CFSEI ANNOUNCES WINNERS OF 2019 DESIGN EXCELLENCE AND INNOVATIVE DETAIL AWARDS

WASHINGTON, DC, July 9, 2019—The Cold-Formed Steel Engineers Institute (CFSEI) presented six Design Excellence awards and one Innovative Detail award during the 2019 CFSEI Expo held June 4-6 at the DoubleTree by Hilton Hotel Chicago – Magnificent Mile in Chicago, Illinois.

CFSEI Design Excellence Awards recognize projects that exemplify excellence in the structural design of new or renovated structures utilizing cold-formed steel products. Entries were judged on the basis of design creativity, technical innovation and overall project excellence in cold-formed steel utilization. Awards were presented in the residential/hospitality, municipal and commercial categories. The 2019 CFSEI Design Excellence Award winners are:

Category: Residential/Hospitality
- First Place – The Rose Hotel Chicago O’Hare – Rosemont, IL – R.A. Smith, Inc.

Category: Municipal

Category: Commercial
- First Place – FrameTech Shop Structural Design – Estevan, Saskatchewan, Canada – Martin/Martin Consulting Engineers
- Second Place – Citadel Self Storage – Louisville, KY – Structuneering, Inc.
- Third Place – Apple Store Michigan Avenue – Chicago, IL – R.A. Smith, Inc.

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The Innovative Detail Award recognizes a cold-formed steel detail that exemplifies creativity or ingenuity to solve a design challenge. The 2019 CFSEI Innovative Detail Award was presented to ADTEK Engineers, Inc. for DC Water Headquarters in Washington, DC for the innovative cold-formed steel solutions devised to make straight lines curved for a challenging project.

“Each year, our award-winning projects raise the bar for innovative solutions to complex cold-formed steel design challenges,” said Maribeth Rizzuto, LEED AP – BD+C, managing director of the Cold-Formed Steel Engineers Institute. “Architects, engineers and owners will be inspired by these creative projects which demonstrate the beauty, versatility and cost-effectiveness of cold-formed steel design. As always, we appreciate all the entries that were submitted for this design competition.”

About the Design Excellence Award Projects
First-Place Award / Residential – Hospitality – The Rose Hotel Chicago O’Hare – Rosemont, IL – R.A. Smith, Inc.
The Rose Hotel Chicago O’Hare is five stories with 165 guest rooms that is part of the boutique Tapestry Collection by Hilton. Located just minutes from Chicago’s O’Hare International Airport, it includes a dining rectangle and first-floor bar, as well as a high-tech meeting space comprising 6,000 of the hotel’s 99,000 square feet. The sloping end walls are the most prominent and unique design feature of the project, featuring sloping cold-formed steel walls supported vertically and horizontally at each floor from the cantilevered floor slab. The building also features parapet walls up to 9’-4” tall that are hard clipped at the roof and provide vertical support for the edge of the deck.

The 10-story Dream Nashville Hotel is located in the city’s historic Printer’s Alley district. Two
buildings listed on the National Register of Historic Places—the Climax Saloon from 1887 and the Utopia Hotel from 1890—were used as the redevelopment’s foundation. The hotel offers 168 guest rooms, a 1,400-square-foot presidential suite, and 8,000 square feet of event space all within a short walk to the Country Music Hall of Fame and Museum. Exterior cold-formed steel bearing walls were designed to support both new and existing brick and stone veneers while being anchored into post-tensioned and precast concrete components. The $70 million redevelopment opened in Spring 2019.

First-Place Award / Municipal—DC Water Headquarters – Washington, DC – ADTEK Engineers, Inc.
D.C. Water Headquarters is designed over an existing pump station along the Anacostia River. The design employs many advanced strategies that will surpass LEED Platinum certification. The building’s heating and cooling system minimizes energy use by incorporating new technologies not yet seen in the United States. A unique system will allow D.C. Water to use its own wastewater as a source of thermal energy to condition the building. Some of the significant features include a variegated green rain screen panel system, tinted glass sunshades, and curved walls which alleviate overabundant daylighting and aesthetically match the curvature of the Anacostia River.

First-Place Award / Commercial—FrameTech Shop Structural Design – Estevan, Saskatchewan, Canada – Martin/Martin Consulting Engineers
When FrameTech Systems decided to build a new office, fabrication, and warehouse facility, the owners chose to innovate rather than build a traditional pre-engineered metal building. FrameTech wanted to fabricate as much of the project with its own roll-form equipment as possible, which presented challenges in terms of height, clear span requirements, and equipment limitations. The new structure—which has a 20-foot-tall, single-story administrative space at the west end of the building and a 25,400-square-foot shop at the east end—is built
entirely from 231,000 pounds of cold-formed steel. The all-cold-formed-steel building had a four-week lead time and a five-week installation time.

Second-Place Award / Commercial—Citadel Self Storage – Louisville, KY – Structuneering, Inc.
Citadel Self Storage is a three-story, 145,000-square-foot storage facility with a distinctive arched glass wall at each end of the building. The storage area has a large U-shaped drive-through area around the 3,500-square-foot leasing office. There are 925 storage units located in the building in addition to a 1,200-square-foot wine storage area. The building contains cold-formed steel from the roof to the ground floor. The main facility contains a 24-mil. standing seam metal roof panel, and the second and third floors consist of 47-mil. composite cold-formed steel deck supporting 4.5 inches of concrete. The building envelope met the requirements of the 2012 International Energy Conservation Code.

Third-Place Award / Commercial—Apple Store Michigan Avenue – Chicago, IL – R.A. Smith, Inc.
Apple Store Michigan Avenue in Chicago is a bold, modern building meant to bring technophiles together. The building is two stories and looks like a glass box topped with a MacBook; the roof is actually carbon fiber and includes the company’s signature logo. A large portion of the cold-formed steel design dealt with interior stone and wall support. The design was planned to create a seamless look from the inside to the outside. A special feature is the roof, which appears to float and was achieved by a hidden steel system. The steel support system stretches under Michigan Avenue, the existing soaring towers and even a parking structure, making the supported area roughly three times the footprint of the actual store.

Innovative Detail Award
ADTEK Engineers, Inc. faced many challenges in using cold-formed steel for this innovative -more-
project, including the curved profile of the building and the coordination of metal panel veneer installation with cold-formed steel framing. At the curved walls, 4'-0"-long straight wall segments were installed and designed to support the eccentric loading using flat plate connections. Flat plates were provided to transfer veneer/opening loads to the panels, and studs were designed to support the eccentric loading and transfer loading to connections.

The 2019 CFSEI Expo had more than 150 architects, builders/contractors, engineers and other construction industry professionals in attendance. The event provided opportunities for education, networking, and an exposition featuring state-of-the-art innovations, technologies and principles in cold-formed steel framing. This is the only event of its kind dedicated to the cold-formed steel framing industry and is held on an annual basis.

The Cold-Formed Steel Engineers Institute comprises hundreds of structural engineers and other design professionals who are finding a better way to produce safe and efficient designs for commercial and residential structures with cold-formed steel. CFSEI members work together to develop and evolve industry standards and design methods, produce and issue technical bulletins, and provide seminars and online training to improve the knowledge and skills base of engineers and design professionals. For more information, visit https://www.cfsei.org/.

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