

Kusser

Fountain SYSTEM

Architectural fountains and Water walls



Saint Francis Health System Tulsa, OK

Page Southerland Page, Dallas, TX · Howell & Vancuren Landscape Architects, Tulsa, OK
Manhattan Construction Company, Tulsa (general contractor)
2014





The 162'-9" long granite water feature for St. Francis Health System is made up of a modular granite Upper Basin, the Runnel, a circular solid granite wall for the Lower Basin, where a central solid granite pedestal (5' x 5' x 2') for a statue of St. Francis is placed, and granite pavers for the interior finished floor of the Lower Basin.

Consisting of three modules, the rectangular Upper Basin is 17'-6" by 23'-5", outside dimensions, and maintains a water level of 6 ½ inches in the basin at an elevation of 789.5 feet. Its integral components include an adjustable 3" overflow drain in the wall, water level sensor, twelve water inlets, two integral 2" suction drains with anti-vortex plates, and a 3" threaded outlet drain with plug for winterization.

The 114'-4" long and 2'-6" wide Runnel consists of six engineered granite modules with integrated plumbing and electrical connections. Its approx. incline is one foot drop for every 38 feet.

The Lower Basin (outside diameter: 28') consists of eight solid granite wall segments and granite pavers on the floor. It maintains a water level of six inches in the basin at an elevation of 786.5 feet - exactly three feet lower than the Upper Basin. A 3" overflow drain in the wall, water level sensor, eight water inlets, two integral 2" suction drains with anti-vortex plates, and a 3" threaded outlet drain with plug for winterization are its integral components. Perimeter LED lighting under the inside ledges of the water feature highlight the gentle water flow at dusk.

Fountain group Künzell, Germany

Mann Landschaftsarchitektur (landscape architect)
2014

Slabs, up to 3' x 2' in size, which were made of dark Fuerstenstein granite and a light Bayerwald granite, cover the new square (11.302 ft²) in Künzell.

A group of fountains blends into the new covering.



Tulsa University Tulsa, OK

Howell & Vancuren Landscape Architects, Tulsa, OK
Key Construction, Tulsa, OK (contractor)
2015



The Hurricane Fountain was designed to create a vortex of descending water and is combined with LED lighting and fog misting to provide an engaging appearance in constant motion. The fountain body was hewn from solid granite with all piping inside the body and basin below. The effects of water, lighting, and fog are controlled by custom computer programs. The design intent was to create a sense of rotation that is reminiscent of the circular motion of a hurricane, which is the symbol for the university's athletic teams. It is the centerpiece of a new plaza surrounded by student housing and a student activities center on the campus of The University of Tulsa.

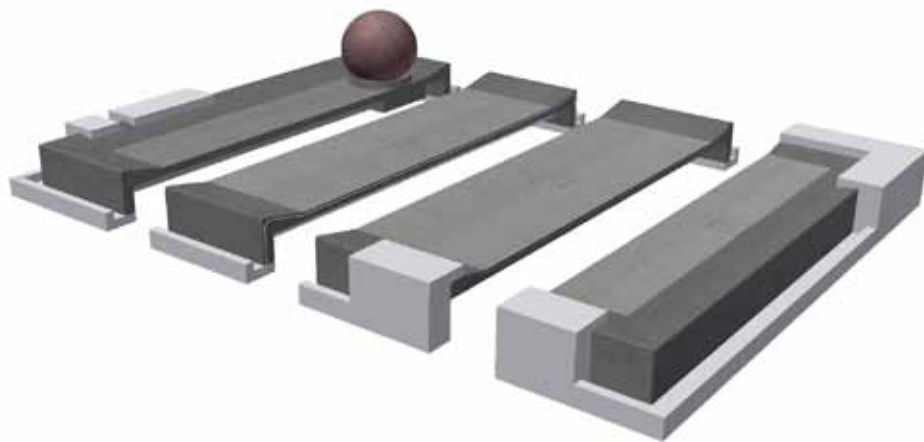
The spiral fountain base ($\varnothing$ 10' / 7', height: 7') consists of two solid granite modules. An integrated Oase rotating nozzle and a fog system display create the Hurricane display: Water sprays out and around, then flows down the granite spiral of the fountain base.

"Granite makes an ideal material for the fountain since it allows the structure to be monolithic, extremely durable, and to be very accurately shaped. By utilizing LED lighting, a mist system, and variable speed pump, an infinite variety of effects, from boisterous to restrained, can be achieved."

Joe Howell, Howell & Vancuren, Inc.

Belay Dacha Outlet Village Moscow, Russia

Hydea S.p.A., Florence, Italy (architect) · Hines Russia (client)
OOO Stroy-Vest (general contractor)
2014



The 29'6" x 29'6" water table with frothy nozzles, water walls, and a Ø 5' Floating sphere comprises of four prefabricated granite modules.

