

Geoffrey Warner, FAIA

ALCHEMY

Principal Architect, Owner, and weeHouse® Founder

2020



Geoffrey Warner embraces Big Thinking for Small Projects.

His weeHouse® and related explorations leverage design systems and prefabrication with an emphasis on craft, restraint, efficiency, and a celebratory use of resources.

Geoffrey Campbell Warner has crafted his studio as a forerunner for the future of architectural practice. Alchemy's uniquely integrated process—developed through years of experience and experimentation with manufacturers—embraces balanced aesthetics; practical production; and efficient cost, materials, and energy use. Alchemy paves a way for others that is both achievable and sustainable. Warner's impact on design is not in spite of small projects, but because of small projects.

Hands-On Building

A product of the Midwest, Geoffrey embraces the farmer's practical, hands-on sensibility, combining it with an admiration for the poetics of the industrial and agrarian landscape.

Influence

S. Claire Conroy, Editor-in-Chief of *Residential Design Magazine*, wrote of Warner's work in 2020, "There are two powerful housing ideas that caught the imagination of the public during the early part of this millennium. The first was the modern modular movement, and the second was the tiny house crusade. At the forefront of both of those waves was Geoffrey Warner of Alchemy in St. Paul, Minnesota. ... The weeHouse is a synthesis of modular and tiny house, with the dual goal of making architect-designed housing more affordable and accessible."

weeHouse®

A client's 2002 request for a \$50,000 cabin led to her 330 square-foot prefabricated "wee house," which gained international attention as a symbol of architectural optimism. That success encouraged development of the weeHouse as a flexible, pre-designed modular system, leveraging modular factories around the country to create dwellings "from 300 to 3,000 square feet." Organizing a design-centered architecture office around a design-delivery product (and one with a registered trademark) was unique in 2003 and continues to be so more than 15 years later. The weeHouse is anything but "wee" when its wider global ramifications are considered.

Learning from the Past, Embracing the Future

Informed by the years of research behind the weeHouse, Alchemy's latest efforts have centered on hybrid panelized or modular delivery methods. These cross-fertilized efforts have led to developing design systems for panelized BarnHouses; an ADU program of lightHouses; a one-room, sustainable mobile hotel; and a passive house homeless community solution. Developing these complementary systems stems from Warner's belief that creativity can be more accessible within limitations. With a focused delivery platform and streamlined materially, designers are liberated to concentrate on the problem's essence.

Overview



Overview

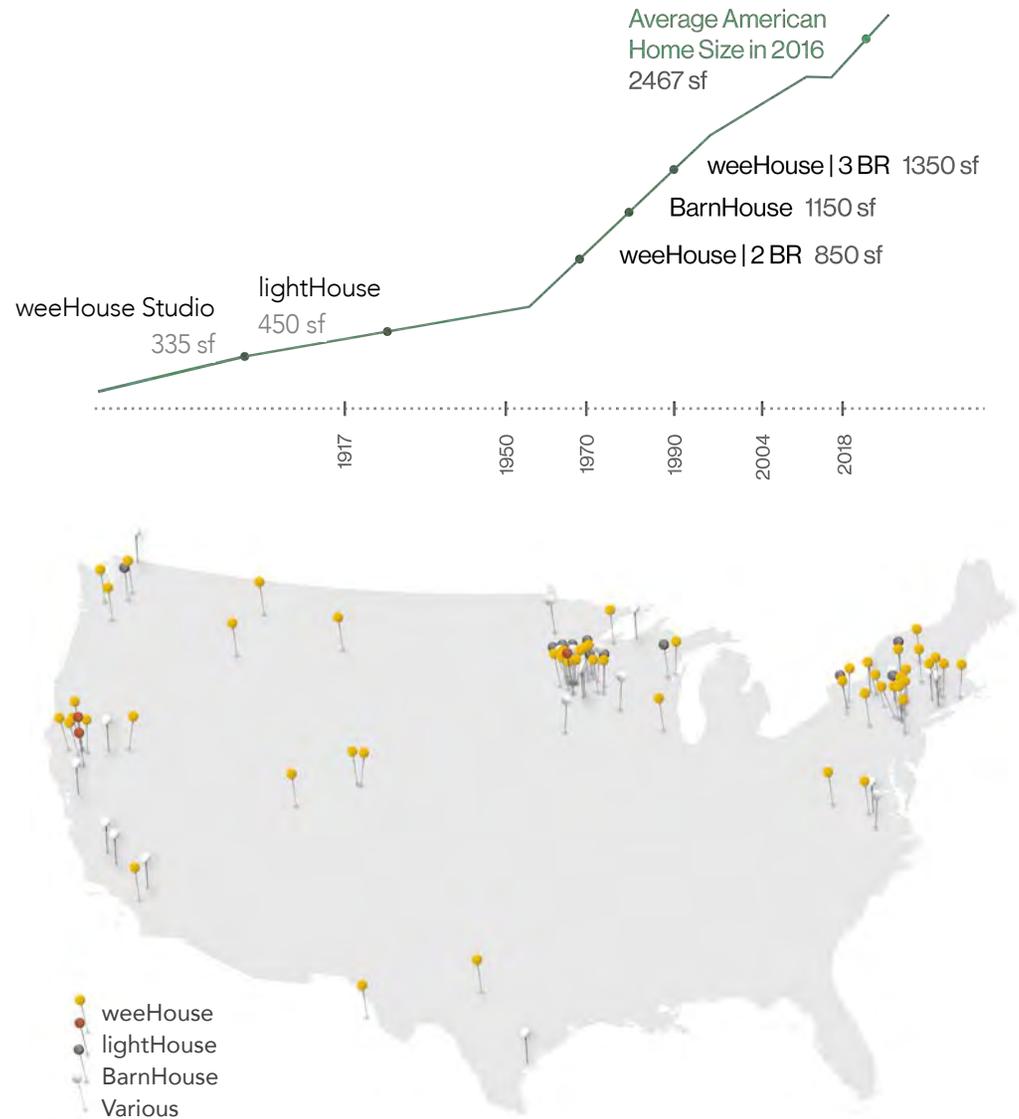
Delivering design. One small project at a time.

Warner has embraced small projects knowing the economics of developing them is offset by their global importance in a more sustainable future.

Supporting creative research and innovation while maintaining billings within a practically run office demands new ways to weave common threads in project delivery systems. The work represented here illustrates how Warner and his team at Alchemy Architects has used its limited resources to make quality design more accessible for over twenty-five years.

Warner's office is dedicated to limiting waste and maximizing the impact of a carefully curated design. His process merges modern design aesthetics with the intimacy of an efficient footprint and appropriately targeted technology, thereby achieving affordability and good environmental stewardship

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Warner’s design-delivery programs celebrate living large while adhering to sustainable practices.

Design-delivery programs.

Social change outcomes.



weeHouse®

The Arado project is the first weeHouse. It was initially fabricated by Warner and subsequently built in a modular factory, leading to the weeHouse system and the idea of productizing architecture to make it more accessible.

