
Johnny N Echols, PE

Principal Engineer
jne@mdseng.com

Professional Profile

Johnny Echols worked as an HVAC technician and design build contractor for more than 12 years before leaving the construction industry and focusing solely in the consulting engineering industry for the past 11 years.

Employment History

Mechanical Design Services, Inc. (09/16/2011 – Present) – President

Huntsville, Alabama

In responsible charge of mechanical design including HVAC, Plumbing and Fire Protection systems. Design HVAC, Plumbing and Fire Protection systems and write detailed control schemes to meet facility program requirements and clearly convey the design intent. Perform Prime Consultant services for clients by preparing and submitting contract documents and construction drawings to applicable governing institutions. Establish design and construction schedules. Review Architectural, Structural, Electrical and Civil Engineering contract documents and drawings in relation to project construction implementation, completeness, accuracy and clear intent of program scope. Provide technical advice in relation to noted deficiencies in system design or construction implementation. Provide cost estimates for various HVAC, Plumbing and Fire Protection systems. Provide Energy Conservation studies for clients along with cost effective mechanical system proposals to increase facility energy conservation efficiency in relation to system first cost versus pay back. Utilize hourly analysis program to determine facility heat and humidity load to size and design the appropriate HVAC systems. Utilize load program in conjunction with local utility rates to estimate the annual energy consumption of the facility including HVAC, plumbing, electrical and process systems. Utilize AutoCad / Revit program suites to produce construction drawings. Research and practice governing code requirements and technical manuals. Write project Specifications, Scopes of Work and Proposals.

Review project submittals and ensure submitted items are compliant to the basis of design. Review project requests for information, change order and pay applications. Conduct design and pre-bid meetings as well as project construction administration meetings. Visit project site and provide field observation reports listing progress and deficiencies. Provide instruction to cure noted deficiencies and coordinate any required system adjustments with other trades.

Mims Engineering Inc. (07/15/2006 – 09/21/2011) - Professional Engineer

Huntsville, Alabama

Design HVAC, Plumbing and Fire Protection systems. Review contract documents and drawings. Provide cost estimates for various HVAC, Plumbing and Fire Protection systems. Utilize computer aided building heat load program to size the appropriate HVAC systems.

Utilize AutoCad program suites to produce construction drawings. Research and practice governing code requirements and technical manuals. Write project Specifications, Scopes of Work and Proposals.

Review project submittals. Conduct design and pre-bid meetings as well as project construction administration meetings. Visit project site and provide field observation reports listing progress and deficiencies.

**C&H Engineers Inc. (07/17/2000 - 05/15/2006) - Project Designer
Florence, Alabama**

Supervise design build construction implementation and installation. Design HVAC piping, control schemes and air distribution systems for various facilities. Perform computer aided heat load calculations. Coordinate with Clients, Architects, Engineers and Contractors in relation to new construction of or renovation to existing mechanical systems. Generate CAD drawings utilizing Autodesk software systems. Provide technical HVAC services to clients. Install various HVAC mechanical systems.

**J.C. Hamm & Sons Inc. (06/20/1994 - 07/06/2000) - HVAC Technician
Florence, Alabama**

Provide technical HVAC services to clients. Installed HVAC mechanical systems.

Education

College/University

The University of Alabama in Huntsville (05/24/2004 - 08/12/2006)

Huntsville, Alabama

Degree: BSME – Major: Mechanical Engineering

GPA: 3.6

Description: Graduated Magna Cum Laude, with emphasis in Energy and Mass Transfer.

College/University

Northwest Shoals Community College (09/07/1994 - 08/19/1998)

Muscle Shoals, Alabama

Degree: CER – Major: HVAC

GPA: 3.2

Description: Technical Career Certificate with emphasis in Heating, Air Conditioning and Refrigeration.

Professional Registration

Alabama, 30043

Tennessee, 118061

Georgia, PE041429

Additional Information

Award - ASME North Chapter Young Engineer of the Year (02/19/2009)
Award for outstanding achievement.

Award - Magna Cum Laude (08/12/2006)
Bachelors of Science in Engineering graduation with honors, Magna Cum Laude

Award - Undergraduate Dean's List (04/11/2006)
Outstanding Scholastic Achievement

Award - Pi Tau Sigma (04/11/2006)
International Engineering Honor Society

License - Alabama Master Gas Fitter (07/19/2003)
Licensed Master Gas Fitter in the State of Alabama to design, service and install fuel gas systems.

Certification - Universal Refrigerant Certification (08/02/1994)
Certification compliance due to the Montreal Protocol to service, install and purchase universal types of refrigerants.