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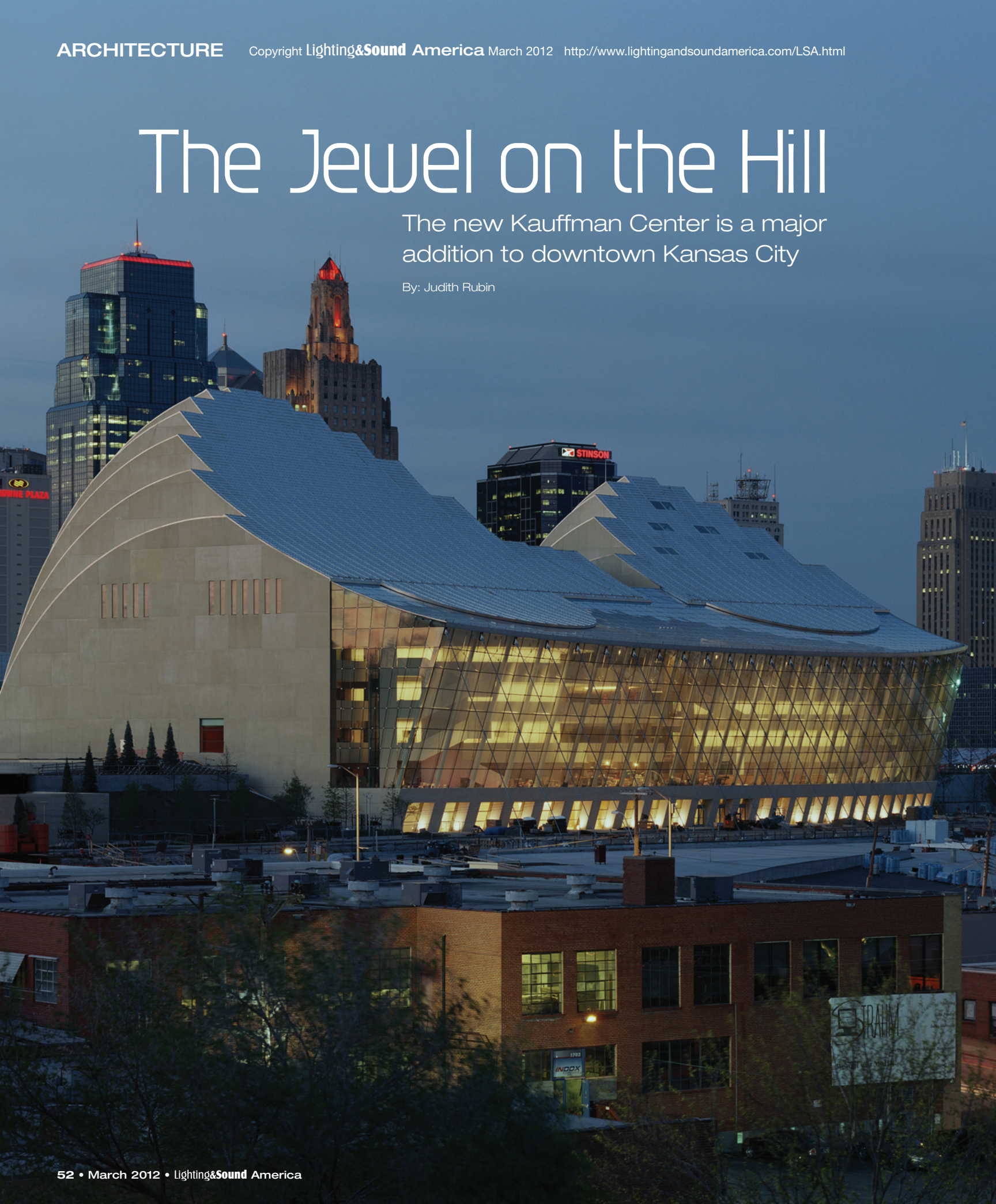
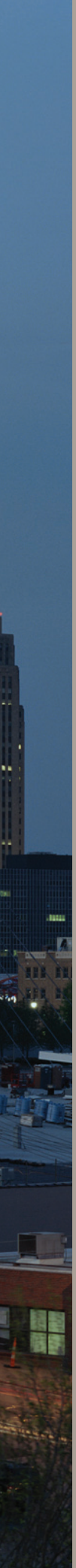
The Jewel on the Hill

