

# Vacek LLC

Structural & Architectural Engineering

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**SAM S. VACEK, P.E.**  
Structural & Architectural Engineer

## **PROFESSIONAL SUMMARY**

Forty-seven years experience as a Structural/Architectural Engineer with experience in structural design, failure analysis, and construction monitoring of industrial, commercial, and residential structures.

Master of Science Degree in Civil Engineering

Bachelor of Science Degree in Architectural Engineering

Registered Professional Engineer in Multiple States

Member of Several Professional Organizations

Chair of the Architectural Engineering Institute AEI Build Enclose Technical Community

Texas Department of Insurance Qualified Windstorm Inspector

City of Houston Special Inspector

Patented Self Sustaining, Fresh Air, Energy Reducing Structural Ventilation System

Primary Areas of Consultation and Expertise:

- Single family and multi-family residences, schools, office warehouses, strip shopping centers, restaurants, commercial office buildings, industrial buildings, hospitals, bridges, towers, and retaining structures.
- Thorough familiarity with the International Building Code, International Residential Code, Uniform Building Code, Standard Building Code, Life Safety Code, Underwriters Laboratories Building Materials Directory, International Conference of Building Officials Research Reports, and applicable Occupational Safety & Health Administration requirements.
- Thorough experience in computer aided design and analysis.

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Porter, Texas 77365

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832-201-9802 f

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[www.Vacek.LLC](http://www.Vacek.LLC)

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## **PROFESSIONAL EXPERIENCE**

- 1993 to Present      **VACEK LLC (formerly VACEK GROUP, LLC)**  
Porter, Texas  
Structural/Architectural Engineer  
Responsible for the design and failure analysis of structures and their individual components. Experience includes single family & multi-family residences, commercial office buildings, historical buildings, industrial complexes, institutional structures, parking garages, tanks, bridges, retaining structures, and towers. Forensic investigations and expert witness services provided for cases such as structural failures, explosions, fires, foundations, plumbing leaks, moisture analyses of buildings, construction defects, and third party opinions. Computer aided design and analysis utilized.
- 1988 - 1993      **CH&A CORPORATION**  
Kingwood, Texas  
Senior Structural Consulting Engineer  
Responsible for the design and failure analysis of structures. Projects include single family & multi-family residences, commercial office buildings, industrial complexes, institutional structures, parking garages, petrochemical facilities, tanks, bridges, retaining structures and towers. Computer aided design and analysis utilized. Forensic investigations and expert witness services provided for cases such as structural failures, foundations/plumbing leaks, moisture analyses of buildings, construction defects, third party opinions, and slip and falls. Damage assessments for structures having been affected by explosions and seismic activity. Computer aided design and analysis utilized.
- 1987-1988      **ASL CONSULTING ENGINEERS**  
Santa Ana, California  
Structural Department Manager/Project Manager  
Responsible for operation of structural office for ASL Consulting Engineers in Santa Ana, California utilizing computer drafting and engineering for design, analysis and investigations. Projects include office buildings, bridges, schools, hospitals, single and multi-family residential, pump stations and reservoirs. Damage assessments performed for structures involved in earthquakes.
- 1984-1987      **VACEK STRUCTURAL CONSULTANTS, INC.**  
Houston, Texas and Santa Ana, California  
President  
Responsible for complete operation of six person structural engineering firm with the application of computer drafting and engineering for design, analysis and investigations. Projects include single-family residences, multi-family dwellings, office warehouses, strip shopping centers, commercial office buildings and water treatment structures, bridges, schools, hospitals, pump stations and reservoirs.

- 1980-1984 **INTERFIELD ENGINEERING COMPANY**  
Houston, Texas  
Structural Department Manager/Project Manager  
Responsible for client relations, production and coordination of civil, structural, mechanical, electrical and plumbing disciplines of various projects including single-family residential, multi-family residential, office warehouses, strip shopping centers, commercial office buildings and medical office condominiums.
- 1978-1980 **B.A. KALMANS & ASSOCIATES**  
Houston, Texas  
Structural Project Engineer  
Responsible for design, production, and client relations of various projects including single-family residences, strip shopping centers, office warehouses, and commercial office buildings.
- 1977-1978 **WALTER P. MOORE & ASSOCIATES**  
Houston, Texas  
Structural Design Engineer  
Responsible for design calculations and detail development of various projects including schools, strip shopping centers, and commercial office buildings.

## **EDUCATION**

Bachelor of Science Architectural Engineering  
University of Texas, Austin, Texas, 1976

Master of Science Civil Engineering  
University of Houston, Houston, Texas, 1979

## **REGISTRATIONS**

Registered Professional Engineer in the States of Arkansas (inactive status), California (inactive status), Florida (inactive status), Louisiana (inactive status), Oklahoma (inactive status), Mississippi (active status), New Mexico (inactive status), Nevada (inactive status), South Dakota (inactive status), and Texas (active status).

## **AFFILIATIONS**

American Concrete Institute  
American Institute of Steel Construction  
American Society of Civil Engineers  
American Society of Heating, Refrigeration, and  
Air-Conditioning Engineers  
Architectural Engineering Institute  
International Building Performance Simulation Association  
International Institute of Building Enclosure Consultants  
Structural Engineers Association of Texas

## **PRESENTATIONS**

Structural Ventilation of the Building Envelope  
Architectural Engineering Institute, Spring 2021  
  
Structural Ventilation of the Building Envelope  
Architectural Engineering Institute, Spring 2023  
  
Structural Ventilation of the Building Envelope  
American Society of Heating, Refrigeration, and  
Air-Conditioning Engineers, Summer 2023

## **APPOINTMENTS**

Chair of the Architectural Engineering Institute  
AEI Build Enclose Technical Community  
  
Texas Department of Insurance Qualified Windstorm Inspector  
  
City of Houston Special Inspector

## **PATENTS**

System and method for inhibiting moisture and mold in an outer  
wall of a structure.  
Publication number: US7247090B2  
Publication date: July 24, 2007

Systems and methods for controlling air properties in structures and in-  
hibiting moisture accumulation and mold propagation in structures  
Publication number: US11248814B2  
Publication date: February 15, 2022

## **AWARD**

Most Innovative Architectural Engineering Company - Southwest USA by  
BUILD Construction and Engineering Awards 2020