



MICHAEL C. WRIGHT—PE, CSP, CPE

President & Expert Witness

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PROFILE

Mike Wright's expert witness experience combines a strong blend of defense, plaintiff and OSHA solicitor cases. As a professional structural engineer licensed in 45 states plus the District of Columbia, Mike rounds out his expertise with the licenses of Certified Safety Professional (CSP) and Certified Plant Engineer (CPE), broadening his knowledge and experience with general industry, construction industry and maritime industry.

With over 30-plus years of academic, practical and specialized knowledge in the areas of construction, demolition, engineering, general industry, maintenance, maritime industry, mining operations and safety, Mike's expertise is a definite plus in providing clients with leading-edge information and insight. He understands the multilayered components of an organization—employee workplace activities; facility components; and design, construction, maintenance and demolition activities—enabling him to untangle difficult matters with a clear understanding of the issues involved and the standards that apply.

By completing over 600 hours of specialized safety training, Mike is able to provide in-depth knowledge and hands-on experience in structural engineering, safety, construction and building code requirements. He serves on ANSI and ASTM standards committees and has a thorough knowledge of NESC and NIOSH requirements as well as MSHA Regulations, OSHA Regulations, Directives and Letters of Interpretation. A recognized author, presenter, and trainer, Mike communicates the issues clearly for all to understand.

Mike received his bachelors from Ohio Northern University in Ada, Ohio, and his masters in Structural Engineering from the University of Cincinnati. He is an avid camper and photographer. Mike and his wife, Diana, have five children and three grandchildren.

OVERVIEW:

CLIENT TYPES, DISCIPLINES, PRODUCT LIABILITY SERVICES, AND STANDARDS AND REGULATIONS

CLIENT TYPES

- ▷ Aerospace
- ▷ Amusement parks
- ▷ Aviation
- ▷ Commercial
- ▷ Contractors
- ▷ Department of Defense
- ▷ Department of Labor
- ▷ Entertainment
- ▷ General industry
- ▷ Manufacturing
- ▷ Maritime
- ▷ Military
- ▷ Residential
- ▷ Restaurant
- ▷ Retail
- ▷ Sports

PRODUCT LIABILITY

- ▷ Aerial lifts
- ▷ Barges
- ▷ Concrete pavers
- ▷ Concrete pumper truck
- ▷ Construction cranes
- ▷ Earth moving equipment
- ▷ Forklifts
- ▷ Gantry cranes
- ▷ Golf carts
- ▷ Heavy equipment
- ▷ Ladders and stepladders
- ▷ Scaffolding
- ▷ Scissor lifts
- ▷ Suspended scaffolding
- ▷ Tower cranes
- ▷ Truck drills
- ▷ Tugboats

STANDARDS AND REGULATIONS

- ▷ ANSI
- ▷ ASME
- ▷ ASTM
- ▷ Jones Act
- ▷ MSHA
- ▷ OSHA
- ▷ U.S. Coast Guard

DISCIPLINES

- ▷ Construction engineering and safety
- ▷ General industry engineering and safety
- ▷ Maritime engineering and safety
- ▷ Product liability
- ▷ Safety engineering and training
 - ADA safety requirements
 - Confined space
 - Suspended crane loads
 - Fall protection
 - Ladders and stepladders
 - Lockout/tagout
 - Machine guarding
 - Product safety
- ▷ Structural engineering

SERVICES

- ▷ Accident cause analysis
- ▷ Accident reconstruction
- ▷ Building codes—local, state and international
- ▷ Construction contracts
- ▷ Consultation
- ▷ Depositions, hearings and trials
- ▷ Field inspection
- ▷ Intentional tort
- ▷ Job hazard analysis
- ▷ Multi-employer worksites
- ▷ Negligence
- ▷ Premise liability
- ▷ Product liability
- ▷ Safety standards
- ▷ Steel erection
- ▷ Structural analysis
- ▷ Structural collapse
- ▷ Suspended load and rigging
- ▷ Wrongful death

CREDENTIALS

The experience and qualifications of Michael C. Wright detailed below demonstrate his authority in the subject matter of engineering and safety.

