Q: My modular classroom has a toilet room that will be used by 12-yr olds. Will a 26” high grab bar work with the 17” high toilet seat height? Where are the requirements for lavatory heights?

A: When the dimensions in ANSI Table C604.11 are used for a Children’s Toilet Room, they should not be viewed as ranges from which to choose. The intent is to use the lower number in the range for the younger aged child and the higher number for the older aged child. Where the average age of the children is a number in between the age range, then the dimension to be used should be extrapolated from the dimensions given.

Since the classroom design is for 12 yr. olds and the design has a toilet seat of 17”, the table above clarifies the rest. The corresponding requirements for water closet centerline, grab bar height and (toilet paper) dispenser height would then be 18”, 27” and 19”, respectively.

Lavatory heights are provided in ANSI 606.2 Exc. 3 and 4.

If there are issues with placement of the rear wall grab bar due to either a pipe location or tank, then either 1) split the grab bar around the pipe or 2) relocate the grab bar beside the tank.

Compliance with ANSI 604.11 is only required if you choose to provide children’s fixtures.

NCEBC 1012.9.2 – Ch. Of Occ. + Elev.

Anytime an existing building undergoes a complete change of occupancy, NCEBC 1012.9.1 is always applicable first. It is so easy to think of the six (6) items listed under this section as simply being Path of Travel requirements into the building that it seemed time to take a closer look just to be certain…and look at what was found!

The 2015 IECB Commentary for this section states: [AU emphasis below]

For a project that involves a complete change of occupancy, full compliance with accessibility requirements is expected and reasonable, except where technical infeasibility can be demonstrated...In addition to accessibility requirements, an accessible route is required to that space. Six items that make up that accessible route are listed. The intent is to provide the bare minimum to get people from a point of arrival into the building and to the area of new use. This is not based on any specific provisions of the Americans with Disabilities Act Accessibility Guidelines (ADAAG), but parallels the intent of the requirements for the removal of barriers.

Consider Item #2 on the list: At least one accessible route from an accessible building entrance to primary function areas.

Where primary function areas are on levels other than the entry floor level, an elevator (or other accessible route) will be required if NCEBC 1104.4 requires an accessible route for new construction of this use. None of the six items figure into the 20% disproportionate amount required by NCEBC 806.2 Exc. 1.
H/C Sign @ 4 Parking Spaces or Not?

Q: My disabled father was unable to park at an apartment complex as a visitor. There are only two parking spots for visitors, and they are both wheelchair accessible. Since the leasing office is on site, the building must comply with Fair Housing Act, which requires one handicap spot for every 25 regular spots. However, I was told that parking lots with less than four parking spots do not need to be reserved for handicap use only. Therefore, these two visitor handicap spots are always occupied by non-handicap cars. What ADA or FHA laws apply for enforcing handicap parking in a public lot with less than four spots?

A: There are two overlapping requirements for accessible parking within the state: the 2010 ADA Standards and the 2012 NC Building Code, which references the 2009 ANSI A117.1. Whenever there are overlapping requirements, whichever requirement is more restrictive takes precedence, or is enforced. The NCBC 1110.1 requirement is more restrictive than the federal ADA provision. This means that where there are any parking spaces on a site, even if there are four or fewer, signage is required for the accessible spaces required by the NC Building Code.

The issue in this case appears not to be one of the provision of accessible parking spaces, but rather the provision of signage indicating that the spaces are for accessible parking. Where accessible parking signs have been omitted (per the federal ADA Stds), there is still a requirement for signage by the NC Building Code.

**2010 ADA Standards**

216.5 Parking. Parking spaces complying with 502 shall be identified by signs complying with 502.6

EXCEPTIONS:

1. Where a total of four or fewer parking spaces, including accessible parking spaces, are provided on a site, identification of accessible parking spaces shall not be required.
2. In residential facilities, where parking spaces are assigned to specific residential dwelling units, identification of accessible parking spaces shall not be required.

**2012 NC Building Code**

1110.1 Signs. Required accessible elements shall be identified by the International Symbol of Accessibility at the following locations:

1. Accessible parking spaces required by Section 1106.1. Location and design of signage shall comply with the requirements of North Carolina General Statute 20-37.6 and 136-30 and the NCDOT Manual on Uniform Traffic Control Devices.

