



Sustainable Design/Build Program: A Yestermorrow and UMass Collaboration

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Good design
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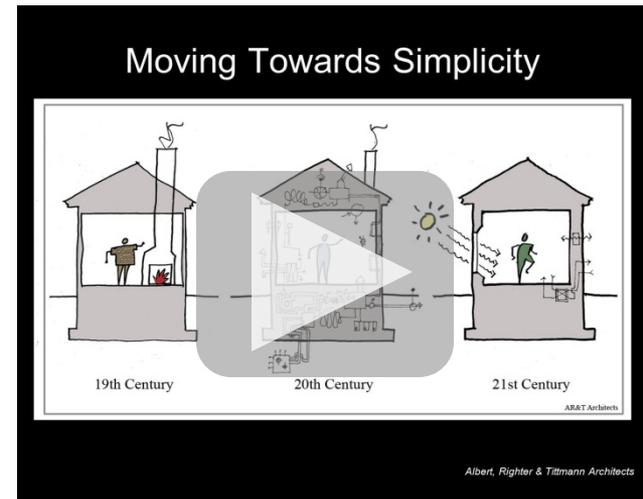
Form Follows Energy

Research, Building Science and Architecture

Detailing for Durability

Healthy Homes Research

Researching Resiliency



<http://network.aia.org/hkc/home/WebinarSeries>

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All attendees will be eligible to receive:
1 HSW LU (AIA continuing education) or
1 IDP Hour (Supplemental Experience).

All attendees at your site will submit for credit by completing the webinar survey/report form.

The URL to the survey/form will be listed at the end of the presentation *and* emailed to attendees. Certificates of Completion can be download at the end of the survey.

Continuing education questions can be directed to knowledgecommunities@aia.org.



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Course Description 1 of 2

In the fall of 2011 and 2012, Yestermorrow Design Build School and UMass Amherst Architecture+Design Program ran their new Sustainable Design|Build Semester program in rural Vermont. Open to undergraduate students from any discipline and school, the program addresses far-reaching sustainability topics through the lenses of small scale architecture and collaborative design/build. Over the course of two respective single fall semesters, students have designed and built two small houses. While referencing other national design|build models, this program distinguishes itself for four unique parameters: an interdisciplinary design approach, a sustainable design agenda, a consensus model of decision-making, and an immersion “study away” campus experience.



Course Description 2 of 2

With that in mind, presenter, José Galarza, in conjunction with Carey Clouse, AIA, defines the basic methods for running effective design/build studios. This presentation covers the first two projects completed: two semesters of design|build with two different groups. The work covered will discuss sustainable systems, design, and strategies, and explain of techniques used to address building safety and user comfort in the context of a very small building. The course provides an introduction to the design and construction of very small spaces, along with an overview of teaching considerations for this unique classroom alternative.



Learning Objectives

1. Develop innovative sustainable systems, design, and strategies for small houses.
2. Understand techniques used to address building safety and user comfort in the context of a very small building.
3. Explain key resources for an equitable, consensus model of decision-making.
4. Understand interdisciplinary approach to sustainable design.





José Galarza
Director of Semester Programs
Yestermorrow Design/Build School
Warren, VT
Speaker



Carey Clouse, AIA
Assistant Professor
University of Massachusetts Amherst
Amherst, MA
Speaker



Stephen Schreiber, FAIA
University of Massachusetts Amherst
Moderator

Submit a question to the moderator via the Chat box. They will be answered as time allows.



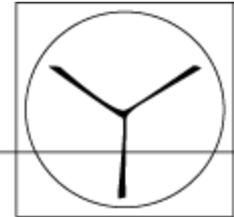


SUSTAINABLE

DESIGN/
BUILD
PROGRAM

YESTERMORROW

DESIGN / BUILD SCHOOL



UMASS
AMHERST

Continuing & Professional Education



















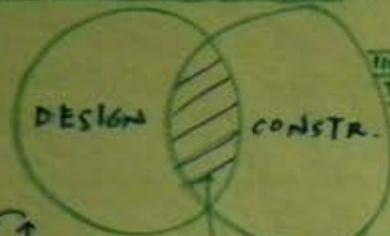


WHAT DOES SUSTAINABLE DESIGN

BUILD MEAN TO YOU?

INCLUSION: ALL ARE WELCOMED INTO THE SPACE AND CAN BRING ASPECTS OF THE DESIGN PROCESS.

HEALTHY COLLABORATION BETWEEN ALL PLAYERS AT ALL PHASES



→ LONGEVITY. SEEING BEYOND 40 YEARS
 "BUILDING TO LAST"
 "QUALITY"
 FUNCTIONALITY: THE NEEDS TO SERVE A PURPOSE & WORKS WELL.

→ HOLISTIC. CONVERSATION BETWEEN MATERIALS, SITE, C

CONTEXT: COMM. INTENT. UNITY, SITE, EDUCATION, "HOME", ETC.