- ▷ 30+ years professional experience as structural engineer, safety engineer, construction engineer, certified safety professional, certified plant engineer, and expert witness
- ▷ 100 million square feet of facility services, including design, renovation, inspection
- ▷ 200 million square feet of fall protection programs
- ▷ 600 hours of training, including fall protection, confined space entry, machine guarding, scaffolding, rescue, aerial and scissors lifts, suspended loads, ladders and stepladders, and confined space
- ▷ ADA safety requirements—developed audits, design protection criteria and foreseeable usage protection
- ▷ Aerial and scissors lifts—developed user training programs, audits, design criteria, user policies and procedures
- ▷ Confined space—developed user training programs, audits, design criteria, user policies and procedures
- ▷ Construction cranes, gantry cranes, tower cranes, and general industry cranes—developed user safety training programs, tire rollover guarding protection, audits, design criteria, user policies and procedures, and foreseeable usage protection
- ▷ Construction equipment tire rollover guarding protection—developed safety programs, audits, design protection criteria and foreseeable usage protection
- ▷ Conveyor safety—developed safety programs, audits, design protection criteria and foreseeable usage protection
- ▷ Earth moving equipment tire rollover guarding protection—developed safety programs, audits, design protection criteria and foreseeable usage protection
- ▷ Fall protection—designed, developed, and implemented written policies, procedures, rescue plans, OSHA fall protection plans, equipment specifications, and use
- ▷ Fall protection equipment—designed, developed, and implemented written user policies, testing procedures, rescue plans, user training programs, user design criteria, safety policies and safety procedures
- ▷ Golf cart safety—developed testing programs, audits, design criteria and foreseeable usage protection
- ▷ International author, presenter and trainer
- ▷ Ladders and stepladders—developed user training programs, audits, design criteria, policies and procedures
- ▷ Machine guarding—developed user training programs, audits, design criteria, policies, procedures and foreseeable usage protection
- ▷ Maritime safety
- ▷ Mine safety and health administration
- ▷ OSHA, MSHA, ANSI, ASTM requirements and industry safe practices
- ▷ OSHA Qualified Person
- ▷ Rollover protection structures—developed safety programs, audits, design criteria and foreseeable usage protection
- ▷ Safety training program developer and facilitator: confined space, construction safety, fall protection, general industry safety, horizontal lifelines, ladders and stepladders, lockout/tagout, machine guarding, rescue, roofing
- ▷ Scaffolding—developed user training programs, audits, design criteria, user policies and procedures
- ▷ Structural engineering for residential, commercial and industrial projects
- ▷ Structural specific and multi-discipline projects
- ▷ Suspended crane loads—develop training programs, audits, design criteria, policies and operating procedures,
- ▷ Suspended scaffolding—developed user training programs, audits, design criteria, user policies and procedures
- ▷ Window washing requirements—developed safety programs, audits, design protection criteria and foreseeable usage protection

EDUCATION

MSCE—University of Cincinnati, 1978, Structural Engineering

BSCE—Ohio Northern University, 1977, Civil Engineering

EMPLOYMENT HISTORY

SAFETY THROUGH ENGINEERING, INC.SM

December 2003 to Present

President, Professional and Licensed Engineer, Certified Safety Professional, Certified Plant Engineer and Expert Witness.

ENGINEERING FIRM

May 1994 to December 2003

Managing Principal of the Executive Council—highest level of engineering management and ownership responsibilities within the firm, major shareholder, and Principal-in-Charge of the Safety by Design[®] business team.

January 1986

Shareholder and Principal-in-Charge of the Industrial/Structural business team.

January 1984

Director of Industrial/Structural business team—responsible for overall management of the design of industrial, commercial and residential structural engineering projects.

January 1981

Project manager—designed multiple structural, residential, commercial and industrial projects.

January 1980

Field project engineer—provided inspection construction services for multiple structural projects.

August 1978

Staff structural engineer—designed individual projects.

LICENSES

- ▷ Certified Safety Professional (CSP)—United States
- ▷ Certified Plant Engineer (CPE)—United States
- ▷ Professional Engineer (PE) in the following states:

- | | | | |
|------------------------|-----------------|------------------|------------------|
| • Alabama | • Indiana | • Montana | • Rhode Island |
| • Arizona | • Iowa | • Nebraska | • South Carolina |
| • Arkansas | • Kansas | • Nevada | • South Dakota |
| • California | • Kentucky | • New Hampshire | • Tennessee |
| • Colorado | • Louisiana | • New Jersey | • Texas |
| • Connecticut | • Maine | • New York | • Utah |
| • Delaware | • Maryland | • North Carolina | • Vermont |
| • District of Columbia | • Massachusetts | • North Dakota | • Virginia |
| • Florida | • Michigan | • Ohio | • Washington |
| • Georgia | • Minnesota | • Oklahoma | • West Virginia |
| • Illinois | • Mississippi | • Oregon | • Wisconsin |
| | • Missouri | • Pennsylvania | |

