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Lighting Sound plasamedia

Kings Theatre

Behind this facade is the year's most stunning renovation

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Above and right: The lobby and auditorium in 1929. Left: The restored lobby.



A Wonder Theatre Delorin

The restored Kings Theatre is Brooklyn's latest performing arts venue

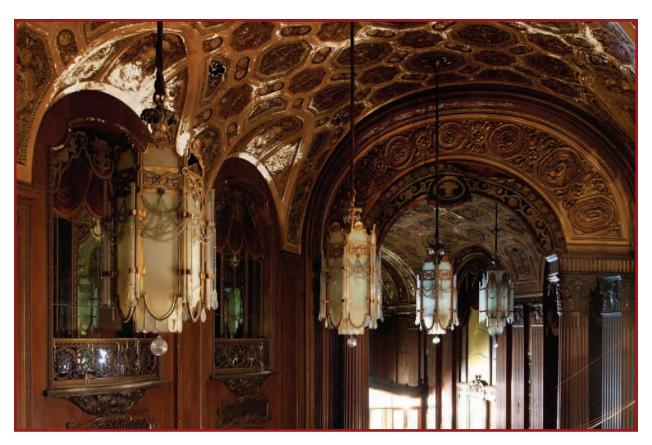
By: David Barbour

he borough of Brooklyn got a magnificent new venue in February with the reopening of Kings Theatre.
Located on Flatbush Avenue, this former Loew's Kings movie palace, a real stunner even among the many rococo creations that went up across America in decades between the wars, has long languished, leaving it in a state of almost irreversible decay. Thanks to a dedicated public-private partnership, the money was raised and a creative team assembled just in time to bring this architectural beauty back from the brink. The restoration, including a renovation to make it suitable as a road house for live performance, carried a price tag of \$95 million.

Opening in September 1929, with a screening of the

Delores Del Rio vehicle *Evangeline* (with the star in attendance), and live performances by Wesley Eddy and His Kings of Syncopation and The Chester Hales Girls, the Kings Theatre (originally known as the Loew's Kings) is one of five "Wonder Theatres" built between 1929 — 30 in the New York metropolitan area by the Loew's theatre chain. (Also the owner of Metro-Goldwyn-Mayer, Loew's believed in providing luxurious venues for its cinematic output). The other Wonder Theatres are the Loew's Jersey, in Jersey City; Loew's 175th Street Theatre, in Upper Manhattan (now known as the United Palace); Loew's Paradise, in the Bronx; and Loew's Valencia, in Queens.

The Kings was designed by the firm of Rapp and Rapp, which was also responsible for such architectural icons as





The theatre's seating was in a state of ruin.

Above: These original chandeliers in the front foyer were hung too high to be stolen by the looters who plagued the theatre over the years.

the Paramount Building in Times Square and the Chicago Theatre in the city of that name. The Kings' interior was designed by Harold W. Rambusch, whose firm, Rambusch Decorating Company, was equally known for its work on churches and movie palaces. According to the *New York Times*, George Rapp, of Rapp and Rapp, designed the Kings as a tribute to the French Renaissance—the Palace of Versailles and Paris Opera House were reputed to be influences—yet he called it "a shrine to democracy where there are no privileged persons. The wealthy rub elbows with the poor—and are better for this contact."

The theatre's interior was designed to bring wonder to guests of all income levels. It featured high curved ceilings, ornate plaster walls, gold-leaf ornament, crystal chandeliers, carpeted floors, plush furniture, and salon-style lounge areas. Rich wood paneling and pink marble accented the lobby and foyer. The exterior featured a glazed terra-cotta ornamental façade.

The theatre, which sat 3,676, combined film screenings with live vaudeville performances, after the fashion of the time. According to the *New York Post*, "Dominating a neighborhood with five other movie houses within five blocks, [Loew's Kings] featured stage shows with performers like Bob Hope, Milton Berle, and Burns and

Allen." With the rise of sound film and subsequent decline of vaudeville, it converted to an all-film format, and, by the mid-30s, the *Post* says, the theatre "had ditched live shows in favor of double features for as little as 25 cents a ticket." Still, generations of fans enjoyed Hollywood films in the theatre's luxurious setting, among them Barbra Streisand. "That's where my obsession with movies began," Streisand said during an appearance at Brooklyn's new Barclays Center in 2012. "And I realized there was a world beyond Brooklyn."

