APPENDIX A3

Noise Specialist Resume

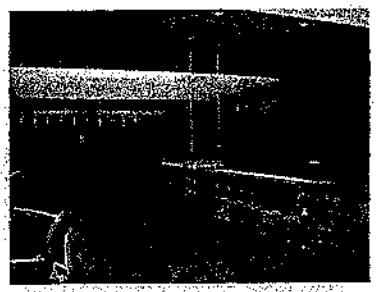
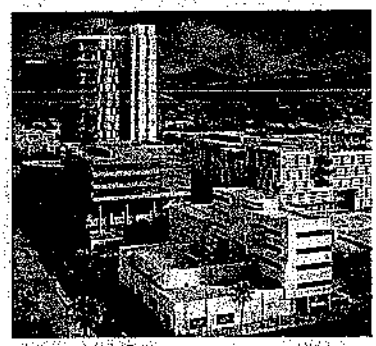
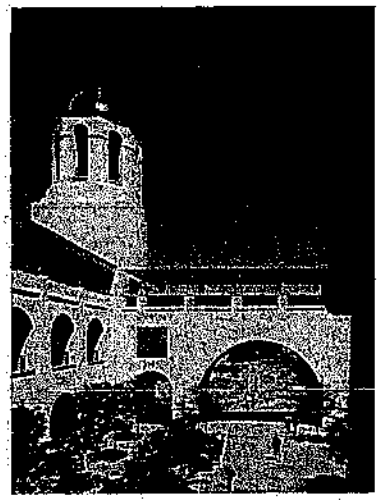
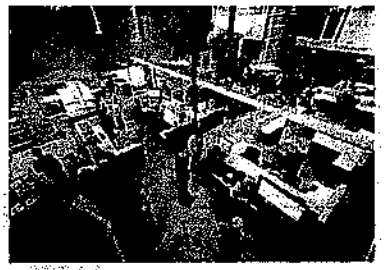
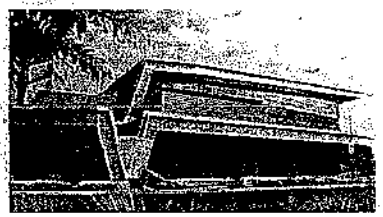
Veneklasen Associates
Consultants in Acoustics | Noise | Vibration | AV | IT

STEPHEN A. MARTIN, PH.D., P.E. | ASSOCIATE PRINCIPAL

Dr. Stephen Martin, P.E. is the Co-Director of Veneklasen Associates' Environmental Noise and Vibration group, and as such manages all manner of projects – from field testing to long-term monitoring programs to complete program environmental compliance. His areas of expertise include noise and vibration monitoring and mitigation for construction projects, power plants and industrial facilities, community noise impact, architectural acoustics including residential sound insulation, instrumentation, and system design. Steve is an outstanding program manager who is technically knowledgeable, skilled in plan development and execution, and well-spoken when communicating with stakeholders. Steve is also the Director of Western Electro-Acoustic Laboratory (WEAL), Veneklasen Associates' NVLAP-accredited testing division. His prior 13-year association with Veneklasen Associates began in 1982, with an interim 17 years working for Wyle, Inc.

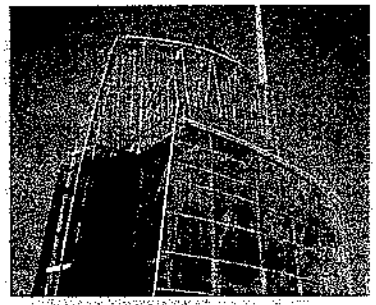
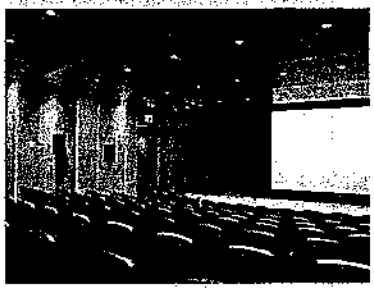
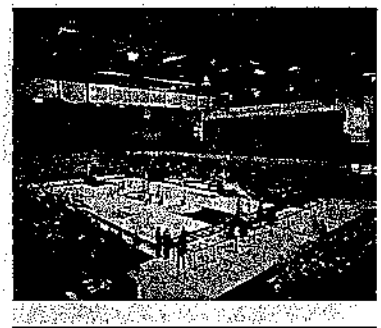
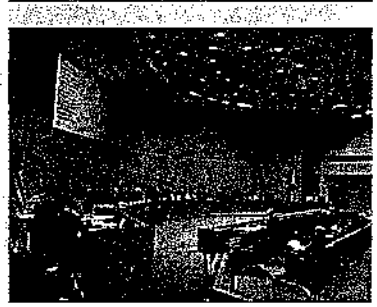
Architectural Acoustics **Mechanical Noise**	Numerous projects to reduce exterior transportation noise and vibration or to improve interior party wall performance. Acoustic measurements and design recommendations to support noise control design and noise reduction recommendations; analysis and recommendations through all project stages for the control of building mechanical system noise and vibration for all types of equipment including but not limited to HVAC, plumbing, exhaust, and elevator operations.
Airport Sound Insulation	Residential Sound Insulation Program (RSIP) manager and acoustic consultant for over 100 projects including experience with FAA requirements, acoustical analysis and design, construction management, conflict resolution, and specialized design methods. Projects included management of RSI Programs at over a dozen municipalities Inglewood, Los Angeles County, Millbrae, San Bruno, San Mateo, Van Nuys and Burbank as well as acoustical measurements and acoustic design guidance at Dallas Fort Worth, King County, and Tucson.
Community Noise **Sound Propagation Studies**	Environmental impact analysis and reports for proposed projects, construction noise analysis and mitigation, construction noise control plans, construction noise monitoring plans, utilities operational noise and vibration impacts and recommendations for control, and general community noise impacts.
Transportation Noise	Measurements for vehicle noise compliance and noise and vibration mitigation, including Los Angeles Metro bus pass-by noise levels per SAE J366, CA Department of Recreation Off-Highway Vehicle Department measurements per SAE J1287 and EPA F76a, and the instrumentation of a DC-10 for Raytheon to document noise and vibration effects of variable flight parameters.
Industrial Noise & Vibration	Noise and vibration control of power plants, industrial facilities, thermal vacuum laboratories, ballistic facilities, and rocket test stands and isolation of delicate equipment installations. Measurements and acoustic recommendations for providing interior noise levels complying with local noise ordinances or compliance with OSHA standards for power plants, pumping stations, pipelines, gun ranges, transformer stations, and other industrial sites.
Lab & Field Measurements	Using ASTM standards, acoustical testing of materials including transmission loss of windows and doors, absorption tests, impedance tube absorption tests, reverberation time, microphone calibration, general audio component testing; field tests include Transmission Loss (FSTC), Impact Insulation (FIIC), Noise Reduction (NNIC and NIC), Reverberation Time, and general vibration and noise measurements.
Experience	2012-Present Veneklasen Associates 1995-2011 Wyle, Inc. 1982-1995 Veneklasen Associates,
Education	Ph.D., 1993, Mechanical Engineering, Acoustics Emphasis, University of California, Los Angeles M.S., 1987, Mechanical Engineering, Acoustics Emphasis, University of California, Los Angeles B.S., 1981, Electrical and Electronic Engineering, California Polytechnic University, Pomona
Professional Affiliations	Acoustical Society of America; Audio Engineering Society Institute of Noise Control Engineering American Society of Heating, Refrigeration, and Air-Conditioning Engineers Registered Acoustical Consultant in Orange and San Diego Counties, California Registered Professional Engineer, Electrical Engineering State of CA, License No. E-12022, 1984

Veneklasen Associates
Consultants in Acoustics | Noise | Vibration | AV | IT

Pioneering Since 1947



Top to Bottom:
LAX – Tom Bradley International Terminal
Columbia Square Adaptive Reuse
Banning Justice Center & Superior Courthouse
South Lake Tahoe High School
Kaiser Permanente Template Hospital Anaheim

Top to Bottom
SDSU Aztec Student Center
Wilshire Grand Tower
MGM Offices Screening Room

Top to Bottom:
Google Venice
Hacienda Heights Community and Recreation Center
UC Davis Activities & Recreation Center
CalPERS Hearing Room

Acoustics | Audio-visual | Information Technology | Security

1711 Sixteenth Street • Santa Monica California 90404 • tel: 310.450.1733 • fax: 310.396.3424 • www.veneklasen.com

Firm Profile

Founded in 1947, Veneklasen Associates is one of the largest acoustical consulting firms in the United States. Our services encompass architectural acoustics, audio-visual (AV), information technology (IT), environmental noise and vibration mitigation. As a sole source for building sound quality and low voltage, our technical and professional standards have been developed through the design of literally thousands of buildings worldwide. Recently, Veneklasen Associates is proud to announce the acquisition of HF Noise Consultants in Canada.

What Makes Us Different?

- Founded in 1947, we are one of the FOUNDERS of acoustics, noise control, vibration control and AV design.
- We are a RESOURCE in our field with decades of field and lab data that inform our recommendations.
- Our TECHNOLOGY RESEARCH efforts have ranged from reducing aircraft noise during the second world war, to designing aircraft hush houses after the war, to designing low mass aircraft in the current environment.
- Our BUILDING RESEARCH efforts resulted in numerous innovations still employed to this day developing acoustical seals for doors – still in use by manufacturers to this day, to the innovation of floating floors, to low frequency sound attenuators, to vibration isolators for mechanical equipment.
- We are regularly invited to present research PAPERS and professional SEMINARS throughout the world so that others can gain from our expertise.
- We are the only acoustical firm in the Western United States with its own NVLAP-accredited testing facility - *WESTERN ELECTRO-ACOUSTIC LABORATORY*.
- In the past five years our research foundation, the PAUL S. VENEKLASEN RESEARCH FOUNDATION, has provided $1.3 MILLION in funding to our peers, students and educators.

- Civic & Government Agencies
- Courthouses & Public Safety
- Education - College & University + K-12
- Studios & Entertainment Facilities
- Transportation, including Airports & Rail
- Medical Centers & Hospitals
- Commercial Buildings & Corporate Interiors
- Hotels, Resorts & Casinos
- Condominiums & Apartments
- Concert Halls & Performing Arts Complexes
- Museums & Cultural Centers
- Industrial & Utility
- Places of Worship

ACOUSTICS

Sound quality and noise mitigation in the built environment is a significant design element. Our goal is to optimize the acoustics according to building science, aesthetics and cost. By utilizing a proactive, collaborative design approach we are able to address the acoustical effect of the building systems, and develop recommendations and performance criteria with the design team and project consultants.

