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Staying at Home

Company Builds Accessible Modular Additions

One of the hottest trends in the housing market has gone “accessible.” A company in Rhode Island has come up a barrier-free, accessible modular structure that can be used in residential settings.

According to company literature, HealingHomes LLC, founded by Jeff Mason of Tiverton, RI, is “dedicated to helping families insure that their loved ones with disabilities can remain at home.” The company has developed a variety of housing solutions for people with physical limitations.

“The design of most conventional homes makes them inaccessible to people of all ages with

disabilities,” says Mason. “HealingHomes offers privacy and independence while simultaneously providing a safe and secure environment.”

‘Home Suite Home’

The HealingHomes Master Bedroom Suite, which includes a bedroom/living area, a bathroom and an optional kitchenette, can be permanently or temporarily attached to the side or back of an

See Home, page 8

Exploring Wayfinding

Designing Spaces that are Easy to ‘Read’

By Patricia Salmi

Universal access to buildings and what is inside those buildings has begun to be part of mainstream thinking in the United States. Since the passage of the Americans with Disabilities Act in 1990, states and municipalities have passed laws requiring public and commercial buildings to accommodate people with limited physical abilities, particularly those people who use wheelchairs or other ambulation devices. However, a less obvious but important issue is providing universal access to wayfinding or finding a desired destination.

Wayfinding is necessary to living one’s life and is something that most people do everyday. The United States is increasingly paying attention to building inclusive communities that invite all of its members to participate, as mandated by the Presidential Executive Order and the New Freedom Initiative of 2001 and the Developmental Dis-

See Wayfinding, page 10



Photo Credit: HealingHomes LLC

The modular addition is set in place by a crane.

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International Symbol of Accessibility (Mis)Use?

By Andy Yarrish, AIA

ISA is the acronym for the International Symbol of Accessibility, but judging by its sometimes odd implementation, it seems to also stand for "It's So Ambiguous." The Americans with Disabilities Act requires that when all entrances are not accessible, the accessible entrances must have the ISA and the nonaccessible

entrances must have directional signage indicating the nearest accessible entrance. Confusion arises when the ISA is displayed in situations where the accessible entrance/feature is not clear. The following three examples use the ISA to varying degrees of effectiveness.

Example 1 (Fig. 1): The exclusive



Figure 1

entrance into this small service establishment has a step directly in front of the door off of the sidewalk. Here the ISA raises more questions than it answers since there is no accessible entrance into the store. Posting the ISA would have made sense if, there was a service

bell or intercom by the sign allowing a customer to contact an employee for assistance. In

such a case, the establishment might implement alternative methods to provide service for customers with disabilities.

Example 2 (Figs. 2 & 3): Here is a good example of use of the ISA. This retail store is

below the sidewalk of an older building and is served by a stairwell inside of the sidewalk entrance. Directional signage, accompanied by the ISA, indicate the nearest accessible entrance.

One possible improvement would be the addition of a diagram showing the location of the accessible building lobby, which is just around the corner from this store entrance.

Example 3 (Figs. 4 & 5): This is a perfect example of ISA abuse. The obvious path into the store is via a few steps from the sidewalk. However, a no-step path runs parallel to the entrance. Even though the accessible path is immediately adjacent to the steps, directional signs, each bearing the ISA, are posted on the column to the side of the steps. As per

the Americans with Disabilities Act Standards for Accessible Design §4.1.2(7), "Elements and spaces of accessible facilities which shall be identified by the International Symbol of Accessibility and which shall comply with 4.30.7" include §4.1.2(7)(c), "Accessible entrances when not all

are accessible (inaccessible entrances shall have directional signage to indicate the route to the nearest accessible entrance)."

The ISA's meaning diminishes or becomes confused when it is used unnecessarily or incorrectly. □



Figure 4



Figure 5



Figure 2



Figure 3

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Universal Design Newsletter is published quarterly by Universal Designers & Consultants, Inc., 6 Grant Ave., Takoma Park, MD 20912-4324; 301.270.2470 (v/tty); 301.270.8199 (fax). E-Mail: publisher@UniversalDesign.com. Home Page: www.UniversalDesign.com.

Publisher & Managing Editor: John P.S. Salmen, AIA; **Editor:** Denise M. Hofstedt; **Consulting Editors:** James DiLuigi, AIA, CSI, and Elaine Ostroff.

Universal Design Newsletter is published by Universal Designers & Consultants, Inc., which is frequently engaged by plaintiffs and defendants for consulting and expert witness services in ADA litigation, design review and facility evaluations.