BarnHouse

Warner’s BarnHouses consist of a panelized, pre-designed toolkit that leverages farmer-tech thinking and celebrates “barn space” over “box space.”

lightHouse

The lightHouse ADU (accessory dwelling unit) grew out of the weeHouse work. Designs offer flexibility despite fewer options, and the goal of streamlining practical solutions for livable small housing.

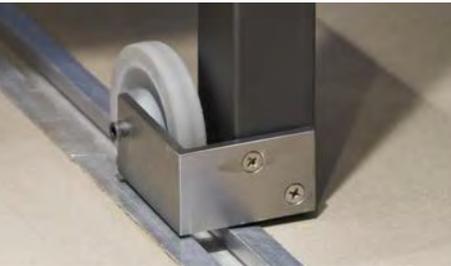
lightHotel

This mobile urban art project arose from the weeHouse work to embrace efficiency and technology on a Very Small scale. Civic engagement promoted public and city awareness about the potential for quality, sustainability, and cost and helped open the door for municipal code changes for the Envision Community.

Envision Community

Housing our homeless with dignity using the same quality and sustainable tools and principles as the weeHouse, BarnHouse, and lightHouse. Cluster housing now allowed by the City of Minneapolis due to precedent set by previous works.

Significant Work | Crafted Work



Furniture, Lighting, and Small Scale Construction
Saint Paul and Minneapolis, MN
1991 – 2001, occasional pieces since then.

Warner’s initial studios were located in shared workshops that created opportunities to learn from craftspeople, experiment with different tools and materials, develop and realize design through doing, and make ends meet by rolling design into a build service.

Polivka Logan
Design Office
Minneapolis, MN
1991
1000 sf

The industrial design studio interior started with a pre-existing layout of sheetrock and paint, with the goal of bringing meaning and materiality into their space. The An-Arch studio project was designed and built equally by the eight recent architecture school grads. The solution was an industrial parasite with highly crafted technical elements perched on or merged into the existing structures. These prefab parts reduced time and disruption during the build.

Bungalow Loft
Minneapolis, MN
1995
1400 sf

Warner and his wife, Dawn’s, typical 1920s stucco bungalow had “an expansion attic” that provided room for a single bedroom. Over the course of a year, Geoffrey leaned heavily on salvaged materials for the details and crafted elements, transforming it into a practical, spacious industrial loft space with two bedrooms and a bath while retaining the house’s bungalow origins.

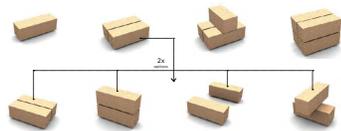
Goodrich Bungalow
Saint Paul, MN
2001 – 2016
2300 sf

Warner and his wife, Dawn, again renovated their home—a larger, three-bedroom bungalow for their growing family—and used it as a laboratory for atypical solutions that meshed salvaged, industrial, and traditional aesthetics. Many of the strategies and techniques developed on the bungalow work have been carried into other Alchemy design solutions and continue to be celebrated for their expressiveness and practicality.

Hopkins Baumann Loft
Minneapolis, MN
2008
2600 sf

The success of this project — a home and office renovation in the basement turbine room of a prominent Minneapolis mill — came from embracing the character of the space itself and leaning on the history to inform new pieces that speak to its past. Much of the character grew out of experimentation on the hands-on work, and embraced by the Owners, themselves talented graphic designers.

Significant Work | weeHouse®



Arado weeHouse
Pepin, WI
2002
336 sf

A \$130,000 lot with a \$50,000 build budget. Farm land two hours from the city. The solution is a minimalist shell conceived at the intersection of a formal idea and an efficient method of fabrication and delivery; a jewel box house achieved by respecting the its budget. The house is so simple that it continues to tell its own story from a period before sustainability and prefab were in fashion. It spawned the weeHouse as a design delivery platform.

weeHouse® System
Design Program
2003 – Present
300 sf – 3000 sf

Starting from the concept of separate boxes as separate functions that make up a house to be delivered by modular factories, the weeHouse has tested many different approaches and morphed to communicate and deliver design for residential and sometimes commercial applications. Through the process Alchemy has not only leveraged the capabilities of modular factories, but also brought to them new value-added methods like in-floor heat, EPDM roofs, and exterior insulation.

Marfa weeHouse
Marfa, TX
2006
500 sf

30,000 acre lot, 500 sf house. One of the first weeHouses, it draws inspiration from Donald Judd's Minimalist concrete boxes located on the grounds of the Chinati Foundation in Marfa. Even with space and budget to spare, offsite construction proved a successful tool for the remote site. A concrete rectangular foundation rises up from sandy soil, hosting the straightforward boxes and their rugged exterior shell that matches the high desert's harsh embrace.

Two Harbors weeHouse
Two Harbors, MN
2005
950 sf

This was the first weeHouse built in a modular factory. Mostly finished in-factory, it was completed on-site by the Owner, Scott McGlasson, a builder on the original Arado weeHouse project. McGlasson is an accomplished furniture designer (Woodsport) and his additions helped to establish an ethos of craft now associated with every weeHouse. Press coverage connected the process to one of smart economics.

Linden Hills weeHouse
Minneapolis, MN
2007
2000 sf + basement

A not-so-wee weeHouse. Designed as a spec house for a realtor, this modular urban house was sold at the beginning of the Great Recession to the incoming Minneapolis Institute of Art director and her architect husband who embraced it as a flexible receptacle for art. The value of having four boxes placed by noon, completed a little over a month later was an apparent if unusual construction to see in an upscale, urban setting at the time. It is currently Warner's home.



weeZero
Moab, UT
 2009
 1300 sf

The weeZero is the first net zero weeHouse incorporating best sustainable practices. The home is a quiet, hovering, oxidized box that is visually absorbed in its red-rock desert landscape. Inside, a cool, luxurious bamboo interior surrounds the kitchen and bath. Water recycling, passive solar, solar electric, and solar thermal collectors were added to achieve a practical low-energy house.

Rocky Brook weeHouse
Dorchester, NH
 2013, 2015
 600 sf, 2100 sf

A house built in stages by a modular delivery process, this house is as much about landscape as it is about the dwellings. The rocks, weathering steel siding, and walls take on different characteristics as they cluster, emphasizing close views overlooking the brook below. The process and economics were detailed in Dwell to provide context for other, similar efforts.

Corning weeHouse
Corning, NY
 2016
 1500 sf

On a \$375,000 budget, a three-bedroom age-in-place retirement house for the owner provides ample living and creating space and a guest room for visiting arts-related friends. Simple agrarian structures were placed in a horse paddock clearing, adapting urban logic to create a place that belies its actual age. The project uses hybrid modular construction and a panelized second floor for the lofted “barn” space.

X-House
Ukiah, CA
 2016
 950 sf

One-hundred percent off-grid house built with active solar on the roof and lead-acid batteries in the foundation. Natural ventilation is aided by ample shading from prefabricated roof panels that cantilever off the upper module—protecting the exterior stair. The lower module also cantilevers seven-feet off its concrete plinth foundation to provide shade and shelter throughout the day and extend the X-House’s small footprint into the landscape.