AERIAL AND SCISSOR LIFTS

Fully trained in the regulations and standards governing aerial and scissor lifts and knowledgeable of their proper application. Past experience includes the selection, use and inspection of equipment and the qualifications to determine if equipment is being used as intended by the manufacturer, OSHA and ANSI. Knowledge of structural engineering, the operation of aerial and scissor lifts on construction and general industry sites, and training adds to expertise.

- ▷ Developed criteria for continuous monitoring program
- ▷ Developed safety training program, including customized manuals
 - Construction industry
 - ▶ Awareness
 - ▶ User
 - ▶ Competent person
 - General industry
 - ▶ Awareness
 - ▶ User
 - ▶ Competent person
- ▷ Evaluation of hazard identification programs
- ▷ Has written policies, program and procedures
- ▷ Performed job hazard analysis
- ▷ Recommendations for use and training

Courses

- ▷ Aerial and Scissor Lift Operator Certified
- ▷ OSHA Course—Aerial Platform Lifts for Construction and General Industry 1997
- ▷ Overhead Lifting and Rigging Safety 1997

Instruction

- ▷ Aerial and Scissor Lift Requirements by OSHA and ANSI Various
- ▷ Overhead Lifting and Rigging Safety 1997

ANCHORAGE POINTS FOR FALL ARREST PROGRAMS

Companies

- ▷ Boeing Corporation
- ▷ Daimler Chrysler Corporation
- ▷ Delphi Automotive Systems
- ▷ Department of Defense
- ▷ Department of Labor
- ▷ Ford Motor Company
- ▷ General Motors
- ▷ Honda
- ▷ Lockheed Martin
- ▷ Navistar
- ▷ United States Navy
- ▷ Pacific Gas and Electric
- ▷ Procter and Gamble Company
- ▷ Saturn Corporation
- ▷ United States Air Force

Types of Services Provided

- ▷ Fall arrest anchorage points—crane system
- ▷ Fall arrest and restraint
- ▷ Fall arrest horizontal lifelines and anchorage points
- ▷ Hazard risk assessments, audits and remediation reports
- ▷ Identified and designed fall arrest anchorage point and machine systems
- ▷ Identified fall arrest anchorage point locations; developed training manual
- ▷ Roof fall protection system programs

AUTOCLAVED AERATED CONCRETE

- ▷ Structural engineering design of AAC cladding panels for M.T.M. Molded Products
- ▷ Structural engineering design of AAC load bearing walls for residential residences
- ▷ Structural engineering design of AAC cladding panels for Repacorp
- ▷ Structural engineering design of AAC block walls for St. Patrick's Catholic Church
- ▷ Structural engineering design of an AAC load bearing wall for Crayex's blast room
- ▷ Structural engineering design of AAC cladding panels for J&M Manufacturing Company
- ▷ Structural engineering design of an AAC load bearing wall and an AAC roof for silo tank
- ▷ Structural engineering design of AAC cladding panels and an AAC load bearing wall for indoor facility at Youngstown State University
- ▷ Structural engineering design of AAC cladding panels for Arcanum Butler
- ▷ Structural engineering design of AAC cladding panels for the Graham Athletic Center
- ▷ Structural engineering design of AAC cladding panels for the South Main Elementary School

CONCRETE FLOOR AND FORMWORK

1999–2003

Qualified Person nationally for the construction prefects for *CECO, Inc.* I designed, redesigned, reviewed, detailed, inspected and directed contractor limited means and methods for concrete formwork (flying forms and conventional shoring), including concrete roofs, concrete floors, stairs, ramps, vertical walls, pits, columns, foundations, etc.

1998–2003

Qualified Person internationally for a construction and renovation project for *P&G*. I designed, redesigned, reviewed, detailed, inspected and directed contractor means and methods for concrete conventional formwork shoring, including concrete roofs, concrete floors, vertical concrete walls, pits, tanks, columns, foundations, etc.

1997–2003

Qualified Person nationally for the construction prefects for *Baker Concrete, Inc.* I designed, redesigned, reviewed, detailed, inspected and directed contractor limited means and methods for concrete formwork (flying forms and conventional shoring), including concrete roofs, concrete floors, stairs, ramps, vertical walls, pits, columns, foundations, etc.

