

# MOHAMMED ARIF KHAN

! +966 564141715 | [arifnza@gmail.com](mailto:arifnza@gmail.com) | Iqama: Transferable | Current Location: Riyadh

## PROFILE SUMMARY

Mechanical Building Services—specializing in fire protection, plumbing systems, and sustainable design (LEED) for large-scale healthcare, metro, and government projects across Saudi Arabia and Qatar. Expert in project management, design coordination, and code compliance with NFPA, Saudi Building Code, and British Standards.

## CORE COMPETENCIES

- Fire Protection System Design & Installation (NFPA Standards, SBC)
- Plumbing System Design (Water Supply, Drainage, Pumping Systems)
- Project Management & MEP Coordination (Civil, Mechanical, Electrical, Architectural)
- Preparation of Shop Drawings & Technical Submittals
- Healthcare Facilities Design & Inspection
- Sustainable Design & LEED Compliance

## EDUCATION & CERTIFICATIONS

- B.Tech. in Mechanical Engineering – JNTU, Hyderabad, India (2007)
- Registered Mechanical Engineer, Saudi Council of Engineers (No. 163988)
- Piping Engineering (ASME B31.3 – Process Piping)
- Certified SNT-TC-1A (ASNT) Level II in NDT (RT, UT, MT & PT).

## SELECTED PROJECTS

- Doha Metro Underground – Gold Line (Qatar) – USD 4.2B | Role: Mechanical Engineer (Design Review – MEP Services)
- Saudi Arabian National Guard Health Affairs (Riyadh, Jeddah, Taif, Qassim) – SAR 8.5B | Role: Mechanical Project Engineer
- Ministry of Health – Riyadh | Role: Mechanical Engineer | Project management of 282 hospitals, Installation and inspection of sprinkler, NOVEC, CO<sub>2</sub>, and hydrant systems
- Saudi Aramco Projects | Role: Mechanical Engineer | Design and site supervision for building services in industrial facilities

## TECHNICAL EXPERTISE

- Standards: NFPA 10, 13, 14, 20, 22, 2001 | SBC | BS Standards
- Systems: Wet & Dry Sprinkler, Hydrant, FM-200, Deluge, Pre-Action
- Tools: AutoCAD, Revit (MEP), Navisworks, BIM 360, MS Project

## PROFESSIONAL EXPERIENCE

### ➤ **MJ Engineering Consultants – India**

#### **MEP Inspector Mechanical | July 2021 – Sep 2025**

- Review process design package, calculations, process scheme and vendor documentation
- Supervision of subcontract activities at Site on behalf of Client.
- Support Client in routine project proceedings and activities Progress report, tracking etc.
- Perform field inspections and site assessments to support the design and installation of fire protection systems, including sprinklers, fire alarms, suppression systems, and fire pumps.
- Review and interpret engineering drawings, specifications, and applicable fire codes (e.g., NFPA, IBC, IFC).
- Coordinate with project managers, design engineers, contractors, and local authorities to ensure compliance and timely project execution.
- Conduct system testing and commissioning, including hydrostatic tests, alarm verification, and functional performance checks.
- Assist with troubleshooting and resolving field issues related to fire protection equipment and installation.
- Document field reports, as-built conditions, and inspection results with accuracy and clarity.

### ➤ **Dar Engineering Consultants – Qassim Saudi Arabia**

#### **Mechanical Engineer | March 2019 – May 2021**

- Classification of **Fire Hazards**, Pipe Sizing, Sprinkler layout, **Fire Pump Sizing**, **Fire water demand** and standard installations.
- Head and Hydraulic calculation, Pipe Sizing & selection of fire pumps
- Designing of Firefighting Systems (Pumping, Hydrant, Sprinkler, Clean agent systems etc.) as per NFPA
- Coordination with other disciplines like: Civil, Structure, Architect, Electrical, Infrastructure and other utilities.
- Preparing pre-tender / post tender engineering documents like Bill of Quantities, Design Basis Report and other relevant deliverables
- Good Knowledge of NFPA Standards (NFPA10, NFPA 13, NFPA 20, NFPA 14, NFPA 2001)
- Estimation & Preparing BOQ for Fire Protection
- Responsible to perform basic design calculations and coordination.
- Responsible for the preparation of design, tender packages, bill of quantities, scope of work, general concept, execution and coordination drawings for piping requirements
- Review of Hydraulic Calculations for entire system
- Preparing drawings – Tender, Design & Final Drawings for preparation of shop drawings
- Execution and installation of Fire Protection Systems for Residential, Commercial and Hospital Projects
- Installation of Internal Network Sprinkler System (Wet & Dry), Stand Pipe (Fire Hose Cabinets & Landing Valves), External network for Fire Hydrant, Pump room, FM 200, Deluge Spray systems and Pre-Action System
- Site Supervision & inspection for Installation of Fire Protection Systems
- Shop drawings preparation and Material submittals (Pump, valves, Zone Control Valves, Landing Valves, Pipes, Fire Hose Cabinets, Fire Hydrants, Fire Extinguishers, Sprinklers Upright & Pendent Concealed) review and approvals

