



ALLIANCE 
Engineers

Design for Modern
Lifestyles

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Design for Modern Lifestyles

Excellence in Mechanical Engineering

Today, within a continually advancing technical environment, Alliance MEP Engineers, Inc. (AMEP) is at the forefront of modern applications of Mechanical, Electrical, Plumbing, and Fire Protection systems (MEPF). Founded in early 2010 by Abdi H. Farah, P.E., the roots of AMEP trace back to when Abdi decided to complement AMEP's sister company, Alliance Structural Engineers, Inc., with MEPF capabilities. In 2012 Keith Leadbetter, P.E. joined AMEP as Principal of MEP Operations and Mechanical Department Head bringing with him over 20 years of experience. Over the years, the team fortified the firm's capabilities with the acquisition of highly talented individuals that share their goals and values.

AMEP combines the talents and vast experience of preeminent professional engineers and proven management personnel to develop a comprehensive set of documents. Headquartered in Reston, Virginia with a satellite office in Gaithersburg, Maryland, AMEP stands ready to provide steadfast engineering services, project management, energy analysis, and commissioning for a variety of project types.

Experience Counts

AMEP excels in producing efficient, cost-effective designs including:

- Single and multi-family homes and townhomes (gardens to high-rise, podium and mixed-use)
- Office (base building and tenant fit-out)
- Commercial (retail/restaurant, automotive, etc.)
- Student housing and educational buildings

We are experienced in LEED, NAHB, EarthCraft, and Energy Star programs, as well as HUD and Virginia Housing. We have the ability to perform Energy Audits, Energy Modeling, and Commissioning.

By maximizing resources, expanding technical depth, and broadening our experience we are capable of providing complete design services.

Seamless Project Integration

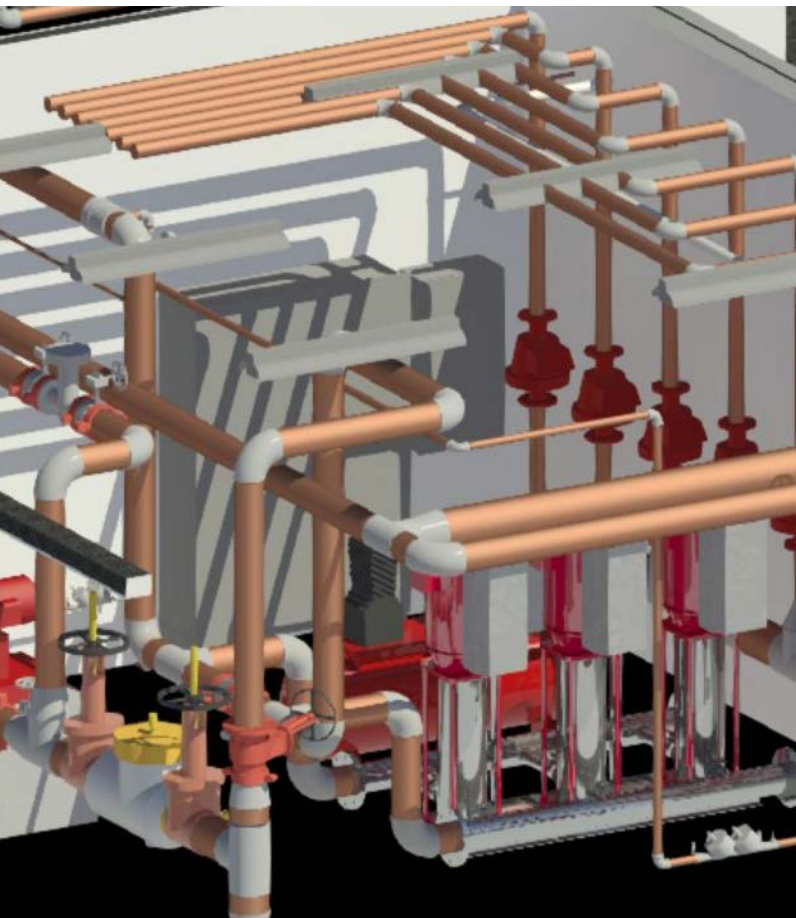
Our comprehensive services are supported by the latest and most dependable software available including: AutoCAD MEP, RevIt, BIM, eQuest, EnergyPlus, Trace 700, and Wright Soft. **We are set up to be a hands-on resource to owners, developers, architects, and contractors.**

Service and quality are always at the forefront of our minds. Know that you can depend on Alliance MEP Engineers Inc. to bring leadership and confidence to your project.