1993–2003

Structural Engineer and eventually Qualified Person consultant for *Shook, Inc.* I designed, redesigned, detailed, inspected and directed means and methods for concrete formwork, including vertical walls, columns, foundations and tanks. Worked with and directed the means and methods of some detailed concrete construction operations using conventional formwork.

1993–2003

Structural Engineer and Qualified Person consultant for *Danis*. I designed, detailed, inspected and directed means and methods for concrete formwork projects east of the Mississippi River (i.e., Sod Run, FL; Philadelphia, PA; Boston, MA; and Greenville, NC). Concrete formwork included conventional shoring, vertical walls, columns, foundations, pits, tanks, flying tables, etc.

1981–2003

Structural Engineer and eventually Qualified Person for *General Motors* with their in-house construction department and their general contractors. I designed, renovated, detailed, inspected and directed their means and methods for concrete conventional formwork shoring, including new factories, renovated factories, parts factories, machine foundations, vertical concrete walls, conventional shoring, concrete floors, roofs, tunnels, etc.

1978–1982

Structural Engineer and Qualified Person consultant for *Miller-Valentine, Inc.* I designed, detailed, inspected and directed means and methods for a mid-rise office building, for a low-rise office building and for have also designed warehousing concrete formwork, including flying forms, conventional shoring, vertical concrete walls, columns, foundations, etc.

CONSTRUCTION AND DEMOLITION EXPERIENCE

Thirty (30+) plus years of experience in design and inspection of construction projects involving renovations and new construction of industrial facilities, structural components within facilities and commercial buildings. Experience includes:

- ▷ One and half (1.5) million square feet new construction of industrial facilities for General Motors.
- ▷ Four 25-ton top running crane systems for General Motors.
- ▷ New commercial store property for Prudential Insurance, including contractor performance review.
- ▷ Multiple building additions for Nova Steel Processing, including contractor performance reviews.
- ▷ Renovation of existing industrial facility for Delphi Chassis Systems.
- ▷ Renovation of existing factory to upgrade six 15-ton cranes to 20-tons each for Mead Paper.
- ▷ Reinforcement of US Steel facility and design of tanks and hoppers for mixing process.

Thirty (30+) plus years of experience with demolition projects in industrial, construction and commercial markets. Experience includes:

- ▷ Demolition and renovation of 1 million square-foot industrial facility for Shook, Inc.
- ▷ Demolition of buildings and tanks for Miami Paper.
- ▷ Demolition and renovation for 2 million square-foot industrial facility for use by General Motors.
- ▷ Demolition of 200,000 square-foot facility for Chrysler Corporation and design, inspection and contractor performance review for new facility that was built.

CONSTRUCTION CRANES

Field inspected crane rigging, lifting location and methods for tilt-up buildings in Vandalia, Dayton and Cincinnati for two years, totaling approximately 3 million square feet of commercial and warehouse space.

CRANE SYSTEM DESIGN AND INSPECTION

- ▷ Provided crane runway design reinforcement and inspection for Nova Steel.
 - Analyzed and reinforced existing facility
 - Four 30-ton top-running crane systems with crane clear spans of 100 feet and runway length of 800 feet
 - Provided field inspection
- ▷ Provided crane runway design along with crane support steel with caisson foundations.
 - 20-ton top-running crane with a crane clear span of 122 feet 6 inches and running length of 200 feet
 - Provided field inspection
- ▷ Provided crane runway design, crane support design and interlocking of trolley design for six 20-ton underhung crane systems.
 - Crane runway length of 600 feet
 - Crane clear spans of 100 feet
 - Provided roof truss reinforcement
 - Provided field inspection
- ▷ Provided Delphi with crane designs and inspection for over 200 underhung crane systems with capacities between 1 to 5 tons.
- ▷ Provided GM-Matamoros with six 25-ton top runway crane systems and crane support system with crane clear span of 35 feet and crane runway length of 700 feet.
- ▷ Provided GM-Pennsylvania with 25-ton top-running crane design with crane clear span of 40 feet and runway length of 150 feet.

