



WILLIAM M. KLORMAN

PROFILE

William M. Klorman is a Licensed General Building Contractor, Concrete Contractor, Home Improvement Contractor, ICBO Certified Special Inspector Reinforced Concrete, Industry Expert for the California State Contractors License Board and Developer who has specialized in the construction of buildings and non-buildings for more than 30 years. He has extensive experience in construction, means & methods, cost estimating and analysis, inspection, safety, quality control and quality assurance, code compliance, investigation, repair, project management and labor relations. He has been personally responsible for the construction of over three hundred existing commercial structures, numerous developments and renovation/repair projects.

William M. Klorman is an established & active Builder. He has developed and constructed numerous buildings from Single Family Residences and Multi Family Housing projects (both rental and for sale units) to Design Build Parking Structures and Commercial Office Buildings and has done so with both Private & Government Funding. Mr. Klorman is the President of **W.M. Klorman Construction Corporation**, a Los Angeles based Design/Build Contracting, General Contracting and Structural Concrete Contracting company (established in 1980) which builds multi-family residential and commercial projects. Klorman Construction has a long and respected reputation for building complex; Parking Structures, Multi-Level Towers and High-End Architectural Concrete projects. In addition to these and its general building projects, they have been leaders in the Repair & Strengthening of existing structures. Klorman Construction has and continues to build buildings in Healthcare, Transportation, Education, Bio-Tech, Telecommunications, Infrastructure, Water & Waste, Retail, Industrial, Commercial, Automotive, and Exclusive Residential markets.

Mr. Klorman is the past Executive Vice President and General Manager of Accurmac/Pacific Enercon, Inc., an International Development and Construction company, which was established in 1977 and maintained Corporate offices in El Monte, CA, Hong Kong and Beijing, China. A/PEI's diverse array of projects range from Multi-Family Housing projects and Commercial High Rise Office Buildings to Co-Generation Power Plants in sizes from 2x125 Mega-Watts to 1,300 Mega-Watts (the largest power plant ever to be built outside of the USA). A/PEI also maintained its own in-house Property Management group and handled full service real estate needs from acquisition through disposition.

Mr. Klorman regularly provides Expert Testimony and Consulting. He has worked as a consultant to the Construction Industry, Legal Profession, Insurance and Surety Companies, Design Professionals, Public and Private Development Owners, Financial Managers and certain Cities and Municipalities. He consults and provides support services for both Plaintiff and Defendant on such matters as: Construction Defects, Cost Analysis, Responsibility, Critical Path Analysis & Recreation (CPM), Construction Accidents (personal injury), Safety, Building Code and Zoning Compliance, Project Status, Feasibility, Forensic Review, Contract Documents, Quality Review and Control, Reconstruction, Construction Management, Development & Analysis, Building Inspection, Structure Failures, Earthquake Damage, Concrete Structures, Multi & Single Family Structures, Product Liability, Safety (OSHA), and Employment Disputes. He can and has provided Expert Testimony and courtroom exhibits for Trial, Arbitration, Mediation, Appraisals and ADR.

LICENSES

B1 – General Building Contractor
C8 – Structural Concrete Contractor
HIC – Home Improvement Contractor
ICBO Certified Special Inspector Reinforced Concrete

AFFILIATIONS

Fellow – American Concrete Institute - International (ACI)
Member – American Concrete Institute – So. Cal Chapter (ACI)
Member – Post-Tensioning Institute (PTI)
Member – Concrete Reinforcing Steel Institute (CRSI)
Member – American Society of Concrete Contractors (ASCC)
Member – American Water Works Association (AWWA)
Member – Association for Advancement of Cost Estimators (AACE)
Member – American Society of Professional Estimators (ASPE)
Member – Building Industry Association – Union Contractors Council (BIA)
Member – Lean Construction Institute (LCI)
Member – Forensic Expert Witness Association
Industry Expert for the California State Contractors License Board
Member of Several Building Associations

APPOINTED COMMITTEES:

American Concrete Institute International (ACI)

Committee on Responsibility in Concrete Construction (RCCC)

**Past Chairman (6/1997 – 11/2005)*

Which authors...

GUIDELINES FOR AUTHORITIES AND RESPONSIBILITIES IN CONCRETE DESIGN AND CONSTRUCTION

MISSION: Make recommendations regarding the responsibilities of and the interactions among the principal parties involved with concrete design and construction.