Commissioning Intent: Systematic process of ensuring that all of the building systems work interactively in accordance with the design intent and the Owner's operational needs. This exercise is not intended to take away from, nor does it reduce the responsibility of, the design team, manufacturer, or installing contractor(s). The effort is to ensure system documentation, equipment start-up, control system calibration, testing and balancing, performance testing, as well as building maintenance training.

Objectives:

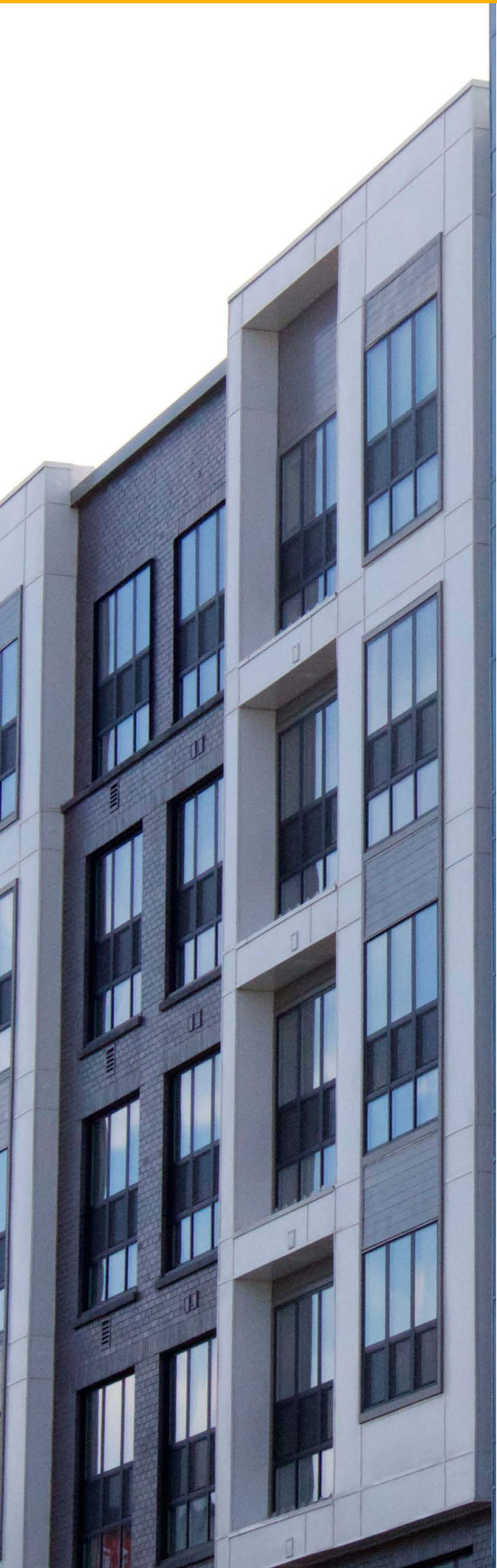
- Establish operating personnel are properly experienced and trained.
- Verify O&M documentation is accurate and complete.
- Document proper performance of the equipment and installed systems
- Confirm equipment and systems are installed, according to the design intent, to manufacturer's guidelines and specifications, applicable industry standards, and that the overall operational status has been verified by the installing contractor.



Why should the Owner make sure objectives stated above are complete and accurate?

