

The Sustainable Architecture awards program recognizes the efforts of licensed Connecticut architects who have developed and demonstrated ways to decrease Green House Gases, reduce energy use and demand, and conserve water use in the built or natural environments. Equally important is the creation of durable, comfortable, and healthy spaces. The award attempts to raise the public awareness of the current climate crisis and the massive role played by construction, maintenance, and operations of the built environment.

The Sustainable Architecture Award also honors the climate change initiatives of AIA Connecticut and Connecticut Passive House to secure a more sustainable and environmentally thriving future.

### 2022 Sustainable Architecture Award Jury



Rachelle Ain, AIA CPHC, WELL AP Co-Chair Carbon Leadership Forum (CLF) Boston



**Julie Janiski** *Co-Chair* Carbon Leadership Forum (CLF) Boston



**Paul Torcellini** *Principal Engineer* National Renewable Energy Laboratory

# **2022 Sustainable Architecture Award Winners**

### **New Construction**

MERIT

### Akamai Technologies Global Headquarters | Pickard Chilton

#### Photography: © Anton Grassl Photography

Replacing an existing structure on a 57,097-sf site, Akamai Technologies' new 482,000-gsf global headquarters in Kendall Square consolidated their workforce into a unified vertical campus. Creating connectivity within the building and the neighborhood was a defining vision for the design.

Distinguishing its massing, five interlocking bars create a series of cantilevers that reach toward downtown Cambridge and the Charles River. Green roofs cover each cantilever and create a network of vegetation from the park at the entrance to the tower top.

The building provided an armature for the AkaMile, a mile-long meandering path designed by the interior architects. It connects collaborative workspaces and amenities across the tower's 19 floors. This continuous multi-level circulation creates a vertical community and promotes interaction among the 2,000 employees.



**Jury Comments:** Despite the floor-to-ceiling glass envelope impacting the thermal performance of the envelope, this is an exciting project with many positive impacts. It features robust site and source energy savings alongside health and wellbeing strategies like the AkaMile walking pathway. The combination of LEED Platinum and WELL Platinum is commendable and supports a realized high-performance project.

# Renovations, Adaptive Re-Use, or Retro-Fit

# MERIT



#### **Greenwich Passive House Deep Energy Retrofit | Trillium Architects** Photography: Elizabeth DiSalvo

Our primary goal was to transform an existing, inefficient and dated home into a beautiful, modern, Passive House, re-use as much of the existing structure as possible, and to re-work the interior layout to better function for a modern family – with an emphasis on light-filled, playful spaces, an open floor-plan with modern aesthetic.

After replacing the cramped attic portion of the roof with a prefabricated truss roof that allowed for usable space, the house comes in at 8,900 square feet.

Our office's initiative is to use little to no spray foam and encourage the use of low carbon building materials. This house has no new concrete, one steel beam and is primarily insulated with cellulose and mineral wool. Most of the house's structure was reused and all materials removed were given to charity, reused or recycled.

**Jury Comments:** The scale of this house is a challenge to support a low-carbon story, so the decision to recycle and reuse all existing materials is commendable alongside the extensive, high-performance envelope upgrade and limited new addition. It is great to see the adoption of VRF heat pumps, heat pump hot water heater, ERVs, and solar panels to support the shift in the market for these technologies to be ever-more economically feasible for homeowners.

# MERIT

#### Legacy Theatre | Wyeth Architects

#### Photography: Robert Benson Photography, LLC

The original masonry building and wood-framed stagehouse addition have a 2,850 SF footprint. It is now a 127-seat theater with state-of-the-art stage technology. Air-to-air heat-pump mechanical systems provide a healthy indoor environment, critical to patrons feeling safe as the theater courageously opened during the Covid pandemic.

Passive House principles are followed throughout to maximize the envelope's effectiveness. Exterior insulation and cellulose added within existing framing super-insulates the stagehouse. Thermal-bridge free continuous insulation and air barrier were added to the walls and roof of the masonry building.

Material decisions were made for low-carbon-impact and long-life. Structural enhancements were made with wood whenever practical. Granite from a quarry a mile away was used for the site sitting walls.



**Jury Comments:** While this building type typically has large overall energy demands, the Legacy Theatre demonstrates the effectiveness of a shared collective vision for sustainability goals and resulting benefits in reducing energy and carbon. The reuse of the existing building and its renovation alongside Passive House principles are two very prominent and exciting components of this project's path to decarbonization. The project also offers a complete omission of fossil fuels on site, and sustainable material selections like local granite and wood.

# **Conceptual or Research-Based Projects**

# MERIT



#### **Uber Sky Loft | Pickard Chilton** Photography: (c) Uber I Pickard Chilton / ARUP

Commissioned by Uber Technologies in 2019, the Uber Sky Loft is a 40,000 gsf high-performance concept design for Uber's planned global network of Skyport Mobility Hubs proposed for initial implementation in 2023.

In order for communities to fully welcome urban air transport solutions to their cities, Uber mandated that the Skyports have minimal-to-zero environmental impact on the respective communities. As such, the Sky Loft extensively uses a highly sustainable mass timber structure - easily sourced, affordable, renewable, and manufactured off-site – to sequester tons of carbon while featuring the biophilic beauty of natural wood.

Located a short walk from other public transit options, the Sky Loft's design creates a compelling and seamless user experience while delivering an elegant and sustainable building.

**Jury Comments:** Interesting conceptual design. The reuse of an existing parking structure supports the built environment's need to address adaptive reuse at large and engages some provocative questions about mobility, and this is an attractive solution. The concept of a new multi-modal transit hub is an important discussion to shift away from single owner vehicles – could these hubs also be paired with buses and rail?