

Title II ADAAG ... Almost

After waiting for more than a year for final accessibility guidelines, state and local governments will have to settle for an "interim final rule" before final guidelines are issued.

Published in the June 20, 1994 Federal Register, the interim final rule developed by the US Architectural and Transportation Barriers Compliance Board (Access Board) governs new construction and alterations of facilities owned or operated by state and local governments covered under Title II of the Americans With Disabilities Act (ADA).

The rule's "interim" nature allows for additional public comment while providing a clear indication of where the Access Board's final guidelines are headed.

The initial notice of proposed rule making was published in December 1992. When the final rule is published, it will be used by the Department of Justice (DOJ) to enforce the ADA.

The interim rule addresses four new sections: public rights-of-way; judicial, legislative and regulatory facilities; detention and correctional facilities; and public residential housing.

Public Rights-of-Way

Alterations to sidewalks and street crossings must comply with the new construction criteria unless site infeasibility precludes compliance. In these cases, the less stringent special technical provisions may be followed.

The rule clearly states that all work in the public right-of-way, regardless of who is performing or paying for the effort, is covered by this rule. It also prohibits diagonal public sidewalk curb ramps and depressed corners

See Title II ADAAG , page 11



Photo: Bill Lebovich

Automated Teller Machines may soon be accessible to customers with visual impairments thanks to Standard Transaction Codes.

forming or paying for the effort, is covered by this rule. It also prohibits diagonal public sidewalk curb ramps and depressed corners

The ADA & Your Money

By Thomas Gunther

Whether you realize it or not the Americans With Disabilities Act of 1990 (ADA) is having a positive impact on you and your money in terms of improved "access", that familiar word made famous by the ADA.

The law's original intent was to mainstream access to all public accommodations for those with disabilities. For banks, it includes access to Automated Teller Machines (ATM). Recent changes to the ADA Accessibility Guidelines (ADAAG) have addressed the range-of-reach requirements for people who use wheelchairs. Banks across the country have made many modifications to physical facilities to remove barriers to these customers.

Providing access for people with visual impairments, however, has proven to be much more difficult. The problem stems from

See The ADA & Your Money, page 4

CONTENTS

1	Title II ADAAG
1	The ADA & Your Money
2	San Francisco Draft Policy
5	Signage Criteria Controversy
6	Access to Recreation: Sports Facilities
8	TTY vs TDD vs TT
10	Residential Accessibility

Departments

FedWatch	3
New Media	7
Design Tips	8
New Products	9
Calendar	12



Waves of Interest

I am proud to write that this October issue closes the first volume of the *Universal Design Newsletter*. For the past two years, we have reported on the implementation of the Americans With Disabilities Act (ADA) and the emergence of Universal Design in the construction and design industries in the US. I believe that, much like the swell of waves on a beach, there has been a natural ebb and flow of interest by the general public on this issue.

In 1991, the ADA was passed but was relatively unknown; the wave was building. In 1992, the ADA wave crested with the implementation of many portions of the law and the immense amount of media hype that surrounded the implementation dates. In 1993, interest in the law receded as people grew accustomed to the idea, although many thought it wouldn't affect them directly. Now, in 1994, the wave has begun to build again as lawsuits and their resulting media attention and new products for accessibility

have become available. I believe that 1995 will be another crest year, with waves of new developments to follow.

Riding the 1995 crest are a raft of new activities and developments. They include the first annual symposium of the Universal Design Education Project in Boston in November of 1994 that will change the way that design is taught in universities around the country; the second Conference on Elevators, Fire Safety and Accessibility in Baltimore in April 1995 which will undoubtedly affect the building codes and design of buildings and their egress systems; the many new products and information services that make Universal Design easier to implement; and perhaps, most importantly, the work of the ANSI A117.1 and Architectural and Transportation Barriers Compliance Board ADA Accessibility Guidelines review committees, both of which will be considering major revisions to those standards.

The waves will continue with the past being only the prelude to a whole new series of design activities that are intended to meet the needs of all people.

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San Francisco Draft Policy

The streets of San Francisco will be safer for people with disabilities if a new draft policy on accessibility at construction sites and prioritized curb ramp reconstruction is adopted.

The draft policy, which comes from an area considered a hotbed of accessibility efforts, could become a model. Some of its concepts are already reflected in the Title II ADAAG criteria. (See article page 1)

The draft policy, developed by the City and County of San Francisco Department of Public Works, covers accessible paths-of-travel at construction sites and a ranking system for the reconstruction of curb ramps.

The portion of the policy dealing with construction sites is especially sensitive to people with visual impairments. It requires connected "A" frame barricades placed end-to-end, and "not every couple of feet." "Large openings between barricades will give confusing signals to a person who is blind and using a detection cane," according to the draft policy.

The curb ramp priority policy responds to Title II requirements for municipalities. It's a detailed ranking system designed to prioritize reconstruction of curb ramps.

A "Number 1" ranked curb ramp has an unsafe condition that may cause a trip or fall.

A "Number 2" ranking would apply when a complaint or request has been filed. The case would be reviewed and another appropriate ranking would be assigned.

A "Number 3" ranking would be assigned when a new curb ramp needs to be installed because of an inaccessible curb return.

A "Number 4" ranking would be assigned when there is already one curb ramp at an intersection, but another one is needed.

A "Number 5" ranking would apply to a non-standard curb ramp that is safe but not completely in compliance with federal and state codes.

