LICENSED ARCHITECT

Association of Licensed Architects

A Publication of the Association of Licensed Architects

Winter 2021/2022



2021 ALA Design Awards

Bridges Napkin Sketch Contest

IBC Update: Exterior Panels

Accessibility Through Universal Design


SHOW
YOUR
BEST
WORK
Oklahoma Contemporary Arts Center, Oklahoma City | Rand Elliott Architects, Oklahoma City
Photo: Scott McDonald
Metal Architecture Design Awards
Deadline: April 29, 2022
For more information, go to
www.metalarchitecture.com/contests
Metal architecture

CONTENTS

Articles

18 Bridges Napkin Sketch Contest Winners



20 IBC Update: IBC Now Allows Large Porcelain Tile Panels on Exteriors



23 Continuing Education: Accessibility for All Through Universal Design



28 Hot Tip: The Role of Vapor Retarders on Building Performance



5 2021 Design Awards









Departments

President's Message	4
Continuing Education Providers/ ALA New Members	31
Index of Advertisers	31

PRESIDENT'S message



With this issue, we celebrate excellence in design by showcasing the thirty-one award-winning projects in the 2021 Design Awards program. The ALA Design Awards will be celebrated on April 8 at the captivating Wingspread home designed by Frank Lloyd Wright and located in Racine, WI. There will be opportunities to tour the home and then enjoy cocktails and appetizers before the awards presentation.

We also celebrate the 2021 Napkin Sketch winners who participated in the Building Bridges-themed program last fall. This year's participants enjoyed a fun, *no-cost* contest and let their imaginations run wild. We see so many amazing sketches and new talent each year.

I think it is safe to say we are emerging from the challenges of Covid-19 and are all excited to return to normal activities. We are pleased to announce that planning is underway for two half-day, in-person conferences this year. The conferences will be held on May 24 and November 10 at the Mid-America Carpenters Regional Council. Please mark your calendars for these two continuing education events and for the annual golf outing, which is scheduled for September 14 at the Bloomingdale Golf Club.

I hope you have been enjoying *Architecture Focus*, our weekly newsletter produced by Aggregage, a digital media content provider for architects and other industries. The newsletter appears in your mailbox every Monday morning and features popular architecture news content. We have also announced a new partnership with The Continuing Architect (TCA) to provide our members with free, high-quality professional development and continuing education courses that supplement ALA's traditional offerings.

We are also partnering with Chicago Association Management (CAM) starting April 1. ALA will be supported by CAM and its team of specialists to provide office administration and other services at an economical cost. This partnership helps ALA expand its resources while using resources only when needed.

LICENSED ARCHITECT

Association of Licensed Architects
One East Northwest Highway, Suite 200
Palatine, IL 60067
Phone: (847) 382-0630
Fax: (847) 382-8380
E-mail: ALA@alatoday.org
Web Site: www.alatoday.org

BOARD OF DIRECTORS
Jeffrey N. Budgell, FALA, LEED AP - President
Rick E. Gilmore, FALA - Vice President
Patrick C. Harris, FALA - Treasurer
Mark V. Spann, FALA, LEED AP - Secretary
Steven H. Pate, FALA - Past President
Joanne Sullivan - Executive Director

DIRECTORS
James J. Belli, FALA
Michael Coan, ALA Emeritus
Robert Davidson, FALA
David Koscielniak, ALA
Kurt Hezner, FALA
Russell Peterson, ALA, CID
Jeffery Stoner, ALA
Jeff Whyte, FALA
Lewis Wilson, FALA

EDITORIAL COMMITTEE
Joanne Sullivan
Jeffrey N. Budgell, FALA
Robert Davidson, FALA
Patrick C. Harris, FALA
Steven H. Pate, FALA

A TO B PUBLISHING INC.
662 Dudley Avenue
Winnipeg, MB CANADA
R3M 1R8

PUBLISHER
Andrew Pattison
204.275.6946
marcomap@shaw.ca

EDITORIAL
Seamus Hamilton-Pattison
204.795.0364
seamus@atobpublishing.com

ADVERTISING SALES
Bert Eastman
204.997.6371
bert@atobpublishing.com

Wayne Jury
204.803.1300
waynej@atobpublishing.com

Arlene Nowicki
204.416.1566
arlene@atobpublishing.com

PRODUCTION TEAM
harper media
your social media strategy & web marketing partner
700 - 200 Main Street
Winnipeg, MB
R3C 1A8

DIRECTOR
Aaron Harper
204.318.1121 xt. 101
aharper@harpermedia.ca

LAYOUT & DESIGN
Joel Gunter
204.318.1121 xt. 108
joel@harpermedia.ca

ALA, Inc. serves the architectural profession. No part of this publication may be reproduced or transmitted in any form without the express written consent of the publisher.

© Copyright 2022 A to B Publishing Inc. All rights reserved. Contents of this publication may be reproduced or transmitted with written permission from the Publisher. Views expressed in this publication are not necessarily those of ALA or of A to B Publishing Inc.

2021 ALA Design Awards

Thirty-One projects were recognized by our judges in the 2021 ALA Design Award Program for their outstanding achievements as a Gold Medal, Silver Medal, or Award of Merit.

The ALA Design Awards Program is our annual showcase of the power of design by our members. The 2021 ALA Design Awards Celebration will be held on April 8th at Wingspread in Racine WI. Congratulations to all of the winners and to those who submitted their projects. We hope you enjoy viewing the winning projects on the following pages. Thanks to our Program Sponsors Andersen Windows & Doors and Hines!

ALA wishes to thank the following judges and Design Awards Committee members for their time and dedication to the program and profession.

Judges:
Martin Felsen, FAIA, UrbanLab
Tomoo (Tom) Fujikawa, ALA, NCARB, Fujikawa Chicago Johnson Gobel Architects
Christopher Groesbeck, AIA, NCARB, LEED AP, UrbanLab
Gordon Klaus, ALA, NCARB, Three i Design
William Schwarz, ALA, Schwarz Lewis Design Group
Nicola Springer, AIA, LEED AP, Kirksey Architecture

Design Award Committee:
Howard Hirsch, ALA - Chairman
Jeffrey Budgell, FALA - ALA President
LeRoy B. Herbst, III, FALA - Jury Chairperson

Gold Awards



Agriculture Classroom Room & Lab Building
Lincoln Land Community College, Springfield, IL

Category: Institutional

Firm: Demonica Kemper Architects, LLC, Chicago, IL

Contractor: Evans Construction

Owner: Lincoln Land Community College

Photographer: Connor Steinkamp

Description: Inspired by rural building materials, structural expression, and the assembly of buildings found in local farming complexes within the region, the Agricultural Sciences Center relates to an interpretation of a vernacular agricultural community. However, the assembly of the building's individual components is also organized and articulated in a contemporary fashion to relate to the progressive direction associated with the college's Agricultural Sciences program.

Gold Awards



Grant & Camilla Bishop Residence
St. George, UT

Category: Single-Family Homes

Firm: Arthur Dyson Architect, Fresno, CA

Contractor: Split Rock Construction

Owner: Grant & Camilla Bishop

Photographer: David Swann

Description: Placed within the contours and boulders of the site and focused upon the clients' objectives, the design of this home joins outer landscape with inner spaces to provide an intimate experience of residence. The peaceful color palette, the contrasting textures of Venetian plaster and native stone, and the views of natural surroundings of the site – combined with the interplay of light and horizon – provide an exciting yet tranquil living environment.



Gore Residence
Chicago, IL

Category: Single-Family Homes

Firm: Level Architecture Incorporated, Chicago, IL

Contractor: Cuzco Construction

Owner: John and Katie Gore

Photographer: Scott Shigley

Description: Our design firm was asked by a young couple to design a new house in McKinley Park, an up-and-coming neighborhood on Chicago's west side. The design takes clues from the existing neighborhood fabric, mostly gabled structures. The footprint is small, preserving outdoor space for backyard entertaining, and saving money on construction. The result is an extremely efficient, yet accommodating single family home. It is modern in appearance, yet fits into its context.