G.S. §136-30 - [Link to G.S. 136-30]

(c) Public Vehicular Areas. - Except as provided in this subsection, all traffic signs and other traffic control devices placed on a public vehicular area, as defined in G.S. 20-4.01, must conform to the Uniform Manual. The owner of private property that contains a public vehicular area may place on the property a traffic control device, other than a sign designating a parking space for handicapped persons, that differs in material and color from the uniform sign but does not differ in shape, size, or any other way from the uniform device. The owner of private property that contains a public vehicular area may place on the property a sign designating a parking space for handicapped persons that differs in material and color from the uniform sign but does not differ in shape, size, or any other way from the uniform device.

**Fair Housing Act Design Manual**

Page 2.23 and 2.24 address Resident Accessible Parking and Visitor Accessible Parking. See box inset (on right).

Without the signage identifying the accessible parking space, there is, in effect, no accessible parking space provided when a vehicle without a handicapped placard parks in the space.

Number of Accessible Parking Spaces

For Residents:
- 2% of parking spaces serving covered dwelling units
- Minimum of one at each site amenity

For Visitors, When Visitor Parking Is Provided:
- A sufficient number of spaces to provide access to grade level entrances of covered multifamily dwellings
- Minimum of one at sales/rental office
Q & A re: Contoured Tub Grab Bar – from AUV9,I2

Q: I am coming across a good bit of confusion with some of my clients, plumbing engineers and contractors about what is required with the tubs in Type A and Type B units. See my questions below.

A: To begin with, the 2018 Feb AccessUpdate newsletter V9,I2 ruling is only applicable for designs with curved wall tubs provided in Type A and Type B dwelling units. Answers italicised in bold below.

1. Is the reinforcement previously required within the tub itself in all flat back accessible tubs in Type A and Type B units what we are providing within the stud walls?
   - **Provide what is required by ANSI 1003.11.1 and 1004.11.1.**

2. Is the tub reinforcement previously required in contoured tub walls in Type A and Type B units what we are providing within the stud walls?
   - **If the contoured back wall is not flat, then off-the-shelf grab bars will not comply with ANSI 607.4 provisions and custom grab bars are then required. If this is the case, then follow the requirements noted in the AccessUpdate V9,I2 Newsletter from Feb 2018.**

ANSI 408 – LULAs – When to Use

When NCBC 1104.4 requires an accessible route [AR] between floors for a new or an existing building, the use of a limited-use [LULA] elevator is often considered to minimize the construction budget. Keep in mind that there are only certain situations where a LULA may be used, based on the ANSI Commentary description of an elevator: ‘LULA elevators are generally used where installation of a full passenger elevator is not practical or economically feasible. LULA elevators provide many of the same features as full passenger elevators and provide accessibility in situations where access may otherwise not be provided.’

Here is where their use is permitted [NCBC 1104.4 Exc. 1]:

1. New buildings where the aggregate upper and lower floor areas do not exceed 3,000 sf.
2. Existing buildings where the aggregate upper and lower floor areas minimally exceed 3,000 sf and it is technically infeasible to install a full-size elevator.

NCBC 1007.5 permits the use of a platform (wheelchair) lift as an accessible means of egress only where it is also permitted as part of a required accessible route by NCBC 1109.7 Exc. 1 - 9. Most situations fall under NCBC 1109.7 Exc. 10 (An accessible route where existing exterior site constraints make use of a ramp or elevator infeasible) which is expressly prohibited for use with NCBC 1007.5 in the IBC Commentary. In an existing building, however, 2015 NCEBC 806.1.3 permits the use of platform (wheelchair) lifts as a component of an accessible route. Since existing and historic buildings often have structural limitations related to the installation of full-size elevators, the use of a LULA as an accessible route has been accepted as an alternate method under NC Admin Code 105.1. So, when it is unenclosed and provided with standby power, the LULA may be used for both an accessible route and a means of egress. [NCBC 1007.5; NCBC 1007.5.1] Once a way is provided to allow persons with disabilities a way to a building’s upper floors, it is prudent to also design an accessible egress plan as well.