Construction Liaison Committee (CLC)

MISSION: Advise the ACI Board on the needs of the concrete construction industry. Recommend the establishment of committees, programs, and activities to address contractors' needs and problems. Assist other committees by suggesting possible construction-oriented members for various committees. Review selected technical committee documents with an emphasis on constructability, economy, and safety in construction.

ACI Young Member Award for Professional Achievement

MISSION: Advise the Board of Direction, by providing a list of nominations, of individuals who are candidates for ACI Young Member Award for Professional Achievement.

Publications Committee

MISSION: Advise the Board of Direction on general policies for the publications of the Institute including the establishment of new periodicals or series of publications and other information services.

Applied Technology Council (ATC)

Project 81: Development of Industry Foundation Classes (IFCs) for Structural Concrete Components - Strategic Plan – PMC

PROJECT SUMMARY:

This project seeks to develop a strategic plan for the development of Industry Foundation Classes (IFCs) for Structural Concrete Components to foster interoperability between disparate Building Information Modeling (BIM) software platforms. This is the initial step in the creation of an extensive suite of interoperable attributes for the IFC exchanges of structural concrete components. The strategic plan will synthesize the state of the art of current IFC interoperability and prioritize the attribute exchanges that would most benefit the industry. This research is designed to support the goal of creating advance tools and methods in the interoperability and building information modeling arena. A [white paper](#) has been produced aggregating this research and laying out a broad structure for the project group to discuss and evolve at the Strategic Planning Session.

MISSION: The Applied Technology Council (ATC) is a nonprofit, tax-exempt corporation established in 1973 through the efforts of the Structural Engineers Association of California. ATC's mission is to develop and promote state-of-the-art, user-friendly engineering resources and applications for use in mitigating the effects of natural and other hazards on the built environment. ATC also identifies and encourages needed research and develops consensus opinions on structural engineering issues in a nonproprietary format. ATC thereby fulfills a unique role in funded information transfer..

Concrete Industry's Strategic Development Council (SDC)

Accelerated Technology Implementation Team (ATI) Building Information Modeling (BIM) for Cast In Place Concrete

SDC BIM Initiative

SDC has identified BIM as an Industry Critical Technology

APPOINTED TASK GROUPS:

American Concrete Institute International (ACI)

Board Task Group Joint with ASCC Address Contractor Needs in ACI

MISSION: Explore ways to improve and increase effectiveness thereby enhancing the ability of designers, educators, academics, owners, constructors and suppliers to better communicate and work together to improve concrete construction.

TECHNICAL CODE COMMITTEES:

ACI Design and Construction Practices

Committee 131 – Building Information Modeling of Concrete Structures (inaugural member)

Mission: Develop and report information on the application of building information modeling to concrete structures.

ACI Design and Construction Practices

Committee 349 – Concrete Nuclear Structures

Mission: Develop and report information on concrete nuclear structures.

ACI Design and Construction Practices

Committee 315 – Details of Concrete Reinforcement--Joint ACI-CRSI

Mission: Develop and report information on proper details of concrete reinforcement.

ACI Design and Construction Practices

Committee 350 – Environmental Engineering Concrete Structures (*past member*)

Mission: Develop and report information on environmental engineering concrete structures, excluding nuclear structures

ACI Design and Construction Practices

Committee 301 (subcommittee E) – Specifications for Concrete

Voting Member on the published 2005 Revised Standard

Mission: Develop and maintain specifications for concrete construction

Post-Tensioning Institute (PTI) Design and Construction Practices

Committee DC-110 Building Information Modeling (BIM) (inaugural Chairman)

Mission: To develop and report information on the application of building information modeling to post-tensioned structures

EXEMPLAR LECTURE & SPEAKING ENGAGEMENTS:

- **University California Irvine (UCI)**
Development and the Responsibilities of Key players in a Construction Project (Developer, General Contractor, Architect, Engineer, Specialty Contractor, Marketing and Disposition)
- **American Concrete Institute (ACI) National Convention** (November '97) Technical Conference, Atlanta, GA
“Case Study of an Internally Post-Tension Concrete Water Reservoir for Cal Poly San Luis Obispo”
- **Post Tensioning Institute** (May 2004) Technical Conference, Huntington Beach, CA
“Special uses of Post-Tensioned Concrete”
- **Post Tensioning Institute** (May 2009) Technical Conference, Portland, OR

“Use of BIM to Facilitate Design & Construction of Concrete Structures”

