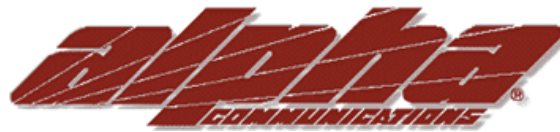# Complying with ADA Guidelines for Communication in Areas of Rescue Assistance

A complimentary technical white paper from

Over a decade after the Americans with Disabilities Act (ADA)[1] went into effect, clear understanding of what is the best way to comply with one of the more important aspects of building egress and safety for the disabled continues to be an open issue in the minds of many building designers, contractors and facility managers. The subject of this confusion is **communication with people in areas of rescue assistance**. Before taking a look at the specifics of this crucial topic, it is helpful to review the overall details of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) for Area of Rescue Assistance.

Overview
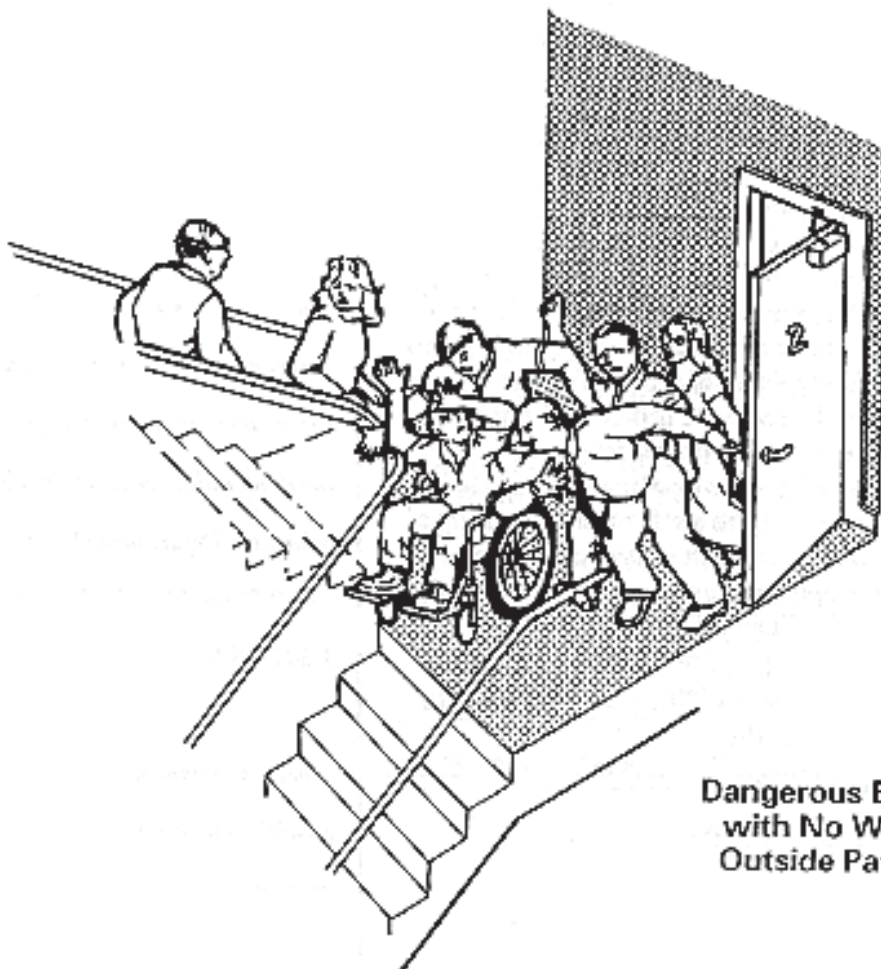
Dangerous Exit Stairway
with No Waiting Area
Outside Path of Travel

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[1] The American with Disabilities Act Accessibilities Guidelines (ADAAG) was published as the standards for Accessible Design in Appendix A in the Department of Justices Final Rule, 28 CFR Part 36/Nondiscrimination by Public Accommodation and in Commercial Facilities

In multi-story buildings, elevators cease operation during emergencies making stairways the only available way to leave most buildings. Stairways are designed to provide a safe means of isolating exiting occupants from smoke and heat during a fire. However, picture the inherent problem facing both the disabled and non-disabled evacuating from a building together, during such an emergency that is more than even one story high.

[1]People who have difficulty using stairs or who use wheelchairs or scooters do not have the same access to safe means of exiting a building as people who climb stairs. Exit stairways seldom have the additional floor space where people can stand or park a wheel chair on a landing while they await assistance. If people using wheelchairs attempt to remain on the small landings that are typically provided, they restrict the path down the stairs for other people as well as jeopardize their own safety.

