

# WM | AIA



N  
E  
W  
S  
L  
E  
T  
T  
E  
R

DANA BIXBY ARCHITECTS  
LAKE ONOTA SCREEN PORCH  
PITTSFIELD, MASSACHUSETTS

SUMMER  
2014

# NEWSLETTER OF THE WESTERN MASSACHUSETTS CHAPTER

## IN MEMORIAM:

### VITO CAOLO, AIA 1927-2014

Born in Springfield, Massachusetts, Vito Caolo was a graduate of Springfield Technical High School, the U.S. Maritime Academy at Kings Point, N.Y., and Rensselaer Polytechnic Institute, where he earned degrees in Architectural and Structural Engineering.

Vito served his country honorably in both the European and Pacific theatres as a Midshipman in the U.S. Merchant Marines. After service, Vito returned to his work in the Architectural field. In 1955, Vito and good friend Victor Bieniek formed Caolo and Bieniek Associates Inc., a design firm that provides professional services throughout New England to this day.

An untold number of communities benefited from the vision, creativity, and hard work provided by Vito and his firm through the design and construction oversight of many area buildings. Some of his professional accomplishments include working on master planning and new facilities for Springfield Technical Community College, the Collins Tri-Towers for the Springfield Housing Authority, the Bellamy Middle School in Chicopee, the High School of Science & Technology and the Rebecca M Johnson School in Springfield, several buildings at Westfield State University, and Police and Fire Department facilities in East Longmeadow, Northampton, Easthampton, Chicopee, and West Springfield.

Vito was a member WMAIA, and served on the MA Board of Registration of Architects for 25 years. He also was a member and served in leadership roles for the New England Council of Architectural Registration Boards, and the National Council of Architectural Registration Boards.

When not working Vito was an avid sportsman, enjoying sport fishing, hunting, & boating, and passed on his love of the outdoors to his sons Alan & Philip. Always drawn to the sea, Vito's retirement in 2001 allowed him more time to enjoy the beach at the Cape and at his "Island Paradise" in Florida.



Photos: Steve Lakkatos

STCC Campus Building



Amherst Post Office



Rebecca M. Johnson School



Milford Fire Department

## IN THIS ISSUE

**ONE** IN MEMORIAM: VITO CAOLO

**THREE TO SIX** UMASS THESIS GRADUATES 2014

**SEVEN** WILLIAMS COLLEGE STUDENT WORK

**EIGHT** SMITH COLLEGE STUDENT WORK

**NINE** NEW TECHNOLOGY

**TEN** ENERGY UPDATE

**ELEVEN + TWELVE** FEATURED ARTISAN: STICKS + BRICKS FURNITURE

**THIRTEEN + FOURTEEN** BEFORE + AFTER: MILLER POLLIN ARCHITECTS

**FIFTEEN** WMAIA PROGRAMS

### THE WESTERN MASSACHUSETTS CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS

THE WMAIA NEWSLETTER IS PUBLISHED FOUR TIMES A YEAR.

IT IS CIRCULATED TO ALL MEMBERS, ADVERTISERS AND SUBSCRIBERS.

PLEASE DIRECT ALL NEWSLETTER CORRESPONDENCE TO

RACHAEL CHASE ASSOCIATE AIA, AT: EDITOR@WMAIA.ORG

ARTICLES, PHOTOS, NOTICES OF EVENTS AND OTHER INFORMATION ARE WELCOME.

OPINIONS EXPRESSED IN THE NEWSLETTER ARE NOT NECESSARILY THOSE OF THE WMAIA.

THE EDITOR RESERVES THE RIGHT TO REJECT OR REVISE MATERIAL AS SPACE AND SUBJECTIVE OPINION PERMIT.

COVER PHOTO: DANA BIXBY ARCHITECTURE

## WMAIA NEWS

### FULBRIGHT FLEX AWARDED TO CAREY CLOUSE, AIA

Carey Clouse, AIA, assistant professor of architecture and landscape architecture at the University of Massachusetts Amherst, has received a Fulbright FLEX Award from the Council for International Exchange of Scholars to travel to the Indian Himalayas in 2014 to research and prototype designs for high-altitude agricultural use. Working in the regions of Zaskar and Ladakh, Clouse will focus her work on the development of productive design adaptations for communities responding to the impacts of climate change.