Finally, a "Number 6" ranking would be assigned when the ramp cannot be improved due to utility conflict, physical barriers or other constraints. ■

DOJ Builds Technical Staff

The Department of Justice (DOJ) has recently expanded its Public Access Office which is responsible for enforcement of Titles II and III of the Americans With Disabilities Act (ADA), for carrying out DOJ's technical assistance program, and for coordinating ADA technical assistance government-wide.

The following individuals provide technical assistance at 800.514.0301 (V) or 800.514.0383 (TTY):

Ruth Hall Lusher has been the Technical Assistance Program manager since December 1993. Prior to coming to DOJ, Lusher was technical director at the Architectural and Transportation Barriers Compliance Board (Access Board) where she directed the Board's research and technical programs including the development of the ADA Accessibility Guidelines (ADAAG).

Ellen Harland is a registered architect and certified building official who has been an architect in Colorado and New Mexico for more than 30 years. In 1988 she joined the Access Board and was involved with the development of the ADAAG. She came to DOJ's Civil Rights Division in 1992 to assist the unit in certification of state and local accessibility codes.

Diane Perry was appointed as an architect to the Public Access Section in June 1993. She provides technical assistance to staff attorneys during investigation of complaints under Title III of the ADA. Formerly, Perry worked for eight years as an architect in the Washington DC area.

Todd Anderson joined the staff in June 1994. His duties include reviewing state and local regulations and building codes for equivalency with the technical standards of the ADA. Before coming to the department, Anderson was a code consultant advising designers, builders, and those charged with approving construction throughout New England.

Jim Bostrom, another recent addition to the staff, has 19 years experience as a design researcher, a professional designer, and as an educator, creating and evaluating environments and products for people with disabilities. From 1985 to 1994, he served as project manager and designer for Barrier Free Environments in Raleigh, NC.

The Revising of ANSI A117.1

The process of revising ANSI A117.1, the American National Standard for Accessible and Useable Buildings and Facilities, is underway. As is the custom every three to five years, the ANSI A117 Committee has begun its efforts to update the Standard. While the formal committee review process will officially begin next year, the committee is accepting

comments on and any suggested changes to the ANSI Standard until March of 1995.

The ANSI Standard is adopted by the nation's model building codes and becomes the basis for providing accessibility in local and state building codes throughout the country.

For more information or to submit your changes, contact Bob Spangler of the ANSI A117 Secretariat at the Council of American Building Officials at 703.931.4533.

Dept. of Education Drafts Fire Plan

The US Department of Education is in the process of developing a comprehensive fire evacuation plan for its headquarters facility that it believes will become a model for government and other buildings.

The push for a comprehensive plan came after an evacuation plan developed by the department for the Mary Switzer Building was found to be missing elements relevant to evacuating people with disabilities. The assistant secretary established a committee to formulate a new plan with emphasis on three of the major disabilities: deafness, blindness, and wheelchair users.

A subcommittee made up of four disabled and two non-disabled people was then formed to research existing fire evacuation plans and find current information on the subject.

"In its efforts," said subcommittee member Eunice Fiorito, "the subcommittee found bits and pieces of in-

formation in existing plans about evacuating people with disabilities, but no comprehensive plans that would apply to mobile, independent people." To round out its research, the subcommittee also met with industry experts on the subject.

According to Fiorito, a draft comprehensive fire evacuation plan will be tested in October 1994. ■

The Cost of Accommodation

The cost of accommodating workers with disabilities under the Americans with Disabilities Act is frequently much less than many employers believe, according to the Job Accommodation Network (JAN).

Data collected by JAN reveals that approximately 70 percent of accommodations cost less than \$500 and 82 percent cost less than \$1,000.

JAN, a toll-free information service run by the President's Committee on Employment of People with Disabilities, provides assistance to businesses on how to accommodate employees with disabilities. In 1993 inquiries to JAN reached more than 61,000.

The phone number for JAN is 800.JAN.7234. In addition, JAN accepts inquiries by computer; to do so, dial 800.DIALJAN.

New Census Bureau Statistics

There are now 49 million Americans with disabilities, according to the latest figures from the US Census Bureau. The six million increase represents a 16 percent jump from previous estimates.

The new figure, which accounts for 20 percent of the total US population, comes from Americans with Disabilities: 1991/1992, a report based on the Census Bureau's first-ever comprehensive disability survey.

The Census Bureau defines a disability as difficulty in performing one or more functional or daily living activities or one or more socially defined roles or tasks. Persons who are completely unable to perform an activity or task, or who must have personal assistance are considered severely disabled.

Among the survey findings: more than half of the 24 million people with severe disabilities lack health insurance and only 23 percent of those aged 21 to 64 with severe disabilities are employed.

The ADA & Your Money, from page 1

the fact that blind customers cannot read the ATM screen to know which buttons to push to complete their transactions. High-tech solutions have been suggested utilizing audio output that attempts to duplicate the text and graphics on the screen. (See related articles in *Universal Design Newsletter*, Vol. 1, No. 2, April 1993 and Vol. 1, No. 5, January 1994.)

The latest advance, however, is a radically different approach that is both simple and universal. The Standard Transaction Code facilitates use by every ATM user. It allows all transactions performed at an ATM to be accomplished by entering a uniform, logical key sequence at the key pad, rather than having to utilize function keys directed by reading the screen. The Standard can be installed at most ATMs in place today. This means that banks will not have to wait years to replace expensive equipment in order to implement the improvement.

