

## **EDUCATION**

1988 **Bachelor of Science in Civil Engineering**  
University of Alabama at Birmingham, Birmingham, Alabama

## **EXPERIENCE**

April 1999  
to Present **Engineering Design & Testing Corp.**  
**Birmingham, Alabama**  
*Consulting Engineer (April 1999-Present)*  
*District Engineering Manager (April 2000-January 2011)*  
*Regional Engineering Manager (January 2011-February 2018)*  
*Associate Chief Engineer (March 2018-2019)*  
*Interim Chief Engineer (July 2019- January 2020).*  
Consulting in the areas of civil and structural engineering for industrial, commercial and residential structures, including cause and origin investigations of collapsed structures; evaluations of wind, fire, flood, and ground movement related damages; wind verses flood water evaluations; evaluations of retaining walls and slope stability failures; building code compliance; evaluation of construction materials and methods; structural evaluations of framing systems, exterior veneers, roof damage; evaluations of construction losses and construction defects; scope of damage evaluations; analysis of cost to repair; expert engineering testimony.

October 1998  
to March 1999 **Quality Technical Services**  
**Mobile, Alabama**  
*Structural Engineer.*  
Performed structural design and administration for structural design department on petro-chemical projects. Projects were both land and sea based.

March 1998  
to September 1998 **Frucon Engineering**  
**Birmingham, Alabama**  
*Senior-Structural Engineer and Department Manager.*  
Performed conceptual and detailed structural designs in pulp and paper, food and beverage, and manufacturing fields. Responsible for all department functions for Civil, Structural and Architectural Departments

March 1988  
to March 1998 **Rust International**  
**Birmingham, Alabama**  
*Structural Engineer.*  
Provided conceptual and detailed design services for multi-million-dollar projects in the pulp and paper, chemical and aerospace fields. Responsible for structural design, construction management and supervision of design and drafting personnel.

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## **EXPERIENCE**

### ***Design and Construction Management (partial list)***

#### **NASA Space Shuttle Fuel Generation Facility — Stennis, Mississippi**

Fuel production facility for space shuttle. Included casting pits, manufacturing facilities and support structures.

#### **NASA Space Shuttle Rocket Testing Facility — Hancock County, Mississippi**

Testing facility for space shuttle rockets. Facility included horizontal test stand, testing bunkers and exhaust plume deflector

#### **Dow Corning Chemical Plants — Various Locations**

Chemical processing and manufacturing facilities throughout the United States

#### **Union Camp Paper Recycling Facility — Franklin, Virginia**

Paper recycling facility converting water paper to pulp for fine paper production

#### **International Paper, Paper Mill — Courtland, Alabama**

New paper machine in existing facility. Included power generation plant, log unloading and handling process equipment, and paper finishing and distribution warehouse

#### **Mead Paper, Paper Mill — Eufaula, Alabama**

New paper mill for fine paper production. Included all phases of production from incoming log handling equipment to paper distribution warehouse

### **Engineering Investigations (partial list)**

#### **Parking Deck Collapse — Atlanta, Georgia**

Multi-level precast concrete parking structure. Determine cause of collapse, scope of structural damage, and feasibility and cost of repair

#### **Scrap Metal Recycling Facility — Louisville, Kentucky**

220 Metric Ton Press and Shear facility. Engineering investigation to determine scope of explosion related damage to facility. Included repair design review and cost to repair/replace analysis

#### **Cotton Storage Warehouse — Covington, Tennessee**

Precast and site cast concrete structure collapse. Determination of cause of collapse, scope of damage and review of repair/replacement options

#### **Communication Tower Collapse — Huntsville, Alabama**

1,000-foot-tall communication tower. Determine cause of collapse of tower

#### **Parking Deck Collapse — Miami, Florida**

Determine scope of damage to precast concrete parking deck. Included design review, determination of extent of damage and cost estimate for replacement

#### **Hurricane Damage to Barge Mounted Casinos — Mississippi Coast**

Engineering investigations to determine cause and scope of damage to floating casino structures in multiple locations along the Mississippi coast. Separation of wind related damages from flood water and wave related damage