- To have a clear understanding that established needs and requirements are adhered to.
- To verify the building will perform as **anticipated** in post occupancy.
- To mitigate possible confrontation with **design staff** (architects, engineers and contractors).
- To develop a systematic and organized set of procedures and documents.
- To educate the **Owner and Building Engineer** on what can be expected from the building on an operational level.

Our diverse experience gives us the knowledge and ability to provide assessments, recommend alternatives, and deliver quality high-efficiency system designs to meet our client's unique, specific demands.



Electrical Services:

- Emergency Backup Systems
- Fault Current Studies
- Fire Alarm Systems
- Interior Electrical Design Coordination
- Generators
- Lighting Control
- Lighting Protection Systems
- Power Distribution
- Site & Area Lighting

Fire Protection Services:

- Details
- Rise Locations
- Specifications
- Tentative Fire Booster Pump Sizing

Mechanical Services:

- Heating, Ventilation, and Air Conditioning
- Boiler Plants
- Chilled Water Plants
- IAQ Studies
- Smoke EVAC Systems
- Energy Analysis
- Energy Modeling
- Commissioning

Plumbing Services:

- Bioswale Coordination
- Central Systems
- De-watering Systems
- Domestic Booster Pumps
- Domestic Water Management
- Domestic Water Systems
- Grease Trap Design
- Hydronic Heat Systems
- Natural Gas Systems
- Sanitary Systems
- Storm & Storm Management

Additional Services:

- 3rd Party MEP Peer Review
- Bid Evaluations, Analysis and Recommendations
- Construction Administration
- Feasibility Studies
- LEED, NAHB, Earthcraft, and Energy Star Design Standards
- Revit - Building Information Modeling
- Site Observations
- Value Engineering

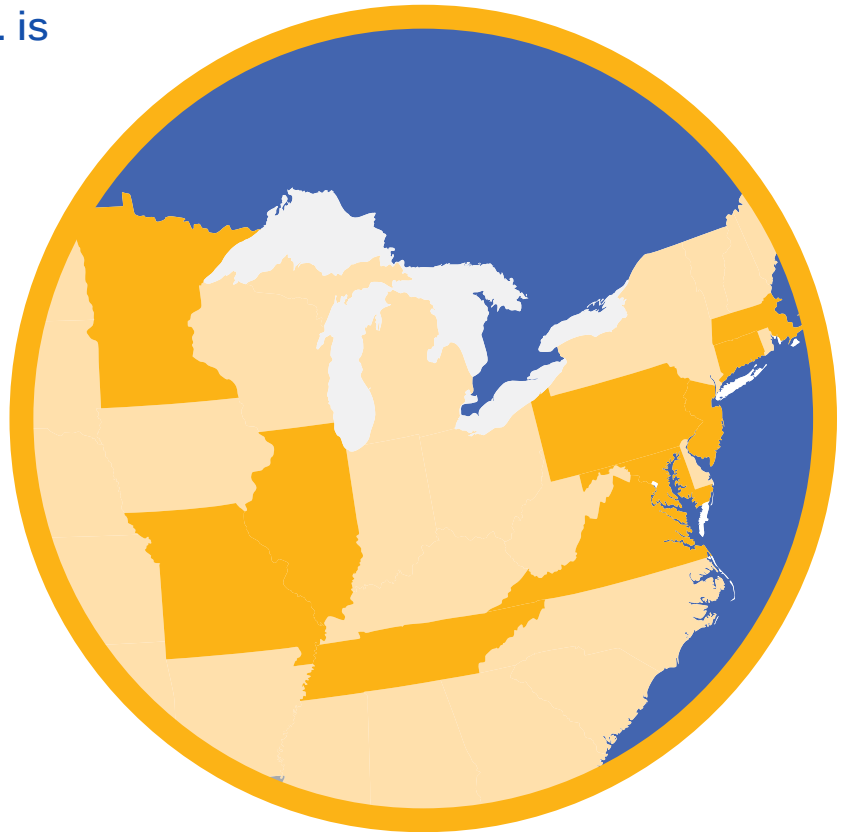


Licensed & Registered

As MEP engineering continues to evolve AMEP stands ready. Our engineering staff is licensed in multiple states and registered with the NCEES (The National Council of Examiners for Engineering and Surveying – which facilitates registration in any state within the United States).