Various factors—the rise of television, the breakup of the studio system, and the shift to the multiplex model—led to the decline of the Loew's Kings. According to the theatre's website, "It was passed over for many block-busters, instead showing mostly kung-fu and B horror movies, which were incapable of drawing the massive

audiences necessary to sustain the theatre. Due to low attendance, high maintenance costs, and the decline of the surrounding neighborhood, Loew's dropped the Kings Theatre." It closed in August 1977, after showing its last film, *Islands in the Stream*, with George C. Scott.

The theatre's stunning interior was reportedly more or less intact as late as 1977. In 1980, it was seized for back taxes, and was officially acquired by the City of New York in 1983, allowing some structural repairs to be implemented. But over the next three decades it fell into a state of near-ruin. Water damage played havoc with much of the gorgeous interior detail, and, according to the website *Curbed*, "Looters ransacked the building in the nearly 40 years it sat unoccupied," tearing out everything including copper wiring. Steven Ehrenberg, director of production at the Kings Theatre, says, "It was some of



The auditorium, before the renovation. The water damage on the house right wall was especially bad.

ARCHITECTURE

the worst I've ever seen."

Over the years, plans were floated to put the theatre back in circulation. One involved turning it into a 12-screen multiplex in the Magic Johnson Cinema chain, which surely would have resulted in the demise of everything that is glorious about the building. Finally, after many false starts, ACE Theatrical Group, in response to a request for proposals from borough president Marty Markowitz and the New York City Economic Development Corporation (NYCEDC), was awarded the right to develop the building and operate it as a venue for live performance. The \$95 million was raised through a partnership involving ACE (led by David Anderson), the NYCEDC, Goldman Sachs Urban Investment Group, and the National Development Council.

Getting the theatre back to something close to its original condition was a herculean task. The list included a restored terracotta façade, a recreated marquee with 812 bulbs, new roofing, and the addition of two loading bays. The lobby acquired 2,354 sq. ft. of historically replicated carpet, restoration of seven chandeliers, the addition of five permanent and five portable bars, and vastly increased restroom capacity.

In the auditorium, tapestries, curtains, and tassels were recreated. New sightlines were worked out, with seating that includes 26 ADA locations. A total of 564 linear feet of RGB LED cove lighting was installed in the ceiling dome, with 55 LED accent lights installed to highlight the front of the stage and organ boxes. The stage house was extensively reworked, too, as we shall see.

Planning the theatre

Gary F. Martinez, FAIA, president of Martinez + Johnson, the architecture firm in charge of the renovation, says, "The damage in many areas of the theatre, particularly the area at house right, was so extensive, and it only worsened between the request for proposals and the time we were able to get started. There was a problem with the drainage system, and water just poured in. Details were disappearing before our eyes; we had to race to get samples. We worked with EverGreene [Architectural Arts, the specialists in detail renovation]; they're real craftsmen, but it involved quite the orchestration of talents and skills to bring back the public areas."

Michael DiBlasi, of Schuler Shook, the project's theatre consultant, says, "Where the water was coming in, from the balcony to the orchestra, all the plaster was gone. The chairs were destroyed and there were many gaps in the seating. We were there one time, trying to get familiar with the building, and it started raining outside. I said, 'What is that noise?' Then I saw: There was water coming in through the doors and into the orchestra, falling into the pit like a waterfall." Fortunately, the structure of the building remained sound, but repairing the roofing was a necessary first step to prevent further water damage. Ehrenberg

adds, "The roof trusses and stage grid were in relatively decent shape. Fortunately, we didn't have to peel off the roof to redo the trusses."

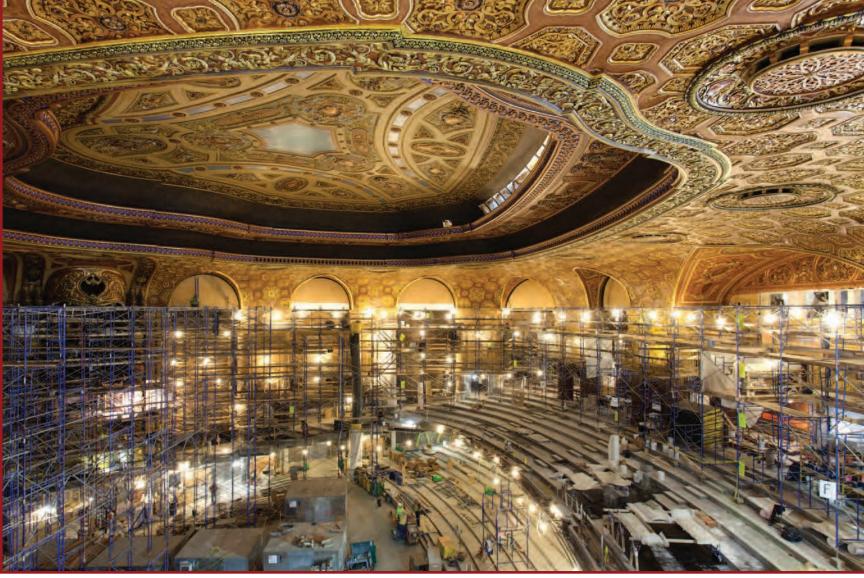
Beyond the daunting issue of getting the building restored lay another question, Martinez says: "How do you modernize a building likes this and still retain its essential character? We had to change the building, architecturally, because of modern codes and ADA requirements, and also because of the lighting and sound systems that had to be installed. But we wanted to be as sensitive as we could to the character of the space. All sorts of questions come up, when, say, you're running conduit of the lighting and sound systems: Where can it go in and where can it come out?"