The new Kauffman Center is a major addition to downtown Kansas City

By: Judith Rubin





Left photo: Tim Hursley; Right photo: Courtesy of David Riffel

If people aren't drawn to it for the music, they'll go for the view. The new, $413-million, 285,000-sq.-ft. Kauffman Center for the Performing Arts, at 1601 Broadway Boulevard in Kansas City, Missouri, links three neighborhoods: the downtown core, the Crossroads Arts District, and the Power & Light District. Open since September 16, it is a key component of an ongoing downtown revitalization. Janet Chu is president and CEO.

The Kauffman Center is the new home of the Kansas City Ballet, Kansas City Symphony, and Lyric Opera of Kansas City. By virtue of its two world-class performance spaces—the 1,800-seat Muriel McBrien Kauffman Theatre and the 1,600-seat Helzberg Hall—the Kauffman has enlarged the city's ability to host music, opera, theatre, and dance. It has already hosted its first world premiere ballet, *Tom Sawyer*, and Helzberg Hall has been compared favorably in the press to the Walt Disney Concert Hall in Los Angeles.

On its hill, the dramatic structure of concrete, steel, and glass is surrounded by five acres of green space.

This privately funded project was driven by prominent citizen Julia Kauffman, acting to realize a dream begun by her late mother, Muriel. The budget included $326 million for the creation of the center, a $40-million endowment, and a $47-million, green-roofed, 1,000-car underground parking garage funded by the city. It brought together some of the top names in venue design and engineering, including Moshe Safdie (architect); Theatre Projects Consultants (theatre design and planning; engineering of custom equipment), Nagata Acoustics (led by Yasuhisa Toyota), Engineering Harmonics (AV systems), and Arup (mechanical, electrical, and plumbing engineering; and fire/life safety consulting)

Additional team members include BNIM (executive architect), Structural Engineering Associates, Inc. (local structural engineer), WL Cassell & Associates, Inc. (local MEP engineers), Land Capital Corporation (project manager), J.E. Dunn Construction (general contractor), Taliaferro and Browne, Inc. (civil engineer), Reed Hilderbrand Associates, Inc. (landscape architect), and Lam Partners Inc. (architectural lighting).

At the press preview, the white-haired, white linen-attired Safdie held court in the serenity of his gleaming, light-filled, 15,000-sq.-ft. lobby—the Brandmeyer Great Hall—said to be the largest enclosed-glass space in the world.

"I consider this the best-sited building I have had the pleasure of working on," said Michael Ferguson,director for Theatre Projects. "It is right downtown, but up on a hill. It stands in stark, beautiful juxtaposition to the turn-of-the-century city and skyscrapers. It is organic and futuristic at the same time. Safdie did a wonderful job, and Isaac Franco and Sarah Lindenfeld, from Safdie's office, also deserve much credit." (The Theatre Projects team also included project leader Richard Pilbrow, theatre designers Brian Hall and Carol Allen, and theatre equipment designer Michael Nishball.)

On its hill, the dramatic structure of concrete, steel, and glass is surrounded by five acres of green space. On the north side, the building forms two mounds of steel-sheathed, arched segments; the southern façade slopes

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down to a fritted glass ceiling and walls that form a gigantic window box wrapping around and across the breadth of the structure. From within, the glass offers sweeping views and admits natural light into the atrium and concert halls; from without, it is a window into the center, enhanced at night by dramatic architectural lighting. Safdie spoke of making the most of a good thing: "The need to get people out of their homes puts the heat on architecture. The center is visible from everywhere in the city—it broadcasts what's going on; it is inviting, open—an extension of the public realm. Architecture needs to create the setting and need for shared group experience, for the feeling of being part of a community." The grounds and the 113,000-sq.-ft. Performing Arts Center Terrace will be used for outdoor performances and public gatherings.

The building also includes 7,000 sq. ft. of staff offices, generous backstage facilities underground (dressing accommodations for more than 250 performers, a lounge, and 11 rehearsal rooms), and the parking garage, which comes with its own music-and-light show. Construction materials included 40,000 sq. ft. of glass, 10.8 million pounds of structural steel, 25,000 cu. yds. of concrete, 1.93 million pounds of plaster, and 27 steel cables, each holding up to 500,000lbs of force to anchor the glass walls.