Alliance MEP Engineers, Inc. is licensed in the following States:

- Colorado (not shown in map)
- Connecticut
- DC
- Illinois
- Maryland
- Massachusetts
- Minnesota
- Missouri
- New Jersey
- Pennsylvania
- Tennessee
- Virginia



You can depend on Alliance MEP Engineers, Inc. to bring leadership and confidence to your new construction, renovation and/or restoration project.



- Six story, mixed-use building
- 521 Apartment units
- 532,000 Square feet of residential space
- 8,000 Square feet of amenity space
- 40,000 Square feet of retail space

Representative Project: Avalon Mosaic



- Five story, mid-rise building
- 469 Apartment units
- 498,000 Square feet of residential space
- 10,000 Square feet of amenity space

Representative Project: Camden Shady Grove

Abdi Farah, P.E.

Principal

Abdi Farah is the Founder and Principal of AMEP. He oversees the operations and management of the firm, including client relations and project development and is actively involved in each and every project. With 20+ years in the industry Abdi is well-known for building long-term professional relationships with AMEP's clients who include architects, builders, developers and other consultants.

In 1995 Abdi founded Alliance Structural Engineers, Inc. which has an impeccable reputation for creativity, technical expertise, and innovative structural design. In 2010 he decided to expand the capabilities of Alliance Engineers with the formation of Alliance MEP Engineers, Inc. in order to provide clients exceptional service with both structural and MEP engineering.

Under Abdi's leadership, AMEP has flourished providing the highest standard service and design delivered on time and within budget.

Abdi earned his Bachelor's of Science from the University of Houston in 1987 and his Masters Degree in Structural Engineering from the University of Toronto, Canada in 1990. He is a registered professional engineer in over 20 states and can obtain licenses in other states as needed.

Keith Leadbetter, P.E., LEED AP BD+C

Principal

Head of MEP Operations

Mechanical Department Head

Keith, a principal of AMEP, has over 20 years of experience in engineering design, analysis, facilities management, and construction administration of mechanical systems for commercial, hospitality, retail, residential, academic, healthcare, and government projects. Keith oversees all MEP trades as the Head of MEP Operations, and as the Mechanical Department Head Keith leads the mechanical design team through all phases of design and construction administration to ensure project requirements and codes are met. His background includes energy auditing, energy analysis, commissioning, and measurement and verification. He is a LEED-accredited professional and has been involved with the design and energy analysis for numerous projects utilizing sustainable design concepts.