The approach was developed by a group of banks in New York with NCR/AT&T, under the review and coordination of the ANSI A117 Committee ATM Task Force. As this approach gains broad acceptance, it will allow both visually impaired and sighted ATM users to speed through their cash withdrawals at their own bank's ATM and ultimately at all networked ATMs.

Standard Transaction Codes facilitate the normal transaction by eliminating the need to read through several screens and make selections from menus by pressing function keys to the right and left of the screen. The keying sequence today is different at each bank, which unfortunately eliminates the possibility of a customer memorizing the sequence and using it at another networked ATM.

The format of the Standard Transaction Code has the user enter the transaction type, the account to be charged and then the transaction amount. Transaction types are either: 1 -- Withdrawal, 2 -- Deposit, 3 -- Transfer, or 4 -- Balance Inquiry (5-9 are reserved for future use). Account codes are: 1 -- Checking, 2 -- Savings, 3 -- Credit and 4 -- Other. Transaction amounts are always entered as dollars and cents. Re-

ceipts are always issued in these transactions (as some banks today issue receipts only at the customer's option). Figure 1 displays the code sequence.

To complete an ATM transaction a customer would insert a card into the machine, key in the "Personal Identification Number", then enter the Standard Transaction Code. For a \$100 withdrawal from the primary or first checking account, the code would be "11110000". The machine would then dispense the \$100, a receipt and the card. Another example (shown in Figure 2) is a deposit of \$346.25 to the primary savings account.

The solution assists all visually impaired card holders, as well as others, to perform all transactions at either proprietary or networked ATMs that support the Standard.

While a visually impaired customer might not be able to read a transaction receipt at the location, the transaction has been completed, and the record can be read at home.


The Dime Savings Bank will be the first bank in the country testing the Standard Transaction Code

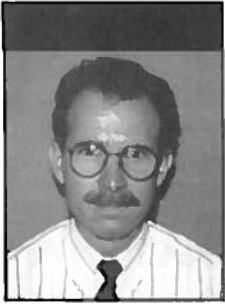
starting in October. A number of the major ATM deployers across the country, as well as many of the large regional networks like NYCE and MAC,

have also indicated their desire to install the Standard.

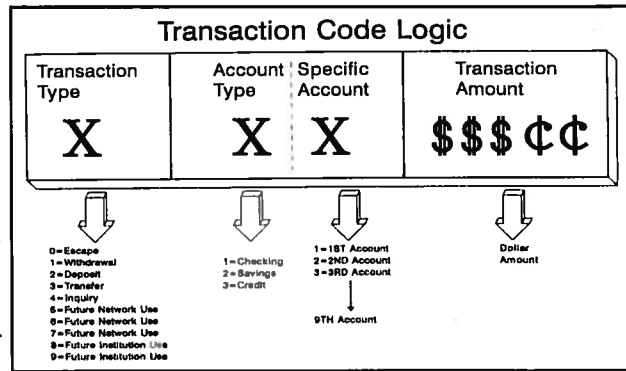
The Standard Transaction Code is an excellent example of how Universal Design can move ATM access ahead by a giant leap. While it is not a 100 percent solution to the ADA mandate of access for all, it is certainly a

positive, mainstream approach that every banking institution should consider as a first step to adding other accessibility enhancements that may become available through technology advancements in the future.

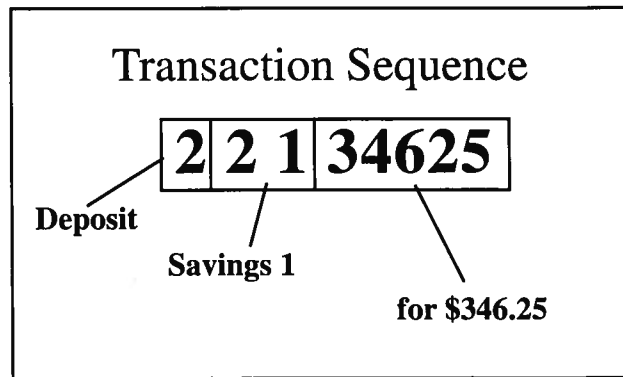
Ask your bank to provide this new customer-friendly service for all its ATM users today! 



Thomas E. Gunther is the Director of Electronic Banking at the Dime Savings Bank of New York, FSB. He is a member of the ANSI A117 ATM Task Group



Standard Transaction Code Sequence

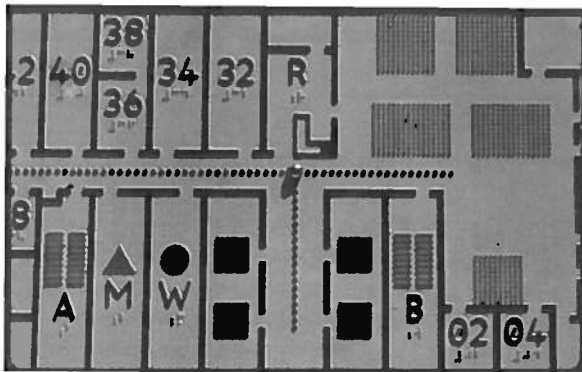


Code sequence for deposit of \$346.25 to a primary savings account

Signage Criteria Controversy

The wayfinding guidelines for people with limited vision proposed in the Americans with Disabilities Act (ADA) fall short of providing adequate signage for all, according to some accessibility professionals.