- **Cal Poly San Luis Obispo, CA**
Lecturing to the Architectural, Engineering & Construction Management Departments on current construction practices, standards and the use of Virtual Design & Construction (BIM)
- **AGC BIMForum** (Winter Session - January 2010) Phoenix, AZ.
“ BIM Leveraging Integration Part 2 – Modeling the Process of Building”
- **American Concrete Institute (ACI) National Convention** (March 2010) Chicago, IL.
“ BIM Leveraging Integration Part 3 – Modeling the Process of Preconstruction”
- **Strategic Development Council (SDC) – Session #27** (May 2010) Kansas City, MO.
“ BIM Leveraging Integration Part 3a – Modeling the Process of Preconstruction”

SDC’S-AN EXECUTIVE FORUM FOR COLLABORATIVE RESEARCH

The Vision: The Strategic Development Council (SDC) shall bring together the concrete industry, along with government, academia, and customers, to focus on collaborative problem-solving in meaningful technology advancement. The result shall be the expeditious movement of meaningful innovations through the standardization process into commercial use.

The Mission...

The SDC shall facilitate advancement of concrete technology by:

- Providing a forum for visioning and prioritizing key challenges facing the concrete industry;
- Assisting ACI in the introduction and timely adoption of innovative technologies, problem solutions, and best practices; and
- Providing a framework for development of programs that respond to industry opportunities and accelerate technology acceptance.

Since its founding in 1997, the SDC has facilitated consortia that have united developers, producers, and customers on market-driven technology needs and produced results that have advanced the state of concrete construction technology.

More recently, the SDC has begun to focus attention on "industry critical technologies" in the concrete industry and identify barriers to their technology acceptance, and is beginning to concentrate resources to remove those barriers.

- **American Society of Concrete Contractors (ASCC) – CEO Forum** (July 2010) Ojai, CA.
“ BIM Leveraging Integration Part 3b – Modeling the Process of Preconstruction”
- **American Concrete Institute (ACI) National Convention** (October 2010) Pittsburg, PA.
“ BIM Leveraging Integration Part 4a – Modeling the Process of a Confederated BIM”

- **Concrete Reinforcing Steel Institute (CRSI) – Spring Technical Meeting** (March 2011) Tempe, AZ.
“BIM for Cast-In-Place Concrete Reinforcement” and;
“BIM Leveraging Integration Part 4a – Modeling the Process of a Confederated BIM”

- **Post-Tensioning Institute (PTI) – Technical Conference** (May 2011) Kansas City, MO.
“BIM Leveraging Integration Part 5 – Post-Tensioning in BIM”

- **University California Los Angeles (UCLA), CA**
Lecturing to the Civil and Environmental Engineering School, Design of Prestressed Concrete Structures Program on current construction practices, standards and the use of Virtual Design & Construction (BIM)

- **University Southern California (USC), CA**
Lecturing to the Civil Engineering School, Functions of the Constructor - current construction practices, standards and the use of Virtual Design & Construction (BIM)

- **TEKLA NORTH AMERICAN – User Conference** (August 2011) Las Vegas, NV.
“Pushing BIM to its Potential” and Panel Discussion

- **Meridian Systems – User Conference** (October 2011) Huntington Beach, CA.
Opening General Session Keynote Speaker “Klorman Construction’s 15-Year Relationship with Prolog” and Session Presentation: “Successful Integration with BIM Technology”

- **American Society of Concrete Contractors (ASCC) – Annual Conference [10 yr. Anniversary]** (Sept. 2011) Grand Rapids, MI.
Seminar: “The Business of BIM – Why you need to get on board”

- **Meridian Systems – Live Webinar** (November 2011)
“9 Ways Project Management Software Helps GCs Thrive in a Difficult Economy”
 Klorman Construction Case Study: In today’s challenging economy some GCs are thriving while others are struggling with increased competition and thinner margins. Thriving organizations are successfully leveraging technology to differentiate themselves from the competition, win more work, and maximize profitability on jobs.
 This is a 1-hour Webinar where William Klorman, founder and CEO of Klorman Construction, discusses the rewards his organization receives from construction project management technology, including how:
 - Consistent processes provide a competitive advantage to win more jobs and increase operational efficiency
 - A single system of record makes it easier to identify projects that are deviating from process
 - Consistent documentation supports claims avoidance and wins

- Better access to project information results in faster decisions and shorter cycle times

- **Fiatech Technology Conference & Showcase** (April 2012) Miami, FL.
“Integrating Databases to improve Quality, Performance & Profitability”



Fiatech is an international community of passionate stakeholders working together to lead global development and adoption of innovative practices and technologies to realize the highest business value throughout the life cycle of capital assets.