ENGINEERING EXPERIENCE

- ▷ Accident investigation and analysis
- ▷ Building shoring design and inspection
- ▷ Crane systems design and inspection
 - Top running—5 to 250 ton
 - Under hung—5 to 20 ton
- ▷ Design and analysis for wind, seismic, gravity loads
- ▷ Design, renovation, inspection—200 million square feet of amusement, aviation, commercial, industrial, maritime, military, residential and retail buildings
- ▷ Factory renovation and design
 - Improvements to existing facilities
 - New machine foundations
 - New crane systems
 - Cooling tower foundations
 - Dock enclosures
 - Working surface platforms
- ▷ Hazardous waste storage tanks
- ▷ Industrial, warehouse, and commercial concrete floors
- ▷ Injection molding machine mat foundations
- ▷ International building codes
- ▷ Machine foundations for dynamic and static machines
- ▷ Multilevel mixing platforms
- ▷ Plant layout design
- ▷ Platforms and mezzanines
- ▷ Safety design for factory and warehousing facilities
- ▷ Safety design recommendations for industrial machinery
- ▷ Safety regulations and standards
- ▷ Structural and civil engineering design and assessment
- ▷ Tank facilities

FALL PROTECTION: CONCRETE CONTRACTORS FORMWORK LEADING EDGEWORK ACTIVITIES

Companies

- ▷ Baker Concrete Company
- ▷ Ceco Concrete Construction, LLC
- ▷ Danis Construction—master plan for fall protection program
- ▷ Ferguson Construction
- ▷ Reynolds Metal Company
- ▷ Shook Construction

Types of Services Provided

- ▷ Anchor points—standard details
- ▷ Documentation video—script, editing, technical consultant for “Horizontal Lifeline Test and Verification of Design Procedures”
- ▷ Manual—anchorage points, procedures, rescue, evacuation
- ▷ Manual—horizontal lifeline: variations of spans and number of people on multiple spans
- ▷ Training—Competent Person, At-Risk Worker, Qualified Person

FALL PROTECTION SYSTEM DESIGN AND INSPECTION

- ▷ Anchorage point location programs
- ▷ Communication towers
- ▷ Construction
- ▷ Cranes
- ▷ Evaluation
- ▷ Fall hazard identification
- ▷ Fall protection for roof workplace activities
- ▷ General industry
- ▷ Leading edge construction programs and procedures
- ▷ Low and steep roofing
- ▷ Precast
- ▷ Qualified person
- ▷ Recommendation and design
- ▷ Rescue programs and procedures
- ▷ Residential
- ✦ Safety audit—job safety analysis
- ▷ Safety training program—general and construction industries
 - At-Risk Worker
 - Awareness
 - Competent Person
 - Horizontal lifeline
 - Horizontal lifeline procedures and usage
 - Qualified Person
 - Rescue
- ▷ Steel erection
- ▷ Wind power towers
- ▷ Written policies, programs and procedures

LADDER SAFETY:

PORTABLE, EXTENSION, STEPLADDERS AND FIXED STAIRS

Fully trained in the regulations and standards governing ladders and knowledgeable of their proper application. Past experience includes the selection, use, and inspection of ladders and the qualifications to determine if the ladders are being used as intended by the manufacturer, OSHA and ANSI. Structural engineering knowledge, use on construction and general industry sites and training add to expertise.

- ▷ Developed criteria for continuous monitoring program
- ▷ Developed safety training program, including customized manuals
 - Construction industry
 - ▶ Awareness
 - ▶ User
 - ▶ Competent person
 - General industry
 - ▶ Awareness
 - ▶ User
 - ▶ Competent person
- ▷ Evaluation of hazard identification programs
- ▷ Has written policies, programs and procedures
- ▷ Made recommendations for use and training
- ▷ Performed job hazard analysis

Courses

- ▷ OSHA Course 502—Update for Construction Industry Outreach Trainers 2002
- ▷ OSHA Course 503—Update for General Industry Outreach Trainers 2002
- ▷ OSHA/AGC, Mobile Section—Competency Awareness Training for Fall Hazards 2002
- ▷ OSHA Fall Protection—Are You Sure About That? 2000
- ▷ OSHA Course 503—Update for General Industry Outreach Trainers 1998
- ▷ OSHA Course 502—Update for Construction Industry Outreach Trainers 1998
- ▷ OSHA 500—Train-the-Trainer in Construction Industry 1996
- ▷ OSHA Course 325-001—Fall Protection Train-the-Trainer Course 1995
- ▷ OSHA Course 325—Safety Standards for Fall Protection 1995
- ▷ Competent Person in Fall Protection Technology—CAL/NEV Safety and Health 1995
- ▷ OSHA Course 501—Train-the-Trainer in General Industry 1994