### ➤ **ALYSJ JV (AKTOR, L&T, Yapi Merkezi, STFA, Jaber Engg) – Doha, Qatar**

#### **Project Engineer | Sep 2016 – May 2018**

- Part of the Doha Metro Gold Line, valued at USD 4.2 billion.
- Oversaw design review of MEP systems for 11 underground stations.
- Coordinated with multi-disciplinary teams to ensure design integration and compliance.
  - Prepare technical submittals, material specifications, and bill of quantities (BOQ).
  - Review and approve shop drawings, material samples, and vendor data.
  - Ensure all designs and installations comply with IPC, UPC, ASPE, and local building codes.
  - Maintain up-to-date as-built drawings and documentation for handover.

- Prepare Fire Fighting System Designs (sprinklers, hydrants, hose reels, standpipes, fire pumps, and suppression systems) in compliance with NFPA, BS, and local codes.
- Develop schematic diagrams, layout drawings, and hydraulic calculations for complete systems.
- Coordinate with architectural, structural, and MEP disciplines to ensure proper integration of fire protection systems.

➤ **Nesma & Partners Contracting Co. Ltd. – Riyadh, Saudi Arabia**  
**Project Engineer | Dec 2014 – Aug 2016**

- Managed mechanical works for Saudi National Guard Health Affairs Projects (SAR 8.5 billion).
- Supervised design and installation of sprinkler, NOVEC, and CO<sub>2</sub> systems.
  - Develop schematic diagrams, layout drawings, and hydraulic calculations for complete systems.
  - Coordinate with architectural, structural, and MEP disciplines to ensure proper integration of fire protection systems.
  - Review and verify shop drawings and material submittals for compliance with project specifications.
  - Estimate material quantities, prepare BOQs, and assist in tender documentation.
  - Design domestic cold and hot water supply systems, drainage, stormwater, and sanitary systems for residential, commercial, and industrial buildings.

➤ **KBR-AMCDE – Saudi Arabia**  
**Mechanical Design Engineer | Nov 2013 – Aug 2014**

- Involved in Aramco building services for oil & gas projects.
- Ensured fire protection design compliance with Aramco and NFPA standards.
  - Manage and coordinate MEP building services (HVAC, plumbing, fire protection, and electrical systems) in compliance with Saudi Aramco Engineering Standards (SAES) and Project Management Team (PMT) procedures.
  - Review and interpret project specifications, IFC drawings, and scope of work to ensure proper execution.
  - Coordinate with Aramco Project Management Team (PMT), Consultants, and Contractors for design reviews and approvals.

➤ **Al Khodari & Al Rabiah Co – Dammam Saudi Arabia**  
**Mechanical Engineer | Mar 2008 – Sep 2013**

- Managed design, installation, and commissioning of HVAC and plumbing systems.
  - Develop and implement preventive and corrective maintenance schedules for all MEP systems (HVAC, plumbing, electrical, fire protection, and building automation).
  - Plan and oversee routine inspections, servicing, and repairs to ensure optimal performance of facility equipment.
  - Maintain maintenance records, logs, and performance reports in accordance with company and regulatory standards.
  - Coordinate with regulatory authorities for system inspections, certifications, and approvals.

## PERSONAL DETAILS

- Date of Birth: 15 Sep 1986
- Marital Status: Married
- Languages: English, Hindi, Telugu
- Driving Licenses: India & Saudi Arabia
- Iqama: Transferable