Gold Awards



Lincoln Savings Bank Central Campus
Waterloo, IA

Category: Commercial/Industrial

Firm: INVISION Architecture, Des Moines, IA

Contractor: Peter's Construction

Owner: Lincoln Savings Bank

Photographer: Integrated Studio; Cameron Campbell

Description: Renovation and adaptive reuse of a 1928 historic tractor factory building to serve as corporate headquarters for Lincoln Savings Bank. Envelope work was included for the entire building replacing the roof deck, windows, and masonry maintenance.

Monroe County Hospital & Clinics Outpatient Expansion
Albia, IA

Category: Institutional

Firm: INVISION Architecture, Des Moines, IA

Contractor: Graham Construction

Owner: Monroe County Hospital & Clinics

Photographer: Integrated Studio; Cameron Campbell

Description: Overall well-being and the experience of both staff and patients was a key informant to design decisions for this outpatient expansion consisting of clinic space, physical therapy and rehabilitation, and an infusion center. Views throughout the addition were carefully located to serve for both wayfinding and patient privacy. The addition provides all visitors with visual, physical, and emotional access to the landscape where environment can help play a key role in the healing process.



Silver Awards



Norix Group, Inc.
West Chicago, IL

Category: Commercial/Industrial

Firm: Heitman Architects, Inc., Itasca, IL

Contractor: Soltys Design Build

Owner: Norix Group, Inc.

Photographer: Patsy McEnroe Photography, Inc.

Description: The Project is a 205,000 SF corporate manufacturing and warehouse facility designed to support the company's goal of creating a sustainable and efficient environment where all manufacturing, assembly, packaging, storage, showroom and corporate office processes are housed under one roof.

The Project's LEED Gold Certification is a testament to the design's effective use of passive design strategies, innovative building systems and creative application of architectural finishes to seamlessly incorporate all company functions in one setting.

Bystronic, Inc.
Hoffman Estates, IL

Category: Commercial/Industrial

Firm: Heitman Architects, Inc., Itasca, IL

Contractor: McShane Construction

Owner: Bystronic, Inc.

Photographer: Patsy McEnroe Photography, Inc.

Description: Thoughtful design using standard parts and pieces of typical industrial market construction elevates the outcome in a very cost constrained industrial market. Consolidating uses; headquarter, manufacturing, and warehouse functions under one roof, reduced total footprint resulting in cost savings and sustainability gains.

The "Hybrid" facility design blends warehouse manufacturing and office coworkers. Shared amenity spaces break down traditional employee hierarchies into a blended egalitarian population. Productivity and innovation are enhanced by synergies between diverse co-worker groups.



Silver Awards



Thomas J. Waters Elementary School North Annex
Chicago, IL

Category: Institutional

Firm: Bailey Edward Design, Inc., Chicago, IL

Owner: Chicago Public Schools

Photographer: Marian Kraus/ Darris Lee Harris

Description: Sprouting from the soil of community gardens, the Annex at Waters Elementary School nurtures a growing student body with a design as vibrant as their forward-thinking curriculum of fine arts, environmental studies, and technology. Inside, nature-inspired colors illuminate the floors and walls. Outside, angled metal panels frame the art, music, and media center windows, echoing the existing school's detailing. Snakes of corbeled brick wind through smooth masonry, reflecting the school's history, values, and vivacity.



Lake Harriet Residence
Minneapolis, MN

Category: Single-Family Homes

Firm: PKA Architecture, Minneapolis, MN

Contractor: Trestle Homes

Owner: Peter Crain

Photographer: Spacecrafting

Description: Deftly balancing the clients' appreciation for modern design and traditional references, this new home creates a sense of place by reflecting the scale and textures of the adjacent traditional homes, while integrating into the fabric of the street and bringing a striking modern spirit to the eclectic, established urban lake neighborhood.

Silver Awards



Hotel Julian
Chicago, IL

Category: Commercial/Industrial

Firm: Hirsch MPG LLC., Chicago, IL

Contractor: W.E. O'Neil Construction Company

Owner: Oxford Capital Group, LLC and Quadrum Global

Photographer: Anthony May Photography

Description: Originally designed by Marshall and Fox in 1911, this 12-story office building, part of the iconic Michigan Avenue wall, sat vacant and in major disrepair after a failed redevelopment attempt. The Hotel Julian redevelopment plan sought to save the existing building, restore the ornate terracotta façade, add five floors, and integrate new with old to create a 218 key boutique hotel.

The June
Chicago, IL

Category: Mixed Use

Firm: Level Architecture Inc., Chicago, IL

Contractor: Method Construction

Owner: Cedar Street Companies

Photographer: Scott Shigley

Description: This mixed use four-story apartment building is designed to re-establish a strong physical corner at the intersection of Broadway and Foster Avenue, addressing the two major street elevations with similarly articulated massing which respect the scale of the immediate context in Chicago's Uptown neighborhood. The building's upper floors hover above a base of mostly glass, capped by a lobby that is set back from the sidewalk and provides a small, tranquil entry garden for residents.



Silver Awards



Pullman Artspace Lofts
Chicago, IL

Category: Multi-Family Homes

Firm: Stantec Architecture, Inc., Chicago, IL

Description: This project is the first residential development in the Pullman district in several decades. Two abandoned 19th-Century three-story workforce apartment buildings will be fully restored at either end of a new three-story residential building, delivering thirty-eight artist live-work units in total. The ground floor of the new building will also feature community gallery and studio space for residents of the development and Pullman neighbors.

Vilnius Connect
Vilnius, Lithuania

Category: Unbuilt Design

Firm: Myefski Architects, Chicago, IL

Owner: Vilnius City Municipal Administration

Description: A celebration of old and new, solidity and transparency, structure and fluidity, the Railway Station Complex takes on many characters. It is a symbol of modernity, designed with technology and sustainability in mind – but at heart, it is cloaked in a terracotta-clad skin inspired by an old-world sensibility. Upon entering visitors are oriented to the historic station in a soaring passenger hall with the ever-changing shadows created by the undulating building skin.



Merit Awards



Surgical Innovation & Training Laboratory
University of Illinois
Chicago, IL

Category: Institutional

Firm: Bailey Edward Design, Inc. and CannonDesign, Chicago, IL

Owner: University of Illinois

Photographer: Chris Barret, Laura Peters, Design Staff

Description: The Surgical Innovation and Training Laboratory at the University of Illinois at Chicago provides a flexible and inspiring space to perform the art of robotic surgical research, training, and development of revolutionary techniques and tools. Designed as a convergence of nature and technology to inspire surgeons. Unexpected textures, patterns, nature-inspired geometries, and a living plant wall provide a biophilic experience while polished surfaces and pervasive technology give the sense of working in a futuristic machine.

West Side Tractor Sales
Headquarters and Service Center
Lisle, IL

Category: Commercial/Industrial

Firm: Barnes Architects, Ltd., Elmhurst, IL

Contractor: RB Construction, Inc.

Owner: West Side Tractor Sales – B3 Partnership, LLC

Photographer: Daryl Barnes/Bob Mead, Mead Communications



Description: An 11-acre site on a main commercial street in a suburb of Chicago – with existing buildings constructed 20 years ago and unoccupied for nearly ten of those years – was purchased by West Side Tractor Sales to create their new corporate headquarters and service center. Reuse was a must for at least one of the buildings to make the project economically viable, and satisfy recommendations by the village board.



Nicky's of Beverly, Chicago, IL

Category: Commecial/Industrial

Firm: CMMR, Chicago, IL

Contractor: Pelar Construction

Owner: Paul Kostopanagiotou

Photographer: Miller + Miller

Description: Nicky's of Beverly is a family-friendly American eatery offering fresh quality food & good vibes since 1997. After 22 years, Nicky's expanded to a new location with a cutting-edge design and artistic experience leveraging shipping containers and a new outdoor space. Since opening, Nicky's has received positive praise in elevating Western avenue, and providing a truly one-of-a kind venue where neighborhood patrons can gather on Chicago's southside to enjoy good food and good vibes.

Merit Awards



156 North Jefferson
Chicago, IL

Category: Commercial/Industrial

Firm: Hirsch MPG, LLC, Chicago, IL

Contractor: Summit Design + Build

Owner: Promus Holdings, LLC and RDG Funds, LLC

Photography: Mike Schwartz Photography

Description: The Crane Company Factory Building is a unique building in the context of Chicago. Built in 1865, it is one of the few remaining pre-Chicago Fire industrial buildings that still exists today. The renovation sought to preserve the existing building's historic character and provide a high-end corporate interior. The building's origins as a steel pipe manufacturing facility lent itself to an industrial chic aesthetic, balancing raw, industrial elements with refined materials and sumptuous furnishings.