"I am thrilled to have the opportunity to work on this research in India," Clouse said of the award. "The collaborative framework and the design-build approach necessitates on-site work in this remote location. I hope this research will offer new insights into high-altitude growing and opportunistic design strategies that might make that agriculture more productive."



WMAIA Executive Committee Member + UMass Assistant Professor, Carey Clouse

### WMAIA

#### EXECUTIVE COMMITTEE

##### PRESIDENT:

CHRISTOPHER FARLEY AIA

##### PRESIDENT ELECT:

HELEN FANTINI AIA

##### TREASURER:

THOMAS RC HARTMAN AIA

##### SECRETARY:

LUDMILLA PAVLOVA AIA

##### PAST PRESIDENT:

JEREMY TOAL AIA

##### MEMBERS:

CAREY CLOUSE AIA

ROBERT HARRISON AIA

DOUG MARSHALL AIA

MARTHA MONTGOMERY AIA

NAYEF MUDAWAR AIAS

STEPHEN SCHREIBER FAIA

JULIE WAGGONER ASSOCIATE AIA

##### EXECUTIVE DIRECTOR:

LORIN STARR AFFILIATE WMAIA

##### NEWSLETTER EDITOR:

RACHAEL CHASE ASSOCIATE AIA

##### EMERGING PROFESSIONALS

##### COORDINATOR

DORRIE BROOKS ASSOCIATE AIA

##### IDP COORDINATORS

JASON NEWMAN ASSOCIATE AIA

LINDSAY SCHNARR ASSOCIATE AIA

##### WEBSITE MANAGER

JULIE WAGGONER ASSOCIATE AIA

##### SOCIAL MEDIA

RACHEL BEESEN AIAS

##### FILM SERIES

ANDY GROGAN ASSOCIATE AIA

##### DISASTER ASSISTANCE COORDINATOR

JOHN ROBINSON AIA

CONGRATULATIONS GRADUATES!

# Architecture+Design

at The University of Massachusetts Amherst

## MASTER OF ARCHITECTURE THESIS 2014



**ADAM CASTELLI,  
PE, LEED GA**

GREENPOINT  
LIBRARY +  
COMMUNITY  
CENTER



**AVIVA J. GALASKI,  
LEED GA**

SUSTAINING  
COMMUNITY :  
A NEW SOCIAL,  
ECONOMIC, +  
ENVIRONMENTAL  
PATH FOR WARE, MA



**MAHSA GH ZADEH**

SLICE OF LIFE:  
FUTURE OF  
LIVING SPACE IN  
METROPOLITAN  
(TEHRAN)



# UNIVERSITY OF MASSACHUSETTS THESIS STUDENTS 2014



**JOHN R. GILBERT III**

RECONSIDERING  
THE COMMUNITY  
CENTER:

RESTORATIVE  
STRATEGIES  
WITHIN EXISTING  
FRAMEWORKS



**SAMANTHA  
GREENBERG,  
LEED GA**

FROM VACANT TO  
VIBRANT:

