ANSI 404.3 Auto Doors – Reqmt or Not?

Q: Are automatic doors required on:
- public buildings
- city or county buildings
- detention facilities or jails
- restaurants
- retail stores
- schools
- any other type of building

A: The question above is a compilation of many similar questions that have been received over the past several months.

So many people are accustomed to seeing automatic opening doors when walking into Target, Wal-Mart, Lowe’s Home Depot, Michael’s, A.C. Moore, Belk’s, other retail stores, local grocery stores, and in hospitals, and for so very many years that the assumption is that this must be a requirement under the ADA or the state building code.

Is it a good idea? Yes, particularly when the store owner wished to make it easier for customers to carry bags and purchases in and out of the store and to encourage additional spending.

But is it required by ADA or the state building code? No, it is not.

As long as the required door maneuvering clearances, slopes, hardware, and door opening requirements are met, there are no requirements for an automatic door.

However, an automatic door may be used as an alternate method when door clearances or door opening pressures cannot be met. Just so you know.

NCBC 1109.2.1 Family Restrooms

On May 10, 2013, columnist Carole Tanzer Miller wrote an article in the Triangle & Co. section of the News & Observer on that all building owners, tenants, and designers should be aware of. It related the story of a couple who visited the new Nature Research Center at the NC Museum of Central Sciences in downtown Raleigh.

This building was designed and constructed prior to the NCBC 1109.2.1 requirement for the inclusion of a family restroom whenever there is an aggregate of six or more male and female water closets required in either an assembly or a mercantile occupancy.

The husband, who had limited mobility and needed some assistance in the restroom, searched for a unisex facility with his wife but could find none. Staff was extremely helpful and directed them to Customer Service for information and directions. All men’s and women’s restrooms were accessible and available, but there were no unisex or family facilities.

After an embarrassing excursion into an empty women’s restroom while one spouse stood guard, the other took care of necessary issues.

Since then, the Museum has converted a Staff Only restroom into a family restroom to avert similar issues. Signs now identify the location of the new family restroom.

Kudos to the museum for their speedy response!

Thanks also to Ms. Miller for her excellent article - to read the article, go to http://www.newsobserver.com/2013/05/09/2882951/column-natures-call-becomes-wake.html
R-3 to B Change of Occupancy

What do you do when you have a property in your jurisdiction that was originally a single family home that has been converted into a business and there is some question as to whether or not the work was done under a permit. Some jurisdictions with these types of situations have received complaints from the community concerning:

1. No accessible parking.
2. No accessible path of travel into the business.

If you are new to the jurisdiction or if the jurisdiction is small, the plan review may have been done by the county or by another agency at the time. There may be several addresses where this conversion has occurred and the information is unavailable to you. If so, how do you proceed with addressing the complaints?

Whether the issue involves a single address or multiple addresses, the following step-by-step procedure will give you a process to follow in determining whether or not the conversion in question complies with the code, which code to use, and how to proceed with addressing the issue.

1. Determine the agency who currently does the plan review for the jurisdiction. The following steps will address the situation whether a permit was received initially or not.

2. Provide a list of addresses to the city/county doing the plan review so that they can verify whether or not a permit has been provided to each address.

3. On each individual address, if a permit was received, the date on the permit will (should) indicate the Building Code in effect when the R-3 to B conversion was made.
   a. This will allow the city/county to verify compliance with the parking requirements in effect at the time of the permit.
   b. These may vary depending on the permit date and whether or not there were any specific parking ordinances within the city/county at that time.