Yamato Transport USA
Wood Dale, IL

Category: Commercial/Industrial

Firm: Suzuki + Kidd Architects, Huntley, IL

Contractor: Toler Construction

Owner: Yamato Transport USA

Photographer: Miller + Miller Architectural Photography

Description: The Yamato Transport renovation design focuses on spatial fluidity, occupant comfort and structured organization. Spatial fluidity was achieved by opening up the office with removing opaque surfaces and incorporating louvered screens, transparent and translucent surfaces. The indoor air quality, thermal comfort, and task lighting were improved by installing a new HVAC system, exterior wall system, and LED lighting throughout the offices.





New Tudor
Arlington Heights, IL

Category: Single-Family Homes

Firm: DII Architecture, Prospect Heights, IL

Contractor: Construction People Corp.

Owner: Chris & Katie Karsten

Photographer: Black Olive Photographic

Description: A family of 5 purchased a quaint cottage tudor, but knew they needed more space; specifically bedrooms, storage, and a new master suite. The property/home is narrow and the only viable option was to design/build over the garage to the rear. This still presented a challenge to add circulation, storage, extra bedrooms and baths. Thus, 2 cantilevers to the north and west were proposed, and a 'destination' balcony.

Merit Awards



Chávez Clinic
Chicago, IL

Category: Institutional

Firm: RADA Architects, Ltd., Chicago, IL

Contractor: Domani Construction & Development

Owner: Dr. Milton Chávez, MD, SC

Photographer: Steinkamp Photography

Description: This cheerful urban clinic has become a welcome addition to Wicker Park urban scene. The design concept reflects Dr. Chávez's team's desire to be people's advocates and guides. A central focal point for patients and providers together symbolically celebrates health and wellness. Expressive tall ceilings, exposed structure and pendant acoustical lighting, arranged in a circular pattern give character to the space. Large scale murals adorning the two-story space draw attention of visitors and passers-by.



Isles Modern
Minneapolis, MN

Category: Single-Family Homes

Firm: PKA Architecture, Minneapolis, MN

Contractor: Streeter

Photographer: Spacecrafting

Description: Designed for streamlined, active city living with a deft balance of lake views and privacy, this right-sized modern home plays well with the adjacent traditional homes on the parkway while bringing a fresh, exciting sensibility to an established urban lake neighborhood.



Glenview Community Ice Center
Glenview, IL

Category: Institutional

Firm: Williams Architects, Itasca, IL

Contractor: W.B. Olson, Inc.

Owner: Glenview Park District

Photographer: Larry Kmiecik/Kmiecik Imagery

Description: Made possible by the passage of a successful referendum in 2018, the Glenview Ice Center is a year-round destination for recreation, instruction and competition. Visitors are welcomed into the facility through The Great Hall. The facility features two NHL-size rinks with spectator seating, adjacent locker rooms, studio rink, team rooms, dryland training and pro shop. In addition, the facility offers a Community Room, full-service restaurant with seating for 50, and a Grab and Go Café.

Merit Awards



Mt. Prospect Fire Station Headquarters
Mt. Prospect, IL

Category: Institutional

Firm: Williams Architects, Itasca, IL

Contractor: Nicholas & Associates, Inc.

Owner: Village of Mt. Prospect, Illinois

Photographer: Kmiecik Imagery

Description: The design firm provided planning, comprehensive architectural/engineering design and construction administration services for the new 30,583 SF Fire station No. 13 located in Mount Prospect, Illinois. The new fire station features a large drive apparatus bay, workroom, offices, lobby, day room and kitchen, sleeping quarters, locker rooms and fitness room. This building was previously a bank that was re-purposed and renovated to become a fully functional Fire Station with 7 apparatus bay doors.

Wild Woods at Trout Lake Camps
Pine River, MN

Category: Institutional

Firm: Station 19 Architects, Inc., Minneapolis, MN

Contractor: Trout Lake Camps

Owner: Trout Lake Camps

Photographer: Saari Forrai Photography

Description: Camp Wild Woods is a safe place for adventures in the woods… where first-time campers gather together to discover God's story of love and grace… and "Fun is Mandatory"! Wildwood's Town Square mini-golf and game courts sit between two 100' "Main Street" buildings that hold its shared activities. The kid-friendly "Spork" dining hall gathers campers from their crazy "Treehouse" cabins, connected by bridges around a fire pit in the surrounding woods.





1100 West Polk Street
Little Italy/University Village
Chicago, IL

Category: Multi-Family Homes

Firm: Hanna Architects, Inc., Chicago, IL

Owner: Howard Perino

Description: Located in Little Italy in the heart of Chicago, this five unit infill residential apartment building is meant to become a part of the bustling neighborhood in which it resides. The historic neighborhood is always filled with people walking through, thanks to the adjacent University of Illinois-Chicago. Large terraces and many large decks amongst the brick and steel invite the property's inhabitants outside, where the tree-lined neighborhood and Chicago skyline are easy on the eyes.

Merit Awards



EVEQ
Chicago, IL

Category: Mixed Use

Firm: SGW Architecture & Design, Chicago, IL

Contractor: Maris Construction

Owner: Pipefitters Local 597

Photographer: Will Quam

Description: EVEQ Condominiums are a modern twist on the historic loft buildings in the West Loop of Chicago.



Peoria Green
Chicago, IL

Category: Multi-Family Homes

Firm: SGW Architecture & Design, Chicago, IL

Contractor: Maris Construction

Owner: ZS DEV Peoria Green LLC

Photographer: Will Quam

Description: This luxury condominium development in the West Loop touts rarely found features in the city — spacious 4 and 5-bedroom homes.



Gleason Lake Mid-Century
Plymouth, MN

Category: Single-Family Homes

Firm: PKA Architecture, Minneapolis, MN

Contractor: Streeter

Photographer: Steve Henke

Description: This whole-house renovation project creates a strong sense of place by preserving the original mid-century spirit of the 1948 home while making the most of the beautiful site on a hill overlooking a quiet lake. Design goals included resolving the outdated interior layout, creating a strong connection to the outdoors, adding another garage to the back of the house and using the highest quality materials to respect and enhance the original design intent.

Merit Awards



Riverside Residence
Fargo, ND

Category: Single-Family Homes

Firm: PKA Architecture, Minneapolis, MN

Contractor: Tomlinson Schultz

Photographer: Spacecrafting

Description: Situated in a neighborhood of homes of differing sizes and design styles, this understated, European-inspired family home brings a youthful elegance to the street. Guided by the clients' appreciation for formality and symmetry, the designers responded to the site with a timeless, two-story white brick home with a mix of formal rooms and casual open spaces with breathtaking views of a magnificent stand of heritage oak, elm and boxelder trees in the backyard.

UnityPoint Health Blank Children's STAR and Developmental Center
West Des Moines, IA

Category: Institutional

Firm: INVISION Architecture, Des Moines, IA

Contractor: Edge Commercial, LLC

Owner: UnityPoint Health – Des Moines Iowa Methodist Medical Center

Photographer: Integrated Studio; Cameron Campbell

Description: As a regional child protection and developmental center, the facility offers care to children who have been victims of abuse, exposed to drugs, experience in foster care as well as diagnosis and treatment for children with developmental, behavioral, and physical conditions. Careful planning, detailing, and installation of ever-changing interference metal panels provides the Children's Developmental Center with an exciting, comfortable, and welcoming environment that promotes children's healing through the refined use of color and form.





Crisp & Modern
Highland Park, IL

Category: Single-Family Homes

Firm: Morgante Wilson Architects, Evanston, IL

Contractor: Legacy Builders

Photographer: Mike Schwartz

Description: This home is reflective of the client's tastes; contemporary, clean lines, open floor plan and large panes of glass which connect one to the outdoors. The home is casual and relaxed and perfect for entertaining.

Building Bridges – Napkin Sketch Contest Winners

The 2021 Napkin Sketch Contest, Building Bridges, encouraged architects, students, and related professionals to design a bridge in a 5-inch by 5-inch sketch. A panel of experts judged the sketches based on creativity and technical skill. This was the second iteration of the annual Napkin Sketch Contest, with the 2020 contest featuring treehouse designs. ALA is excited to continue this tradition, with a fresh focus for 2022. Details to be announced in the fall.