Sonoma weeHouse
Santa Rosa, CA
 2017
 1040 sf

The mandate from owner and design collaborator, BJ Siegel, the Senior Design Director at Apple, was to embrace the ethos of the original Arado weeHouse: design simply, build smart, but incorporate a more liberal budget. This led to a high-end illustration of the luxury of less. A 30-minute video of this project has been viewed four million times in two years.

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Significant Work | Public Realm + Commercial



Montessori Training Center of Minnesota Classrooms
 Saint Paul, MN
 2012 – 2014
 4500 sf

A growing Montessori school needed three stand-alone modular classrooms with kitchens and baths. Using the modular weeHouse concept, these were placed in three consecutive years as grades were added. The buildings were delivered for costs comparable to generic modular satellite buildings, despite the fact that they also had to negotiate a very tight site in and around a wetland area.

Specs Optical Facade
 Minneapolis, MN
 2012

To increase the visibility of an optical shop on a busy commercial street, Alchemy used 3D modeling, laser-cutting, die-cutting, and a water-jet to digitally fabricate the facade. The result is technology used to create architecture inseparable from the idea of sign.

Bang Brewing
 Saint Paul, MN
 2013, 2016
 1400 sf (42' grain bin)

This micro brewery was built on a shoestring budget for only \$350,000. Though simple in appearance, it is rich with association to agriculture, beer culture, and archi-culture. As one of the country's only 100% organic breweries, this ethos was extended to the landscape, environment-conscious energy use, and an authentic use of salvaged materials. It is consistently ranked a "Best Place To Be" in the Twin Cities.

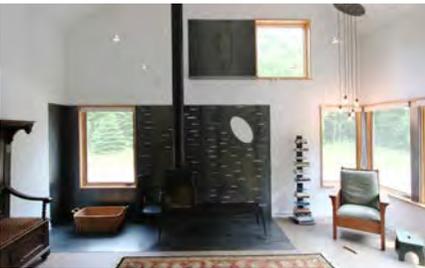
Payne+Maryland Small Home Development
 Saint Paul, MN
 2016
 500 sf – 900 sf

The small housing development was led by Warner and designed with Lunning Wende Architects and Coen+Partners using Saint Paul's only 2016 development grant. It leverages prefab and small home design to create a green, low-energy, affordable solution for smaller households. As part of the grant, one mandate was to critique the city's zoning code and illustrate viable options for its improvement, promoting better design and more inclusiveness.

Silver Lake Smiles Dental
 New Brighton, MN
 2021
 3200 sf

An urban solution to a suburban site. A white box with randomized "cavity" windows within a two-story screened garden transforms a sea of parking. The near-Passive building—made from many of the same elements developed for the BarnHouse program—houses both a five-chair dental office and a liquor store. The interior features fir ply and expressive open framing to focus patients' attention on window and ceiling elements.

Significant Work | BarnHouse



Spencer BarnHouse
Siren, WI
1999
1400 sf

The clients requested a “modern farmhouse,” pointing to the children’s book, *My Cousin Katie*, for inspiration. Taking cues from a collage of red siding, gable roof, and platonic form, this house uses oversized and undersized windows and flush or inset detailing to play with the scale and make it at once “big like a barn” and “small like a house.” It became a strong starting point for those ideas despite—or because of—its \$250,000 budget and small footprint.

Klocker House
St. Cloud, MN
2005
2200 sf

A saw-toothed Structural Insulated Panel (SIP) shell treats humble pole barns with modernist graphic love. The interior is a panoply of mad-scientist tinkerer-farmer due to sheathing a feature wall with birch plywood, stacking birch IKEA cabinets like a hay loft, and hanging rooms from the roof. It’s a celebration of the barn both practically and aesthetically without being a literal pastiche.

Blair BarnHouse
Blair, WI
2010
1850 sf

This full-time house takes all its clues from the great things about nineteenth century barns and updates them for the twenty-first century. Modern yet acceptable in a rural community where families have lived for generations, the house is fully sustainable and celebrates farm tech, with “barn light,” few-but-large openings, a ‘hay’ loft under-and-over space, and a warped exterior skin.

Winhall BarnHouse
Winhall, VT
2014
1500 sf

A 68’ long, 1800s shotgun barn that had undergone three additions had the character of a tired trailer home with 7’ 2” ceilings, vinyl siding and cheap finishes. Alchemy stabilized and exposed the original wood frame, removed a section of ceiling to create an interior bridge, and inserted a powerfully intimate guest room into the most restrictive space. The frame was wrapped in new 12” SIP shell, combining practicality and energy efficiency, and allowing the original structure to remain intact.

Door County BarnHouse
Sturgeon Bay, WI
2015
1800 sf

The owners asked Alchemy to renovate a “builder farmhouse” completed for them just fifteen years earlier. By removing the typical builder materials and details, and adding only fifteen feet to a poorly scaled, two-story space, and incorporating new industrial ‘farmer stuff,’ the house was transformed into something that transcended its modest beginnings. Many of the techniques started here have become part of the BarnHouse toolkit.

Significant Work | BarnHouse



Quadror weeHouse System
Design Program
2010 – 2011

This design system arose from the visionary Dror Benshetrit's innovative folding Quadror frame, combined with a weeHouse-like design program where the two designers inspired each other to expand opportunity in their own work. Because of the consideration for structure and delivery, it was also an inspirational forerunner of the hybrid BarnHouse and lightHouse programs.

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Folded House
Minneapolis, MN
2013
2250 sf

A 1960s ranch house renovation created an accessible age-in-place home and studio for a three-person family. The renovation embraces the house's original 1960s character while adding craft within a new, high-performance shell. It features passive solar design with thermal mass, and an integrated landscape with digitally designed and fabricated laser cut steel. The form of the folded roof comes from the influence of the sun's path, and harvested by the Trombe wall inside.

Justen Barn House
Mendota Heights, MN
2015
2950 sf

The owners are live on a suburban lot behind their grandson, creating an age-in-place family compound. A simple rotation of the gable line creates sloped walls, which were fabricated with CNC-cut SIPs so exact that the shell shifted only 1/8-inch over the opposite corners of the house. Alchemy teamed-up with Chaleff Rogers Architects in New York to bury the structure within the roof, thereby maintaining the purity of the home's geometry.

Seward BarnHouse
Minneapolis, MN
2016
1450 sf

This house is a model of restraint and celebration that addresses a critical need for urban families. The quonset shotgun garage and two story barnHouse form distinct yards with urban character defined by rural materials. The exterior weathering steel detailing and barn rain screen belie the platonic gables of its neighbors. A work-at-home lifestyle is achieved on a modest budget and small footprint that nonetheless features a spacious barn-like interior.

BarnHouse
Design Program
2017 – Present
750 sf – 1250 sf

Celebrating barn space instead of box space, the BarnHouse combines farm technology, crafted industrial elements, and weeHouse thinking. A robust platonic building envelope using 10-to 12-inch SIPs with liquid membrane, passive house windows, and a rain-screen skin, the BarnHouse increases expectations around low energy use. The utility core contains bathroom and mechanical and is standardized for various models, from accessory dwelling units (ADUs) to three-bedroom homes.