PROPOSING A  
NEW APPROACH  
TO THE ANCHOR  
STORE TYPOLOGY



After



Before



**DAVID  
HARRINGTON,  
LEED GA**

THE UNDER WING  
HOME

REFUGE  
MONOCOQUE  
HOUSING IN  
TORNADO PRONE  
LOCATIONS



**MATTHEW JONES,  
LEED GA**

BRIDGING  
THE GAP:  
COMMUNITY  
ORIENTED  
TRANSIT



# CONGRATULATIONS GRADUATES!

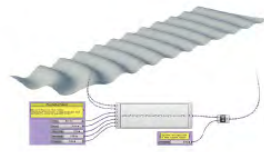


**PATRICK C. KITZMILLER**  
COMMUNITY COHESION:  
TRAIL OF BRATTLEBORO, VT  
ARCHITECTURE AS COMMUNITY BRIDGE

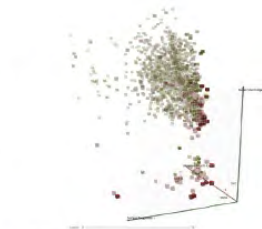


**ROBERT B. MARCALOW,**  
**LEED GA**

PARAMETRIC TOOLS IN THE DESIGN PROCESS



FORMULATE



GENERATE



SELECT

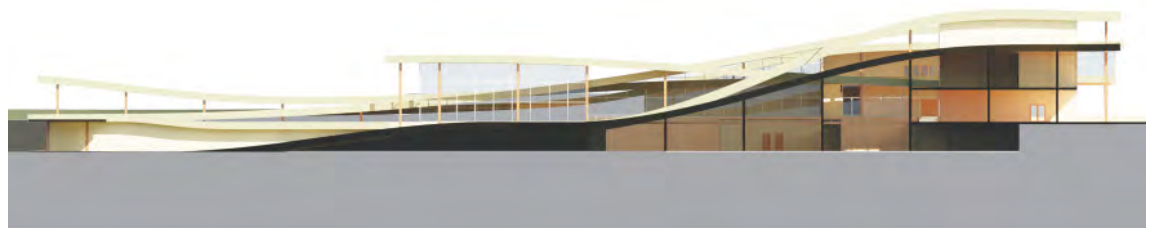


FABRICATE



**MARYAM SHAFIEE**

ARCHITECTURE FOR SCIENCE:  
SPACE AS AN INCUBATOR TO NURTURE RESEARCH



**ERIN RILEY,**  
**LEED GA**

BUILDING COMMUNITY:  
CONNECTING PEOPLE WITH  
THEIR LOCAL RESOURCE



# UNIVERSITY OF MASSACHUSETTS THESIS STUDENTS 2014



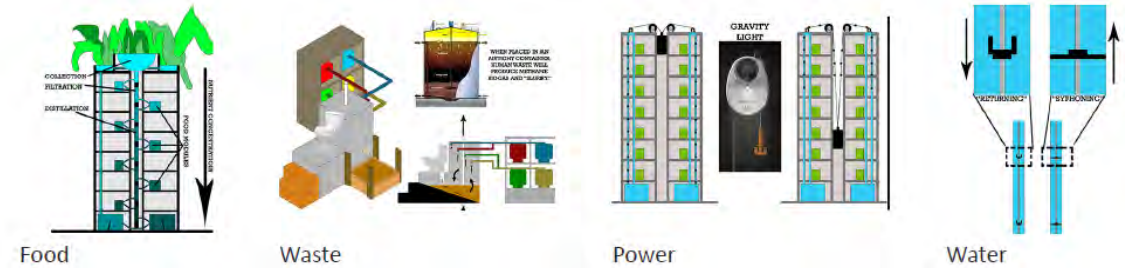
**OLAOLUWA  
SILVA,  
LEED GA**

COMMUNITY  