Mail subscription rates: One year \$75 (U.S.). Second-class postage paid at Takoma Park, Md. Postmaster send address changes to *Universal Design Newsletter*, 6 Grant Ave., Takoma Park, MD 20912-4324, publisher@universaldesign.com.

For information on advertising rates or obtaining alternative accessible formats, please call or write the *Universal Design Newsletter* Publisher.

Cruise Ships Must Comply with ADA

In June, the US Supreme Court ruled that foreign-flagged cruise ships in United States waters must comply with the Americans with Disabilities Act (ADA).

The decision reversed a lower court ruling that held that Title III of the ADA, covering public accommodations and commercial facilities, does not apply to foreign-flagged cruise ships in US waters because of a presumption that with no clear indication of congressional intent, general statutes should not apply to foreign-flag ships.

In speaking for the court, Justice Kennedy noted that “the statute is applicable to foreign ships in the United States waters to the same extent that it is applicable to American ships in those waters.”

However, the high court also ruled that any structural alterations under the ADA must be “readily achievable,” not conflict with international safety requirements, nor interfere with the internal operation of the ship.

“The architects of the ADA endorsed provisions that require all places of public life to be accessible to Americans with disabilities,” said Stephen Bennett, president and CEO of United Cerebral Palsy. “Clearly, their intent was to ensure that citizens with disabilities were not just able to access public services that make life possible, but places that make life worthwhile. While Justice Kennedy’s majority opinion creates a large loophole by limiting modifications so as not to create too much international discord or disruption of a ship’s internal affairs, the decision is a clear victory for the disability community and the ADA.”

According to a statement by the International Council of Cruise Lines, “Cruise lines continue to offer an accessible vacation option although neither the ADA nor any subsequent regulations have clarified precisely what foreign-built ships must do to reconcile accessibility with mandatory international safety standards.”

Movie Theater Settlement

Regal Entertainment Group, the largest movie theater chain in the country, settled a lawsuit filed by the US Department of Justice (DOJ) un-

der the Americans with Disabilities Act (ADA). The lawsuit challenged the construction of stadium-style movie theaters that fail to provide persons who use wheelchairs seating and line of sight comparable to that of the general public.

As a result of the consent decree agreement, Regal is required to provide improved lines of sight for persons who use wheelchairs in its current and future stadium-style theaters. Under the decree, all future construction of Regal theaters will be designed in accordance with design requirements that place wheelchair seating near the middle of the auditorium. Regal also agreed to make changes to nearly 1,000 existing stadium-style theaters by moving wheelchair seating further back from the screen. At the remaining theaters, Regal will ensure that any wheelchair seating be relocated as far back from the screen as possible without major reconstruction.

According to DOJ, “These stadium-style theaters offer superior lines of sight and a superlative movie-going experience. However, they present unique challenges for the placement of movie-goers using wheelchairs. While in the past such individuals may have had to sit directly under the screen, today’s agreement affords them the opportunity to enjoy the same product as non-wheelchair users.”

HUD Grants “Safe Harbor” Status

The US Department of Housing and Urban Development has granted “safe harbor” status to the 2003 International Building Code (IBC) on the condition that the International Code Council (ICC), publisher of the IBC, clarifies the requirements for accessible pedestrian routes.

The ICC had requested that HUD review the accessibility provisions of the 2003 IBC to determine whether the code could be recognized as one of the safe harbors for compliance with the accessibility requirements of the Fair Housing Act, the regulations implementing the act, and HUD’s Fair Housing Accessibility Guidelines.

HUD’s final report concluded that the 2003 IBC could be granted safe harbor status for this section only if the ICC issued a statement main-

“...the statute is applicable to foreign ships in the United States waters to the same extent that it is applicable to American ships in those waters.”

Justice Kennedy
US Supreme Court

Striving for Accessibility Through Collaboration

Tricia Mason Appointed to the Access Board

Tricia Mason is one of the newest, and perhaps the youngest, member of the US Architectural and Transportation Barriers Compliance Board (Access Board). But don't let her youth deceive you – she is a skilled collaborator who knows the power of bringing people together.

Mason, appointed to the Access Board this spring by President George Bush, was sworn in at the May 11 meeting of the Board.

Not yet 30, Mason has been in the accessibility policy arena for more than 15 years. Her interest in policy was sparked as a youngster attending a regional conference of the Little People of America (LPA) with her parents. She immediately began attending the national LPA conference, missing only two since she was 10 years old. In her early 20s she was elected as an LPA district director. After three years of serving in that capacity, she successfully ran for a national office. She currently serves as National President of LPA.