To overcome signage shortcomings, Roger Whitehouse, a designer in New York, has modified existing systems to create a "comprehensive coordinated wayfinding system." He is using his ideas in his renovation work for the New York-based Lighthouse Inc., formerly Lighthouse for the Blind. This



Tactile maps that work for people without sight.

system leads users from larger to smaller details and then back to the big picture and incorporates tactile maps, special signs and textured floors.

The system includes maps that depict a relatively complete floor plan; maps that show the main corridor designating doorways, stairs and restrooms; and route

Raynes Rail

The Massachusetts Eye and Ear Infirmary in Boston has installed a handrail system that guides patients through the hospital using Braille messages.

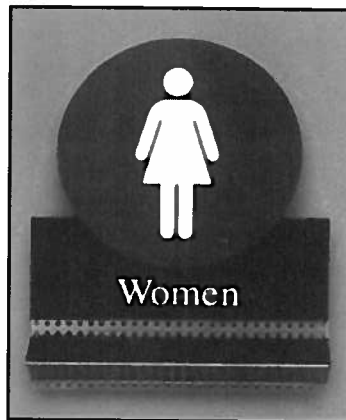
Designed by Coco Raynes of Boston, MA, the Raynes Rail provides continuous Braille messages on its inner face. It describes the floor plan and corridor patterns and announces the location of offices, ramps, stairs and elevators.

The messages read on the right, following the commonly accepted traffic pattern and conforming to the practice of having a seeing eye dog on the left. This may create problems, however, in that Braille is read from left to right and people who read Braille with their left hands are not in contact with the rail. Also some blind people object to a system designed for them by sighted persons that seems to reinforce the stereotype of blind people feeling along walls or holding onto handrails for support in their wayfinding activities. Eventually, audio instructions activated by touch will be installed for people who don't understand Braille.

and event diagrams that indicate access and exit points.

Whitehouse has also developed a special signage system that can be used by a variety of people. The system, which is triangular and mounted along the wall, contains three components. One component is a rail that incorporates Braille and tactile letters. It protrudes from the wall at a 45-degree angle to make it easy for users to read with their fingertips. A second component is mounted flush against the wall and includes large-type signage as well as directional indicators. The third component, infra-red transmitters that can be received by people with special receivers, is also on the rail but angled downward.

In studying signage issues, Whitehouse has identified a new typeface that is easier to read by touch. He has also found the optimum size for letters to be 5/8 inch to 3/4 inch, and that the spacing between letters and between words needs to be increased to allow for easy understanding. For tactile readers the use of all capital letters enhances readability; however, for sighted readers, the use of upper and lower case letters is preferable.



Whitehouse Signage System

paper released last year, the Institute proposed the idea that designers should use a color from the middle of the spectrum against a color from the end of the spectrum to create contrast that is aesthetically pleasing and visible to individuals with low vision. ■

SEGD Recommendations

The Society for Environmental Graphic Design (SEGD) has called for a re-examination of the Americans with Disabilities Act (ADA) guidelines that specify letter width-to-height ratios, claiming that there are very few typefaces that meet the requirements.

The recommendation was included in a white paper developed by the group to provide clarification and interpretation of ADA regulations.

The group maintains that the criteria in the current guidelines omit letterforms that are suitable in terms of visual and tactile legibility.

SEGD recommends that the average between the widths of the capital letter "O" and the numeral "0" be used to determine letterform width-to-height ratios and the average of the stroke thicknesses between the capital letter "I" and the numeral "1" be used to determine the letterform stroke width-to-height percentages. They also recommend that these ratios be expressed as a percentage of height. The group has proposed that the range for character body width of letterforms intended to be read visually be roughly between 55 and 115 percent, and for stroke width between 8 and 33 percent. It also suggested separate conditions be established for letterforms intended for tactile use only on signs where visual and tactile components are separate.

Similarly, the Lighthouse Research Institute has explored the issue of color contrast in print legibility in an effort to give designers options beyond black and white. In a technical

Access to Recreation: Sports Facilities

By Kim Beasley

This is the second in a series of articles in Universal Design Newsletter on the new recreation recommendations.

ADA Accessibility Guidelines (ADAAG) for recreational facilities and outdoor areas are a step closer to reality. The US Architectural and Transportation Barriers Compliance Board (Access Board) recently convened a 27-member Federal Advisory Committee charged with gathering information and making recommendations concerning accessibility guidelines for newly constructed and altered recreation facilities and outdoor areas. To address the broad spectrum of recreation facilities, the following subcommittees were created: Places of Amusement; Play Settings; Boating & Fishing; Developed Outdoor Facilities; Golf; and Sports Facilities.

Increasingly, persons with disabilities are enjoying a wide range of recreational and sports activities.

Emergence of new technology is allowing wheelchair users, for example, to select specially designed wheelchairs for various athletic events, such as track and field, tennis, or basketball. Blind skiers and runners may use devices that emit an audible signal to give location and direction.

The Sports Facilities Subcommittee began its work based on the premise that all sports facilities can be designed to be accessible to persons with disabilities. They recognized, however, that the criteria should never fundamentally alter the sports activity. For example, in sports where the field of play is grass, the need for a firm, stable, slip-resistant surface cannot be met. The committee recommended that an accessible route be provided to the field of play.

This requires that the field of play be defined. In football, the field of play stops at the line; in baseball, it extends to the wall and, in fact, beyond if one can reach beyond to catch the ball.

