

Curriculum Vitae

Mark C. Vanderslice, RRC

Roofing, Waterproofing and Exterior Building Envelope, Weatherproofing Consultant

Mr. Vanderslice has been actively involved in virtually all phases of the roofing/waterproofing and consulting industries for the past 33 years. Prior to founding Roofing Forensics, Inc. in 1988, Mr. Vanderslice held the positions of Director of Technical Sales and Services, Regional Vice President and Corporate Vice President for over four years for one of the largest Roof Consulting firms in the Western United States.

Mark is an active member of The Institute of Roofing, Waterproofing, and Building Envelope Professionals (formerly The Roof Consultants Institute (RCI)). He was the 16th (to receive certification as a Registered Roof Consultant) of nearly 400 nationally recognized Registered Roof Consultants in the United States from a professional membership of over 2,500. It is currently estimated that there are several thousand non-credentialed "roofing and waterproofing consultants" operating within the industry.

Mr. Vanderslice has been designated as an expert witness in more than 500 cases involving water intrusion from various sources including roofing, waterproofing, sheet metal, wall systems inclusive of stucco, stone cladding, masonry, cavity walls, DEFS, EIFS, and metal panels as well as elastomeric deck systems and virtually all types of water intrusion and related construction defects.

Mark spent over six years in the residential and commercial roofing divisions of a major roofing material manufacturer. His responsibilities at that time included roofing contractor application training, roof system application audits, specification development and reviews of existing specifications for owners and architects.

Also, Mark has conducted and participated in numerous roofing informational seminars, panel discussions and roofing information clinics. These lectures have been sponsored by schools of architecture, major architectural firms, local chapters of the American Institute of Architects (AIA), Construction Specifiers Institute (CSI), developers, material manufacturers, contractors, Fortune 500 Corporations, Lorman Education Services, National Association of Women in Construction (NAWIC), International Conference of Building Officials (ICBO) and Roof Consultants Institute (RCI).

A 1973 graduate of the University of Arizona, Mark continues to expand his knowledge. Mr. Vanderslice has accumulated thousands of hours of continuing education credits in the areas of roofing, waterproofing, Exterior Insulation and Finish System (EIFS), metal roofing systems and sheet metal fabrication and installation.

Professional History

5/88 to
Present

ROOFING & WATERPROOFING FORENSICS, INC.

President/Owner/Registered Roof Consultant

- Conduct roofing, waterproofing and exterior building envelope weatherproofing system leak investigations and failure analyses (relative to water intrusion issues) and provide in-depth reports of our findings, recommendations and appropriate alternatives for repair
- Existing Construction: Development of specifications, plans and related Construction Documents for the repair of water intrusion problems and building restoration related to the exterior building envelope in conjunction with the client's architect
- New Construction: Develop project specifications or review and recommend modifications of roofing, waterproofing, sheet metal flashing and related exterior building envelope weatherproofing systems specifications, plans, details and related Construction Documents in conjunction with Roofing & Waterproofing Forensics' "in house" architect or client's architect
- New Construction: Red-line review of project plans, specifications and details related to the exterior building envelope weatherproofing systems to verify compliance with acceptable roofing and exterior weatherproofing assemblies
- During Construction: Provide in-field problem solving with the Construction Team (Architect, General Contractor, subcontractors) to avert or correct problems
- Neutral third-party expert in the areas of roofing, waterproofing, sheet metal flashings, the exterior building envelope weatherproofing assemblies as well as means and methods of water intrusion into buildings
- Has provided Expert Witness testimony (in trial, arbitration or mediation) involving roofing, waterproofing, sheet metal flashing, exterior building envelope weatherproofing systems and water intrusion into habitable structures in over 500 cases

4/84 to
4/88

INDEPENDENT ROOFING CONSULTANTS

5 Civic Plaza

Newport Beach, CA 92660

Vice President, Director of Technical Services

- Responsible for virtually all technical operations and sales
- Conducted roofing analyses, litigation, quality control, specification reviews and seminars to architects, owners and contractors
- Review of technical staff reports

2/78 to
4/84

OWENS/CORNING FIBERGLAS

5933 Telegraph Road

Los Angeles, CA 92606

Commercial/Residential Roofing Specialist

- Handled technical sales of commercial and residential roofing products
- Contractor application training • Quality Control • Audits for guarantee program • Pre-job conferences • Failure analyses

Certificates:

- Registered Roof Consultant #16 - Roofing Consultants Institute
- Exterior Design Institute (EDI) - Certified EIFS Inspector
- Exterior Design Institute (EDI) - Certified Moisture Analyst

Education

- 3/16/89 Roof Consultants Institute/RCI Incorporated: Registered Roof Consultant
- 9/69-12/73 University of Arizona, Tucson, Arizona
Graduated 1973 • Bachelor of Science
Biological Sciences with a Minor of Chemistry & Physics
- 9/68-6/69 Northern Arizona University, Flagstaff, Arizona
Biological Sciences

