



# TONY CHILDRESS

**Owner/President, P.E., S.E., Childress Engineering Services**

## **Project Responsibilities**

Architectural Engineering, Forensic Engineering, Structural Engineering, Drafting, Construction Management and Consultation to residential builders, commercial owners, architects, manufacturers and contractors for design, analysis, and remedial construction.

## **Areas of Expertise**

- Investigation of system failures in commercial and residential building construction;
- Building Code and ADA Code interpretation;
- Investigative services for exterior wall systems, roofing, waterproofing and structural system failures;
- Identification and resolution of non-compliance construction;
- Design and analysis of various cladding components for exterior wall systems, including glass and aluminum curtain walls and stone clad wall systems and skylights;
- Laboratory and field-testing of exterior wall systems;
- Remedial construction documents;
- Remedial construction management services;
- Expert Witness Testimony

## **Summary of Qualifications**

Over 23 years of extensive experience in research, design, management and consulting experience including project engineering, design engineering and construction administration for commercial, residential and industrial projects. Project experience includes office, retail, and institutional buildings.

- Design and structural analysis of aluminum and steel framing systems for exterior Curtain wall.
- Design and analysis of various cladding components for exterior wall systems and skylights.
- Design of concrete and concrete embedment anchors including post tension and rebar slabs on grade.
- Design of stone and granite slabs/panels including steel strong-back systems.
- Design of steel and wood structures utilized in lightweight commercial and residential construction.
- Consultant for building owners, architects, manufacturers and contractors for design, analysis and inspections for new construction, as well as remedial construction.
- Consultant for problem prevention, identification and resolution of air and water infiltration as well as structural system failure.
- Consultant on Storm Damage assessments.
- On-site testing and inspection of new and existing curtain wall systems, steel and wood structures and concrete replacement.
- Expert Witness Testimony on engineering and construction legal matters.

*Due to the vast amount of projects worked on, job references are available on request.*



## Education

### **Bachelor of Science in Civil Engineering/Structures Specialization**

Texas Tech University, Lubbock, Texas  
December 1987

### **Continuing Education Units:**

ASCE July, 1993, ASCE July, 1995, ASCE July, 1998

14 Hours (July 19-23, 1993)

40 Hours (September 11 – October 8, 1994)

Building Officials Association of Texas

- Foundation Inspections, Water Infiltration
- 1991 SBC Update
- Wood Framing, Design & Inspection
- Handgrips & Handrails, Brick Veneer
- Foundation Design and Repair Specifications (2005 – 2011)

ACI-Concrete Slabs on Ground (November 7, 2002)

ASCE-Designing Aluminum Structures (June 13, 2003)

Florida Professional Engineer Update (October 18, 2004)

ASCE-Financial Management for P.E.'s (January 15, 2005)

Auburn University – Structural Design of Spread Footings (March 8, 2007)

Auburn University – Geotechnical Aspects of Shallow Foundations Design (March 8, 2007)

Florida Professional Engineer Update (June 26, 2006)

Murdough Center for Engineering Professionalism – Engineering Ethics (March 30, 2007)

Auburn University – Ethics and Professionalism (December 21, 2007)

World of Concrete – 12 Hours (January 21, 2008);

9 hours (February 2, 2009); 6 hours (February 3, 2010)

ASCE – 4 Hours (June 2008, July 2008)

Chance – Helical Anchor and Foundation Seminar – 16 Hour (September 30 – October 1, 2008)

McKissock – Ethics for Texas Engineers (February 23, 2009 & March 31, 2011)

Post-Tension Institute – 7 hours (2009); 2 hours (2010); 8 hours (2011)

## Licensures

Registered Professional Engineer, State of Texas, since 1992. Licensed Professional Engineer in States of Alabama, Arizona, Arkansas, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Tennessee, Texas, Vermont, Virginia, Washington DC

National Registration with the National Council of Examiners for Engineering and Surveying (#24220)

## Professional Experience

**1994 - Present**

**Childress Engineering Services, Inc.**

**Plano, Texas**

**Owner/President**

Founded Childress Engineering Services, Inc. in 1994. CES has successfully grown to employ over 100 people including registered engineers, CAD technicians, commercial and residential designers, field inspectors, consultants, architects and administrative personnel. In addition, the company has expanded to include three branch offices, earns annual revenue in excess of five million dollars and offers services to customers around the globe.