MACHINE GUARDING SAFETY

- ▷ 3 million square feet of machine guarding projects
- ▷ Continuous monitoring program
- ▷ Customized design methodology programs
- ▷ Developed machine guarding training programs, audits, design criteria, policies, procedures
- ▷ Evaluation of hazard programs
- ▷ Fall hazard identification programs
- ▷ Involvement with over 4,000 machines located at major manufacturing facilities
- ▷ Machine guarding courses, including:
 - Scientific Technologies, Inc., August 2003
 - Rockford Institute, March 2003
 - OSHA Course 204A Machinery and Machine Guarding Standards, February 2003
- ▷ Machine guarding training at GM Powertrain for supervisors, operators, maintenance, engineering
- ▷ Recommendation and design standards
- ▷ Safety audits—job safety analysis
- ▷ Safety training program: general industry awareness
- ▷ Written policies, program and procedures

MARITIME SAFETY

- ▷ American Bureau of Shipping—Interwaterway Requirements
 - SOLAS Cargo Ship Safety Equipment Requirements
 - Mobile Offshore Drilling Unit Safety Requirements
- ▷ American National Standards Institute (ANSI)
- ▷ Code of Federal Regulations
 - Title 33: Navigation and Navigable Waters
 - Title 46: Shipping, Part 8—Vessel Inspection Alternatives, Subpart D—Alternate Compliance Program
- ▷ Maritime (Standards 29 CFR)
 - Part 1915: Occupational Safety and Health Standards for Shipyard Employment
 - Part 1917: Marine Terminals
 - Part 1918: Safety and Health Regulations for Long Shoring
- ▷ National Institute for Occupational Safety and Health (NIOSH)
- ▷ Occupational Safety and Health Administration (OSHA)
- ▷ U.S. Coast Guard
 - USCG Office of Design and Engineering Standards
- ▷ U.S. Coast Guard Approved Supplements
 - ABS Rules for Steel Vessels for Vessels Certificated for International Voyages (1 June 2003)
 - ABS Rules for Steel Vessels Under 90 Meters (295 Feet) in Length for Vessels Certificated for International Voyages (1 June 2003)
 - ABS Rules for Steel Vessels for Vessels on International Voyages (1 November 1999)
 - ABS Rules for Steel Vessels Under 90 Meters (295 Feet) in Length for Vessels on International Voyages (29 March 1999)
 - ABS Rules for Building and Classing Mobile Offshore Drilling Units and the 1989 IMO MODU Code (1 November 1998)
 - ABS Rules for Steel Vessels for Vessels on International Voyages (1 August 1997)
 - DNV Supplement, Revision 10 (October 2003)
- ▷ U.S. Coast Guard Publications
 - Navigation and Vessel Inspection Circular No. 2-95 “Alternate Compliance Program”
 - Marine Safety Manual Vol. II, Section B, CH. 9
 - Federal Register Vol. 60 No. 23 (February 3, 1995) “ACP and ABS Pilot Program”
 - Federal Register Vol. 61 No. 250 (December 27, 1996) “ACP and Recognized Societies”
 - Federal Register Vol. 63 No. 30 (February 13, 1998) “ACP Supplement Development Process”
 - Supplement Review and Revision Process
- ▷ U.S. Department of Homeland Security

RENOVATION OF MAJOR FACTORIES

Companies

- ▷ Daimler Chrysler Corporation (Regional)
- ▷ Delphi Automotive Systems (International and National)
- ▷ Ford Motor Company (Regional)
- ▷ General Motors (International and National)

Types of Services Provided

- ▷ Design Improvements to Existing Facilities
- ▷ Design New Machine Foundations
- ▷ Design New Crane Systems
- ▷ Design Cooling Tower Foundations
- ▷ Design Dock Enclosures
- ▷ Design Working Surface Platforms

RESIDENTIAL ROOFING EXPERIENCE

- ▷ Four generations of residential contractors.
- ▷ Started own roofing construction company with my father.
- ▷ At age sixteen (16) formed “Wright Brothers Construction” with my brother. Work consisted of small commercial, residential and barn roofing projects.
- ▷ Types of roofs: standing seam metal roof, corrugated metal roof, rolled roofing, shingle roofing, slate roofing, hot four-ply with gravel roof, and hot four-ply, hot two-ply and hot three-ply roofing systems.
- ▷ Throughout lifetime, continue to do roofing projects for non-profit organizations, friends and family (work done in Michigan, Ohio, Kentucky, West Virginia, Florida, Tennessee, South Carolina and Indiana).

