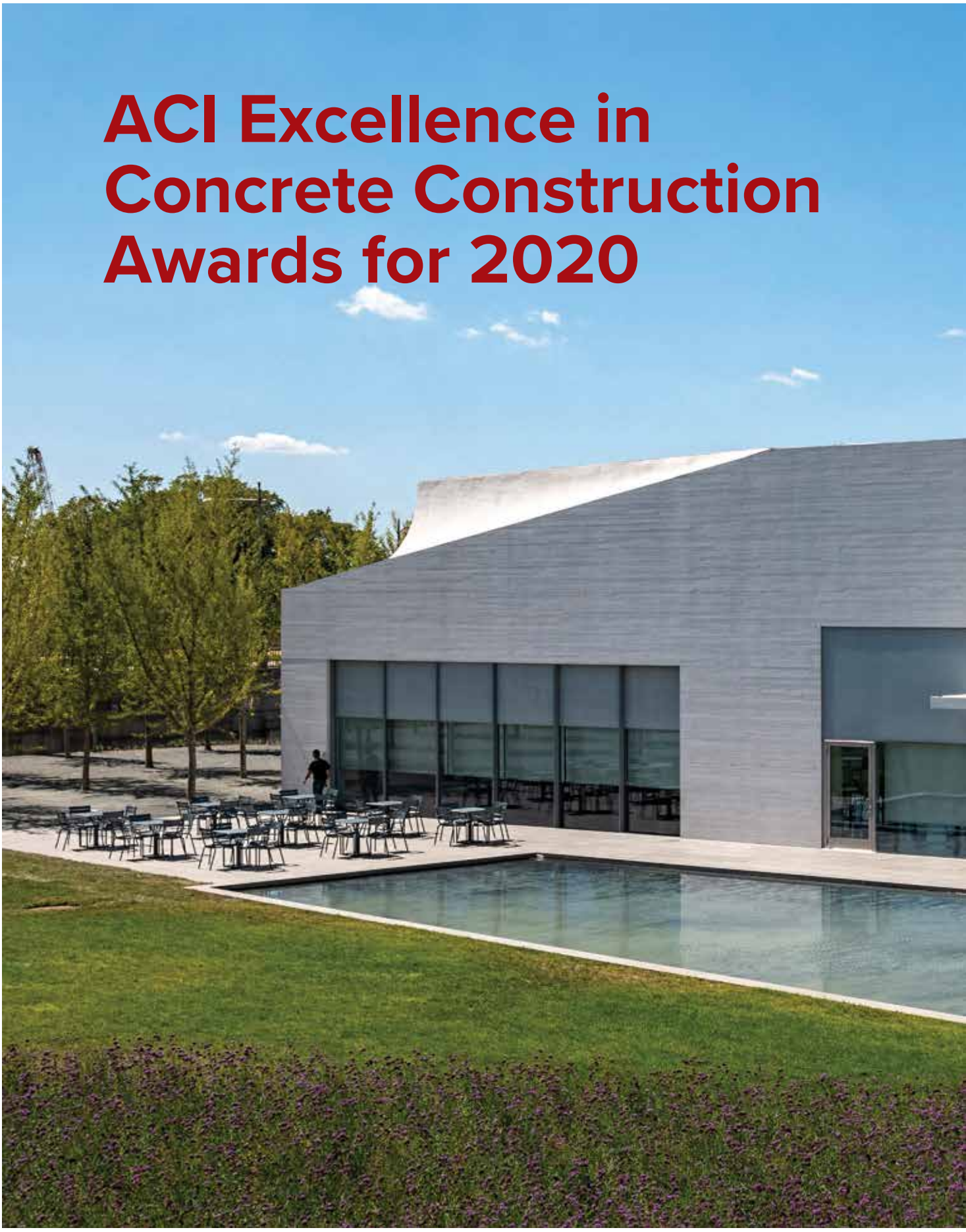
ACI Excellence in Concrete Construction Awards for 2020