Roofing/Waterproofing Continuing Education

- 12/12 Roof Consultants Institute
Professional Building Consulting
San Francisco, California
- Professional Consulting Today
 - Ethics
 - Common Practices
 - Contract Administration
 - Roof Specific Practice
 - Waterproofing Specific Practice
 - Exterior Wall Specific Practice
 - Specialized Practice
- 9/12 Roofing Consultant Advisory Board
Inagural Roofing Consultant Advisory Board Meeting
Saginaw, Michigan
- Membranes
 - Membrane Selection
 - Membrane Failure Modes
 - Membrane Coatings
 - Total Roof Systems
 - Membrane Attachment
 - Overlay Boards
 - Vapor Retarders
 - Higher-R Value Standards
 - Specifications
 - Trends in Preferred Style
 - Manufacturer Participation
 - Installation
 - Pre-qualified Contractors
 - Inspection Programs
 - Warranties/QA
 - Single Source Supply
 - Coverage & Exclusivity

4/12

American Concrete Institute
1-Day ACI Concrete Slabs-on-Ground Seminar
San Francisco, California

- Expectations relative to slab-on-ground performance, serviceability, reference documents; owner, local market, site specific issues, sustainability and implied criteria
- Engineering considerations, loads, soil support system, concrete mix
- Moisture emission and related issues, curling considerations, surface tolerances
- Preparation, placing and finishing slabs-on-ground
- Slab-on-ground thickness design; Design examples for distributed, rack post and lift truck loading; reasonable assumptions when you don't know
- Design for shrinkage, minimizing restraint to movement; joint spacing, reinforcing options to limit out-of-joint crack width development
- Two course slab systems
- Floor joints and load transfer
- Reinforcing: conventional deformed bar, welded wire and fibers
- Curing, surface treatments, liquid densifiers, polishing
- Plans and specifications: what the engineer should provide and what the contractor should expect
- Pre-construction coordination meeting
- Problem recognition and remediation

1/11

Roof Consultants Institute
11th Annual Hawaii Winter Workshop
Waikiki, Hawaii

- Heat, Air, and Moisture: Building Science and Infrared Thermograph
- Infrared Thermography for Roofing Investigations
- The Consequential Structural Effects of Improper Design or Installation of Nonstructural Systems
- Designing, Specifying, and Testing Windows for Water Penetration Resistance: The Effects of Changes in the AAMA 502 Test Standard
- Utilizing Infrared Imaging to Detect Filled Versus Unfilled Cells in Exterior Concrete Masonry Unit (CMU) Walls
- A Critical Review of the Life Span of TPO, PVC, and Other Single-Ply Roof Membranes
- Google and Its Applications for Use in the Practice of Roofing, Waterproofing, and Exterior Building Envelope Consulting
- Failure in the Transition of a Curtain Wall to a Roof Expansion Joint Over a Supercomputer: a Forensic Case Study
- Troubleshooting in Design of Construction Details
- Inspection Guidelines and Investigation Standards for Unsafe Conditions on Building Façades and Façade Ordinances in Accordance With ASTM E2270-05
- Roof Damage Investigations: Misclassification of Roof Damage Causation and Fraud in Insurance Property Damage Claims

Roofing/Waterproofing Continuing Education (continued)

- 10/10 Roof Consultants Institute
Building Envelope Technology Symposium
San Antonio, Texas
- Addressing Roof Leaks by Fixing a Wall Problem
 - Lessons Learned from Curtain Wall Failure Investigations
 - Cement Plaster Metrics: Quantifying Stucco Shrinkage and Other Movements; Crack-Acceptability Criteria for Evaluating Stucco
 - Hidden Holes in Balcony Waterproofing Applications
 - The Designer Dilemma: Modern Performance Expectations and Historic Masonry Wall Systems
 - Saving Our Facilities (and the World)
 - In Between: Designing Joints Within Façades
 - Metal Roofing: Platform for Renewable Energy Systems
 - Not Your Grandfather's Windows: New Glazing and Fenestration Technologies to Meet Expanding Energy- and Peak-Power Reduction Goals
 - High Performance Building Enclosures to Cause Condensation and Indoor Air Quality Problems; the Need for Integrated Design and New Investigation Protocols
 - Rapid Building Failure
- 6/10 W. R. Grace Construction Products Waterproofing Division
Cambridge, Massachusetts
- Intensive waterproofing installer training in application of WR Grace's Preprufe Below Grade Waterproofing membrane and Air and Water Barrier Systems
16 Hours
- 6/09 Duro-Last Roofing, Inc.
Saginaw, Michigan
- Three- (3) Hour Saginaw Facility Tour (including one (1) hour of Health, Safety, Welfare and one (1) hour of Sustainable Design) - Review of manufacturing process. - PVC Single-ply as Sustainable Roofing Systems (including three (3) hours of Health, Safety and Welfare) - Review of PVC roofing system fabrication and installation process.
- 5/09 Roof Consultants Institute
WESTCON Windows and Flashings
Long Beach, California
- Introduction (Windows & Flashings)
 - Basic Summary and Terminology
 - AAMA Window Selection Guide
 - Materials for Prefabricated Windows
 - High-Performance Glass
 - Gaskets for Glazing
 - Sealants for Windows: Movement Joints and Goop
 - Storefront Window Systems
 - Water Testing (ASTM Test Standards)
 - Window Installation (based on ASTM E 2112-07)

Roofing/Waterproofing Continuing Education (continued)

- Storefront Window Flashings in Drainage Plane Stucco Walls
 - Experimental Designs
 - Preliminary Test Results

2/09

International Roofing Expo
Sponsored by NRCA
Las Vegas, Nevada

- NRCA Technical Operations Committee: Roofing Industry Technical Issues
- Vegetative Roofs...Key Considerations, Using “Green Credits” and Common Mistakes to Avoid
- Assessing Thermoplastic Polyolefin (TPO) Membranes...Beyond ASTM D 6878
- Avoiding Wind Damage: Design and Application Practices That Matter
- Open Forum: Technical & Design Observations from the Field Experts