The solution as embodied by the ADAAG requires that a safe waiting area[1] be provided at or near exits for people who cannot climb stairs, that is designated fire protected. Areas of rescue assistance must be large enough for a minimum of two wheelchair users to position themselves out of the path of travel. **They must be equipped with a two-way communication system** and have adequate signage that directs occupants to the area. Although the ADA guidelines apply to new building and alteration (remodel) construction for public accommodations and commercial facilities, common sense tells us that many "grand fathered" existing structures would benefit by integrating some other aspects of assistance for the disabled, even without complying with the space requirements of an enlarged area for refuge, most notably a means of communicating with safety personnel from below, to critical locations within the building.
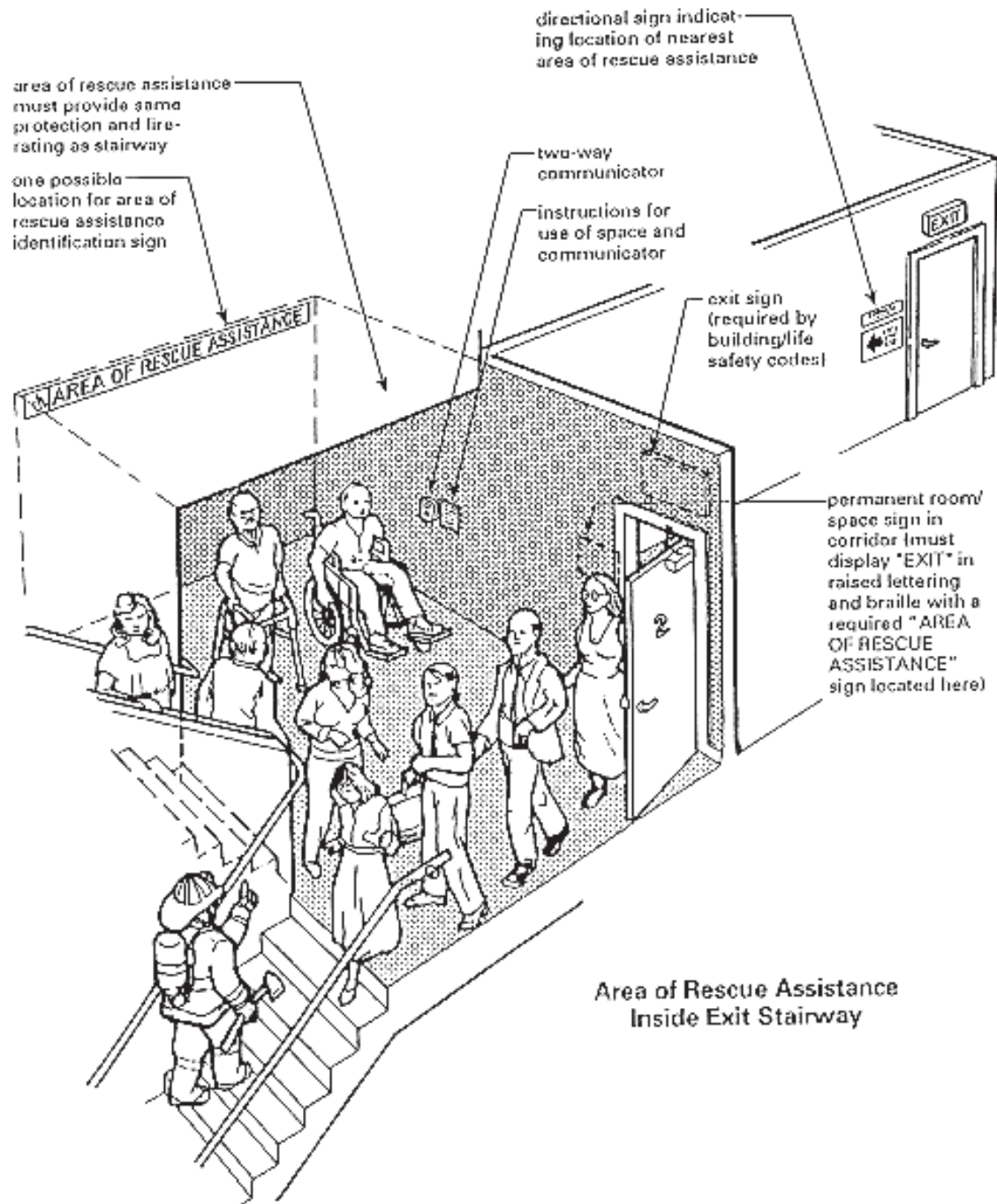
SPECIAL NOTE: The 2009 International Building Code (IBC) has changed to require 2-way communication equipment for Area of Rescue/Area of Refuge in ALL new construction whether the building is sprinklered or not. This was voted on in September 2008. The NFPA (National Fire Protection Association) has already changed their standard to eliminate the sprinkler exemption. If your State or Local jurisdiction adopts the 2009 IBC, the you must put in an Area of Rescue/Area of Refuge system!