Significant Work | lightHouse



lightHotel
Saint Paul and
Minneapolis, MN
2017
8' x 20' Shipping Container

The lightHotel, a one-room mobile hotel is a postcard of the Twin Cities. Inspired by Italo Calvino's Invisible Cities, the lighthotel creates a ritual that seeks to become part of the narrative of the city. Part place-making event, it also achieved ecotourism as a by-product of the technologies required to make the hotel functional. The result is both a laboratory and proving ground for next efforts for the lightHouse and the Envision Community.

lightHouse System
Design Program
2019 – Present
310 sf – 600 sf

Big house, small package. Relying on over fifteen years of design thinking with the weeHouse, the lightHouse is a streamlined version of the weeHouse; less options, but more suited to varied, expedient delivery methods. Designed to leverage modular construction—or be panelized with a modular bath core—the goal is to practically solve the ADU perception, quality, time, and cost problems that are current barriers to fulfilling these varied housing needs.

Sebastopol lightHouse
Sebastopol, CA
2019
450 sf

The first official lightHouse, it was delivered as a modular build and fabricated at Plant Prefab, about 500 miles from the site. It is an initial ADU on a lot that reserves room for the larger, primary home. With a compact and efficient mechanical core and a well-performing shell, it is a very low energy building. Alchemy's craft is evident in its custom-made, functional jewelry and built-ins. It is a testing ground for more than half a dozen other lightHouses in the works.

Envision Community
Minneapolis, MN
Started 2018

Alchemy and University of MN design partners, Tom Fisher and Jacob Mans, teamed with a Hennepin County Medical Center surgeon and the homeless citizens of Street Voices for Change in this pilot program designed to house the most at-risk populations and help keep them out of the healthcare system. With a Passive House design, a central dining and bath center, and a low-impact foundation, the system allows the houses to be moved as needed. In the process, the team helped Minneapolis change its zoning code.

Envision Model 1
Minneapolis
2020
400 sf

This two-bedroom prototype was designed with Jacob Mans and built by students and homeless volunteers. To reduce both mechanicals and operating costs, it uses 10-inch fir plywood shell; triple glazed, triple sealed tilt turn windows and doors; and a liquid membrane weather barrier. This test model used partially salvaged and rough-sawn "junk" wood and flexible rain screen siding. A developing toolkit of CNC components helps achieve design, craft, and reduce labor.



BIG LOVE: 10 small projects

BIG LOVE: 10 small projects

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|-------|---|-------|--|
| BL.1 | Arado weeHouse
Pepin, WI
2002
Photographers: Douglas Fogelson and Geoffrey Warner | BL.6 | lightHouse System and
Sebastopol lightHouse
Sebastopol, CA
2019, 2020 |
| BL.2 | weeHouse® System
2003 – Present | BL.7 | Specs Optical Facade
Minneapolis, MN
2011 |
| BL.3. | Marfa weeHouse
Marfa, TX
2005
Photographers: Josh Capistrant and
Scott Ervin | BL.8 | Bang Brewing
Saint Paul, MN
2014 |
| BL.4 | Sonoma weeHouse
Santa Rosa, CA
2016
Photographers: Brian Ferry and
Millicent Harvey and Geoffrey Warner | BL.9 | Hopkins Baumann Loft
Minneapolis, MN
2008 |
| BL.5 | lightHotel
Saint Paul, MN and nearby locations
2018 | BL.10 | Blair BarnHouse
Blair, WI
2010 |

Arado weeHouse

A \$130,000 lot with a \$50,000 budget. Farm land two hours from the city. The solution is a minimalist shell conceived in the intersection of a formal idea and a method of fabrication and delivery within the practicalities of a shipping envelope; a jewel box house achieved because of its restrictive budget. The house is so simple that it continues to tell its own story from a period before sustainability and prefab were fashionable, and spawned the weeHouse as a design delivery platform. The shell is sized upon standard Andersen patio doors which flush with the ceiling to create an open interior. To address the budget, electrical and utilities were roughed into the house but not brought to the site.

Firm of Record	Alchemy
Role of Nominee	Architect, Project Manager
Location	Pepin, WI
Year	2002
Size	1200 sf
Awards	2006 AIA-MN Honor Award
Publications	StarTribune, 2006; Smart HomeOwner, 2007; New York Times, 2007; <i>Tiny Houses</i> by Rizzoli, 2009





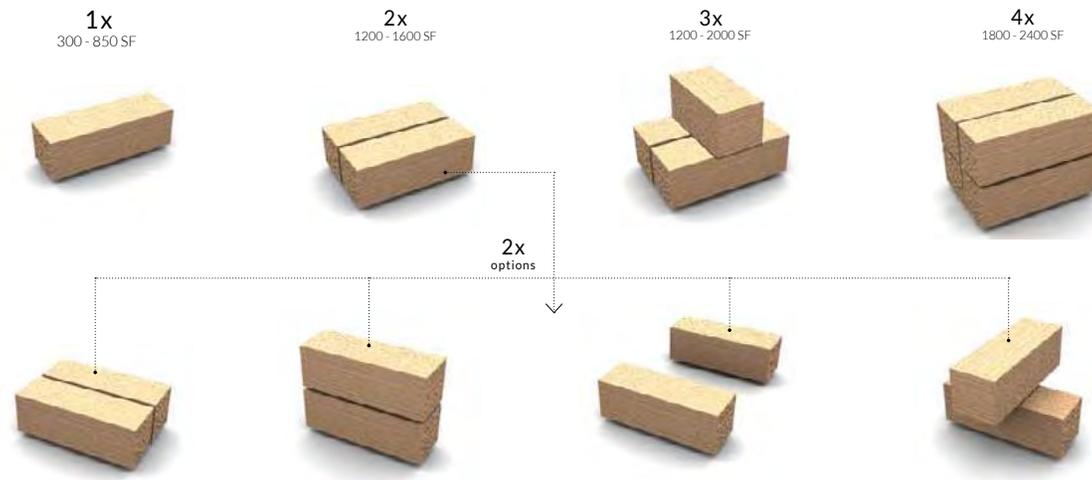
Photo © 2004 Douglas Fogelson. Rights with accreditation.



Laura Ingalls Wilder's home in Pepin, WI and Donald Judd's minimalist concrete boxes in Marfa, TX provided inspiration for the weeHouse.

An idea (left) paired with a process (right): literally, a delivery method.





weeHouse® System

A flexible modular design system based on “box space,” a concept that people inherently understand from growing up playing with blocks.

The system provides a selection of options with enough flexibility to meet different needs, sites, and climates. Pre-designed plans allow testing of ideas quickly, allotting more time to embrace the creative aspects of the design process. In particular, the two-box program utilizes an efficient modular process, yet yields completely different houses depending on the way the boxes are combined. Through the system,

Warner and his team at Alchemy Architects have not only leveraged the capabilities of modular factories, but also brought to them new value-added methods like in-floor heat, EPDM roofs, rain screen siding, and exterior insulation.