Roofing/Waterproofing Continuing Education (continued)

10/08

Roof Consultants Institute
Leed and Title 24: Roofing Issues
Long Beach, California

- How California “Title 24 – Building Standards” Relates to the Rest of the California Code of Regulations
- How California “Title 24, Part 6 – Energy Code” is Administered, Updated and Enforced
- Highlight Selected California Energy Code Provisions Related to Low-Sloped Roofing
- Discuss Changes from the 2005 to the 2008 California Energy Code Related to Low-Sloped Roofing
- Identify Compliance Options (and Web-based Tools) Available to Roof Professionals
- To Provide Links to Resource Information

6/08

Roof Consultants Institute
Plaza and Deck Waterproofing
Long Beach, California

- History of Horizontal Waterproofing
- Types and Consumptions of Waterproofing Products
- Regulations and Codes Relating to Waterproofing
- Surface Preparation and Detailing
- Waterproofing Flashing Detailing
- Balcony Flashing Detailing
- Drains and Scuppers
- Flood Tests and Why Testing is Required
- Comparison of Benefits and Limitations of Waterproofing and Balcony Coatings

Roofing/Waterproofing Continuing Education (continued)

- 3/08 2008 Roof Consultants Institute
23rd International Convention & Trade Show
Phoenix, Arizona
- Below-grade Waterproofing: Failures and Solutions
 - Integrating Thin-film Photovoltaics onto Building Envelope Surfaces
 - Understanding Insurance Exposures & Risks: Do you Have Coverage or Just Think You Do?
 - Building Envelope Condition Assessment and Commissioning
- 2/08 WUFI/ORNL
WUFI Computer Modeling Workshop For Wall Design and Performance
(Heat and Moisture Transfer in Building Envelopes)
Portland, Oregon
- Installation of WUFI-ORNL/IBP Software
 - History of WUFI-ORNL/IBP
 - Practical Application of Simulation Tools
 - Thermal Performance of Walls and Roofs (Cool Roofs)
 - The Importance of Modeling for Heat and Moisture Transport in Building Envelope
 - Mold Perspectives and Design Perspective
 - Fundamentals and Requisites
 - Boundary Conditions / Surface Conditions
 - WUFI-ORNL Group Modeling Project & Competition
 - Group Modeling Project & Presentation of Results
 - Analysis of Material Properties
 - Assignment and Examples
 - Review of Example Cases by all trainers
 - Evaluation of Results
 - Features of WUFI-PRO
 - Assignment of More Examples of WUFI-PRO
 - WUFI-2D and WUFI Plus overview
 - Future Standards and Guidelines and Mold Growth
 - Limitations of Modeling
 - Q & A
- 9/07 Roof Consultants Institute
Roof Technology & Science II
Downey, California
- Fundamentals of single-ply, polyurethane foam and PMR roof systems
 - Basic concepts and terminology of metal roofing
 - Steep roof design and installation: asphalt shingles, tiles, wood shakes and shingles
 - Building Codes
 - Fire testing/ratings of roofing
 - A basic understanding of wind interaction upon roofing and typical wind ratings
 - Principles of roof asset management including roof inspections, maintenance, and non-destructive evaluations

Roofing/Waterproofing Continuing Education (continued)

- 8/07 Roof Consultants Institute
Advanced Waterproofing
Los Angeles, California
- Principles of Waterproofing
 - Bentonite
 - Capillary
 - Hot Rubber
 - Multi-Ply Bituminous
 - Liquid Applied
 - Pre-formed Sheet Membrane
 - Plaza Decks and Expanded Use Roofs
 - Modulus of Foundation & Plaza Decks
 - Garden Roof Assemblies
 - What is a Green, Cool, Sustainable Roof & Does it Exist?
 - ASTM 2396-05
 - ASTM 2397-05
 - ASTM 2399-05
 - Contract Documents
 - Specifying and Detailing
 - ADC Waterproofing Construction Design Guidelines
 - ASTM Standards
 - Sealants
 - Basic Concrete Information
 - Below-grade Concrete Restoration
- 5/07 Roof Consultants Institute
Stucco as Weather Protection System: An In Depth Look at a Common Assembly
Downey, California
- General Wall Design Principals
 - Structural Requirements for Supporting Walls
 - Weather Resistive Barriers for Drainage Plane and Cavity Walls
 - Flashings, Metal Lath, Stucco Materials and Mixes
 - Stucco Application, Curing and Finishes
- 3/07 International Roofing Expo (Formerly NRCA Annual Trade Show)
Las Vegas, Nevada
- Designing Tile Steep Slope Roofs to Meet Mother Nature in 2007
 - Review of Current Underlayments
 - Self-Adhering Products: Best Practices and Common Problems to Avoid
 - Balanced Attic Ventilation Systems
 - Open Forum: Technical & Design Observations from the Field Experts

Roofing/Waterproofing Continuing Education (continued)