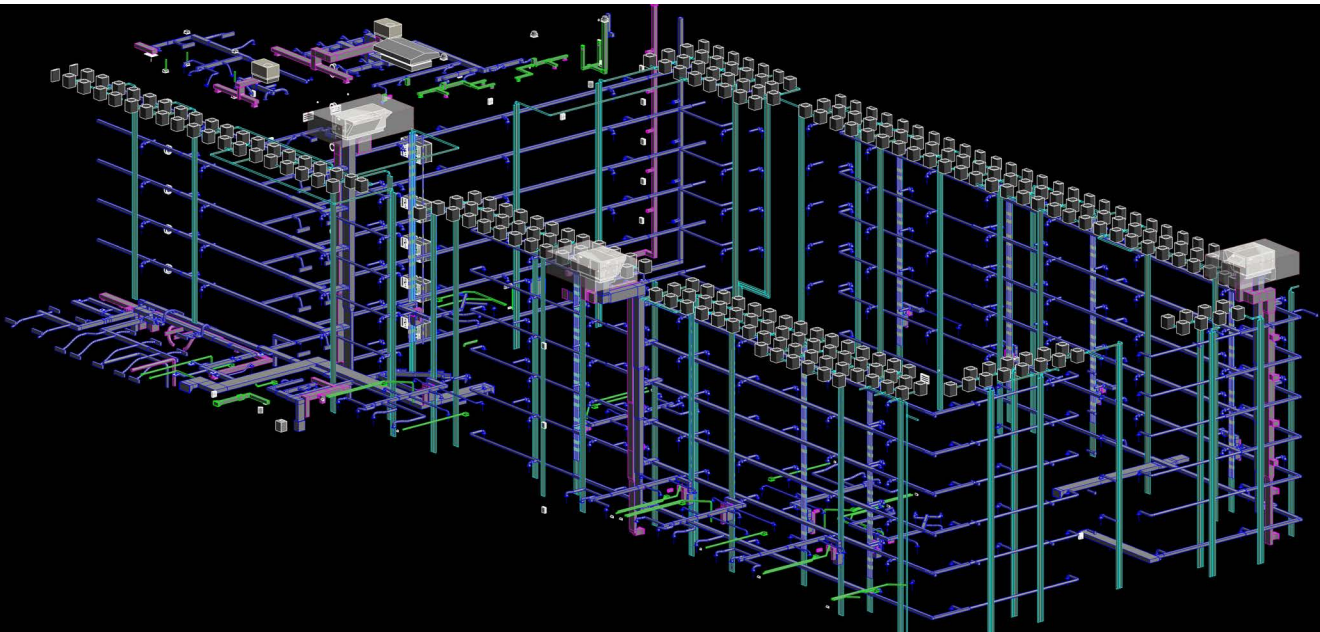
He is licensed in Washington DC, Maryland, New Jersey, New York, and Virginia and is a member of ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers), USGBC (United States Green Building Counsel), and NSPE (National Society of Professional Engineers). He holds a Bachelor of Science in Mechanical Engineering degree from Howard University.



Nart Shafagoj, P.E., LEED AP BD+C

Electrical Department Head

Nart oversees the electrical department operations for our national and global offices. Nart offers 15+ years of experience in project management, electrical engineering design for a wide variety of commercial, residential, mixed-use, educational, hospitality, government, industrial, and mass transportation projects. Nart holds professional engineering licenses in Washington DC, Maryland, Virginia, Illinois, Pennsylvania, Tennessee, and can obtain additional professional engineering licenses in other Jurisdictions through his NCEES record. Additionally, Nart is a LEED accredited professional with a specialty in building design and construction, and is a member of USGBC (United States Green Building Counsel), and NSPE (National Society of Professional Engineers). Nart holds a Bachelor degree in Electrical Engineering and a Masters degree in Engineering Management both from the George Washington University.



Steven G. Pulzone, CPD

Associate MEP Principal

Plumbing Department Head/Fire Protection Engineer

Steve is responsible for the overall quality and production of plumbing and fire protection engineering documents, including the supervision of engineering and CADD personnel within the plumbing/fire protection department. He also works with all other design professionals and consultants from other related disciplines that affect plumbing and fire protection work including architectural, structural, and civil documents for coordination and integration purposes. With over 38 years of experience with HVAC, plumbing, and fire protection in the engineering field, he serves as the Plumbing Department Head with responsibility for management, design, coordination, and administration from inception through construction. Steve is familiar with the current prevailing codes, standards and regulations including general construction methods and techniques which serve to provide economical design decisions for implementation into project documents and contracts. He is a member of ASPE (DC chapter) and of the National Fire Protection Association with certifications in: Air Conditioning and Refrigeration, Plumbing Design, Hydronic Pumps and System Studies, Sprinkler and Fire Protection Systems, Mechanical Engineering and Math Curriculum, and has completed the Engineering Review Program of Washington.