ENVIRONMENTAL NOISE

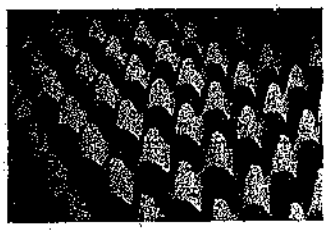
As an acoustics firm, Veneklasen Associates is further differentiated by our environmental noise capabilities. This includes, but is not limited to, measurements and analysis for regulatory compliance and noise impact consultation for utilities, industrial and commercial development. Our role has ranged from recommendations specific to OSHA in the workplace to community noise analysis for EIRs. Our longevity in the environmental noise field provides us with a broad array of comparative data as well as extensive public outreach experience, often with sensitive community projects.

RESEARCH AND TESTING

Our firm's origins are in research; we were founded in 1947 in response to a need to investigate noise impact relating to inventions resulting from World War II, such as rocket engines or noise within military aircraft in operation. Our findings and associated innovations led to patents in hearing protection, microphones, and measurement instrumentation. Veneklasen Associates' commitment to research was sustained throughout the decades and remains a passion to this day. Our work has led to improvements in the acoustical design of performance spaces such as concert halls and auditoriums, and, in the case of multifamily residential properties, set industry standards and best practices. Today our research experience informs our testing methodology, with capabilities in both our NVLAP accredited lab – Western Electro-Acoustic Laboratory - and in the field.

Acoustical Consulting Services

Sound quality and noise mitigation is a significant factor in the built environment. Our goal is to optimize the acoustical design according to building science, aesthetics and cost.



Veneklasen Associates' engineering expertise and consulting practices are derived from over 60 years as innovators in the field. Our designs optimize sound quality in a manner consistent with each project's functional, design and budgetary requirements. By utilizing a proactive, collaborative design approach we are able to address the acoustical effect of all of the building systems on the built environment, and develop recommendations and performance criteria with the design team and project consultants. Our recommendations are provided early in the design phases and we remain involved through Construction Administration to verify that our recommended assembly details are executed properly in the field.

Veneklasen Associates' acoustical recommendations are provided in the form of marked-up floor plans, typical details, sketches, acoustical specifications and brief written reports when necessary. Once this information is reviewed by the architect as well as other appropriate member(s) of the Design Team - the structural engineer, mechanical-electrical-plumbing engineer - it is incorporated into their documents at the appropriate project phase.

I. Exterior Noise

Defined as excessive noise and vibration impact resulting from activities at adjacent properties, outdoor events, operation of plants, machinery and equipment, or transportation sources such as automobile, rail, truck or aircraft.

- *Site Measurements* – Due diligence to satisfy prevailing building code and the expectations of occupants.
- *Multiple Locations* – Short- or Long-Term Monitoring for CNEL and octave band levels
- *Analysis* – Reports with noise level requirements suitable for both municipal agencies and the design team

II. Building Design

From an outdoor amphitheater to a classroom, our goal is to optimize acoustical performance by providing recommendations for exterior and interior architectural elements such as building façade details, room adjacencies, finishes and materials, construction assemblies (e.g. floor/ceiling), and mechanical and electrical equipment.

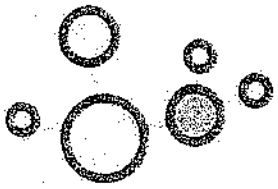
- *Architectural* – Sound isolation, space plan adjacency review, and acoustical finishes
- *Structural* - Structural elements and construction breaks relating to vibration transmission
- *Building Systems (MEP)* – Interior and Exterior noise control and vibration isolation

III. Construction Oversight

Our services during Construction are as important as during the design phases; many of our details - although practical and straightforward - are unfamiliar to workers in the field but are critical to the success of the project, in addition to field conditions that occur unexpectedly.

- *Bid Review* - Evaluation of bids on acoustically related items.
- *RFI's* - Response to RFI's from the field including the evaluation of shop drawings and submittals.
- *Observations* - Periodic observations; preparation of and the preparation of observation reports.

Technology in Building Systems: Audio-Visual, Information Technology & Security



Recent advances are changing data networks from a singular computing platform to a unified resource for building systems. Our capacity to design for AV/IT/Security convergence accommodates the integration of building operations, data management, process automation, and communications systems such as audio, video and voice. These efficiencies also reduce infrastructure, cabling, conduit requirements as well as power consumption, adding value for LEED projects.

The successful implementation of technology requires:

- Early planning with the designer, technology consultant, and owner.
- Collaboration with end users.
- Enlisting the right technology for the job, not just the latest and greatest.
- General awareness of what is available to ensure that considerations are made for every aspect of the building in the early "idea" phase.
- Complete and thorough documentation.

The utilization of network convergence also eliminates the duplication of equipment. Instead of multiple budgets for adequate stand-alone systems, a combined design allows the client to purchase optimal equipment with greater long-term flexibility. Applications will run better and building systems will be more stable. Convergence also provides for cost savings in design, construction, and building maintenance.

AUDIO-VISUAL SYSTEM DESIGN (AV)

Since the late 1940's, Veneklasen Associates has pioneered the design of high quality audio-visual systems. Initially concentrating on the design of sound reinforcement systems for auditoriums, convention centers and hotels, many of these systems incorporated the firm's own design innovations – bi-amplification, column arrays and pressure zone microphones. In the past three decades, Veneklasen Associates has enhanced its AV designs to include videoconferencing; video projection, video recording, and digital signage.

- Sound reinforcement and reproduction
- Multimedia presentation systems
- Paging systems
- Audio and videoconferencing
- Film and video projection systems
- Remote control systems
- Digital signage

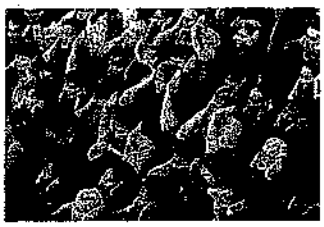
INFORMATION TECHNOLOGY SYSTEM DESIGN (IT)

Our IT team provides leadership in the design of all Information Transport systems, including main computer center design, pathways, distribution closets, fiber and copper backbones, and broadband. Our scope may include DAS (Distributed Antenna Systems) to provide full coverage for cellular and wireless LAN connectivity. With a focus on network convergence, the same infrastructure will accommodate telephones, building automation, administrative, and entertainment applications. Finally, computer rooms, distribution closets, and pathways incorporate energy efficient methods to maximize LEED certification points.

- Entrance facilities and equipment rooms
- Grounding, bonding, and protection systems
- Fiber and copper backbone distribution
- Horizontal cabling
- Private CATV and broadband distribution
- Wireless network (public and private), including complete site surveys

Veneklasen Associates

Environmental Noise and Vibration Consulting Services



Environmental noise generated by utilities, industrial and commercial complexes impacts thousands of lives on a daily basis. This includes OSHA requirements that protect individuals in the workplace, plant noise to planes, trains and automobiles. Our environmental noise and vibration areas of service include Environmental Noise and Vibration Surveys; Plant Equipment Noise and Vibration Surveys; Mitigation Plans, OSHA Noise Surveys, Engineering and Compliance Evaluations; Environmental Impact Reports, and Construction and Post Construction Noise Level Verification and Monitoring.

Based upon our decades of experience and diversity of project type, Veneklasen Associates' environmental noise services are comprehensive and may include:

REGULATORY REQUIREMENTS
Verification of the prevailing Federal, State, County and City standards

AMBIENT NOISE ENVIRONMENT
Noise measurements on-site and in areas surrounding the project

ENVIRONMENTAL IMPACTS
Modeling and predictions, including thresholds of significance, from both on-site - construction, facility operations, mechanical equipment - and off-site sources such as rail traffic

PROJECT DESIGN FEATURES
Synthesis of Specific Plan requirements as well as collaborative discussions with the project design team

PROJECT IMPACTS
Within a geographic range, analysis of additional building operations, construction activity, and increased traffic that may also contribute to environmental noise impact

MITIGATION MEASURES
Project design features including landscape features, as well as mitigation measures regarding construction operations such as truck haul traffic, etc.

Environmental Noise & Vibration
Construction / Operations / Maintenance
Clients: Utilities, Environmental Consultants, Engineers, Industrial Projects, Schools, Hospitals, Municipalities
- Baseline Noise and Vibration Surveys
- Prediction of Noise and Vibration Levels
- Noise and Vibration Mitigation
- Expert Testimony

Power Generation Plants
Construction / Operations / Maintenance
Clients: Utilities, Industrial Firms, Architects, Engineers
- Baseline Noise and Vibration Surveys
- Prediction of Noise and Vibration Levels
- Plant and Vicinity Noise Contours
- Noise and Vibration Control Design and Specifications
- Materials Acoustical Testing
- Post Construction Noise Level Verification and Monitoring

Waste & Clean Water Treatment Plants
Design / Construction / Operations
Clients: Utilities, Industrial Firms, Architects, Engineers
- Baseline Noise and Vibration Surveys
- Prediction of Noise and Vibration Levels
- Plant and Vicinity Noise Contours
- Noise and Vibration Control Design and Specifications
- Materials Acoustical Testing
- Post Construction Noise Level Verification and Monitoring

Transportation Systems
Station Design / Rail Vehicle Design; Maintenance & Yard Facilities; Airports
Clients: Architects, Engineers, Transportation Companies, Manufacturers
- Environmental Noise
- Building Acoustics, Paging Systems
- Product Development
- Materials Acoustical Testing

Professional Engineering Staff

With professionals ranging from Physicists to Architects to Licensed Engineers, we bring an unrivaled combination of experience with complex projects – small or large - which means VA's involvement will result in high functioning, cost-conscious, and aesthetically sensitive solutions.

