Exemptions for Exits in Existing Bldgs

There are several building code sections that exempt the requirements for providing accessible means of egress in existing buildings: NCBC 1009.1; NCEBC 410.6 Ex.2; and NCEBC 806.1 Exc. 2. This application works where alterations are made to a building where all the exits are existing, and the building use or occupancy is continued. The language reads basically the same way:

Accessible means of egress are not required to be provided in existing buildings.

Several years ago, at a NC Council of Code Officials’ panel in Wilmington, there was a Q&A session that identified the following four (4) times when the exemptive language would not be applicable. These four times are:

1. When a shell building has received its Certificate of Occupancy but has not yet been built out.
   - Typically, the requirements for sprinklers, fire alarms and areas of rescue are determined based on the uses/occupancies within the building. So, a shell building may sit empty for several years before its first occupancies determine the requirements for the accessible means of egress.

2. When the occupancy or use of a building is changed and the new occupant load is larger than that which can be accommodated by the existing stairs.
   - In this case, life safety overrules accessibility requirements.

3. When a stair is demolished and rebuilt.
   - Here, new construction requirements prevail.

4. When an existing convenience stair is converted to an egress stair for the first time.
   - Again, since this is the first time the stair is used for egress, the stair may never have been originally constructed as an egress stair and is required to comply.

NC EBC 410 Commentary

Attached to this newsletter is an excerpt from the 2015 IEBC Commentary. This excerpt accompanies the interpretation on the 2nd page of this newsletter regarding the applicable requirements when there is an occupancy change from a single-family Group R-3 dwelling to a Group B occupancy. In this case, very few, if any, renovations or alterations were proposed for the interior of the new Group B occupancy.

The response begins by addressing the question with NCEBC 1012.9.2 references from the chapter that specifically addresses Changes of Occupancy. Also included are some cross references to NCEBC Ch. 410. These clarify that, no matter the approach taken, the references – and therefore the requirements – throughout the code, when accessibility is concerned, are identical.

Since the 2015 IEBC Commentary references are direct in terms of sections numbers for 2018 NCEBC Ch. 4, I have attached a copy of the Commentary for the 2015 IEBC 410 – Change of Occupancy. The same logic is applicable if either NCEBC Ch. 10 or NCEBC Ch. 8 are used.
Q: We have an existing Single-Family residence that is undergoing a complete Change of Occupancy to a Business. The designer is proposing no work beyond installing a required H/C parking space with an accessible route to the accessible entrance. He is also infilling existing opening to install 3'-0" x 6'-8" doors with lever hardware. None of the bathrooms are accessible, and of course there is no drinking fountain in the existing building. The designer is saying due to the fact of minimal money being spent on the project that he is not required to make the toilet rooms accessible nor is he required to install a drinking fountain. We are trying to follow the 2018 Existing Building Code beginning with Chapter 10 Change of Occupancy; as Chapter 10 mentions in several locations that Change of Occupancy is required to follow NCEBC 1012.9 Accessibility, then NCEBC 1012.9.1 refers to NCEBC 906 and NCEBC 806. Once we get to this point is where we seem to go off track. Please advise.

A: It sounds as though you have followed all the correct section numbers in the NCEBC for a complete change of use. It may also be that NCEBC 410.4, 410.6 and 410.7 are what the designer is following. In general, the requirements are identical, regardless of the section being used. The issue becomes exactly how to apply them.

1. NCEBC 407.1 does require that the new occupancy meet all the requirements for that new use or occupancy, unless, subject to the approval of the building official, the new use or occupancy is permitted without conforming to all the requirements of the new use or occupancy.
   a. Typically, these are fire and life safety issues, although other plumbing, mechanical and occupancy-related issues are reviewed here. Anything required here, based on the new occupancy or use, forms part of the alteration budget used for NCEBC 806.2 Exc. 1 disproportionality.
   b. If the number of NCPC-required plumbing fixtures is what is required for the new occupancy, then any upgrades would have to be addressed under NCEBC 806.2 Exc. 1 path of travel provisions. If not, then what goes in new (think Group R to Group A) would have to comply with current code requirements.

2. NCEBC 1012.9.2 [NCEBC 410.4.2] has minimum provisions that are required based on the change of use.
   a. The budget for all of this is applied toward the NCEBC 806.2 Exc. 1 [NCEBC 410.7 Exc. 1] amount; this includes the expense for lever hardware and the installation of 3'-0" doors throughout.
   b. The NCEBC 1012.9.2 reference to NCEBC 1012.9.1, which in turn references NCEBC 806 and 906, is simply so that there is a complete reference throughout the NCEBC to any applicable code section that may be involved in an alteration. It may help to know the following to understand these "all over the place" references:
      a. The requirements that are in the 2015 IBC are exactly the same as what was originally in 2012 IBC Ch. 34 for alterations to existing buildings.
      b. Even though the IBC has different requirements for Level I, Level II, Level III work, or for alterations or rebuildings of existing buildings, when it comes to accessibility, the requirements are exactly the same in each and every case.
      c. While the underlined language in the NC codes usually means this is NC language, in the NCEBC, the underlined language typically means that the original IBC language was relocated in accordance with how the Building Code Council wished to format the code similar to the formatting of the NC Rehab Code that was used earlier.