Graham Perry, LEED Green Associate **Construction Administration and** **Commissioning Manager**

As AMEP's Construction Administration and Commissioning Manager, and over 20 years experience, Graham leads the overall design teams through all phases of project design ensuring all project requirements, codes, and schedules are met. His role at AMEP also includes site survey investigation, design/code compliance inspections, proposal creation, and training younger project managers. With a focus on HVAC, Graham has designed mechanical systems for retail shopping centers, mixed use residential and commercial buildings, server and data centers, townhouses, single family homes, restaurants, clubhouses, mid-rise office buildings, gas stations, government and healthcare buildings, and schools and churches. Along with his mechanical background, Graham is also experienced with electrical and plumbing system design. As a LEED Accredited Professional, Graham understands the concepts and strategies for customizing designs to meet today's Green Building requirements, and has done so successfully on numerous multi-family and smaller residential projects. He holds current LEED, Green Globe and ICC certifications as well as being experienced with NAHB, EarthCraft, and Energy Star design guidelines. Graham holds a Bachelor of Science in Geography and a Minor in History from Marshall University in Huntington, West Virginia.

Indra Thakkar, P.E. **Senior Mechanical Engineer**

Over the last 40+ years, Indra has provided MEP engineering services on a wide variety of projects including: federal and local government contracts, office buildings, universities, and places of worship. At Alliance Indra's specialty is designing MEP systems for multi-family and hi-rise buildings. As a Senior Mechanical Engineer, Indra is responsible for the mentoring of junior engineers as well as quality control. He has worked with over 30 architects and developers during his extensive career as an MEP engineer, designing HVAC, plumbing, fire protection and sprinkler, and mechanical design systems. Indra has an M.S. degree in Mechanical Engineering and is a member of the NFPA and the ASPE.

He is certified in GEO THERMAL Design and Installation, and has also performed mechanical inspections for the State of Maryland and Prince George's County, Maryland.

DMBE Certified Minority-Owned

LEED Certified Staff

Licensed in 11 States and DC



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Alliance MEP Engineers, Inc.

Company Summary

Alliance MEP Engineers, Inc. (AMEP) is at the forefront of modern applications of Mechanical, Electrical, Plumbing, and Fire Protection systems (MEPF). Our comprehensive services are supported by the latest and most dependable software available. We are set up to be a hands-on resource to owners, developers, architects, and contractors. AMEP combines the talents and vast experience of preeminent professional engineers and proven management personnel to develop a comprehensive set of documents. Headquartered in Reston, Virginia with a satellite office in Gaithersburg, Maryland, AMEP stands ready to provide steadfast engineering services, project management, energy analysis, and commissioning for a variety of project types.

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Licensed in 11 States and DC*

NAICS Codes:

541330: Engineering Services

541340: Drafting Services

541350: Building Inspections Services



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Capabilities Statement

Electrical Services:

Electrical power distribution design for Commercial, Residential, Mixed-Use, Government, and Transportation projects including Base Building, Retail, Restaurant, Garage, Site, Multifamily, Interior Tenant Fit-outs, Data Centers, Sensitive Compartmented Information Facilities (SCIF), and Metro Designs • Emergency backup systems including Uninterruptable Power Supply systems (UPS) and Generators • Lighting control systems and electrical energy compliance calculations • Fire Alarm Systems • Performance based lightning Protection Systems

Fire Protection Services:

Details • Riser Locations • Tentative Fire Booster Pump Sizing

Plumbing Services:

Bioswale Coordination • Central Systems • De-watering Systems • Domestic Booster Pumps • Domestic Water Management • Domestic Water Systems • Grease Trap Design • Hydronic Heat Systems • Natural Gas Systems • Sanitary Systems • Storm & Storm Management

Mechanical Services:

Heating, Ventilation, and Air Conditioning • Boiler Plants • Chilled Water Plants • IAQ Studies • Energy Analysis • Energy Modeling • Commissioning

Service Sectors:

3rd Party MEP Peer Review • Bid Evaluations, Analysis and Recommendations • Construction Administration • Feasibility Studies • LEED, NAHB, EarthCraft, and Energy Star Design • Revit-BIM • Site Observations • Value Engineering

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Abdi Farah, P.E.

Owner Principal

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Keith Leadbetter, P.E., LEED AP BD+C

Principal Head of MEP Operations Mechanical Department Head

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Senior Mechanical Engineer

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