4. On each individual address, if a permit was not received, then the R-3 to B conversion becomes an existing non-complying situation which requires compliance with the current code. [G.S. §153A-365 http://www.ncga.state.nc.us/gascripts/statutev/statutevlookup.pl?statute=153A-365]
   a. Current code for change of occupancy requires the following (as a minimum):

   3411.4 Change of occupancy. Existing buildings that undergo a change of group or occupancy shall comply with this section.
   3411.4.1 Partial change in occupancy. Where a portion of the building is changed to a new occupancy classification, any alterations shall comply with Sections 3411.6, 3411.7 and 3411.8.
   3411.4.2 Complete change of occupancy. Where an entire building undergoes a change of occupancy, it shall comply with Section 3411.4.1 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.
   3. Signage complying with Section 1110.
   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 the new construction standards for any of these requirements for a change of group or occupancy, the above items shall conform to the requirements to the maximum extent technically feasible.
5. On each individual address where the conversion was made prior to the adoption of the Americans with Disabilities Act in 1991, there are Barrier Removal obligations that may be applicable on a federal level. There are two Barrier Removal documents prepared by the US Department of Justice explaining the obligation to remove whatever is readily achievable, able to be done with a minimum of time and expense. If someone were to file a complaint with the USDOJ regarding the property, the first violation carries with it a penalty of approximately $55,000. This information may be verified by calling the ADA Technical Assistance Help Line at 1-800-514-0301 Ext. 7. A recording comes on at the first number and after dialing the extension, but if you remain on the line, you will talk to a live person after a wait of no more than 2-3 minutes each time you call. The Technical Assistance Person does not ask where you are calling from or who you are. They are there to assist you, not come after you.

6. On each individual address where the conversion was made after the adoption of the Americans with Disabilities Act in 1991, there are Barrier Removal obligations that may be applicable on a federal level. The above Barrier Removal documents will still be applicable. Again, if someone were to file a complaint with the USDOJ regarding the property, the first violation carries with it a penalty of approximately $55,000. Compliance is a better avenue.

Q: For NCBC Section E107.2 Designations, it states “interior and exterior signs identifying permanent rooms and spaces shall be tactile”. Does this mean all permanent rooms are required to get tactile signage, or is it if provided it shall be tactile? For instance, if a space has all offices and no open work areas, would each office be required to have a tactile sign? If the office is made of a DIRTT or movable wall product, would this also apply to those spaces? I referred to the 2012 IBC Commentary and it indicated “where permanent signage is provided”. I just wanted to be sure this was your interpretation as well.

A: NCDOI interpretation is the same as the ICC interpretation: where signs are provided.

When there is a permanent sign, it is the permanent room, and the number associated with the room, that is required to be identified. If the room is an office, the occupant of the office is not required to be identified in Braille. The idea is that the room (the office, the mechanical room, the conference room, and so forth) will continue to be that same use, however, the occupant of that room may change over time. If there is no sign for the permanent room, then there is no requirement to provide a sign.

If you provide a sign for a room that has the occupant’s name and no room number then a dilemma arises:
- The room is a permanent room.
- The room is identified with a sign.
- The requirement for that sign does come under NCBC App E107.2.
- The NCBC App E107.2 requires that the sign be tactile.

Where names are a substitute for the room numbers, then they serve a similar purpose as the room numbers and should be portrayed in Braille. If offices are identified by a person's name, or similar criteria, rather than numbers, and if those criteria serve the same identifying purpose as the numbers, then that identifying criteria shall be portrayed in Braille. For example, a convention center may have a set of meeting rooms that are not numbered, but are given names instead, e.g., Magnolia Room, Camellia Room, and so forth.
Aging in Place in Your Own Home

The idea of aging in place in your own home is growing in popularity, especially considering the cost of new property and, often the lack of a willingness to move from where you are now. So the question becomes how to go about doing this gracefully, efficiently and effectively. There are definitely things that can be learned from others who have gone before us.

John P.S. Salmen, AIA, President of Universal Designers & Consultants, Inc., was interviewed in his home. He discussed the changes that he made to his house in a video that you can find on:


When he sent me the link, he suggested that we “Check out the two videos before the one about my house on this site for a wider discussion of Aging in Place.”

None of us are getting younger, at least I know that I am not, so these are definitely worth watching, especially if you advise your clients, tenants, and family as they age. Most likely, they will be wanting to age in place as well.