#### **Marine Research Facility — Charleston, South Carolina**

Description Construction defect evaluation. Review of structural design for both seismic and hurricane wind force resistance, evaluation of horizontal force resistance capacity of the structure, and adequacy of structural systems and construction

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**Steel Production Facility — Birmingham, Alabama**

Scope of damage evaluation for damage resulting from furnace explosion. Included investigation of furnace structure and support structures

**Art and Science Center and Planetarium — Baton Rouge, Louisiana**

Review of design and construction for code compliance

**Medical Office Building Collapse — Meridian, Mississippi**

Description Determination of cause of collapse of site cast concrete structure. Included review of shoring design, construction sequencing, and structural design

**High School Auditorium Collapse — Pinson, Alabama**

Steel-framed structure. Investigation to determine cause of roof collapse of auditorium. Design review of structural and drainage design, investigation of construction techniques and facility maintenance

**Yacht Club Facility — New Orleans, Louisiana**

Multi-story recreational facility. Determination of cause of damage to facility. Included review of structural design and building envelope design and construction

**Warehouse/Distribution Facility — Atlanta, Georgia**

Steel-framed warehouse building. Determination of cause of collapse of roof structure. Review of structural design, roof drainage design, and construction

**Community College — Hanceville, Alabama**

Investigation of storm related damage to 27 structures, including a 13-story tower undergoing renovation at the time of the storm. Evaluation of both cause and scope of damage, and review of repair proposals

**Office Building Complex — Germantown, Tennessee**

Steel and wood-framed, multi building office complex. Post fire structural evaluation to determine scope of damage and potential for repair

**Plastic Manufacturing Facility — Birmingham, Alabama**

Site cast reinforced concrete structures. Review of design and construction to determine cause and scope of construction defects

**Automobile Manufacturing Facility — Talladega, Alabama**

Steel-framed manufacturing facility supported on driven concrete piles. Review of design and construction for determination of cause of foundation failure. Review of geotechnical evaluation for original construction, and review of contract documents for design and construction responsibilities

**Multi-Story Hotel — Trussville, Alabama**

Review of construction process and documentation to determine percentage of completion of construction. Included payment application review and construction evaluation documentation

**Chemical Manufacturing Facility — Plaquemine, Alabama**

Steel-framed manufacturing facility. Determination of scope of structural damage to manufacturing facility resulting from fire

**Multi-Story Condominium Building — Orange Beach, Alabama**

Steel and wood-framed residential/rental facility. Review of construction for adequacy of repairs due to hurricane related damage

**Floating Boat Docks — Guntersville, Alabama**

Steel-framed floating dock structures for yacht club. Investigation of structures to determine scope of storm related damage. Included review of design documents and cost analysis for repairs

**Concrete Parking Deck — Huntsville, Alabama**

Site cast concrete parking structure. Review of design and construction for construction defect/structural failure evaluation. Determination of cause of failure and adequacy of structural design and code compliance. Site monitoring during demolition for review of construction techniques and materials usage

**Concrete Storage Silo — Pine Mountain, Georgia**

Elevated concrete storage silo. Post fire structural evaluation to determine scope of fire related damage. Review of repair proposals for structural adequacy and cost

**Bottling Facility — Memphis, Tennessee**

Steel-framed manufacturing facility. Determination of scope of structural damage to manufacturing facility resulting from fire

**Office Building — Fort Walton Beach, FL**

Steel-framed multi-story commercial building. Determination of cause and scope of roof damage. Included review of repair/replacement proposals and cost analysis

**US Route 78 Bridge — Tupelo, Mississippi**

Determination of scope of damage. Review of repair proposals and cost of repair analysis

**Office Building and Warehouse Facility — Pelham, Alabama**

Investigation to determine cause of collapse. Analysis to determine appropriate method of temporary shoring, scope of damage, and review of repair proposals

**Auditorium Under Construction — Memphis, Tennessee**

Wood-framed auditorium with truss failure during construction. Determination of cause of collapse. Review of structural design and construction methods/sequencing

**Shopping Mall — Pensacola, Florida**

Steel and concrete retail structure. Analysis to determine effects of blasting on structure. Review of blasting logs, structural design, and construction