DEVELOPMENT  
IN EMERGING  
CITIES: A CASE  
FOR LAGOS,  
NIGERIA



**BRYAN  
TOEPFER**

UTOPIA IN THE APOCALYPSE:  
CREATING A FRAMEWORK OF SURVIVAL SYSTEMS



**KYLE  
BYRON YOUNG**

MOUNT TOM  
SELF  
TRANSFORMATION  
RETREAT  
HOLYOKE, MA



**ZHAOXIONG  
YU**

INVESTIGATION OF  
HISTORICAL AREA  
IN XI'AN, CHINA



WOULD YOU LIKE TO WRITE AN ARTICLE FOR THE NEWSLETTER?  
EMAIL EDITOR@WMAIA.ORG



# STUDENT WORK: WILLIAMS COLLEGE



ARCHITECTURAL DESIGN I

ANDREW UDELL



PROFESSOR: HENRY BENEDICT

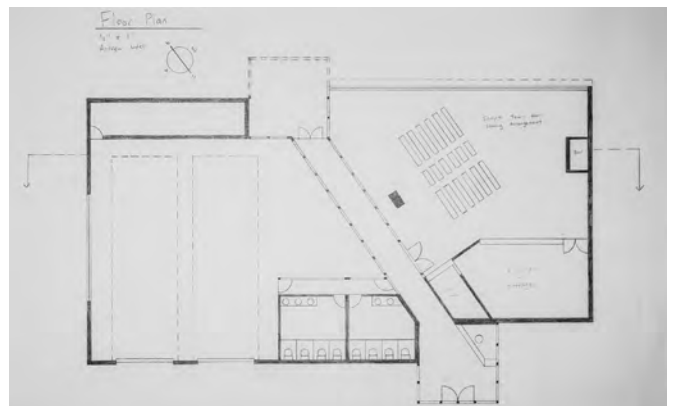
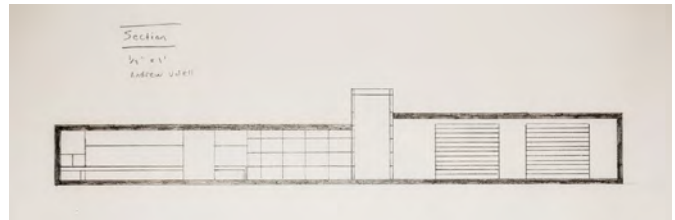
effective  
award-winning  
elegant  
colorful

websites / logos / brochures  
architectural photography  
text / copy writing  
qualifications / proposal packages  
awards program packages  
marketing plans

mica  
blue  
CREATIVE

clients include:  
Head Start  
Margo Jones, Architects  
C.J. Lawer Associates, Architects  
Lukas Design Interiors  
Paintbox Theatre  
Berkshire Hematology Oncology  
J.P. Engineering