A second key premise addresses access to the sports facility from the perspective of both spectator and participant. Even professional athletes who are injured on the field of play benefit from accessible design features, though the injury may be temporary. This requires that showers, lockers, toilet facilities, dressing rooms and other ancillary facilities be universally designed. For the most part the existing criteria in ADAAG addresses these facilities.

Specific sports facilities such as courts, velodromes and rinks were analyzed to determine if some design standards should be modified to eliminate barriers and increase opportunities for persons with disabilities to become sports participants. One example is the emerging sport of sledge hockey. This sport, played on a hockey rink, involves players who are seated on specially designed sleds. Similar to hockey, team players maneuver a puck using sticks. The sticks are designed to also allow players to maneuver themselves on the ice. The subcommittee determined that the step into the penalty box could be reduced from 8 inches to a minimum of 4 inches so it can be negotiated by an individual on a sledge. This minor change would have little or no effect on the fundamental nature of the sport while substantially improving the opportunities for individuals with mobility impairments to play sledge hockey.

New design standards for elements such as cuspidors (devices similar to drinking fountains where athletes can spit without fouling the drinking fountain basin) were also recommended. Since the criteria for drinking fountains do not apply to cuspidors, the committee came up with a maximum height of 29 inches for cuspidors (floor to rim), allowing someone who is seated in a wheelchair to access the device.

The subcommittee provided extensive information regarding spectator seating and suggested modifications to ADAAG that will improve the distribution, integration, and quality of seating and sightlines. One recommendation addresses integrated or enhanced view seating which provides a comparable view of the field of play for a seated individual even when other spectators are standing. This usually involves raising the spectator relative to other fans. This creates a problem in that this type of seating may reduce opportunities for social interaction.

Another concern addressed by the committee is the requirement for a ratio of 1 to 1 companion seating immediately adjacent to the accessible seating. The result of this ratio is that two percent of the seating must be on the accessible route of travel. The committee recommended a relaxation of the 1 to 1 ratio to encourage the use of innovative products such as the Camden seat (See *Universal Design Newsletter*, Vol. 1, No. 1, January 1994.) that may take up slightly more space but provide more flexibility for the operator and spectator.

The Access Board has copies of the full report of this and the other subcommittees. Individuals interested in receiving a copy should contact Ms. Peggy Greenwell at 202.272.5434. (V)

...all sports facilities can be designed to be accessible to persons with disabilities.



People with disabilities enjoy a wide range of sports.

Kim Beasley, AIA, was chairman of the Access Board Sports Facilities Subcommittee. He is an architect and managing principal of Paradigm Design Group, Washington, DC. He also manages the Paralyzed Veterans of America's architecture and barrier-free design program.



Accessible Design for Hospitality: ADA Guidelines for Planning Accessible Hotels, Motels & Other Recreational Facilities; Second Edition, written by Thomas D. Davies Jr., AIA, and Kim A. Beasley, AIA, includes extensive revisions to address federal legislation passed since the first edition was published, especially the Americans with Disabilities Act (ADA).

The book includes practical information about the challenges facing disabled guests. It also includes a breakdown of accessibility as it relates to specific elements on lodging properties such as entries, lobbies, guestrooms, restaurants, meeting and conference facilities and recreational facilities. The authors review the scope of ADA requirements for hotels and motels as well as cost issues.

The 182-page book, published by McGraw-Hill, is available for \$49.00 from bookstores or by calling 800.262.4729.

Technology & Disability: Home Modifications Volume 2, Number 4, Fall 1993, is a collection of articles edited by Edward Steinfeld, AIA dealing with independent living and adapting homes to meet the needs of people with disabilities.

Articles included in this 88-page publication cover such topics as: developing a national policy on home modification; home modifications and performance of routine household activities by individuals with mobility impairments; bathing for older people with disabilities; identifying barriers to independence in home environments; and resources for home modification and repair programs.

For more information, contact Journal Fulfillment Department, Andover Medical, 80 Montvale Ave., Stoneham, MA 02180.

The American Society of Interior Designers (ASID) has published **Universal Design Programs, A Two-Part Program Package for the Design Professions**. The package is designed for ASID chapter use in presenting programs for both the general public and interior design professionals.

The first section, "Closer to You Than You Think: Universal Design and Your Future", is designed as a general interest/public outreach program. It was developed to help chapter staff and/or volunteers plan and manage programs for audiences outside the practitioner community. It includes a programmer's kit, presentation materials, and a 10-minute videotape presentation.

The professional interest/continuing education program is titled, "How to Build Your Practice With Universal Design." This section includes information to help staff plan and manage a program for the

professional audience, as well as instructors' and participants' materials. It is designed to help practitioners understand the general aspects of Universal Design and be able to respond to client concerns.

For more information contact ASID, 608 Massachusetts Ave. NE, Washington, DC 20002; telephone 202.546.3480; fax 202.546.3240.

The National Rehabilitation Information Center (NARIC) has just released five publications for consumers and practitioners in the disability field.

NARIC Guide to Resources for the Americans With Disabilities Act; Second Edition, is a comprehensive, annotated list of ADA related resources. Organized according to the act's first four Titles -- employment, public services, public accommodations, and telecommunications -- the guide includes an extensive bibliography and contact information on more than 100 public and private organizations.


The Directory of National Information Sources on Disabilities; Sixth Edition, is an all-new, two-volume resource that describes more than 700 organizations. It includes information on services provided, a user-friendly subject index, and an acronym list.