4. In the case of a Group R building that changes its occupancy to a Group B occupancy, where the scope of work is limited to the following: handicapped parking with an accessible route to the building entrance, plus the addition of 3'-0" interior doors, the accessibility requirements include (but may not be limited to):
   a. NCEBC 407.1 requires compliance with the new occupancy classification.
      i. Review the floor loading for the building to see if there are changes from Group R-3 to Group B that may require upgrading the space.
   b. The budget associated with NCEBC 410.4.2 (parking, accessible route into the building, door replacement) plus any amount from NCEBC 407.1 are added to determine the overall amount used to calculate the 20% NCEBC 410.7 Exc. 1 disproportionate amount.
      i. This is what is used to provide accessibility for the restrooms. (See the Commentary references for the 2016 IBC 410.7 noted below.)
         - "...an accessible route to such facilities, including any restrooms and the drinking fountains serving the primary function area, must also be made accessible, even though such facilities and areas may not by themselves be considered primary function areas. This is not just the route to the bathrooms and the drinking fountains; the bathrooms and the drinking fountains themselves must also be improved when not accessible...There are conditions under which it may not be reasonable to strictly enforce this requirement for an accessible route to an altered or added primary function area. Exception 1 approaches this by utilizing the cost of the alterations or addition as a basis for determining if providing a complete accessible route is reasonable. The requirement for a complete accessible route does not apply when the cost of providing it exceeds 20 percent of the cost of the alterations or addition to the primary function area. These costs are intended to be based on the actual costs of the planned alterations or additions to the primary function area before consideration of the cost of providing an accessible route.
      ii. The 20% disproportionate amount may cover the expense of removing a tub (to allow for the required 56" x 60" clearance around the water closet) along with providing additional accessibility features in the ground floor restroom.
**SECTION 409 MOVED STRUCTURES**

409.1 Conformance. Structures moved into or within the jurisdiction shall comply with the provisions of the *International Building Code* for new structures.

- Moved structures are required to comply with the provisions applicable to new construction, which is generally intended to mean the IBC. The moved structure may comply with the alternative provisions of Chapter 14 instead of the code requirements for new structures, which may be particularly useful if the moved structure is older than the effective date of the adoption of the building codes in the jurisdiction. The fire separation distance of the moved structure must comply with requirements for new structures even if the compliance alternative provisions of Chapter 14 are used to meet the code requirements.

**SECTION 410 ACCESSIBILITY FOR EXISTING BUILDINGS**

410.1 Scope. The provisions of Sections 410.1 through 410.9 apply to maintenance, change of occupancy, additions and alterations to existing buildings, including those identified as historic buildings.

- The purpose of Section 410 is to establish minimum criteria for accessibility when dealing with existing buildings and facilities. The history and efforts involved are similar to those discussed in the commentary for IBC Chapter 11. Access to buildings and structures for people with physical disabilities has been a subject that the building codes have regulated since the early 1970s. They have consistently relied on a consensus national standard, ICC A117.1, *Accessible and Useable Buildings and Facilities*. Accessibility is not a new subject to the construction regulatory community. There has been a great deal of emphasis and awareness placed on the subject of accessibility through the passage of two federal laws. The Americans with Disabilities Act (ADA) and the Fair Housing Amendment Act (FHA) are federal regulations that affect building construction as it relates to accessibility.

The International Code Council® (ICC®) recognizes the value of consistency between federal laws and the codes. Efforts for coordination with federal accessibility requirements are ongoing. Representatives from interested accessibility groups, the Department of Housing and Urban Development (HUD) and the Architectural and Transportation Barriers Compliance Board (ATBCB, commonly referred to as the Access Board), have been attending and participating in the code change process for the IBC and ICC A117.1. In addition, the ICC has participated in the public comment process on the development of federal regulations for accessibility. Appendix B includes information found in the *Americans with Disabilities Act Accessibility Guidelines* (ADAAG) that cannot be enforced through the typical code enforcement process, but would provide beneficial information for the designer/owner for full compliance purposes. The ICC has worked toward, and will continue to strive for, accessibility regulations that reflect the highest possible degree of consistency with federal regulations and, more importantly, reasonable and appropriate provisions to meet the needs of people with disabilities.

- Buildings undergoing alterations are generally expected to fully comply with the accessibility provisions. However, exceptions are then provided to indicate the conditions under which less than full accessibility is permitted.

For example, if a door and frame are removed and replaced, the door must meet the requirements for width, height, maneuvering clearances and hardware. If just the doorknob is being removed, it must be replaced with lever hardware.

- If the area undergoing alteration does not contain a primary function, there are no additional requirements; however, if the area contains a primary function, there is an additional criterion that may require work not in the original scope to achieve accessibility. This additional criterion is to provide an accessible...
route to the altered area, including any toilets and drinking fountains that serve it. Requirements for an accessible route might specify that the door previously discussed be removed and replaced because it did not have adequate width or maneuvering clearances.

The principle behind this approach to upgrading existing buildings is that they will become more accessible over time. A valid time to work toward that goal is when a structure is being altered. Special considerations are offered because of the difficulty involved in dealing with existing facilities that may not have been built with accessibility for physically disabled persons in mind. For example, when a historically registered home is being made into a museum, if changing the front door to allow for wheelchair access would alter the historical significance, alternatives are offered in Section 410.9. Other examples include the alternatives offered in Section 410.7 if it is technically infeasible to provide full accessibility in an existing building. Please note that the term "technically infeasible" refers to either movement of a major structural element or other physical constraints. For example, a ramp to provide entrance or exit from a particular door may not be possible because of property lines or setback constraints.

410.2 Maintenance of facilities. A facility that is constructed or altered to be accessible shall be maintained accessible during occupancy.

- Continued compliance with the accessibility requirements of the code is dependent on maintenance of such facilities throughout the life of the building. For example, drinking fountains that are required to be accessible are of little value if they malfunction through deterioration or failure of any of the working parts. In other cases, inoperable elevators, locked accessible doors and obstructed accessible routes must be maintained such that they are readily usable by individuals with disabilities.

410.3 Extent of application. An alteration of an existing facility shall not impose a requirement for greater accessibility than that which would be required for new construction. Alterations shall not reduce or have the effect of reducing accessibility of a facility or portion of a facility.

- The purpose of this section is to clarify where alterations and scoping for alteration requirements apply. The requirements in Sections 410.6 and 410.7 do not impose a higher level of accessibility than the level required in new construction. At the same time, alterations cannot result in a lesser degree of accessibility than existed before the alterations were undertaken.