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[1] 1994 Barrier Free Environments, Inc. NIDRR Grant #H133D10122
[2] ADAAG 3.5 Defines the Area of Rescue Assistance as an area which has direct access to an exit, where people who are unable to use stairs may remain temporarily in safety to await further instructions or assistance during emergency evacuation

How to Communicate with People in Areas of Refuge
ADAAG 4.3.11.4

AREAS OF RESCUE ASSISTANCE

area of rescue assistance must provide same protection and fire-rating as stairway

one possible location for area of rescue assistance identification sign

directional sign indicating location of nearest area of rescue assistance

two-way communicator

instructions for use of space and communicator

exit sign (required by building/life safety codes)

permanent room/space sign in corridor (must display "EXIT" in raised lettering and braille with a required "AREA OF RESCUE ASSISTANCE" sign located here)

AREA OF RESCUE ASSISTANCE

EXIT

Area of Rescue Assistance Inside Exit Stairway

The ADA accessibility guideline for area of refuge communication states: *A method of two-way communication with both visible and audible signals must be provided in each area of rescue assistance. The system must permit non-verbal use so someone with a hearing or speech impairment could notify the safety and rescue personnel of their presence, and very importantly be reassured that someone has acknowledged their call.*

The methods to accomplish this are varied and can range from a simple visual panel with lights indicating various messages have been received and what the response will be. More sophisticated non-verbal solutions might provide LEDs or LCD screen displays which could provide on going communication during an emergency, instructing the disabled as to evacuation procedures. In each case the communicator must be powered by the facilities emergency electrical service to ensure continuity of operation during emergencies. Guidelines stipulate that receiving equipment should be installed at the point of entry. However, in special cases, the AHJ (Authority having Jurisdiction) may approve another location.

[1] ***Audible signals can include voice output or recorded messages. A button that lights to indicate that help is on its way is an acceptable visual signal.***

Clear and easily seen instructions on the use of each area of refuge provided with a two-way communication system are an important consideration as well. Specifically, the guidelines require information on how to summons assistance and **directions for use of the communication system be posted adjacent to the system**.

The ADAAG also stipulates that buttons, and operating mechanisms to signal for help or reply as well as the location of the unit itself must be within the reach range of a seated person. [2]The requirement is that the panel must be located no higher than 48 inches above the floor for forward reach and 54 inches for side reach and must be operable without tight grasping or twisting. Two-way communication equipment installed in elevators must also comply with ADA guidelines[3].

The System Is the Solution…

Alpha Communications® has been at the forefront of providing effective, easy- to-install, reliable and fully ADA-compliant area of refuge / area of rescue assistance turnkey systems for all types of facility situations since the early stages of ADA implementation. The follow highlights the features and flexibility of our three (3) most popular series.

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[1] Advisory 410.6 Part II Architectural and Transportation Barriers Compliance Board 36 CFR Parts 1190 and 1191 (November 16, 1999)

[2] Communicators must comply with ADAAG 4.27 Controls and Operating Mechanisms, 4.2.5 Forward Reach, and 4.2.6 Side Reach

[3] ADA section 4.10.14 and ADA section 4.27.4

The NC150R Series Area of Refuge system is designed to provide audio communication between the NC150R master intercom/annunciator station, and up to eight (8) (or more) area of refuge (area of rescue) remote call-in stations (in Aluminum, Plastic or Stainless Steel).

It is our least expensive and most popular system for Areas of Rescue Assistance applications.

Calls are indicated at the master by visual and audible signals. The master station also has sensitive two-way audio communications and tone call functions. Remote call-in stations have sensitive two-way communications, call-placed and call-answered L.E.D. indicators. A maximum of eight (8) remote call-in stations may be connected to the standard NC150R master station. Larger capacity masters, or masters with desk or surface mounting, or privacy handsets are available on a special-order basis.

You can even add pocket-paging capability as well, to signal building staff that are away from the master station(s), that assistance is required.

Options also include battery back-up, multiple master capabilities, and a wide variety of ADA signage.