Firm of Record
Role of Nominee
Year

Alchemy
Architect, Project Manager
2004 – Present



Marfa weeHouse

A 500 square-foot house with a 30,000 acre living room. The modestly scaled retreat sits lightly on the landscape in a remote site located twenty minutes outside the small arts colony of Marfa, Texas. The initial house is a do-all outpost—the first of three modules that were planned for the site. The module arrived complete with an outdoor shed and a fully finished interior and exterior. Warner sought to re-imagine the idea of luxury based on size, looking to leverage the uniqueness of place through an efficient, multi-use space and simple, elegant detailing.

Firm of Record	Alchemy
Role of Nominee	Architect, Project Manager
Location	Sonoma, CA
Year	2006
Size	568 sf
Awards	2010 AIA-MN Honor Award
Publications	Fast Co. Design, 2006; Residential Architect, 2008; Curbed, 2013; Architecture MN, 2012; <i>150 Best Tiny Home Ideas</i> by Harper Collins; Dwell, 2018



Sonoma weeHouse

This small, ultra-minimal home is based on the original Arado weeHouse yet customized to meet the luxe finishing requirements of the client, BJ Siegel, Senior Design Director at Apple. The home embraces the “less is more” mandate to its fullest extent. Luxury arises from an interior that fully inhabits views on both sides, a detail that is reinforced by the huge operating side walls, and a white bed box in the center of the space. To maximize the modular process, everything was fit into within a 16-foot wide shipping envelope, complete with steel that supports a 10-foot cantilevered porch with 40-foot pre-cambered beam that was bolted in place onsite. The simple form was anything but simple in the way that it managed to conceal structure, door hardware, recessed shades, and insect screens within this limited space.

Firm of Record	Alchemy
Role of Nominee	Architect, Project Manager
Location	Sonoma, CA
Year	2016 – 2018
Size	990 sf
Awards	2018 AIA Small Projects Award 2017 Residential Architect Design Award
Publications	Fair Companies Video by Kirsten Dirksen, 2018; Dwell, multiple 2016 – 2020; Midwest Home, 2018





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lightHotel

The lightHotel is a one-room hotel that serves as a postcard of the Twin Cities. It is part public art project, part off-grid laboratory, and part civic engagement piece. Inspired by Italo Calvino's *Invisible Cities*, the lightHotel creates a ritual that seeks to become part of the narrative of the city, while improving on the aspirations of prefab to live smaller and greener.

Using a container not as a solution in itself, but as a symbol of restriction, the result is a space that is spacious, despite allocations for mechanical (in-floor hydronic heat and a dual-purpose boiler) and water systems (a jet pump to a water bag under the bed, and a grey water filtering system). The lightHotel both embraces the straightforward structure of the shipping container and embellishes upon it through the use of industrial iconography and decorative touches like custom fittings, an industrial vent, and gold leaf shrouds.

Firm of Record	Alchemy
Role of Nominee	Architect, Project Manager, Builder
Location	Twin Cities, MN; Eau Claire, WI
Year	2018
Size	160 sf
Publications	Fair Companies Video by Kirsten Dirksen, 2018; StarTribune, 2018; MinnPost, 2017



lightHouse System

Between the full-size house and an Airstream trailer lies a void to be filled—one that faces obstacles of economics, quality, lending, zoning, and public perception. Arising from over fifteen years of design thinking, the lightHouse offers a streamlined version of Alchemy’s iconic weeHouse. Delivered in a fast and efficiently, it provides a solution for replacement housing, cabins, guest houses, accessory dwelling units (ADUs), short-term rentals, home offices, or age-in-place dwellings.

Luxurious and well-crafted, the lightHouse is both low-energy and sustainable. Limited but meaningful options allow for design adaptations that respond to various climates, sites, and orientations. Standing on its own or blending into surrounding architecture, the lightHouse is a beacon for living sustainably and a celebration of “living large with the luxury of less.”

Firm of Record	Alchemy
Role of Nominee	Architect, Project Manager
Year	2018 (System), 2020 (Sebastopol lightHouse, right)
Size	Various (System), 450 sf (Sebastopol lightHouse)
Publications	Metropolis, 2018; Forbes, 2020; Dwell, 2020

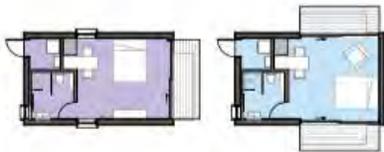
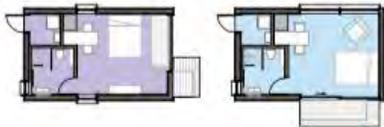
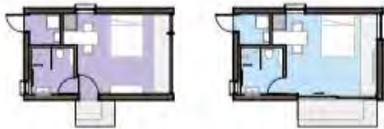


The entire line of lightHouses is taken from real-world clients and their needs, using a standardized bath and mechanical core. The S, M, L, and XL lightHouses can be delivered on one truck as single, complete dwellings. The M and 2X lightHouses can be delivered in two narrower 12-foot sections and seamed onsite.

Introduced along with the Sebastopol lightHouse and Plant Prefab in 2020, Alchemy currently has approximately half a dozen lightHouses in various stages of planning or production, helping to prove and develop the system as a viable, high quality, efficient, and flexible model for what ADUs can be.

