

44th Annual Concrete Design Award Case Studies

Trillium Hill Farm won in the Agricultural category.



On March 27th, 2025, Carew Concrete kicked off a project with Bayland Buildings at Trillium Hill Dairy Farm.

Trillium Hill has expanded its family farm from a 400-cow operation to over 1,900 head of cattle and continues to grow. The producer enjoyed being part of such an innovative and complex project.

This project consisted of a few mixes totaling 9,674 cubic yards.

The project used a variety of mixes, including but not limited to fly ash, straight bag, and NRCS-approved mixes. Over 5,000 cubic yards of concrete contained Forta Fiber.

Every day, multiple crews at the site would be pouring different portions of the job simultaneously. This required extreme attention to detail and clear communication among dispatch, the workers, and the drivers of the ready-mix trucks to ensure accurate placement on the job.

Weather conditions and on-site farm equipment also played significant roles in the delivery of concrete to this job.

Project Team Members

Owner: Trillium Hill Farm

Concrete Supplier: Carew Concrete & Supply

Architect/Engineer/Contractor: Bayland Buildings

Engineer: JE Arthur and Associates

333 N. Water Street won in the Commercial category



333 N. Water Street is a 33-story high-rise in downtown Milwaukee, located just north of the fashionable 3rd ward district.

A total of 27,400 cubic yards were placed on the project. Mixes included a 5,000-psi mix for grade beams, an 8,000-psi mix for pile caps, mat foundations, and columns, and a 10,000-psi mix for shear walls and columns for the

first 12 stories of the high-rise.

Perhaps the most challenging mix was a 7,000-psi mix used for the post-tensioned decks. This mix was required to reach a strength of 3,000-psi in 20 hours so the decks could be stressed and the columns could be set the next morning.

A combination of mid- and high-range water reducers was introduced into the mix to improve pumpability, along with a hydration stabilizer to prevent separation. A mix with this much chemical introduced posed a challenge for finishability, so a finishing aid was used to assist in that effort.

The project had an extremely aggressive schedule, and the contractor completed the concrete portion 8 months and 3 weeks ahead of schedule.

Project Team Members

Owner/Developer: Hines

Concrete Supplier: Riv/Crete Ready Mix

Architect: SCB

Engineer: Magnusson Klemencic Associates

Concrete Contractor: VJS Construction Services

Jewelers Mutual Park won in the Concrete Overlay category.



This multi-year project featured a comprehensive series of concrete overlays constructed between April 2020 and July 2024, totaling more than 3,200 cubic yards of concrete. The initial phase consisted of an unreinforced 4,000-psi concrete overlay placed directly over the existing asphalt pavement.

To manage budgeting and minimize operational disruption, the owner elected to proceed with additional phases annually. Beginning in the second phase, the owner incorporated fiber reinforcement and, by the third phase, transitioned to a 5,000-psi exterior concrete mix, following contractor recommendations and adjustments related to the use of Type 1L cement.

In total, more than 200,000 of the 230,000 square feet of new pavement were successfully installed as overlays on existing asphalt— demonstrating the versatility, performance, and sustainability advantages of concrete overlay systems.

Beyond the engineered improvements, the owner valued enhanced aesthetics, significantly improved nighttime lighting, long-term durability and reduced maintenance associated with concrete.

The project showcases how phased construction, evolving mix designs, and innovative overlay techniques can be combined to provide a high-performance pavement solution with exceptional lifecycle value.

Project Team Members

Concrete Supplier: MCC

Contractor: Milis Flatwork

Ozaukee Country Club Pool won in the Decorative Commercial category



The Ozaukee Country Club pool renovation highlights the excellence of decorative concrete, completed on an accelerated schedule. Delivered in less than three weeks to meet a Memorial Day grand opening, the project required precise planning and coordination.

The 14,000-square-foot pool deck features a slate-textured stamped concrete finish with a pewter base color and a dark gray release agent, creating a refined natural-stone appearance. Approximately 180 cubic yards of an exterior 4,500-psi limestone concrete mix were placed to ensure durability and long-term performance in a freeze-thaw environment.

Trench drains and custom pool coping were integrated to provide adequate drainage while maintaining clean detailing across the deck. ADA-compliant slopes and transitions were incorporated seamlessly without disrupting the deck's texture or visual consistency.

Despite weather-sensitive decorative work and a compressed timeline, the project was completed on schedule and ready for immediate use. The finished pool deck showcases high-quality craftsmanship, functional design, and successful execution under demanding conditions.