It was through her involvement in LPA that she became a member of the American National Standards Institute (ANSI) A117 Committee in 2001, during the final push for harmonization of the ANSI A117.1 Standard for Accessible and Usable Buildings and Facilities and the revised Americans with Disabilities Act Accessibility Guidelines (ADAAG).

“Her representation of the Little People of America on the ANSI A117 Committee has given Tricia Mason a recognition of the power that design, and the standards to which we must design, have over the lives of people with disabilities,” says John P.S. Salmen, President of Universal Designers & Consultants Inc., Takoma Park, MD. “She is now working to see that power exercised in a positive way.”

She has found her work with the ANSI committee enlightening. She welcomed the opportunity to bring her perspective to the group. Mason notes, that often times people of short stature are not considered in accessibility solutions. But through her work with the committee she discovered she truly

group. “I like being able to collaborate with other people to come up with solutions. Access helps everyone – I like being able to help people realize that,” she says.

After graduating from the University of Wyoming with a Bachelor of Science degree in Textiles and Merchandising and a minor in Interior Design in 1999, Mason was eventually hired as a community programs specialist with the Wyoming Governor's Planning Council on Developmental Disabilities. It was there she found her knack for lobbying. When working with a professional lobbyist hired by the Council, Mason discovered that talking to legislators came easily to her.

Mason recently made the decision to return to school to pursue a masters degree in interior architecture. She will be taking classes on line this fall through the Academy of Art University, based in San Francisco. “With a masters, I would like to do consulting on accessible design and would eventually like to get a PhD so that I can teach,” she says.

Access Board Appointment

Mason is looking forward to serving on the Access Board. When asked about her thoughts on the existing ADAAG, she notes that there is “always room for improvement when it comes to accessibility standards. There are new technologies, new ways to do things. I don't think you can write it and expect that's the way it should be forever.”

She says that the current ADAAG made great strides for people with disabilities and the proposed ANSI 48-inch reach range is a good addition. “[The 48-inch reach range] helps a great number of people,” says Mason. “It's great that has been realized.”

She won't elaborate on the any further changes coming to ADAAG, but says “I think it is evident in the work of the Access Board, in all the different rules and guidelines — courts, boating, etc.— that there are always more things that can be made accessible.”

An Interest in Education

During her tenure on the Board, Mason hopes to play a part in any efforts to include universal design in the college design curriculums. “In my college courses I wasn't taught about the ADA. I'm hoping to be a part of that movement.”

See Tricia Mason, page 11



Tricia Mason

To read the full text of this article, visit *Universal Design Newsletter* on line at www.UniversalDesign.com.

appreciated working with others to craft solutions that were beneficial to more people, not just one particular

GERMANY

SENTHA Project

The German Research Society (Deutsche Forschungsgemeinschaft, DFG) is currently funding a multi-disciplinary research project to develop products and services so that older people can maintain their independence in everyday life for as long as possible. The project name, SENTHA, stands for “Everyday Technology for Senior Households.” In this project, designers at the Berlin University of the Arts are working together with scholars from the Technical Universities in Berlin and Cottbus, as well as the Berlin Institute for Social Research. For more information, visit: www.sentha.udk-berlin.de/engl/index.htm

M.A. in ‘Barrier-free Systems’

This summer, the University of Applied Sciences in Frankfurt/Main is offering a M.A. degree program on “Barrier-free Systems.” The interdisciplinary course is the result of the cooperation between three departments – architecture, informatics and engineering, and care and social sciences. Among the courses to be offered is one on barrier-free planning and building. Another will focus on developing problem-solving strategies using a combination of thinking and acting. The purpose of these strategies is to enable people of all ages, irrespective of ability, to live an independent and self-defined life. For more details, visit: www.campus-germany.de/english/10.4533.1.7.html

CANADA

Inclusive Cities Canada Initiative

Inclusive Communities Canada (ICC) is a project of five community and regional social planning councils across Canada, in collaboration with the Standing Committee on Social Development of the Federation of Canadian Municipalities (FCM). The initiative is based on the understanding that social inclusion benefits all members of the community: those who are

vulnerable for reasons of poverty, racism or fear of difference as well as the broader community that benefits when all people are valued and contributing members. Initiative leaders claim that inclusive communities do not just reduce exclusion, they recognize and value diversity, nurture human development and civic engagement, and promote cohesive living standards and adequate community supports. The goals of Inclusive Cities Canada are: to strengthen civic capacity to create and sustain inclusive communities for the mutual benefit of all people and to ensure that work at the local civic level is acknowledged as being critical to a national urban strategy and that community voices of diversity are recognized as core Canadian voices.