ECOLOGY: LOOKING @ A BIG PICTURE OF BUILDING & SITE/MAT. & BUILDING/SITE & COMMUNITY.

DESIGN/BUILD

CONTINUAL DIALOGUE BETWEEN THE ACT OF DESIGNING AND THE INTENT

EFFICIENCY: CONSIDER PROPERTIES OF MATERIAL. CON. SITE. SERVAION, ENERGY CONSERVATION

INTENTION: CLEAR

CARE: CREATING IDEAS OF USE, FUTURE POS. AN ARTIFACT(S) THAT WILL BE CARED FOR. ALL ABILITIES, COMMUNITY, ETC.

CONSIDER THE IMPACT.

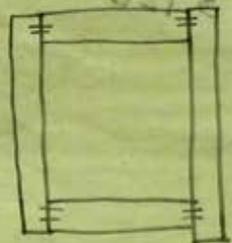
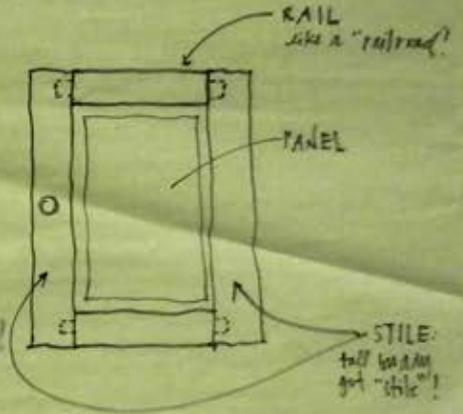
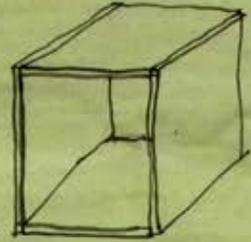
ASPECTS OF CREATION

HOLISTIC:
 ARTISTIC
 ENVIRONMENTAL
 STRUCTURAL

INHABITANTS: DWELLERS WITHIN HAVE SPECIAL NEEDS WHICH SHOULD BE CONSIDERED & HONORED.

23 AUGUST 2012

CABINETS: a box with a pretty face!



A BOX ...

A DOOR!