- 5/06 Roof Consultants Institute
A New Standard ASTM E2266: Design and Construction of Low-rise Frame Building Wall Systems to Resist Water Intrusion
Downey, California
- Scope, Referenced Documents, Terminology, Summary of Guide, Significance of Use
 - General Design Principals
 - Design Practices
 - General Guidelines
 - Drainage Walls
 - Drainage Wall Cladding: Portland Cement Plaster (stucco)
 - Drainage Wall Cladding: Wood and Wood Derived Products
 - Drainage Wall Cladding: Vinyl Siding Drainage Wall Cladding: Fiber-Cement Siding
 - Cavity Drainage Walls
 - Wood-framed Decks or Stairs with Exposed Framing and Decking
 - Plaza Decks or Stairs with a Protected Waterproof Membrane
 - Plaza Decks or Stairs with an Integral-Wearing Waterproof Membrane
 - Windows, Doors and Similar Wall Penetrations
 - Special Wall Configurations
 - Exterior Joint Sealants
- 3/06 The 50th Annual CSI Show and Convention
Las Vegas, Nevada
- The Historical Restoration Challenge: Case Study – Havana, Cuba
 - MCCA Ed: Nondestructive Test Methods for Masonry
 - Aerosol Foam Sealants: Tying the Building Together
 - MCAA Ed: Designing Constructible Aesthetically Pleasing Masonry Details
 - Introduction to Coatings: Field Performance and the Application Process
- 10/05 SWR Institute 2005 Fall Technical Meeting
San Francisco, California
- Alcatraz Cell House: Structural Stabilization and Seismic Upgrade
 - Exterior Waterproofing of High-rise Cathedral Hill Tower: San Francisco
 - Restoration of the Cathedral of Immaculate Conception Stone Tower
 - Rising Damp in Historic Masonry Foundations: South Hall at Univ. of Wisconsin-Madison, Madison, WI
 - Exterior Restoration of Chapel, Vassar College, Poughkeepsie, NY
 - Moisture: A Billion Dollar Flooring Problem, A Billion Dollar Opportunity
 - Masonry Wall Construction: A Review of Common Problems, Causes and Remedies
 - Lessons Learned from 25 Years of Terra Cotta Repairs
 - Moisture Part II: A Billion Dollar Flooring Problem, A Billion Dollar Opportunity
- 04/05 Roofing Industry Committee on Weather Issues, Inc. (RICOWI) April 1, 2005
- Steep-sloped Roofing • Tile, Metal, Wood & Composition (Jerry Vandewater, Joe Wilson, Lee Shoemaker & Bas Baskaran)
 - Metal Roofing

Roofing/Waterproofing Continuing Education (continued)

- Low-slope Roofing (Bas Baskaran, Phil Dregger, Robb Smith and Dave Roodvoets)
- Oklahoma City Hailstorm

04/05

RCI 20th International Convention & Trade Show
Pathways to Professionalism
Miami Beach, Florida

- SPRI ANSI Standards and the International Building ANSI/SPRI FX-1 Standard Field Test Procedure for Determining the Withdrawal Resistance of Roofing Fasteners ANSI/SPRI RP-4 WIND DESIGN Standard for Ballasted Single-ply Roofing Systems
- ANSI/SPRI ES-1 Wind Design Standard for Edge Systems used with Low Slope Roofing Systems
- ANSI/SPRI RD-1 Performance Standard for Retrofit Drains
- Ro
- of Design Constitutes the Practice of Engineering and/or Architecture
- Definition of what constitutes a roof system
- A brief history of roof design
- Policy Statements of several states regarding roof consulting services
- A review of the International Building Code relative to roof design
- Delineation of the services that roof consultants, roofing contractors, manufacturers, and distributors can provide and not cross over the line into the practice of engineering or architecture
- LEED Accreditation and Certification as it applies to Roof Consultants
- Tile Roof Systems: Analysis and Inspection Techniques

04/04

2004 Roof Consultants Institute 19th International Convention & Trade Show
Reno, Nevada

- Good Architecture, Poor Roof: A Case Study of How the Architect, General Contractor and Roofing Contractor Failed to Perform
- Slate Roof System Inspection & Reporting Techniques for Roof Consultants
- Phenolic Insulation and the Building Envelope
- Daytime Infrared Roof Inspections
- Overview of the New Wind Design Guide for Mechanically Attached Roof Systems

3/04

2004 Sealant, Waterproofing & Restoration Institute (SWR Institute)
Blazing the Trail to Success
Tucson, Arizona

- Major League Expansion Joints: Phillie Phanatic's Ball Park Project, Philadelphia, PA.
- Shotcrete and Below-grade Bentonite Waterproofing
- Capillary Waterproofing/Remedial Waterproofing on New Construction
- Blindside Waterproofing: Preventing water entry into Subterranean Structures
- Design Risks in Design/Build Contracts
- Ringling Museum and Ca'dZan Mansion Restoration Project
- The New Generation of Work Platforms – Mast Scaffolding
- Decorative Low Profile Polymer Cements: Live Demonstration
- Exterior Wall Coating for Concrete and Masonry Demonstration
- High Rise Façade Restoration: A Team Effort

Roofing/Waterproofing Continuing Education (continued)