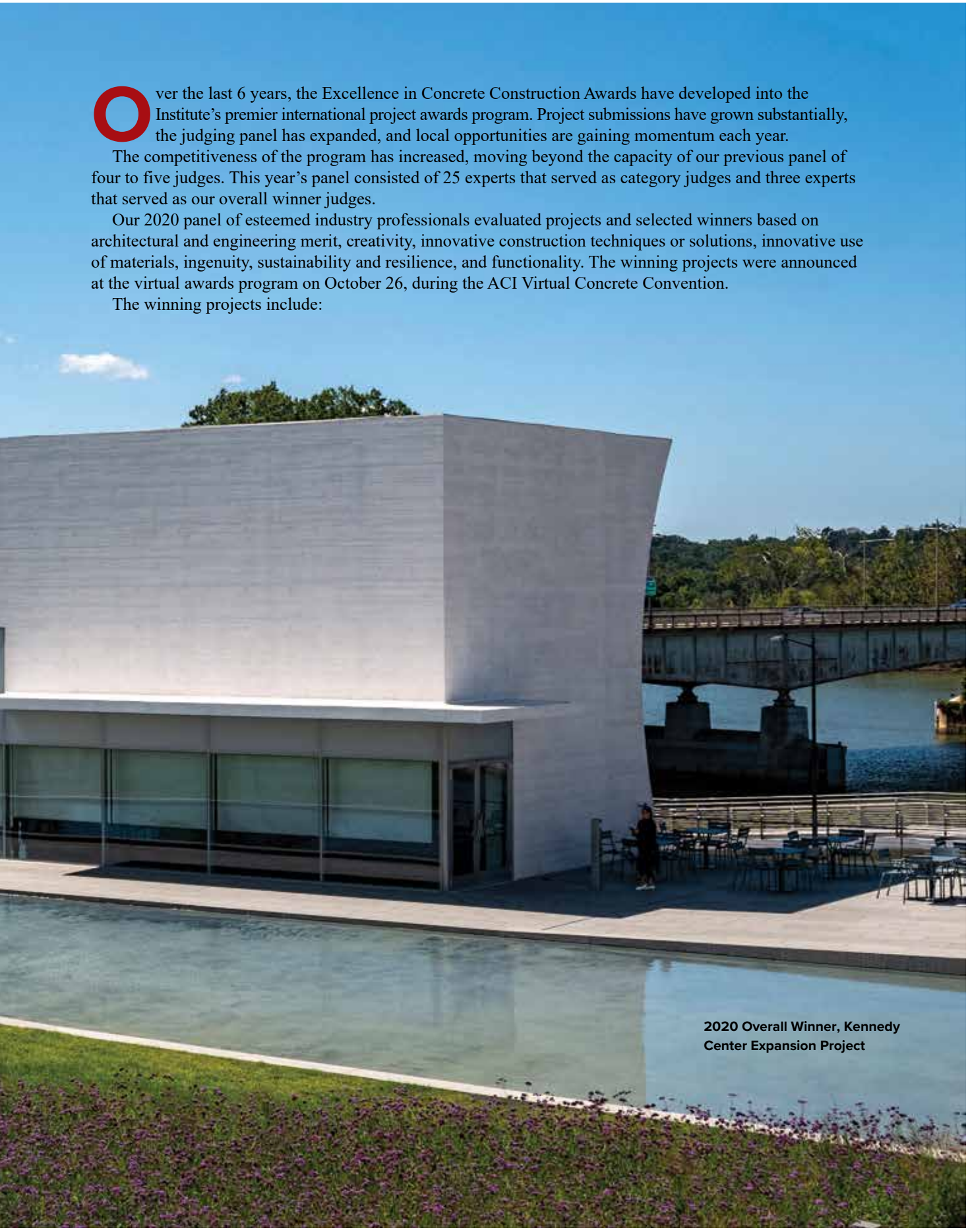


Over the last 6 years, the Excellence in Concrete Construction Awards have developed into the Institute's premier international project awards program. Project submissions have grown substantially, the judging panel has expanded, and local opportunities are gaining momentum each year.

The competitiveness of the program has increased, moving beyond the capacity of our previous panel of four to five judges. This year's panel consisted of 25 experts that served as category judges and three experts that served as our overall winner judges.

Our 2020 panel of esteemed industry professionals evaluated projects and selected winners based on architectural and engineering merit, creativity, innovative construction techniques or solutions, innovative use of materials, ingenuity, sustainability and resilience, and functionality. The winning projects were announced at the virtual awards program on October 26, during the ACI Virtual Concrete Convention.

The winning projects include:



2020 Overall Winner, Kennedy Center Expansion Project

Overall Excellence Award and Low-Rise Buildings, First Place

Kennedy Center Expansion Project, District of Columbia, United States

Nominated by: ACI National Capital Chapter
Owner: U.S. Government
Architect: Steven Holl Associates
Engineer: Silman
General Contractor: The Whiting-Turner Contracting Company
Concrete Contractor: The Lane Construction Corporation
Concrete Supplier: Vulcan Materials

The Kennedy Center Expansion Project, known as the REACH, consists of three new buildings—the Welcome, Skylight, and River Pavilions—situated on the 4.6 acre (1.9 ha) campus along the Potomac River in Washington, DC. Each structure features titanium-white board-formed concrete, sweeping curves, and crisp clean lines that complement the existing monument.