FACE FRAME TRADITIONAL/WESTERN

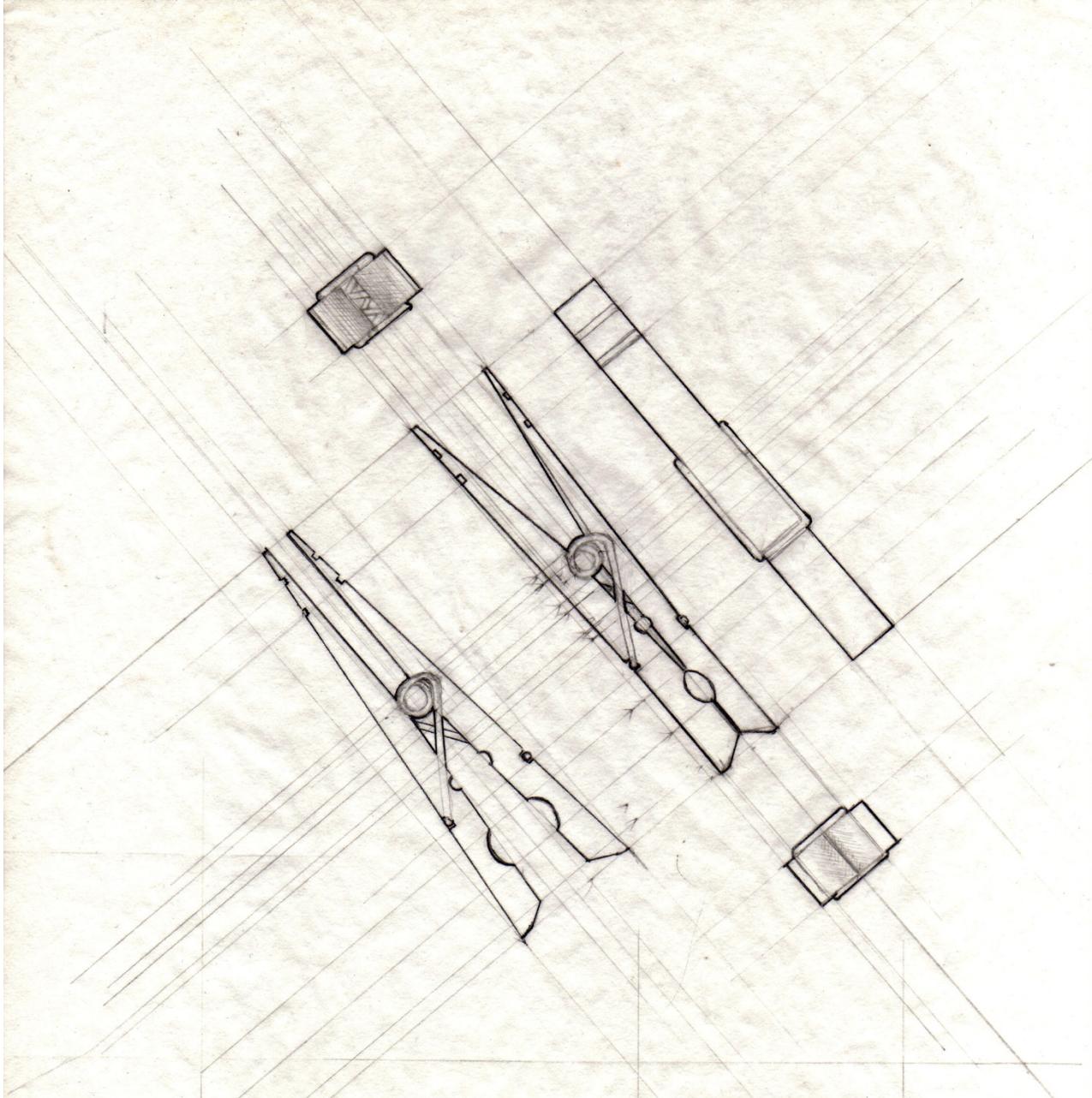
EURO-STYLES/EUROPEAN STYLE

WAKE

WANT

WAKE

WANT





















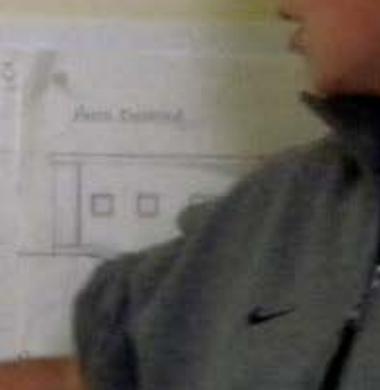
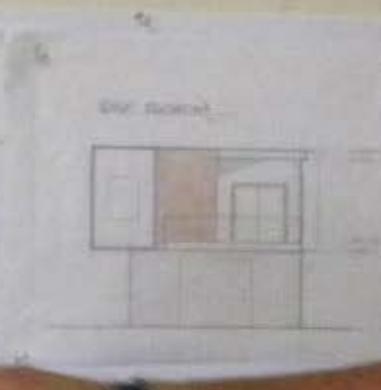
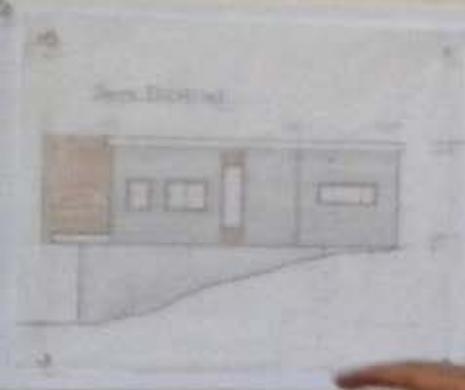
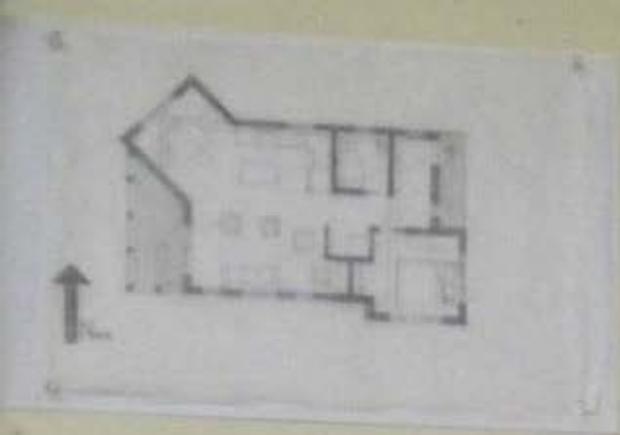










































