Mahabir S. Atwal, Ph.D.
Managing Principal

Mahabir is an accomplished acoustics, noise, and vibration engineer who has consulted on over 500 projects worldwide and published over 25 technical papers; his commitment to research and development has led to several successful entrepreneurial ventures. *Ph.D, Physics, MBA, Business Management.*

James A. Good
Principal

Jim joined Veneklasen Associates in 1970 after completion of an architectural degree; he is a leader in the firm's acoustical design practice having designed all manner of building types including a proficiency in studio and production facilities. *BS, Architecture.*

John J. LoVerde
Principal

With over 50 published technical papers, John is nationally recognized as an expert by owners, architects and developers alike in the design of multifamily residential acoustics; his portfolio also includes hospitality, education, medical and performing arts facilities. *MS, Acoustics (Fluid Mechanics).*

Jerry P. Christoff
Principal

Jerry is a master acoustician, teacher and mentor - in his 60+year career at Veneklasen Associates, he has been involved in the acoustical design of countless landmark civic, cultural and institutional buildings from the Wilshire Grand Tower (in design) to the Seattle Opera House. *MS, Applied Physics.*

Hooshang Khosrovani
Principal | *Ph.D., P.E.*

Specializing in industrial applications and community noise impact, Hooshang has been in the environmental consulting field for over four decades, with an emphasis on noise and vibration mitigation for transportation, utility, and manufacturing facilities. *PhD, PE Mechanical Engineering (Acoustics).*

Wayland Dong
Associate Principal

Wayland is an accomplished acoustical consultant, with extensive knowledge of with impact and airborne noise isolation. He is the co-author of several *Acoustical Society of America* technical papers and has presented at ASA meetings worldwide. *BS, Physics.*

Steve Martin
Associate Principal | *Ph.D., P.E.*

In his 30 years as a consultant, Steve has developed expertise with residential sound insulation, aeroacoustics, architectural acoustics, noise and vibration propagation and control, classroom acoustics, instrumentation and system design. *Ph.D. & MS, Acoustics; BS, Electrical Engineering.*

Samantha Rawlings
Associate Principal | *LEED AP*

Samantha has worked on a wide variety of projects at Veneklasen Associates, from exterior noise studies to architectural acoustical design projects; she presented at the 2007 Acoustical Society of America annual conference and became a LEED AP in 2009. *BS, Engineering (Acoustics and Music).*

Jack Shimizu
Associate Principal | AV

Jack has been an Audio-Visual designer for over 25 years, during which time he has developed complex and comprehensive systems for airports, civic buildings, hotels, theaters and auditoriums, schools, and sports facilities. *US Navy Electrical & Electronics School.*

Jennifer Levins
Senior Associate

Jen is a highly experienced acoustical designer for residential, educational, and office facilities. With over 10 years of experience, her guiding principle of work is to provide proper acoustic design to all.

Richard H. Silva
Senior Associate

Rich has been involved with the architectural acoustics and noise and vibration control design for corporate offices, courthouses, schools, residences, and studios during his 10 years as an engineer. He is particularly adept in the field with troubleshooting, testing, and inspections. *B.S., Mechanical Engineering.*

John Zeman
Senior Associate | *LEED AP*

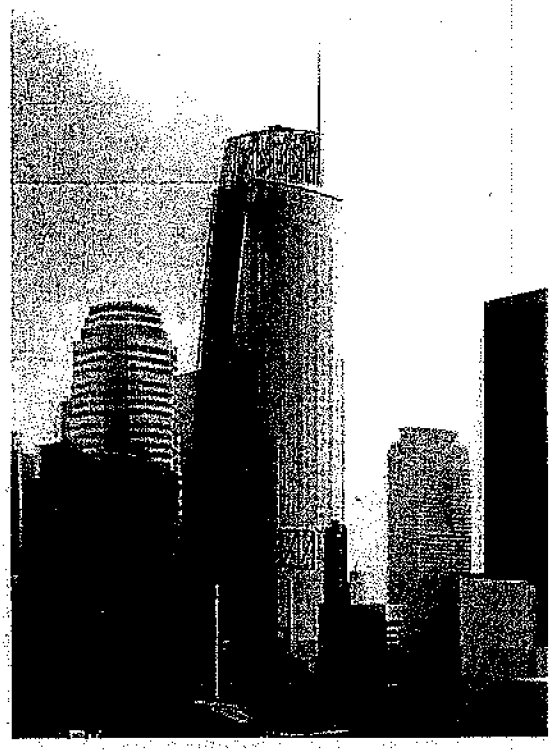
John's knowledge about acoustic science, AV systems, IT, and sound engineering makes him a uniquely multi-dimensional consultant; he is involved with a wide range of projects from exterior noise studies to architectural acoustics for a variety of building types. *MS, Environmental + Architectural Acoustics.*

ASSOCIATES

Pablo Amezquita – Audio-Visual – design, drafting and production. AS, Computer-Aided Drafting Technology.
Jack Briskie – Environmental Noise - measurements, analysis, and mitigation recommendations. BS, Engineering.
Jesus Bolivar – Audio-Visual – mechanical and 3D design drafting. AS, Computer-Aided Drafting Technology.
Luis Cabrera – Acoustics – measurements, drafting and production. AS, Computer-Aided Drafting Technology.
Elena Carvajal – Audio-Visual – mechanical and 3D design drafting. AS, Computer-Aided Drafting Technology.
George Kourtis – Acoustics – measurements, calculations, and design. BS, Acoustics.
Cathleen Novak – Acoustics – architectural acoustics, measurements and noise control. MAE, BA, Architectural Engineering.
Matthew Rashoff – Acoustics – architectural acoustics, measurements. BS, Engineering, MS, Acoustics.
Raul Mijares – Acoustics – testing, measurements, analysis and calculations.
Christopher Kezon – Acoustics – design, analysis, measurements, and modeling. BS, Acoustics.
Menandro Domingo, *CTS* – Audio-Visual – design, drafting, and production. BS, Architecture.
Angel Murrillo – Audio-Visual – mechanical and 3D design drafting. AS, Computer Aided Drafting Technology.
Fernando Rivas – Acoustics – measurements, calculations, and design.
Pablo Cantero – Acoustics – measurements, calculations, and design.
Sanath Hapuarachchi – Acoustics – measurements, calculations, and design.
Devin Wong – Acoustics – architectural acoustics, measurements. BS, Civil Engineering, MS, Acoustics.

Veneklasen Associates

Representative Projects | *Mixed Use*



Wilshire Grand; *Los Angeles,CA*

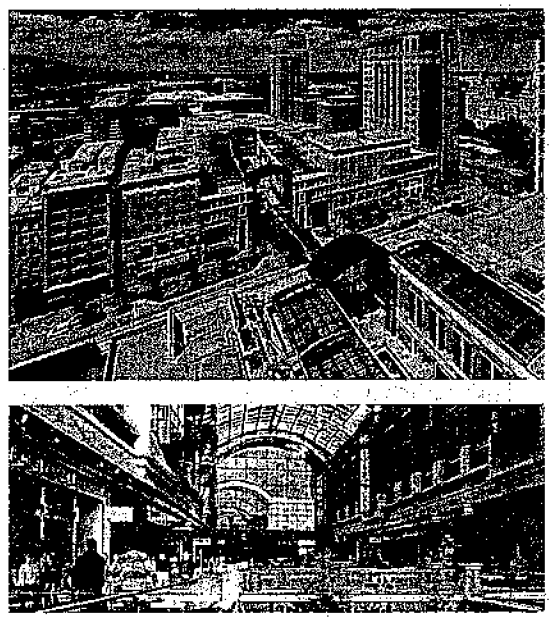
The Wilshire Grand 73-story tower is the next civic landmark, both for region and the Southwest - upon completion it will be the tallest building west of the Mississippi. It is also a landmark project for the City of Los Angeles, as it is the first tower without a flat roof.

The project program includes a 4-star hotel with function spaces that include a Grand Ballroom, meeting rooms, a fitness room, and a spa. Approximately 20 floors of office space make up the base of the tower, with retail spaces in the podium. A grand plaza with a 4-story main atrium will greet visitors entering off of street level. The project also includes a 5-story underground parking garage and a restaurant at the top of the tower.

Acoustical challenges related to this project include sound flanking at the tower curtainwall, a fitness facility above grade, and adjacencies between hotel occupancies and dissimilar occupancies.

Veneklasen Associates is providing acoustical and audio-visual system design and consultation.

Design AC Martin | Completion 2017 | Cost $1.1 billion



City Creek Center; *Salt Lake City, UT*

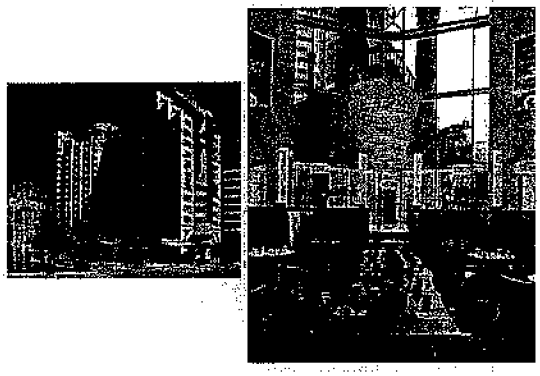
Veneklasen Associates' scope for this Salt Lake City downtown revitalization effort encompasses 1.6 million square feet of office space distributed between eight buildings; five condominium towers with approximately 600 dwelling units, 900,000 square feet of retail including an outdoor pedestrian shopping mall capped by 115 apartments, and a five-level underground parking structure that covers the entire two-block development. With six acres of public spaces including a man-made creek that runs throughout the property, City Creek was recognized with a LEED Silver ND (Neighborhood Development).

Veneklasen Associates provided acoustical design services for all buildings. Acoustical challenges related to this project included above-grade pool and fitness facilities, rooftop mechanical systems, including a generator on one condo tower, adjacencies between residential occupancy and retail occupancies, and a retractable glass roof over the retail mall.

The magnitude of the project required the services of three architectural firms and two contractors, requiring a high degree of coordination and cooperation on the part of the design team.

Design ZGF | Completion 2012 | Cost $1.5 billion

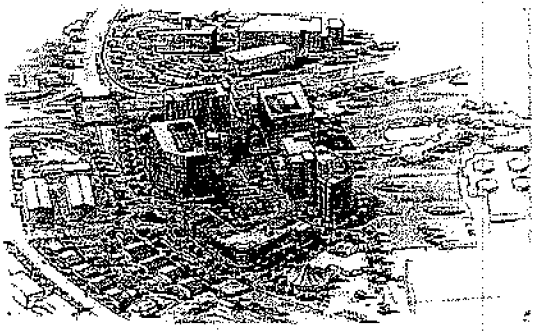
Representative Mixed Use | *Cont.*



Marriott Downtown Eaton Centre; *Toronto, Canada*

Veneklasen Associates is collaborating with Houston / Tyner, Black Dog Studios Interior Designers on renovating the concierge lounge, guestrooms and corridors of the prestigious Toronto Marriot Eaton Center. Veneklasen Associates will design and engineer the acoustical specificities to the upgraded facilities and infrastructure.