SAFETY PROGRAMS

- ▷ Aerial and scissor lifts
- ▷ Amusement parks
- ▷ Confined space
- ▷ Design liaison
- ▷ Fall protection programs—200 million square feet
- ▷ Ladder and stepladder safety—portable and fixed
- ▷ Lockout/tagout
- ▷ Machine guarding programs—3 million square feet
- ▷ Rescue
- ▷ Roof deck structural integrity—33 million square feet
- ▷ Rope rescue
- ▷ Safety regulations, standards and industry safety practices
- ▷ Scaffolding
- ▷ Suspended crane loads
- ▷ Suspended scaffolding
- ▷ Systems design and analysis
- ▷ Trainer
- ▷ Working surface/platforms structural integrity—16 million square feet

SCAFFOLDING/SUSPENDED SCAFFOLDING/ TRANSPORT PLATFORM

Fully trained in the regulations and standards governing scaffolding and knowledgeable of its proper application. Past experience includes the erection, use and dissembling of scaffolding and the ability to identify if equipment is being used as intended by the manufacturer, OSHA and ANSI. Knowledge of structural engineering, scaffolding training and construction experience adds to expertise.

Lecturing Engagements

- ▷ Amusement Industry Manufacturers and Suppliers International (AIMS) Safety Seminar and Certification Testing 2001–2003
- ▷ West Central Ohio Safety Council; Why Falls Are Still Killing Our Workers 1999
- ▷ American Contractors Insurance Group, Inc.; Contractor Education Series on Fall Protection Requirements. Scaffolding. Video for Safety/Claims Management Workshop 1997

Courses

▷ OSHA/AGC, Mobile Section: Competency Awareness Training for Fall Hazards	2002
▷ OSHA Course 502: Update for Construction Industry Outreach Trainers.....	2002
▷ OSHA Course 503: Update—General Industry Outreach Trainers.....	2002
▷ OSHA Fall Protection: Are You Sure About That?	2000
▷ OSHA Course 502: Update for Construction Industry Outreach Trainers.....	1998
▷ OSHA Course 503: Update for General Industry Outreach Trainers	1998
▷ OSHA 500: Train-the-Trainer in Construction Industry	1996
▷ Competent Person in Fall Protection Technology: CAL/NEV Safety and Health.....	1995
▷ OSHA Course 325-001: Fall Protection Train-the-Trainer Course.....	1995
▷ OSHA Course 325: Safety Standards for Fall Protection.....	1995
▷ OSHA Course 501: Train-the-Trainer in General Industry	1994
▷ OSHA Fall Protection in the Construction Industry: Current Enforcement Emphasis	1993
▷ Principles and Applications of Elevated Fall Hazard Control by RTC	1993

TRAINING SAFETY PROGRAMS: INCLUDES CUSTOMIZED TRAINING MANUALS

Awareness Training

▷ Honda of America (National)	1999
▷ Pacific Gas and Electric.....	1999
▷ NAVFAC OSHA Support Office (National)	1996

Program Administrator

▷ Walt Disney Parks and Resorts.....	2010
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Competent Person Training

▷ Kings Island	2010
▷ Cedar Fair.....	2010
▷ Honda Manufacturing of Indiana	2009
▷ Cedar Fair.....	2009
▷ Daimler Chrysler Corporation	2007
▷ GM Powertrain—Willow Run	2007
▷ OSHA Ohio Fall Protection Equipment Specific Training.....	2003
▷ Paramount Amusement Parks (National).....	2000–2003
▷ Delphi Automotive Systems, Dayton, OH (National)	1999–2003
▷ Honda of America Manufacturing (Regional)	1999–2003
▷ Procter & Gamble Company (Global).....	1998–2003
▷ OSHA Georgia Office	2001
▷ Puget Sound Naval Shipyard (Regional).....	1998
▷ Saturn Corporation (Regional).....	1998
▷ Pacific Gas & Electric (Regional).....	1997
▷ Reynolds Metal Company (Regional).....	1996–1997
▷ Boeing Company (National)	1996
▷ CON-STEEL, Inc., General Contractors (National)	1996
▷ Navistar International (Regional)	1996
▷ IUE—General Motors (National).....	1995
▷ Danis Construction Company (National)	1995–1993