An outstanding panel of educator-practitioners who have more than 100 years of service as faculty members at Ball State University's College of Architecture & Planning have been assembled to adjudicate the entries. Collectively, they have been recognized with awards in the annual *ARCHITECTURAL RECORD Napkin Sketch Contest*, Ken Roberts Memorial Delineation Competition (KRob) and have made dozens of invited presentations at professional and educational conferences.

JUDGES:

CHAIR – Tony Costello, FAIA, Irving Distinguished Professor Emeritus of Architecture & Principal, Costello + Associates
Lohren Deeg, Associate Professor of Urban Planning and Member of the American Society of Architectural Illustrators
Harry Eggink, **RA**, Professor of Architecture

CATEGORY: LICENSED ARCHITECTS AWARDS



First Place Honor Award

Tomoo Fujikawa, ALA

Fujikawa Johnson Gobel Architects

"The jury was taken by both the simplicity and complexity of this submission. The simple, suspension bridge with bamboo slats as a deck above what appears to be a grove of bamboo trees allows the viewer to speculate on just how high above the valley floor the bridge really is. One juror remarks that this sketch has a traditional Japanese print aesthetic to it."



Runner Up

Thomas Hickey

Thomas Hickey & Associates

"The jury really wanted to recognize both the whimsical and graphic interpretation and execution inherent in this submission to convey the concept of "bridge."



Runner Up

Michael Henning

Pappageorge Haymes Partners

"The jury was really impressed with the elegant line work displayed in this submission."



Runner Up

Jason Soderlund

RQAW

"The jury recognized the incredible sense of distance from countryside to major city in the distance that is captured in this submission. Certainly a view that millions of commuters by rail and automobile can relate to."

CATEGORY: NON PROFESSIONAL AWARDS

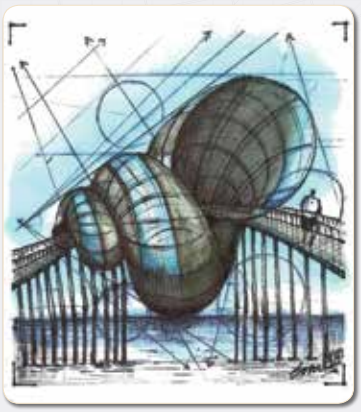


First Place Honor Award

Somnath Mukherjee

Hight Jackson Associates

"The jury lauded this submission as a true work of art with the creation of great depth and beautiful use of color."



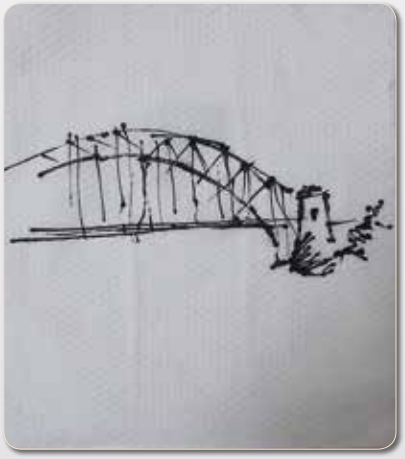
Runner Up

Somnath Mukherjee

Hight Jackson Associates

"The jury enjoyed the incredible "sense of movement" through the multi-conical bridge elements and the complimentary use of color."

CATEGORY: STUDENT AWARDS



First Place Honor Award

Jishnu Pramela Marjappan

VIT University

"The jury lauded this submission as being a "true sketch" that was executed with few lines to capture the essence of a steel truss bridge with masonry tower at its anchorage on the shore. The term, "less is more" certainly applies here."



Runner Up

Yogesh Kumar

VIT University

"The jury enjoyed that this sketch paid homage to one of the great historic bridges in our country ... the Brooklyn Bridge."

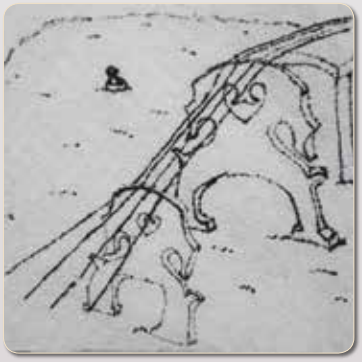


Runner Up

Leonardo Argueta

Joliet Junior College

"The jury commended the use of the letters that spell-out bridge... in the design of the piers which are often an overlooked component of a bridge."



Honorable Mention

Alton Richardson

Joliet Junior College

"The jury recognizes the use of the unique definition of "bridge"... that being a critical element of string instruments."

IBC Now Allows Ultra-Large Porcelain Tile Panels on Exteriors

BY: SCOTT CONWELL, ALA, FAIA, FSCI, INTERNATIONAL MASONRY INSTITUTE



The 2021 edition of the International Building Code (IBC) creates new opportunities to use large format adhered porcelain tile and ultra-large format tile panels on building exteriors. The new code requirements represent the first major update for porcelain tile since its introduction to the IBC in 2009.

The International Masonry Institute (IMI) and the Tile Council of North America (TCNA), with the cooperation of tile and setting material manufacturers, jointly proposed these new criteria for exterior tile to the International Code Council (ICC), who unanimously approved the proposal and implemented the language into the 2021 IBC.

The new requirements respond to the increased availability of larger, thinner porcelain tiles, improved technologies in bonding mortar, and the tile industry's focus on qualified labor. The updated section from the 2021 IBC reads as follows in its entirety:

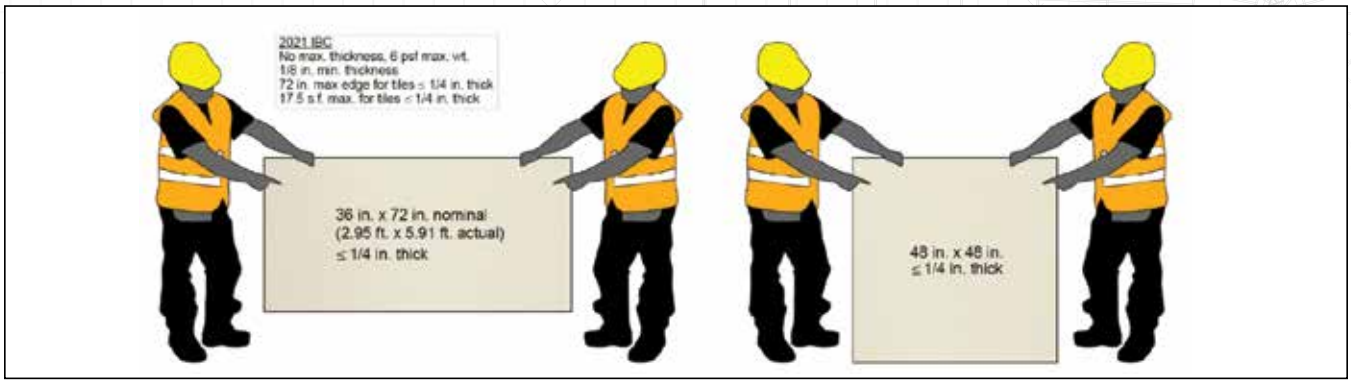
1404.10.2 Exterior adhered masonry veneers – porcelain tile. Adhered units weighing more than 3.5 pounds per square foot (0.7 kN/m^2) shall not exceed 48 inches (1219 mm) in any face dimension nor more than 9 square feet (0.8 m^2) in total face area and shall not weigh more than 6 pounds per square foot (0.29 kN/m^2). Adhered units weighing less than or equal to 3.5 pounds per square foot (0.17 kN/m^2) shall not exceed 72 inches (1829 mm) in any face dimension nor more than 17.5 square feet (1.6 m^2) in total face area. Porcelain tile shall be adhered to an approved backing system.

Code requirements from 2009 through 2018

In 2009, porcelain tiles meeting ANSI A137.1 *American National Standard Specifications for Ceramic Tile* were typically manufactured to a thickness of



Perry's Stakehouse in Schaumburg, Illinois uses adhered ultra-large gauged porcelain panels on the exterior. The architect was Aria Group, The general contractor was ICI, the title contractor was Ready Tile, and the tile installers were BAC Local 21 Illinois. Photo Credit: International Masonry Institute



For tiles 1/4 thick and thinner, the 2021 IBC now allows tiles as large as 17.5 square feet, for example 36" x 72" (nominal) or 48" x 48".