Alternate ISA on Pkg Space

For years, NC specifically prohibited painting the International Symbol of Accessibility [ISA] (on the left) on the ground at the parking space. Now that we are in ANSI A117.1, that prohibition has disappeared and the symbol has begun reappearing. In the current code – and the standard – there is no code requirement for or against it.

Recently, a specific request was made to DOI to allow the use of an alternate ISA on the ground that provides a more active representation of a wheelchair user (see ISA – alternate, below left). Since there is nothing in either the NCBC or ANSI to limit providing an alternate symbol on the ground, the request was approved.

The approval includes specific criteria, including providing signage at the front of the parking space that maintains the ANSI 703.6.3.1 International Symbol of Accessibility as required by code. So, if you see the more active symbol marking a parking space, that is why.

Alternate ISA Stickers – No

While the article above does allow the use of an alternate International Symbol of Accessibility to be painted on the parking space, it specifically does NOT allow replacement stickers to be placed over the ANSI A117.1 502.7 required ISA (see ANSI 703.6.3.1) symbol on the parking sign. The standard International Symbol of Accessibility is required by both NCBC 1110.1 Exc. 1 and G. S. 20-37.6 and 136-30, as well as by the 2010 ADA Standards.

Putting a replacement sticker over the required ISA will render the sign non-code-complying, so please be certain that if you do elect to use the alternate symbol on the ground at the parking space that you do not go one step further and do anything that will cover the symbol on the sign at the front of the parking space. Here is the website that suggests this is OK; http://www.accessibleicon.org/shop.html it is not OK to do.

Fig 703.6.3.1
International Symbol of Accessibility

International Symbol of Accessibility - Alternate
Transient Lodging for Hearing-Impaired

ANSI 1006 Units with Accessible Communication Features addresses smoke detection, fire alarm systems, visual notification appliances and other communication systems within ‘units required to have accessible communication features’. The question becomes: where is the scoping for this section? Which dwelling or sleeping units require these features?

The NC Building Code does address provisions associated with smoke detection, fire alarm systems and visual notification appliances. There is a gap when it comes to addressing scoping provisions in transient lodging facilities for hearing-impaired persons. So, where do we go for these requirements?

ADA Stds 224.4 Guestrooms with Communication Features has a handy Table 224.4 and language that clarifies the issue.

224.4 Guest Rooms with Communication Features. In transient lodging facilities, guest rooms with communication features complying with 806.3 shall be provided in accordance with Table 224.4.

So, let’s take a look at ADA 806.3 first.

806.3 Guest Rooms with Communication Features. Guest rooms required to provide communication features shall comply with 806.3.

Advisory 806.3 Guest Rooms with Communication Features. In guest rooms required to have accessible communication features, consider ensuring compatibility with adaptive equipment used by people with hearing impairments. To ensure communication within the facility, as well as on commercial lines, provide telephone interface jacks that are compatible with both digital and analog signal use. If an audio headphone jack is provided on a speaker phone, a cutoff switch can be included in the jack so that insertion of the jack cuts off the speaker. If a telephone-like handset is used, the external speakers can be turned off when the handset is removed from the cradle. For headset or external amplification system compatibility, a standard subminiature jack installed in the telephone will provide the most flexibility.

806.3.1 Alarms. Where emergency warning systems are provided, alarms complying with 702 shall be provided.

806.3.2 Notification Devices. Visible notification devices shall be provided to alert room occupants of incoming telephone calls and a door knock or bell. Notification devices shall not be connected to visible alarm signal appliances. Telephones shall have volume controls compatible with the telephone system and shall comply with 704.3. Telephones shall be served by an electrical outlet complying with 309 located within 48 inches (1220 mm) of the telephone to facilitate the use of a TTY.