The NARIC Guide to Disability and Rehabilitation

Periodicals; Fourth Edition, contains information on nearly 500 newsletters, magazines, and journals pertaining to disability and rehabilitation.

The 1994 NIDRR Program Directory describes 300 research projects funded by the National Institute on Disability and Rehabilitation Research (NIDRR) during fiscal 1994.

The Compendium of Products by NIDRR Grantees and Contractors (1994); First Edition, is a bibliographic compilation of products -- manuals, brochures, posters, videos, audio cassettes, computer programs, training materials -- produced in 1993.

Copies of these publications are available from NARIC. To place an order or for more information, contact NARIC, 8455 Colesville Rd., Suite 935, Silver Spring, MD 20910-3319; telephone 1.800.346.2742; fax 301.587.1967; or electronic bulletin board (BBS) 301.586.3563. 

UDEP links to the Internet

Finding information on the Internet about Universal Design just became easier.

This summer, Adaptive Environments announced the Universal Design Information Network, an interactive network designed to provide designers and design educators with information about how to make environments and products usable by all people. To provide Universal Design information on the Internet, the new information network maintains a gopher.

A gopher is software that can assist users in finding information within the network. Gophers have the ability to search the entire network using key words or free text to find files that deal with a topic. A gopher will typically show a list of options that may point directly to a file located somewhere on the Internet.

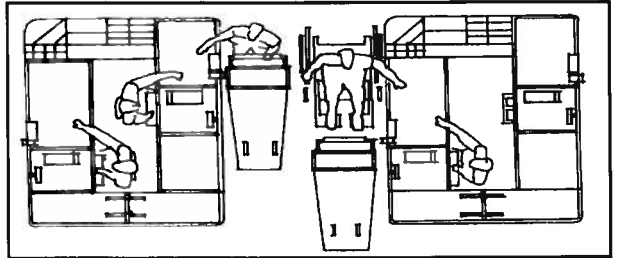
The Universal Design Information Network is part of the Universal Design Education Project (UDEP) which is funded by the Department of Justice and other public and private sponsors. This electronic information system uses the Internet to provide immediate access to the growing body of information on Universal Design.

The Universal Design gopher address is: gopher.gopher.umb.edu.

DESIGN TIPS



PROBLEM: Wheelchair-accessible checkout aisles take up more room than standard checkout aisles. Store designers, in trying to minimize the number of wheelchair-accessible aisles to conserve space, minimize choices for customers.



Stephen B. Alicandro A.I.A.

TIP: Back-to-back checkout stations with shared customer aisles can provide access to all aisles while reducing the overall space requirements.




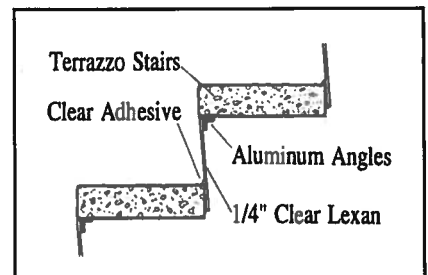
PROBLEM: Windows, draperies, overhead fans and ceiling light fixtures without wall switches may be out of reach and difficult to operate or control.

TIP: Handheld remote control devices (similar to TV or VCR remotes) are now available to operate switches and motors which control out-of-reach equipment.



PROBLEM: How do you eliminate the tripping hazard on an open riser stairway that was designed to allow light into a lower area?

TIP: Rick Gibbs of Nobody Beats the Wiz, Inc., of Carteret, NJ, came up with a detail that attaches clear 1/4-inch lexan risers to terrazzo stair treads with aluminum angles and silicone adhesive. This eliminates the tripping hazard while still allowing the light in. 



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TTY vs TDD vs TT


by Paula Holbrook

ATBCB Accessibility Specialist

In the mid-1960s, teletypewriters for printing stock quotes were adapted so that people who were deaf could type messages over the telephone to others who also had a teletypewriter. These bulky machines were referred to as TTs.

During the 1970s, technology allowed smaller, portable devices that became telecommunication devices for the deaf, or TDDs.

During the 1980s, people who had speech impairments or normal speech and hearing began to use the devices. A new term, text telephone (TT) was coined to indicate that their use was not limited to persons who were deaf or hard of hearing. It emphasized the function of the device rather than the ability of the user. The Federal Communication Commission adopted the term text telephone in their regulatory language during the early 1990s, as did the Department of Justice (DOJ) and the US Architectural Transportation Barriers Compliance Board.

Members of the deaf community who rely upon American Sign Language to communicate objected because the sign for text telephone (TT) is also used for "toilet." In a national survey, conducted by Telecommunications for the Deaf, Inc., deaf individuals preferred the term teletypewriter (TTY). The Access Board, the DOJ and *Universal Design Newsletter* have complied. 