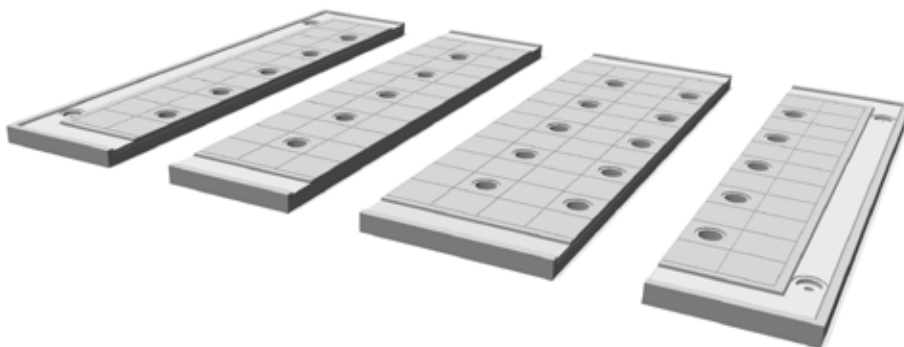


Pulkovo Outlet Village Saint Petersburg, Russia

Hydea S.p.A., Florence, Italy (architect) · Hines Russia (client)
ETS Construction Company, St. Petersburg (contractor)
2015



Two traditional one tier fountains (Ø 18') and an interactive fountain were prefabricated in the Kusser works in Germany to ensure a high degree of quality control and very short installation periods in Saint Petersburg, Russia, while the new Pulkovo Outlet Village was being completed.



The 26' x 26' interactive fountain comprises of four prefabricated granite modules.

Leesburg Village Center Leesburg, VA

L.F. Jennings, Inc., Falls Church, VA (general contractor)
Urban, Ltd., Chantilly, VA (landscape architect)
2015



The Interactive PopJet Fountain is located on the north side of Village Market Blvd. across from the Center Court where the Fire Fountain is located. The water feature display is composed of 25 stainless niches, each including a column effect 12V programmable sequencing nozzle and 30W LED RGB color-changing light assembly, with a stainless cover/grate. These niches are embedded in the concrete, creating a display of illuminated nozzles in the pattern of three connected diamonds which can be individually programmed for height and color-changing light offering a large array of interactive display possibilities.



The Fire Fountain at the Center Court is twelve foot in diameter at the lower basin which contains four plume jet nozzles, shooting water into the upper basin which is elevated an additional foot above the lower basin water line. LED lights are spaced evenly around the center perimeter of the lower basin to illuminate the upper basin and fountain display of the four plume jet nozzles. Additional LED lights in the upper basin bowl, which spills water all around the edge of the bowl into the lower basin, highlight the fire bowl and the water display after dusk. The central fire feature display, a four foot stainless bowl with a grapevine pattern etched along the circumference, is elevated three feet, six inches above the ground elevation and provides a flame of approximately 18" wide above a three foot pan of lava rocks.



Forest Park Medical Center Frisco, TX

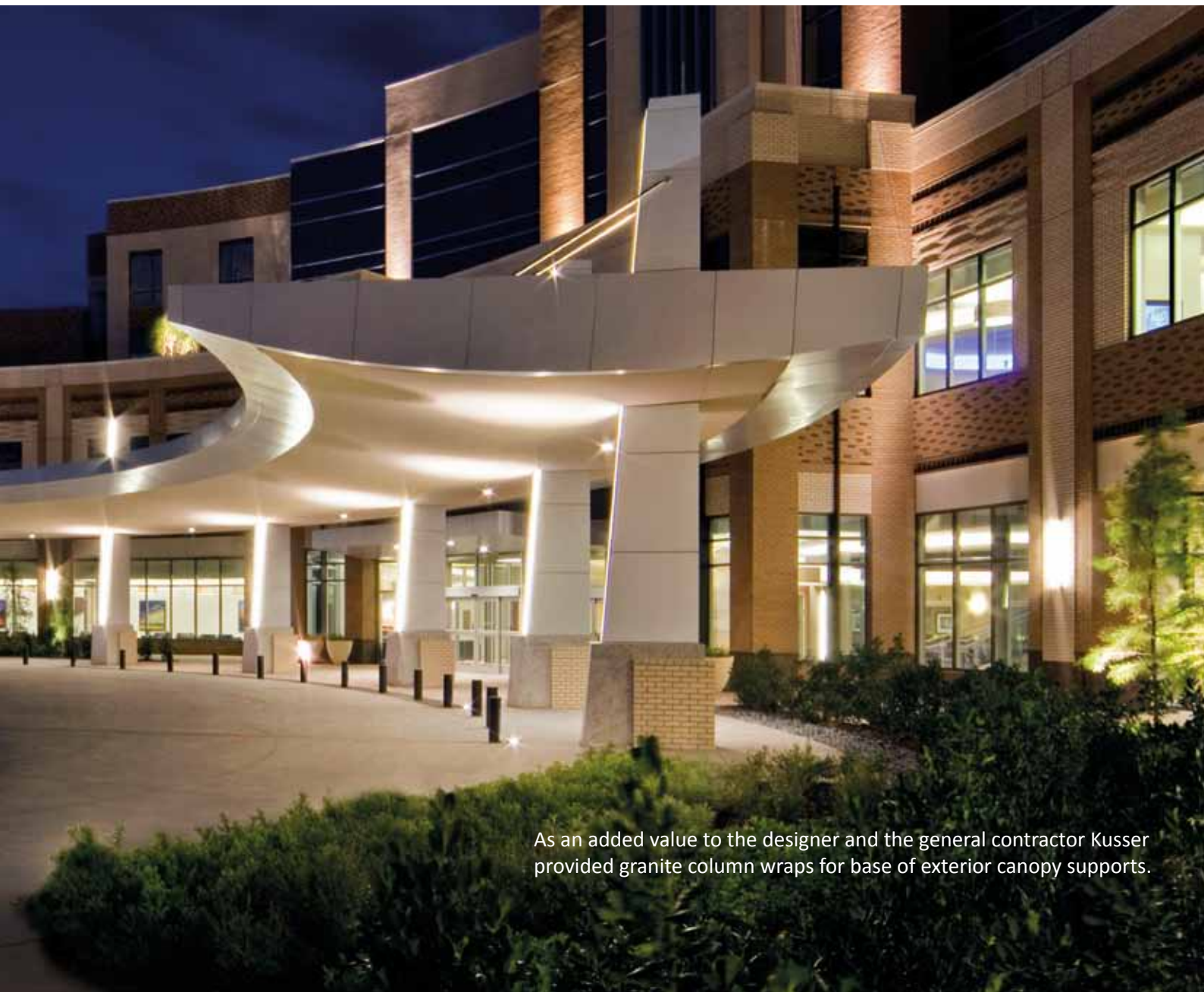
BOKA Powell, Dallas, TX (architect) • Talley Associates, Dallas, TX (landscape architect)
Balfour Beatty Construction, Dallas, TX (general contractor)
2012