- 8/03 The RCI Region VI Meeting
- Failure Case Studies of Fluid-Applied Waterproofing
 - Principles of Attic Ventilation
 - Restoration and Remediation of Lightweight Insulating Concrete Roof Decks
 - SBS Modified Plaza Deck Waterproofing/Green Roofing
 - A Good Design Gone Bad: A Case Study of Projects that Start with a Good Design but End in a Disaster
- 6/03 WSRCA - Specifications Seminar
- Best Darn Details in the West (Asphalt Shingle, Modified Bitumen, Tile, Metal)
 - UL Rated Systems Seminar
- 6/02 The CSI Show, Linking People, Information & Technology
Las Vegas, Nevada
Education Programs
- Moisture-related Flooring Problems
 - Special Detailing and Specifications for Masonry Construction
 - Mold As Damage in Construction Defects
 - Construction Specifications Institute's 46th Annual Convention
- 6/02 Western Roofing Expo 2002 and RCI Region 6 Meeting, Las Vegas Nevada
Commercial Roofing Accredited Auxiliary Seminar "Roofing 2002" and Beyond"
Roof Consultants Institute Region Six Summer Workshop
- Reroofing and Building Code Compliance
 - Attic Ventilation for Reroofing Projects
- 5/02 RCI Roof Consultants Institute
17th International Convention and Trade Show (four-day program)
Galveston Island, Texas
- Region Presentation: RTE & WSRCA – Roof Tile Installation
 - Mock Trial Education Programs
 - Troubleshooting Exterior Masonry Walls
 - Air Infiltration – the Enemy of Wind Resistance and Condensation Control
 - What Consultants Need to Know about Slate Roofs
 - Quality control and Inspection of Lightweight Insulating Concrete
 - Wind Events and Wind Warranties
 - Roofing Litigation – Hot Topics and Issues
- 11/00 RCI Roof Consultants Institute Fundamentals of Roof Consulting –
(three- [3] day intensive program) and Region 6 Fall Meeting
San Diego, California
- Roof Consulting Practice
 - Wind, Fire
 - Codes & Standards
 - Drainage, Moisture Detection

Roofing/Waterproofing Continuing Education (continued)

- Low-slope Roofing
- Thermal & Energy, Visual Surveys
- Roof System Selection
- Moisture • OSB Sheathing, FM Data Sheets and UL Directory

10/00 Sealant Waterproofing Restoration Institute (SWRI)
2000 Fall Technical Meeting
Savannah, Georgia

- Walking Tour of Savannah Architectural Wonders
- Tower Building: A hands-on experience of the dimensions of success
- The Big Dig, Boston
- Troubleshooting Exterior Masonry Walls: Part I & Part II
- Technical Sessions:
 1. Preformed Sealants
 2. Building Cleaning
 3. Urethane Grout Injection
- Kentucky Capital Restoration
- Unique Project Presentation: Grants Stadium
- Clearinghouse Moderator: Jeff Erdle
- Repairing EIFS: Stop Talking About It and Do It (Tools, Technique & Touch)
- Renovation of Lane Stadium – Virginia Tech

10/00 IWC XI International Waterproofing & Roofing Congress
A Bridge to the Third Millennium
Florence, Italy

State of the Art Waterproofing Membrane Technology (Day 1)

- State of the art membrane technology
- Wind load resistance tests of heat welded joints between roofing felt and sheet metal flashings
- Rheological and chemical evaluation of the aging of SBS modified bitumen as used in roofing
- Behavior of insulation material under point load as parameter for the safe and mechanical mounting of single-layer polymer bitumen sheets
- Polymer bituminous membranes: The new generation
- The most recent frontiers of performance in APP modified bitumen waterproofing membranes with the use of a new polyolefin generation
- New waterproofing systems: Thermal energy reduction during application; improved safety and use of thermo-sensitive insulation board
- Bridge deck waterproofing with bitumen sheets: Developments, Practical efficiency, developments and European standardization
- Tear resistance of bituminous roofing membranes
- The mechanization on bridge decks. Reliability and performance on bituminous waterproofing membranes

Roofing/Waterproofing Continuing Education (continued)

Illustrate Membrane Applications – including high profile international case studies (**Day 2**)

- Flexible Polyolefin roofing membranes: Ten years of field experience
- Thermoplastic polyolefin (TPO) Roofing Membranes: The North American experience
- Toward sustainable roofs via design for heightened maintainability and future disassembly
- Mundelein High School roofing replacement
- Sealing of dikes, lakes, rivers and canals: Water – man’s best friend and man’s worst enemy
- The Design and Construction of the Millennium Dome
- EDP Centre of the Assicurazioni Generali Insurance Company and the Centro Congressi Firenze
- The Sacred Convent and Basilica of Saint Francis of Assisi
- 1.3 Mwatt integrated PV-roofs project
- The resistance of modified bituminous felts to working traffic. The “walk-on ability”

Legislation and Environmental Issues Affecting our Industry (**Day 3**)

- State of the Art Waterproofing Technology: Maintain existing constructions

9/99

Sealant Waterproofing Restoration Institute (SWRI) Fall Technical Meeting
Toronto, Ontario

- Sealant Specification Challenges
- Unique Sealant Project In Toronto
- Electrochemical Chloride Extraction (ECE)
- The Lorelei Fountain Restoration Project
- EIFS Problems & Solutions
- Sealant Types & Uses
- Traditional Roofing Techniques
- Restoration of St. Patrick’s Church

6/99

Western States Roofing Contractors Association (WSRCA) 25th Annual Convention & Trade Show
Western States Roofing Contractor Association
Las Vegas, Nevada

- Foreman and Superintendent Program
- How to Avoid Litigation Headaches
- Waterproofing Seminar
- Ready-Set-Go Marketing
- Steep-sloped Roof Ventilation

6/99

FCAOC Forensic Consultants Association Orange County
Santa Ana, California

- What You Must Know to Effectively Litigate
- The Case Management Order
- The Hidden Claims
- Finding Insurance Coverage
- The Uniform Building Code
- Proper Use of the Expert