Qualified Person Training

▷ Honda Manufacturing of Indiana	2009
▷ Cedar Fair.....	2009
▷ 121 st Air Refueling Wing (Regional)	2007
▷ GM Powertrain—Willow Run	2007
▷ 121 st Air Refueling Wing (Regional)	2006

- ▷ Procter and Gamble Corporation (Global)..... 2000
- ▷ Puget Sound Naval Shipyard (Regional)..... 1998
- ▷ Saturn Corporation (Regional)..... 1998
- ▷ Navistar (Regional)..... 1997
- ▷ The Reynolds Metal Company (Regional) 1997
- ▷ The Boeing Company (National) 1996

Machine Guarding Training

- ▷ GM Powertrain (Regional): Supervisors, Operators, Maintenance and Engineering..... 2003

NOT RETAINED

MEMBERSHIPS

- ▷ American Concrete Institute (ACI)
- ▷ American Forest and Paper Association (AF&PA)
- ▷ American Industrial Hygiene Association (AIHA)
- ▷ American Institute of Steel Construction (AISC)
- ▷ American National Standards Institute—Standards Committee Member (ANSI)
 - A1264.1-2007: “Safety Requirements for Workplace Walking/Working Surfaces and Their Access; Workplace Floor, Wall and Roof Openings; Stairs and Guardrails Systems” —Safety Standards for Floor and Wall Openings, Railings, and Toeboards and Fixed General Industrial Stairs Committee Member
 - Z117: “Safety Requirements for Confined Spaces”—Confined Space Committee Member
 - Z359—Fall Protection Full Committee Member
 - Z359.0-2007: “Definitions and Nomenclature Used for Fall Protection and Fall Arrest”—Vice Chairman for Managed Fall Protection Program Subcommittee
 - Z359.1-1992 (R1999): “Historical Document”
 - Z359.1-2007: “Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components”—Subcommittee Member
 - Z359.2-2007: “Minimum Requirements for a Comprehensive Managed Fall Protection Program”—Subcommittee Member
 - Z359.3-2007: “Safety Requirements for Positioning and Travel Restraint Systems”—Subcommittee Member
 - Z359.4-2007: “Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components”
 - Z359.6-200X: “Safety Requirements and Specifications for Personal Fall Arrest Systems (PFAS)”
 - Z359.8-200X: “Safety Requirements for Rope Access”
 - Z359.12-200X: “Safety Requirements for Connecting Components for Personal Fall Arrest Systems (PFAS)”
 - Z359.15-200X: “Safety Requirements for Vertical Lifelines for Personal Fall Arrest Systems (PFAS)”
 - Z359.16-200X: “Safety Requirements for Fall Arresters for Personal Fall Arrest Systems (PFAS)”
 - Z359.17-200X: “Safety Requirements for Horizontal Lifelines for Personal Fall Arrest Systems (PFAS)”
 - Z359.18: Safety Requirements for Anchorage Connectors for Personal Fall Arrest Systems (PFAS) Subcommittee
 - Z490: Criteria for Best Practices in Safety, Health and Environmental Training Committee
- ▷ American Society of Civil Engineers (ASCE)
- ▷ American Society of Safety Engineers (ASSE)
- ▷ American Welding Society (AWS)
- ▷ American Wood Council (AWC)
- ▷ Amusement Industry Manufacturers and Suppliers International (AIMS)
- ▷ Association for Facilities Engineering (AFE)
- ▷ Association of Iron and Steel Engineers (AISE)
- ▷ ASTM Committee F24, Amusement Rides and Devices
- ▷ ASTM Committee F24.24 on Design and Manufacture: New Ride Fall Protection Working Group Chairman
- ▷ Certified Plant Engineer (through Association for Facilities Engineering) (CPE)
- ▷ Cincinnati Society of Safety Engineers
- ▷ Dayton Society of Professional Engineers
- ▷ International Society for Fall Protection (ISFP)
- ▷ National Fire Protection Association (NFPA)
- ▷ National Safety Council (NSC)
- ▷ National Society of Professional Engineers (NSPE)
- ▷ Institute for Safety Through Design Institute—Charter Member (ISTD)
- ▷ The Masonry Society (TMS)
- ▷ United States Technology Advisory Group (U.S. TAG) to ISO/TC94/SC4 Delegation

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