The initiative connects partners in five urban areas across Canada, the cities of Vancouver and North Vancouver; the City of Edmonton; the city of Toronto; the city of Burlington; and the Greater Saint John Area of New Brunswick.

For more information, visit: www.inclusivecities.ca/publication/index.html

UNITED STATES

Tools For Introducing Human-Centered Design Now Available

Tools for Introducing Human-Centered Design is a new teaching unit that is now available for viewing and downloading at the Universal Design Educator’s Online website. Developed by Elaine Ostroff and Leslie Kanés Weisman to promote universal design awareness and practice, especially among design educators, students and practitioners, the unit includes a large slide show and a building survey form. The two components can be used independently or in tandem with each other. They were developed, in part, with support from the National Institute on Disability and Rehabilitation Research, as part of the grant-funded partnership that created the website at www.udeducation.org.

The slide presentation is fully illustrated and annotated with lecture notes. It provides background on the civil rights and disability rights movements, the origins of universal design, global demographics and sus-

...inclusive communities do not just reduce exclusion, they recognize and value diversity, nurture human development and civic engagement, and promote cohesive living standards and adequate community supports.



teach

“World Update” is compiled by Elaine Ostroff, founding director of the Adaptive Environments Center, and Denise Hofstedt. If you have information about international universal design efforts that you would like to have published in Universal Design Newsletter, write to us at: 6 Grant Ave., Takoma Park, MD 20912; or contact publisher@universaldesign.com.

American Communities Not Prepared for Aging Population

AARP Report Calls for Changes

America's cities, towns and neighborhoods are not prepared to serve the needs of the nation's surging older population, warns a new AARP report. *Beyond 50.05—Livable Communities: Creating Environments for Successful Aging* takes a look at the adequacy of communities to serve the needs of persons of all ages, especially those 50 and older, and provides recommendations for improvement.

The demand for "livable communities"—those that provide affordable and appropriate housing, supportive community features and services, and adequate transportation and mobility options—is made clear by a recent Census Bureau forecast predicting that between 2000 and 2030, as the baby boom generation ages, the number of people 65 and older will more than double in 26 states.

The new AARP report, which establishes a link between the qualities of livable communities and Americans' ability to age successfully, finds that people frequently give low grades to their community if it is lacking those qualities. Today's shortcomings will be exacerbated as the number of older Americans surges in the next three decades, according to AARP.

When older people are not engaged in their communities, they have lower feelings of self-control, less success dealing with aging issues, lower life satisfaction, and a poorer quality of life, the report finds. Only 56 percent of those who report low engagement in their communities said they were satisfied with their lives, compared to 87 percent of those who were highly engaged. The report explores how older residents can maintain independence and exercise choice and control in their lives.

"Each time an older person finds it is no longer reasonable to live in his or her home or community, it is a crisis on an individual and family level," said John Rother, AARP's Director of Policy and Strategy. "Community features can enhance the lives of older residents. This is increasingly important because between now and 2020, the number of Americans 50 to 64 years old will increase by 13 million, and those 65 and older by 18 million."

According to Richard Duncan of the Center for Universal Design at North Carolina State University, AARP's report is "a needed wake up to us all."

"Millions of homes are built each year while

thousands of new or 'renovated' communities are planned with little thought to the future of those who will live in them," says Duncan. "These homes and this infrastructure will be around for many years. Each year that passes without altering these choices makes it harder and more expensive to change and deal with them later. We are still near the front end of the demographic tidal wave of aging whose needs must be addressed soon," he says.

AARP's work on Livable Communities is initially focused on housing and mobility issues. Older people feel more isolated when their homes do not meet their physical needs, the report finds. A lack of affordable housing can force older persons to have to move. In an ideal situation, planning during an original design phase or making modifications to an existing structure can make homes suitable for people to age in their communities if they wish, or provide them alternatives in other communities where they want to live. This can reduce the number of people feeling forced to move into assisted living facilities or nursing homes while they are still capable of living independently.

Older Americans who don't drive make many fewer trips, and frequently miss doing things they want to, because of insufficient transportation options. Public transportation can be a critical source of mobility for this population (for instance, one-sixth of medical trips for those over 50 are made on public transportation). Other mobility options, including safe walking options, taxi services, and human services transportation, can reduce reliance on personal cars and increase opportunities for community involvement.

AARP's Beyond 50.05 report encourages community leaders and civic groups to facilitate social involvement, including organizational membership and volunteering, and actively solicit contributions by persons of all ages and abilities in community decision-making. The report promotes the design and modification of homes to meet the needs of older residents, and encourages stability through an adequate supply of diverse, affordable housing options. AARP's Public Policy Institute has developed a community checklist, called the "Livable Communities: An Evaluation Guide." For more information, visit: www.aarp.org. 