Directly responsible for Business Operations and Engineering Management for five departments: Commercial, Residential, Design Engineering Services, Consulting, and Administrative. The Consulting Division provides services to architects, building owners, manufacturers and contractors on distinctive



structural design and framing details for both commercial and residential projects. The Commercial Division is a National Curtainwall Consulting group specializing in Engineering Design, Failure Analysis, and Onsite Testing and Inspection of Exterior facades. The Residential Division is a group specializing in the design of post tension slabs, pier and beam foundations, rebar foundations, and concrete. The Design Engineering Services Division provides engineering design (framing) and architectural engineering services from starter homes to full custom estates as well as low rise and retail offices.

**1988 – 1993 Architectural Wall Systems, Inc.**

**Forney, Texas**

**Engineering Manager/Structural Engineer/Software Manager**

Structural Engineer and Engineering Manager for a national curtainwall consulting group. Managed a total staff of 9 engineers and draftsmen. Engineering responsibilities included the design and analysis of various cladding components for exterior wall systems. Design requirement included: crosssection design of system components, verification of design capacities, and coordination of shop drawings to show proper installation methods, and calculations to verify the structural integrity of the system to meet local building code and architectural specifications.

Engineering Software Manager's responsibilities included the design, implementation, and marketing of specialized computer software.

**Presentations  
and Seminars**

The following presentations/seminars have been prepared and presented by Tony Childress annually to many companies and individuals in the construction community. The benefactors of these seminars are the employees within companies such as the Builders Enclosure Council, Vistawall Architectural Products, Harmon Inc., Naturalite, Viracon Inc., Moduline, Legacy Homes, and many others.

- *Unlocking the "Bible" Behind the Engineering*
- *Engineering Rules of Thumb*
- *IRC Framing Review and Standard Construction Guidelines*
- *Field Construction of Slabs on Grade*
- *Forensic Consulting – When Do You Need Them*
- *The Construction Investigator*
- *Engineering Rules of Thumb, Structures and Curtainwalls*
- *The Next Revolution in Post-Tensioning Technology for the Slab-on-Grade Industry*
- *Curtainwall 101 for Architects*
- *Foundation Design and Repair Specifications*
- *Knowledge is Power, An Engineer's Perspective*

**Publications**

- *Engineering Rules of Thumb – Texas Homebuilder Magazine – November/December 2007*
- *Foundation Movement & Construction Tolerances: A Better Understanding*
- *Safe and Sound: Understanding the DoD's UFC when Designing for Blast Hazard Mitigation*
- *Contributing Author – Architects' Guide to Glass & Metal Magazine - November/December 2009*
- *The Importance of a Roof Management Program. Contributing Author – Units Magazine – January 2010*



## Professional Affiliations

National Society of Professional Engineers (N.S.P.E.)  
American Society of Professional Engineers (A.S.P.E.)  
Texas Society of Professional Engineers (T.S.P.E.)  
Post Tension Institute (P.T.I.)  
Home Builders Association (H.B.A.)  
American Concrete Institute (A.C.I.)  
Building Official Code Administrators Institute (B.O.C.A.I.)  
National Conference of States on Building Codes and Standards (N.C.S.B.C.S.)

## Honors/Activities

Nominated and inducted into the Texas Tech University Civil Engineering Academy  
Secretary / Treasurer for Texas Tech Civil Engineering Academy for 2005  
Vice-Chairman for Texas Tech Civil Engineering Academy for 2006  
Chairman for Texas Tech Civil Engineering Academy for 2007  
Appointed member of the DC-10A Structural Subcommittee of the PTI committee  
DC-10 Slab-on-Ground (July 30, 2009)



**CHILDRESS**  
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