



AQX Engineering Inc.

Qiang "Chung" Xiao, Ph.D., P.E.
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About us

AQX Engineering is a full service, structural engineering firm headquartered in Newport Beach, CA with a branch office in San Gabriel, CA. We provide a wide variety of services ranging from home additions/remodels to multi-family residential projects, and from re-imaging/remodeling small commercial projects to ground-up big buildings on a flat lot or a sloped lot.

AQX has ten full-time engineers and three cad technicians. Our hardworking and talented team is committed to providing you excellent service on time and on budget.

AQX carries a professional liability insurance of \$1.0 million.



Management Team

Dr. Qiang “Chung” Xiao, P.E., President

Chung has over 19 years of integrated experiences in structural analysis and design, seismic risk assessment and R&D in structural engineering. He is experienced with the structural engineering and design for many facility types including auto dealership facilities, industrial/warehouse facilities, office buildings, recreation facilities, residential, retail shopping centers, and post-tension concrete structures.

He has BS, MS (Beijing Jiaotong) and PhD (Vanderbilt) in Structural Engineering in 1983, 1986 and 1993.

Larry Gere, Vice President

Larry recently joined AQX as Vice President. He has 50 year's experience in structural detailing/design, plan QA/QC, project management, business development and engineering firm management.

Salina Padilla, Executive Administrator/Business Developer

Salina has over 8 year's experience in business development, client relationship, office operation and accounting/book-keeping.



Why AQX?

- **Affordable rates:**

You can count on competitive fees and cost effective solutions for your projects

- **Quality:**

You are assured of the highest quality and responsive services

- **eXcellence**

You get a team committed to doing the best possible job on your project, no matter how big or small

Client Satisfaction Is Our Highest Priority



Services

The technical staff in AQX Engineering is specialized in:

Structural Engineering

- Multi-family and custom homes
- Home remodels/additions
- New facilities: (offices, warehouses, auto-dealer buildings, restaurants etc.)
- Re-imaging and remodeling existing facilities
- Monopoles and towers for telecommunications
- Entertainment structures
- Stress analysis for oil refinery pipes using RISA3D
- Foundation and anchorage for industrial equipment
- Temporary shoring, using H piles and caissons
- Hardscape, and retaining walls

Earthquake Engineering

- Seismic retrofit design for warehouses and office buildings
- Seismic risk assessment – PML study and report

Energy Engineering

- Title 24 energy reports for residential construction



Services

Our expert technical staff specializes in the following construction materials:

- Wood: wood framing and shear walls for residential and commercial projects
- Masonry: masonry walls for commercial projects
- Concrete: slab, caissons, retaining walls, with special expertise in:
 - Post-tensioned slabs
 - Tilt-up buildings
- Steel: moment frames, braced frames, towers and H-pile-caisson with retaining walls at top
- Light-gage steel studs: roof/floor framing, built-up beams, load-bearing walls, x-braced walls with special expertise in:
 - connection details for residential and commercial buildings using light-gage steel studs



Clients

AQX has a large client base located in communities throughout Southern California, including Shell Beach, Agoura Hills, Pasadena, West Covina, Corona, San Clemente and San Diego. Currently AQX works with about 80 clients who consist of architects/designers, real estate developers, home builders and general contractors.

The following are the selected clients:

- AEPC Group, LLC, Newport Beach
- Andrade Architects, Inc., Laguna Beach
- Brion Jeannette Architecture, Newport Beach
- California Design Associates, Shell Beach
- Corcoran Corcoran and Botich Inc., Newport Beach
- Design Development Group, Agoura Hills
- Eric Trabert and Associates, Santa Ana Heights
- Greg Lee Builders, Corona del Mar
- James Whaley, Architect, Eugene, OR
- Matt Macarewich and Associates, Capistrano Beach
- Powell Dudley Frith Architects, Laguna Beach
- Redpoint Builders, Newport Beach
- Randy Ranieri Architect and Associates, Inc., Costa Mesa
- Rolly Puluski, Architect, Laguna Beach
- Steven Langford Architects, Irvine
- Tarlos and Associates, Irvine
- Timely Design and Construction, Inc., Lake Forest