Each of the two performance spaces—the 18,900-sq.-ft. Muriel Kauffman Theatre and 16,800.-sq.-ft. Helzberg Hall—is a distinct structure of concrete existing within a larger collective enclosure of glass and steel. Brian Markham, project manager and structural engineer for Arup, describes it as the "box-in-box concept of noise isolation: Each theatre is its own separate building with walls, roof, and foundation, with another building around that having its own walls, roof, and foundation, and the two never touch anywhere." The external shell and airspace keep structure-borne noise and vibrations from reaching the theatres; the theatres' concrete walls also bar airborne noise. There are well-concealed gaps, rather than joints, between structures. The nature of the design speaks to the close collaboration between the trades on this project.

The building, consisting of two mounds of steel-sheathed, arched segments, under construction.

Photo: Courtesy of Safdie Associates

Theatre Projects began planning with Julia Irene Kauffman and the Muriel B. Kauffman Foundation in 1999. Having opted to create two high-quality halls rather than a single, multipurpose venue, they have seen to it that each is designed with specific strengths and aesthetics. Ferguson likened Helzberg Hall to an acoustic guitar and the Muriel Kauffman Theatre to an electric guitar, while Safdie termed them respectively the "cool room" and the "hot room."

Helzberg Hall

The Kansas City Symphony has settled comfortably into the 1,600-seat Helzberg Hall. The wood-lined, skylit, ovate symphony hall, with a resonant floor of Alaskan cedar, uses an intimate "vineyard" configuration, with the concert platform encircled by audience seating in terraces. No seat is more than 100' from the stage. The 2,700-sq.-ft. stage extends approximately one-third of the distance into the hall, placing 40 percent of the seats alongside or behind the orchestra and allowing some of the audience to experience the musician's perspective. A fantastical backdrop is provided by the elaborate custom mechanical pipe organ built by Casavant Frères: It is four stories tall, with 79 stops, 102 ranks, and 5,548 pipes.

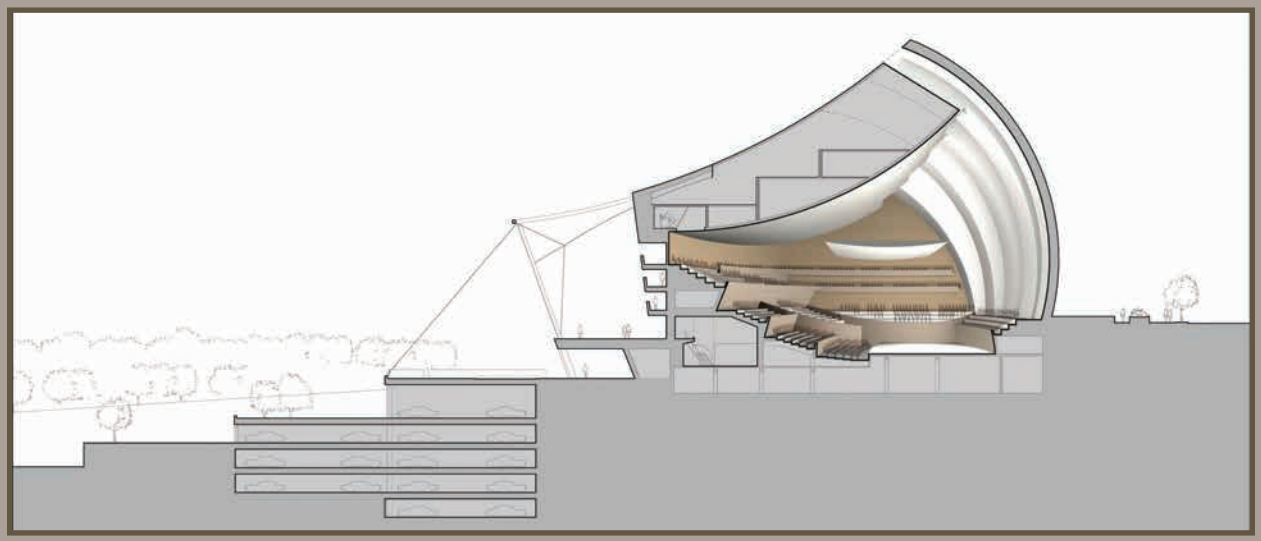
Toyota perfected his acoustical design by building and testing a 1/10 scale mockup of the room prior to construction. "We set up sound-measuring devices in a total of 38 locations in the scale model," he said. "In the first round of testing, we began by looking for echoes, the most likely sound problem. After identifying the location of an echo, we judge the distance to the originating location from the response waveform. Using this distance as a guide, we determine the expected root cause of the echo, apply sound-absorbing material to that location, and conduct a retest to learn if the echo no longer occurs.