9/32 – 7/16 in. (7 – 11 mm), and were adhered with mortar manufactured in compliance with ANSI A118.4 *American National Standard Specifications for Modified Dry-Set Cement Mortar*. Due to safety concerns and recommendations of the tile industry at that time, the IBC limited the size of these relatively thick and heavy tiles to a maximum of 24 in. (610 mm) in any dimension, and a maximum area of 3 ft^2 (0.28 m^2) for any one tile. Moreover, the IBC imposed the restriction that any one tile shall not weigh more than 9 pounds per square foot (0.43 kN/m^2). By today's standards these requirements seem overly restrictive, but they served the tile industry well in the last decade.

What factors have sparked the code changes?

It is now safer and more efficient than ever to use larger adhered porcelain tile. This is a result of major industry improvements over the last decade like larger and thinner tiles, stronger mortars, and increased focus on installer training and certification programs.

Larger, thinner tiles

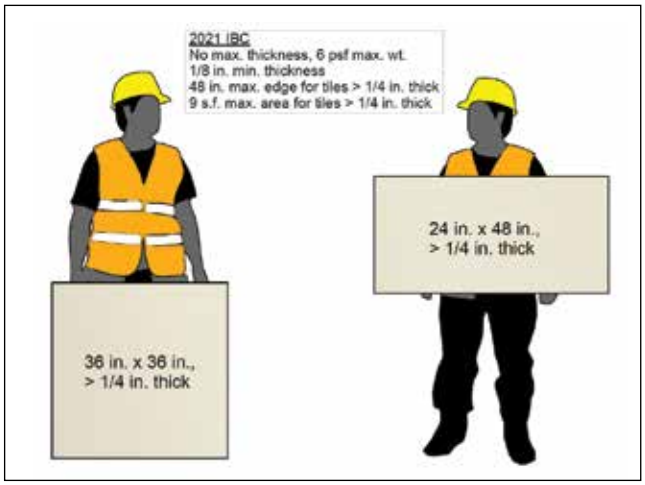
Porcelain tile manufacturers worldwide now have the technology to produce tiles that are significantly thinner and larger than tile manufactured in previous decades. Porcelain tiles manufactured to ANSI A137.3 *American National Standard Specifications for Gauged Porcelain Tiles and Gauged Porcelain Tile Panels/Slabs* are commonly 1/8 – 7/32 in. (3.5 – 5 mm) in thickness. Gauged porcelain tile (GPT) panels also frequently have facial dimensions nearly as large as 6 ft. x 12 ft. (1800 mm x 3600 mm in actual size). The thinner profile of these tiles results in units that remain relatively lightweight despite their ultra-large format.

Stronger mortar

Just as tile manufacturers were developing technology that would test the limits of tile size and thickness, setting material manufacturers were improving their products to provide more tenacious bond strength. ANSI A118.15 *American National Specifications for Improved Modified Dry-Set Cement Mortars* was approved as a new standard in 2014, establishing more rigid criteria for resistance to shear forces. For example, the required 28-day shear strength of mortar meeting ANSI A118.15, the standard recommended by most GPT panel manufacturers, is double



Prior to the 2021 IBC, exterior adhered porcelain tiles were limited to 3 square feet per tile, for example 16" x 16", 20" x 20", or 12" x 24"



The 2021 IBC now allows exterior adhered porcelain tiles thicker than 1/4 in sizes as large as 9 square feet, for example 36" x 36" or 24" x 48".

the requirement for mortars meeting ANSI A118.4, at 400 psi (2.76 MPa) and 200 psi (1.38 MPa) respectively.

Industry's focus on qualified labor

Even with these tremendous improvements in materials, the tile setters, finishers, and contractors installing them must be qualified. Trained, skilled craftworkers and contractors are paramount to the success of any tile project, and when the public's health, safety, and welfare are at stake, qualified labor is critical.

The tile industry has made great strides in the last decade in expanding the delivery of longstanding programs like the apprenticeship and training program of the International Masonry Training and Education Foundation (IMTEF) and joint apprenticeship and training committees. These programs provide union installers with training and technical expertise that reflect the latest technologies and ANSI requirements. Further, the Tile Contractors' Association of America (TCAA)'s Trowel of Excellence certification establish credentials for best practice tile contractors who are signatory with the International Union of Bricklayers and Allied Craftworker (BAC). For installers who aspire to be the most technically proficient in their field, the Advanced Certifications for Tile Installers (ACT) assess and certify installers in seven critical skill areas including large format tile (LFT) and GPT. Each of these qualified labor training and certification programs works closely with manufacturers of tile and setting materials to ensure that the union labor force is constantly kept up to date with the latest material and installation technologies. Architects can ensure qualified labor on their projects by making one or more of these credentials a requirement in their specifications.

The new code requirements in 2021

So how large a porcelain tile can now be adhered to a facade? To simplify the new code requirements, the criteria in the 2021 IBC is summarized as follows:

For tiles greater than 1/4 in. (6 mm) thick, the maximum tile size is 9 ft^2 (0.84 m^2), which in common tile sizes is 36 x 36 in. (915 x 915 mm) or 24 x 48 in. (610 x 1220 mm). Tiles of this thickness may not have any face longer than 48 in. (1220 mm).

For tiles less than or equal to 1/4 in. (6 mm) thick, the maximum tile size is 17.5 ft^2 (1.6 m^2), which translates to 48 x 48 in. (1220 x 1220 mm) or 36 x 72 in. nominally (900 x 1800 mm in actual size). Tiles of this thickness may not have any face longer than 72 in.

Finally, while this update applies to large and ultra-large format tiles, it is important to remember that ceramic and porcelain tiles in traditional sizes continue to be allowed under the IBC for exteriors. With this code change, architects can now specify these larger size tiles without submitting any special requests to the local building code official. If an architect wishes to specify tiles that exceed these requirements, it may still be possible to do so with the approval of the authority having jurisdiction.

What's next?

Chicago architects are encouraged to consider ceramic and porcelain tiles in all sizes, installed by qualified BAC craftworkers. The durability, low maintenance, sustainability, health benefits, and unlimited design aesthetics of expertly installed tile make it the perfect choice for building facades, and it is now easier than ever to meet building code requirements and deliver a beautiful, healthy building.

Note: *this article is an adaptation of a similar article written by the same author published in the 2021 Tile Council of North America (TCNA) Handbook.*

KELLY P. REYNOLDS & ASSOCIATES, INC.
BUILDING CODE CONSULTANTS

NATIONWIDE
PHONE 1-(800) 950-CODE (2633)
Fax (866) 814-2633
Email: codexperts@aol.com
www.kellypreynolds.com
Free hot lines (members only)

616 Executive Drive
Willowbrook, IL 60527-5610

Corporate Office
16182 W. Magnolia Street
Goodyear, AZ 85338-5518

CVG
CHARRETTE VENTURE GROUP

We invest in small to mid-sized architecture firms.

Your firm is unique, your challenges aren't.
Get your free consultation at CharretteVG.com.

Accessibility for All through Universal Design

BY: RAMESH GULATEE

Disability impacts all of us. Most Americans will inevitably suffer from impairments during their lifespans. These impairments may be due to issues that are diagnosed, such as obesity, combat injuries, lifestyle and other factors. Additionally, as America grays, the prevalence of sensory (visual, hearing), manipulatory and mobility impairments will increase in duration and magnitude.

It is easy to extrapolate the CDC data below to conclude that aging and obesity alone constitute the majority of the US population. The modeling projections point to higher proportions of Americans in this category during the next 25 years.