410.4 Change of occupancy. Existing buildings that undergo a change of group or occupancy shall comply with this section.

Exception: Type B dwelling or sleeping units required by Section 1107 of the International Building Code are not required to be provided in existing buildings and facilities undergoing a change of occupancy in conjunction with alterations where the work area is 50 percent or less of the aggregate area of the building.

- When an entire building undergoes a change of occupancy, the building must comply with the provisions in Section 410.4.2. If a portion of a building undergoes a change of occupancy, such as when there is a tenant change or a partial renovation where a space changes function, then the level of accessibility is addressed in Section 410.4.1.

The exception notes where Type B dwelling and sleeping units would not need to be included where there is a change of occupancy to a Group I or R building (see Section 1107 of the IBC). Where the change of occupancy does not involve extensive alterations (exceeding 50 percent of the square footage of the building), then Type B accessibility requirements would not need to be provided in the new or altered dwelling or sleeping units. This exception is similar to what is also found in the code for alterations where less than a Level 3 alteration occurs. A Level 3 alteration is greater than 50 percent of the square footage of the building. This, therefore, decreases the burden on many smaller projects. Type B dwelling units should be provided in larger alterations because, where major alterations are being performed, there is a prime opportunity to have those buildings move toward being able to serve a wider range of the population. With the population of the United States aging, there will be a steady increasing demand for units that include accessibility features. See the commentary to Section 410.4.2, Section 410.6, Exception 4, and Section 410.8.8 for additional information.

410.4.1 Partial change in occupancy. Where a portion of the building is changed to a new occupancy classification, any alterations shall comply with Sections 410.6, 410.7 and 410.8.

- When a building undergoes a partial change of occupancy, such as where there is a tenant change or a change in function of a specific area, then the level of accessibility provided must achieve the same level as if that space were undergoing an alteration. Basically, the intent is that any spaces or elements being altered will meet new accessibility provisions unless technically infeasible (see Section 410.6). If the area changing occupancy is a primary function of the space, an evaluation of the accessible route, as well as bathrooms and drinking fountains serving this space, must be made. If these elements are not accessible, improvements must be made. However, there is a limit to the cost of the additional improvements to a maximum of 20 percent of the cost of the alteration (see Section 410.7). The reference to Section 410.8 provides for additional allowances because the designer/owner is still dealing with existing building constraints. For example, the accessible route could be provided by a platform lift (see Section 410.8.3), while in new construction, this option is limited (see IBC Sections 1009.5 and 1109.8).
410.4.2 Complete change of occupancy. Where an entire building undergoes a change of occupancy, it shall comply with Section 410.4.1 and shall have all of the following accessible features:

1. At least one accessible building entrance.
2. At least one accessible route from an accessible building entrance to primary function areas.
4. Accessible parking, where parking is being provided.
5. At least one accessible passenger loading zone, when loading zones are provided.
6. At least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.

Where it is technically infeasible to comply with any of the requirements for a change of occupancy, the above items shall conform to the requirements to the maximum extent technically feasible.

Exception: The accessible features listed in Items 1 through 6 are not required for an accessible route to Type B units.

For a project that involves a complete change of occupancy with alterations, full compliance with accessibility requirements is expected and reasonable for areas being altered, except where technical infeasibility can be demonstrated. If full compliance is technically infeasible, the element must be made accessible to the fullest extent that is feasible. This is consistent with the general approach that has always been taken relative to other matters regulated by the code.

In addition to accessibility requirements in the space, an accessible route is required to that space. Six items that make up that accessible route are listed. This section establishes that when an existing building undergoes a complete change of occupancy, compliance with those requirements, at minimum, is expected. That way, a person with mobility impairments would be able to arrive at the building (see Items 1, 3, and 5), get to the accessible entrance (see Items 2, 4 and 6) and have at least one accessible route throughout the building to all the primary function areas (see Item 2). Changes between levels could be via a ramp (see Section 410.6.5), an elevator (see Section 410.9.2) or a platform lift (see Section 410.8.3). If the altered area would not be required to be served by an accessible route in new construction, an accessible route would not be required for a change of occupancy (see Section 410.3). If the area undergoing a change of occupancy is being altered and contains a primary function area, the accessible route provisions in Section 410.7 are also applicable. This would not only require an accessible route to the change of occupancy area, but would also include possible upgrades to toilet rooms and drinking fountains that serve the area. These elements could use the 20-percent cap on cost offered in Section 410.7, Exception 1. If full compliance is technically infeasible, the element must be made accessible to the fullest extent that is feasible. See the commentary to Section 410.7 for additional information on the exceptions.

Typically, a building undergoing a complete change of occupancy is being, at least partially, gutted and undergoing alterations because of changes in function, possibly caused by increased occupant load, means of egress requirements, sprinkler requirements, or mechanical and plumbing changes. The intent is to create a balance between the change of occupancy meeting all new construction requirements for accessibility and the fact that the designer/owner is dealing with some existing building conditions.

This is not based on any specific provisions of the ADAAG, but parallels the intent of the requirements for the removal of barriers.

If the change of occupancy results in a Type B dwelling unit being provided, the exception permits the building to be exempt from providing the additional accessible route requirements listed in this section. This allowance addresses concerns of site impracticality for existing structures. This also reinforces the intent that the inclusion of Type B units is not meant to require elevators when alterations are performed on upper floors in nonelevator buildings (see the exceptions to Section 1107.7). These areas would have been exempted if built new under the FHA and IBC, and should continue to be exempted.

410.5 Additions. Provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, a primary function shall comply with the requirements in Section 410.7.