"Millions of homes are built each year while thousands of new or 'renovated' communities are planned with little thought to the future of those who will live in them."

Richard Duncan
Center for Universal
Design



Website Spotlight: Ten Small Business Mistakes

The Department of Justice has added a streaming video to its Americans with Disabilities Act (ADA) website: *Ten Small Business Mistakes*. Available in both open captioned and audio described versions, the video can be viewed on computers having either dial-up or broadband Internet

connections. *Ten Small Business Mistakes* identifies common mistakes that small businesses often make when trying to comply with the ADA. It also addresses the importance and value of doing business with people who have disabilities. The link to this video is available online at www.ada.gov.

Tutorial on Accessible Telecommunications Products

A new web-based training course on ensuring access to telecommunication products under section 508 of the Rehabilitation Act is now available from the US Architectural & Transportation Barriers Compliance Board. The course, the last in a series developed by the Access Board covering Section 508 standards, is designed for those involved in the purchase or procurement of telecommunications products for federal agencies. It covers all of the requirements that telecommunications products must meet. The courses are part of the online "508 Universe" program provided on www.section508.gov.

Updated ADA Technical Assistance CD ROM

The Department of Justice (DOJ) has produced a new edition of its technical assistance CD-ROM, featuring three recently produced Americans with Disabilities Act (ADA) publications: "Communicating with Guests Who Are Deaf or Hard of Hearing in Hospital Settings," "Communicating with Guests Who Are Deaf or Hard of Hearing in Hotels, Motels & Other Places

of Transient Lodging," and the "ADA Checklist for Polling Places." These publications, along with updates of other materials have been added to the collection of ADA documents that were on the previous CD-ROM., including the DOJ ADA regulations, the ADA Standards for Accessible Design, the Title II and Title III Technical Assistance Manuals, ADA technical assistance publications, and a complete set of the ADA status reports, "Enforcing the ADA."

For more information, visit: www.ada.gov. Call the ADA information line at 800.514.0301 (v) or 800.514.0383 (tty).

Another Eyesight: Multi-Sensory Design in Context

The Dog Rose Trust has published "Another Eyesight: Multi-Sensory Design in Context" by Julia Ionides and Peter Howell. The book covers the nearly 20 years of work in universal and multi-sensory design by the Trust. It describes recording techniques in detail. In addition, the book includes sections on tactile models, tactile production techniques and outdoor interpretation. For more information, visit www.dogrose-pres.co.uk 

It covers all of the requirements that telecommunications products must meet, including those providing access for persons with hearing impairments.

World Update, from page 5

tainable design; explains and illustrates the principles of universal design with examples from several design disciplines; and introduces the universal design building survey. The user-friendly building survey is the first to include in one form, universal design performance criteria, Americans with Disabilities Act requirements for existing buildings, and some sustainability issues. The primary purpose of the unit is to raise people's awareness about the difference between the required minimum access standards in pub-

lic facilities and the more inclusive goals of universal design. Like the slide show, the survey can also be used in a variety of ways that include term projects or class assignments; pre-design research in design studios; post occupancy evaluations of built projects; and as a "performance checklist" of issues and considerations to think about when designing public accommodations. There is no charge for these materials but users must register in order to download them. 

Home, *from page 1*

existing house. Designed and custom-built according to the needs of the individual, the module matches the color, style and siding of the existing home.

The units, which are locally coded and factory-built, can also be equipped with “smart” technology that empowers the resident to control his or her living environment from anywhere in the unit. The lights, doors, windows and heating/cooling can be responsive to voice commands or a portable touch pad. Other available technological features include:

- Alarm to main residence/public safety officials,
- Hands-free phone use,
- Emergency auto dial to police, and
- Two-station intercom



Master suite

unit is 20'x13'9" or 24'x13'9". The unit is manufactured at a plant and then shipped via truck to the installation site. A crane lifts the unit into place. Once in place, the unit can be installed in approximately one week if there are no unusual site conditions, according to HealingHomes. The entire process can take three to nine weeks from the time the contract is signed. The cost of the smaller unit with standard features and typical

site installation fees is approximately \$75,000. Among the other standard features included are:

- Bathroom and bedroom large enough for a wheelchair user to turn 360 degrees,
- A universally accessible roll-in shower,
- Adjustable, hand-held shower head,
- Sliding bathroom doors,
- Grab bars,
- Wheel-in closet,
- Surfaces with uniform, smooth edges,
- Single lever controls for all faucets,
- Anti-scald valves in tub/shower,
- Indirect lighting throughout the suite,
- Bay window for maximum natural light, and
- Exterior aesthetics that blend with the main residence.