Selected On-Going or Finished Projects

Restaurants

- Shakey's Pizza Remodel and Re-imaging, West Covina
- Shakey's Pizza Re-imaging, Alhambra
- Shakey's Pizza, 7,000 sq. ft, Ground-up, Palmdale
- Shakey's Pizza Remodel, Culver City
- Shakey's Pizza Remodel, Springfield, NJ
- Elephant Bar Re-Imaging, Emeryville
- Elephant Bar Remodel, Toledo, OH
- Elephant Bar Remodel, Dublin, CA
- Elephant Bar Remodel, Riverside, CA
- Brent's Deli Remodel, Westlake Village
- Casuelas Cafe, 9,000 sq. ft., Ground-up, Palmdale
- Dakota Restaurant, ground-up, Westlake
- Wendy Addition, Monrovia, CA
- Fleming TI, Walnut Creek, CA
- On the Border, Vancouver, WA



Selected On-Going or Finished Projects

Offices and Retails

- **TESCO Building 100, about 400,000.0 sq. ft. tilt-up panels, Riverside**
- Austin Johnson Office and Retail Buildings, 16,000 sq. ft., tilt-up panels, Irvine
- Casuelas Office and Retail Buildings, 20,000 sq. ft., Ground-up, Palmdale
- Clinical Medical Office and retail buildings, 8,000 sq. ft, Santa Ana (masonry and wood shear walls)
- **Marine Emporium, 24,000 sq. ft., two stories, Oxnord, CA**

Mini Storage

- **4MyStorage.com, 84,000 sq. ft., two story, caisson-grade beam foundations, masonry wall on the first floor and metal stud walls on the second floor, Long Beach**

Shops and Stores

- Mother's Market, new mechanical units on existing roof, Irvine
- SuperPet Remodel, 8,000 sq. ft., Temple City
- Mini-Mart Remodel and Re-imaging, Culver City
- Berkshire Shopping Village, totally 12 one- and two-story buildings, Berkshire, MA (done in other firms)
- **CVS Store, 16,000 sq. ft., Baldwin Park, CA**
- PS2 Store TI, 5,000. sq. ft., seismic retrofit wall anchorage, new wall openings, LA



Selected On-Going or Finished Projects (Cont.)

Museums and Gyms

- Newport Sports Museum Expansion (masonry and wood shear walls), Newport Beach
- Foothill Gym Addition, Monrovia

Auto Dealer Facilities (showroom, drive-up canopy, car wash bldg., and service areas)

- Keyes Acura, Van Nuys, CA. (one-story building with service area at basement. Penalized wood framing system, and post-tensioned two-way slab at first floor. Masonry shear walls. Special steel/concrete moment frames) (done in other firms)
- South Bay BMW, Torrance, CA. (two-story tilt-up panel building with post-tensioned two-way slabs at roof and 2nd floor. Concrete and masonry shear walls) (done in other firms)

Telecommunication:

- Numerous projects on structural designs on screen walls and platform framing for new equipment for T-mobile, AT&T and NEXTEL.

Industrial

- 5000 sq. ft. Mezzanine for Worr Game Industries, Corona
- Control Room, Boeing, Huntington Beach, CA (two story, light-gage metal studs for floor and wall framing)

Governmental

- US Marine Training Facility, two story, Barstow (concrete slabs and walls)
- US Army Multi-Purpose Facility, foundations for metal frames, Ft. Irwin
- 2700 sq. ft Mezzanine for FA-18 Simulator Training Facility, Miramar, CA (steel girder/beam framing with Chevron braced frames and X-braced frames)



Selected On-Going or Finished Projects

Residential

Multi-family homes

- **Nicolai Condomium, 9 units, underground parking, San Clemente**
- **Domingo Villas, 8 units, caissons and grade beams, Newport Beach**
- Cefalia 2 Unit Condo, about 8000 sq. ft, Costa Mesa
- 2 Unit Condo, about 8000 sq. ft, Seal Beach
- Montisano Triplex, 6600 sq. ft, three stories, San Diego
- Housemore Duplex, 4 units, partial basement, Newport Beach
- Duplex for Harvest Financial, 6000 sq. ft, sloping lot, San Clemente
- Shahbazian Duplex, 6400 sq. ft, sloping lot, caissons/shotcrete wall, Dana Point
- Royal Duplex, 5500 sq. ft, three stories, San Clemente
- Clayton Duplex, 4500 sq. ft, Newport Beach
- Shipp Duplex, totally four buildings, 3500 sq. ft for each duplex, three stories, sloped lot for one building, Newport Beach (no moment frames are used)
- Lee Duplex, 3500 sq. ft, three stories, Corona Del Mar (no moment frames and no steel beams are used)
- Rosten Duplex, 3500 sq. ft, three stories, Corona Del Mar (Consultant on lateral design to five eliminate steel moment frames)
- Brana Duplex, 4000 sq. ft., Corona Del Mar