NCDOI has revisited, in a meeting with DHHS, how the Residential Care Facilities get addressed from an accessibility point of view. From now on, NCBC 425.1-5 will be addressed as follows:

1. All NCBC 425 facilities that fall under the following sections will be addressed as single family residential occupancies for the accessibility purposes and not as Group I-2. These are constructed to comply with the NC Residential Code and have no accessibility requirements applicable to them.
   a. NCBC 425.2
   b. NCBC 425.3
   c. NCBC 425.4

2. All NCBC 425 facilities that fall under the following section will continue to be addressed as Group I-2 for accessibility purposes. These are larger facilities and are more in line with commercial facilities and should comply with the accessibility requirements that apply to commercial facilities.
   a. NCBC 425.5
There continues to be questions about the language in the 2012 NCBC addressing NCBC 1106.2 parking requirements for Groups R-2 and R-3 occupancies. The number of spaces required by the NCBC is the larger of either those designated for the Type A dwelling units or 2% of all provided parking spaces. This means that if the number of designated Type A parking spaces exceeds 2% of the total number of spaces provided, then additional spaces may not be available for the Type B units.

The FHA guidelines require a minimum of 2% of the parking spaces be made accessible. The designer should refer to the FHA guidelines for assistance when additional Type B parking spaces may be required. For your convenience, a link to the appropriate page in the Fair Housing Act Design Manual is provided: [Page 2.23] http://www.huduser.org/Publications/pdf/fairhousing/fairch2.

If you go to the ICC website at www.iccsafe.org, you can download the errata sheet for the 2009 ANSI A117.1. This is something that you should do, if you have not already done so. There are really very few typos, but there may be one or two that could be agonizing after the fact. Case in point: if you look at Table 404.2.3.2, Footnote 1 requires the addition of 6 inches to the pull side of a door if a latch and closer are provided. The Errata clarifies that Footnote 2 applies: this requires the 6” addition when only a closer is provided.
NC PEV Readiness Initiative

After a one-year time frame and monthly conference calls from one end of the state to the other, there is now a graphics-laden reference document on accessibility for PEV charging stations. Centralina Council of Governments, with Advanced Energy locally and others across the state, took the lead in organizing the Mountains to Sea initiative which assembled the Policy, Codes and Standards Working Group that put together the resulting document. Funded by a US Dept of Energy grant, the Plug-In Electric Vehicle Planning Toolbox titled Accessibility for Public Charging Stations contains many examples, with photos for your use.

Official DOI statement: "The ADA guidance published via the NC Plug-In Electric Vehicle Taskforce is an excellent resource for any entity planning to install public charging stations. Advanced Energy was invaluable in the development of this article; it is based on the direct experience of two of North Carolina’s leading PEV-ready municipalities and reflects the official interpretation of accessibility requirements for our state."

Please take a look at it and use it for designing any PEV charging stations in the state. You can find it at: http://www.ncpevtaskforce.org/

Then click on:
- **Resources** link in upperright
- **PEV Planning Toolbox**

Checking the PEV Planning Toolbox link will take you to the next page where the top link is titled: PEV Planning Toolbox.

PEV Charging Stations:
The next ANSI Standard is reviewing proposed requirements for PEV charging stations. These proposals are being considered for adoption for the 2015 ANSI A117.1 Standard.

Maneuvering Space for 30” x 48” Space

Recently, sketches for several Type A and Type B dwelling unit bathrooms, as well as commercial bathrooms, have found their way to our NCDII review desks with generic questions as to whether or not the sketch complies with code.

The questions typically relate to the 30” x 48” wheelchair space required by ANSI 305.3 and whether its position in the room is beyond the arc of the door swing in an individual toilet room or bathroom per ANSI 606.3.2.2 Exc.; ANSI 1003.11.2.1 Exc.; or ANSI 1004.11.2.1 Exc. Swinging the door out may not solve all related issues.

What designers need to remember is that the wheelchair occupant has to be able to maneuver the wheelchair into the space designed on the sketch. The designer cannot just put it in place with no thought as to how someone gets it there. The fact that a 30” x 48” space exists magically in front of a lavatory does not make it accessible if the user cannot get the wheelchair into the room and into the space.

This is the minimum 36” clear width of an accessible route required by ANSI 403.5. It allows you to maneuver into the clear floor space.

Designers need to provide it and inspectors should be looking for it.