- **American Concrete Institute (ACI) National Convention** (October 2012) Toronto, Canada.
“Development of an Information Delivery Manual for Cast-In-Place Concrete BIM”
 Creating international software exchange standards for the Reinforced Concrete Industry.

- **Trimble Dimensions 2012** (November 2012) Las Vegas, NV
“Integrating Construction Specific Databases to Improve Quality, Performance and Profitability”

- **World Of Concrete 2013** (February 2013) Las Vegas, NV
Leveraging Integration Part 11: “Value and Improvements obtained by using & leveraging Trimble Technologies”

- **Trimble Buildings Case Study: Klorman Construction and the Tom Bradley International Terminal at LAX – Live Webinar**(May 2013)
“Value and Improvements obtained by using & leveraging Trimble Technologies in the real world”

- **KLORMAN UNIVERSITY**

Mr. Klorman, on a regular basis teaches at KLORMAN University such topics as, concrete technology; concrete formwork, review and use of ACI Documents, concrete mix designs, BMP project management, BMP storm water prevention program, KLORMAN’s proprietary 5d modeling system used by KLORMAN’s Virtual Construction Department which, takes a model based approach and expands the information into location based scheduling, estimating, form design, cost management, video coordination communication and constructability analysis.

ASSORTED KEYNOTE SPEAKING ENGAGEMENTS FOR INDUSTRY PROFESSIONALS

Project Controls
 Specifications & Standard of Care
 Enforcement of Contract Documents
 Concrete and How to Produce Specific Results

The use of Building Information Models (“BIM”) to the 5th Dimension
 Constructability Issues and Clash Detection using BIM
 Safety (Job Hazard Assessments)
 Contractor’s Work Plans
 3D Mock Ups
 The Use of BIM for Safety Review
 IFC’s for Cast-In-Place Concrete

TECHNICAL PAPERS

Case Study of an Internally Post-Tensioned Concrete Water Reservoir for California Polytechnics University, San Luis Obispo, CA

PUBLICATIONS

Case Study of an Internally Post-Tensioned Concrete Water Reservoir for California Polytechnics University, San Luis Obispo, CA (published in Concrete International Magazine September ’99)

Are Contractors Responsible for Code Requirements That Do Not Appear in Contract Documents? By William M. Klorman & Kenneth B. Bondy. (Published in the January 2002 issue of Concrete Construction Magazine)

Concrete Perspective: Concrete Frames vs. Steel Frames and the World Trade Center by William M. Klorman & Kenneth B. Bondy. (to be published in the January 2002 issue of Concrete Construction Magazine)

“Effect of Post-Tensioning on Tolerances” by William M. Klorman (published in the April 2009 issue of Concrete International Magazine)

The Sustainable Concrete Guide - Applications by Andrea J. Schokker, published by U.S. Green Concrete Council. Mr. Klorman authored Chapter 9 Planning and BIM (Building Information Management) available as of 11/2010

BIM: Leveraging Integration –Modeling a Confederated BIM at LAX’s New Tom Bradley International Terminal by William M. Klorman (published in the October 2011 issue of Structure Magazine)

AWARDS & HONORS

Best Concrete Project in the State of California 1997

Awarded by McGraw-Hill’s F.W. Dodge Construction Link Magazine (December 1997 issue) for the **California Polytechnics University, San Luis Obispo, Water Reservoir** a **Design/Build** project

American Concrete Institute (ACI) – **Elected Fellow**

On November 1, 2010 Mr. Klorman was honored by the American Concrete Institute and elected a Fellow of the Institute in recognition of his contributions to the work of ACI.

"At the time of nomination, a Fellow shall have been a Member of the Institute, or a representative of an Organizational or Sustaining Member of the Institute, for at least ten years. A fellow shall have made outstanding contributions to the production or use of concrete materials, products, and structures in the areas of education, research, development, design, construction or management. In addition a Fellow shall have made significant contributions to ACI through committees and/or local chapters."

During the past 106 years, the Institute as only elected 761 Fellows and Mr. Klorman is one of them.

Klorman Wins Runner Up 2011 Tekla North America BIM Awards

KLORMAN's LAX Tom Bradley International Terminal project placed Runner Up in Tekla's 2011 North America BIM Awards in the Overall BIM Category (Projects in which Tekla Structures has played a significant role and multiple parties have collaborated using BIM to benefit project delivery).