Other Housing Solutions

For people who need accessible living space, but don't have room on their property, HealingHomes offers its services to retrofit an existing living space or convert a garage into an accessible apartment.

The company also offers a modular “Granny Flat,” also known as an Elderly Community Housing Opportunity (ECHO Cottage). It is a complete single-family, one-bedroom, one-story, home that can be set up in a backyard, detached from the main residence. For more information visit: www.healinghomes.com. 

The lights, doors, windows and heating/cooling can be responsive to voice commands or a portable touch pad.

Optional Elements Available in Modual Home

- Second means of egress
- Exterior entrance ramp
- Automated doors and windows
- Overhead lifts
- Accessible tubs/Hydrotherapy units
- Fully alarm-enabled
- Emergency battery pack for loss of power
- Outlet/adaptor to recharge wheelchair battery
- Broad blocking above ceiling to support lift
- Kitchenette
- Adjustable cabinets and counter tops
- Glare-free task lighting
- Greater energy efficiency
- Skylights

The technology allows for real time teleconferencing with doctors and nursing staff for a “virtual house call.” Medical professionals can telemedically monitor vital signs via the Internet with the use of specially designed clothing worn by the patient. A home entertainment system can also be incorporated into the technology package.

The Specifics

The footprint required by the

Portable Pool Lifts

RMT, a designer and manufacturer of battery operated pool lifts, offers several varieties of pool lifts including the PAL Portable, a completely portable lift that can be stored when not in use and works well for facilities with multiple pools and/or spas.



Pool Lift

The RMT Splash! Aquatic Lift is a semi-portable lift that connects to the deck using a traditional deck anchor. The lifts can be independently operated by the user with the provided waterproof remote control.

Splash! Aquatic Lift is a semi-portable lift that connects to the deck using a traditional deck anchor. The lifts can be independently operated by the user with the provided waterproof remote control.

Reg/Leg Watch *from page 3*

taining the ICC interprets the code as requiring “an accessible pedestrian route from site arrival points to accessible building entrances, unless site impracticality applies . . .” The final report also explained the process by which the ICC is to “publish and disseminate” this statement.

According to the ICC, 44 states and the District of Columbia have already adopted the IBC.

Marshalls Evacuation Plans

Marshalls Clothing Stores will certify the accessibility evacuation routes in its 700+ stores in the United States and Puerto Rico as the result of a lawsuit settlement between Katie Savage and the Disabilities Rights Council of Washington Inc. and Marshalls of MA Inc. In addition, Marshalls will revise its corporate-wide emergency evacuation policies and procedures to account for people with disabilities. Under the agreement reached this spring Marshalls is required to certify that each of its stores provides an emergency exit for people with disabilities and all of its store managers are trained to assist customers in locating and using a store’s accessible emergency evacuation routes. The company is also required to create written corporate-wide emergency policies and procedures for the evacuation of people with disabilities.

The agreement will be phased in over two and one-half years. 

Under Sink Protectors

Clear™Shield, by Plumberex Specialty Products Inc., is a transparent under sink protector to allow for quick security inspections in airports, schools and other public buildings. In addition, the clear PVC shield offers American with Disabilities Act compliance by preventing bruises, burns and cuts. The one-piece design produces total transparency and permits the chrome finish to shine through.



Sink protector

Floating Beach Chair

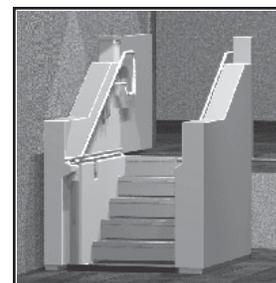
The Tiralo Floating Beach Chair was designed for use on the beach and in the water. The chair, which is intended to be pulled rather than pushed features buoyant Dunemer™ wheels and flip up and removeable quick release Floatrests™ with grips. The foldable chair is made of marine aluminum and is salt water resistant.



Floating beach chair

Stairway and Lift Combined

AccesStair™, by LIFT –U, is a stairway and a vertical lift in one unit. It installs on level floor (no pit) and requires only a small footprint. It is suited for retrofit applications where existing construction and occupancy pose difficult challenges to universal access. The unit runs quietly and cycles quickly from stairway to lift and back into stairway mode. Minimal dexterity is required to operate the unit. LIFT-U offers a free distance learning course on its website at www.verticalmobility.com. Architects completing the course can earn AIA Continuing Education Unit (CEU) credit. 