Selected On-Going or Finished Projects

Residential

Custom homes

- Lot 8A, 12,000 sq. ft. Newport Beach
- Lot 50B, 9000 sq. ft, full basement, wood and light-gage metal stud construction, Shady Canyon
- Lot 22A, 8000 sq. ft, Shady Canyon
- Lot 26B, 8000 sq. ft, Shady Canyon
- Lot 47A, 8000 sq. ft, Shady Canyon
- Walker Residence, 7,300 sq. ft, Basement, Newport Beach
- Martin Residence, 8,000 sq. ft, Santaluz
- Lambrozo Residence, 7,800 sq. ft, Santaluz
- Gonzalez Residence (construction phase), 7800 sq. ft, basement, Newport Beach
- Sutton Residence, 7200 sq. ft, Lot 85 and 86, Fresno
- Valente Residence, 6850 sq. ft, basement, Corona Del Mar
- Braden Residence, 6500 sq. ft, off-set floor levels with partial basement, Coto de Caza
- Haglund Development, three houses, total 6500 sq. ft, Perris
- Jiang Residence, two houses, total 6000 sq. ft, San Gabriel
- Krause Residence, 5300 sq. ft, basement, Coto de Caza
- Miller Residence, 4800 sq. ft, San Diego
- Shipp Residence, 4800 sq. ft, basement, Newport Beach
- Brown Residence, 4500 sq. ft, San Clemente
- Elwood Residence, 3000 sq. ft, Shell Beach



Selected On-Going or Finished Projects

Home remodels/additions

- Robinson Residence, 6,000 sq. ft, 2nd story addition, Newport Beach
- Horgan Residence, 3500 sq. ft, three story, Huntington Beach
- Roper Residence, addition at the third floor, Mission Viejo
- Maney Residence, 2500 sq. ft, caisson and grade beam foundation system, San Clemente
- Werner Residence, 4500 sq. ft, light gage metal studs for walls and floor framing, x-braces with metal straps, San Clemente
- Parseghian Residence, 4600 sq. ft, mixed wood and light gage metal materials, San Clemente
- Westmoreland residence, 3000 sq. ft., Long Beach
- Bloustein residence, 2nd story addition, Studio City, CA



Selected On-Going or Finished Projects

Hardscape, retaining walls, shoring systems

- Wang Residence, Shoring Systems, Caissons and H Piles for retaining wall system, Wang Residence, Newport Beach
- Steel pile shoring and retaining walls for Hamilton residence, Newport Beach
- Batniji Residence, Caissons and H Piles for retaining wall system, Newport Beach
- Shahbazian Duplex, sloping lot, caissons/shotcrete wall, Dana Point
- Thompson residence, temporary shoring, Irvine
- Simpson residence, hardscape and trellis, India Wells, CA
- Hoffman residence, hardscape and retaining walls, Coto de Caza
- Schmit residence, hardscape and retaining walls, Irvine



Case Studies

- **Dennis Bedell, Timely Design and Construction, (714) 612-2091**

AQX saved this client approx. \$65,000 through our creative design of temporary shoring and retaining walls. The county approved the structural drawings without any plan check comments.

- **David Shipp, Redpoint Builders, (949) 955-1525**

This client saved approx. \$30,000 with our unique lateral design approach designed without steel moment frames on four duplex projects, where steel moment frames are commonly used by other engineers in similar types of structures.

- **Greg Lee, Greg Lee Builders, (949) 673-3069**

Saved this client approx. \$40,000 by eliminating five steel moment frames and erection pad footings on a duplex project.

- **Steve Hopkins, (949) 859 7385**

The city approved our drawings without any plan check comments on the structural drawings on Newport Sports Museum Expansions