The Welcome, Skylight, and River Pavilions are all interconnected below-grade under a green roof where visitors can meander through the labyrinth of concrete curves. Multiple board form patterns and custom "crinkle" form liners add to the texture of the architectural concrete both above- and below-grade. While the "crinkle" concrete creates a wonderful acoustic effect in the performance and rehearsal rooms, the visual effect is absolutely stunning.

High-Rise Buildings, First Place

Hudson Commons/441 Ninth Avenue, New York, United States

Nominated by: Concrete Industry Board of New York City Chapter
Owner: Cove Property Group
Architect: Kohn Pedersen Fox Associates
Engineer: WSP Parsons Brinckerhoff
General Contractor: Pavarini McGovern
Concrete Contractor: Regulator Construction, Inc.
Concrete Supplier: NYCON Ready Mix

The Hudson Commons project in New York, NY, is a clear demonstration of "thinking outside of the box." In addition to modernizing an eight-story building that had originally served as a warehouse, the team of Cove Property Group, Kohn Pedersen Fox, and Pavarini McGovern added 17 stories, creating a modern "Class A" commercial office building with abundant lighting, high ceilings, outdoor terrace spaces, and other amenities that appeal to today's tenants.

Following a full interior demolition of the original building, Pavarini McGovern opened floor slabs to install a new structural core, and the team reinforced the existing foundations and columns to support the tower. The new design brightens the existing building significantly, with glass panels on the first floor and expanded windows throughout. The addition includes an all-glass façade and expansive ceiling heights to ensure tenants get plenty of natural light.

High-Rise Buildings, Second Place

W Hotel Tower, Washington, United States

Nominated by: ACI Washington Chapter
Owner: Kemper Development Company
Architect: HKS Architects
Engineer: Cary Kopczynski & Company
General Contractor: GLY Construction
Concrete Contractor: McClone Construction Company
Concrete Supplier: Cadman

The dramatic 41-story W Hotel Tower features luxury on a grand scale. Located in the heart of downtown Bellevue, WA, it includes 245 hotel rooms and 231 upscale apartments atop a three-level podium. The podium includes boutique shops, a variety of themed restaurants, a state-of-the-art IMAX theatre, and other recreational amenities for the public, apartment dwellers, and hotel guests. The six-level subterranean parking structure provides 2200 spaces and connects to the adjacent Lincoln Square North via a tunnel, creating a massive parking network for over 4000 vehicles.

Mid-Rise Buildings, First Place

Science Complex—Campus MIL, Québec, Canada

Nominated by: ACI Québec and Eastern Ontario Chapter
Owner: Université de Montréal
Architect: Menkès Shooner Dagenais LeTourneux Architectes, Lemay, and NFOE Architectes
Engineer: SDK et associés
General Contractor: EBC Inc.
Concrete Contractor: Sorel Tracy Ciment
Concrete Supplier: Lafarge

Totaling nearly 60,000 m^2 (645,800 ft^2) and aiming to achieve LEED® NC Gold certification, the Université de Montréal's Complexe des sciences was inaugurated on September 20, 2019, three years after the groundbreaking ceremony. This unique site is devoted to teaching and research, and it brings together over 35 research chairs. Located on the site of the former Canadian Pacific marshaling yard, in the northeast sector of Outremont, the Complexe des sciences is the starting point for the revitalization of an entire area located right "in the middle" of the Island of Montréal, hence the name MIL (milieu de l'île de Montréal).

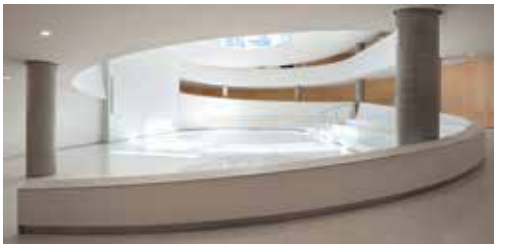
Mid-Rise Buildings, Second Place
725 Ponce, Georgia, United States

Nominated by: ACI Georgia Chapter
Owner: New City Properties
Architects: S9 Architecture and Cooper Carry
Engineer: Uzun+Case, LLC
MEP Engineer: Jordan & Skala Engineers
General Contractor: Brassfield & Gorrie
Concrete Supplier: Thomas Concrete of Georgia

Located on the Atlanta BeltLine between North Avenue and Ponce de Leon Avenue is 725 Ponce, a mixed-use development by New City Properties. The $200 million development is a 14-story office, retail, and parking structure designed by the architecture firms S9 Architecture and Cooper Carry. The structural engineer was Uzun+Case, LLC, and the MEP engineer was Jordan & Skala Engineers. The project was constructed by Brasfield & Gorrie, and Thomas Concrete provided concrete with CarbonCure technology.