Project Team Members

Owner: Ozaukee Country Club

Concrete Supplier: Riv/Crete Ready Mix

Architect/Engineer/Contractor: Nord Construction

The Ranch won in the Decorative Residential category



Ready-mixed concrete was used for the motor court panels and borders, two patios, the rear and front walkways, the house and barn porches, and the driveway borders and panels.

Creating an intentional sequence of experience from the point of entry along the driveway to the motor court, from the motor court along the front walk to the front porch, along the rear walk to the two patios, and from the motor court to the barn porch required attention to heated and unheated areas and multiple sequential flow lines.

Combining the colors, textures, and flexibility of ready-mix concrete with linear intentionality and destination definition creates an inviting, coherent, and elegant visual experience.

The complexity of the design, extensive use of borders, differences between heated and unheated areas, multiple flow lines, and the scheduling of multiple pours were the primary challenges.

Ready-mixed concrete accounted for 95% of the project and offered variety, flexibility, beauty, and sustainability, physically and visually improving the vehicular and pedestrian residential environment.

Project Team Members

Owners: Jon & Sandy Bushman

Concrete Supplier: County Ready Mix

Landscape Architect: Alchemy Concrete

Froedtert Parking Blue won in the Education & Healthcare category.



In summer 2025, Froedtert and the Medical College of Wisconsin unveiled its newest parking structure, the “Blue” garage. Located at the west end of campus, this five-level, post-tensioned concrete facility accommodates about 2,400 vehicles.

Innovative mobility technology is used throughout, assisting visitors with real-time parking availability and providing electric vehicle charging stations. The design features a skybridge connecting the structure to the patient tower.

The concrete mixes were critical to the project’s success. Engineered for a 75-year lifespan, the structure’s durability and reduced carbon impact were achieved through advanced concrete mix design.

Developing the main concrete mix required multiple trial pours to balance admixtures, cement, aggregates, and low-carbon by-products. This resulted in a 6,000-psi, air-entrained mix that reached 3,000-psi in 24 hours for post-tension stressing.

A corrosion inhibitor was added to resist salt and water damage in winter. The mix achieved a 20% reduction in embodied carbon, saving over 2,200 tons of emissions.

Various concrete mixes for walls, columns, and decks were used, totaling over 40,000 cubic yards in 18 months. It is one of the largest projects on the Froedtert campus and will remain a durable, sustainable fixture for years to come.

Project Team Members

Owner: Froedtert & the Medical College of Wisconsin

Concrete Supplier: Riv/Crete Ready Mix

Architect: Eppstein Uhen Architects

Engineer: GRAEF

Contractor: C.G. Schmidt

First Supply – Joe Poehling Distribution Innovation Center won in the Industrial category



The 305,000-square-foot industrial facility in West Salem used more than 14,500 cubic yards of ready-mix concrete for interior slab-on-grade, foundations, parking lot paving, and site concrete.

The interior floor mix was designed for 4,000-psi at 28 days with a maximum shrinkage of 0.40. It incorporated Type 1L cement, Class C fly ash, #4 and #67 coarse aggregates, natural sand, a mid-range water reducer, and 7.5 lbs. of macro fibers per cubic yard, with a water cementitious ratio capped at 0.45 to further control shrinkage.

A superflat slab area was required to meet the owner's ASRS system specifications. This section was successfully placed as a single 35,000-square-foot pour spanning more than 160 feet. The project also included a fiber-reinforced mezzanine topping slab.

Remarkably, the entire interior slab was completed in under two weeks to accelerate the owner's schedule. Although the exterior pavement was initially designed as asphalt, minimal cost differences enabled the owner to upgrade to an unreinforced concrete parking lot.

The concrete contractor placed over 180,000 square feet of exterior pavement in under two weeks, while coordinating with multiple active trades and maintaining project momentum.

Project Team Members

Owner: First Supply

Concrete Supplier: Croell

Architect: MSI General Corporation

Contractor: Milis Flatwork

ATW Terminal Concourse Expansion won in the Municipal category.



In November of 2023, Miron Construction broke ground on the \$66 million, 47,000 square-foot expansion of the main concourse for the Appleton International Airport.

The entire project consisted of 4,000 cubic yards of concrete, with over 10% of the project volume made up of lightweight

concrete.

