
An Intersection of Art and Engineering in Shotcrete

A Testament to Shotcrete Application, Located at the Art Omi Sculpture Park in Ghent, New York — Captivating Explorations of Space, Perception, and Materiality



Chemi Rosado-Seijo, Ceremonial Pearl-Hole (The Ceremonial Bowl), 2020. Shotcrete. Courtesy Art Omi. Photo Credit: Alon Koppel.

By Jasper Kahn

THE CEREMONIAL BOWL

In 2019, Kaaterskill Kahncrete collaborated with Nor'easter Skateparks to build artist Chemi Rosado-Seijo's Ceremonial Pearl-Hole (The Ceremonial Bowl) at Art Omi.

"In this site-specific work, Rosado-Seijo explores the parallels between skateboarding and contemporary art. The functional skate bowl is designed to exist as both a sculpture and social space — for skating, meeting,

performances, and more. Ceremonial Pearl-Hole (The Ceremonial Bowl) references both the indigenous heritage of the Hudson Valley and the Batéy, a special plaza around which the Taíno people built their settlements in Puerto Rico and throughout the Caribbean, usually surrounded by stones. The bowl pays homage to skateboarding history through its concrete depth and curves reminiscent of a pool, in which vertical skateboarding originated." (Art Omi Website- Courtesy of the artist and Embajada, San Juan.)

ART OMI PRESENTS THE WORKS OF MORE THAN 60 CONTEMPORARY ARTISTS AND ARCHITECTS OVER 120 ACRES OF FIELDS AND FOREST AT THEIR SCULPTURE & ARCHITECTURE PARK. THIS VENUE OFFERS THE GUESTS AN OPPORTUNITY TO EXPERIENCE A RANGE OF LARGE-SCALE WORKS IN A SINGULAR OUTDOOR ENVIRONMENT. (ART OMI WEBSITE)



A Bowl-in-One! Kaaterskill Kahcrete and Nor'easter Skateparks shape artist Chemi Rosado-Sejio's "The Ceremonial Bowl" at Art Omi in Ghent, NY. Photo credit: Bart Friedman

To construct the bowl, we placed 30 yd³ (23 m³) of shotcrete in a 12-ft (3.6 m) diameter at 7.5 ft (2.3 m) deep with 9.5 ft (2.9 m) extensions. We had an army of people to shoot, shape, and finish this bowl-in-one.

It was a great success from the artist's and sculpture park's standpoints and is being used daily. People come to skate who may not have come to view the art otherwise — the skaters discover art, and art-driven guests discover skating.

The art director of the sculpture park had closely observed our shotcrete placement and concrete finishing during development, and advised he would reach out for us to do concrete projects in the future.

TUNNELTELLER

A year later, the art director reached out to us to execute the unique and intricate TunnelTeller sculpture by Berlin-based contemporary artist Alicja Kwade. It is designed to be a maze of concrete walls suspending stainless steel pipes as a visual interactive piece.

The sculpture had been previously built (at another location), however when the art director visited the site, he was disappointed by the execution of the build. The walls were 2 in. x 6 in. (50 mm x 150 mm) wood studs covered with cement board and parged over.

He felt as though the TunnelTeller was missing its density — to lean against the walls and know that they were hollow and fake concrete was disappointing to him. When he had the opportunity to bring this dynamic sculpture to Art Omi, he was determined to have it built

with solid concrete and told us, "You guys are the only crew to bring this piece to life!"

The scope of work for this project would truly be a one-of-a-kind build, with a very elaborate set of drawings created to construct the piece to the artist's requirements and vision. We cast footings for the walls and fabricated steel brackets to suspend stainless steel pipes. The form work was critical because of the specific lengths and miters of the pipes. It was clear that shotcrete was the only way to place the concrete to fully encase the pipes.

THE BUILD

The stainless steel pipes came from Poland, with diameters from 16 to 36 in. (400 mm to 1200 mm) and custom polished to a mirror finish on the inside. In the sculpture, they are placed in different directions and angles to give the viewer the ability to look through them as a kaleidoscope. Needless to say, these pipes were very precious — when shotcreting around them, it was imperative to keep them undamaged.

Once the pipes were in place, the formwork for the walls began. Decisions on whether to form the inside or the outside of the walls varied: For our forms, we used 0.5 in. (13 mm) plywood and 2 x 4 in. (50 x 100 mm) to frame the walls. Reinforcement was #3 (#10M) reinforcing bars spaced 16 in. on center with 6 in. welded wire mesh tied to the bars.

The goal was to make 8 in. (200 mm) thick walls 8 ft (2.4 m) tall finished on both sides. We used lumber forms for the back of the wall while the outer shotcreted surface used guide wires to allow cutting and shaping to the desired surface.



Mirror finished stainless steel pipes from Poland, suspended in place before shotcrete application.



Wall formwork with Kahncrete dog inspectors Lex & Heyla.

Once forms were set, the reinforcing bars and mesh were placed, the pipes protected, and guide wires tightened to the perfect pitch, it was time to shoot! We shotcreted the walls lift by lift, placing material to approximately 0.75 in. (19 mm) higher than finish grade, enabling us to cut the wall to the precise plane defined by our guide wires. Once the exposed wall surfaces were floated and sealed with a trowel, the cover caps of the pipes and wall forms were removed while the concrete was still plastic. This strip and face method allowed us to achieve a uniform finish on all sides of the walls. The final sponge finish of the walls was requested by the artist to juxtapose a raw feel against the polished pipes.



Guide wires set to define outside corner of the wall.



Team Kahncrete L to R: Brandon ChrisJohn, Lex Kahn (dog), Ryan Cardone, Justin McDowell, Heyla Kahn (dog) and Matty Sorrano. Photo Credit: Jasper Kahn.



The concrete is in — almost finished cutting.



Alicja Kwade, TunnelTeller (2018). Stainless steel, concrete, natural stone (Azul Macaubas). Alicja Kwade, courtesy 303 Gallery, New York. Photography by Alon Koppel. (Art Omi credit)



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Curing for each wall involved wrapping them in plastic and then keeping them covered for weeks. Over a 10-day period, nineteen different wall panels were built using the same process, shooting 140 yd³ (107 m³) of concrete. From the precision required in the finishing to the seamless integration of stainless-steel pipes, shotcrete was the ideal solution for bringing TunnelTeller to life.

When the piece opened to the public it was the new highlight of the park. The visual and physical interactions created by the mixed materials were loved by all ages.

These projects were a great success thanks to the innovation of shotcrete!

Rosado-Seijo and Kwade's sculptures stand as a testament to the power of collaboration between artists and shotcrete specialists, exemplifying the possibilities that arise when creative artistic vision meets shotcrete's technical capability.



Jasper Kahn is a passionate shotcrete specialist and the founder of Kaaterskill Kahncrete, established in 2019. His journey began at age 18, watching his local skatepark being built – a moment that sparked a lifelong commitment to shotcrete placement. Over 15 years and more than 100 skateparks around the globe later, Jasper has developed a reputation for quality and leadership in the

skatepark industry. An ACI-certified shotcreter, he emphasizes the importance of proper shotcrete application, teamwork, and perseverance. Jasper's dedication to best practices drives his mission to elevate the industry.