PRODUCTS

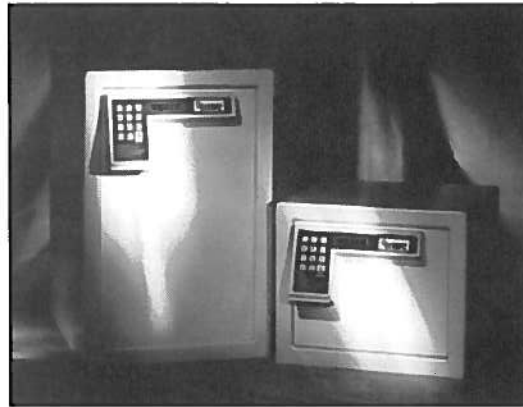
Lutron Lighting Controls



This line of innovative lighting controls includes wireless remote-control, slide-lever wall switches for closed-fist operation. Table lamp dimming switches with slide controls allow individuals to activate or dim lights without having to reach up or move across the room. Programmable lighting systems that automatically activate a series of lights on a pre-

determined pathway through the residence are also available.

nation are punched in, and the number "5" button has a raised dot for tactile orientation. The safe opens and closes with a touch of the buttons, eliminating the need for special range-of-motion or rotation of the wrist to operate. ■



Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036
800.523.9466

Video Sentry Series and Master Sentry

This combination of closed-circuit televisions, telephones, and video creates a powerful new margin of security and safety for businesses or homes. The system meets the requirements for a two-way audio/video communications system for 'areas of rescue assistance'. Cameras use infrared technology to capture images in bright daylight or complete darkness.



These images are transmitted to a phone console with a built-in monitor. Basic single-camera and multiple-camera complex systems are available. Contact Aiphone Corporation.

ADA Safe

Primarily designed with the hotel industry in mind, the ADA Safe by Elsafe Inc. has features to accommodate persons with physical, auditory, and visual disabilities. The telephone key pad provides visual and auditory feedback as the numbers of the combi-

The New Products Column was provided by the ABLEDATA project, a computerized database of information on assistive equipment which is funded by the National Institute on Disability and Rehabilitation Research and is administered by Macro International, Inc., Silver Spring, MD.

Aiphone Corporation,
1700 130th Avenue NE
PO Box 90075,
Bellevue, WA 98009
206.455.0071

Elsafe, Inc.
4303 Vineland Road
Suite F-15
Orlando, FL 32811
800.252.3004 or
407.423.7233

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Residential Accessibility

Working Toward Uniform Provisions

By Lawrence G. Perry, AIA

Architects and developers involved in the design or construction of new multi-family residential properties currently find themselves forced to deal with a wide variety of accessibility requirements.

The Federal Fair Housing Amendment Act of 1988 applies to all newly constructed multi-family projects containing four or more dwelling units. The requirements of the Fair Housing Accessibility Guidelines (FHAG) cover up to 100 percent of the dwelling units in a project, depending on site conditions, building configuration, and unit configuration.

In addition to these federal requirements, local or state building codes also require accessible dwelling units. The most recent editions of each of the three model building codes (1993 BOCA National Building Code, 1994 ICBO Uniform Building Code, and 1994 SBCCI Standard Building Code) require two percent of dwelling units in properties with twenty or more dwelling units to be accessible in accordance with CABO/ANSI A117.1-1992. The requirements of the A117.1 standard are much more stringent than those of FHAG.

In an attempt to coordinate these varying dwelling unit accessibility provisions, the ANSI A117 Committee has formed a Residential Task Force. The task force has two primary tasks: to evaluate current A117.1 dwelling unit criteria and propose changes, if needed, and to develop technical criteria for accessible dwelling units consistent with the intent of the FHAG. The task force is focusing only on spaces (interior and exterior) or elements which are part of dwelling units; public and common areas are not being addressed.

Staff from the Department of Housing and Urban Development (author and enforcer of FHAG) have been active participants in the task force, providing input on the intent of the FHAG, information on interpretations and legal precedents, and informal critiques on the proposed language being


drafted by the task force.

The task force first developed a matrix identifying each specific element of dwelling units, and the existence of related accessibility provisions in the two documents. Recognizing that a "Fair Housing" unit is far different from an "ANSI" unit, the task force then began to develop two sets of provisions: one for Type A units, which are units based on the provisions of ANSI A117.1, and another for Type B units, which are units consistent with the intent of FHAG.

While ANSI A117.1 contains technical, how-to criteria, it leaves scoping (how many) provisions to the building codes. The task force determined that the dwelling unit package should be complete, including both scope and technical provisions. This decision was reached for several reasons. First, major gaps were identified in the current ANSI A117.1 model code package for Type A units. Secondly, FHAG criteria combine scope and technical provisions; for example, the number of plumbing fixtures required to comply depend on which technical criteria are followed. Finally, the Board for Coordination of Model Codes indicated that the codes should deal with the larger scoping issues, determining how many units must comply, and leave the assembly of pieces of the dwelling unit to the ANSI A117.1 process.

In order to include scoping provisions, and to gather all residential criteria into one place in the document, the ANSI A117 Committee, has acted upon the recommendation of the task force to clearly separate dwelling unit criteria in the next edition of the standard.

These are the first major steps towards the development of a clear, comprehensive set of residential dwelling unit accessibility criteria. This will benefit anyone involved in the design or construction of these units, but will also lead to more uniform interpretation, enforcement, and opportunities for persons seeking units with accessible design features.

Individuals interested in more information about the ANSI Residential Task Force should contact the ANSI A117 Secretariat at the Council of American Building Officials at 703.931.4533. 



Lawrence G. Perry, AIA, is an architect and codes consultant based in Silver Spring, MD, and is the chairman of the ANSI A117 Residential Task Force. Mr. Perry also serves as codes consultant for the Building Owners and Managers Association (BOMA), representing the interests of the office building industry in the codes and standards arena. He has authored the following publications: Emergency Planning Guidebook, The ADA Answer Book, and ADA Compliance Guidebook. Mr. Perry has also conducted over 75 seminars nationwide on the ADA for local BOMA chapters and private corporations.