The project team was successful in achieving its goal of opening the new terminal in time for the 2025 NFL Draft.

The new design delivers a better customer experience, a more accessible design, and an added Biergarten in the gate area. It increased the total gates to 10, helping the airport accommodate 1 million arrivals by the end of 2025.

For the draft alone, the airport was able to accommodate 272 flights and 50,000 passengers.

Project Team Members

Owner: Appleton International Airport

Concrete Supplier: Carew Concrete & Supply

Architect/Engineer: Mead & Hunt

Contractor: Miron Construction

ONE 09 won in the Other category.



One 09 is a 17-story, 505,880-square-foot mixed-use development transforming the Lake Monona skyline. The structure features three underground parking levels, 340 market-rate residential units, a ground-floor chop house and food hall, a rooftop pool, a golf simulator, and outdoor terraces with panoramic views of Lake Monona, Lake Mendota, and the State Capitol.

One 09 required considerable coordination. The building footprint occupied the entire site, leaving only north-side access and requiring lane closures for each concrete pour.

The project required accelerated concrete strength, with 55 elevated post-tension deck pours needing to reach 3,000-psi in under 24 hours.

To stay on schedule, a deck was poured every three days for 39 pours, requiring careful sequencing and material management. Structural performance was enhanced by installing 10,000-psi buttress walls in the parking levels to support the north exterior foundation wall.

The development included a snow-melting system for the parking ramp and exterior promenade. A total of 22,650 cubic yards of concrete were poured, and the project was finished in just over 19 months. The concrete was a high-performance 6,000-psi mix with high-range and mid-range water reducers, achieving an average 4,000 psi in 24 hours.

Project Team Members

Owner: Quad Capital Partners

Concrete Supplier: Wingra Redi-Mix

Architect: Potter Lawson

Engineer: Fink Horejsh

Contractor: J.H. Findorff

Amerilux won in the Parking Lot category



The Amerilux parking lot project is a prime example of how ready-mixed concrete can deliver durability, efficiency, and aesthetic quality under a tight schedule. The project covered 294,781 square feet, and roughly 6,125 cubic yards of ready-mixed concrete.

6-inch pavement was used in light-duty areas, and 7-inch pavement in high-traffic zones. A 4,500-psi exterior concrete mix was used, incorporating 3 to 5 pounds of macro fiber per cubic yard. Recycled slag was used at 20% replacement to minimize environmental impact.

Engineered for heavy-duty use, macro fiber reinforcement was strategically placed in central drive lanes, enhancing structural integrity under frequent vehicle traffic.

Precision grading and finishing were achieved through 3D GPS grading and laser screeding, enabling the lot to connect seamlessly with building drainage systems to prevent standing water. Construction was completed under a tight one-month schedule, with 13 pours averaging 471 cubic yards per pour.

Despite weather challenges, including rain and heat, careful planning and coordination were essential. The result is a high-performance, visually uniform concrete parking area that meets structural and functional requirements, minimizes long-term maintenance, and demonstrates concrete's efficiency and longevity compared to other paving materials.

Project Team Members

Owner: Amerilux

Concrete Supplier: MCC

Architect: Keller

Engineer: Mach IV

Contractor: Absolute Concrete

Centennial Park Splash Pad/Playscape won in the Public category.



The Village of Waunakee takes pride in the diversity and depth of its recreational system. The community recognized a need for a fully inclusive play space that allows children of all ages, abilities, and backgrounds to play together; thus, the vision for the Centennial Park Playscape was born.

The new park includes a 4,000-square-foot interactive splashpad with multicolored concrete, a concrete plaza with festoon lighting, an 8,000-square-foot ADA-accessible playground with sloped embankments, a wheelchair rocker, a merry-go-round, and inclusive swings.

The site topography offered opportunities for creative grading, sloped concrete embankments, and decorative stone walls to highlight the park's elements.

To ensure the rubber safety surfacing remains stable on a 45-degree slope, a concrete sublayer was poured on the steep embankment to improve adhesion. The splashpad area was designed with large, sweeping arcs of integral-colored concrete, accented by crisp sawcut joint lines.

Thickened edge walkways along the artificial turf areas and the parking lot edge provide necessary edge treatment and vertical safety barriers for pedestrians in active zones. Several concrete seating areas ring the playscape, and colorful shade sails provide shelter for patrons.