AccessStair

RMT
(portable pool lifts)
RehaMed International
14008 SW 140th St.
Miami, FL 33186
800.577.4424 Toll Free
305.255.1400 Phone
305.969.2155 Fax
www.poollifts.com

Plumberex Specialty Products Inc.
Clear Shield™
800.475.8629
www.plumberex.com

Tiralo-USA
(floating beach chair)
42 Cove Way
Brinnon, WA 98320
877.244.2810
www.tiralo-usa.com

LIFT-U
(AccesStair™VMH)
P.O. Box 398
Escalon, CA 95320
209.838.2400 (phone)
209.838.8648 (fax)
www.verticalmobility.com
877.566.2833

Wayfinding, *from page 1*

abilities Assistance and Bill of Rights Act of 2000. Communities that are inclusive and inviting offer ease of wayfinding and provide buildings that enable independence to the greatest extent possible.

At first blush, building owners and managers might think that their buildings offer appropriate wayfinding information by providing maps, directories, and signage, or even a staffed information booth. However helpful this might seem, to a growing number of people these wayfinding devices are often inaccessible and inadequate.

Who are these people and what makes it difficult for them to use these common wayfinding aids? This broad group of users includes:

- people with various intellectual impairments such as traumatic brain injury, intellectual disability, and aging people with dementia;
- non-English speaking and reading individuals, particularly newly-immigrated persons;
- large numbers of the burgeoning elderly population; and
- those who simply have difficulty with wayfinding.

A little insight makes it easier to understand why common wayfinding aids could be difficult to access for so many. For example, maps are often provided in shopping malls and building complexes as a wayfinding aid. However, many people have difficulty reading a two-dimensional map. A map is a graphic abstract interpretation of

three-dimensional space and the information contained in it must be trans-

lated to the actual space, a task that is virtually impossible for a person with certain cognitive impairments.

Building directories, often paired with maps, present a different sort of difficulty to people with cognitive impairments or the non-reader. For example, finding a specific medical office amongst a listing of many similar offices in a large medical building can be a daunting, if not impossible, task for someone with mild dementia or a traumatic brain injury. For the non-reader, the non-English-reader, or person with dyslexia (a reading impairment), directories that provide text-only offer no source of help at all.

Signage is one of the most frequently relied upon wayfinding cues for people. This is particularly true for persons with intellectual disabilities, as found in a recent wayfinding study with this population in a large suburban shopping mall. Recommended approaches for increasing the universality of signage includes the following: limit the amount of information, pair text with consistent graphics, and place signage perpendicular to the path of travel.

Landmarks are another important cue in wayfinding design. Many people with different types of cognitive disabilities rely on landmarks to mark and remember a path. By placing distinct landmarks at key intersection points, pairing the landmarks with signage, and use of proper lighting, landmarks become useful wayfinding cues that are universally accessible.

Building layout is one of the most critical elements in wayfinding. Open buildings that allow the user to visually survey the space offer better

See Wayfinding, page 11

Building owners, managers and design professionals can utilize association cues to their advantage by placing things that people associate with another thing close to each other.

Pat Salmi is a design specialist in wayfinding for people with cognitive impairments. She is presently a Ph.D. candidate at the University of Minnesota and can be reached by e-mail at salm0054@umn.edu.

DESIGN

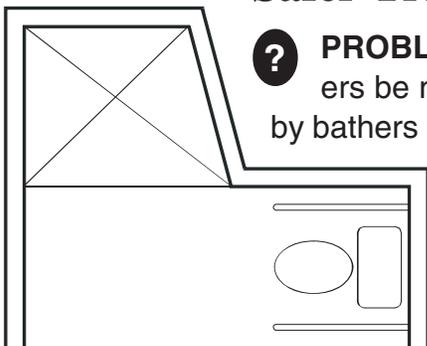
TIP

Safer Transfer Showers?

? **PROBLEM:** How can transfer showers be made safer and easier to use by bathers and care givers?

TIP: At the American Institute of Architects National Convention and Expo this past May, Gregory J. Scott, AIA pre-

sented a seminar titled “Dentures, Denim & Design: Architects Designing for Seniors.” He showed a simple but effective shower plan for resident units at continuing care retirement communities (CCRC). A trapezoidal shower plan is wider at the front thereby providing more room for assistants. The layout is based on a concept from Dr. Lorraine G. Hiatt. 



Trapezoidal shower plan

Wayfinding, *from page 10*

wayfinding advantages than buildings that are more closed. Unfortunately, design professionals, building owners, and managers are frequently dealing with existing buildings and do not have the luxury of designing the space from the ground up.