Roofing/Waterproofing Continuing Education (continued)

- 5/99 West Coast Casualty's Annual Construction Defect Seminar
Anaheim, California
- Sick Building Syndrome
 - There's Gold In That Mold: Sick Building Syndrome
 - In The Construction Defect Case - by Alexander Robertson, IV, Esq.
 - Fungal Contamination Diagnostic Approaches, Health
 - Impacts and Abatement Procedures - by W. Edward Montz, Jr, Ph.D.
 - Moisture Intrusion Mechanisms In Buildings – by Francis M. Gallo, P.E.
 - Recoverability of Personal Injury Damages
 - Involving Mold and Fungus – by John V. O'Meara, Esq.
- 4/99 ASTM EIFS Seminar, Sponsored by the American Society for testing and
Materials
Seattle, Washington
- Investigation and Remediation of Water-Related Problems on EIFS-clad Wood-framed Buildings
 - How to properly investigate and report field problems
 - How to repair field problems
 - New EIFS products for wood-framed buildings
 - Training and quality assurance programs for EIFS
- 3/99 The Roofing Conference and Exposition for Historic Buildings,
Philadelphia, Pennsylvania
- In a Good and Workmanlike Manner": Preserving Historic Roofs
 - Common Mistakes in Historic Roofing Repair and Maintenance
 - Tin Sheets to the Wind: A Disciplined Approach To Historic Roof Restoration
 - Proper Roof Drainage
 - Rainwater Conductor Systems: Survey of Historical Options
 - Detailing a Roof Restoration: Historical Accuracy Versus Industry Standards
 - Improving Hydraulic Performance of Roofs for Building Preservation
 - Structures for Historic Roofs
 - Specifying Historic Roof Repair and Replacement
 - Historic Roofing Consideration in Seismic Rehabilitation
 - Historic Clay Tile Roofs
 - Evaluating Historic Clay Tile and Terra Cotta Roofing System
 - A Recipe for Restoring an Historic Tile Roof
 - Historic Metal Roofing and Ornamentation
 - Lead, Tin and New Developments in Metal Coatings for Historic Roofing
 - Ornamental Sheet Metals in Historic Roofing Systems
 - The Gilding of Historic Roofs and Ornament: Preparation is the Key
 - Architectural Copper Seminar
 - Restoration of Jefferson's Tin Shingle Roof at Monticello
 - Historic and Contemporary Steep-sloped Underlayments
 - Evaluating the Roofing Substrates of Older Buildings and How Their Condition Impacts the Roof Design
 - Historic Roof System Investigation: Eastern State Penitentiary and the Wagner Free Institute of Science

Roofing/Waterproofing Continuing Education (continued)

- 11/98 University of Wisconsin, Madison College of Engineering
Madison, Wisconsin
- Preparing Designers and Owners to Detect
 - Deficiencies in Drawings and Specifications
- 10/98 Metalcon International
San Diego, California
- Understanding Metal Roofing
 - Paying Attention to “Details” Up Front
 - Stainless Steel: The Beautiful, Versatile, Cost-effective Design Solution
 - Six Steps to Leak-free Metal Roofing
 - The Impact of New Codes on Metal Roofing
 - Copper in Architecture
 - Design & Analysis of Architectural Metal Roof Systems
- 9/98 Roof Consultants Institute (RCI)
EIFS Seminar, NWCB EIFS Education & Inspector Training Program,
Ontario, California
- Northwest Wall and Ceiling Bureau
 - Exterior Insulation and Finish System
 - Bellevue, Washington
 - RCI Region 6 Meeting
 - Ethical Practices
- 8/98 Construction Specifications Institute (CSI)
CSI Tri-region Conference
Las Vegas, Nevada
- Education Sessions:
 - Performance Specifying
 - Design vs. Specified: How to Get Your Dish on the Menu
 - Destination Design
 - Water and The Desert
- 4/98 Roof Consultants Institute (RCI)
13th International Convention & Trade Show
Dallas, Texas
- Technical Session: Ethical & Contractual Issues
 - Doing the Right Thing – You be The Judge
 - Artisan Demonstration: Siplast
 - Technical Session: Hail Damage to Shingles
 - Technical Session: Disaster Readiness
 - Technical Session: RCI Research Program Report – RICOWI
 - Technical Session: RCI Research Program Report – SIGDERS

Roofing/Waterproofing Continuing Education (continued)

- 2/98 NRCA's 111th Annual Convention & Exhibit
Las Vegas, Nevada
- Building Codes: Provisions that Affect Roofing Professionals
 - Technical Operations Committee Issues and Updates
 - Provisions in AIA Documents and Update
- 1/98 Architectural and Structural Standing Seam Metal Roofing System Installation
Workshop and Seminar - 2 Days
Kansas City, Missouri
- Butler Training Center, A Facility of Butler Manufacturing Company
(1.0 REU)
- 11/97 Roof Consultants Institute (RCI)
Building Envelope Symposium
San Diego, California
- Roof Decks
 - Flashing & Sheet Metal
 - Roof Membranes
 - Curtain Walls
 - Wind Design
 - Exterior Insulation and Finishing Systems (EIFS)
 - Tile Roofing
 - Roof Coatings & Insulation
 - Pitfalls in Waterproofing
 - Plaster & Stucco
(8 hours – .8 CEUs)
- 3/97 Roof Consultants Institute (RCI) – National Convention
Anaheim, California
- Slate Artisan Installation
(2 hours – .2 CEUs)
- 2/97 Exterior Design Institute (EDI)
Virginia Beach, Virginia
(35.5 hours – 3.55 CEUs)
- Moisture Analyst Certification Program
 - Training & Certification Relating to Means & Methods Utilized to Detect Sources of Water Intrusion Into the Building Envelope
(7 hours – .7 CEUs)
 - Third Party Exterior Insulated & Finish Systems (EIFS) Inspection Certification
 1. EIFS System Components
 2. System Design
 3. Specifications
 4. Proper Installation
 5. Residential & Commercial Details
 6. Troubleshooting