The 46' wide, tri-level granite fountain in front of Forest Park Medical Center is comprised of 24 clear stream nozzles in the lower pool and 16 water level dependent cascade nozzles surrounding a large frothy nozzle in the center. Both the solid granite wall structure of the exterior fountain and the two solid granite water walls with





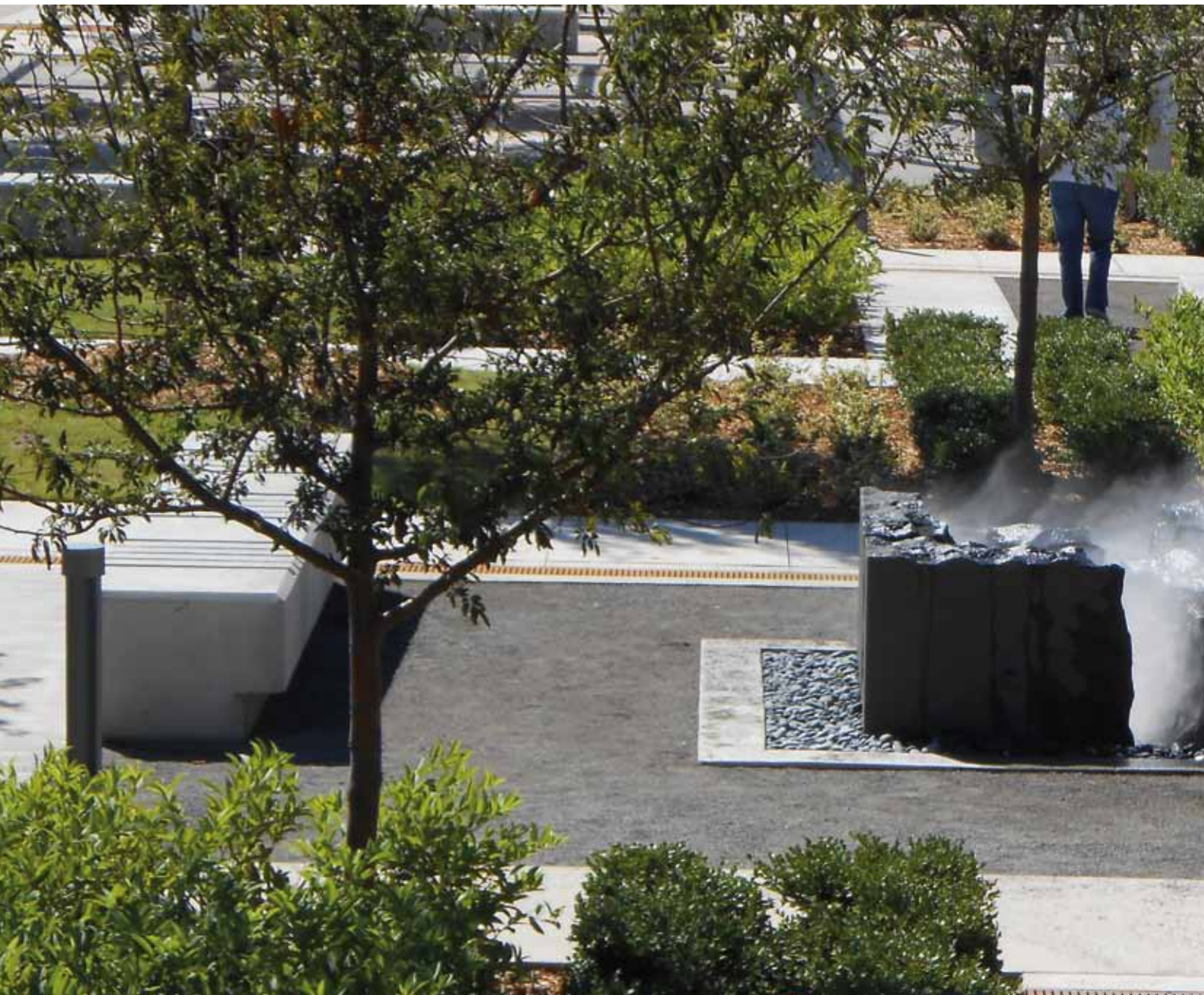
basins in the lobby were prefabricated in the company-owned German plant. Starting with preliminary concept designs and collaborating closely with the architects, landscape architects, and general contractor, Kusser Fountainworks designed and built the water features within budget and on schedule.



