2018 Building Codes Available Online

The 2018 North Carolina Building Codes are available for order on the NCDOI webpage here. Once you get to the page, click on the link marked Purchase State Building Code On-Line and you will be taken to a separate page where you may select which 2018 NC Building Code you wish to purchase.

When you go through the NCDOI webpage, the price offered will be the same as the price offered to an ICC member who purchases a NC Building Code direct from the ICC Store, meaning you will receive the ICC-member-discount without being a member.

These codes will go into effect on January 1, 2019. (See reference on left of AU Newsletter title block.)

REMEMBER: Early use of a specific 2018 NC code section is permitted using the 2012 NC Administrative Code & Policies Section 102.5 which states:

102.5 Any rules that are adopted by the Building Code Council and approved by the Rules Review Commission shall be accepted by the Code Enforcement Official as an alternate method of construction prior to the effective date if requested by the owner or his agent.

NCEBC 705 — Plumbing - Background

This is probably the most overlooked, misunderstood section in the entire 2015 NC Existing Building Code, at least from the accessibility point of view. The 2015 edition simply states: [Deleted]. If you know there is an NCEBC Commentary online for the 2015 NCEBC, then you can look up NCEBC 705 and discover that it says this:

SECTION 705 ACCESSIBILITY
(Replaced by Section 806)

Commentary: The provisions for accessibility were moved to Level II Alteration work since they are not applicable in Level I Alteration work. Replacement of fixtures, removal of fixtures or other alteration of restrooms may constitute Level II Alteration work.

The intent of this is to let a designer know that any work done on plumbing fixtures automatically reclassifies the work as Level II and puts the provisions in NCEBC 806. This will be clearer in the 2018 NCEBC since the [Deleted] section under NCEBC 705 was revised to read:

Deleted. (Replaced by Section 806).

It may help to understand why this is organized this way. When the Building Code Council’s Existing Building Code Subcommittee reviewed and compared the NC Rehab Code with the International Existing Building Code, the decision was made to amend the accessibility portions by moving all the IEBC accessibility language to correlate with the NC Rehab Code language that was familiar to Committee members. None of the requirements were changed, but it made more sense to the Committee than simply amending the original IEBC language with the NC Rehab Code language that they wanted to keep. This explains why if you purchase an IEBC Commentary it is so difficult to find commentary language explaining the intent of the IEBC. If you have a copy of the unamended IEBC, then it is much easier to follow the requirements. In general, from an accessibility point of view, the requirements are the same as they were in the old NCBC Ch. 34, just in a different location.
ANSI 406.12/.13/.14 - Detectable Warnings (DW) as Skateboard Deterrents: NOT!

The 2017 ANSI Commentary language for ANSI 406.6 clarifies that Detectable warnings provide a tactile clue for persons with visual impairments when they approach some type of edge. Detectable warnings are intended to alert pedestrians of a hazard such as a street or a platform edge.

The use of a detectable warning (DW) in any way other than for its intended use, and in the intended locations, may provide confusion for the prescribed user, as well as subject the designer to potential litigation. Intersecting an accessible route with a detectable warning strip to deter skateboarders will confuse visually impaired persons as to where the hazard is located, and potentially make them more cautious of other locations where DW are installed in accordance with code.

NCBC 1109.2.8 – Stages: Churches + Perf. Areas

These questions address stages, permanent and portable, and whether any are exempt or not.

Q: The first is a small church stage for a sanctuary of less than 300. We typically provide accommodations for a ramp in religious facilities. However, the client has an interior designer on board claiming title 3 exemption for churches on a ramp to a stage. The local AHJ sees otherwise.

A: This comes to us routinely but is always worth returning to because the focus of the question often changes.

1. It turns out that everyone is right in this case. The 2010 ADA Standards do have an exemption for churches; however, the NC Building Code is applicable to all commercial buildings within the state, with few exceptions (any exceptions are noted in NCBC 1103.2).

2. In cases where there are overlapping code requirements (or exemptions), whichever requirement is more restrictive is the one that takes precedence. This means that the church platform is required to comply with NCBC 1108.2.8 (along with NCBC 1007.2). If the occupant load of the platform is 50 or more, then both exits from the platform are required to be accessible.

Q: In a Painting with a Twist franchise, the art instructor’s instruction is demonstrated from a platform or a stage. We removed the platforms from the drawings, to satisfy the local AHJ because we could not accommodate a ramp. The franchise owner and corporate came back with rationale that the platform is a piece of furniture which is portable and can be placed on wheels. In typical fashion, they cite many other locations with stages. Are there options regarding ramps and stages used in a portable or temporary fashion?

