

Fred Jacob, CIPE, VE, Administrator / Value Engineer

Fred Jacob has over 26 years of experience in design of HVAC, plumbing, and fire protection systems for laboratory and healthcare facilities. He has been a project engineer responsible for all phases from design through construction on numerous projects. Most recently, he has been responsible for value engineering on all of the projects, checking for constructability, reviewing bid submittals and construction administration.

Professional Experience:

- Kaiser Berkeley Regional Laboratory - 35,000 sq. ft., Laboratory Expansion, 40,000 sq. ft., Biomedical Engineering 30,000 sq. ft., Laboratory Remodel, \$24.5 million construction cost, Berkeley, CA
- Ernest Gallo Clinic and Research Center – 62,000 sq. ft. Laboratory / Research Center, 7,000 sq. ft. Animal Holding and 4,500 sq. ft. Administrations, \$14.8 million construction cost, Emeryville, CA
- Bayer Diagnostics Lab – 72,000 sq. ft. 2-story building, 100,000 sq. ft. Parking Garage, \$11,000 million construction cost for Shell & Core Building, \$7.6 million construction cost for Tenant Improvement, Berkeley, CA
- Palo Alto Medical Foundation – 360,000 sq. ft. Laboratory including Animal Facility Lab, 350,000 sq. ft. Underground parking structure, Palo Alto, CA
- Chiron Corporation - Central Plant Development, \$8.5 million construction cost, Emeryville, CA
- Kaiser Los Angeles Medical Center - Hospital Replacement project, 448-bed, 900,000 sq. ft., \$240 million construction cost, Los Angeles, CA
- Mills-Peninsula Replacement Hospital, 232-bed, 400,000 sq. ft. Hospital and 150,000 sq. ft. MOB, \$160 million construction cost, Burlingame, CA
- San Mateo County Health Center - Hospital Expansion, 200-Bed, 394,000 sq. ft., \$110 million construction cost, San Mateo, CA
- Kaiser Oakland Medical Center - Complete Remodeling of the Existing Chilled and Hot Water Systems and Provision of New Central Plant, approximately 1,300 tons of refrigeration and 30,000 MBH of heating, Oakland, CA.
- Veteran Administration - Seattle: 505-Bed patient rooms, eight operating rooms, 12 minor surgery rooms, spinal cord injury, supply, process, and desterilizing and all the supporting laboratory departments, oral surgery, morgue, ambulatory care, and intensive care, Seattle, Washington.
- Veteran Administration - San Francisco: Complete remodel of a 150,000 sq. ft. medical office building including emergency care, dental, minor operating rooms, supply, process, and desterilizing, and data processing San Francisco, CA.
- Veteran Administration - Palo Alto: Remodel of 50,000 sq. ft. of patient rooms, laboratories, spinal cord injury, and partial isolation rooms, Palo Alto, CA.

Publication:

Fred Jacob's article on mechanical engineering was published in Handbook of Utilities and Services for Building, "Seismic Protection". He is chairman of the Technical Committee with ASHRAE and ASPE to publish a handbook of hot water heating systems. Fred Jacob has served as President of American Society of Plumbing Engineers (ASPE) San Francisco.

Education:

BS, Mechanical Engineering / 1975 - California Polytechnic State University, Pomona, CA

Registration:

Fred Jacob is Certified in Plumbing Engineering (CIPE) and in Value Engineering (VE)