3. If reinforced flat back tub walls are provided do we have to provide grabs in both Type A and Type B dwelling units at the time of construction?
   - **No.**

   If not, do we have to store the grab bars for each and every one of these accessible tubs in a closet in each of these units? We have not been doing this.
   - **No. Custom bars are only required at the final inspection for tubs with contoured backs.**

4. If adding reinforcement to the tub walls is going to be the norm, can we eliminate the reinforcement in the stud walls to offset the added cost?
   - **No, minimum code requires that “reinforcement shall be provided for the future installation of grab bars…” [ANSI 1003.11.1; ANSI 1004.11.1] While it is always possible to provide more than the minimum required reinforcement, it is never acceptable to provide less than the minimum required.**

5. What if the contoured shower has contoured grab bars that are available to install and meet the requirements of 607? Do they still have to install all of them in type A AND Type B units or store them in every type A and B unit?
   - **In this case, each shower would have to be reviewed on a case-by-case basis to make the determination. Issues to be reviewed would include a) contour location, b) degree of tub back contour, and - most important – c) will off-the-shelf grab bars be available for this type of tub contour for the life of the dwelling unit?**
   - **The above applies the same expectation of grab bar availability that is used for a flat back wall tub.**
     - o If the same grab bar availability exists, then no grab bars are required to be provided at the time of the Certificate of Occupancy.
     - o If not, then they are required.
ANSI 904 Sales and Service Counters

904.1 General. Accessible sales and service counters and windows shall comply with Section 904 as applicable.

**EXCEPTION:** Drive up only sales or service counters and windows are not required to comply with Section 904.

904.2 Approach. All portions of counters required to be accessible shall be located adjacent to a walking surface complying with Section 403.

904.3 Sales and Service Counters. Sales and service counters shall comply with Section 904.3.1 or 904.3.2.

- **904.3.1 Parallel Approach.** A portion of the counter surface 36 inches (915 mm) minimum in length and 36 inches (915 mm) maximum in height above the floor shall be provided. Where the counter surface is less than 36 inches (915 mm) in length, the entire counter surface shall be 36 inches (915 mm) maximum in height above the floor. A clear floor space complying with Section 305, positioned for a parallel approach adjacent to the accessible counter, shall be provided.

- **904.3.2 Forward Approach.** A portion of the counter surface 30 inches (760 mm) minimum in length and 36 inches (915 mm) maximum in height above the floor shall be provided. A clear floor space complying with Section 305, positioned for a forward approach to the accessible counter, shall be provided. Knee and toe clearance complying with Section 306 shall be provided under the accessible counter.

Sometimes it is not easy to differentiate between when ANSI 904.3 Service Counter requirements are applicable and when ANSI 902 Work Surface requirements also enter the equation. How do you fit them both together? Here is one example.

Q: Could you give me the answer to the counter top requirement for new installations and renovations in existing buildings? In this situation, the contractor has put in a pull-out at a 34" height, but the display case for pastries is on a top that is 33" high. I said that the case needs to go away and pull outs are not normally acceptable. Also, is there a minimum width? I usually see a 36" wide by 34" high accessible counter. Never have I seen a 34" High by 14" wide pullout at an order area side approach.

A: The complete language of ANSI 904 for Sales and Service Counters is noted below for easy reference. ANSI 904.3.1 requires a 36" maximum height and a 36" minimum width for a counter top. Plus, the ANSI 904.3 charging paragraph states that the accessible portion of the counter top is required to extend the same depth as the sales and service countertop. [See yellow.]

There is nothing in the 2009 ANSI Standard permitting a pull-out sales and service counter. This approach was an option under the old 1999/2002/2004 NC Accessibility Code that was used for banks. For a bank, even nowadays, the pull-out was/is considered a Work Surface under ANSI 902.4, which requires a height between 28" and 34" above the finished floor.

The example shown above is a Service Counter, which is addressed under ANSI 904 Sales and Service Counters, not under ANSI 902 Work Surfaces. As a sales and service counter, the 34" high pull-out counter does not comply with all ANSI 904 provisions, specifically the depth and the width of the accessible surface.

The required width varies depending on the approach. For a parallel approach, a 36" minimum width is applicable, while a 30" minimum width is applicable for the forward approach. [ANSI 904.3.2]

In the example shown above, if the counter that the cash register is on is 36" high (which it is), then a parallel approach may be provided adjacent to the cash register, exactly where the pull-out is located. After installing all the equipment (currently stored temporarily on the countertop), the shop owner needs to maintain a 36" minimum accessible counter width adjacent to the cash register so that it extends the full depth of the counter. Then, any check signing can also be accomplished at the 34" high pull-out work station. It looks as though everything has been taken care of – great design!