"With the results in hand, we met with the architectural team to discuss the various options," he continued. "Depending on the location, the solution options included strategic placement of sound-absorbing material, using or altering planned sound-diffusing elements, and adjusting the angle of certain wall surfaces. Thereafter, we updated the 1/10 scale model to reflect the design decisions and entered the second round of testing, which began with using our measuring devices to confirm that the echoes had been eliminated. When our testing passed this milestone, we proceeded to the final validation of obtaining impulse response data from the scale model, calculating the acoustical properties that can be derived from the data, and analyzing the data in comparison to data for existing concert halls."

While the symphony is its primary user, the Helzberg was designed to accommodate other kinds of music, including amplified; it can also hold broadcast events. A hefty amount of well-stowed gear lurks amid Toyota's delicate acoustical design. Six Gala Spiralifts, supplied by JR Clancy, enable a range of configurations for the concert platform: The automated system can go from flat floor to orchestra configuration in 60 seconds. The travel distance is 4'.

Nagata Acoustics specified precisely determined angles for the hall's side walls, to make them function as effective sound-reflecting surfaces. Painted out behind acoustically transparent lattice and metal mesh grills are complex sound-reflective shapes. Additional sound reflection is provided by gypsum board concealed behind wood grills. Suspended some 50' above the stage by seven chain motors from JR Clancy is a 100,000lb fixed acoustical canopy. The motorized chain-hoist is controlled by a Skjonberg Controls 48-channel system. Clancy also provided 10 adjustable acoustical banners concealed in the side walls. The canopy holds plumbing, sprinklers, AV equipment, and concert lighting, including 36 Philips

The Brandmeyer Great Hall under construction.



A section rendering of Helzberg Hall.

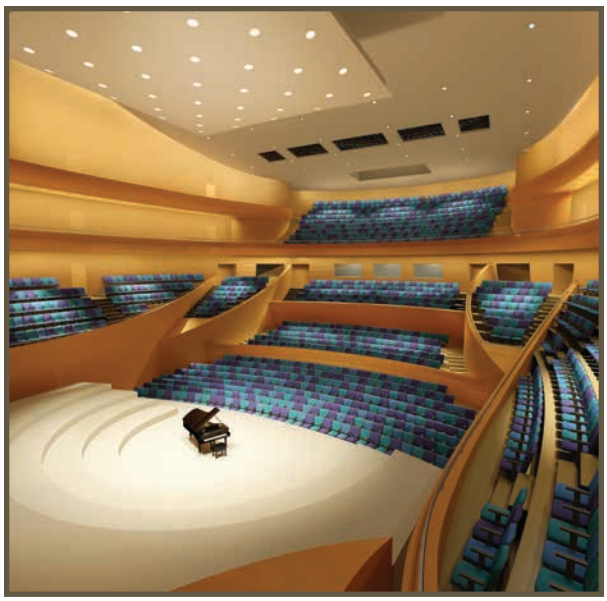
Top photo: Coutesy David Riffel; Bottom image: Courtesy of Safdie Associates

The interior of Helzberg Hall.

Vari*Lite VL1000s, which can be lowered for maintenance via three outrigger pipes, controlled by a SceneControl pendant, which controls seven additional hoists.

The light portholes in the canopy are covered with glass to maintain the sound-reflective surface. “In a concert hall, acoustics have to take precedence,” noted Ferguson, “but, when you put lighting fixtures behind glass, you lose footcandles. To supplement the canopy lighting and support special events, 36 VL1000 fixtures, which are nearly silent, were added to outriggers on the edges of the canopy.”