A: Let’s consider the situation this way:

1. If the art instructor is an employee of, or is contracted by their Employer, then NCBC 1103.2.3 seems the best way to address the platform. Access to it would be exempt, provided that
   a. the platform area is less than 300 sf,
   b. if elevated 7” or more, and
   c. the elevation is essential to the function of the work.

   Since the customers attending need to be able to see the art instructor and the instruction being performed, the elevation would be considered essential to the work being performed.

2. The platform cannot be considered as ‘a piece of furniture, portable and … be placed on wheels’.
   a. ANSI 403.2 requires compliance with ANSI 302.
   b. ANSI 302.1 requires a stable, firm and slip-resistant floor surface.
NCBC 1007.2 + Accessible Exits

Let’s talk about NCBC Chapter 10 and egress. This chapter and the requirements within it, excluding NCBC 1007, were mostly all in effect before any requirements for accessibility were written into the building code. While the specifics of the requirements may have changed and become more detailed over time, in large, the provisions have not changed much over the years. An occupant load is calculated for a room, area, floor or building based on the use of the space; numbers of exits are determined, dependent on the number of occupants within the room, area, and floor in question; then a clearly marked, unobstructed egress path is provided from each location within the building. The egress path is restricted from passing through areas of potentially greater hazard, has travel distance limitations to reaching an exit, and is not complete until the public way is reached.

Now, when the accessibility provisions in NCBC 1007 were put into the building code, none of the earlier egress requirements changed. Instead, the existing egress requirements were further augmented by another layer of provisions, that being how to make the egress provisions in NCBC Ch. 10 accessible. When designing exits from a building, it is necessary to evaluate both basic egress requirements (think life safety here) and accessibility. It is easy to think that the accessibility provisions take precedence over everything else, but that may not always be the case.

Let’s look at an example. **Option 1**: In the left graphic below, there are five (5) exits discharging from a building to a sidewalk at a lower level which parallels the main sidewalk on the upper level. Let’s call these exits, starting from left to right, as A, B, C, D and E. The most direct path of travel from each exit to the public right of way (PROW), i.e., the upper sidewalk, is a relatively direct one, marked with red dashed arrows, using the stairs. This path of travel does mean that someone with a disability will not be able to exit all the way to the PROW, but instead will use exterior areas of assisted rescue [EAAR] to be located along the lower walkway. [Please note that these EAAR have not been designed into the plan shown but could be.]

![Diagram](image1)

Now let’s look at **Option 2**: In this redesign, the egress paths from A, B, C, D and E have all been modified so that the proposed route from each travel on the lower sidewalk parallel to the building, passing, in turn, where the short flights of stairs leading directly to the PROW used to be located. This path is marked by a dashed red line. This revised path does permit someone with a mobility impairment to reach the PROW from each exit but requires them to travel past multiple discharge points from the building to do so.

In evaluating **Option 1** vs. **Option 2**, there are a couple items to consider.

- **Option 1** complies with code; the path of egress travel is direct and obvious for both able-bodied persons and persons with disabilities. A fire or event in Area C or D would not affect egress from A or B.
- **Option 2** provides an egress path direct to the PROW for both able-bodied persons and persons with disabilities; it is not the most direct path of travel; and, if a fire or other event originates in Areas B, C, D or E, all occupants discharging from exit doors prior to those points may find their exterior path of egress travel blocked off and unavailable to them, leaving them trapped.

While the redesign for **Option 2** appears to permit a more accessible means of egress, there are situations where **Option 2** increases the life safety risk to both able-bodied persons and persons with disabilities. In this case, if complying EAAR can be designed adjacent to the lower sidewalk, this appears to be a safer resolution for everyone concerned.

NCBC 1104.5 – Location of Accessible Route

When designing either exterior Accessible Routes or interior ones, the simplest point to make is what is stated in the code language: the accessible route shall be in the same area as the general circulation path. “Same area’ means starting and ending in roughly the same location.

**NCBC 1104.5 Location.** Accessible routes shall coincide with or be located in the same area as a general circulation path. Where the circulation path is interior, the accessible route shall also be interior. Where only one accessible route is provided, the accessible route shall not pass through kitchens, storage rooms, restrooms, closets or similar spaces.

**Exceptions:**

1. Accessible routes from parking garages contained within and serving Type B units are not required to be interior.
2. A single accessible route is permitted to pass through a kitchen or storage room in an Accessible unit, Type A unit or Type B unit.