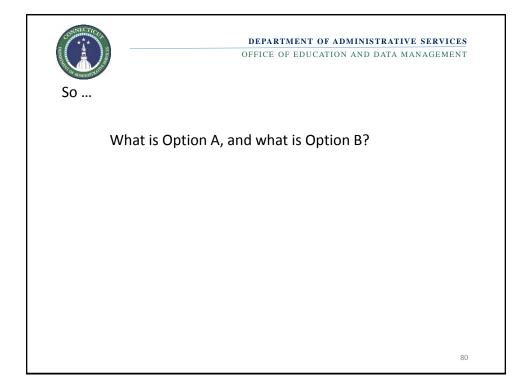














OFFICE OF EDUCATION AND DATA MANAGEMENT

OPTION A:

Lavatory: 30" x 48" clear space for parallel approach

OR

Accessible lavatory w/ removable vanity cabinet

Water Closet: 16" to 18" from a side wall

Clear space 48" from side wall & 56" from rear wall

(66" from rear wall for forward approach)

Bathtub: 30" x 60" clear space for parallel approach

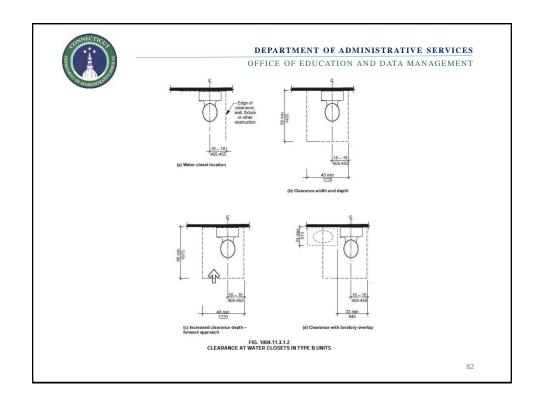
OR

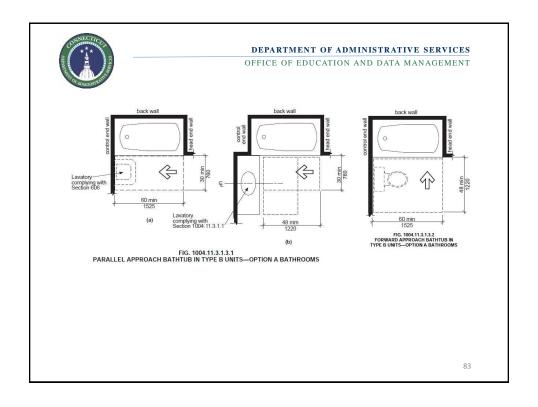
48" x 60" clear space for forward approach

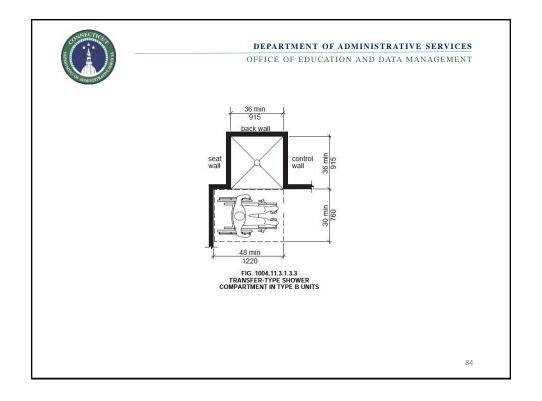
Shower: 36" x 36" minimum shower dimension

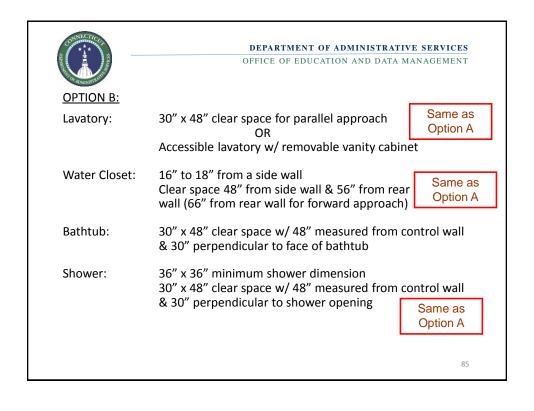
30" x 48" clear space w/ 48" measured from control wall

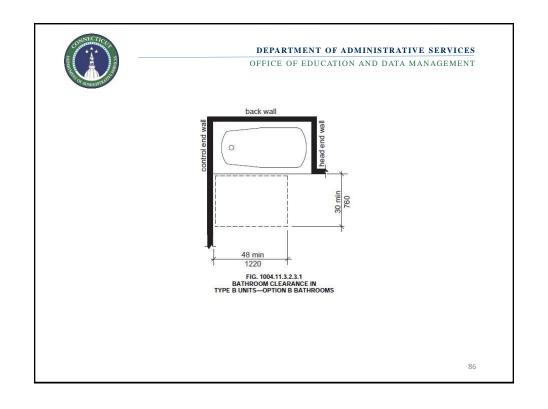
& 30" perpendicular to shower opening













OFFICE OF EDUCATION AND DATA MANAGEMENT

KITCHENS			
ELEMENT	TYPE A	TYPE B	
Clearance between opposing cabinets	40" for galley shape 60" for U-shape	Same as Type A	
Work Surface	(1) 30" wide x 34" max. height. 30" x 48" clear space for forward approach. (May have removable base cabinet)	Not required	
Sink	30" x 48" clear space for forward approach. Knee clearance under (1) bowl. (May have removable base cabinet.)	30" x 48" clear space for parallel approach. (Forward approach allowed as an exception.)	



DEPARTMENT OF ADMINISTRATIVE SERVICES

OFFICE OF EDUCATION AND DATA MANAGEMENT

KITCHENS			
ELEMENT	TYPE A	TYPE B	
Appliances (General)	30" x 48" clear space for parallel or forward approach	Same as Type A	
Refrigerator/freezer	50% of freezer shelf space max. 54" above floor. 30" x 48" clear space for parallel approach. C.L. of approach space may be offset max 24" from C.L. of appliance.	30" x 48" clear space for parallel approach. C.L. of approach space may be offset max 24" from C.L. of appliance. (No shelf requirement.)	