Martinez also notes that the auditorium's layout posed certain challenges. "Architecturally, it is almost a transitional piece. A lot of the old movie palaces were designed also for live entertainment. But the reason this room is so large and the balcony so shallow is that Rapp and Rapp were thinking of cinema as the predominant style of entertainment. Rapp and Rapp also did Loew's Jersey, which we are slated to work on, and they took a very different attitude there. It's much more vaudevillian in its layout."

The architect is referring to the expansive orchestra level and relatively tiny mezzanine. "You walk in the room and, after only ten steps, you're out from under the balcony," he says. "Understanding the spatial dynamics of the room was critical. Cinema sightlines don't work for theatre. We re-raked the orchestra floor and mezzanine, which also had an acoustical impact." Di Blasi adds, "The sightlines were poor; some of them were abysmal. But we were able to work within the original layout and resolve issues of ADA compliance and also safety and egress. In addition, the number of seats was reduced about 20%, to 3,200, and their widths were increased. Many of the historic stanchions were gone, but we were able to salvage many of them and supplement the rest with new ones." The new seating was supplied by Irwin Seating.

At the same time, the team from EverGreene worked to restore the auditorium's interior. Ornamental plaster was restored. Lost balcony fascia and smaller decorative details had to be recreated from extant sections, and decorative statues in the grotto had to be repaired. A decorative paint scheme, drawn from the original, was implemented. Ornaments in the auditorium and lobby ceilings were gilded and glazed. Wood finishes were regrained and restored, as were historic metal fixtures. Interestingly, the interior was originally designed to have a slightly muted patina, to suggest one was walking into a palace that had been used for years. This idea has been respected in the current renovation.

"The backstage was a totally different story," says Martinez. "From the perspective of theatre technology, it was extremely challenging. Our initial thinking was to



The renovation in progress; EverGreene Architectural Arts restored the decorative walls and ceiling.

remove the entire stage house, which would allow us to reorganize things. In the end, we put in a small, add-on bustle, but we kept a lot of the original stage house. We kept the back wall, but took out all of stage right and expanded it; in doing so, we changed the way the entire rigging wall was set up."

Also, Martinez says, "The loading situation for the venue was completely changed. Most Broadway houses load in one truck at a time; we wanted a true dock situation, with two trucks in use at once. We put in a double dock setup; it ended up being almost 9' above the stage, so we put in a lift as well. East 22nd Street, which runs behind the theater, was closed and 'demapped' in anticipation of expanding the stage house into the street, which allowed us to add more dressing rooms. That's where the dock is located. We also added a tall room, at the back of the stage, for storage; the stage house was enlarged by 224 sq. ft." Ehrenbereg adds that new HVAC systems are located in this addition.

Other results to the work on the stage house included seven dressing rooms with 44 stations; a new rigging

system; and the new freight lift, which measures 20' x 10'. The stage house floor now measures 272,535 cu. ft. iWeiss Theatrical Solutions, based in Fairview, New Jersey, installed the rigging system (which consists of 49 linesets), the Serapid orchestra pit lift, and, in the house, chandelier winches. The company also painted the house curtain and grand valence, with paint supplied by Hudson Scenic Studios, and provided decorative drapery throughout the lobby and auditorium, along with wall upholstery and stage drapery.

Martinez adds, "We also looked closely at patron facilities. We added a huge number of restroom facilities [an increase of 44%] to make up for the small number that was there. For shows with intermissions, we want to be able to handle the crowds. We also added the concession stations, none of which were in the theatre originally. There was only one, in the crook of the grand stairs in the lobby. We put in four large, built-in bar areas; one of them, at house left, is built into the house itself, because the promenade upstairs is so narrow. By building into the house, we took up space, and seats, so we had to get permission from the historical



The lobby and foyers acquired 2,354 sq. ft. of historically replicated carpet. New concession areas were added, to meet the expectations of contemporary audiences.

review board." All of these changes were necessary, he adds, "It was a different time and the building had a different purpose. People who go to the theatre today have certain expectations. We always ask, what does it take to make it into a 21st-century theatre?"