LAS VEGAS (August 12, 2011) Each year Tekla hosts a North America BIM Award competition open to all Tekla users who have modeled projects with the software during the preceding year. The BIM Awards competition is held in conjunction with Tekla's Annual North America User Meeting, which this year took place in Las Vegas, Nevada, August 11-13.

The growing popularity of Tekla Structures and the adoption of 3D modeling attracted a record number of Tekla Structures users to submit their 3D models. Models were submitted for judging in three categories: Category 1 – BIM, Category 2 – Steel, Category 3 - Concrete

Participants submitted web models, descriptions of their projects, photos, and other supporting material. Online voting opened to the public prior to the 2011 Tekla North American User Meeting. The top projects then went to a panel of three judges: Rafael Saks, Associate Professor, Technion – Israel Institute of Technology; Heather Brown, Director & Associate Professor, Concrete Industry Management at Middle Tennessee State University; and Chris Moor, Director Industry Initiatives, American Institute of Steel Construction (AISC).

Meridian Hall of Fame – Inducted

On October 11, 2011 Mr. Klorman was honored by Meridian Systems when he was inducted into the Meridian Hall of Fame

The Meridian Systems Hall of Fame recognizes project-based organizations that are best in class when it comes to managing infrastructure-intensive capital building programs and construction projects. Persons accepted into Meridian's Hall of Fame program have demonstrated a strong track record of achievement in adopting project management technology to better serve their customers, increase productivity of their workforce and improve business operations. They serve as models of what can be achieved in the capital building and construction industry.

American Concrete Institute (ACI) – Awarded Roger H. Corbetta Concrete Constructor Award

On October 21, 2011 Mr. Klorman was honored by the American Concrete Institute and On behalf of the Board of Direction, that he had been selected to receive the Roger H. Corbetta Concrete Constructor Award.

This honor was bestowed by the ACI Board of Direction at its fall 2011 meeting specifically *"for your effective participation in ACI activities and your innovative techniques in the planning and execution of concrete structures including your leadership in the field of Building Information Modeling (BIM)."*

Formal announcement of his selection was made at the Opening Session and Awards Program, Sunday, March 18, 2012, at the Hyatt Regency Dallas, Dallas, TX.

Constructech Vision Award – Awarded Gold Vision Award

On October 5, 2012 in San Mateo, CA., Mr. Klorman and Klorman Construction were honored by Constructech Magazine which awards them the Gold Constructech Vision Award. The Constructech Vision Award honors companies that have realized the advantages of applying modern technologies to their everyday businesses.

NOTEWORTHY

Largest Concrete Pour in Recent History Completed in L.A

DJC
RealEstate
FRIDAY FEBRUARY 02, 2001

CONSTRUCTION

Large concrete pour completed in West L.A.

Los Angeles - W.M. Klorman Construction Corp., an El Monte-based design/build contractor, completed one of the largest single concrete pours in recent memory at the Howard Hughes Center in Los Angeles.

On Jan. 6, 110 concrete trucks converged on site at 7 a.m. In just under 12 hours, crews poured approximately 500 cubic yards per hour totaling 5,600 cubic yards (or 22.7 million pounds) of concrete and laid 700 tons of rebar, equivalent to 130 miles. Along with the trucks, six boom pumps, an 80-ton crane and 225 workers worked in tight conditions more than three stories below street level.

"This pour is one of the largest we've been involved with," says Skip Keene, territory manager of Southdown Concrete, Brea, who has been with the company for 20 years.

Designed by Daniel Mann Johnson Mendenhall, Los Angeles, the overall project footprint encompasses nearly 100,000 square feet or 2.2 acres. A 12-story office building plus a heliport will rise over a three-story subterranean parking structure that will connect to an eight-story parking structure. Together, the three structures will total approximately 750,000 square feet of floor area. The office building is scheduled to open in April 2002.

Lowe Enterprises Commercial Group is developing Howard Hughes Center for its owner, Arden Realty. Swinerton & Walberg, Los Angeles, is the project's general contractor. The structural engineers are KPFF of Los Angeles and Seneca Structural Engineering of Laguna Hills. Innovative Design Group of Irvine is the parking consultant.

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CITATION

“Aside from his effective participation in ACI activities on local and national levels, including his membership and past chairmanship of the Board Committee on Responsibility in Concrete Construction, Bill Klorman has been a major factor in promoting the design and construction of quality concrete structures throughout California. His innovative and successful techniques in the planning and execution of all types of major concrete construction have been inspirational for all those involved in the design and construction of concrete buildings in California.”

By Ken Bondy, President Post-Tensioning Institute, Director American Concrete Institute. (2009)