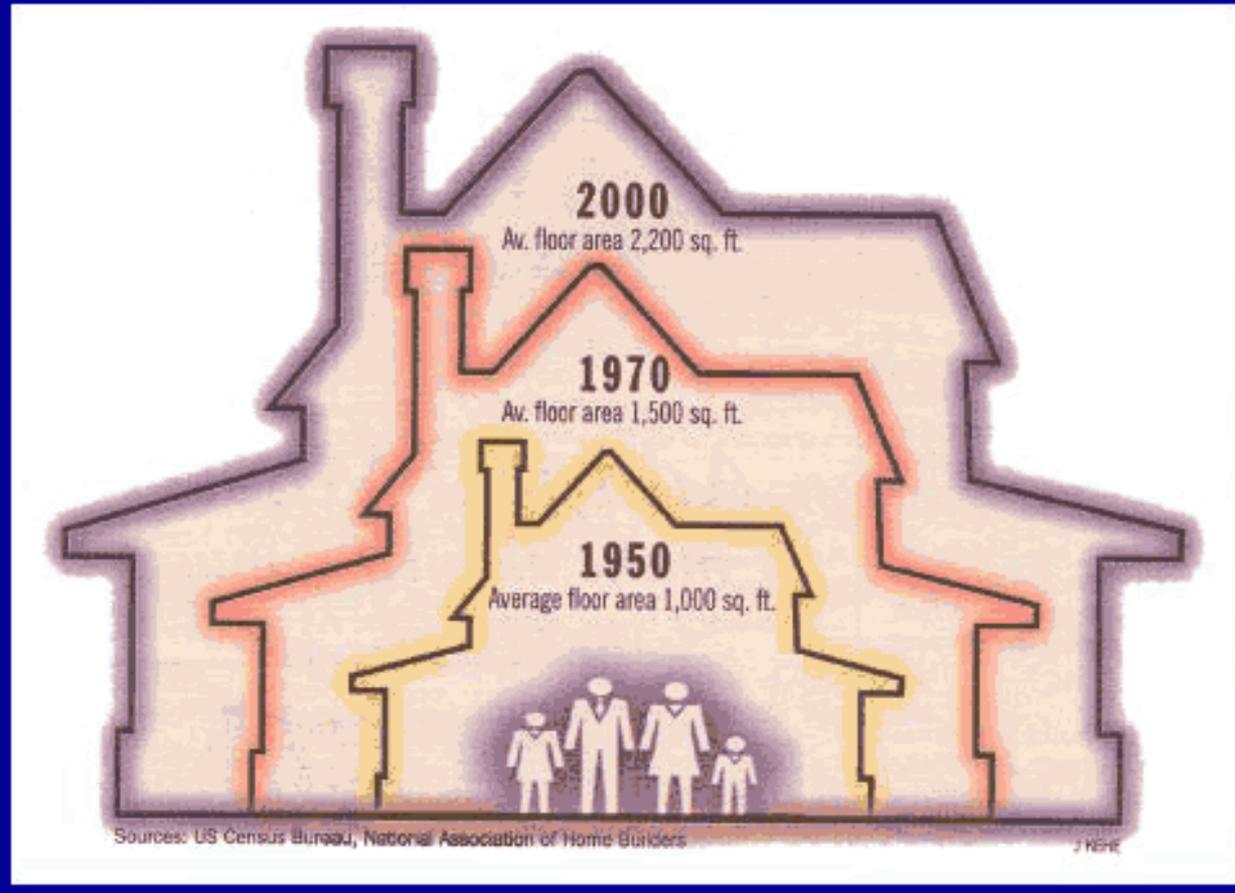






2011

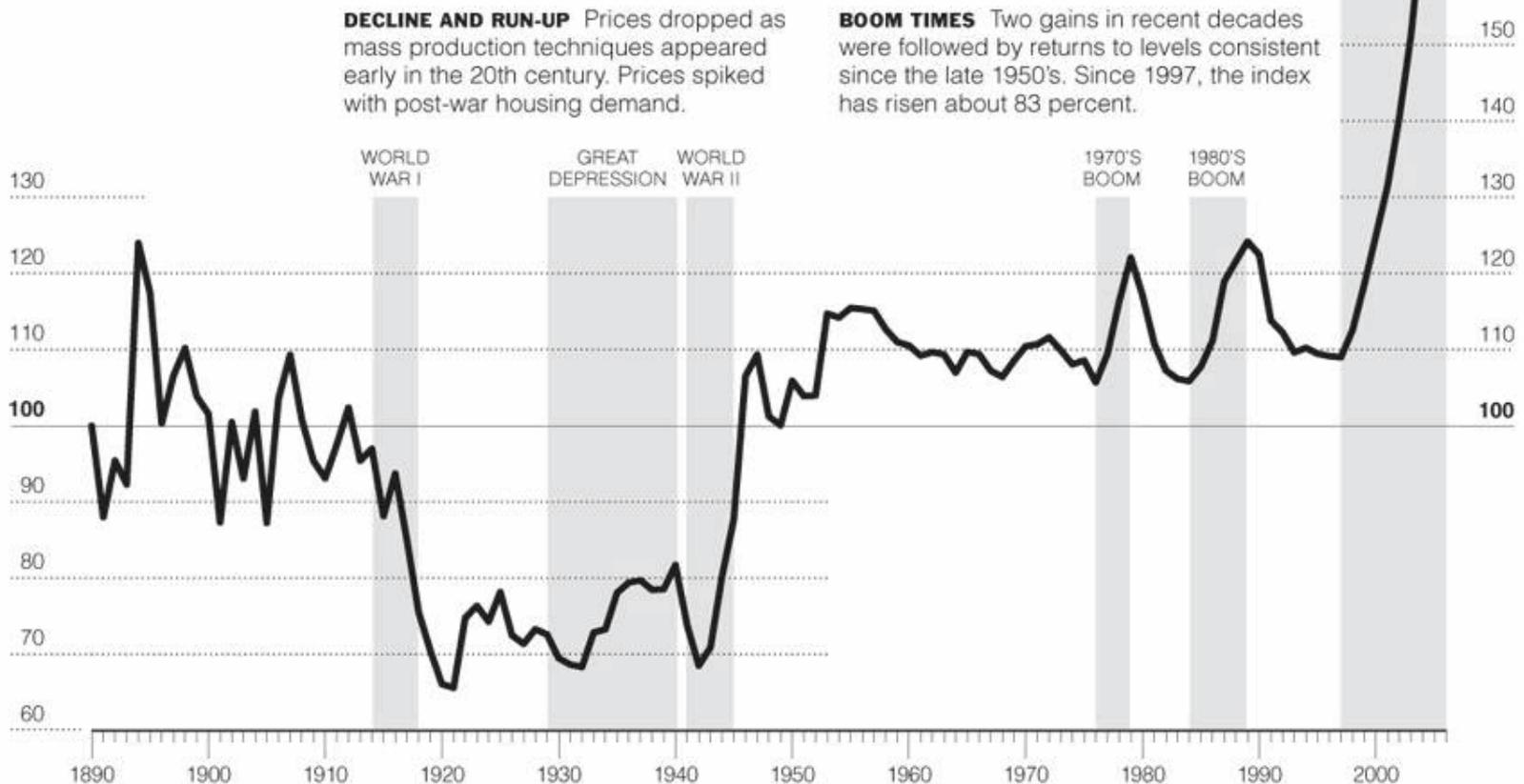
1950 3.37 people per household - 297 s.f. per person
1970 3.14 people per household - 478 s.f. per person
2000 2.62 people per household - 840 s.f. per person