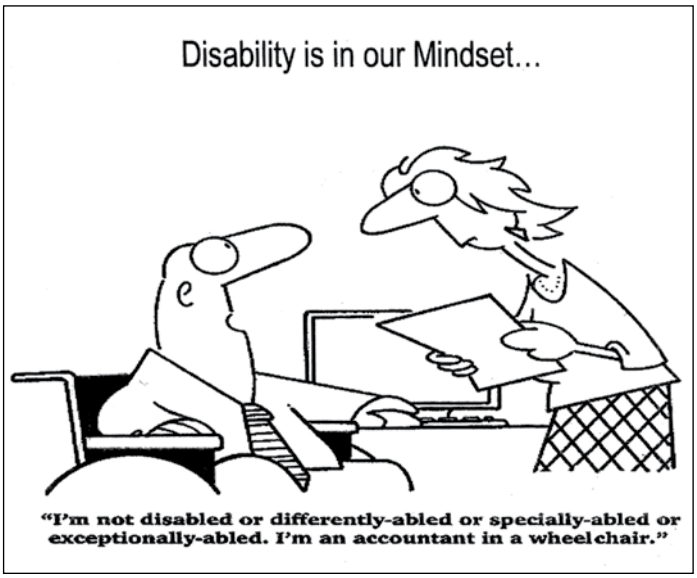
Despite the demographics, there is a perception in the design engineering and real estate industries that the "accessibility ordinances" are excessively cautionary, and amount to mandating designs for **worst-case scenarios**. Barrier-Free Design is in fact designing for the **best situation**, because it accommodates the needs of changing US demographics.

This article will help readers to understand Universal Design (UD) concepts and identify and modify unworkable designs. It will also help them to compare Universal Design vs. non-universal designs and to identify and source Universal Design-based products.

Demographics for U.S. Impairments

If we could fit the entire U.S. population (332 million) into a room of 100 people while maintaining the proportions of Americans suffering from various impairments, the room would have the following demographics:

Impairments	%	Millions
ADA	16	54
Combat Veterans	6	20
Aging Induced	16	54
Obesity	42	139
Lifestyle Situations	8	27 (Live/Learn/Work/Play Mishaps)
Relatively Healthy	12	38



Accessibility Timeline:

The following legislation and advocacies have been undertaken since 1968:

ABA 1968	The Architectural Barriers Act
RA 1973	The Rehabilitation Act (sec. 508)
ADA 1990	The Americans with Disabilities Act
UD 1997	Development of principles of Universal Design/UD, North Carolina State University
UD 1998	First International Conference on Universal Design, NYC
AIA 2008	Resolution on "integration of Universal Design in the built environment" adopted by AIA, and becoming AIA's policy statement on accessibility.

Definitions: Accessibility

Traditional Design - Designs based on the needs of an able-bodied individual

ADA Design - Compliance to minimal accessibility standards guidelines

Barrier-Free Design - Design that enables access of the built environment for all. Numerous myths and misconceptions exist regarding Universal Design. Some of them are:

The ADA and other disabilities laws have created equality.

Universal Design only helps people with disabilities and seniors.

Universal Design is simply good ergonomic design.

Advances in healthcare and medical science are reducing incidences of functional limitations.

Universal Design can't sustain itself because the people who need it most can't afford it.

Universal Design is human-centered design for broad-spectrum use to the greatest extent possible. UD applies to surroundings, objects, products and equipment that humans interface with, such as infrastructure, cities/towns, habitat, landscape, and more.

The purpose of this article is to promote awareness and understanding of barrier-free design to enable access of the built environment to all.

The issues of access to a barrier-free environment were studied at length and developed into a set of guiding principles called **Universal Design** by an esteemed group of designers from North Carolina State University in 1997.

PRINCIPLE 1: Equitable use
Right/Left Hand Scissors
The design is useful and marketable to people with diverse abilities.
Provide the same means of use for all users i.e., identical when possible or equivalent.
Avoid segregating or stigmatizing any users
Provisions for privacy, security, and safety should be equally available to all users.
Make the design appealing to all users.

PRINCIPLE 2: Flexibility in use
Audio/Video/Tactile cues on ATM
The design accommodates a wide range of user preferences and abilities.
Provide choice in methods of use.
Accommodate right/left-handed access and use.
Facilitate the user's accuracy and precision.
Provide adaptability to the user's pace.

PRINCIPLE 3: Simple and intuitive Use
Smart phones/thermostats/wi-fi security cameras
Use of the design is easy to understand, regardless of the experience, knowledge, language skills, or concentration levels of the users.
Eliminate unnecessary complexity.
Be consistent with user expectations and intuition.
Accommodate a wide range of literacy and language skills.
Arrange information in a way that is consistent with its importance.
Provide effective prompting and feedback during and after task completion.

PRINCIPLE 4: Perceptible information
Product assembly pictorials (Ikea)
The design communicates necessary information effectively regardless of ambient conditions or the user's abilities.
Use different modes i.e., pictorial/verbal/tactile and others for essential information.
Provide adequate contrast between essential information and its surroundings.
Maximize legibility of essential information.
Differentiate elements in ways to make it easy to give instructions or directions.
Provide varying techniques or devices used by people with sensory limitations.

PRINCIPLE 5: Tolerance for error:
Fuses/Circuit Breakers, Undo/Redo Commands
Minimize design hazards and adverse consequences of accidental/unintended actions.
Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated or shielded.
Provide warnings of hazards and errors.
Provide fail-safe features.
Discourage unconscious action in tasks that require vigilance.

PRINCIPLE 6: Low physical effort:
Battery-powered tools with interchangeable bits
The design can be used efficiently, comfortably, and with a minimum fatigue.
Allow user to maintain a neutral body position.
Use reasonable operating force.
Minimize repetitive actions.
Minimize sustained physical effort.

PRINCIPLE 7: Size and space for approach and use:
Adjustable height countertop
Provide appropriate size and space for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.
Provide a clear line of sight to important elements for any seated or standing user.
Make reach to all components comfortable for any seated or standing user.
Accommodate variations in hand and grip size.
Provide adequate space for the use of assistive devices or personal assistance.

Accessibility thru Design Evolution:

Wheeled Mobility

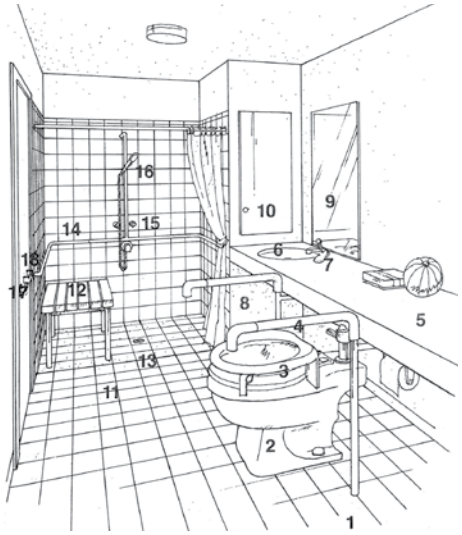


Trains, Planes, Cars



Bathrooms

ADA



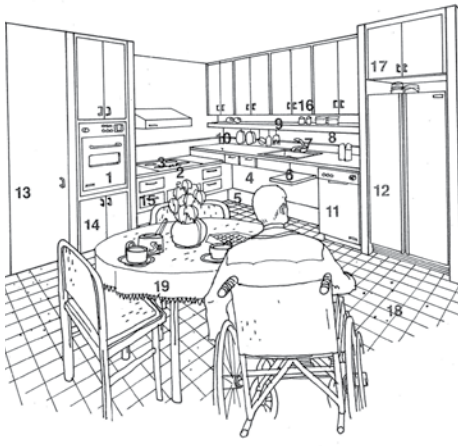
1. Space for a wheelchair either side of toilet
2. Toilet with recessed base
3. Adjustable height toilet seat or seat extender
4. Swing-away grab bars
5. 27"/ 69 cm-deep counter
6. Washbasin within reach of the seated position on the toilet
7. Mixing faucet, lever handle, within reach of the seated position on the toilet
8. Knee space under counter, drain pipe covered or insulated
9. Mirror, lower edge no higher than 36"/91 cm
10. Medicine cabinet within reach
11. Space for transfer to a shower seat
12. Freestanding shower seat, can be placed either end of shower, or removed
13. No curb for shower stall; the chairbound can wheel directly into the shower; shower stall floor slope to center drain
14. Grab bar, three sides of shower stall
15. Controls centered on back wall of shower stall
16. Hand shower
17. Outswinging bathroom door, lever handle
18. Door pull, hinge side of door