Additions must comply with new construction. An addition, however, is also an alteration to an existing building; therefore, accessible route provisions for existing buildings are applicable (see commentary, Section 410.6). For example, a new dining area is added in a restaurant. All accessible elements within the parameter of the addition must be constructed to be accessible. If the route to or from the addition, or the bathrooms or drinking fountains that serve the addition, are in the existing building, the routes must be evaluated for accessibility. Section 410.7 specifies that the accessible route would include the route to these elements, the toilet rooms themselves, the fixtures in the toilet room and the drinking fountains.

410.6 Alterations. A facility that is altered shall comply with the applicable provisions in Chapter 11 of the International Building Code, unless technically infeasible. Where compli-
PRESCRIPTIVE COMPLIANCE METHOD

In accordance with this section is technically infeasible, the alteration shall provide access to the maximum extent technically feasible.

Exceptions:

1. The altered element or space is not required to be on an accessible route, unless required by Section 410.7.

2. Accessible means of egress required by Chapter 10 of the International Building Code are not required to be provided in existing facilities.

3. The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall be permitted to meet the provision for a Type B dwelling unit.

4. Type B dwelling or sleeping units required by Section 1107 of the International Building Code are not required to be provided in existing buildings and facilities undergoing a change of occupancy in conjunction with alterations where the work area is 50 percent or less of the aggregate area of the building.

The code approaches the application of accessibility provisions to a facility that is altered by broadly requiring full conformance to new construction, meaning full accessibility is expected. Exceptions are then provided to indicate the conditions under which less than full accessibility is permitted.

The circumstance under which full compliance with accessibility provisions is not required is when it is deemed to be technically infeasible (see the commentary for the definition of "Technically Infeasible" in Section 202). This is considered reasonable since, if not provided for, plans for alterations may be otherwise abandoned by the building owner. The opportunity to upgrade and increase the current level of accessibility in an existing building would then be lost. This concern is also embodied in the requirement that an altered element or space is expected to be made accessible to the extent to which it is technically feasible to do so. In this manner, the code accomplishes the greatest degree of accessibility while recognizing the justifiable difficulties that may be involved in providing full accessibility. Alterations are not required to exceed new construction requirements (see Section 410.3).

In accordance with Exception 1, if the area undergoing alteration does not contain a primary function (see Section 410.7), there are no additional requirements past the original scope of the project. However, if the area contains a primary function, there are additional criteria to achieve accessibility that may require work not in the original scope of the project. The additional criteria are to provide an accessible route to the altered area, as well as improvements to any toilets and drinking fountains that serve the altered area.

Exception 2 indicates that accessible means of egress are not required as a result of undertaking alterations to existing buildings. Strict compliance with IBC Section 1009 is often technically infeasible. The requirement for a 48-inch (1219 mm) clear width between handrails would require many stairways to be widened. This often would entail movement of major structural elements in order to accomplish this alteration.

Exception 3 addresses the specific circumstances where an existing Type A dwelling unit is being altered. While Section 410.2 says that a level of accessibility must be maintained, in the situations where a Type A dwelling unit is "individually owned," such as a condominium, then it only needs to meet the technical requirements for a Type B dwelling unit (see ICC A117.1, Section 1004) when it is altered or remodeled by the owner. Type B units require a lesser level of accessibility than Type A units. For example, if an owner wanted to alter the bathroom in his or her unit, he or she would only be required to meet the lesser accessibility requirements of a Type B unit with the new construction. This exception would not be applicable to units that are for rent.

Exception 4 allows some partial building alterations in Group I and R structures to occur without providing Type B dwelling units and sleeping units (see Section 1107). Where the alteration does not exceed 50 percent of the square footage of the building, then Type B accessibility requirements would not need to be provided in the dwelling or sleeping units being altered (see Sections 410.8.6 and 410.8.7 for alterations where Accessible units and Type A units are required). This exception is similar to what is also found in the code for change of occupancy where less than a Level 3 alteration is occurring. A Level 3 alteration is greater than 50 percent of the square footage of the building. This decreases the burden on many smaller projects.

Type B dwelling units must be provided in larger alterations. Where major alterations are being performed, there is a prime opportunity to have those buildings move toward being able to serve a wider range of the population. With the population of the United States aging, there will be a steadily increasing demand for units that include accessibility features. In addition, while the Fair Housing Act (FHA) is only applicable to new construction, this law was enacted in 1991. Some buildings constructed after that time may not be in compliance with the FHA. When a major alteration/renovation is occurring, there is an opportunity to bring those buildings into compliance. See the commentary to Sections 410.4.2 (the exception), 410.8.6, 410.8.7 and 410.8.8 for additional information.
410.7 Alterations affecting an area containing a primary function. Where an alteration affects the accessibility to, or contains an area of primary function, the route to the primary function area shall be accessible. The accessible route to the primary function area shall include toilet facilities and drinking fountains serving the area of primary function.

Exceptions:
1. The costs of providing the accessible route are not required to exceed 20 percent of the costs of the alterations affecting the area of primary function.
2. This provision does not apply to alterations limited solely to windows, hardware, operating controls, electrical outlets and signs.
3. This provision does not apply to alterations limited solely to mechanical systems, electrical systems, installation or alteration of fire protection systems and abatement of hazardous materials.
4. This provision does not apply to alterations undertaken for the primary purpose of increasing the accessibility of a facility.
5. This provision does not apply to altered areas limited to Type B dwelling and sleeping units.