A History of Home Values

The Yale economist Robert J. Shiller created an index of American housing prices going back to 1890. It is based on sale prices of standard existing houses, not new construction, to track the value of housing as an investment over time. It presents housing values in consistent terms over 116 years, factoring out the effects of inflation.

The 1890 benchmark is 100 on the chart. If a standard house sold in 1890 for \$100,000 (inflation-adjusted to today's dollars), an equivalent standard house would have sold for \$66,000 in 1920 (66 on the index scale) and \$199,000 in 2006 (199 on the index scale, or 99 percent higher than 1890).



Source: "Irrational Exuberance," 2nd Edition, 2006, by Robert J. Shiller

Bill Marsh/The New York Times



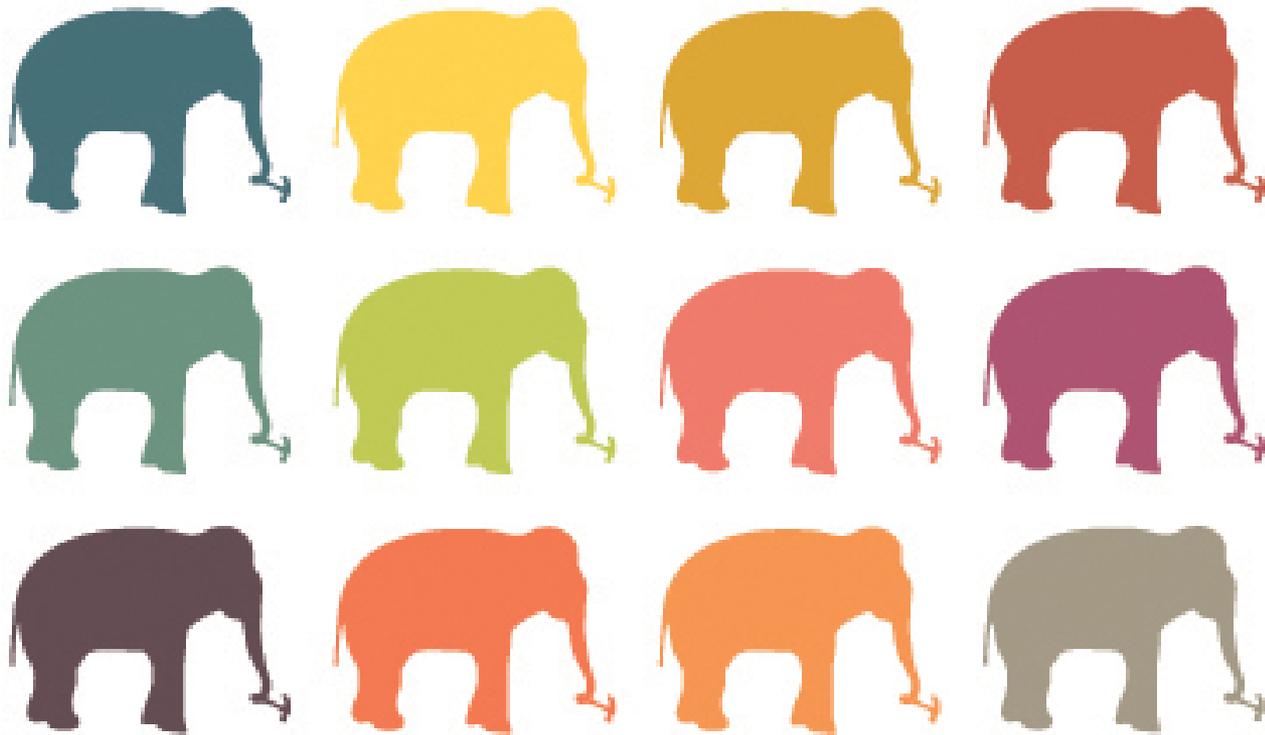
Yestermorrow Semester in Sustainable Design/Build 2011

It's okay to be tiny.