**The 4200 Series Area of Rescue** is an AUDIO-VISUAL TYPE (with voice communications) system.
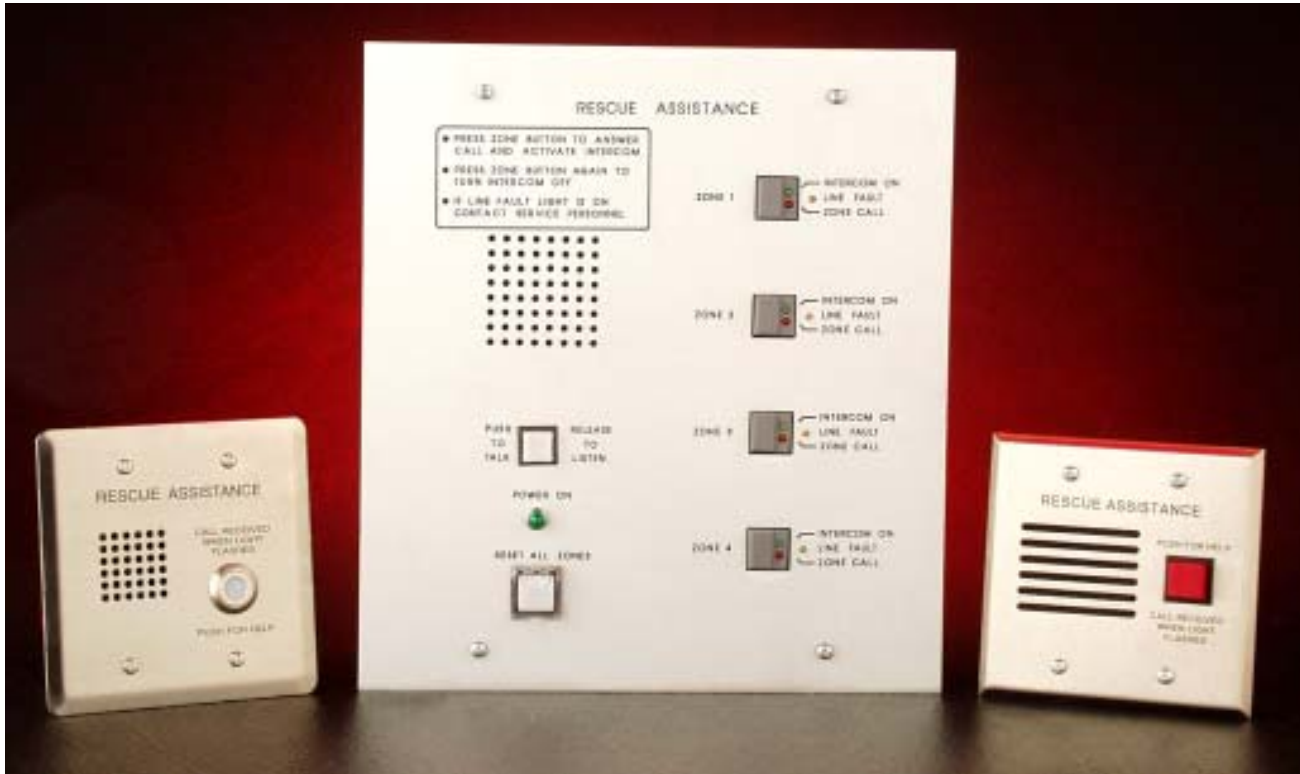
The 4200 series systems are designed to provide an emergency signal between 1 to 44 (or more) area of refuge (area of rescue assistance) remote call-in stations and the master station.

The 4200 series answers with an 'Acknowledge' LED, and the ability to speak with the calling remote(s) using the built-in intercom feature.

Calls are indicated at the master by visual and audible signals. Remote call-in stations have call-placed and call-answered L.E.D. indicators. A maximum of 44 remote call-in stations may be connected to any of the master stations. Larger capacity masters are available on a special-order basis.

The 4200 series systems have 'supervised' circuitry to indicate when a wiring fault has occurred. Both systems are available with standard and/or vandal-resistant remote call-in stations, and with standard power supply or battery back-up.
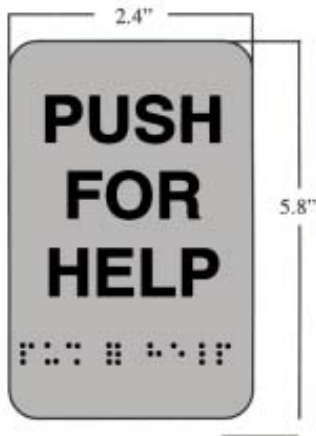
A full line of ADA signage is also available for either system. Quick and easy configuration of all components of either of these area of rescue systems is available by accessing our product catalog and AlphaQuote™ system configurator over the Internet at our website: **www.AlphaCommunications.com**

For more information please contact Alpha Communications®, 42 Central Drive, Farmingdale NY 11735-1202. Phone 631-777-5500 / Fax 631-777-5599.

Email: info@alphacommunications.com or call TOLL-FREE 1-800-666-4800.