Universal Design



Kitchen

ADA

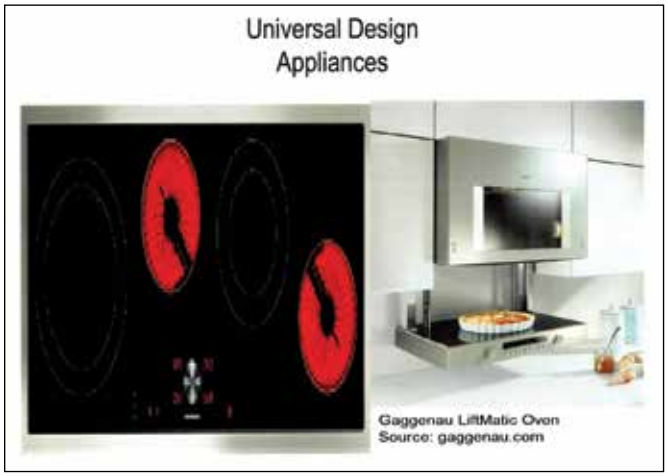


1. Wall oven, for easy access, open at counter height
2. Cooktop controls at the front, to avoid burning
3. Cooktop and counter, 30"/76 cm to 33"/84 cm height
4. Knee space under sink counter to allow sitting in the wheelchair at counter
5. High recessed base under cabinets to accommodate wheelchair pedals
6. Pullout work shelf, 30"/76 cm to 33"/84 cm at standard height counters
7. Mixing faucet at sink, lever handle
8. Cove lighting under wall cabinets, bulb replacement within reach range
9. Shallow shelf over sink counter within reach range
10. Wall space within reach over sink counter, used for hanging utensils
11. Front-loading dishwasher
12. Side-by-side refrigerator doors to allow access to refrigerator and freezer
13. Full height storage closet for easy access
14. Cabinet space under wall oven within reach range
15. Drawers under cooktop and counter for easier access
16. Easy grip cabinet door pulls
17. High cabinets (out of reach for the chair-bound) for other user
18. Smooth, nonskid slooring, open spaces for wheelchair passage
19. Round table to avoid corners, legs, or pedestal base with no apron to allow for wheelchair

Universal Design



Universal Design Appliances



Conclusions: CDC data show that Americans spend 75-80% of their lives indoors.

In the U.S., built environments incorporate ADA accessibility design guidelines for compliance with regulatory thresholds. This approach results in accommodating the accessibility needs of about 1 in every 6 Americans to the exclusion of the majority of citizens.

The need to develop a more inclusive accessibility policy is recognized in the U.S.

www.section508.gov/blog/infographic-the-case-for-universal-design.

In this regard, organizations such as ADA, the U.S. Access Board, GSA and other governmental bodies have been proactively advocating for greater accessibility of the built environment, as well as digital accessibility, through the application of universal design principles.

Barrier-free accessibility is generally viewed favorably by municipal jurisdictions, leading to expediency in project approvals, and when considered/incorporated at the conceptual stages results in: a) lower life cycle cost, b) adaptability to changing demographics, and c) greater broad-spectrum usage.

This enhances the asset value towards greater marketability. Barrier-free design, or provisions for it, is undeniably part of good design practice that contributes to the success of the built environment.

Example: Consider the plus value of an ATM machine that offers tactile, audio, and video cues to banking customers vs. an ATM that does not.

Accessibility Resources

Organizations:
ADA - www.ada.gov
US Access board - www.access-board.gov
Federal Communications Commission - www.fcc.gov
Center for Applied Special Technology - www.cast.org
Assistive Technology Industry Association - www.atia.org
International Association of Accessibility Professionals - www.accessibilityassociation.org

Industry:
Household Products - www.oxo.com
Appliances - www.ge.com, www.gaggenau.com
Accessibility-Related Products - www.hafele.com
Bathroom/Kitchen Accessories - www.pressalitcare.com, www.toto.com, www.laufen.com, www.kohler.com

About the Author: *Ramesh Gulatee, Architect (Canada/USA) focuses on accessibility in practice and was the sponsor of the resolution on Universal Design/AIA '08, Boston. Ramesh was invited by NCD to participate in the ADA2010 Accessibility Summit, Washington DC. Since 1998, Ramesh has worked as project lead on the McCormick Place Corporate Addition, The Goodman Theatre Center, and Fort Sheridan Housing Development, Illinois.Ramesh currently serves on the ADA Accessibility Illinois steering committee.*

LICENSED ARCHITECT

Association of Licensed Architects

Test Questions

CE Quiz - Continuing Education Test – Accessibility for all through Universal Design

1. What is Universal Design?
   a. Design for All
   b. Design that is based solely on wheelchair access
   c. Design that works without a specific user in mind

2. Name the institution, year and team composition that developed UD principles:
   Write in your answer: _____
   _____

3. Is ADA (ADA Accessibility Guidelines) the same as UD?
   a. True
   b. False

4. Select 5 Myths about Universal Design:
   a. Building codes adequately address all disabilities
   b. Universal Design is simply good ergonomic design
   c. UD is same as ADA compatible design
   d. UD is not necessary since ADA has created equality
   e. Universal Design only helps people with disabilities and older people
   f. Improvements in health sciences/care have reduced disability limitation

5. Select all the UD principles from the list below:
   a. Equitable Use
   b. Evidence-Based Design
   c. Barrier Removal
   d. Flexibility in Use
   e. Low Physical Effort
   f. Simple and Intuitive Use
   g. Perceptible Information
   h. Tolerance for Error
   i. Size and Space for Approach and Use

6. ABA and UD accomplish accessibility for all.
   a. True
   b. False

7. Universal Design, Adaptive Design and Inclusive Design all work on a similar basis?
   a. True
   b. False

8. When is it appropriate to install grab bars?
   a. Make provision(s) if needed
   b. Install to complete

9. Is UD applicable to private residences only?
   a. True
   b. False

10. When is it a good design practice to integrate UD into a project?
    a. Before permit submittal
    b. When negotiating with the builder
    c. During construction
    d. During the design concept stage

ALA/CEP Credit: This article qualifies for 1.0 LU (HSW pending at time of publishing) of State Required Learning Units and may qualify for other requirements. Valid through March 2024.

Contact Information: _____

Last Name: _____

First Name: _____ Middle Initial: _____

AIA # if applicable: _____

Firm Name: _____

Address: _____

City: _____ State: ____ Zip: _____

Tel.: _____ Email: _____

Credit Card No: _____

Expiration Date: _____

PAYMENT: ALA/AIA/CEP Credit or Certificate of Completion:
Cost: $15 (ALA Members) $20 (non-members)
❑ Check or ❑ Credit Card

❑ Please send me a certificate of completion (required by certain states & organizations) that I may submit.

Your test will be scored. Those scoring 80% or higher will receive 1 LU Credit.

Fax: 847-382-8380
Address: Association of Licensed Architects,
One East Northwest Highway, Suite 200
Palatine, IL 60067
Attn: ALA/CEP Credit
Scan & Email: ala@alatoday.org

Certification: (Read and sign below)
I hereby certify that the above information is true and accurate to the best of my knowledge and that I have complied with the ALA Continuing Education Guidelines for the reported period.

Signature: _____ Date: _____

The Role of Vapor Retarders on Building Performance

BY: COREY ZUSSMAN, CSI, AIA, NCARB, ALA, REWC, RRO, CDT, CQM, LEED AP BD+C DIRECTOR OF QUALITY MANAGEMENT, PEPPER CONSTRUCTION



Exterior building assemblies are not water-tight, and moisture will enter the building. It doesn't have to be ice, a leak, or a flood that causes significant damage to your building and operations. Vapor can have devastating results in its smallest moisture form if not properly controlled. In addition to property and structural damage, moisture is a breeding ground for mold, mildew, and insects, bringing exposure to health-related issues.

Vapor is water suspended as particles in the air in a gaseous form, and it's this vapor that is ever-present and the most challenging to control in our buildings. Understanding how vapor moves through the exterior walls and how the building envelopes interact with HVAC systems allows architects and engineers to specify suitable mechanical systems and building envelope components to manage the vapor movement through the building envelope.

So how does water vapor move? Generally, vapor travels from warm to cold and from high to low pressure. Therefore, installing or not installing a vapor retarder in the correct location is the first defense in building a durable and healthy wall system. In cold climates, such as Chicago, the goal is to keep the interior warm, moist air from getting to a cold exterior surface. A vapor retarder is designed to stop the travel of vapor. So, vapor retarders in the wrong location could prevent assemblies from drying out and damage the wall system.