S

14' x 22' = 310 sf



M

16' x 24' = 280 sf



L

16' x 30' = 480 sf



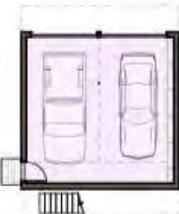
XL

16' x 38' = 600 sf



2X

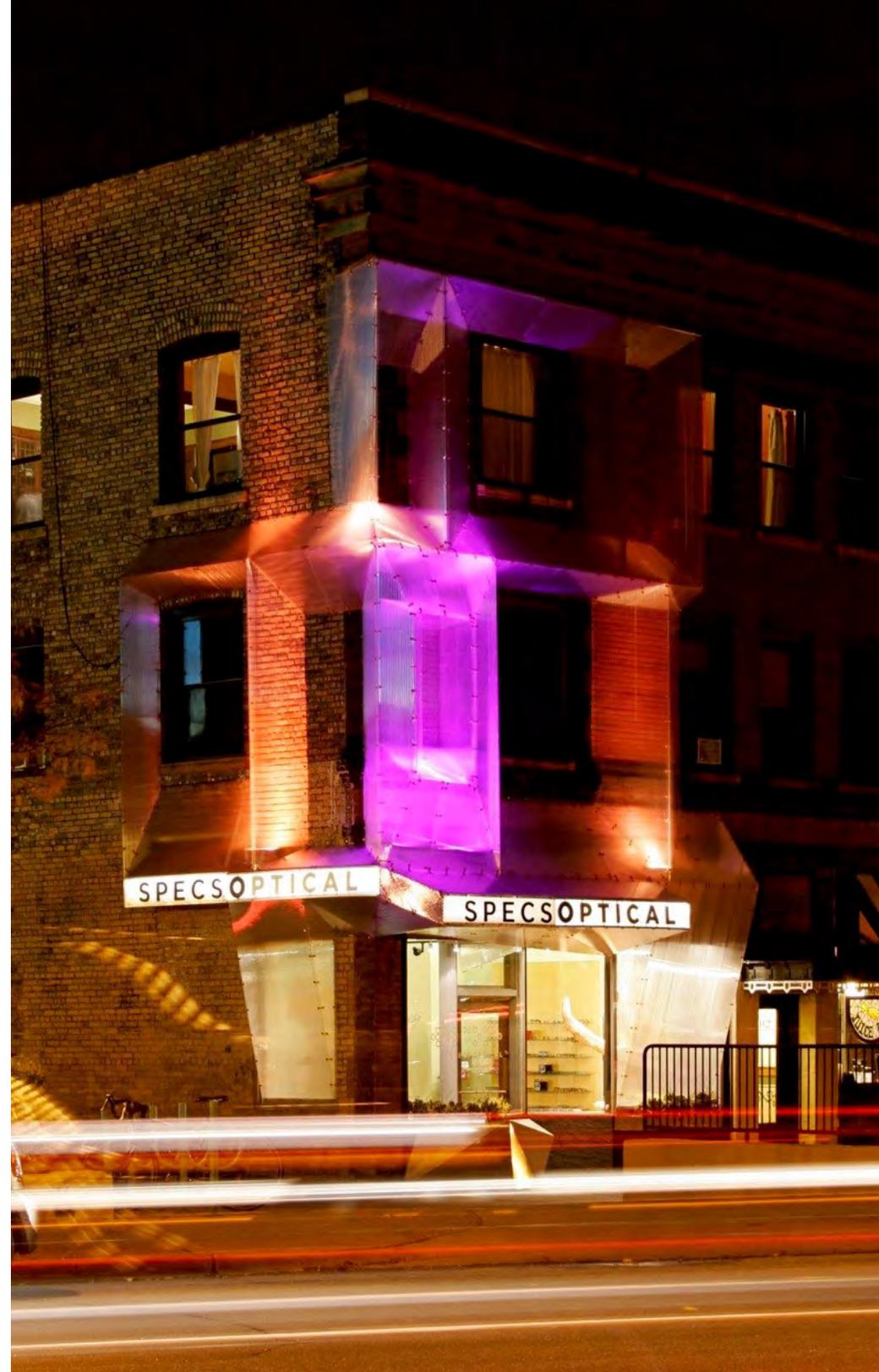
24' x 24' = 570 sf

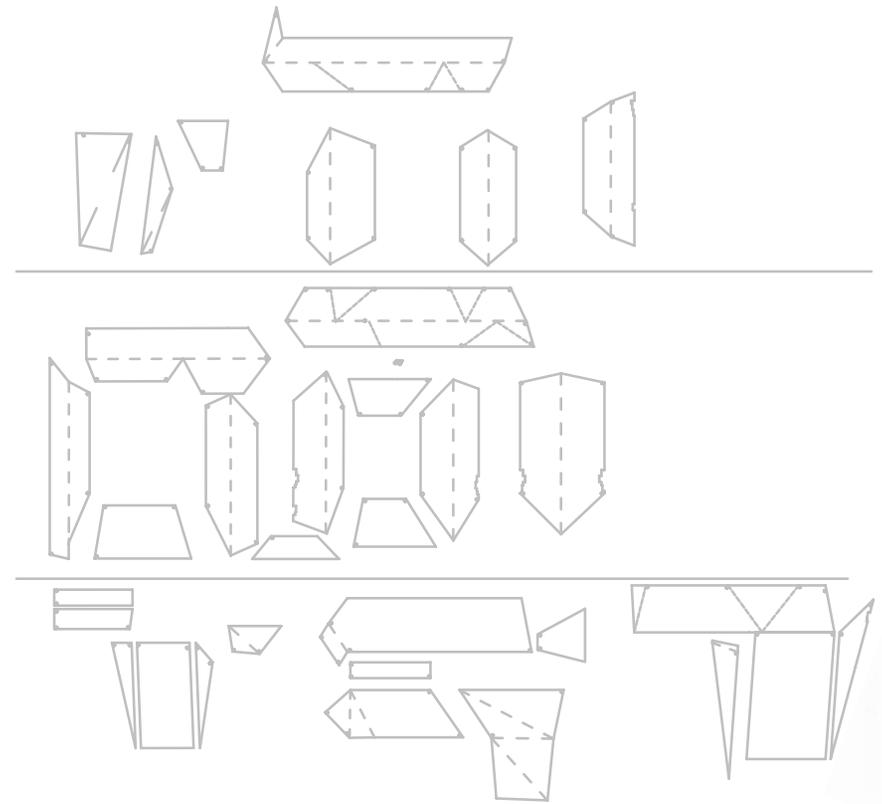


Specs Optical Facade

The irony of an optical shop that can't be seen on one of the busiest commercial streets in Minneapolis was not lost on the business owners. Landscape beautification installed by the city obscured the storefront and sign code limitations prevented the shop from using signage that would be visible behind the trees and bushes. Warner investigated both city codes and technology to create architecture inseparable from the idea of a "sign." The solution was craft arising from machine fabrication—a crystalline envelope of 5/8-inch thick greenhouse polycarbonate skin, manipulated to form offset and distorted frames around the existing windows. Low-power LED spots are programmed to slowly shift color over the facade, boosting nighttime visibility.

Firm of Record	Alchemy
Role of Nominee	Architect, Project Manager
Location	Minneapolis, MN
Year	2010
Awards	2010 AIA MN Honor Award
Publications	Architecture MN, 2011





Top right: Design work was undertaken in 3D computer modeling and flattened, allowing for a more efficient physical production.

Bottom right: A laser-cut scale model was used as a guide for installation, with all pieces numbered in both small and full scales.

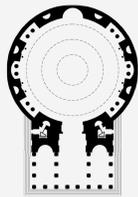
Left: The skin is manipulated to respect the existing windows, signage, and the 1900s building.

Bang Brewing

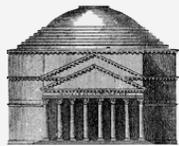
Bang Brewing, opened in 2013 by a husband and wife team, is the first 100% organic brewery in the Midwest. The brewery reflects their focus on sustainability and being good environmental stewards. The “prefab” grain bin saved on build costs and provided a high volume to exterior surface area ratio for energy and material conservation. Along with its palette of silo silver and salvaged wood, the brewery features a custom made insulated glass skylight, spray urethane insulation (R-28), and in-floor heat beneath the high-strength, polished concrete floors. The pavilion, added in 2016, extended the palette into an organic rain garden. Culverts provide shelter, handmade picnic tables and benches provide rest, and a carpet of gravel controls rainwater. Bang Brewing is consistently noted as a top destination for those visiting the Twin Cities.