Julie Waggoner  
(413) 665-2280  
jwaggoner@micablue.com





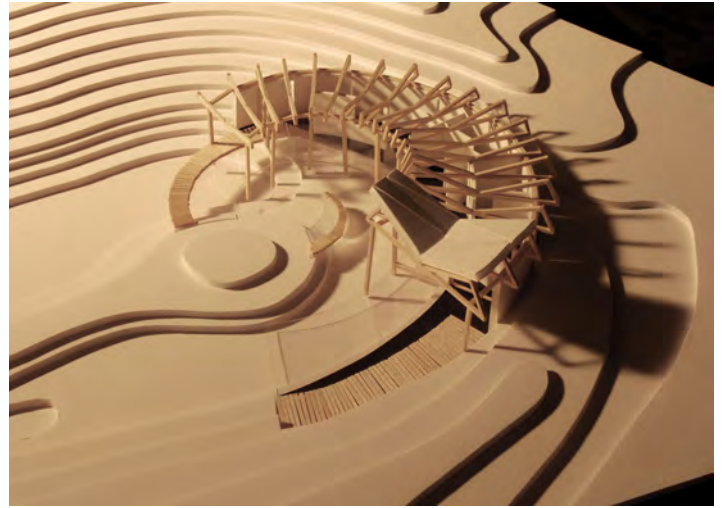
# STUDENT WORK: SMITH COLLEGE

## ADVANCED ARCHITECTURE, SPRING 2014



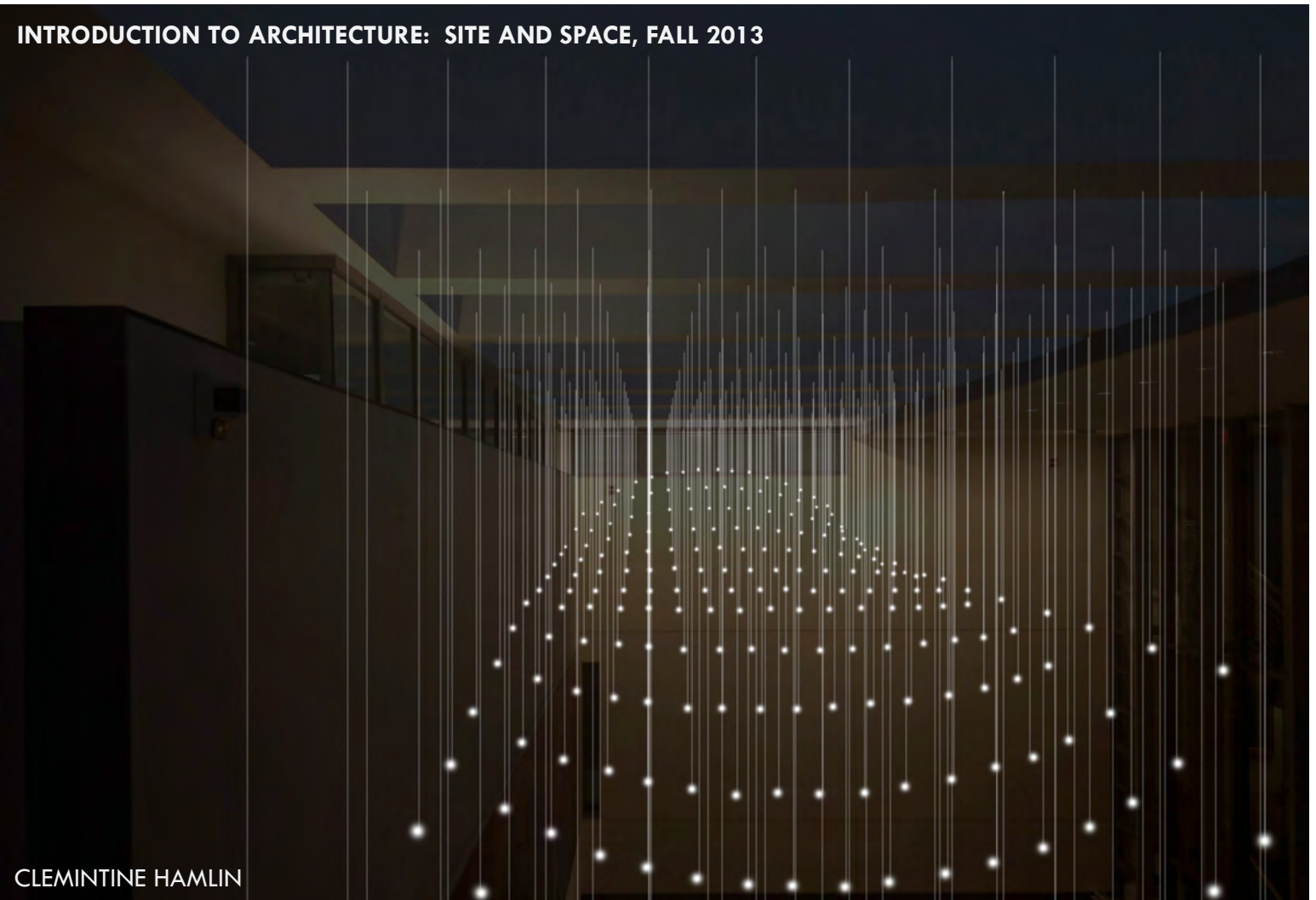
REBECCA FLORES

PROFESSOR: JAMES MIDDLEBROOK

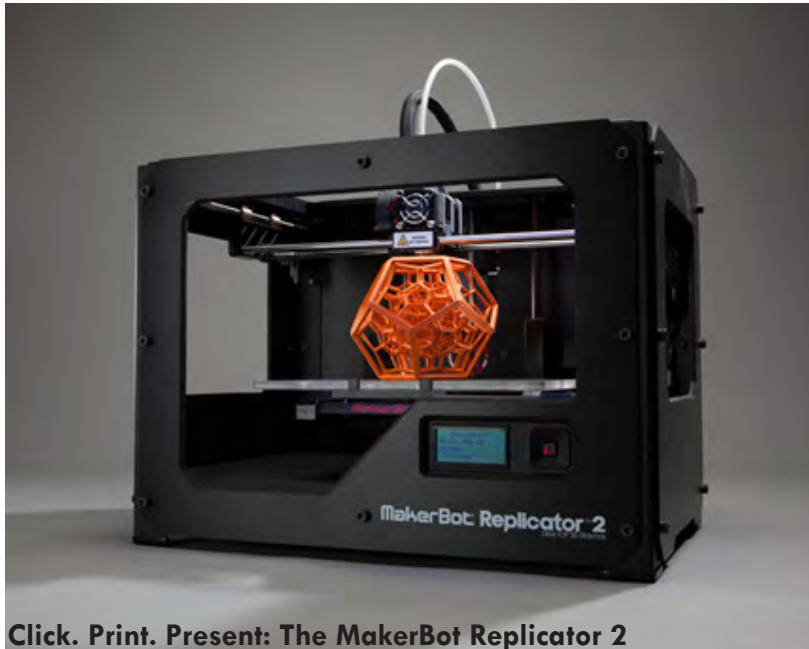


CLEMINTINE HAMLIN

## INTRODUCTION TO ARCHITECTURE: SITE AND SPACE, FALL 2013



CLEMINTINE HAMLIN



Click. Print. Present: The MakerBot Replicator 2

Remember those sleepless nights in the studio?

The hours of lost sleep that seemed to just keep stacking up on each other? The feeling of total isolation?

The frustration that arose when the computer shut itself down in the middle of a crucial design moment?

These things haven't changed in the architecture studio.

But we now have a new technology that makes our tasks as designers more efficient. This new technology allows us to manufacture physical 3D models of our projects.

The cutting and gluing together of a physical model is becoming obsolete. We can now produce and export a file; and a 3D printer can create our building.

At UMass Amherst, we have the technology to "print" a 3D model with the Makerbot. The process goes as follows: A computer aided design (CAD) file is created. It is then sent to a 3D printer. The printer then builds the object in the CAD file by starting at the base and applying sequential layers of material. The end result is a fully realized model of the design.