As an added value to the designer and the general contractor Kusser provided granite column wraps for base of exterior canopy supports.

Guthrie Green Tulsa, OK

Kinslow, Keith & Todd, Inc. (architects) · SWA (landscape architects)
CMS (fountain consultants) · Manhattan Construction (general contractor)
2012





Guthrie Green was created at the initiative of the George Kaiser Family Foundation, which converted one city block, a former industrial site in the centre of the Brady Arts District of Tulsa, into a 2.7 acres park. Featuring a stage, The Dock pavilion, tree-lined paths, shade structures, water features, and a large lawn, it offers space both for family activities and peaceful escapes. The five interactive light and water shows Guthrie Green accommodates are each completely different in performance and display.





Four water features, a fog, mist, gush, and seep fountain, are made of solid black gabbro in different shapes, measuring 5' x 5' x 2'-6" each. Their effects range from LED color changing light systems with fog to simple white lights with bubble jets. The fountain field, which is made of a pre-assembled structural framing and custom-cut, flamed Bohus granite pavers, is approximately 34' in diameter. All 37 nozzles can be controlled independently of each other offering an unlimited amount of interactive displays.





After extensive value engineering examination, Kusser Fountainworks fabricated and installed both the natural stone features and all five mechanical, electrical, filtration, and sanitation systems. 37 LED lights and water switches were programmed for multiple interactive light and water shows. As is customary with all Kusser projects, Guthrie Green was completed by performing the initial start-up and training the maintenance staff.





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page 6, 7: "Neue Mitte Passau"
Wenzl Architekten, Passau, 2007

1, 2, 3 *Water at Rest*
642 yds² water stairs,
two water walls in Fuerstenstein
granite (12'-6" and 31'-2" long)



3

Kusser Fountain SYSTEM - an overall solution

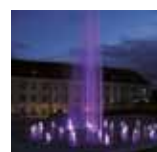
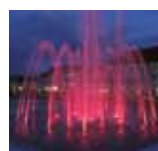


4, 5 *Water in Motion*
Choreographed water jets

4



5



We offer an overall solution for the mechanical and structural realization of fountains and water walls, the Kusser Fountain System. Fountains and water walls are prefabricated in solid natural stone and equipped with all necessary technical elements so that they can be installed at the construction site within short time frames. Granite, which is extremely frost and chemical resistant, is ideal for high-quality, long lasting fountains. The package of natural stone works, water hydraulics, and individually programmed fountain controls combines to provide an integrated system. Proven and tested for years, time consuming construction coordination is reduced along with risk of structural damage. Besides production and installation, in many cases we also provide design and details developed in close collaboration with the client according to the preliminary design intent. Projects range from small private fountains to very large projects in public spaces.

Historic DC Courthouse Washington, DC

Beyer Blinder Belle Architects & Planners LLP, Washington · Hensel Phelps Construction Co. (general contractor)
2009



A bowl shaped water feature approximately 18'-8" wide by 4' tall is constructed from solid granite. It was factory fabricated in custom-designed modules, then assembled and installed within three days in the green area east of the Historic DC Courthouse on Judiciary Square. Since June 2009, following a four-year restoration by Beyer Blinder Belle Architects & Planners LLP, the Historic DC Courthouse has become the home of the District of Columbia's highest court, the D.C. Court of Appeals.

The project included the granite water feature, the filtration and water treatment systems as well as the programming of all water and illumination effects. For optimum performance and as with most large commercial water features, water level controls are included in the electrical control panel of the fountain.

Baton Rouge Metro Airport Baton Rouge, LA

Brown + Danos Landdesign, Inc. · J. Reed Constructors, Inc. (general contractor)
2010



The 11'-6" tall water walls in front of the parking garage at Baton Rouge airport are subjected to strong winds. Prestressed granite was ideal for attaining slender cross-sections of columns and beams despite the high loadings.