Firm of Record	Alchemy
Role of Nominee	Architect, Project Manager, Fabricator
Location	Saint Paul, MN
Year	2014, 2016
Size	1385 sf
Publications	Fair Companies video by Kirsten Dirksen, 2018; PBS, 2019; MPR, 2020





PANTHEON



PANTHEON



FIELD OF BARLEY



BEER KEG



GRAIN BIN



FERMENTER

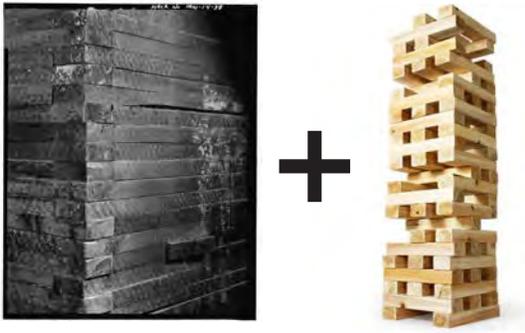


Hopkins Baumann Loft

Owned by recently relocated New Yorkers, this live-work space was especially chosen for its historic roots as the turbine room within a formerly working mill. As the darkest and least expensive unit in the building, the floor was raised and the ceiling dropped with curved white and steel clouds to funnel the daylight from the north-facing windows. To hide mechanicals and structural, a timber “house” was inserted as a guest bedroom/office and bath suite. Recessed tracks with tables on wheels transform kitchen tables into a conference space, on a path that mimics the main turbine axle from the original space. Old tech infiltrates the interior design, including bronze bushing that allows a 600-pond custom door to pivot freely.

Firm of Record	Alchemy
Role of Nominee	Architect, Project Manager, Fabricator
Location	Minneapolis, MN
Year	2008
Awards	2008 AIA MN Home of the Month Award
Publications	2008 AIA MN Honor Award New York Times, 2008; StarTribune, 2008; Midwest Home, 2008; Architecture MN, 2009





The interior "house" is composed of 12"-24" wide blocks made from plain rough-sawn whitewashed northern Minnesota pine.

Their irregular layout is inspired by Jenga blocks and cribbing shown in this Library of Congress photo from the space.



Blair BarnHouse

This full-time house takes inspiration from 19th-century barns, updating them for a fully sustainable 21st-century home. Celebrating the charm of derelict barns, the facade features a warped skin and large openings to filter light. Inside, an open two-story room with under- and over-spaces mimic the space and shape of hay lofts. The result is modern take on an iconic structure that has defined the rural Midwestern landscape for generations. The interior features hacked IKEA furnishings paired with steel industrial fittings, a laser-cut column, and custom made light fixtures fabricated from insect screen bags. Despite a modest budget, the house used about \$10 per month in a typical January by relying on a ground source heat pump and a robust building shell.

Firm of Record	Alchemy
Role of Nominee	Architect, Project Manager
Location	Blair, WI
Year	2020
Size	1850 sf
Awards	2010 AIA-MN Honor Award 2011 AIA National Honor Award
Publications	Interior Design, 2011; StarTribune, 2011; Dwell, 2013



Appendix | Publications

Over 55 of Warner's projects have been published in upwards of 300 books, newspapers, magazines, blogs, and videos worldwide. Below is a partial list illustrating the breadth of the publications.

Residential Design, "Pro-File Design: Alchemy Architects," Apr. 2020

Dwell, "Budget Breakdown: A Steel-Clad Prefab Blends Into a Lush Forest for \$665K," Mar. 2020

Family Handyman, "homeLAB: A Testing Zone for Innovations," Feb. 2020

Dwell, "For Minimalist Modular Design...Look No Further Than the weeHouse," Feb. 2020

ArchDaily, "25 Projects Merged into the Diverse Landscape of California," Jan. 2020

Metropolis Magazine, "Future of Modular Housing," Sept. 2018

Kirsten Dirksen / Fair Companies "Apple Architect Picks a Small Prefab Home," Sept. 2018. Over four million views.

Fine Homebuilding, "Houses by Design: Prefab Homes," Jul. 2018

TreeHugger, Lloyd Alter, "After Fifteen Years, the weeHouse Just Keeps Getting Better Each Time," Oct. 2018

Midwest Home, "Alchemy Celebrates 25 Years," Oct. 2017

MINN POST "Mobile, One-Room LightHotel Celebrates 'The Luxury of Less,'" Jan. 2017

Dwell, "Steel the Scene," Dec. 2016

Midwest Home, "Mia's Third Thursday and LightHotel," May 2016

NCARB, "Small Homes, Small Communities," Jul. 2016

HIVE, Jennifer Castenson, "Nothing Small About the weeHouse," Oct. 2016

Professional Builder, "Tiny Homes Tap a Bigger Market," May 2015

Back to the Cabin by Dale Mulfinger, 2013. Book.

The Wall Street Journal, "A Big Version of a 'weeHouse,'" Jun. 2012

Construir (Brazil), "Celeiro Moderno," Apr. 2012

Mother Earth Living, "Alchemy's weeHouse: Beautiful Tiny Homes," Feb. 2012

Interior Design, "The Great Outdoors: Blair BarnHouse" Feb. 2011

MSN.COM, "Small Homes/Big Appeal," Feb. 2011

Huffington Post, "The Future of Housing," Feb. 2011

New York Times, "Trading New York for Midwest Grit," Sept. 2008

NPR, "The weeHouse Comes to Linden Hills," Sept. 2008

New York Times, "Think Small," Feb. 2007

CBS Marketwatch, "Defying Trend," 2007

Sundance Channel, "Big Ideas/Small Planet," Apr. 2007

Arquitectura Y Diseno (Spain), "Modulares y Desmontables," Jan. 2007

TIME, "Shrinking Down the House," Aug. 2006

Kiplinger's Personal Finance, "Fabulous Prefabs," Jul. 2006

WIRED, "Some Assembly Required," Jan. 2006

Toronto Star, "Some Assembly Required," Jan. 2006

Más Pequeños Espacios Urbanos by Cristina Del Valle, 2005. Book.

Good House, Cheap House by Kira Obolensky, 2005. Book.

Residential Architect, Nigel Maynard, "New Visions of Home Bungalow Loft," 2005

Pioneer Press, "American Icon," Sept. 2004. Feature on Warner.

Metropolitan Home, "Holiday Gift Guide," Nov. 2003. Features a \$50K weeHouse.

The Farmhouse by Jean Rehkamp Larson, 2001. Book.

New American Additions and Renovations, Kim & Trulove, 2001. Book.

House Beautiful, "Up On The Roof, Bungalow-Loft," May 1997.

Interior Design, "This Old House, Geoffrey Warner Built Bungalow-Loft," May 1997.

Appendix | Awards, Honors and Recognition

2019 Dezeen Award
Global Shortlist,
Rural House of the Year
One of six houses to win
the award.
Sonoma weeHouse

2018 AIA National
Small Projects Award
Sonoma weeHouse

2017 Residential
Architecture Award
Sonoma weeHouse

2017 SIPA Building
Excellence Winner,
Houses Under 3000
Square Feet
Justen Barn House

2016 AIA-Minnesota
Honor Award
Sonoma weeHouse

2012 AIA National
Small Projects Award
Specs Optical Facade

2011 AIA-Minnesota
Honor Award
Marfa weeHouse

2010 AIA National
Award in Housing
Blair BarnHouse

2010 AIA-Minnesota
Honor Award
Blair BarnHouse

2010 AIA-Minnesota
Honor Award
Specs Optical Facade

2009 AIA-Minnesota
Home of the Month
Goodrich Bungalow

2009 MN Nursery
and Landscape Association
Grand Honor Award
Goodrich Bungalow
Collaboration with
Phillips Garden.

2008 AIA-Minnesota
Honor Award
Hopkins Baumann Loft

2008 AIA-Minnesota
Home of the Month
Linden Hills weeHouse



Appendix | Exhibitions

lightHotel

Minnesota and Wisconsin
Summer 2016 – Summer 2018
An urban eco-tourism event
featuring music, art, and poetry
readings in the lightHotel.