**Legal Consultations (partial list)****Retaining Wall — Birmingham, Alabama**

Expert testimony on cause of collapse, warnings and barricades

**Single Family Dwelling — Jasper, Alabama**

Expert testimony on construction defects, appropriate repairs and cost of repair

**Restaurant — Birmingham, Alabama**

Expert testimony on construction, lighting and code compliance

**Office/Warehouse Facility — Atlanta, Georgia**

220 Metric Expert testimony on cause of collapse, structural and drainage design, and cost of repair

**Condominium Facility — Birmingham, Alabama**

Expert testimony on construction defects, structural and drainage design, construction methods and materials

**Manufacturing Facility — Greenville, Alabama**

Expert testimony on cause and scope of collapse, structural design, and construction methods and materials

**Single Family Dwelling — Birmingham, Alabama**

Expert testimony on code compliance of residence

**Single Family Dwelling — Huntsville, Alabama**

Multi-level precast concrete parking structure. Determine cause of collapse, scope of structural damage, and feasibility and cost of repair

**Scrap Metal Recycling Facility — Louisville, Kentucky**

Expert testimony on cause and scope of damage to residence. Analysis of structural design and construction, analysis of structural response to wind forces, and review of repair proposals

**Retail Shopping Mall — Tuscaloosa, Alabama**

Expert testimony on cause and scope of damage to roofing and roof structure. Included review of design and construction and cost of repair

**Manufacturing Facility — Birmingham, Alabama**

Expert testimony of cause and scope of damage to steel and concrete structure. Included feasibility of repair and cost analysis

**Retaining Wall — Pell City, Alabama**

Expert testimony of design and construction of retaining wall, cause of failure, and construction methods

**Retail Shopping Mall — Mobile, Alabama**

Expert testimony on construction defects, structural design, code compliance, construction methods and materials

**Single Family Dwelling — Olive Branch, Mississippi**

Expert testimony on construction defects and code compliance

**30-Story Condominium Building — Panama City, Florida**

Expert testimony on storm related damage, construction defects, structural design, building envelope design, and code compliance

**Multiple Single-Family Dwellings — Anniston, Alabama**

Expert testimony on blasting damage to residences. Evaluation of structures, blasting records, and soil response to blasting wave generation

**Commercial/Warehouse Facility — Dothan, Alabama**

Expert testimony on cause of construction accident. Review of construction sequencing and methods, code compliance, and workplace safety requirements

**Retail/Warehouse Facility — Pelham, Alabama**

Expert testimony on cause of structural collapse. Included review of structural design, drainage design, and construction methods

**Office Building — Birmingham, Alabama**

Expert Testimony on flooding of office building. Review of drainage calculations, maintenance requirement, and weather records

**REGISTRATIONS and CERTIFICATIONS**

Registered Professional Engineer in Alabama (# 19393)

Registered Professional Engineer in Arkansas (# 14596)

Registered Professional Engineer in Florida (# 55003)

Registered Professional Engineer in Georgia (# PE026011)

Registered Professional Engineer in Louisiana (# 32381)

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Registered Professional Engineer in Michigan (# 6201070012)  
Registered Professional Engineer in Mississippi (# 14349)  
Registered Professional Engineer in North Carolina (# 50350)  
Registered Professional Engineer in Tennessee (# 00105023)  
National Council of Examiners for Engineering and Surveying (# 18027)  
Certified Building Inspector  
Certified Masonry Inspector  
Confined Space Entry  
OSHA Site Supervisor

### **PROFESSIONAL ORGANIZATIONS**

American Institute of Steel Construction  
American Society of Civil Engineers  
International Code Council  
International Society of Explosives Engineers, Alabama Chapter  
Tau Beta Pi

### **PRESENTATIONS**

2018     *Design and Construction Evaluation PPO*, February 2018; Orlando, Florida  
2016     *Property Damage from High Winds, and Assessing Fire Effects on Steel and Concrete*, October  
          11 and 12, 2016, Mexico City, Mexico  
2015     *Construction Defect Evaluation*, August 2015; Tampa, Florida  
2006     *Hurricane Damage Evaluation Procedures*, May 20, 2006; Charlotte, North Carolina