Somewhere in a McMansion someone is trying to mop the floors.
All of them.

Our little house thinks you deserve better.
It isn't afraid to be different. Or cheap. Or sustainable.
And it knows you aren't either.

See the big picture in your tiny house.



it's okay to be tiny.





Tiny House (227 SQFT)

2012 WMAIA Honor Award Winner

Features Include:

- Transportable
- 50 AMP electric (suitable for PV)
- Composting Toilet
- Charred Cedar Shiplap Siding
- Recycled/Salvaged Material Throughout









Yestermorrow Design/Build School | UMass Amherst

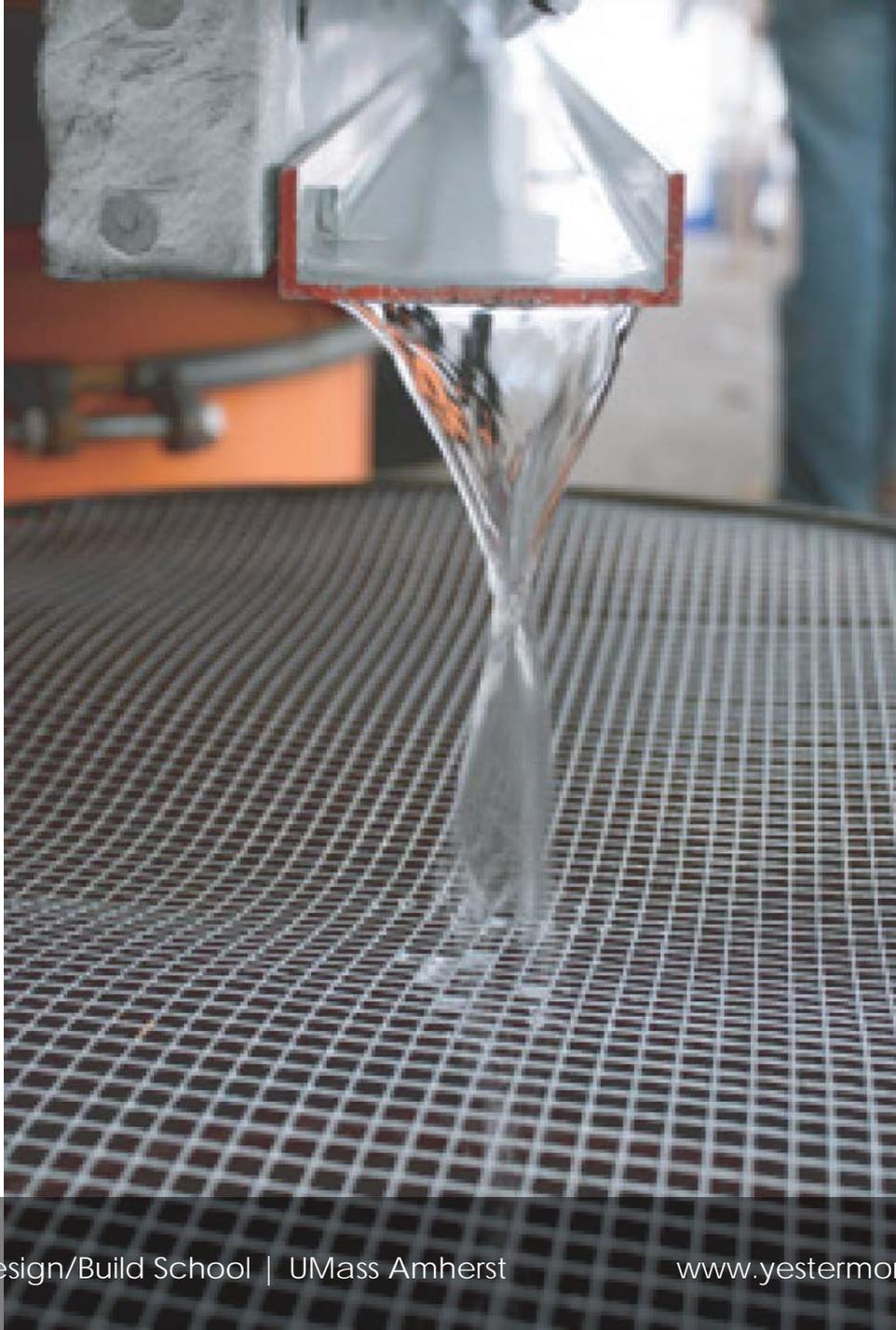


www.yestermorrow.org/semester

















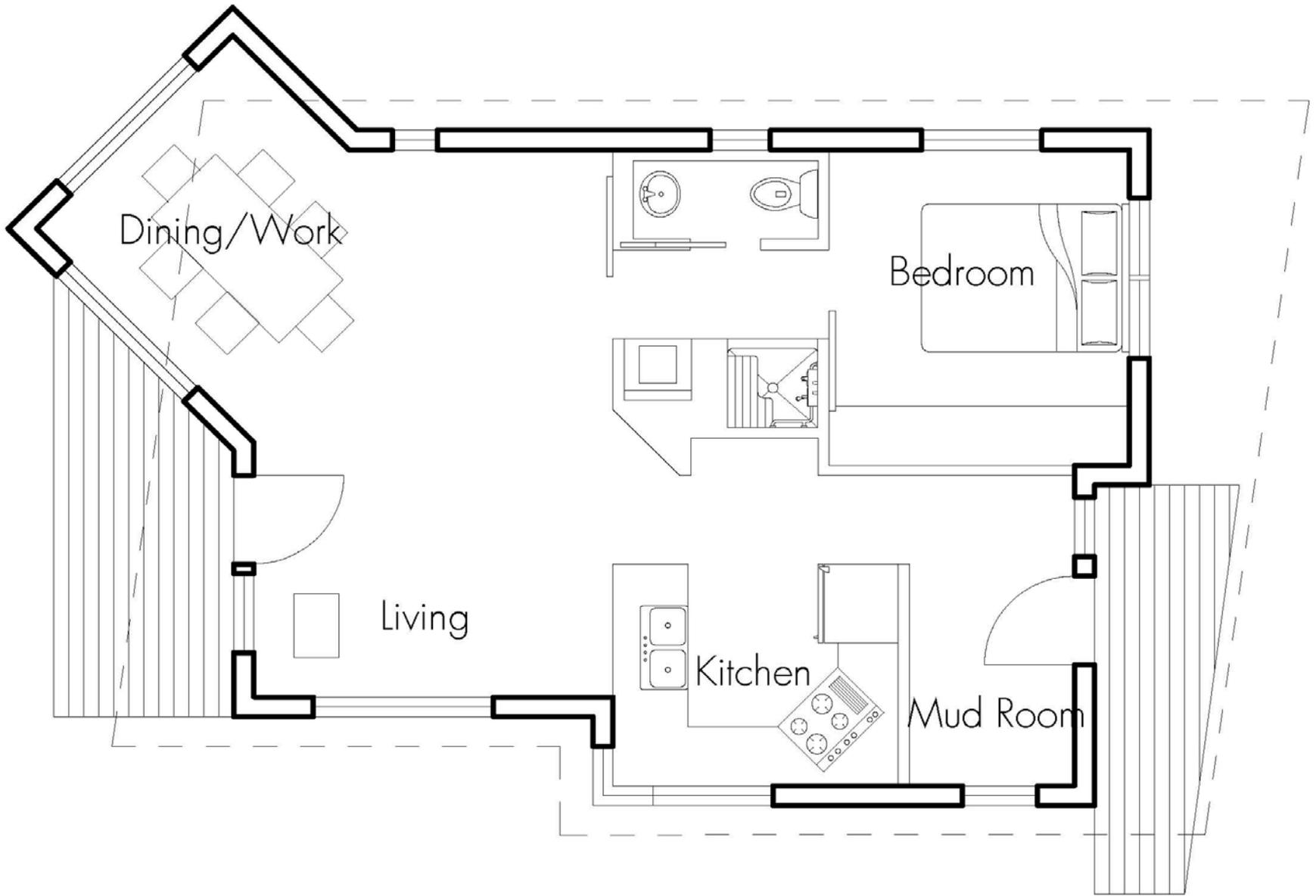



it's okay to be tiny
Presented in partnership with DesignBuild 2017

OPEN HOUSE TODAY
3:30-6PM
Yestermorrow Design/Build School is a 501(c)(3) nonprofit organization. All proceeds from this event will be used to support our programs.



2012



Small House (625 SQFT)

Features Include:

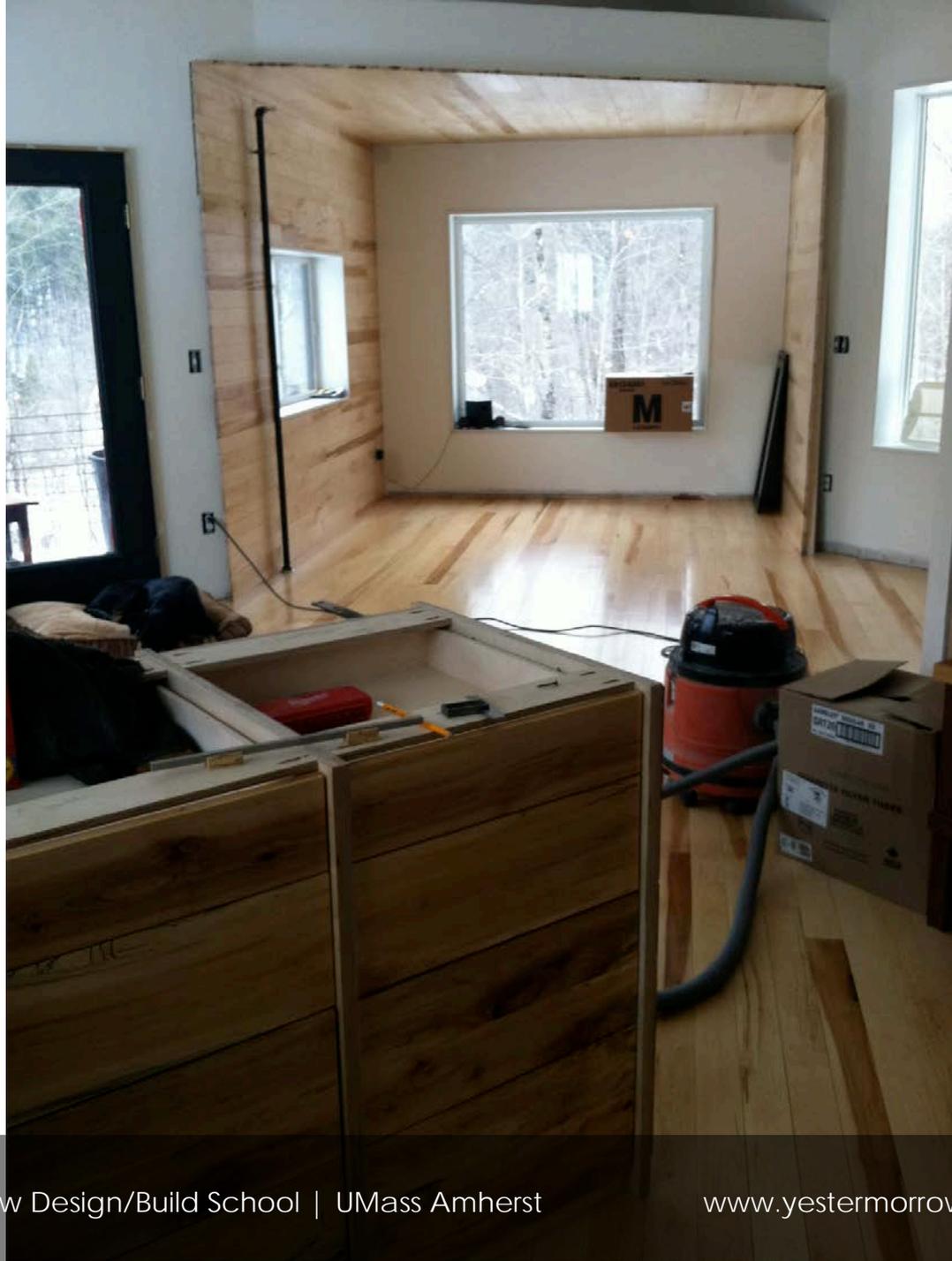
- Multiple cantilevers
- Salvaged cherry as exterior cladding
- Visible heavy steel structure
- Shop-built corner wood
- Super insulated cellulose blown walls
- Locally built Elm Woodstove
- Sheet steel wrap on exterior

















INSTRUCTORS: BEN CHENEY, CAREY CLOUSE, JOSÉ GALARZA, JOSH JACKSON, ANNIE MURPHY, ANNA LUCEY ○ STUDENTS: ERIC STUMPF (SKIDMORE COLLEGE), EVAN MORRIS (CLEMSON UNIVERSITY), HARRY HARRIS (POMONA COLLEGE), HENRY RUTLEDGE SHEPLEY (UNIVERSITY OF VERMONT), RYAN HERRICK (HAMPSHIRE COLLEGE), TERRI CHAPMAN (NEW SCHOOL), URS RIGGENBACH (COLLEGE OF THE ATLANTIC), EVAN DUNAGAN (UNIVERSITY OF WASHINGTON), MATT SUTTER (UMASS AMHERST), MEGAN MORSE (NORWICH UNIVERSITY), RUBY NELSON (COLLEGE OF THE ATLANTIC), AUSTIN ANDERSON (NEW YORK UNIVERSITY), BEN RESNICK (BROWN UNIVERSITY), BRIAN THOMAS KENNEDY (BATES COLLEGE), GRACE BENNETT (UNIVERSITY OF OREGON), JENNIFER CAVANAUGH (HAMPSHIRE COLLEGE), MIRA LIEMAN-SIFRY (TUFTS UNIVERSITY)

2011 - 2012

For more info:

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(802) 496 – 5545

Stay in touch with us via our website, e-newsletter, blog, Facebook group, Twitter or LinkedIn.

Follow the student produced blogs from 2011 & 2012 semesters:
<http://ym-semester.tumblr.com/>
<http://ym-semester12.tumblr.com/>



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Yestermorrow Design/Build School
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Thank you for joining us!

This concludes the AIA/CES Course #H13003.

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