The project totals 949,300 ft^2 (88,200 m^2), including 1064 parking spaces on the first several levels, 370,000 ft^2 (34,400 m^2) of loft-style office space, and 65,000 ft^2 (6040 m^2) for a Kroger grocery store. Features include an exposed structural concrete frame as well as rooftop terraces with views of the Historic Fourth Ward Park, Ponce City Market, and the Atlanta skyline.

Low-Rise Buildings, Second Place
Amélioration des infrastructures de l'Assemblée nationale du Québec, Québec, Canada



Nominated by: ACI Québec and Eastern Ontario Chapter
Owner: Assemblée nationale du Québec
Architect: Provencher_Roy Associés Architectes Inc.
Engineer: WSP Canada Inc.
General Contractor: Pomerleau Inc.
Concrete Contractor: Coffrages Synergy
Concrete Supplier: Les Entreprises LT Ltée

This project's bold architectural concept helped preserve the heritage, symbolic, and identity-related character of the Parliament building, recognized as a national historic monument of Québec since 1985. By building the reception center under the landscaped areas facing the Parliament, the monumental staircase and architectural integrity of the heritage building designed by Eugène-Étienne Taché were preserved and enhanced.

The new reception center, which opened its doors on May 29, 2019, is made up of three underground levels facing the Parliament and one level under the inner courtyard. Both areas are linked together by a 21 m (69 ft) long by 4.5 m (15 ft) wide reinforced concrete tunnel dug into the rock under the main wing of the Parliament building.

Decorative Concrete, First Place

King Abdullah Petroleum Studies and Research Center, Saudi Arabia

Nominated by: ACI Saudi Arabia Chapter
Owner: Saudi Aramco
Architect: ZAHA-HADID
Engineer: ARUP
General Contractor: Drake & Scull International (DSI)
Concrete Contractor: Gulf Elite General Contracting
Concrete Supplier: Saudi Ready-Mix Concrete Company

The King Abdullah Petroleum Studies and Research Center (KAPSARC) in Riyadh, Saudi Arabia, is a premier, globally recognized center for energy, environmental research, and policy studies. Covering an area of 70,000 m^2 (753,470 ft^2), the facility includes the Energy Knowledge Center, Energy Computer Center, Conference Auditorium, Research Library, and Prayer Hall. The main building consists of a concrete-framed structure with a basement and three floors. The building envelope consists of glass-fiber-reinforced concrete (GFRC) cladding panels and glazing attached to steel frames. The design concept of the center is a cellular, partially modular system that integrates different buildings as a single assembly with interconnecting public spaces. The hexagonal prismatic honeycomb structures use the least material to create a lattice of cells within a given volume. This structural and organizational principle determined the building's composition as a mixture of crystalline forms that emerges from the desert landscape, evolving to best respond to the environmental conditions and internal functional requirements. The honeycomb grid is compressed toward its central axis as an extension of the natural wadi that runs to the west.

Decorative Concrete, Second Place

SSENSE MONTRÉAL, Québec, Canada

Nominated by: ACI Québec and Eastern Ontario Chapter
Owner: SSENSE
Architect: David Chipperfield Architects / AEDIFICA
Engineer: Latéral
General Contractor: Groupe Decarel
Concrete Contractor: Coffrages Synergy
Concrete Supplier: Lafarge

SSENSE is a business based in Montréal with a global reach, serving 150 countries and generating an average of 76 million page views per month. It is best known for its selection of high-end clothing for men and women.

SSENSE MONTRÉAL is located at 418 Saint-Sulpice Street. It is a six-story building built in 1866, and it is directly adjacent to Notre-Dame Basilica. The historical façade of the building was preserved and encloses a cast-in-place concrete structure in which the concrete architecture is exposed and explicit. SSENSE MONTRÉAL celebrates the first building in Canada designed by David Chipperfield Architects. The café, located on the top floor and with a seating capacity of 34, offers a relaxed and inventive culinary experience. It features a concrete counter and a customized common table, as well as a glass ceiling over the exposed concrete structure that covers the entire space and provides an unobstructed view of the sky. SSENSE MONTRÉAL is a hub of activity, where human experience, creativity, and interaction are at the forefront.