The water walls were prefabricate and installed with lengths of 105'-11" and 79'-11" each.



Prestressed granite for slender structural elements

Brenninger Fountain Fulda University Square

Planergruppe Oberhausen, Reith + Wehner Architekten
2012



As part of the redesign of the area, the “Rock Fountain”, by Georg Brenninger, which has stood in front of the Karstadt building at the Fulda University Square since 1963, was renovated and placed in a new basin. The new fountain basin (33' x 21') consists of five modules, manufactured from solid granite at the factory, and integrated on-site into a single basin with durable seals and screw fittings.



© Claudia Dreyße, Dortmund

Solid granite modules



For adapting large fountains to installation conditions we divide them into solid natural stone modules. The prefabrication of these modules allows a high degree of quality control and permits very short installation periods that take days rather than weeks.

Prefabricated, factory-tested modular granite basins are more durable and waterproof than conventionally built fountains. The dense stone seals against water and with professional fabrication of finished surfaces remains durable for decades.



© Claudia Dreyße, Dortmund (2)

Brambleton Town Center Ashburn, VA

LSG Landscape Architecture, VA
2007



© Roger Foley (2)



Operating at variable speed, the independently programmed cascade and clear stream nozzles create interweaving patterns at variable heights. The project consisted of extensive design and build. Due to its modular design and precision fabrication, the total installation time of the 15' x 55' tall solid granite fountain was five days only.

Pre-assembly of the granite modules in the German plant for test-runs. The 55'9" x 15'0" large fountain basin is made of nine prefabricated, solid granite modules.

Each granite module fits like a glove as the basin gets assembled on a concrete foundation provided by the general contractor.



Potomac Yard Arlington, VA

LSG Landscape Architecture, VA
Comstock Homebuilding Companies, Inc. (general contractor)
2007



© Roger Foley (2)

The *Eclipse* on Center Park in the National Gateway at Potomac Yard, Arlington is a luxury high-rise, mixed-use community comprised of 465 upscale residences.

Sculptural fountain

Centrally located in the courtyard of the development, this sculptural granite monolith has water flowing out of the top over its chisel cut surfaces into a solid granite basin.



Potomac Yard Arlington, VA

LSG Landscape Architecture, VA

Comstock Homebuilding Companies, Inc. (general contractor)

2007





© Roger Foley (2)

Interactive fountain

In the shape of a lunar eclipse, the interactive fountain with its suspended deck, made from granite pavers, has (25) individually programmable jets and (9) perimeter nozzles arcing inward toward the center of the fountain.

Potomac Yard Arlington, VA

LSG Landscape Architecture, VA

Comstock Homebuilding Companies, Inc. (general contractor)

2007



Mosaic District Merrifield, VA

Mahan Rykiel Associates · LF Jennings (general contractor)
2012



This design/ build project started with a survey of the site and review of water feature design concepts as they relate to the designated use of the area. We also provided turn-key design, fabrication, and installation of the interactive water feature system and three solid granite water features, including all mechanical, electrical, filtration, and sanitation systems. Twelve LED lights and water switches were programmed to perform multiple water displays and light shows.