Project Team Members

Owner: Village of Waunakee

Concrete Supplier: Advanced Concrete

Architect/Engineer: Parkitecture + Planning

Contractor: Parisi Construction

Peterson Family Dairy – Digester and Lagoon won in the Sustainable category.



In 2024 and 2025, Vanguard Renewables constructed a Digester Tank (3 million gallons), Hydrolysis Tank (330,000 gallons), and Digestate Storage Lagoon (395 feet long by 255 feet wide by 26 feet deep and 12 million gallons) in River Falls.

Even though this project was located on the Peterson Farm, this infrastructure primarily processes food waste from industrial facilities that would otherwise go into landfills. It then creates renewable natural gas, which is put into the natural gas grid.

The three structures consisted of approximately 3,500 cubic yards of concrete and 291 tons of reinforcing steel. Due to the aggressive chemical nature, the concrete for the digester included an integral crystalline waterproofing admixture to increase its durability.

This was crucial during leak testing, as the admixture sealed any weeps or hairline cracks that would've allowed water to pass, preventing the need for repairs.

Other challenges included sandy subsurface soils drawing water from the 0.42 water cementitious concrete and winter conditions during the placement of the digester. Lastly, the structures are all constructed in compliance with ACI 350.

Project Team Members

Owner/Developer: Vanguard Renewables

Concrete Supplier: Cemstone Ready Mix

Civil Engineer: MSA Professional Services

Engineer: Excel Engineering

Contractor: JP TANK

Project Manager: MBA Energy & Industrial

Freedom Concrete Plant won in the Tilt-Up category



The producer needed a high-production concrete plant. From day one, the goal was to improve safety and efficiency, and to build a long-term solution to supply the Appleton/Green Bay markets with high-quality concrete.

The producer chose to truly promote the concrete industry by opting for a tilt-up building. The contractor who was awarded the project, along with the architect and engineer, designed a state-of-the-art concrete production facility.

Throughout the project, various high-performance mix designs were used to create a robust, long-lasting building. The producer provided its own on-site-produced concrete and aggregates to ensure quality control.

Many other state-of-the-art technologies were incorporated into the building. A direct-feed admixture system, heated floors, snow-melt slabs, an on-demand sand heater, and automatic aggregate misters are just a few examples.

This newest concrete plant for the producer really allows them to showcase the beauty of what concrete can build.

Project Team Members

Owner & Concrete Supplier: MCC

Architect: Perspective Design

Engineer: Innovative Tilt-Up Design

General Contractor: C.E. Doyle

Contractor: Milis Flatwork

Special Mention: Lunda Construction

The Golden Eagle won in the Southwest Region category.



D LaLicata Concrete is a well-established concrete contractor serving southeastern Wisconsin since 1989 and is known for its high-quality workmanship. This family-owned business stays true to its roots, being honest and taking pride in the work it does.

Offering an endless array of stamped patterns, colors, and design options, they specialize in custom residential work to give homes and businesses an eye-catching appeal that enhances the property. This is a company that combines old-world craftsmanship with a modern appeal.

The submitted project is a color-stamped driveway completed in one pour with five crew members. At 26 yards, the project used two of Solomon's colors, walnut and buttercup, with the wood plank texture and a lava rock border.

The mixed-use was a straight 6-bag low chert delivered at a 5-inch slump, so that they could stamp it with two different textures. Paying attention to detail, they also used an antique dark gray release in the joints and hand-ground each nail mark in the wood plank texture.

Project Team Members

Owners: Scott & Lindsey Witthun

Concrete Supplier: Schmitz Ready Mix

Contractor: D. Lalicata Concrete Contractors

Alto-Shaam Warehouse won in the Southeast Region category.



The Alto-Shaam warehouse expansion required exceptional coordination, advanced finishing techniques, and an unwavering commitment to quality to deliver a flawless floor system that supports modern automation and sets a new benchmark for industrial concrete performance.

Of the 85,000 total square feet, 60,000 met a F-min 60 flatness standard. Each 7-inch-thick slab used 4,000-psi concrete with two layers of wire mesh for reinforcement and long-term durability. Work was completed in 22 pours, each approximately 15 feet wide and 100–200 feet long.

To meet the superflat specification, the crew used custom forms for precise alignment, a truss screed for the initial strike-off, and a bump cutter to refine the levelness. Finishing was completed with a large pan trowel machine, producing a smooth, uniform surface ready for high-precision material handling.

All slabs were wet-cured for 7 days to ensure proper hydration, surface strength, and crack resistance.