An area containing a primary function is one in which a major activity for which the building or facility is intended is carried out (see the definition of "Primary function" in Section 202). For example, the lobby of a hotel in which the registration and check-out desk is located would be a primary function area. Other examples would be the dining area of a restaurant, the meeting rooms or exhibition halls in a conference center, virtually all office and work areas in a business building, and retail display areas in a mercantile occupancy. The key concept is that a primary function area is one that contains a major activity of the facility. Areas that contain activities not related to the main purpose of the facility would not be considered primary function areas. For example, a mechanical equipment room, storage closet, toilet facilities, corridors, lounges and locker rooms would not be considered primary function areas. With this background, it is clear that areas containing a primary function are clearly more critical in terms of the purpose for which people enter and use the facility; therefore, this section reflects that when such areas are altered or added, it is important to require that an accessible route to the primary function area be provided. When an accessible route to a primary function area is required by this section, an accessible route to such facilities, including any restrooms and drinking fountains serving the primary function area, must also be made accessible, even though such facilities and areas may not by themselves be considered primary function areas. This is not just the route to the bathrooms and drinking fountains; the bathrooms and drinking fountains themselves must also be improved when not accessible.

There are conditions under which it may not be reasonable to strictly enforce this requirement for an accessible route to an altered or added primary function area. Exception 1 approaches this by utilizing the cost of the alterations or addition as a basis for determining if providing a complete accessible route is reasonable. The requirement for a complete accessible route does not apply when the cost of providing it exceeds 20 percent of the cost of the alterations or addition to the primary function area. These costs are intended to be based on the actual costs of the planned alterations or addition to the primary function area before consideration of the cost of providing an accessible route. For example, if the planned alterations will cost $100,000, not including the cost of an accessible route to a primary function area, this exception would apply if the additional cost of providing the accessible route would exceed $20,000. It is not the intent to exempt all requirements for accessibility when the total cost for providing the accessible route exceeds the 20-percent threshold. Improvements to the accessible route are required to the extent that costs do not exceed 20 percent of the cost to the planned alteration or addition. It is not required that the full 20 percent be spent. If the accessible route (including accessible bathrooms and drinking fountains) is already provided, no additional expenditure is required. Note that there is not a priority list given for where money should be spent on improving the accessible route. The logical progression is access to the site, accessible exterior routes to accessible entrances, access throughout the facility, access to services in the facility, toilet and bathing rooms and, finally, drinking fountains. Evaluation on how and where the money available should best be spent must be made on a case-by-case basis. For example, if an accessible route is not available to an upper level, and the cost of an elevator is more than 20 percent of the cost of the renovation, then other alternatives could be investigated, such as a platform lift or limited access elevator, or adding the elevator pit and shaft at this time, with elevator equipment added later. If all such items are in excess of the 20-percent limit, perhaps the money available could be spent toward making the toilet rooms accessible. The idea is that existing buildings would become fully accessible over time.

Exceptions 2 and 3 identify certain alterations that are not intended to trigger the requirement for providing an accessible route to a primary function area. Alterations limited to such elements as windows, hardware, operating controls, electrical outlets, signage, mechanical, electrical and fire protection systems, including alterations for the purpose of abating a hazardous materials circumstance, do not affect the usability of a primary function area in the same manner as alterations that affect the floor plan or the configuration, location or size of rooms or spaces. It is therefore considered unreasonable to require the installation of an accessible route when the scope of alterations is limited to that reflected in these exceptions.
Note that the costs for these items are not "backed out" of the total cost for the alteration before applying Exception 1. Exceptions 2 and 3 are alterations limited to the specific items referenced.

Exception 4 is intended to avoid penalizing a building owner who is undertaking alterations or additions for the purpose of increasing accessibility. It is appropriate to encourage owners to make such alterations without requiring them to do more work simply because they chose to increase the accessibility of the space. This could otherwise have the opposite effect of discouraging such alterations to avoid the expense of undertaking more work and expense than was originally planned. For example, federal law (ADA) requires that owners of existing buildings remove certain existing barriers to accessibility. Removal of such barriers may require a permit from the code official. It would be unreasonable to have such activity trigger the mandatory requirement for further alterations to accomplish accessibility beyond the originally planned work. In principle, the code takes the view that some extent of greater accessibility is positive progress and should be encouraged, not penalized.

Where the alterations result in Type B dwelling units being provided where none previously existed (Section 410.6, Exception 4), Exception 5 would obviate the need for any additional money to be spent toward providing an accessible route to those Type B dwelling or sleeping units. This is intended to encourage the creation of such units without penalizing building owners. Similar to Section 410.4.2, this exception is intended to address the concerns of site impracticality for providing accessible routes to and into existing buildings providing Type B dwelling units.

This also reinforces the intent that the inclusion of Type B units is not meant to require elevators when alterations are performed on upper floors in nonelevator buildings (see exceptions to Section 1107.7). These areas would have been exempted if built new under the FHA and IBC, and should continue to be exempted.

### 410.8 Scoping for alterations

The provisions of Sections 410.8.1 through 410.8.14 shall apply to alterations to existing buildings and facilities.

- The specific provisions of this section are intended to reflect conditions under which less than full accessibility, as would be required in new construction, is permitted in altered areas. As previously discussed, Section 410.6 requires alterations to comply with the full range of accessibility-related provisions of the code for new construction. This section reflects a reasonable set of conditions under which a different level of accessibility can be provided. Sections 410.8.1 through 410.8.14 are part of the code's coordination effort with ICC A117.1 and the recommendations for the ADAAG Review Federal Advisory Committee.

#### 410.8.1 Entrances

**Accessible entrances shall be provided in accordance with Section 1105.**

**Exception:** Where an alteration includes alterations to an entrance, and the facility has an accessible entrance, the altered entrance is not required to be accessible, unless required by Section 410.7. Signs complying with Section 1111 of the International Building Code shall be provided.

- This provision is contained here to point to the accessibility provisions of IBC Chapter 11 for entrances. A facility is not accessible if the entrances into it are inaccessible. IBC Section 1105 establishes reasonable criteria for providing accessible entrances. A facility is not required to have all of its entrances accessible in order to provide reasonable accommodation to disabled persons. If a facility has multiple public entrances, it is not considered unreasonable to require at least 60 percent of the entrances to be accessible. In addition to the 60-percent accessible public entrances requirement, entrances that have a specific function or provide access to only certain portions of the facility must be addressed.