When building a new space is not possible, a new concept that can be implemented is that of association cues. In a study on wayfinding in a shopping mall with people with intellectual disabilities, the participants were asked to locate any public restroom in the mall. Interestingly enough, almost all of the participants either looked for a restaurant, drinking fountain, or telephones. When asked why they were looking for these things, the participants said that these were

things often found near restrooms. And while an association cue is a new wayfinding concept, it really isn't a new concept at all. When a person is lost, he or she looks for something familiar that is associated with finding the destination.

Building owners, managers and design professionals can utilize association cues to their advantage by placing things that people associate with another thing close to each other. While this can include objects, it can also be applied to certain smells or sounds.

There are many factors that go into the design of better wayfinding, and this article has covered only some of the variables. Making buildings accessible to those with physical impairments is just a start. 

Tricia Mason, *from page 4*

She would also like to do her part to change attitudes about accessibility especially among designers. "I had a designer tell me that accessibility 'stifled her creativity'... accessible design can be just as creative and beautiful as the rest of it," she says.

She sees the education component of the Access Board's work as crucial to improving accessibility in the US. She is especially interested in increasing the awareness and knowledge of business owners. "Things that I notice the most are when places attempt to become accessible, but fail," she says. It's a frustrating process for business owners that think they are doing the right

thing when making changes, but because of lack of knowledge or bad advice, their efforts don't enhance their accessibility.

Progress

Increased awareness for the need for accessibility is important to Mason. She was heartened to be asked recently to serve on her local library board in Cheyenne. Plans are currently underway to build a new public library. She says she's excited to help in the design process to make the building accessible and she's excited that they realized they need to make it accessible - "that's progress." 



"I had a designer tell me that accessibility 'stifled her creativity'... accessible design can be just as creative and beautiful as the rest of it."

Tricia Mason,
Access Board

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Please send me information about other publications and services available.

July 25-27, 2005: US Architectural & Transportation Barriers Compliance Board, Washington, DC. This is the bi-monthly meeting of the Access Board. Contact: 202.272.5434 (v), 800.872.2253 (v), 202.272.5449 (tty) or www.access-board.gov.

Sept. 15-16, 2005: Workplace Accommodations: State of the Science, Atlanta, GA. Sponsored by the Rehabilitation Engineering Research Center on Workplace Accommodations. Contact: www.workrerc.org/sos.

Sept. 19-22, 2005: Retrofitting for Accessibility, Gatlinburg, TN. This National Center on Accessibility training course provides education on federal legislation and accessibility requirements for park and recreation facilities and programs. Contact: www.ncaonline.org.

Sept. 26-27, 2005: Job Accommodation Network Conference, San Francisco, CA. This conference will focus on accommodation questions that confront human resource managers, supervisors, and other professionals who have responsibility for the hiring and management of employees. Contact: www.jan.wvu.edu

Sept. 28, 2005: Universal Design Hits Home: New Directions in Single Family Housing, Woodbridge, VA. The purpose of this universal design symposium is to educate housing and building industry professionals and community leaders on the growing trend and demand for single family housing with universal design features. Contact: Toni Clemons-Porter at 703.792.6403.

Sept. 28-30, 2005: International Conference on Accessible Tourism, Kenya, Nairobi. The conference topics include: accessible tourism, accessible accommodation, accessible transportation, accessible environments, universal design and accessibility as a human right. Contact: bodo@avu.org.

Sept. 29-Oct. 1, 2005: Kennedy Center for the Performing Arts Accessibility Conference, Scottsdale and Mesa, AZ. Accessibility in the arts focuses on making the arts better able to be enjoyed by people with hearing loss, sight or vision impairment and issues of mobility. Contact: 601.757.8118 or 520.631.6253

Oct. 23-26, 2005: White House Conference on Aging, Washington, DC. This conference, which occurs once a decade, makes policy recommendations to assist the public and private sectors in promoting the dignity, health, independence, and economic security of current and future generations of older persons. Contact: www.aoa.gov/press/conference_on_aging/conf_on_aging.asp

Nov. 1, 2005: Accessibility & Historic Integrity, Sacramento, CA. Sponsored by the National Preservation Institute. Contact: www.npi.org

Feb. 1-4, 2006: International Conference on Aging, Disability and Independence, St. Petersburg, FL. This conference is expected to include presentations on assistive devices; housing and home modification and universal design; smart homes; telehealth; transportation. Contact: www.icadi.php.ufl.edu

Events to be placed in the UDN Calendar must be submitted to the editor two months before the publication date.

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