



Steven Winter
Associates, Inc.

CT ZERO ENERGY CHALLENGE



A Steven Winter Associates Publication

The sixth annual CT Zero Energy Challenge featured nine new homes from across the state exemplifying high-efficiency design, with SWA providing sustainability consulting services for two of the three winners.

The Torcellini Residence, a three-bedroom 1920s bungalow style home in Eastford, won the Lowest Construction Cost category at \$83/sf and was involved in a three-way tie for CT Zero Energy Challenge Overall Winner. The home's design emphasizes sustainable architecture and indoor air quality, with careful attention paid to healthy material selection and a tightly constructed building envelope. Solar panels are clip mounted on a 30 degree metal roof system providing 9.4kW of renewable energy, and reduced the Home Energy Rating System (HERS) Index from 35 to 2. Learn more about the [Torcellini Residence](#).



Continuing the theme of low-cost performance, the three-bedroom Katzin Residence in Litchfield was honored in the Lowest Net Operational Cost category and one of three tied for the CT Zero Energy Challenge Overall Winner. The project team set out to prove that high level performance is attainable at low first cost per square foot (\$122/sf). In an effort to minimize total cost of ownership, the Katzin Residence met ambitious budget goals by eliminating complex building systems and finishes relying instead on passive sustainability and resiliency features. Most notably, there is a slab on grade foundation with enhanced insulation (instead of conventional basement); use of concrete panel walls, which require no additional siding; and, a Structural Insulated Panel (SIPS) roof. All of these features result in a low maintenance, more durable home. Learn more about the [Katzin Residence](#).

For more information on the winning projects, contact Senior Sustainability Consultant [Karla Butterfield](#).

MARKET ADOPTION: AEROSEAL

At this year's Air-Conditioning, Heating, Refrigerating (AHR) Expo in Orlando, the biggest trade show for HVAC professionals, Aeroseal's duct sealing technology was declared the Product of the Year. The unique appeal of the Aeroseal technology is that it seals ducts from the inside. Walls and ceilings do not need to be removed or damaged to gain access for traditional mastic sealing. For this capability, Aeroseal was recognized as "a groundbreaking solution to an industry-wide problem." Although it's been over twenty years since the product was developed, and ten since its application in multifamily buildings, it is only now that Aeroseal is being publicly recognized with the Innovation Award for Product of the Year.

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Continue to the full [Party Walls blog](#) post to read about Aeroseal's journey from conception to widespread use in New York City multifamily buildings.

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ZERO WASTE
CERTIFIED

U.S.

zerowaste

BUSINESS COUNCIL

Waste reduction is an important topic these days in New York, as the city targets sending “zero waste to landfills” by the year 2030 as part of the [One NYC](#) program. What zero waste means from a practical standpoint is a 90% reduction of waste to landfills, as this accounts for non-recyclable toxins, among other issues.

Much like the US Green Building Council (USGBC), the US Zero Waste Business Council (USZBWC) has developed a rating system that allows businesses to track and achieve different performance tiers of waste reduction in their operational practices. Zero waste is defined as “designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them.”

There are four levels of performance. A company is considered to be zero waste certified once it hits 90% reduction, and from there can achieve one of four levels of certification:

- Bronze: 90.1% – 94.9% reduction
- Silver: 95% – 96.9% reduction
- Gold: 97% – 98.9% reduction
- Platinum: 99% – 100% reduction



The program focuses on reducing, reusing, recycling, composting materials, and redesigning policies to achieve waste reduction in businesses. The program encourages monitoring possibilities for a closed-loop system both upstream and downstream.

Becoming Zero Waste Certified requires 12 months of tracking and monitoring to ensure that targets have been reached. Recertification is required every three years.

Any company is eligible to become a Zero Waste Certified facility. Interested parties should go to [uszwbc.org/certification/facilities](#) to be connected with the council and register a project.

Individuals can also become Zero Waste Certified. It's similar to becoming a LEED AP in that professionals are trained to help implement zero waste policies and help facilities to become Zero Waste Certified. For more information, visit [uszwbc.org](#).

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