Northern Spark: Climate Change/ Climate Chaos

Minneapolis, MN
Summer 2016
lightHotel in the shadow of
Minneapolis' Stone Arch Bridge.

The Art of Sustainability Minneapolis Institute of Art

Minneapolis, MN
Spring 2016
lightHotel in the MIA courtyard.

BarnHouse and lightHouse Showcase

Minneapolis/Saint Paul
Home Show
Minneapolis, MN
Spring 2015
SIP houses erected in one week.

100 Years of Student Drawings University of Minnesota School of Architecture

Minneapolis, MN
October 2013
Warner's thesis project,
"A Motel in the Desert," was
featured representing the
Class of 1987.

Interim Report on the Excavation of Zone 5

Form + Content Gallery
Minneapolis, MN
Summer 2011
Group salvage art show from The
Department of Public Design, a
collection of Twin Cities Architects
assembled to create collaborative
work and art during the Great
Recession.

MASTER/Plan: Visionary Architects and Their Utopian Worlds

Cornell Fine Arts Museum at
Rollins College
Orlando, FL
September – December 2010
Alchemy featured as one of six
international architect-artists,
including Morris Adjmi, Michael
Graves, Chad Oppenheim, Adrien
Smith, and Paolo Soleri.

Design Philadelphia:

A Clean Break
October 2008
Philadelphia, PA
Saturn weeHouse featured.

La Triennale di Milano Architecture Biennale

Milan, Italy
Summer 2008
Models, drawings, and photos
from the Marfa weeHouse.

Walker on the Green: Artist-Designed Mini Golf

Walker Art Center
Minneapolis, MN
Spring – Summer 2008

Some Assembly Required: Contemporary Prefabricated Houses

Traveling Exhibition
December 2005 – 2007
Alchemy featured along
with eight architects working
in prefabrication, including Steven
Holl, Lazor Office, Marmol
Radziner, Michelle Kauffman,
Swedish Pinc House, Resolution 4:
Architecture, and Rocio Romero.
Locations included the Walker Art
Center, Vancouver Art Gallery,
Yale School of Architecture,
Museum of Contemporary Art
at the Pacific Design Center,
and Virginia Center for
Architecture.

HOME House Project: The Future of Affordable Housing Weisman Art Museum

Minneapolis, MN
January – April 2006
Furnishings and lighting from
salvaged materials to create
a room within the Gehry gallery.

For the Love of Salvage University of Minnesota Architecture Library

Minneapolis, MN
Spring 2001
Furnishings and lighting
from Warner's studio.

Illegal Houses Minnesota College of Art and Design Gallery

Minneapolis, MN
March 1989
A theoretical show celebrating rule
breaking. Warner presented the
concept of a "Dual House," a six-
foot-wide wall house set entirely
outside a residential setback and a
tower house. Other participants
included Julie Snow, FAIA (Snow
Kreilich); Vincent James, FAIA
(VJAA); and Joan Soranno FAIA
(HGA).

Appendix | Speaking

AIA-New York CRAN
Small and Tiny Houses
May 5, 2020
Zoom Presentation
Panel with Kai Uwe, Bergmann
BIG, Dennis Wedlick,
Dale Mulfinger, Lloyd Alter,
and Peter Chapman.

BMC National
*Small Spaces, Big Windows:
Transforming Expectations
of Luxury*
January 22, 2020
Las Vegas, NV

AIA-Minnesota Keynote
Envisioning Homeless Community
November 12, 2019
Minneapolis, MN

ADU Community
Workshop Series
September – October, 2019
Minneapolis, MN
Public information sessions.

Modular, Prefab and Construction
Senate
Small is Big. Again.
October 20, 2019
San Francisco, CA
Speaker and prefab panelist.

North Dakota State University
Design Build
October 1, 2018
Fargo, ND

University of Minnesota
Small is Big. Again.
April 12, 2017
Minneapolis, MN

AIA-Wyoming Keynote
*What is the Deal with Tiny Houses,
and Why Are They Big Again?*
June 23, 2017
Jackson, WY

3M
Small is Big
August 15, 2017
3M Corporate Campus
Saint Paul, MN
Division presentation with
lightHotel display and tour.

New England Sustainable Energy
Association
*Off-Site Construction:
The Future?*
March 9, 2016
Boston, MA
Panelist with Lake Flato,
Bensonwood, and Kaplan
Thompson.

New Brighton Housing Forum
Prefab, Small, Affordable
June 4, 2016
New Brighton, MN

AIA-Minnesota
Small Homes
October 2016
Minneapolis, MN
Presentation with Jay Isenberg
and others.

See Change:
Conference on Design:
*The Power of Visual
Communication*
May 21 – 22, 2013
University of Minnesota
Minneapolis, MN

University of Minnesota Design
Lecture Series
*Dirty Laundry:
The Dirt on Design*
November 18, 2011
Minneapolis, MN

AIA Outreach:
Minneapolis AIA
weeHouse
May 2009
Minneapolis, MN

Design Philadelphia 2008
weeHouse and Design Build
October 2008
Philadelphia, PA

University of Minnesota
Design Lecture Series
*Dirty Laundry:
The Dirt on Design*
November 2008
Minneapolis, MN

Minnesota Marketing Association
weeHouse
April 2007
Minneapolis, MN

Walker Art Center
Talk with Curator Andrew Blauveld
and Charlie Lazor (Flatpak).
February 16, 2006
Minneapolis, MN

AIA-Minnesota
weeHouse
November 2004
Minneapolis, MN

Appendix | Teaching and Juries

Teaching

Designing Practice
University of Minnesota
College of Design, School of Architecture
Spring 2015

A class aimed at providing students first-hand exposure to national leaders of design-centric businesses in the Twin Cities. Students visited and interviewed the founders of local studios, researched the history and context in which they practice, modeled their businesses using the Business Model Generation handbook, and used that research to inform the modeling of their own hypothetical practices. Studio visits included BluDot, VJAA, TE Studio, Locus Arch, Rolu Fabrication, Werner Design Werks, Coen+Partners, Tom Oliphant, Woodsport, and Alec Soth, among others.

Design Build
University of Minnesota
College of Design, School of Architecture
Fall 1998, Spring and Summer 1999

One of the first classes in years offered to University of Minnesota students to get real life hands-on building experience. Students identified, communicated, designed, and built permanent community garden shelters and infrastructure on LaSalle Avenue in Minneapolis. With Jono Query of IIIAD and Joe Lambert, AIA.

Solar Decathlon
University of Minnesota
College of Design, School of Architecture
Adjunct Faculty Advisor, 2008 – 2009

AIA Juries

Boston, 2018
North Dakota, 2016
Kansas, 2015
Maine, 2012