

The Insider

National Elevator Industry, Inc.

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Destination Dispatch Series (3/3) – Accessibility for Persons with Disabilities

At the end of World War II, one of the greatest waves of elevator modernization occurred when human operators in the car were replaced by "operator-less control systems." Passengers used to announcing their floor requests to an often-uniformed operator suddenly had to learn to use an elevator car operating panel, pushing floor buttons for themselves and learning to use the door open and close buttons. Today, people call and operate elevators on their own without a second thought.

When destination dispatch systems first entered the building market in the 1990's they caused a similar confusion, but their use was quickly mastered by the riding public. Persons with disabilities experienced a similar learning curve as these intuitive systems were installed in more and more buildings.

Making these systems accessible to persons who are blind or visually impaired has been essential to their acceptance and success. Many destination dispatch systems identify each individual rider using RFID card readers, allowing them to personalize each elevator trip by providing extra boarding time for wheelchair users, or special audible and visual cues for hearing or sight-impaired users.

Persons with mobility impairments and those who are deaf or hard of hearing interact with destination dispatch systems in the same way as their peers without disabilities. Hall call stations are at a height that is accessible for wheelchair users and those of short stature, and two-way communication systems in the cars have the same features as "regular" elevators for those who are deaf or hard of hearing. But destination dispatch systems introduced beneficial visual cues as hall call displays direct riders to a specific elevator that announces its arrival with an alphabetic hall lantern at the elevator opening.

Destination Dispatch vs. Regular Hall Call



NEII® worked with organizations representing persons with disabilities to meet this challenge. As a result, the ICC/ANSI A117.1 accessibility standard referenced in most U.S. building codes requires destination dispatch (destination-oriented elevators) to provide a visible signal, audible tones and

verbal announcements to indicate which car is responding to a call. When the car arrives these same audible tones and verbal announcements are replicated at the elevator door, directing visually impaired riders to the correct car. The audible tone and verbal announcement are activated by pressing a function button on the hall call station that is identified by the International Symbol for Accessibility and a symbol of three raised dots in an equilateral triangle configuration. The function button is located immediately below the keypad arrangement or floor buttons.

The Americans with Disabilities Act (ADA) Standards for Accessible Design have similar requirements, except that a function key to activate the audible cues is not specified. Most manufacturers have opted to include the function key in their systems as an “equivalent facilitation” permitted by the ADA to ensure that persons with visual impairments will receive unique audible cues when they use the system. Despite these inconsistencies between the ADA Standards and the ICC/ANSI A117.1, what you’ll find is that *NEII*’s members are developing innovative destination dispatch systems that are making accessibility easier for all riders, disabled and nondisabled alike.

Through modern technology, custom features and personalized solutions, destination dispatch is yet another step forward for the elevator industry in advanced mobility. The most important takeaway for elevator riders with disabilities is that destination dispatch systems offer increased convenience and accessibility for all.

Questions regarding the codes and standards that address destination dispatch systems should be directed to the *NEII* Code & Safety Director, Brian Black, at bdblack@neii.org or 585-302-0813. If you have questions about issues under discussion in your state, don’t hesitate to contact the *NEII* Government Affairs Director, Amy Blankenbiller, at ajblankenbiller@neii.org or 785-286-7599.

Have a comment or question for the experts? Want to submit a topic for a future issue of the newsletter? Send us your thoughts at theinsider@NEII.org to keep the conversation going!

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