If the building already has the accessible entrances required by IBC Section 1105, an entrance that is being altered is not required to be made accessible; however, if the entrance was required to be made accessible as part of the route to the altered primary function area, the exception would not apply. If entrances are not accessible, appropriate signage marking such entrances and directing persons with disabilities to the nearest accessible entrance is required.

#### 410.8.2 Elevators

Altered elements of existing elevators shall comply with ASME A17.1 and ICC A117.1. Such elements shall also be altered in elevators programmed to respond to the same hall call control as the altered elevator.

- Requirements for new construction state that all elevators on an accessible route must be fully accessible in accordance with ICC A117.1. If a passenger elevator is altered, the altered element must be accessible in accordance with the requirements for existing elevators in Section 407 of ICC A117.1. If the altered elevator is part of a bank of elevators, the same element must be made accessible in every elevator that is part of that bank. The purpose of this requirement is to have consistency among elevators in a bank so that disabled people are not required to wait for a specific elevator when the general population can take the first available elevator. ICC A117.1 also provides accessibility requirements for limited use/limited access (LULA) elevators (ICC A117.1, Section 408) and private residence elevators (ICC A117.1, Section 409). While these types of elevators can serve as part of an accessible route, their use is limited by ASME A17.1.
410.8.3 Platform lifts. Platform (wheelchair) lifts complying with ICC A117.1 and installed in accordance with ASME A18.1 shall be permitted as a component of an accessible route.

- This section provides for the use of platform (wheelchair) lifts in existing buildings. In order to create an accessible route where there are changes in floor levels, the provisions for new construction would most often require the installation of an elevator or ramp. Platform lifts are allowed in new construction for limited conditions (see IBC Section 1109.8). If the space in an existing building precludes the installation of an elevator or ramp, a platform lift may be the only practical solution. Given the choice between no accessibility or accessibility by a platform lift, accessibility is preferable.

Previously, platform lift requirements were addressed in the elevator standard, ASME A117.1, but they are now addressed in their own standard, ASME A18.1. One of the many changes was the removal of the requirement for key operation, which previously discouraged independent utilization of platform lifts. Note that, in accordance with IBC Section 1009.5, platform lifts are also permitted for an accessible means of egress; however, accessible means of egress are not required in existing buildings undergoing alterations in accordance with IBC Section 410.6. Exception 2:

A chair lift is not acceptable as part of an accessible route in either new or existing construction. For examples of the difference between a chair lift and a platform lift, see the commentary to Section 1109.6 of the IBC.

410.8.4 Stairways and escalators in existing buildings. In alterations, change of occupancy or additions where an escalator or stairway is added where none existed previously and major structural modifications are necessary for installation, an accessible route shall be provided between the levels served by the escalator or stairways in accordance with Section 1104.4 of the International Building Code.

- If a stairway or escalator is added as part of an alteration in a location where one did not previously exist, the alteration must also include an accessible route between the same two levels. Where major structural modifications are required to install the stairway, there is no longer the argument that it is technically infeasible to add the accessible route to the other level. If an accessible route is already available between the two levels, or if the stairway or escalator is replacing an existing stairway or escalator, this requirement is not applicable. In conjunction with Section 410.3, if the requirement for the accessible route would be in excess of what is required for new construction, such as an accessible route to an area that was exempted by IBC Section 1103.2, 1104.4, 1107 or 1108, this requirement is not applicable. The intent is that if a route is provided between accessible levels for a nondisabled person to use, it is reasonable to also expect an accessible route.

410.8.5 Ramps. Where slopes steeper than allowed by Section 1012.2 of the International Building Code are necessitated by space limitations, the slope of ramps in or providing access to existing facilities shall comply with Table 410.8.5.

- This section recognizes the circumstances where, due to existing site or configuration constraints, a ramp with a slope of one unit vertical in 12 units horizontal (1:12) may not be feasible. A steeper slope is allowed where the elevation change does not exceed 6 inches (152 mm). Further ramp requirements, such as width, landings, etc., are set forth in IBC Section 1012.

<table>
<thead>
<tr>
<th>TABLE 410.8.5 RAMPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLOPE</td>
</tr>
<tr>
<td>Steeper than 1:10 but not steeper than 1:8</td>
</tr>
<tr>
<td>Steeper than 1:12 but not steeper than 1:10</td>
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</table>

For SI: 1 inch = 25.4 mm.

- In existing buildings, ramps that rise 3 inches (76 mm) or less may have a slope as steep as one unit vertical in eight units horizontal (1:8). In existing buildings, ramps that rise 6 inches (152 mm) or less may have a slope as steep as one unit vertical in 10 units horizontal (1:10). If it is possible to provide a lesser slope, it is desirable to do so. These steeper slopes should only be utilized when the one unit vertical in 12 units horizontal (1:12) slope is not possible.

410.8.6 Accessible dwelling or sleeping units. Where Group I-1, I-2, I-3, R-1, R-2 or R-4 dwelling or sleeping units are being altered or added, the requirements of Section 1107 of the International Building Code for Accessible units apply only to the quantity of spaces being altered or added.

- This section sets forth the rate for providing Accessible dwelling or sleeping units in Groups I-1, I-2, I-3, R-1, R-2 and R-4 where such facilities are altered or where units are added. Assuming that Accessible units are not already provided, the number of Accessible units to be incorporated into each alteration is based on the number being altered or added. For example, if a nursing home was being altered a portion at a time, 50 percent of the units being altered each time would be required to be fully wheelchair accessible. It is not the intent that all units being altered are required to be Accessible units until 50 percent of the units in the entire facility are Accessible. The total number of Accessible units in the facility is not required to exceed that required for new construction. It is unreasonable to require a greater level of accessibility in an existing building than is required in new construction.