Acoustical and sound systems

Echoing Martinez, DiBlasi says, "The building is so spectacular, you have to understand how to preserve it—to not destroy it with new equipment and the amenities that people expect today. The new pieces have to be inserted discreetly, and yet you have to be aware of power needs and new technologies. You just can't bolt a pipe to the wall and call it good; you have to make it look appropriate. If we tried to restore every last piece of the building to what it was in 1929...well, you could never do all that embroidery. Having done so many buildings with Martinez + Johnson and ACE Theatrical Group, we all have an understanding." He cites an example: "The areas from the two twisted columns at each organ box, across the entire proscenium, are as close to 100% original as possible.

After that, we were more judicious as to what was restored and was done in the spirit of the building."

Working with EverGreene's team, DiBlasi and his staff examined many of the auditorium's extant details for clues on how to proceed. "They would find pieces lying on the ground and ask, 'Is this important or not?' They would make stockpiles of decorative details to see if they could be reused. One piece I found was a lighting fixture that had a latticed quality and was also a cup dispenser. It was near the water dispenser; we found it in an old lighting catalog and identified it." Ehrenberg says, "Because one side of the theatre was in much worse condition, EvergGreene repeated castings from the good side and used them to replace detail on the bad side." This process of close examination also yielded many secrets. "Some of the original embroidered fabric in the auditorium had painting on it from day one, to give it a certain worn patina. We worked with iWeiss to figure out that extra level of detail."

Schuler Shook also handled the theatre's architectural lighting. "There were about seven fixtures left, most of them



The theatre was originally designed, by the firm Rapp and Rapp, as a tribute to the French Baroque era. The Palace of Versailles and the Paris Opera House were reputedly major influences.

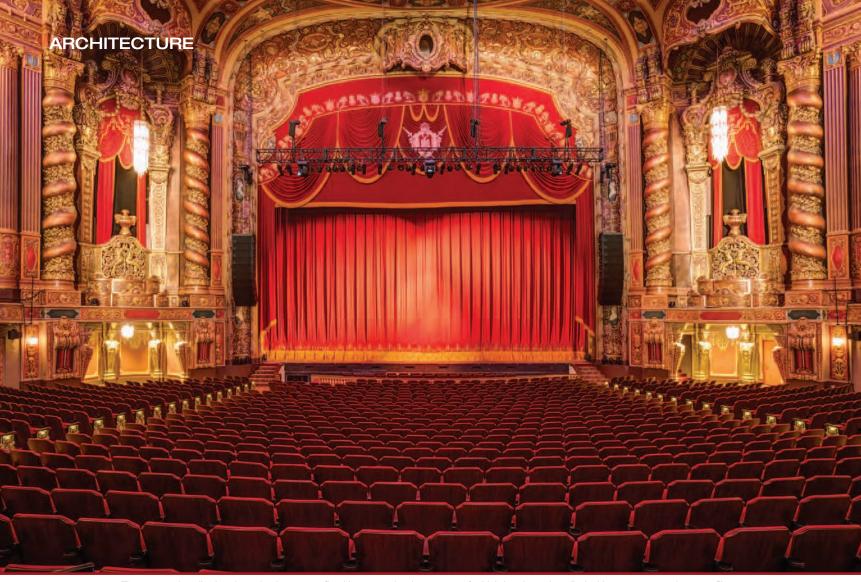
in the lobby, because they are so high nobody could get to them," DiBLasi says. "These were taken down and sent to Litemakers, in Queens, and restored. The balance of the fixtures are new and are based on the seven that we had. We even found shadow lines on the walls, where fixtures had once been, and used them as a template. Later on, someone found part of a sconce and confirmed that what we were doing was accurate; we added winches as well, to make them more serviceable. We also added to the dome a mixture of Philips Color Kinetics iColor Cove and ColorBlast fixtures." St. Louis Antique Lighting also worked on decorative lighting.

The dome also contains a cove for 12 long-throw 5° ETC Source Fours, the first of many changes made to facilitate the lighting system. DiBlasi says: "There are three sets of box booms in the giant archways in the colonnades behind the curtains. You don't see them unless you look for them. We also had to hang extra steel and power, install new catwalks, all the infrastructure that makes the facility usable." He adds that the lighting package includes

70 ETC Source Fours, 42 Source Four PARs, 100 Elektralite RGB LED PARs, and four Lycian 1295 followspots. Control is via an ETC lon console, plus ETC Sensor 3 dimmers. Lighting by was supplied by Barbizon's New York office.