Roofing/Waterproofing Continuing Education (continued)

7. Maintenance
8. Repairs
9. Caulk Sealant Requirements
10. Inspection Protocols
(28.5 hours – 2.85 CEUs)

10/96 West Coast Casualty's Fourth Annual Construction Defect Seminar
Anaheim, California
(8 hours – .8 CEUs)

6/96 Construction Specifications Institute (CSI)
Costa Mesa, California

- Use of Master Format 1995 Edition
(3 hours – 3 AIA Learning Units)

5/96 Los Angeles County Bar Association
Master Series Program – Cross Examination of Expert Witnesses,
Los Angeles, California

4/96 Roof Consultants Institute (RCI) - National Convention
Various Roofing Seminars and Demonstrations,
Richmond, Virginia

1/96 World of Concrete '96
Las Vegas, Nevada

10/95 Dex-O-Tex Installer Training
Dex-O-Tex Division of Crossfield Products
Rancho Dominguez, California

9/95 Roof Consultants Institute (RCI)
Ontario, California
Building Envelope Symposium

1. Below-grade Waterproofing
2. Building
3. Deck Coverings: Adhered & Non-adhered
4. Roof Membranes
5. Roof Penetrations and Flashing
6. The UBC and Portland Cement Plaster (Stucco)
7. Tilt-ups/CMUs
8. Exterior Insulation and Finish Systems
9. Failures Due to Sun, Wind & Salt Air
10. Fenestration: Windows & Doors
11. Water Repellents & Coatings
12. Maintenance Programs & Materials Testing
13. Means and Methods Utilized to Conduct a Successful Building Leak Investigation
(15 hours – 1.5 CEUs & 20 AIA Learning Units)

Roofing/Waterproofing Continuing Education (continued)

- 12/94 Exterior Insulation and Finish System (EIFS)
STO Installer Training
Phoenix, Arizona
(12 hours – 1.2 CEUs)
- 12/93 Copper Installer Training Program
Roofing Industry Educational Institute (RIEI)
Englewood, Colorado
(40 hours – 4.0 CEUs)
- 3/93 Roof Consultants Institute (RCI)
• Single-ply Systems: Understanding the Factors that Affect Performance;
A Realistic Approach to Prescriptive Specification; Architectural Sheet
Copper; In Andrew's Way – Facts and Findings on Hurricane Andrew;
Fastening Examined as a Science
(5 hours – .5 CEUs)
- 2/93 Roofing Industry Educational Institute (RIEI)
Architectural Metal Roofing System – Update
(8 hours – .8 CEUs)
- 12/92 The Building Envelope: Solutions to Problems
Ontario, California
A six-(6) part symposium presented by Simpson Gumpertz & Heger Inc.
1. Waterproofing Exterior Walls
 2. Exterior Walls: Wind Effects, Structural Systems and Durability
 3. Waterproofing of Paved Plaza Decks, Garages and Underground Structures
 4. Curtain Wall Systems
 5. Masonry: Brick, Stone and Concrete Block
 6. Roofing: Failure Prevention and System Design
(8 hours – .8 CEUs)
- 5/92 "Roofer" (Roof Analysis) Program – Sponsored by the U.S. Army
Construction Engineering Research Laboratory & the U.S. Army
Engineering & Housing Support Center
University of Illinois
Champaign, Illinois
(24 Hours – 2.4 CEUs)
- 3/92 Various Roofing Informational Seminars
Roof Consultants Institute (RCI) – National Convention
- 11/91 National Roofing Legal Resource Center Seminar
Lake Tahoe, Nevada
16 Hours – 1.6 CEUs
- 3/91 Roof Consultants Institute (RCI)
Various Regional Roofing Informational Seminars

Roofing/Waterproofing Continuing Education (continued)

- 11/90 Sealant & Waterproofing Contractors Association
Sealant Seminar
San Francisco, California
(20 Hours – 2.0 CEUs)
- 3/90 Roof Consultants Institute (RCI) – National Convention
Various Roofing Seminars
(4 Hours – .4 CEUs)
- 12/89 Construction Litigation Super Conference
San Francisco, California
(16 Hours – 1.6 CEUs)
- 10/88 University of Illinois
Champaign, Illinois
Fluid-applied Roofing/Waterproofing Seminar
(24 Hours – 2.4 CEUs)
- 6/88 Roofing Industry Educational Institute (RIEI)
Roofing Update
(8 Hours – .8 CEUs)
- 6/88 Roofing Industry Educational Institute (RIEI)
Roofing Systems Design and Specifications
(8 Hours – .8 CEUs)
- 6/88 Roofing Industry Educational Institute (RIEI)
Standing Seam Metal Roofing
(16 Hours – 1.6 CEUs)
- 3/88 Roof Consultants Institute (RCI) – National Convention
Various Seminars
(4 Hours – .4 CEUs)
- 3/88 Roofing Industry Educational Institute (RIEI)
Asbestos Seminar for Roof Consultants
San Francisco, California
(8 Hours – .8 CEUs)
- 2/81 California State University • Los Angeles
Los Angeles, California
Roof Systems Update
(8 Hours – .8 CEUs)
- 9/80 Basic Roof Designs
Paul Tente & Associates
(8 Hours – .8 CEUs)