The finished floor exceeded performance expectations, delivering a high-strength, exceptionally flat surface designed for long-term reliability in Alto-Shaam's advanced warehouse environment. The project shows outstanding teamwork, quality control, and attention to detail from Marriott Construction and Riv/Crete Ready Mix.

Project Team Members

Owner: Alto-Shaam

Concrete Supplier: Riv/Crete Ready Mix

Contractor: Marriott Construction

RGL Building 62 won in the Northeast Region category.



The RGL Building 62 project relied on ready-mixed, cast-in-place concrete to meet strict performance and scheduling requirements. Large, efficient pours, including the largest placement of 1,600 cubic yards in just eight hours, allowed the team to maintain progress despite tight timelines and variable weather.

All flatwork incorporated 3-pound macro fibers to support heavy truck traffic and ensure long-term durability. A 3D GPS laser screed was used to meet Floor Flatness/Floor Levelness tolerances and ensure proper drainage.

Euco-Shield finishing aid was applied to the parking lot to enhance protection against Wisconsin's harsh winters and the chemicals used to combat them, while an integral sealer at the loading dock enabled faster access for interior construction.

Project aesthetics remained a key focus, with broom-finished exterior concrete, consistent edging, and flexible forms used to achieve curved parking areas. Interior slabs met the required polished trowel finish.

Despite fluctuating weather and a compressed, overlapping schedule, the project finished on time, starting on September 5, 2023, and finishing on November 14, 2024. Cast-in-place concrete totaled 30% of foundations, 29% of interior flatwork, and 41% of exterior flatwork.

Project Team Members

Owner: RGL Logistics

Concrete Supplier: MCC

Architect/Engineer: Alliance Construction and Design

Contractor: Absolute Concrete

Legacy Plaza at Zenoff Park won in the North Central Region category



Ready-mixed concrete was used in a circular walkway, a 16-foot white softball with red stitching, the Stevens Point Softball Association 50-year plaque & flag pole base, the entry area, the Zenoff Park plaque base, and the connecting walk & landing to the park's building to create a space that celebrates two dedicated individuals, the originators, and the

donors and serves as a place of respite.

Creating a space of purpose and honor within the vocabulary of the place (softball & baseball) required a site design that was overt in the tribute to and legacy of individuals, provided for circulation to and through the site, and accommodated surface water, all in a positive, visually iconic way.

Achieving the aesthetics of place, purpose, and outcome required the flexibility, utility, and sustainability that ready-mixed concrete offers.

The primary challenge was creating a layout that clearly said "SOFTBALL" through the colors and textures of concrete.

Ready-mixed concrete accounted for 92% of the project. Using a range of concrete techniques, including colored & broom-finish ready-mixed, colored & stamped ready-mixed, colored & stamped overlay, stained precast concrete softballs, and colored & textured precast concrete benches, the project achieved recognition and celebration that clearly represents the place.

Project Team Members

Owner: Stevens Point Softball Association

Concrete Supplier: County Ready Mix

Landscape Architect: Alchemy Concrete

Lucette Brewing Company won in the Northwest Region category.



Located in Menomonie, Lucette Brewing Company decided to invest in concrete for its parking lot long before it was installed in the fall of 2024.

The process began with a simple question from the Cemstone representative during construction of the building in 2021, when the foundation system used ICFs. “Have you thought about concrete for the parking lot?”

From there, the conversion process began. Initially designed as an asphalt parking lot, this 63,000-square-foot, 5-inch-thick, macrofiber-reinforced, 4,500-psi parking lot was designed in 2023 using [pavementdesigner.org](https://www.pavementdesigner.org).

It was installed in the fall of 2024 using laser-screed technology over 4 days so the brewery could remain operational. 1,000 cubic yards of concrete were delivered, placed, finished, and cured, resulting in a bright welcome mat for weddings, events, and beer-and-brick-oven-pizza fans from Menomonie and surrounding communities.

Cemstone and Atlas Specialty Contracting, the paving contractor, worked together to ensure that the concrete mix design and installation practices complied with ACI standards, thereby meeting the owner’s expectations for quality, appearance, and long-term performance, which is why they chose concrete.

Project Team Members

Owner: Lucette Brewing Company

Concrete Supplier: Cemstone Ready Mix

Engineer: John Lee, P.E., Cemstone Companies

Contractor: Atlas Specialty Contracting

Sales Representative: Bob Biederman