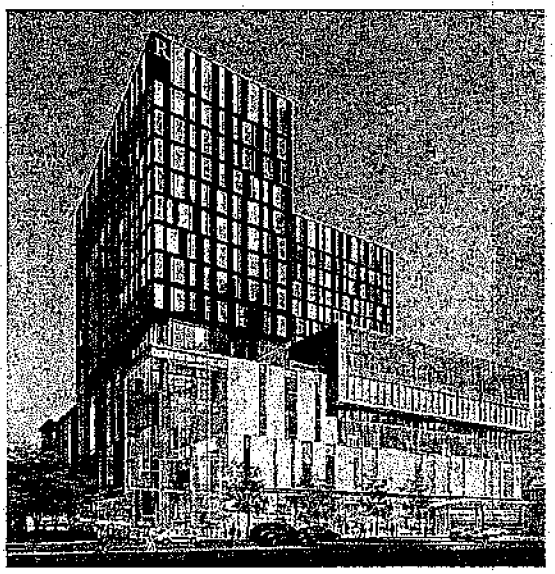
Design Houston / Tyner | Completion 2015



Stadium Shopping Centre; *Calgary, Canada*

Veneklasen Associates will engineer, build and implement the acoustical design for the new Stadium Shopping Centre. The 6.1-acre site upon completion will be enchanted by a series of taller structures mixed with residential, retail, hotel and office spaces. The new centre will be replacing the northwest Calgary strip mall.

Design RTKL Design | Completion 2016-Present



Renaissance ClubSport, Marriott; *Calgary, Canada*

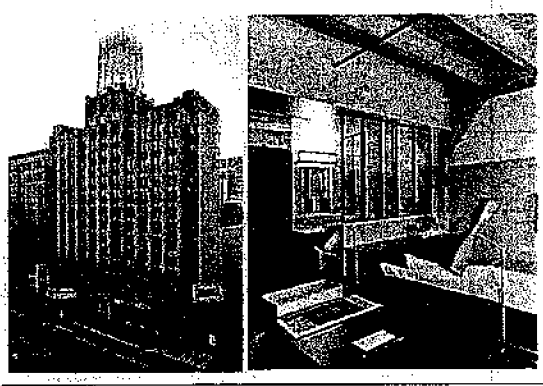
As the first Renaissance branded hotel in Calgary, the Renaissance ClubSport consists of 160,000 square feet with 230 guestrooms, a fitness club, and prime retail space. It will be located on the corner of 12th Avenue and Macleod Trail SE; walking distance to the trendy shops and restaurants of the Beltline district.

A unique feature of the hotel is its 80,000 square foot fitness and social resort, managed by U.S. based Leisure Sports Inc. Veneklasen Associates provided the acoustical design for the project.

Design RTKL Design | Completion 2017 | Cost $130 million

Veneklasen Associates

Representative Projects | *Hospitality*



Ace Hotel; *Los Angeles, CA*

Atelier Ace/Ace Hotel's conversion of the historic 1927 United Artists Theater (Broadway) and office building into a boutique 13-floor hotel features 166 rooms and 16 suites, a restaurant, bar, event/meeting space, retail and roof top pool, reactivation of the historic theater with approximately 1,600 seats. Veneklasen Associates provided comprehensive Acoustical, AV and IT design, and is currently in design for Ace for properties in New Orleans and Chicago.

Design GREC + Commune Design | Completion 2014 | Cost $35 million

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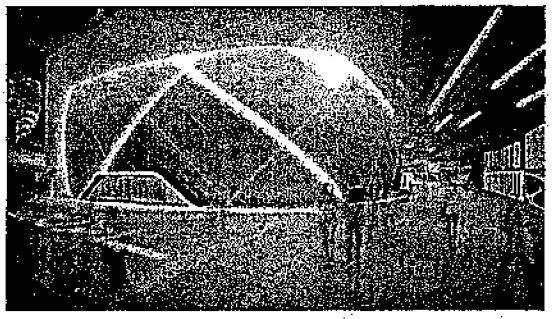
Gaylord Rockies Resort and Convention Center; *Aurora, CO*

This expansive 85-acre resort features a hotel with 15-story, 1,500 guest rooms and an 800,000 SF conference center. In keeping with the Gaylord brand, the property is a hybrid destination resort and convention center, in order that the whole family can vacation while parents partake in professional commitments. Program elements include the Great Hall Resort Entry as well as multiple ballrooms, exhibit hall, three-floors of meeting spaces, outdoor function spaces, spa and fitness, and several restaurants and bar. A $25 million water park will be open year round.

Design HKS | Completion 2018 | Cost $750 million



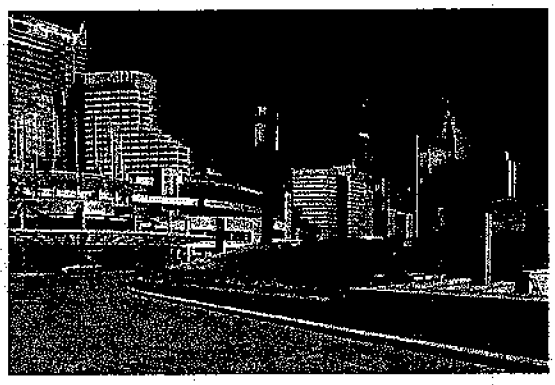
Los Angeles Convention Center Expansion – Plan B

Per the possible location of an NFL team stadium next to the Staples Center in the South Park district of Downtown Los Angeles (Farmers Field), the City and Los Angeles Convention Center officials set in motion a plan to demolish the West Hall of the existing Convention Center and replace its functions in-kind. Veneklasen Associates provided Acoustical and AV System design. Acoustical challenges included the ambience of the 1,000' Pico Passage and reduction of outside noise from the Harbor Freeway (110), adjacent streets and Farmer's Field.

As part of the AV design, VA provided a Basis of Design that to convert the existing outdated analog systems into an infrastructure compatible with new digital technologies and equipment. The goal was to elevate the design and display options Convention Center-wide, as well as system stability, adaptability and user interface.

Design Populous | Completion TBD | Cost $275 million

Representative Projects | *Hospitality cont.*

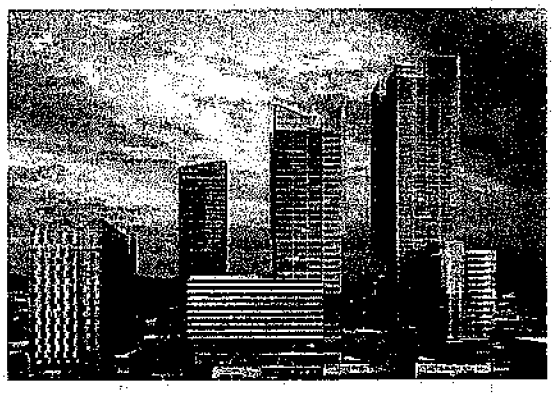


Metro Toronto Convention Centre; *Toronto, Ontario, Canada*

As Canada's leading trade show and convention facility, the venue has over 600,000 square feet of exhibit and meeting space including 64 meeting rooms, a world-class 1,330-seat theatre and two ballrooms. The facility is capable of hosting all types of events and conferences. Event group sizes range from 40 to 40,000 attendees, The Centre is located in the heart of downtown Ontario.

VA provided both the acoustical and AV design for the extensive interior renovations of the Centre.

Design Populous | **Completion** 2012 | **Cost** $29 million



Metropolis; *Los Angeles, CA*
Services: Acoustics, Noise & Vibration

The Metropolis "megaproject" consists of Phase 1 - a 38-story condominium tower and a 19-story boutique hotel - and Phase 2 – two high-rise residential towers, one 40-story and one 25-story tower. Amenities in our scope are expansive and include an indoor/outdoor clubhouse, fitness, yoga studio and garden, movie theater, residents dining lounge with catering pantry, conference and business center, TV and entertainment room, dog-park with bathing station, and a resort-styled outdoor pool with cabanas and barbecues. Veneklasen Associates is providing the acoustical design for Phase 1 – Interiors, and Phase 2 – Core & Shell + Interiors.

Design Harley Ellis Devereaux | **Completion** Phase 1/2016; Phase 2/2018 | **Cost** $1.1 billion

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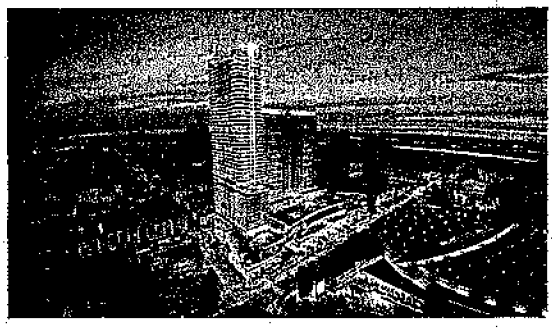

Oceanwide Plaza (formerly Fig Central); *Los Angeles, CA*
Services: Acoustics, Noise & Vibration

Once completed, the 1.5 million SF Fig Central mixed-use development will be an anchor and landmark within the burgeoning cluster of new high profile real estate within downtown Los Angeles' South Park district. Located directly opposite Staples Center and down the street from the Convention Center, this three high-rise tower property will include a 218-key hotel, 700 total residential units – both apartments and condominiums, and a podium with 200,000 SF of retail space and subgrade parking. Veneklasen Associates, Inc. is the project's Acoustical engineering consultant.

Design RTKL | **Completion** 2017 | **Cost** $1 billion

Representative Projects | *Residential* [see also City Creek Center]

Columbia Square Mixed Use Development; *Hollywood, CA*

This redevelopment of the historic CBS Studios on Sunset incorporates the site's existing mid-rise structures and new high rise elements with creativity and efficiency; in addition to three renovated historic structures, upon completion Columbia Square will feature two new office buildings totaling more than 330,000 SF, a 20-story residential tower with 200 apartments, 33,000 square feet of retail and four and a half levels of underground parking. Veneklasen Associates is providing Acoustical design services.