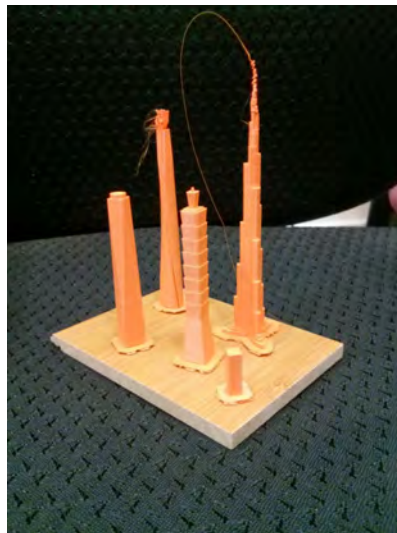
What seemed a fantasy -- printing our designs in three dimensions -- is now a reality. How will this type of manufacturing affect the accuracy and productivity in today's architectural world?

As architects, we know that it is very time consuming to construct a hand-made model. With 3D printing, you may wait from six to 24 hours to see the final product. Let the machine assemble the model while you focus on the rest of your presentation.

The other compelling aspect of this technology is that your design can be sent all over the world: With the click of a button, your building model can emerge 1,000s of miles away...or be ready for a client coming to the office the next day.

While the facilities at UMass are not available to the public, there are numerous companies that provide this service. Try [www.i.materialise.com](http://www.i.materialise.com) or search [www.makexyz](http://www.makexyz) for local resources.

A 2000 SF House, printed at 1/16" scale, would cost approximately \$50.



## ADVANCED TOPICS IN CAD & BIM

BUILDING AND CONSTRUCTION TECHNOLOGY

UMASS AMHERST SPRING 2014

PROFESSOR ALEXANDER C. SCHREYER



DO YOU HAVE ANY TECHNOLOGY RELATED QUESTIONS?