410.8.7 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being altered or added, the requirements of Section 1107 of the International Building Code for Type A units apply only to the quantity of the spaces being altered or added.

- Type A units are required in new construction where 20 or more apartments (including condominium style) are constructed on a site. Group R-2 requirements for
Type A units would also include convents and monasteries and could include some townhouse-style units (see the commentary to IBC Section 1107.6.2.2.1 for additional information).

Note that this requirement is applicable when 20 or more units are included in the construction project; not when an individual owner performs alterations to his or her condo when there are 20 or more units in the building. This section sets forth the rate for providing Type A dwelling or sleeping units in Group R-2 facilities in an addition where there is a change to the function of a space (i.e., a change of occupancy, such as creating apartments in an old warehouse, increasing the number of apartments by changing a storage area to apartment units or reconfiguring larger units into smaller units) or an alteration. Assuming that Type A units are not already provided, the number of Type A units required is based on the number being added or altered. For example, if a story was being added to an apartment building or a story in an apartment building was being altered, the number of Type A units required would be based on the number of units in the new story or the area being altered, not the number of units in the entire building. If Type A units are provided, the total number of Type A units in the facility is not required to exceed that required for new construction, as indicated in Section 410.3. It is unreasonable to require a greater level of accessibility in an existing building than is required in new construction.

410.8.8 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the International Building Code for Type B units apply only to the quantity of the spaces being added. Where Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered and where the work area is greater than 50 percent of the aggregate area of the building, the requirements of Section 1107 of the International Building Code for Type B units apply only to the quantity of the spaces being altered.

In new construction, Type B units are required where four or more dwelling units or sleeping units are constructed together and those units are "intended to be occupied as a residence" (see commentary, IBC Section 1107). The IRC references IRC Group R-3 for accessibility requirements for IRC units (see the definition of "Townhouse" and IRC Section R320.1).

This section sets forth the rate for providing Type B dwelling or sleeping units in Group I-1, I-2, R-1, R-2, R-3 or R-4 facilities. Type B units are required where more than four units are added in an addition or where major alterations are occurring that affect more the 50 percent of the area of the building. The Type B units in the facility are not required to exceed that required for new construction, as indicated in Section 410.3 and IBC Section 1107.7. It is unreasonable to require a greater level of accessibility in an existing building than is required in new construction. In consideration of existing site constraints, Sections 410.4.2 and 410.7 also include exceptions for the additional accessible route requirements in structures where Type B units are added as part of an alteration or change of occupancy. Note that this exception is not applicable to additions where Type B units are required.

410.8.9 Jury boxes and witness stands. In alterations, accessible wheelchair spaces are not required to be located within the defined area of raised jury boxes or witness stands and shall be permitted to be located outside these spaces where the ramp or lift access restricts or projects into the means of egress.

- This exception for jury boxes and witness stands is consistent with Sections 231 and 808 of the 2010 ADA Standards for Accessible Design. The intent is that if ramp access to a jury box or witness stand would have the ramp limiting or blocking the means of egress for the general population in the space, alternative locations for potential jurors or witnesses are viable. The same alternative is available if a platform lift would effectively be an obstruction for the general means of egress from the courtroom.

410.8.10 Toilet rooms. Where it is technically infeasible to alter existing toilet and bathing rooms to be accessible, an accessible family or assisted-use toilet or bathing room constructed in accordance with Section 1109.2.1 of the International Building Code is permitted. The family or assisted-use toilet or bathing room shall be located on the same floor and in the same area as the existing toilet or bathing rooms. At the inaccessible toilet and bathing rooms, provide directional signs indicating the location of the nearest family or assisted-use toilet room or bathing room. These directional signs shall include the International Symbol of Accessibility and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

- This section deals with circumstances in which it is technically infeasible to alter existing toilet facilities to be accessible. Where new bathrooms are created in existing buildings or existing bathrooms are part of an alteration, both the men's and women's facilities would be required to be accessible. An alternative solution when it is technically infeasible to alter the existing toilet rooms would be the creation of a single unisex toilet or bathing room containing accessible facilities. The requirements for family or assisted-use toilet facilities in IBC Sections 1109.2.1 through 1109.2.1.7 provide guidance on what is required in such toilet rooms. If this alternative is selected, the room must be located on the same floor and in the same area as the existing toilet or bathroom. This is the best alternative to providing fully complying separate men's and women's facilities. One might argue that it is technically infeasible to accomplish either of these alternatives, since the alternative to altering existing facilities involves creation of an additional toilet or bathroom that was not otherwise contemplated. This would not be a persuasive argument, since there is likely to be space available somewhere in the facility to commit for use as a toilet or bathroom. In any case, the intent is that some form of an accessible toi-
let room or bathing facility is necessary and must be provided.

It should be noted that this alternative is not offered as a choice between making the existing separate-sex toilet rooms accessible or providing a family or assisted-use accessible toilet room. The existing separate-sex toilet rooms must be altered when it is technically feasible. Consideration of this alternative is only available when altering the existing toilet rooms is technically infeasible (see the definition of “Technically infeasible” in Section 202). Signage must be provided at the inaccessible toilet rooms in accordance with IBC Sections 1110.1 and 1110.2 to notify disabled persons where a facility is not accessible and direct them to the nearest accessible facilities.

410.8.11 Dressing, fitting and locker rooms. Where it is technically infeasible to provide accessible dressing, fitting or locker rooms at the same location as similar types of rooms, one accessible room on the same level shall be provided. Where separate-sex facilities are provided, accessible rooms for each sex shall be provided. Separate-sex facilities are not required where only unisex rooms are provided.

This section takes a similar approach for dressing rooms as provided for in Section 410.8.10 for toilet rooms and bathing facilities. If it is technically infeasible to alter existing dressing rooms to be accessible, then space elsewhere on the level must be committed to providing no less than one accessible dressing room. In this case, if the existing dressing rooms provide separate rooms for each sex, then no less than one accessible dressing room for each sex must be provided.