Design Rios Clementi Hale Studios + House & Robertson | Completion 2016 | Cost $ 850 million

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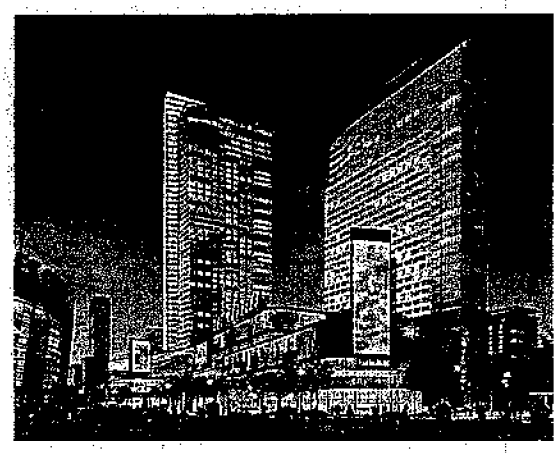

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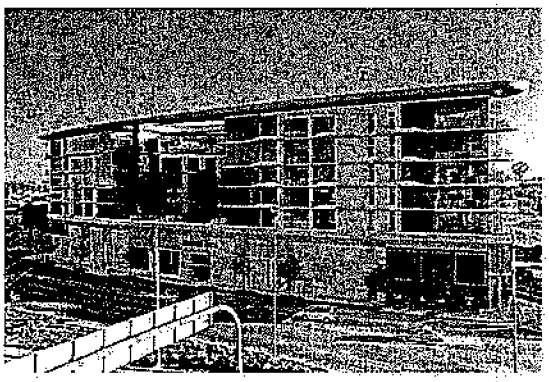
Design RTKL | Completion 2017 | Cost $850 million

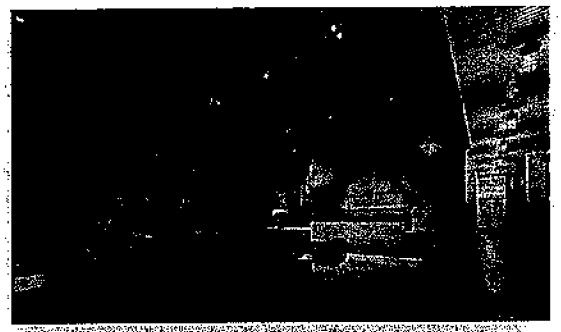


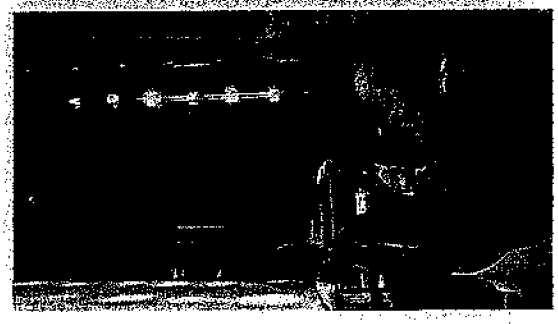
8500 Burton Way; *Beverly Hills, CA*

Developer Rick Caruso's 87-unit luxury apartment project is located at the busy intersection of Burton Way and La Cienega Boulevard. Eight stories high, the street and lower levels consist of retrial and parking. Apartment units range in size between 900 and 2,200 square feet and feature floor to ceiling glass, hardwood floors, and stone tiling. The property also includes a roof top pool deck, fitness center and club room.

Design MVE + Togawa Smith Martin | Completion 2012 | Cost $60 million

Representative Projects | *Studios*





Google YouTube Studios; *Los Angeles (Playa Vista), CA*

Veneklasen Associates provided Acoustical Consultation and Design Services for the Google/YouTube studios on the Hercules campus at Playa Vista, California. The project consisted of approximately 41,000 RSF of space with 30,000 SF dedicated to studio/technical space alone:

Soundstages
Large Stage (1), Medium Stage (1), Green Screen Stage (3), Large Green Screen Stage (1), Motion Capture Stage (1), Large Jam Room (1)

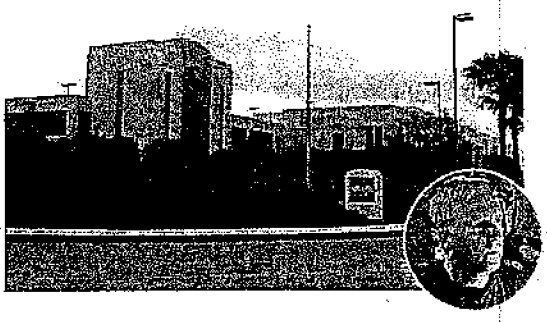
Control Rooms
Production Control Suite - Video, Audio, VO (1), Combined Production Control (3)

Post Production
Mix to Picture Suite, Audio (1), Mix to Picture, VO Booth (1), Video Post – Avid Room (2), Video Post – Residency Room (4), Video Post – Day Room (8), Photoshop (2)

Tech Support
Rack Room (50)

Production Support
1) each - Green Room., Dressing Room, Hair and Makeup, Shower, Gear Rental, YouTube Next Back Lot, Rehearsal Room; Lockers (30), Audience Holding (50)

Design HLW | Completion 2011 | Cost $25 million



Lightstorm Entertainment/James Cameron Productions; *Manhattan Beach, CA*

Veneklasen Associates provided the acoustical design for two screening rooms for Lightstorm Productions - one large and one small – at Manhattan Beach Studios (MBS). The rooms were carved out of an existing – and operational - sound stage space, in addition to which they were outfitted with THX. As a result they required significant mitigation to achieve sound isolation.

Design Bastien & Associates | Completion 2011 | Cost Not Available

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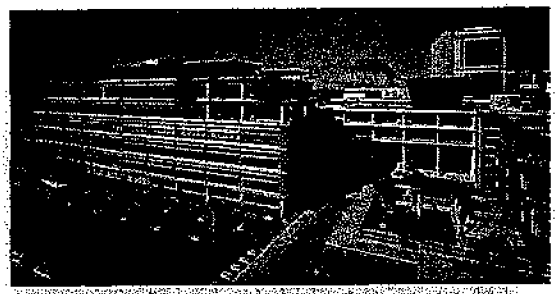
DisneyToon Studios; *Glendale, CA*

This ambitious adaptive reuse involved the conversion of 83,000 SF of warehouse into office and digital production space for direct-to-video and some theatrical firms. The program included (2) recording studios and control rooms, (10+) editing rooms, (2) screening rooms, offices and conference rooms, including a large-scale story room.

Design Wolcott Architecture | Completion 2011 | Cost Not Available



CalPERS Headquarters Expansion; *Sacramento, CA*

Occupying two full city blocks, this complex is both a corporate symbol and an enhancement to the downtown Sacramento civic district. Demonstrating a new standard of environmental sustainability for a large-scale headquarters building, the set of buildings achieved a LEED Silver rating. The vast 550,000 SF program consists of office space as well as training, conference and multi-purpose rooms with requirements that included video-conferencing and distance learning systems.

VA provided the acoustical and AV design throughout, including a specialized lobby exhibit feature that was pioneering for its time with a series of plasma displays operated by visitors individually. The Hearing Room (shown left) was updated in 2012, with VA providing AV updates on a regular basis to this day.

Design Pickard Chilton, Kendall/Heaton Associates, Colliers International | Completion 2005/2011-2012/ongoing| Cost $250 million

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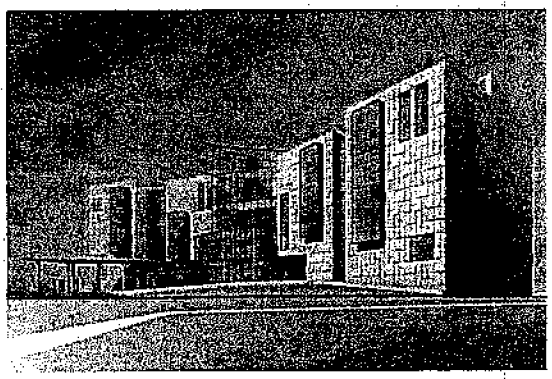
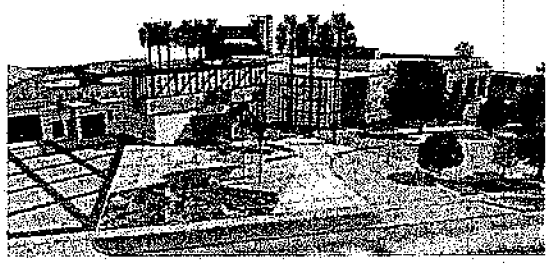


Madera County Superior Courthouse; *Madera, CA*

This expansive 110,610 SF courthouse project consists of ten Courtroom sets with courtrooms, jury suites, client/ witness rooms, holding cells, judicial chambers, courtroom waiting, etc.; Court Administration with offices and conference rooms; County Criminal, Civil and Family Divisions each with open plan and private offices, meeting rooms, counters, open plan workspace; and court and building operations including public lobby, command center and security screening, holding areas, central login and Sallyport, booking station, etc. Veneklasen Associates provided Acoustics, AV, and IT design services, and Security design through an alliance with TransTech Systems.

Design AC Martin | Completion 2015| Cost $66 million

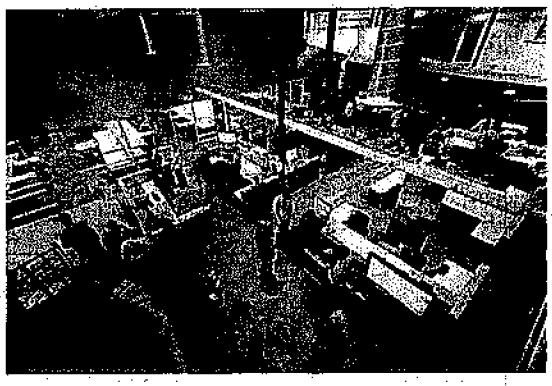


Rancho Cucamonga Fire Training Center; *Rancho Cucamonga, CA*

This state-of-the-art fire training campus is efficiently packed with critical training resources on a compact site. The program includes training and *classrooms, critical services* including future provisioning for back-up EOC, *the* City's Data center back-up location, offices, and conference rooms, a fitness center, locker rooms, a library, kitchen and dining, and simulation spaces. Veneklasen Associates is providing the Acoustical and Information Technology System design.

Design HMC | Completion 2016| Cost $16 million

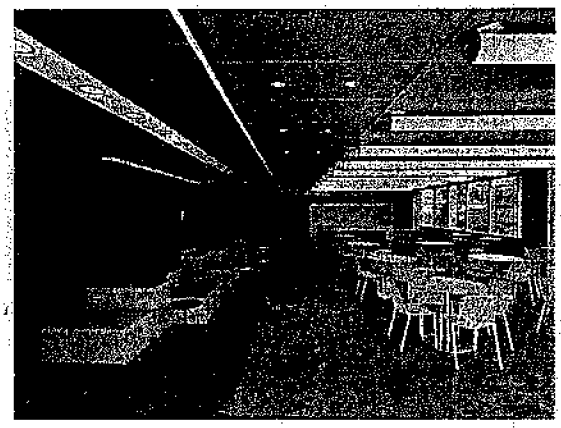
Representative Projects | *Corporate & Offices*



Google Campus; *Venice, CA*

112,000 RSF tenant improvement distributed between three buildings. The program includes open office space, multiple meeting/conference rooms, a gym building, and tech talk area. The campus is designed to create an environment that fosters collaboration and supports a fusion culture of work and recreation with such amenities an on-site cafeteria as well as small cafes throughout, a climbing wall, game room, and dog park. Open multi-level spaces and exposed utilities reinforce the company's creative energy and also allow for long term flexibility with a current employee population of 200 can grow to as many as 350.