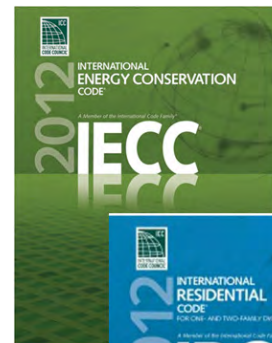
[EMAIL\\_EDITOR@WMAIA.ORG](mailto:EMAIL_EDITOR@WMAIA.ORG)

**MASSACHUSETTS STRETCH CODE UPDATE DELAYED**

The 2012 IECC (international energy conservation code) is effective July 1. Interestingly, the Massachusetts Stretch Code has not yet been updated. The result is that communities that have been designated Green Communities and have adopted the Stretch Code (approximately half of Massachusetts towns) will continue to use the 2009 IECC based stretch code. Hopefully the BBRs (MA code authority) and the Dept of Energy Resources will rectify this situation soon.

Massachusetts is considered a national leader in building energy codes. Many states are looking to us, especially because of a new EPA ruling that could move states to reduce building energy use and corresponding carbon emissions. In 2009, Governor Patrick formed the Zero Net Energy Building Task Force to move Massachusetts toward zero net energy residential and commercial construction by 2030. Building codes are evolving to help the market transition to high performance building standards. Since we have been building with cheap energy methods for the last 60 years, the transition is not easy.

The future code, the 2015 IECC, is more stringent than the 2012 IECC, and gets us closer to the zero net energy target. Many stakeholders consider the Stretch Code an appropriate tool to bridge the gap and help the market transition. Yet there are many in the industry who do not accept the mandate to build to a higher energy performance standard. Undoubtedly, code changes can be confusing. Since the structures we build today are going to last a long time, it makes sense to build to a standard we are aiming for in the future. We all need to consider what kind of built environment we want to leave for future generations.



A CLASSIC  
**REINVENTED**  
*from Marvin*

THE NEXT GENERATION  
ULTIMATE  
DOUBLE HUNG WINDOW

*Marvin combines state-of-the-art technology  
with legendary craftsmanship to unveil  
this first of its kind window. A modern innovation  
that remains historically authentic.*

**MARVIN**  
Windows and Doors  
Built around you.™

Available soon. To experience this innovation contact your nearest retailer.

R.K. MILES, INC.  
24 West Street • Route 5 North • West Hatfield, MA  
866.446.5820 • www.rkmiles.com



**Adin Maynard** is a HERS rater and BPI Building Analyst.

His company, HIS & HERS Energy Efficiency, supports architects and builders with code compliance, building diagnostics, and rebate programs.

[adin@hhefficiency.com](mailto:adin@hhefficiency.com).

[www.hhefficiency.com](http://www.hhefficiency.com)

DO YOU HAVE ANY ENERGY RELATED QUESTIONS?

EMAIL [EDITOR@WMAIA.ORG](mailto:EDITOR@WMAIA.ORG)

# FEATURED ARTISAN

*sticks and bricks*

## STICKS AND BRICKS IS AN ARTIST COLLABORATORIUM.

Sticks and Bricks is a design and build shop located at 9 Market Street in Northampton.

This unique workshop and retail space makes one-of-a-kind furniture- often from old, under-used and reclaimed materials. Liz Karney and her friend, co-designer, and principal collaborator and space-sharer Justin Brown fill the shop with dressers, sideboards, kitchen tables, lamps, chairs and an endless array of home furnishings that double as functional art.

While they sometimes have to use new materials to make a custom piece, Liz and Justin mostly work with and are inspired by materials that are relics from another time and place. Legs from an old sewing machine. Old industrial machine parts. Hinges. Knobs. Reclaimed barn board. Old dressers stashed away for decades in an attic or basement. Liz and Justin have a knack for finding, re-imagining, taking apart and repurposing into something entirely new.

Their pieces fuse the rich history and character of the past with a modern sensibility. They are original, beautiful, well-made pieces of art that are, at the same time, highly functional for every room in the home.