Embedded unistruts on each of the three balcony levels provide side- and front-lighting positions. “With the architect, we organized power, data, and dimming in a way that was highly aesthetic,” noted Ferguson. More front-lighting positions are available on balcony fronts and on the catwalk, which is acoustically isolated behind glass. Concealed by 6" plaster plugs in the ceiling are some 70 rigging holes. “Just pull out the plug and hook up a beam or one of the chain motors provided by Clancy,” said Ferguson. “If you want to do a big TV shoot and need a truss out front to light the front of the room, you have the ability to choose a 6' or 8' grid and pick the line you want.” More options are offered by 36 chain-motor potential pick points, each with a receptacle box. Also courtesy of Clancy: five 992lb cyclorama point hoists, with a speed of 0-197' per minute, controlled by a SceneControl pendant, which also runs the lighting, banner, and speaker hoists.



A rendering of Helzberg Hall, showing the interior from a different perspective.

The lighting package for the hall includes 16 ETC Source Four 10° and 76 Source Four 19° units plus the 36 VL1000s. The dimmer control format is DMX512 and the proprietary network uses ETC Net3 Ethernet nodes and routing. There are 342 ETC Sensor performance dimmers and 42 Sensor sine wave dimmers. The main lighting control console is an ETC Ion, with wireless and wired focus remotes plus tech table video feed. Console connection locations are at the booth, tech positions, sound cockpit, and side stage.

Theatre Projects specified six Robert Juliat Victor 1,800W MSR followspots, provided by Clair Brothers Systems. Three of them are found in the Helzberg and the other three in the Muriel Kauffman Theatre.

Behind five glass windows at the back of the auditorium are the audio and lighting control rooms, a pair of translation or broadcast booths, and a projection booth. AV and sound consultants Engineering Harmonics Inc. came on board in 2006 and worked with Nagata Acoustics to design and specify a performance sound system (installed by Clair Brothers) that would integrate with the natural acoustics of the room. Clair Brothers staff included Dustin Goen (system engineer/project manager) and Chipp Tate (site coordinator). “This was our second foray into the design of a sound system in a terraced hall with Nagata Acoustics,” noted Engineering Harmonics president Philip

Top photo: Tim Hursley; Bottom image: Courtesy of Safdie Associates

Giddings. His team included Martin Van Dijk (senior consultant), Roger Gans (associate consultant), Russ Noble (designer), and Paul Alegado (project manager).

Multiple challenges for Engineering Harmonics arose from the need to incorporate modern AV systems without disrupting the acoustical integrity of Toyota's room design. "A hall like that is intended to have a single source: the stage," said Van Dijk. "When loudspeakers that are not onstage are used as a source, all the reflectors built into the room become your enemy. Even a small amount of energy is reflected back into the hall, and it's a very delicate process that takes a lot of fine tuning. I think of the speakers as two systems: performance and voice lift, the voice lift being as discreet as possible. Because it's optimized for the symphony, Helzberg Hall needed sound reinforcement to help with speech intelligibility. Patrons are there to listen to music, but they are also interested in the words of the maestro and other presenters." Another challenge involved balancing visual aesthetics with optimal speaker placement. "Ultimately, you want to put the speaker where the symphony is, but can't. And you can't block a sightline, or a view of the organ."

For voice lift, a "voice stick" of Renkus Heinz Iconyx steerable arrays was devised with three IC16-5 columns, in a 360° arrangement located above the front of the platform, hung from a JR Clancy hoist in the tech attic above the canopy; it can drop in through an automated porthole in the canopy. These support the spoken word, in concert with individually timed balcony fill loudspeakers mounted on the balcony railings with custom enclosures. Voice lift at the orchestra level is supplied by R3-T units, camouflaged in a pair of oak-finished enclosures, custom-created by Clair. "Everything essentially builds out from these two," explains Van Dijk. For the low end of intelligibility, a dozen Renkus Heinz 12" subwoofers are built into the front edge of the stage. These are also independently timed. Also built in along the edge of the stage is a custom enclosure with a unique driver built by Manger (Germany). "It is essentially a full-range single driver," says Van Dijk, "a plane wave driver with incredible dynamic and phase response. This was all part of the effort to not unmask the loudspeaker. The more you can get that response as close

Photo: Tim Hursley

The fritted glass ceiling and walls form a gigantic window box wrapping around and across the breadth of the structure.

The glass façade makes a striking addition to the Kansas City skyline.