Acoustical issues

C. Russell Todd, of the firm Akustiks, also notes the auditorium's relatively unusual layout. "What is really interesting is, compared to other historic theatres, there isn't a large, deep underbalcony. The acoustic volume per seat count is much lower compared to most concert halls; it's good for amplified sound, which is what's going on in there today. When you walk into this space, you're essentially in one room. It creates a communal feel; you're looking across at 3,000 people and you're all acoustically in the same space. For example, during the inaugural concert with Diana Ross, they tossed yellow beach balls into the audience and it was a big party. You can't do that in a room with a deep, deep balcony."



The restored auditorium has also been retrofit with new technology, most of which has been installed with an eye toward not conflicting with the design. The curtain and other draperies were supplied and installed by iWeiss Theatrical Solutions.

And, like the rest of the team, Todd notes that he and his staff worked to implement changes to the room's acoustics, trying to make them as invisible as possible. "The wall surfaces are either acoustically diffusive or we made them highly absorptive, then tweaked the absorption to address the bass energy in the room," he says. "The French Baroque detail creates the diffusion; we worked with the architects on materials to create the absorption. The plan was to enhance what the room already provided rather than trying to make it into something it isn't." Still, he notes, "You'll see heavy absorption in the panels on the rear wall, and 50% of the side walls feature absorption in the form of heavy drapery, with the other 50% being the diffusive surfaces of the French baroque style."

Also, in the spirit of working with the existing building, Todd says, "We looked into its guts, looking for opportunities to use existing duct systems, rather than tearing out areas that weren't accessible and providing sound attenuation to the air handlers. We also introduced some acoustical materials into the lobby areas so that, as you progress from the street, the spaces become a little more

controlled. In this way, there's not a cacophony of sound, and it's a place where you can have conversation. The real intent of this project is to build a community experience."

Anthony Nittoli, also of Akustiks, who was in charge of specifying the sound systems, also notes the room's unusual layout, saying, "It's one of the few theatres for which we use large line arrays at left and right; the room lends itself to that kind of coverage; you don't have to worry so much about keeping sound off of the side walls. Also, the balcony is quite high, so you can be under it and still within the line of sight of the main arrays. The d&b [audiotechnik] rig performs beautifully in there." The speakers are drawn from d&b's J-Series; each array features eight J8s and six J12s; subwoofers include J-SUBs and J-INFRAs. Front fill is supplied by eight d&b 10SDs, with over and under-balcony fill from d&b 8S and 12S boxes. A set of d&b M4 floor monitors is also available; also used are d&b D6 and D80 amps. The frontof-house audio console is under consideration; there are two mixing positions available.

"We cover all the lobbies and public spaces with



The seating was re-raked in order to improve the theatre's sightlines. The seating was supplied by Irwing Seating.

program monitoring, as well as video to the dressing rooms," says Nittoli, "as well as an extensive infrastructure—audio, video, analog, and digital. You never know when an act will drop in an analog desk. We also did an assistive listening system." The paging system features control by Rane, microphones from Shure and Sennheiser, and speakers by Soundtube. Other available mics for onstage use are by Shure. The assisted listening system is by Williams Sound. The intercom system is by Clear-Com. The video system includes a camera and backstage television by Panasonic, lobby monitors by Samsung, and video distro by Link Electronics. Acme Professional, based in New Market, Maryland, supplied the sound gear.

Nittoli adds that, due to some budget issues, the system is still a work in progress, with new gear being added. However, he says, "We've given them a system that works for most of the acts that go in there. And, fortunately, everything seems to be working well."

Looking ahead

Kings Theatre appears to be having a lively first year. Its upcoming schedule includes comedian Daniel Tosh, Jill Scott, Sesame Street Live, Josh Groban, Jackson Browne, Yo La Tengo, Garbage, Ringo Starr, Jethro Tull, Alvin and the Chipmunks, Neil deGrasse Tyson, Moscow Ballet, Sleater-Kinney, and, at Christmas, the musical Annie. There is also talk of using it for community events—graduations, etc.—as was the case in the old days.

"The Kings Theatre is now once again an integral part of this community, after being lost to the City for so long," said David Anderson, president and CEO of ACE Theatrical Group and the driving force behind the project. "We are so proud to welcome New Yorkers back to the Kings and we thank the community for its incredible support of the revitalization project. It is our hope that everyone will join us as we celebrate the historic reopening and embark on the Theatre's inaugural year of performances." The Kings Theatre, it seems, is a Wonder Theatre once again.