Design HLW | Completion 2012 | Cost Not Available



MGM Corporate Offices; *Beverly Hills, CA*

The relocation of MGM's Corporate Headquarters from Century City to Beverly Hills, requiring the build-out of approximately 131,000 SF of commercial space. The program included private offices and open plan administrative space, a boardroom, and conference and meeting rooms that feature video conferencing facilities. The project had a very aggressive schedule and many specialty areas that needed VA's attention including a 150-seat Screening Room and an Executive Screening Room. Veneklasen Associates provided Acoustics, AV, IT and Security design.

Design t.s.p.: project management + IA Interior Architects | Completion 2011 | Cost Not Available

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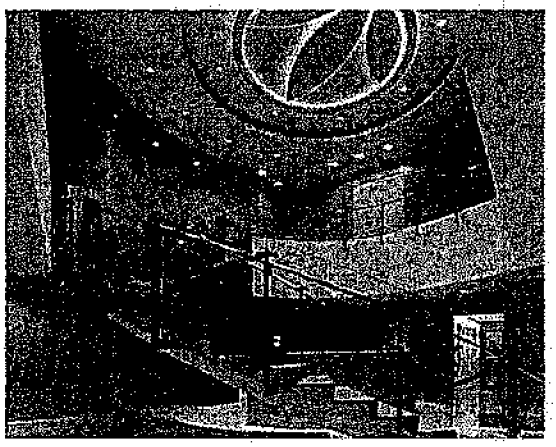
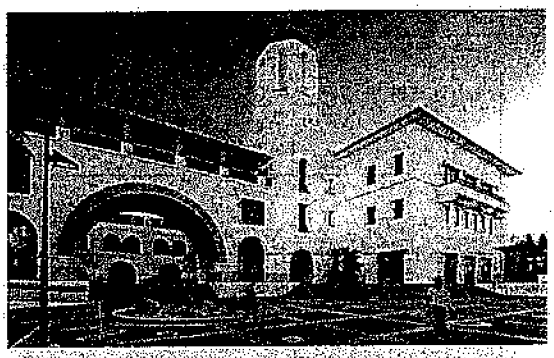


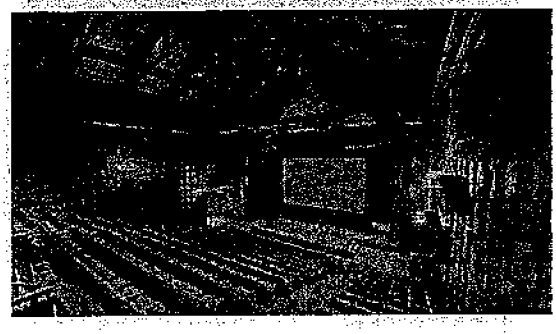
Herbalife @ LA Live!; *Los Angeles, CA*

Herbalife's Executive Team headquarters is situated within the mega entertainment and commercial development, LA Live! The 65,000 SF space houses approximately 40% open plan and 60% office as well as facilities for the Herbalife Broadcasting Network. In addition to office space, the program was very comprehensive and included boardroom, multiple small and medium conference and breakout rooms, Founders' Club and Chairman's Club rooms, large video conference room, health and wellness room, and employee lunch/lounge area. The Herbalife Studio is an HMN Insert Studio complete with an audio-control room, video control room, (2) HBN edit rooms and an equipment room.

Design HOK | Completion 2007 | Cost Not Available

Representative Projects | *Education*





Aztec Student Center, San Diego State University

Slated to be the first LEED Platinum student union in the country, this 206,000 GSF complex serves a population of 34,000 students and supports 350 organizations. The Center contains meeting and program spaces including Montezuma Hall with seating for up to 1,200 lecture-style, ballroom, a satellite fitness center, multiple dining options such as cafes, Pub Restaurant and market and convenience store with indoor and outdoor seating, a patio area for entertainment, and a new state-of-the-art bowling and games center.

The Student Center also has a multi-purpose 300 seat theater, quiet and group study spaces with WiFi access, a large courtyard, and outdoor gathering spaces for as many as 3,000 standing students for an outside concert. Veneklasen Associates provided both Architectural Acoustics and Audio-Visual System Design services for this project.

Design Cannon Design | Completion 2014| Cost $75 million

South Lake Tahoe High School; *Lake Tahoe, CA*

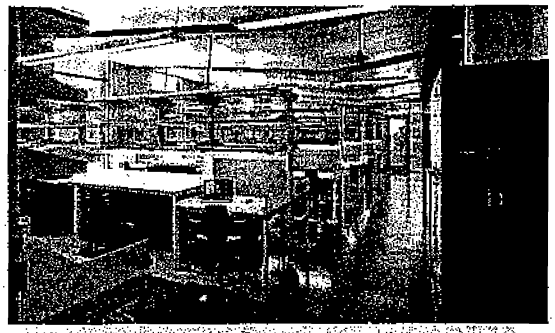
As part of an expansive campus update, the South Lake Tahoe High School Career Technical Education (CTE) Programs were increased by two significant Academies - Media Performing Arts and Green. Veneklasen Associates provided the Acoustical, AV and IT design for the project.

The 26,000 SF Media Performing Arts Academy encompasses a complete modernization of the High School's existing 15,000-square-foot Theater Building and an 11,000-square-foot Media & Design Arts School Expansion. It includes editing suites, sound proof recording studios, dozens of big-screen LCD televisions, a tiered orchestra room and a professional-grade theater. The 'Green' Academy focuses on Transportation & Construction trades. The synergy between the two academies is reinforced via their common 'Construction Court', an exterior learning platform for the Construction & Finished Carpentry Labs, as well as a Scene Shop Yard for the Theater and Sound Stage Lab.

Design LPA | Completion 2013 | Cost $25.5 million

Veneklasen Associates

Representative Projects | *Healthcare & Research*



Sanford Consortium for Regenerative Medicine; *La Jolla, CA*

Preeminent 135,000 GSF research center specifically designed to foster interdisciplinary collaboration and the exchange of information among researchers from the University of California San Diego, Salk Institute, Scripps Research Institute, and the Sanford/Burnham Medical Research Institute (formerly San Diego Consortium for Regenerative Medicine).

The complex accommodates 330 total personnel in open labs, offices and specialized core labs. Shared two-story break rooms interconnect all levels and encourage interaction. The facility's conference facilities will include a 150-seat auditorium and a large divisible conference room. Veneklasen Associates provided the Acoustical and Audio-Visual systems design.

Design Fentress Architects, Davis Davis | Completion 2011 | Cost $115 million

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Kaiser Permanente Template Campus:
Hospital, Medical Office Building & Central Utilities Plant
CA: Anaheim, Fontana, San Leandro.
OR: Portland

Kaiser Permanente adopted a "Triplet" approach, or a common building template and construction standards for several hospital campuses; VA provided Acoustical consulting services for four (Anaheim, Fontana, San Leandro, and Portland (OR).

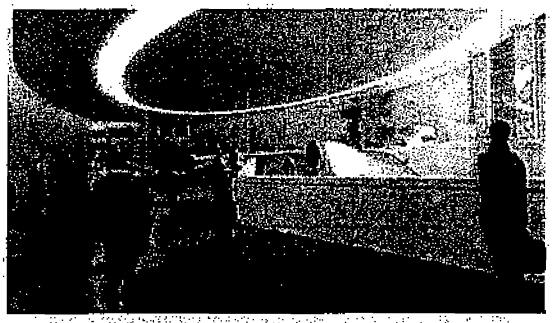
Template Hospital (typical)
Multi-story Type 1 construction exceeding 400,000 SF on average, with 400+patient rooms, ICU, Labor and Delivery, OR, Interventional Suites, Imaging Rooms, Dialysis, Emergency Department Bays, Inpatient Pharmacy, and Laboratory space as well as miscellaneous specialty areas.

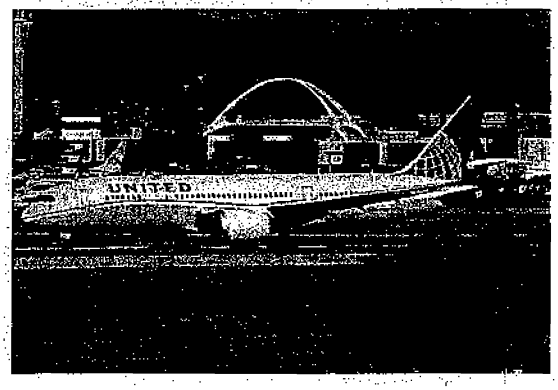
Hospital Support Building (typical)
Multi-story Type 1 Construction with pharmacy, outpatient and inpatient clinical spaces, admitting and administrative offices, and pre-operative suites.

Central Utility Plant (typical)
Facility mechanical and electrical equipment required for the Template Hospital and HSB.

Kaiser Permanente Orange County Medical Center
Design Cannon Design | Completion 2012 | Cost $500 million

Representative Projects | *Transportation*





Multiple Terminal Updates - Los Angeles International Airport

Multiple terminals at LAX are undergoing expansive enhancements and updates with a common goal to improve communication systems, safety and security, and traveler comfort and amenities – and as the acoustical and/or audio-visual designers, Veneklasen Associates occupies a critical role. Designing for the amount of traffic – travelers, employees, maintenance and operations – durable finishes and surfaces, and high volume spaces is very challenging, including the requirement that terminals must remain operational.

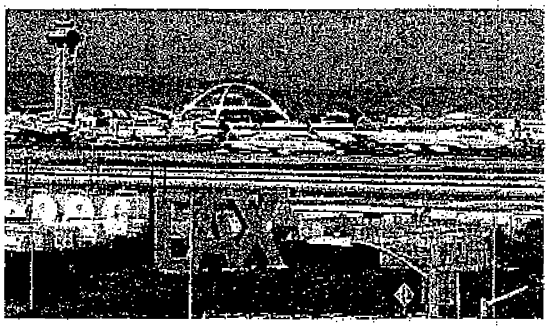
Veneklasen Associates is involved in several of these comprehensive modernization efforts including the provision of AV:

Terminal 1 | Cost: $400 million
Lobby & Concourse |Southwest Airlines *with* PGAL (Acoustics)

Terminal 2 | Cost: $300 million
Lobby | Various Airlines *with* SOM
Concourse | Various Airlines *with* Gin Wong Associates (AV)

Terminals 6, 7 & 8 | Cost: $413 million
United Airlines *with* HNTB (Acoustics & AV)

Spaces impacted by our design include: traveler arrival and terminal lobby, ticketing, security screening, concourse and connector(s), business/first class lounge, passenger waiting, and baggage claim. Our services include multi-zone paging system design and visual signage interface, noise modeling, finishes and room shaping, and building system noise and vibration, e.g. HVAC.