Infrastructure, First Place

Alaskan Way Viaduct Replacement Program, State Route 99 Tunnel, Washington, United States

Nominated by: ACI Washington Chapter
Owner: Washington Department of Transportation (WSDOT)
Architect: HNTB Corporation
Engineer: HNTB Corporation, lead engineer of record
General Contractor and Concrete Contractor: Seattle Tunnel Partners, JV of Dragados USA, Inc., and Tutor Perini Corporation
Concrete Supplier: CalPortland

The largest soft-ground bored tunnel in North America, the 2 mile (3.2 km) State Route 99 tunnel, with a 52 ft (16 m) excavated diameter, replaced the aging Alaskan Way Viaduct as a critical part of one of the largest infrastructure projects in the United States. The tunnel's alignment runs under 158 downtown Seattle buildings, including single-story structures and high-rises as well as at-grade and elevated roadways, active bridges, an active railroad tunnel, several large sewers, and public and private utilities.

The tunnel's 32 ft (10 m) wide roadways carry two southbound lanes atop two northbound lanes. The tunnel features state-of-the-art fire detection, fire suppression, and ventilation systems; a security system with closed-circuit TVs; and a separate, completely pressurized evacuation area with its own ventilation system—the first of its kind.



Infrastructure, Second Place

Samuel de Champlain Bridge, Québec, Canada

Nominated by: ACI Québec and Eastern Ontario Chapter
Owner: Infrastructure Canada
Architect: Provencher_Roy et Dissing+Weitling (Poul Ove Jensen—Denmark)
Engineer: T.Y. Lin, International Bridge Technologies, and SNC Lavalin joint venture
General Contractor and Concrete Contractor: Signature sur le Saint-Laurent Construction Inc.
Concrete Supplier: Lafarge Canada Inc.

The Samuel de Champlain Bridge Corridor Project extends over 8.4 km (5.2 miles) and was built to replace the original Champlain Bridge with a new structure measuring 3.4 km (2.1 miles) in length. Designed for a 125-year service life, the new iconic bridge serves as a gateway from the United States to Montréal while representing one of the largest and most important transportation infrastructure projects in this historically rich urban region as well as North America.

The bridge comprises six traffic lanes, extra-wide shoulders, a transit corridor designed to accommodate a light-rail transit system, and a multiuse path for pedestrians and cyclists.

The project involved extensive use of precast concrete elements—particularly the piers—and the upper portion of the main span tower was built using sophisticated self-climbing forms. The project also includes the construction of a second bridge with a 500 m (1640 ft) span linking Île des Sœurs to the island of Montréal as well as the widening of Highway 15, which passes through the city's urban zone.

Repair & Restoration, First Place

Conococheague Aqueduct Rehabilitation, Maryland, United States

Nominated by: ACI Maryland Chapter
Owner: National Park Service
Engineer: McMullan & Associates
General Contractor and Concrete Contractor: Corman Kokosing Construction Company
Concrete Supplier: Thomas, Bennett & Hunter, Inc.

The historic Conococheague Aqueduct on the Chesapeake and Ohio Canal in Williamsport, MD, was restored using a combination of historic and modern materials and methods. This water-filled, three-arch bridge carried canal boats over the Conococheague Creek from 1835 to 1924. One of the aqueduct's stone walls was replaced with a timber wall with outriggers in 1920, after a canal boat broke through and fell to the creek below, and the repair served until the aqueduct was permanently closed after two floods in 1924. The modern restoration included repairs to the existing stonework, construction of a concrete channel, and installation of timber outriggers to replicate the bridge's 1920s appearance. With the construction of a canal turning basin and restoration of water in the aqueduct, the repair and restoration project now allows visitors to ride a boat across the historic Conococheague Aqueduct and through a working canal lock.

Repair & Restoration, Second Place

Berri-Sherbrooke Underpass Rehabilitation, Québec, Canada

Nominated by: ACI Québec and Eastern Ontario Chapter
Owner: City of Montréal
Architect: GR7 Architecture
Engineer: SNC-Lavalin
General Contractor: Eurovia Québec Grand Projects
Concrete Supplier: Béton provincial

The Berri-Sherbrooke underpass is in the heart of Montréal. Built in 1955, it allows for the passage under Sherbrooke Street of two lanes of traffic in both directions, one particularly busy bicycle path, and one sidewalk. The site is divided into five structures: one rigid-framed, two-span bridge in reinforced concrete and four retaining walls, also in reinforced concrete. The bridge was repaired in 2004, but the retaining walls presented major deficiencies and needed rehabilitation. The work was carried out over 2 consecutive years, with a break in winter. Landscaping work was completed in the spring of 2020.

The deadline for submitting entries for the ACI Excellence in Concrete Construction Awards for 2021 is April 19, 2021. Each ACI chapter or ACI International Partner is eligible to sponsor one project in each of six possible categories. Visit **www.ACIExcellence.org** for more information.