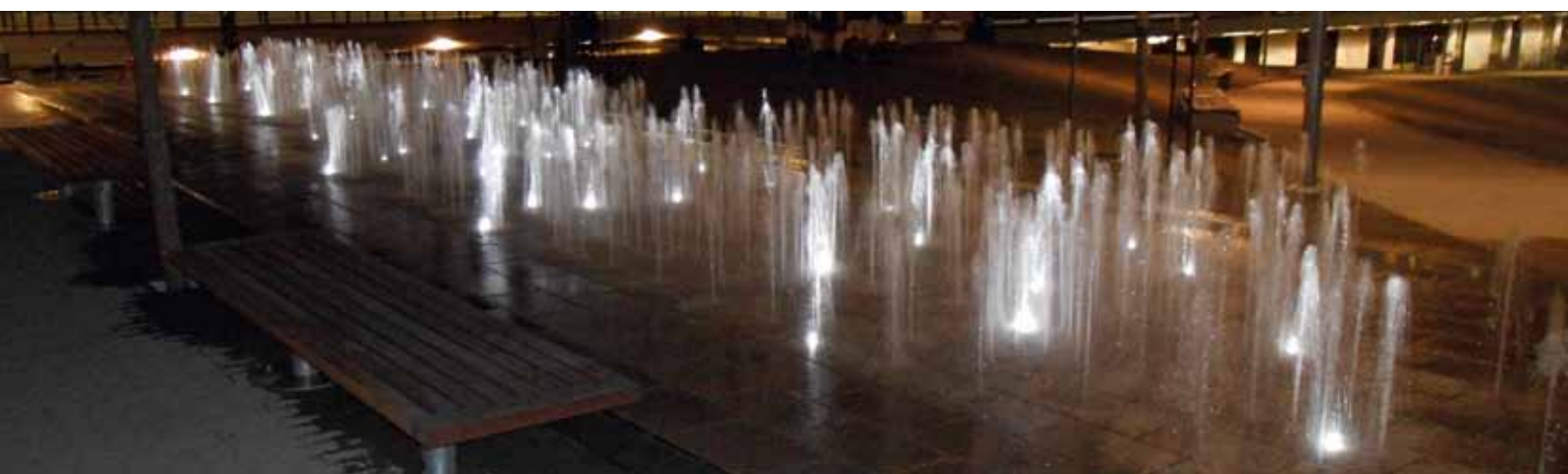


Repentance Park Baton Rouge, LA

Reed Hilderbrand Landscape Architects · Reich Associates (local landscape architect)
DEW Inc. (fountain consultants) · Arrighi Construction, LLC
2013



The 750 nozzles of this interactive fountain are integrated under a drilled and cored stone pavement plaza. The Kusser design team established and produced extensive piping, filtration, mechanical, and penetration design and coordination. It also created the design drawings and documentation of the fountain. Together with the manufacturer Crystal Fountains, the nozzles were optimized to realize the effects designed by the landscape architects and fountain consultant. All (750) nozzles operate from (1) pump with a VFD drive so the entire field of fountains rises and falls together. It is illuminated by 60 flush mounted LED white lights randomly spaced in the deck.



Fountain field Fulda University Square

Planergruppe Oberhausen, Reith + Wehner Architekten
2012



© Claudia Dreyße, Dortmund (2)

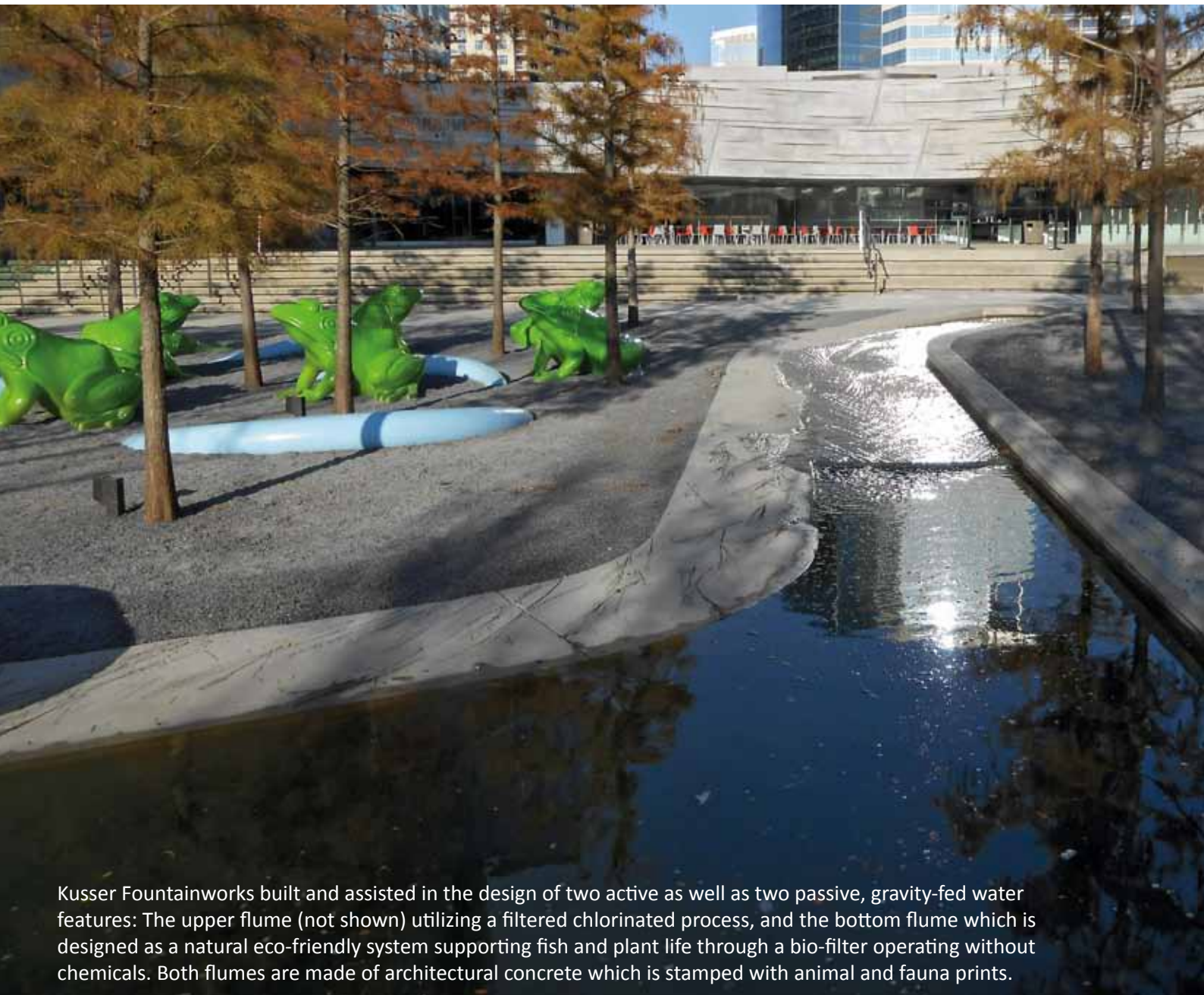
The fountain field at Fulda University Square is covered with granite slabs 6" thick. It can tolerate vehicles with point-loads of up to 5.5 tons, meaning that the area it occupies in the square can still be used for multiple functions. A 12' x 16' basin made of solid granite beneath the fountain field collects the water, simultaneously serving as a water reservoir. The 16 foam nozzles can be turned on and off and their height can be continuously changed; this means that the ideal prerequisites for fountain choreography are in place.