Roofing/Waterproofing Continuing Education (continued)

- 3/80 NRCA
Built-up Roofing Seminar
(8 Hours – .8 CEUs)
- 3/78 Owens/Corning Fiberglas
Toledo, Ohio
Built-up Roofing & Shingle Roofing Intensive Training
(100 Hours)

Speaker History

- 1/11 Google and Its Applications for Use in the Practice of Roofing, Waterproofing, and Exterior Building Envelope Consulting
Roof Consultants Institute 11th Annual Hawaii Winter Workshop
Waikiki, Hawaii
- 3/10 Exterior Building Envelope Design & Construction Defects and How to Avoid Them
Construction Specifier's Institute (CSI)
Inland Empire Chapter
Rancho Cucamonga, CA
- 3/08 2008 Roof Consultants Institute 23rd International Convention & Trade Show
Construction Defect Litigation Support: Becoming an Expert Witness
Phoenix, Arizona
- 9/07 Roof Technology & Science II
Roof Consultants Institute (RCI)
Downey, California
- 11/05 RCI Region IV Meeting in Downey, California
- 09/04 Snyder Langston Builders, Orange County
Most Common Roofing and Waterproofing Conditions Contributing to Commercial, Industrial and Institutional Building Leaks and How to Avoid Them. (From a Contractor's Perspective)
- 6/04 American Institute of Architects, Orange County/CES Seminar
Roof Design/Construction to Avoid Moisture-Related Problems
Irvine, California
- 11/03 Exterior Envelope Weatherproofing Problem Solving Prior to Construction: The Proactive Approach
Roof Consultants Institute, Region VI Meeting
Los Angeles, California
- 9/03 Roof Consultants Institute RTQA Class
Rooftop Quality Assurance: Daily Reports
Standards & Ethics for the Registered Roof Observer
Los Angeles, California

Speaker History (continued)

- 6/02 Lorman Education Services – Seminar
Solving Water Intrusion and Mold Problems in California
Arcadia, California
- 6/02 RCI Region 6 Meeting at Western Roofing Expo 2002
Commercial Roofing Accredited Auxiliary Seminar
Contractor / Consultant Relations – Panel Member
Roof Surveys and Analysis”
Western States Roofing Contractors Association
Las Vegas, Nevada
- 5/02 National Association of Women in Construction
The House That Mold Built
Garden Grove, California
- 1/00 RCI Region 6 Meeting
The Getty Museum Project
Roof Consultants Institute (RCI)
Los Angeles, California
- 4/99 CREIA Educational Meeting
Waterproofing and Flashing
California Real Estate Inspection Association
La Canada, California
- 1/99 Roofing Seminar for LPA Architecture
Roof System Design – Concepts and Principles
Irvine, California
- 9/98 RCI Region 6 Meeting
The Getty Museum Project
Roof Consultants Institute (RCI)
Ontario, California
- 4/98 Photographic Documentation and Presentation
13th International Convention & Trade Show
Roof Consultants Institute (RCI)
Dallas, Texas
- 11/97 Building Envelope, Roof Leak Investigation
Construction Claims Education Conference
Costa Mesa, California
- 6/97 Moisture Intrusion & The "Hidden" Effects
Construction Law Breakfast Meeting
Pomona, California
- 2/97 Roofs, Decks & Waterproofing
Community Associations Institute (CAI)
Irvine, California
Orange County Bar Association • Construction Law Section, Orange, California

Speaker History (continued)

- 9/96 How to Conduct a Successful Building Leak Investigation
Construction Specifiers Institute (CSI) – 1996 West Region Conference, San Diego,
California
- 9/96 Quality Control Through Case Study
Professional Practice Committee, The Pasadena & Foothill Chapter of The American
Institute of Architects
Pasadena, California
8 Hours – .8 CEUs
- 6/96 The Residential Contractor v. The Institutional Builder
The Getty Museum Project as a Model
Orange County Bar Association • Construction Law Section
Orange, California
- 5/96 The Anatomy of Construction Leaks
Construction Specifiers Institute (CSI)
Costa Mesa, California
- 12/95 How to Conduct a Successful Building Leak Investigation
Roof Consultants Institute (RCI) – Region Six Meeting
Anaheim, California
- 9/95 Building Envelope Symposium • Southern California
Roof Consultants Institute (RCI)
Ontario, California
15 Hours – 1.5 CEUs & 20 AIA Learning Units
- 7/94 Summer Conference • "Sub Flubs" Leaks Caused by Various Sub-Trades
National Association of Women in Construction (NAWIC)
Costa Mesa, California

Professional Affiliations

- CSI The Construction Specifications Institute
EDI Exterior Design Institute
ICC International Code Council (Formerly the ICBO-International Conference of
Building Officials
NRCA National Roofing Contractors Association
RCI The Institute of Roofing, Waterproofing, and Building Envelope
Professionals/Roof Consultants Institute
SWRI Sealant, Waterproofing & Restoration Institute