Visit them online at [www.sticksandbricksshop.com](http://www.sticksandbricksshop.com)



Photos: Liz Karney + Ilana Panich Linsman



HAVE YOU WORKED WITH AN ARTISAN WE SHOULD KNOW ABOUT?  
NOMINATE SOMEONE FOR 'FEATURED ARTISAN' BY EMAIL AT [EDITOR@WMAIA.ORG](mailto:EDITOR@WMAIA.ORG)

## BEFORE + AFTER: MILLER POLLIN ARCHITECTURE

Tracy and Paul Opalinski inherited a home in Ware, Massachusetts. The mint condition 1961 ranch house was left to them by an uncle, Max Urban, who founded a sporting goods manufacturing business in Ware in 1959. Tracy and Paul decided to move to Ware and live in the house, but there was one problem: they didn't want vintage ranch. They wanted pure modern. Tracy had a vision of a calm, uncluttered living environment. She and Paul visited Sigrid Miller Pollin's studio in Amherst with this vision in mind and a collaboration began.

An architectural project is only as good as its clients and the Opalinskis were open to a wide range of design explorations. "The clients blew my mind!" said Sigrid. Tracy wanted a kitchen that didn't look like a kitchen, open white space, a greater sense of volume in the flat ceilinged living room, a meditation/yoga space, a new spacious, uncluttered master bedroom suite and innovative bedroom-bath combinations for their grown son and daughter. The exterior would essentially remain untouched, but entering through the door would be an experience of light, tranquility and pure space. This conceptual thinking undergirded the renovation.

Miller Pollin collaborated with the Opalinskis to dream up a "kitchen as furniture." They hatched the idea of "the form," an oval volume skinned in a dark Ipe wood finish which would serve multiple functions between the kitchen and the living room: pantry, refrigerator, freezer, broom closet, and media center. Two carefully-located floating islands would form the rest of the kitchen for a seamless but utilitarian work space.

Tracy wanted to stay with the same "vocabulary" throughout the project. Subtractive niches were carved out of thick walls to house selected crystal pieces or allow glimpses through spaces. Pocket doors for closing off spaces and pantry doors became white Japanese shoji screens with rice paper, a design concept partly inspired by Frank Lloyd Wright's translucent ceiling at Fallingwater. Miller Pollin integrated a soft plaster dome into the center of a design for translucent ceiling panels. Michael Humphries of Humphries Woodworking brilliantly met the challenge of refining and producing the project's woodwork. An energy efficient mechanical system was installed by MJ Moran, which included geothermal wells.

"The project was a truly collaborative effort," Tracy told Sigrid when the project was completed. Sigrid agreed. "Without the design vision and tenacious character of the clients we would never have seen the magic that happened in the story of this house in Ware."

Architect: Miller Pollin Architecture

Principal: Sigrid Miller Pollin FAIA

Assistant: Andrew Bagge AIA

Structural Engineer: Ryan Hellwig PE

General Contractor: Bob Dymon, Dymon Enterprises, Inc.

Finish Carpentry: Michael Humphries Woodworking

HVAC/Geothermal: MJ Moran Inc.

Photography: "Before Photos" Andrew Bagge

"After photos" Shelly Harrison Photography



**BEFORE**



# WM AIA newsletter

190 NORTH MAIN STREET • FLORENCE MASSACHUSETTS • 01062

Prsrt Std  
US Postage  
PAID  
Permit 183  
Greenfield



## Solar power for high performance design



Goldham & Hartman Architects

## WM AIA programs

WMAIA Programs will resume in September  
Watch your enews for updates!

**DID YOU NOTICE WE ARE NOW (PARTIALLY) IN COLOR?  
WHAT DO YOU THINK?**

EMAIL [EDITOR@WMAIA.ORG](mailto:EDITOR@WMAIA.ORG) WITH FEEDBACK!

AIA NEW ENGLAND REGIONAL CONFERENCE  
**TRANSFORMATION**  
SEPTEMBER 26-27, 2014 • PROVIDENCE, RHODE ISLAND

FOR FULL CONFERENCE INFORMATION +  
DESIGN COMPETITION CALL FOR ENTRIES  
GO TO [WWW.AIA-RI.ORG](http://WWW.AIA-RI.ORG)