Other Related Activities

- The model codes have already begun to incorporate the provisions of FHAG, using some of the preliminary work of the Residential Task Force. Building Officials and Code Administrators (BOCA) is addressing two code proposals in 1994; International Conference of Building Officials (ICBO) and Southern Building Code Congress International (SBCCI) will likely consider similar proposals in 1995. These provisions will be revisited by the model code organizations once new CABO/ANSI criteria is available.
- The Access Board is developing separate guidelines for dwelling units covered by Title II of the ADA (State and Local Government Section). The Residential Task Force will likely be expanding its scope to study these guidelines.
- The Council of American Building Officials is working to establish a more formal process for exchange of information between the model code organizations and HUD.

Title II ADAAG, from page 1

in new construction. However, diagonal public sidewalk curb ramps are permitted in alterations.

Judicial, Legislative and Regulatory Facilities

The overriding theme in the section that deals with courthouses, town halls, state capitols, commissioners' meeting rooms and other meeting places reinforces the idea that employee work areas are covered, while individual work stations are not required to be fully accessible.

Consistent with that concept, judges' benches and other work areas would be adaptable but not necessarily accessible. For example, a judge's bench may be designed so that a ramp can be installed at a later date.

On the other hand, areas where the public needs access, such as jury boxes, witness stands, and speakers' rostrums are required to be accessible and on an accessible route. This is similar to the requirement for accessibility to common use areas.

Other criteria include:

- At least one holding cell must be accessible.
- At least 5 percent, but not less than one visiting area must be accessible to visitors and detainees.
- A permanently installed assistive listening system must be in half, but not less than one, of each type of courtroom, hearing room, jury deliberation room, and jury orientation room.

Detention and Correctional Facilities

Citing the aging prison population, the Access Board requires that at least 3 percent (but not less than one) of holding cells be accessible in new construction. In addition, at least one accessible cell must be provided among each security level and type of cell.

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Public Residential Housing

The technical criteria are similar to other residential accessibility standards, (See article on Residential Accessibility on page 10) but apply to single and multi-family units. The guidelines also require dispersed, accessible, rather than adaptable, units.

For a copy of the final interim rule, call 800.USA.ABLE.

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Oct 2 - 4: Assisted Living: From Concept to Reality (Arlington, VA) is the fall conference of the Assisted Living Facilities Association of America. Call 703.691.8100 for more information.

Oct 4 - Nov 22: Universal Design Seminars, sponsored by the University of Maryland School of Architecture, College Park, MD, covers such issues as housing, historic preservation, recreation, and workplace design. A series of eight Tuesday evening programs will feature federal regulators and national experts from the Washington, DC metropolitan area. Call 301.405.6294 for more information.

Oct 5-7 (San Diego, CA), Oct 26-28 (St Louis, MO): Fall Conferences and Pre-Conference Workshops of the Association of ADA Coordinators. These sessions will update attendees on implementation of the ADA. Call 800.722.4ADA for more information.

Oct 13: As Young As you Feel: Lifespan Design; Oct. 20: The Accessible Alternative: Access to the Home Office; Nov. 3: To See or Not To See: Access to Sight. Access by Design seminars sponsored by Pratt University. Call 718.636.3690 for more information.

Oct 8-11: ASLA Annual Meeting and Expo featuring LANDTECH seminars will include a two day presentation on proposals of the Access Board Recreation Advisory Committee. San Antonio, TX. Contact the American Society of Landscape Architects at 202.686.2752.

Nov 1 & 2 (Chicago, IL); Dec 13 & 14 (Orlando, FL); Feb 12 & 13, 1995 (Phoenix, AZ); and Mar 27 & 28, 1995 (Boston, MA) will be the sites of a series of seminars on **Functional/Environmental Assessments and Home Modifications** sponsored by Abilities OT Services, Inc. Call 410.358.7269 for more information.

Nov 5-10: The World Conference on Independent Living: Technology, Care and Living Environments will be held in Orlando FL. Co-sponsored by the American and International Association of Homes and Services for the Aging, Stein Gerontological Institute, and the University of Florida, it will feature over 150 educational sessions. Call 202.508.9400 for more information.

Nov 16 & 17: Designing the Future: Toward Universal Design. The Universal Design Education Project will present its first national conference on Universal Design Education and Practice in conjunction with Build Boston, the Boston Society of Architects Annual Convention in Boston, MA. Contact Leslie Jo at 617.695.1225 x 0 (V/TTY).

Dec 1: Adding Vision to Universal Design is a new half-day continuing education seminar co-sponsored by the AIA, New York Chapter, and Lighthouse, Inc., that will focus on how vision loss affects function and building design. Call 212.821.9470 for more information.

Dec 5-9: Universal Design: Designing to Include People with Disabilities in Park and Recreation Facilities is being sponsored by Project Access and the National Center on Accessibility/Indiana University. San Antonio, TX. Class size is limited. Call 317.349.9240 for information.

April 19-21, 1995: 2nd Symposium on Elevators, Fire and Accessibility will be held in Baltimore, MD. and co-sponsored by many federal and national organizations and associations. Contact Marcy Weinstock at 212.605.8793

May 30 - June 3, 1995: Acoustical Accessibility for the Hearing and Visually Disabled is a special session planned for the spring meeting of the Acoustical Society of America in Washington, DC. To submit an abstract or for more information contact David Lubman at 714.898.9099

Events to be placed in the UDN Calendar must be submitted to the Editor one month before the publication date

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