Campus-wide Integrated Paging System, LAX

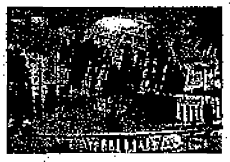
VA is in the process of designing an integrated networked based public address system as part of the overall LAWA security system update. This upgrade is in response to recent events on the airport campus when it became apparent that an all terminal paging system was mission critical. This public address system will reside on the LAWA network backbone. VA will incorporate redundant features via a spanning tree protocol to prevent an inoperable paging system due to a catastrophic failure.

The system will also be designed to coordinate with the fire alarm system, monitor the amplifier loads, and report notices upon the failure of any of the paging system equipment. VA is collaborating with LAWA convergence project partners in order to ensure the effective integration of the paging system features, in order to achieve the highest possible level of operability and reliability. The public and emergency notification capability will provide LAWA with a safe and secure means of communicating campus wide in a stable and secure manner.

Representative Major Projects

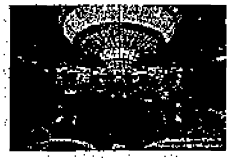
Los Angeles International Airport

Airports
Los Angeles International Airport
Terminals 1, 2, 4, 5, 6, 7 & 8, Tom Bradley International Terminal,
TBIT Star Alliance Lounge, Qantas Oneworld Lounge (ProAV Award 2008)
McCarran International Airport; Las Vegas, NV
Phoenix Sky Harbor International Airport



Universal Studios Hollywood

Amusement Parks
Aquarium of the Pacific (original + expansion); Long Beach, CA
California Adventure @ Disneyland; Anaheim, CA
Griffith Park Observatory Restoration (Construction Noise Mitigation); Los Angeles, CA
Legoland; Carlsbad, CA
Universal Studios Hollywood



Harrah's Horseshoe Casino

Casinos
Fantasy Springs Resort Casino; Indio, CA
Harrah's Horseshoe Casino; Hammond, IN
Las Vegas Hilton; Las Vegas, NV
Mohegan Sun Casino of the Wind; Uncasville, CT *(ProAV Award 2009)*
Treasure Island; Las Vegas, NV

Los Angeles Convention Center

Convention Centers
George R. Moscone Convention Center; San Francisco, CA
Las Vegas Convention Center
Los Angeles Convention Center – Original Facility + Pico Hall Expansion
Oakland Convention Center
Salt Palace Expansion; Salt Lake City, UT

South Lake Tahoe High School

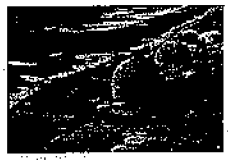
Education *K thru 12*
LAUSD– *over 30 Primary, Middle and High Schools*
Arcadia USD – Arcadia High School Performing Arts Academy + Broadcast Studio
Crossroads School; Santa Monica, CA
St. Margaret's Episcopal Day School; San Juan Capistrano, CA
South Lake Tahoe High School Media Arts + Green Academy; Lake Tahoe, CA

USC Tutor Campus Center

Education *College + University*
Los Angeles Community College District *(multiple projects)*
University of California - Davis, Irvine, Los Angeles, Riverside, San Diego, Santa Barbara
California State University - Cal Poly Pomona, Channel Islands, Dominguez Hills,
Fullerton, Long Beach, Northridge, San Jose
University of Southern California - Tutor Campus Center

Veneklasen Associates

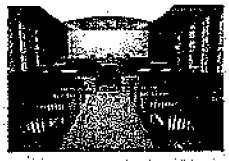
Representative Major Projects



SONGS

Environmental Noise

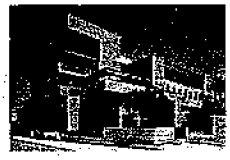
Hyperion Treatment Plant; Playa del Rey, CA
Ford Amphitheater Vilar Pavilion; Vail, CO
NBC Universal "Evolution" Real Estate Development – EIR Community Noise
San Onofre Nuclear Generating Station (SONGS) – Annual Siren Testing Program
Southern California Edison *(multiple substations)*



AOC 5th District Court of Appeals

Government *Courthouses*

AOC California Courthouses *(multiple branches)*
Los Angeles Municipal Courts *(multiple branches)*
Federal Courthouses & Office Buildings – Las Vegas, San Diego, San Jose, Santa Ana, Seattle
United States Bankruptcy and District Courts; Riverside, CA
United States 9th Circuit Court of Appeals; Pasadena, CA



Santa Monica Public Safety Facility

Government *Justice*

Glendale Police Headquarters; Glendale, CA
Los Angeles Central Jail Expansion; Los Angeles, CA
Maricopa County Juvenile Detention Center; Phoenix, AZ
Santa Monica Public Safety Facility; Santa Monica, CA
Southwest County Justice Center; Riverside, CA

LA City Hall + Project Restore

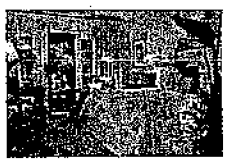
Government *Offices*

Burbank City Council Chambers
CalPERS Headquarters; Sacramento, CA
Caltrans Administration Headquarters Region 3; Marysville, CA
Los Angeles City Hall + Project Restore
Solano County Government Center; Fairfield, CA

Encore at Wynn

Hospitality *Hotels*

Ace Hotel Adaptive Reuse; Los Angeles, CA
Beverly Hills Hotel & Bungalows Renovation
Encore at Wynn; Las Vegas, NV
Marriott Hotels *(multiple properties)*
Montage Hotel & Luxury Residences; Beverly Hills, CA



4 Seasons Biltmore Santa Barbara

Hospitality *Resorts & Spas*

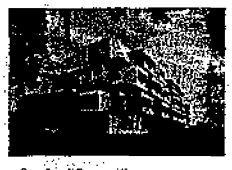
Four Seasons Resorts *(multiple properties)*
Hyatt Grand Champions Resort; Indian Wells, CA
La Quinta Resort & Club; La Quinta, CA
The Resort at Pelican Hill; Newport Beach, CA
Ritz-Carlton Resorts *(multiple properties)*

Representative Major Projects

Broome Library, CSUCI

Libraries

California Institute of Technology Fairchild Library; Pasadena, CA
City of Santa Monica Virginia Park Library
Los Angeles County Library System *(multiple locations)*
Mt. Saint Mary College William Coe Memorial Library; Brentwood, CA
John Spoor Broome Library, California State University Channel Islands



Sanford Consortium

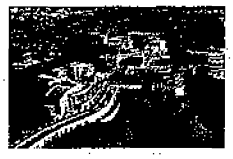
Laboratory Facilities

Baxter Bioscience Headquarters; Westlake Village, CA
Jet Propulsion Laboratory - OILS Building; Pasadena, CA
Los Angeles Harbor College - Physical and Life Sciences Building, Wilmington, CA
Sanford Consortium for Regenerative Medicine; La Jolla, CA
TRW Calibration Laboratory; Redondo Beach, CA

Childrens Hospital Los Angeles

Medical Centers & Hospitals

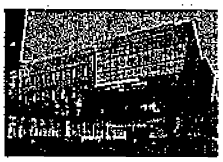
Children's Hospital Los Angeles
Kaiser Permanente Template Hospitals & MOB *(multiple campuses)*
Pima County Psychiatric Hospital; Tucson, AZ
UC Irvine Douglas (Replacement) Hospital
Veterans Administration Hospitals - La Jolla, Long Beach, West Los Angeles, San Mateo



The Getty Center

Museums & Cultural Centers

California Science Center Phase 2; Los Angeles (Exposition Park), CA
The Getty Center; Brentwood, CA
Simon Wiesenthal Center/Museum of Tolerance; West Los Angeles, CA
Skirball Cultural Center; Brentwood, CA
Tyler Museum of Art; Tyler, TX



Belkin Headquarters

Office Buildings *Shell & Core*

Belkin Headquarters; Playa Vista, CA
Capital East End Complex; Sacramento, CA
Constellation Place; Century City, CA
Corporate Pointe; Culver City, CA
ESRI Regional Headquarters: Redlands, CA

Google Venice

Office Buildings *Interiors*

Performance Capture Studio; Beverly Hills, CA
Fulbright & Jaworski; Los Angeles, CA
Google Campus; Venice, CA
Herbalife Headquarters at LA Live!; Los Angeles, CA
National Academy of Recording Arts & Sciences/Grammy Headquarters

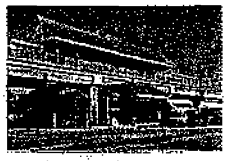
Veneklasen Associates

Representative Major Projects

Nate Holden Performing Arts Center

Performing Arts

Denver City Lights Amphitheater; Denver, CA
East LA College Performing Arts Complex; Monterey Park, CA
Nate Holden Performing Arts Center; Los Angeles, CA
House of Blues - Myrtle Beach, New Orleans, Orlando, San Diego, West Hollywood
Ventura College Theater Renovation



Metro Chinatown Station

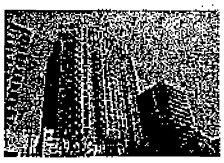
Rail

BART Railway Extension - Noise and Vibration Survey; San Francisco, CA
Metro Universal – Noise and Vibration Study; North Hollywood, CA
Metro Rail Stations *(multiple locations)*
Smart Corner Condominiums *(Transit Oriented Development)*; San Diego, CA
1205 Colorado Blvd. Recording Studios; Santa Monica, CA

Metropolitan Lofts

Residential *Apartments & Lofts*

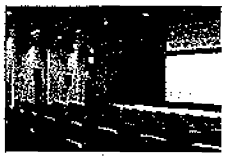
Artisan Lofts on Central; Phoenix, AZ
Eastern Columbia Lofts; Los Angeles, CA
The Irvine Company *(multiple apartment properties)*
Metropolitan Lofts; Los Angeles, CA
University of Laverne Student Housing; La Verne, CA



The Californian

Residential *Condominiums*

The Californian on the Wilshire Corridor *(HOA testing, multiple units)*
City Creek; Salt Lake City, UT
Thornton Park Central; Orlando, FL
The Century by Robert A.M. Stern; Century City, CA
Zocolo by Ricardo Legorreta; Santa Fe, NM