Photo: Tim Hursley

to theoretically perfect, the better your intelligibility and detail out of the speaker will be at a lower volume. It's really intended to support those people closer to the stage—with incredible detail while keeping the volume as low as possible. It was a high-end way to do it, but justified by the hall."

The main performance speaker system features left and right clusters of Renkus-Heinz ST4 reference point arrays plus Renkus-Heinz ST-2M, which Van Dijk describes as "having the ST4 capacity but in a shape that lets you tighten the cluster as much as possible. They can be configured as left and right or as a center cluster. Center is most applicable, but there could be reasons to break it up, for which they can bring it down onto a custom dolly Clair Brothers designed." The rest of the speaker package, all from Renkus-Heinz, includes TRX62H units for over-balcony fill, ST2-R rear clusters, ST2MR and ST2-R side clusters, and PNX112 subwoofers. EAW JF80s are used for stage effects, with EAW SM-200s acting as stage monitors. A variety of QSC amplifiers—CX-168s, CX-702s, CX-902s, CX 302s, and CX1102s—are employed. The CX-168s can also be used as stage monitors and for effects. A Peavey Nion platform provides digital signal processing. The two sound consoles are a Yamaha PM5D with Optocore Mini YGDAI I/O cards and a Yamaha DM2000.

There is an Optocore system for the main snake, with lines between the stage and mix positions, and an Optocore box for connecting microphones with fiber-optic

running to another box to connect at the control booth or the front-of-house mix position. “It reduces the amount of copper analog lines,” explained Van Dijk. “Some of these technologies, like Optocore, are sonically really quite good and have passed many a golden ear listening test. It certainly reduces the cost of cabling and the size of conduits. In our designs, the conduit infrastructure is really quite substantial and an enormous undertaking for the electrical contractor. The Kauffman electrical contractor, Mark One Electric, did amazing work and was very conscientious. Clair Brothers was subcontractor to them and together they delivered a good quality product. We have a fully isolated technical power system that indeed passed its isolation tests; the system is very quiet. There are a lot of technical power company switches for lighting and sound throughout the back of house and at the loading dock—it is well outfitted.”

The rest of the AV package in the concert hall includes mics by Crown, DPA, Earthworks, Sennheiser, and Shure; JBL LSR4328 speakers; a Sweetwater Creation Station sound effects computer; Clear-Com communications; and a Samsung 920WM flat panel display.

Muriel McBrien Kauffman Theatre

The 18,900-sq.-ft. Muriel McBrien Kauffman Theatre is a 30'-tall proscenium theatre for opera, dance, and touring productions. It is designed to convey grandeur as well as intimacy, with three stepped balconies and wraparound side boxes of seating to bring people close to the stage. This sparkly space is the new performance home of Kansas City Ballet and Lyric Opera of Kansas City. Audiences are seated around the stage in a variation on the traditional horseshoe configuration. “It was very important to achieve the feeling of shared experience. We accomplished this by wrapping people around the sides of the room to populate as much of the theatre space as possible, and by segmenting the seating to make the house feel fuller even if it isn’t a full house,” says Ferguson. “Also, the stepping side boxes help convey the scale of the performer. The intimacy created connects the audience to each other; you want the laughter and emotions to rumble around the room.”

The 5,000-sq.-ft. stage features a flexible orchestra pit configuration and the ability to adjust the stage opening width from 40' to 50'. The maximum pit size, 1,300 sq. ft., accommodates up to 96 musicians. The 73'9" fly tower accommodates seventy 2,000lb counterweight sets (scalable to 90 sets) with a double-loading gallery. The fully walkable rigging grid is accessible by stairs, ladders, and elevator. The house curtain utilizes a motorized counterweight lineset; center and intermediate splits allow for motorized split travel or guillotine opening. There are also 28 variable-acoustic banners on custom chain drivers stored behind the wall at the rear of the auditorium levels, where they can be lowered behind the seat backs, using a SceneControl pendant. Rigging, curtain systems, and pit lifts were provided by JR Clancy. Between the two Gala lifts and the custom seating wagons, the theatre can go from full seating to full pit in about 15 minutes. Another lift and seating wagon located at the back of the orchestra seating provide a sound mix position for special events. The sound consoles are the same as in Helzberg Hall: the Yamaha PM5D with Optocore Mini YGDAI I/O cards, and a Yamaha DM2000.