Perot Museum of Nature and Science Dallas, TX

Morphosis Architects • Talley Associates (landscape architects) • Balfour Beatty Construction, Dallas, TX (general contractor)
2012

The Perot Museum of Nature and Science in Dallas is one of 162 pilot projects designed according to the guidelines and performance benchmarks of the Sustainable Sites Initiative (SITES) rehabilitating a polluted urban brownfield. By collecting and recycling air conditioning condensation and rainwater, the irrigation water needs and almost 75% of the non-potable water needs of the museum are met.



Kusser Fountainworks built and assisted in the design of two active as well as two passive, gravity-fed water features: The upper flume (not shown) utilizing a filtered chlorinated process, and the bottom flume which is designed as a natural eco-friendly system supporting fish and plant life through a bio-filter operating without chemicals. Both flumes are made of architectural concrete which is stamped with animal and fauna prints.



During rainfall two gravity-fed mechanisms dramatically stage the flow of rain water collected on the roof tops:

- a stainless steel rain pipes feature located on the prominent upper plaza, which the collected rain water spills from. This water is then filtered through a bed of river rock and flows into a storage cistern.
- a waterfall in the northern corner of the site. (not shown)



At night miniature, 1W LED submersible lights which are flush with the concrete surface create celestial lighting patterns in the bottom flume.

Water Table Markt Rohr

Ferstl Ingenieurgesellschaft
2010



Water gently flows out from the central recess and down the longitudinal sides of the 17'-6'' long water table, which is made of Fuerstenstein granite. The end pieces with the engraved coats of arms are solid pieces of the same material.





11



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13



14

11-14 Hitachi Data Systems Corp.,
Santa Clara, CA, USA
two 18'-0" high water walls,
7'-10" high column fountain
Fennie + Mehl Architects,
San Francisco, CA, USA, 2005

15 Water wall in a private wellness
garden, 2007- landscape architect:
Zuckerschwert + Martin, Freising,
www.z-und-m.de



15

Fountain SYSTEMS in all sizes



16



17

16 Water wall, 16'-5" x 8'-0" in a private garden, Vernal, UT, USA, 2005

17 Water wall, length: 39'-4", floor coverings and water basin in the courtyard of a government building, 2006

18 Water wall, 4'-6" x 18'-4" in the foyer of Sparkasse Passau, 2006

19 Fountain with illuminated jets, Ludwigsplatz Passau, 2007



18



19

Orthopaedics at Gasteig Munich

mhp | Architekten, Innenarchitekten, Munich
2009



The two fountains made of pale natural stone stand at the thresholds between the waiting areas and the surgeries, and create a pleasant atmosphere for the patients.

The fountains were both cut from the stone in one piece, with no base.

Photo: Sascha Kletzsch, Munich



Photos: Kirstin Knufmann





20-22 photos: Nels Akerlund

20



21



22

20-22 Water wall (13'-6"x 8') granite counter tops, benches, and fireplace at Rockford Memorial Hospital, USA, 2006
Richard L. Johnson Associates

23 Water wall at Healthways, Inc., Feltus Hawkins Design, Nashville, TN, 2008



23



24

24-26 two-sided water wall (8' x 8'), negative edge with sculpture at North Cypress Medical Center, Kimberly A. Michaud Interiors, Brentwood, TN, USA, 2006



25



26

Fountain SYSTEMS in hotels



27

27 Onyx water table (6' x 6' x 1') with water dripping from stainless bowls, W Hotel, Atlanta, GA, USA, 2008, Arch.: HKS, Inc., Atlanta, GA Designer: Unit 5+Manufacture

28 Solid granite water table (7' x 3' x 3') Hilton Anaheim Hotel, 2008 Designer: The Puccini Group San Francisco, CA

29 Floating Sphere fountain, Marriott Hotel at Beisheim Center Berlin, 2003



28



29



Schloß Elmau, Upper Bavaria
Luxury Spa & Cultural Hideaway
Watertable (16'-9" x 82') and 5'-1"
tall solid granite fountain, 2007

Bad Wiessee Casino



32'-10" tall granite water wall · Interior architect: Hartmut Weber, Aichtal
wall in Andeer quarzit with 9'-10" long waterfall
Arch.: ARGE Spielbank IB Wagenpfeil/AB Mayr
Bad Wiessee Casino, 2005