MGM Offices Screening Room

Studios & Screening Rooms

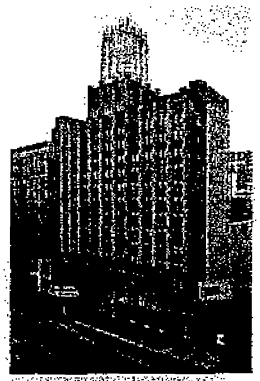
ESPN Radio Studio @ LA Live!
Jay Leno Stage @ NBC Universal; Burbank, CA
Lightstorm Studios/James Cameron Productions; Manhattan Beach, CA
MGM Offices & Screening Room; Beverly Hills, CA
Univision Radio & Television Studios *(multiple locations)*

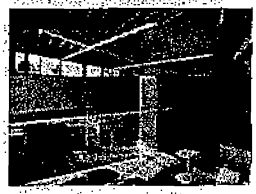
Lake Avenue Church

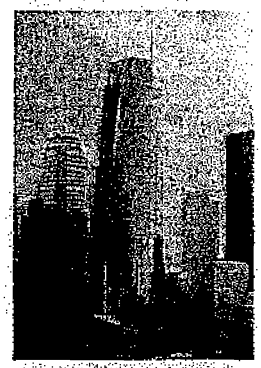
Worship

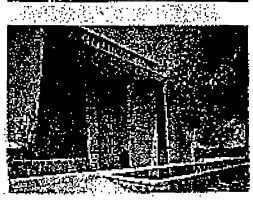
Brentwood Presbyterian Church; Brentwood, CA
First Church of Christ Scientist; Santa Monica, CA
Interfaith Chapel at Chapman University; Orange, CA
Lake Avenue Church; Pasadena, CA
Temple Israel; Long Beach, CA

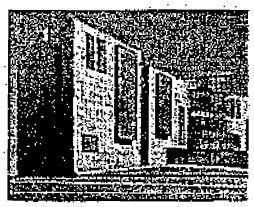
Veneklasen Associates











Top to bottom: Ace Hotel Los Angeles, North Lake Tahoe High School, MGM Beverly Hills, Wilshire Grand, LAX TBIT Star Alliance Lounge, Caltech Baxter Hall, Madera County Courthouse.

Low Voltage Convergence – AV, IT, Security Systems

Veneklasen Associates' capabilities to design for low voltage convergence means cost savings in both construction and building operations. Efficiencies reduce equipment, infrastructure, cabling and conduit requirements. It facilitates the integration of building systems, operations and access; data management; process automation; and communications systems such as broadcast or video conferencing.

REPRESENTATIVE PROJECTS

Market	Project | Services
Civic	11000 Wilshire Federal Building Assessment | *AV, IT, Security, Acoustics*
Hospitality	Ace Hotels - Los Angeles, Nashville, Chicago, New Orleans | *AV & IT*
Hospitality	Ace Hotel New Orleans (in design) | *AV & IT*
Civic	AOC Banning Justice Center & Superior Courthouse | *AV, IT, Acoustics*
Civic	AOC Madera Superior Courthouse | *AV, IT, Security, Acoustics*
Education	Caltech Baxter Hall Update | *AV, IT, Acoustics*
Education	CSU Dominguez Hills Feasibly Studies | *AV & IT* 1. Cane Library Modernization + 2. Math & Science Building
Education	CSU Los Angeles Feasibly Studies | *AV & IT* 1. Lab to Classroom Building + 2. Math & Science Building |
Residential	Cloverdale Apartments (in design) | *AV, IT, Security, Acoustics*
Public Safety	Delano Police Headquarters | *AV, IT, Security*
Hospitality	Gaylord Rockies Resort and Convention Center | *AV, IT, Security, Acoustics*
Civic	Hacienda Heights Community & Recreation Center | *AV, IT, Security, Acoustics*
Public Safety	Los Angeles County Fire District Headquarters | *AV & Acoustics*
Public Safety	LAX Public Safety Facility (in design) | *AV, IT, Security, Acoustics*
Transportation	LAX/TBIT Renovation | *AV & Acoustics*
Transportation	LAX/TBIT Star Alliance Lounge | *AV, IT, Security, Acoustics*
Corporate	MGM Offices; Beverly Hills, CA | *AV, IT, Security, Acoustics*
Military	Marine Corps Logistics Base Yermo Annex | *IT & Security*
Hospitality	Marriott Marquis & Marina Expansion *(thru DD)* | *AV, IT, Security, Acoustics*
Corporate	NARAS Grammy Headquarters | *AV, IT, Acoustics*
Education	Ocean Discovery Institute's Living Lab (in design) | *AV & Acoustics*
Corporate	Philips Petroleum Data Center | *AV, IT, Security*
Corporate	Rubin Postaer and Associates Data Center | *IT*
Public Safety	Rancho Cucamonga Fire Training Center | *AV, IT, Security, Acoustics*
Worship	St. Anthony's Church Community Center | *AV, IT, Security, Acoustics*
Education	Saint Margaret's Episcopal Day School Expansion | *AV, IT, Acoustics*
Education	South Lake Tahoe High School Academies | *AV, IT, Acoustics*
Corporate	SCE Emergency Operations and Conference Center | *AV, IT, Acoustics*
Education	Southwestern Law School Residence Hall | *IT & Security*
Cultural	Tyler Museum of Art *(thru DD)* | *AV, IT, Acoustics*
Education	USC Tutor Campus Center | *AV & Acoustics*
Mixed Use	Wilshire Grand Tower (in design) | *AV & Acoustics*

Veneklasen Associates

Western Electro-Acoustic Laboratory (WEAL)

Veneklasen Associates is the only acoustical firm in the Western United States with its own NVLAP-accredited testing laboratory; our facility features extensive preparation space and varied chambers to accommodate a wide array of testing scenarios.

Western Electro-Acoustic Laboratory (WEAL) was founded by Paul S. Veneklasen in 1947 following his participation in acoustical research at Harvard University's Electro-Acoustical Laboratory and at the University of California, Los Angeles (UCLA). It is currently accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), under the National Voluntary Laboratory Accreditation Program, (NVLAP) for several laboratory and field testing procedures including:

- ASTM E-90 - *Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss*
- ASTM C-423 - *Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method*
- ISO 3741 – *Determination of Sound Power Levels of Noise Sources – Precision Methods for Broad-Band Sources in Reverberation Rooms*
- ISO 354 – *Acoustics/Measurement of Sound Absorption in a Reverberation Room*
- ANSI S12.51 – *Determination of Sound Power Levels of Noise Sources Using Sound Pressure* – Precisions Method for *Reverberation Rooms*
- ANSI S1.10 – *Method for Calibration of Microphones*

ANECHOIC CHAMBER

Anechoic chambers are echo-free above the cutoff frequency and permit accurate acoustical measurements without the constraint of sound reflections from walls and ceiling surfaces. Most large anechoic chambers are privately held or operated by governmental agencies and are not available for commercial use. At WEAL now you can have available a multi-million dollar facility without spending your own capital.

REVERBERATION CHAMBER

WEAL features a 275 m3 Reverberation Chamber to measure Sound Absorption and Sound Power Levels which is ideal for the testing of acoustical finishes and building materials such as perforated metal panels, duct liners, resonant absorbers, ceilings, batts, wall panels and fabrics.

FIELD TESTING

We can facilitate interior measurements such as sound transmission, noise reduction, and impact isolation as well as exterior measurements to support impact tests, and building façade testing. WEAL has its own testing equipment and analysis software for full service reporting.

WEAL is the *only laboratory in California* accredited for these field test procedures:

- ASTM E-336 - *Standard Test Method for Measurement of Airborne Sound Insulation in Buildings*
- ASTM E-1007 - *Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission through Floor-Ceiling Assemblies and Associated Support Structures*
- ASTM E-166 – *Guide for Field Measurements of Airborne Sound Insulation of Building Façades and Façade Elements*

LAB TESTING SERVICES

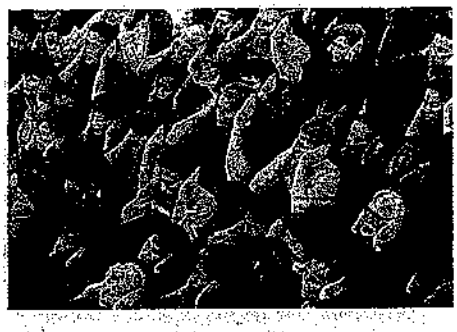
- Sound Transmission Loss and STC Determination
- Sound Absorption
- Sound Power Level
- Anechoic Chamber Requirements
- Calibration of Microphones

FIELD TESTING SERVICES

- Sound Transmission Loss and Noise Reduction
- Impact Insulation
- Building Façade Measurements
- Field Noise Measurement

Veneklasen Associates
Consultants in Acoustics | AV | IT | Environmental Noise

Environmental Noise & Vibration Consulting Services



Veneklasen Associates is experienced with the mitigation of environmental noise and vibration generated by utilities, industrial, transportation, commercial and entertainment complexes. This includes the impact of noise produced: in the workplace as regulated by OSHA requirements; by planes, trains and automobiles; from the operation of industrial plants and utilities; through activities associated with real estate development and expansion; and resulting from events at outdoor performance venues and theme parks.

Plants & Utilities | Construction | Transportation | Environmental Impact Reports | Outdoor Venues & Theme Parks

Based upon our decades of experience and the diversity of project type in our portfolio, our range of environmental noise capabilities is extremely comprehensive:

Regulatory Requirements
Verification of the prevailing Federal, State, County and City standards

Ambient Noise Environment
Long-term measurements - on-site and in surrounding areas - with remote access to the instruments and data.

Environmental Impacts
Modeling, analysis and predictions including the identification of significant sound level thresholds from both on-site - construction, facility operations, mechanical equipment - and off-site – plane, rail, traffic - sources.

Project Design Features and Soundscaping
Synthesis of Specific Plan requirements as well as collaborative discussions with the project design team to meet the customized needs of the client.

Project Impacts
Within a geographic range, analysis of additional building operations, construction activity, and increased traffic that may also contribute to environmental noise impact

Mitigation Measures
Project design features including source mitigation, isolation measures and landscape features, as well as recommendations for construction operations such as equipment selection, truck haul traffic, etc.

CLIENTS

- Architects & Engineers
- Plants & Utilities
- Water & Water Treatment Plants
- Private Developers & Owners
- Environmental Consultants
- Public Institutions & Operators
- Municipalities & Agencies
- Transportation Agencies & Maintenance Yard Facilities
- Manufacturers

SERVICES

- Baseline Noise and Vibration Surveys
- Analysis & Prediction of Noise and Vibration Levels
- Materials Acoustical Testing
- Noise and Vibration Mitigation Measures
- Noise and Vibration Control Design & Specifications
- Plant and Vicinity Noise Contours
- Expert Testimony
- Construction Noise Mitigation & Monitoring
- Sound System Design

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