All onstage electrics are fed from a lighting gallery, creating flexible electrical locations. An overhead automation gallery separates scenery from lighting. Lighting positions

Photo: Tim Hursley

The Muriel McBrien Kauffman Theatre.

include a pair of catwalks at the front of house, all three balcony fronts, 10 lighting positions under the boxes on the side walls, and a box boom technical zone placed directly in front of the proscenium. This position provides lighting ranging from 8' to 40' above ground. "You can put a fixture wherever you need it for that specific angle," says Ferguson, who reports that Kauffman theatre operations director Patrick Donnelly and his technicians have been finding the system both easy and efficient.

The lighting system employs seven ETC Sensor dimmer racks and approximately 642 Sensor dimmer modules, plus two Sensor sine wave dimmer racks with 48 sine wave dimmer modules. The lighting control console is an ETC Eos. Twenty company switches are distributed around the room to support additional gear. Some of the power locations include buss ducts. "The buss ducts allow you to put in one 8'-long raceway, from which you can get any flavor of power you want," says Ferguson. "We try to provide lots of options and to future-proof as much as possible. This is intended to be a 100-year building, and many cities have existing theatres older than that. We put in extensive cable management systems, with the goal being that you can run wire from any one space to another. You can park a broadcast truck in the loading dock, run cable down to the concert hall, and get to mid-auditorium without having to go through an open door or across the ground."

Lighting fixtures for both halls were provided by Clair Brothers. The distributor was Broken Arrow Electric Supply and the installer was Mark One Electric. For ETC, Ted Ozimek was project manager, Jeff Stroman was field service engineer, Shawn Blystone was systems engineer, and Charlie Arcand was systems drafter.

The lighting package includes approximately 400 ETC Source Four units in various degree sizes and models, 120 Source Four PARs, 24 Philips Vari*Lite VL1000s, 96 Altman T-3 cyc lights, eight L&E MR16 strip lights, and 36 Wybron CXI color changers. Three Robert Juliat Victor 1,800W MSR followspots were installed. "They are geared for heavy multiple uses, including Broadway touring, which they will see in the spring," said Ferguson.

"Inside the performance spaces, we provide dimming and control of all house lights," notes Ferguson. "They are all controlled through an ETC Paradigm integrated control processor. There are decorative LEDs, provided by Tivoli, in the auditorium: The crinkly, reflective balcony fronts, made by 3form, are clear molded plastic with LED backlighting. The LEDs, which have a very long life, are demountable. Sixteen murals on the walls were handpainted by local Art Institute graduate students. "Most theatre rooms are defined by the front of balconies more than the back wall; in this case, the design team really used that, with the dramatic balcony fronts and the stepping all around the room," observes Ferguson.

As in Helzberg Hall, glassed-in control booths at the back of the auditorium accommodate sound, lighting, projection, and director/broadcast. One booth houses the Figaro Systems control system, which provides show titling on personal seatback monitors. "The opera felt it was very important for a modern room in the 21st century to have this," said Ferguson. "It allows you to provide subtitles in different languages while maintaining the purity of the stage picture." The feed can be personalized to the seat and can eventually be used to convey marketing, sponsorship, or sales messages.

Engineering Harmonics specified both analog and digital infrastructure, also with future proofing. "There is a lot of 'dark fiber' that can be used to upgrade video and do other things in the future," says Van Dijk, "and copper data paths as well, with CAT 5 cabling. The loudspeaker system underwent an eleventh-hour evolution. It was initially designed around line arrays, but, at the end of the day, it was discovered that the arrays wouldn't fit the openings of the proscenium arch because of its geometry and structural members."

"A hall like this is intended to have a single source: the stage. When loudspeakers not on stage are used as a source, the reflectors built into the room become your enemy. Even a small amount of energy is reflected back into the hall; it's a very delicate process that takes a lot of fine tuning." — Van Dijk

The solution was a combination of Meyer Sound MICA line arrays with Meyer's new JM1P downfill loudspeakers. "It is a multifaceted speaker system: essentially three separate systems that can be combined in different ways, depending on the type of show," says Van Dijk. The full package, all by Meyer, includes a center cluster of three MSL-4s with three DF-4s for center cluster downfill, four M2D-SUB flown subwoofers, three JM1Ps and five Micas each at left and right in custom Clair rigging frames, two CQ-1s, two UPA-1Ps, four MSL4s, and two 700-HP subs, one each at the left and right of the stage. There are also portable ground stacks on custom Clair Brothers carts with five Micas and one 700-HP each, and an upstage FX cluster of two Meyer MSL-4s and two PSW-2s with custom cart and CM Lodestar chain hoist.