410.8.12 Fuel dispensers. Operable parts of replacement fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum, measuring from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

The requirements for new fuel dispensers (i.e., gas pumps) can be found in Section 1109.14 of the IBC. Basically, the idea is that the controls must be within the reach ranges for someone standing on the parking lot surface. However, many existing facilities have gas pumps located on raised islands as a feature for protection of the pumps from accidental contact. This section would allow the new gas pump with the reach range of 15 inches (380 mm) to 48 inches (1220 mm) to be located on top of a 6-inch (150 mm) curb and still meet the maximum reach of 54 inches (1370 mm).

410.8.13 Thresholds. The maximum height of thresholds at doorways shall be 1/8 inch (19.1 mm). Such thresholds shall have beveled edges on each side.

Thresholds at doorways may be 3/4 inch (19.1 mm) maximum in existing buildings. In new construction, a typical threshold is 1/8 inch (12.7 mm) maximum in accordance with the IBC. This section recognizes that such things as differences in floor materials may create changes in elevation greater than that allowed in new construction. Edges of thresholds must be beveled to allow for the passage of a wheelchair.

410.8.14 Amusement rides. Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride’s performance differs from that specified by the manufacturer or the original design, the amusement ride shall comply with requirements for new construction in Section 1110.4.8 of the International Building Code.

To the extent that amusement rides are subject to the accessibility requirements of IBC Section 1110.4.8, they should be accessible and usable by individuals with disabilities. These scoping provisions are flexible, permitting latitude in terms of the method of access (e.g., transfer seat, roll-on seat or transfer device to lift the rider). Mobile and portable rides are exempted. Rides without seats, designed for children who are assisted onto the ride or controlled by the user are also exempted under IBC Section 1110.4.8.2 from providing wheelchair transfer spaces. Technical criteria can be found in the 2009 ICC A117.1, Section 1102 and includes accessible routes, load and unload areas, wheelchair spaces on rides, seats for transfer, and transfer devices. Recognizing the technical issues associated with existing amusement rides, compliance with accessibility requirements is required when the amusement ride is extensively altered.

410.9 Historic buildings. These provisions shall apply to facilities designated as historic structures that undergo alterations or a change of occupancy, unless technically infeasible. Where compliance with the requirements for accessible routes, entrances or toilet rooms would threaten or destroy the historic significance of the facility, as determined by the applicable governing authority, the alternative requirements of Sections 410.9.1 through 410.9.4 for that element shall be permitted.

Exception: Type B dwelling or sleeping units required by Section 1107 of the International Building Code are not required to be provided in historical buildings.

The regulations of individual adopting jurisdictions may provide additional guidance or limitations on the use of this section. Basic ADA requirements permit exceptions and alternatives for historic buildings. These minimum requirements provide reasonable accommodations for building users.

For this section to be applicable, the building must be registered as historic. Historic buildings are treated much the same as provided for in Sections 410.4 and 410.6, in that a historic building that is altered or has undergone a change of occupancy is expected to comply with accessibility requirements, unless technical infeasibility can be demonstrated; however, this section also goes on to acknowledge that the historic character of a building may be adversely affected by strict compliance with accessibility provisions. For example, compliance with door width requirements may necessitate the removal of
410.9.1 Site arrival points. At least one accessible route from a site arrival point to an accessible entrance shall be provided.

- Full compliance would require an accessible route from all site arrival points. If this requirement would adversely affect the historical significance of the building, the alternative available is to provide an accessible route from one site arrival point to an accessible entrance.

410.9.2 Multilevel buildings and facilities. An accessible route from an accessible entrance to public spaces on the level of the accessible entrance shall be provided.

- It is not required in building alteration that accessibility to spaces above or below the level of accessible entrance be provided. Full compliance for new construction might require an accessible route to levels above or below, as well as throughout, the entrance level. If this requirement would adversely affect the historical significance of the building, the alternative is to provide an accessible route from the accessible entrance to all spaces open to the public on the entrance level. If elevators are provided, but are not accessible, signage in accordance with IBC Section 1110.2 is required.

410.9.3 Entrances. At least one main entrance shall be accessible.

Exceptions:

1. If a main entrance cannot be made accessible, an accessible nonpublic entrance that is unlocked while the building is occupied shall be provided; or

2. If a main entrance cannot be made accessible, a locked accessible entrance with a notification system or remote monitoring shall be provided.

Signs complying with Section 1111 of the International Building Code shall be provided at the primary entrance and the accessible entrance.

- Although uniform building access is the rule for new construction, older buildings may have main entrances that are both inaccessible and a significant element of the building’s character. In these cases, providing access by an alternative route is deemed to meet the primary intent of the accessibility regulations.

Full compliance would require 60 percent of the entrances to be accessible. If this requirement would adversely affect the historical significance of the building, only one main entrance is required to be made accessible. If a main entrance cannot be made accessible, then an employee or service entrance may serve as the accessible entrance, provided that it remains unlocked when the building is open. Alternatively, a locked entrance, where monitoring or a notification system is available, could be provided. Signage must be provided at inaccessible entrances in accordance with IBC Sections 1111.1 and 1111.2.

410.9.4 Toilet and bathing facilities. Where toilet rooms are provided, at least one accessible family or assisted-use toilet room complying with Section 1109.2.1 of the International Building Code shall be provided.

- Full compliance would require an accessible toilet/bathing facility at each location where toilet/bathing facilities are provided. If altering the existing facilities to be accessible would adversely affect the historical significance of the building, only one unisex bathroom that complies with the accessible family or assisted-use toilet/bathing requirements in IBC Section 1109.2.1 is required. Signage must be provided at inaccessible toilet rooms in accordance with IBC Section 1110.2.

Bibliography

The following resource materials were used in the preparation of the commentary for this chapter of the code.