All building materials and systems that impact or are impacted by moisture content should be considered, and a custom plan should be developed. For example, air-conditioned enclosures, below-grade spaces, excessive moisture spaces, and an exterior vapor retarder can change the building conditions.

For specialty buildings, such as a natatorium, sauna, and refrigeration warehouse, the vapor retarder along with an air barrier should be located based on computer analysis of the exterior and interior wall assembly. Why? Depending on its location in the wall, a vapor retarder could trap the moisture or allow the moisture to move freely throughout the facility, which would cause extensive moisture damage to the facility.

Double vapor retarders, or vapor retarders on both sides of an assembly, should not be considered lightly, and it is recommended not to be installed in most situations. Vapor retarders have a permanence rating, which allows



Vaper barrer installation with self-adhered sheets



Vaper barrer installation with spray or roll-on





Parapet Detail Challenges

vapor to pass through the material at a significantly reduced rate, which is why they are not vapor "barriers." Designers must be careful when potentially installing a double vapor retarder in the wall system, such as a wall covering, latex paint, plastic behind the drywall, and an air/vapor retarder on the exterior surface of the exterior wall. The key concept is that vapor should be able to exit in at least one direction to facilitate assembly drying.

By understanding the role of protective materials and systems and how they function separately and together within a wall system, you can make smart choices that optimize the function of your building and ensure its durability over a more extended period of time. Why is this important? First, it's healthier for the building and its occupants. Second, it's cheaper to maintain and prevent costly repairs.

At Pepper, we implement quality assurance measures during planning and implementation to advise you on the best solutions for your building's performance. If you have a question about your existing facility or upcoming project, please contact us. We can help.

LICENSED ARCHITECT

Association of Licensed Architects

Association of
Licensed Architects

ALA Career Center

Find and Post Architecture Jobs



The ALA Career Center was created to give employers and job seekers a better way to find each other and make that perfect fit.

Create an Account Today!

alatoday.org/careers

Employers

- Create an account
- View job posting packages
- Post a job
- New! Post internships for FREE for 60 days!

Job Seekers

- Create an account
- Upload your resume
- Browse jobs
- FREE resume review by TopResume

Call for assistance 888-491-8833

Ext. 2580 (Extension required)

ALA CE Providers

Please call upon our CE Providers to present seminars for you and your office.

APA – The Engineered Wood Association

The Building and Fire Code Academy

Centor North America

Chicago Roofing Contractors Association

EHLS/To the Top Home Elevators

evoDOMUS, LLC

Hoover Treated Wood Products

International Code Council

Leightronix

Masonite International Corp.

Ohio Storm Water Association

Woodland Windows and Doors Inc.

ALA Welcomes New Members

Professional

Mr. Gaver Nichols
ALA
Gaver Nichols Architect
Alexandria, VA

Mr. Jeffrey Bridleman
ALA
Partners In Design Architects
Kenosha, WI

Mr. Ryan D. McKichan
ALA
Architectural Design Consultants, Inc.
Lake Delton, WI

Mr. Peter Szczelina
ALA
Tandem Architecture
Chicago, IL

Mr. Thomas Pins
ALA
Orren Pickell Design Group
Wilmette, IL

Mr. James David Julian
R.A., ALA
Designhouse LLC
Greenwood, IN

Associate

Mr. Joshua Nicholas Brellenthin
Station 19 Architects
Minneapolis, MN

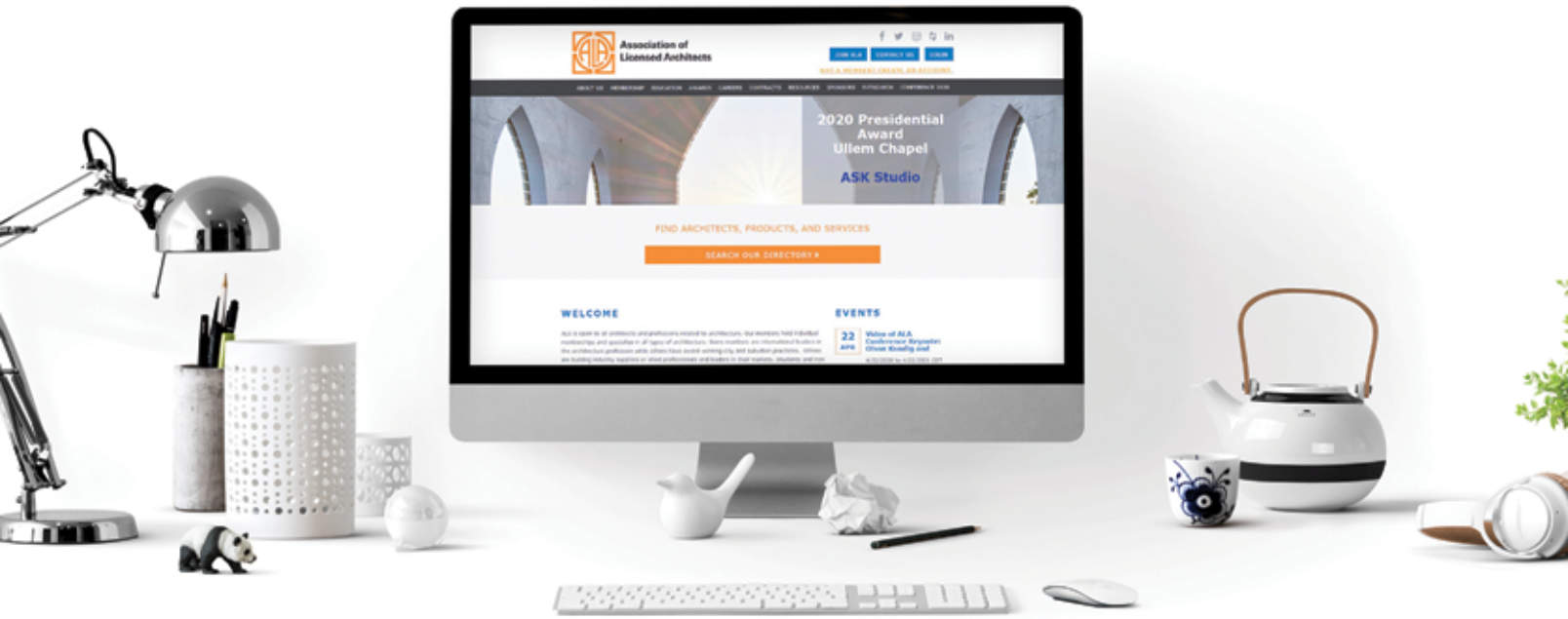
Senior

Mr. Richard H. Sweers, II
ALA
RH Sweers Architect
Overland Park, KS

Mr. Charles E. Bell
ALA
Charles E. Bell Architects
St. Louis, MO

Index of Advertisers

ADVERTISER	WEBSITE	PAGE
ALA Career Center	www.alatoday.org	30
ALA Membership	www.alatoday.org	Outside Back Cover
Charrette Venture Group	www.charretteVG.com	22
Kelly P. Reynolds & Associates, Inc.	www.kellypreynolds.com	22
Metal Architecture Design Awards	www.metalarchitecture.com	Inside Front Cover



YOU'RE **INVITED**

TO JOIN THE ASSOCIATION OF LICENSED ARCHITECTS!

BUILDING RELATIONSHIPS | ADVANCING ARCHITECTURE

Join our dynamic organization for just $250* annually and start building valuable relationships. We are delivering more of what you need today while being proactive for the future.

- Member certificate
- Annual ALA Design Awards
- Annual ALA Architecture Conference
- Monthly virtual continuing education webinars
- 18 short-form, easy-to-understand contracts FREE to download
- Subscription to Licensed Architect Magazine
- Career Board: Job Postings and Openings
- Collegial culture
- Committees and collaboration
- Online member directory

Visit the ALA website today alatoday.org (Click on membership tab)

Questions: Call us at 847-382-0630 or email ala@alatoday.org

Association of Licensed Architects

"I like the idea of a smaller organization with a more personal feeling. Being a member offers timely and engaging educational offerings and supplier access for technical questions relating to my projects"

- Howard Hirsch
Hirsch MPG LLC



*Professional or Allied Professional member rate.