A rendering of the theatre. The venue features an American Harlequin reversible floor, with Latch-Loc panels, for the stage.

For simple announcements, there is a small Renkus Heinz Iconyx IC-16 system built into the torms. Additional speakers include eight EAW JF80s for sound effects, two EAW SB180 subs, eight EAW SM-200 stage monitors, 18 Renkus-Heinz TRX 61 loge fill speakers, two JBL LSSR4328s,15 Tannoy CMS401DCe overbalcony boxes and 29 more CMS401DCes for the underbalcony, as well as nine custom 4" Clair front fills permanently mounted in the removable pit rail. QSC amps—the models include CX-168, CX-254, CX-1102, CX-702, CX-302, and CX-168—are also used. All are controlled on a Peavey MediaMatrix Nion platform, preset with core programming and loudspeaker calibration setups. There is multi-zoned connectivity for surround locations, to support a special effects and cinema rig consisting of 40 custom 4" Clair FX speakers, which can be mounted at 50 locations around the room.

Sound consoles are a Yamaha PM5D and a DM-2000. A Christie LX1500 projector and Draper custom 22'6"-by-40' StageScreen are suitable for corporate displays. Panasonic AW-E650 cameras on the balcony rail capture the stage action; the feed is piped out to the lobby areas and entrances for latecomer video, and fed to dressing rooms. A digital RF system, consisting of 18 Contemporary Research QMOD-HD and 86 LG LCD displays, allows for the distribution of multiple channels of content around the building. Hearing assistance is provided by Sennheiser analog infrared system, which draws from modulators placed in the proscenium walls and creates a stereo feed from a combination of program sound plus the console mix.

The rest of the AV package includes mics from Crown, DPA, Earthwork, Sennheiser, and Shure; a Samsung 920WM flat panel display, SFX pro audio show control software, a Sweetwater Creation Station sound effects computer, a Clear-Com communications system; and a pair of LG Electronics LB32LC7DC large video monitors

With so much equipment loaded into the proscenium, care had to be taken to preserve the acoustical elements. “We had to negotiate with the acoustician to get those speakers in there,” recounts Van Dijk. “The arch of the proscenium is a critical acoustic reflector. The opening had to be completely sealed in terms of a hard baffle, so there’s no place where sound can go through to the other side; you need to maintain a continuous reflective surface. To sort out the baffle that goes around the speaker system, Clair Brothers had to build a custom plug that fit the specific geometry of the opening provided.”

The lobby and the experiential parking garage

Renkus-Heinz Iconyx steerable line arrays were built into several locations in the lobby walls for announcements. Also, there are Tannoy CMS401DCes in the open oval staircases and Tannoy CMS501DCs in drum wall ceilings at each level. Five hundred Tannoy CMS501DCs ceiling speakers are distributed around the building. In the uppermost lounge area, an open space facing the glass, Engineering Harmonics used Amina AIW5T70s, made for the home market, embedded into the walls.

Portable equipment for events in the lobby includes a wireless microphone setup, Meyer UPAs and small subwoofers on stands, and a small cart with a mixer. Any number of sources are played into the lobby using a Crestron control system, which is accessible from the front-of-house manager’s office and the main equipment room, which adjoins Helzberg Hall and the backstage area.

A visit to the Kauffman Center is likely to begin and end in the parking garage, and this aspect of customer service has been integrated into the whole. Embracing the notion that a parking garage can be an extension of the visitor experience, artists Mags Harries and Lajos Héder and composers David Moulton, Bobby Watson, and Roberta Vacca produced “Terpsichore for Kansas City.” When visitors exit their vehicles anywhere in the garage, they hear music playing from the ceiling. The centerpiece, a four-story “light organ” situated in the central stair tower of the garage, uses acrylic tubes and LEDs to play a light show choreographed with the music. Funding came from a one-percent-for-art project overseen by the Kansas City Municipal Art Commission.

Image courtesy of Safdie Associates