The 55'-9" x 18'-2" large fountain, designed by the Munich artist Manfred Mayerle, is the result of a competition sponsored by HUK Coburg in conjunction with the design of the station front court. A 31'-2" long, curved and inclined solid granite wall that is composed of six modules freely spans the 18'-2" wide basin. Water is pumped through borings inside the solid element and runs down the side of the curved wall whereas on the other side it falls down like a waterfall. At the opposite end of the basin, a 14'-9" diameter granite disc freely turns on a very thin film of





water. A moving ring of jets is generated by cutting off a segment of the Floating disc. Due to precision tolerances, only a very low water pressure is necessary to keep the disc turning.

page 44, 45
Fountain of HUK Coburg
at the station front court
in Coburg
Artist: Manfred Mayerle,
Munich, 2007



Stonebridge at Potomac Town Center- Woodbridge, VA

RTKL Associates Inc. (architect) · Hensel Phelps Construction Co. (general contractor)
2012



Located in the upscale Stonebridge Shopping Center at Potomac Town Center, this custom fountain is composed of a Floating disc and sixteen frothy nozzles in a 14' wide x 2' tall concrete basin with granite stone cladding.





Two missing segments of the Floating disc allow for water spraying out of the frothy nozzles to rise to a height of three feet. As the disc rotates weightlessly on a thin film of water, a moving ring of jets is created. The water splashing down into the basin flows over a slanted, precision-cut, octagonal water wall.





30



31

30, 31 Mall of Louisiana,
Baton Rouge, LA, 2008
17'-3" and 24'-3" granite
fountain with stainless steel
cap, CMH Architects, Inc.,
Birmingham, Alabama



32

32, 33 PlusCity, Linz, Austria
Granite fountain with jets,
Floating granite sphere and
waterfall below a
prestressed granite staircase,
2004



33



34

34 Jumping jets, floating disc,
floating wheel, Weserpark
Bremen, 2004

Further Fountain SYSTEMS in shopping malls



35



36

35, 36 Solid, 6'-3" wide one-piece granite basins with monolithic bowl fountain, UNO Shopping, Linz, Austria, 2005, Delta Project Consult, Light design: Dieter Bartenbach

On www.kusserUSA.com you find photos, videos, and information of water walls, water tables, water stairs, and fountains that were produced by us over the past 20 years. Please contact us for further information and for design assistance.

Additional projects realized

www.kusserUSA.com



Fountain technology



The highest industry standards

The fountain technology of Kusser Fountainworks complies with the highest industry standards. We ensure that connective elements attached to the granite are made only of stainless steel and are, if possible, detachable. Our engineering solutions, which have been tried and tested over many years, were established in the company's own metal-working department. We install only high-quality, third-party products.

Prefabricated concrete vaults, water tanks

For equipment vaults, we have developed standardized systems such as seamless prefabricated units made of waterproof concrete, which are individually equipped at the factory with all components. Once they are on-site, all that remains is for them to be positioned on prepared foundations and to be connected to the fountain system through inlet and outlet lines. In addition to easy installation and longevity, a further advantage of underground reservoir vaults made of concrete is that the water in them automatically remains cool and fresh as a result of the low earth temperature. If the fountain equipment is to be located in an equipment room within a building, prefabricated water tanks made from stainless steel, glass-fiber reinforced plastic, or polyethylene are used.

Custom fabrication and pre-assembly

Where possible, pump systems, manifolds, and mechanical systems are pre-assembled at the factory and shipped to site for better quality control and faster installation time. Structural framing is factory fabricated for interactive fountains to guarantee perfect alignment of nozzles and lights. It also allows for pre-assembly of all pipes, drains, and conduits.

Controls and programming

The controls are proprietary designs which can be individually adapted to specific fountains. A simple control system consists of a seven-day timer with manual or automatic filter cleaning. A Programmable Logic Controller (PLC) offers a higher level of convenience and lower maintenance costs.

Personal service

We undertake specialized fountain planning tasks and provide advice during all phases of the service – on technical issues, tender documents, quality, and costs.



Kusser Graniteworks USA, with its division, Kusser Fountainworks, is a subsidiary company of Kusser Granitwerke – a family business with almost a hundred years of history in the quarrying and processing of natural stone. It currently employs some 100 people. A long-standing tradition of exceptional craftsmanship, state-of-the-art machinery maintained by the firm's own specialists, and internal planning teams of technicians, engineers, and architects have helped establish Kusser as one of the world's leading companies in the natural stone industry. In 1989 the first Kusser fountain was installed in the United States. Since 2004, the successful acquisition of the former US distributor has established Kusser Graniteworks USA as a permanent presence in the US market. The following brochures provide more detailed information about Kusser products and services:

- General company information, "Designing with natural stone"
- Natural stone for indoor spaces
- Natural stone for the outdoors
- Prestressed granite
- Kusser Fountain SYSTEM
- Fountain technology
- Floating spheres/ objects
- Implementing works of art

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