

# ABDUL RAHMAN

## SENIOR MECHANICAL ENGINEER

SCE MEMBERSHIP ID:960610

## CONTACT INFO

+966 538715601

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## PERSONAL PROFILE

Results-driven Mechanical Engineer with over 9 years of comprehensive experience in mechanical design, site execution, procurement, estimation, and project management across high-profile residential, commercial, and infrastructure projects in Saudi Arabia. Proven expertise in HVAC, firefighting, plumbing, and infrastructure systems, including installation, testing, and commissioning in compliance with ASHRAE, SMACNA, and NFPA standards. Adept at preparing shop drawings, performing heat load and hydraulic calculations, managing procurement, coordinating with clients, consultants, and contractors, and ensuring timely project delivery. Skilled in cost control, tender pricing, and handling multiple projects simultaneously while maintaining high quality and safety standards. Proficient in AutoCAD, HAP software, and Microsoft Project for effective project planning and execution.

## WORK EXPERIENCE

### Mohammed Alrashid Trading & Contracting Company (MARCO)

Technical Office Engineer (Mechanical) – Design, Site & Technical Office

November 2023 – Present

#### Projects Involved:

- Samhan Heritage Hotel (Diriyah)
- Al Zallal Project – Base & Boon
- Al Zallal Project – Oulu Luxury Restaurant
- Abdulaziz Al Qadir Compound
- Noura Villas
- Fouzia Villas
- Iris Office

#### Key Responsibilities:

- Oversee design, execution, procurement, and material delivery for HVAC, firefighting, and plumbing systems.
- Estimate and price mechanical tenders based on B.O.Q.
- Review and analyze tender documents (drawings, specifications, B.O.Q.).
- Design mechanical systems for fit-out and villa projects.
- Install, test, and commission Ecology Units and Exhaust Fans to ensure optimal performance and compliance with project specifications.
- Perform essential calculations, including heat load assessments and static pressure calculations for fan selection and system balancing.
- Install, test, and commission the complete duct system, including insulation, cladding, and associated accessories in accordance with approved drawings; promptly resolve any issues encountered during execution.
- Execute the installation, testing, and commissioning of PVC, UPVC, PPR, and HDPE piping systems for plumbing works, ensuring quality and adherence to project standards.
- Install, test, and commission Fire Fighting networks (both Grooved and Threaded systems), including sprinklers, zone control valves, and all related accessories, following NFPA codes and safety regulations.

## **MASAH Specialized Construction Company**

Senior Mechanical Engineer (HVAC, Firefighting, Plumbing & Infrastructure)

Nov 2021 – Nov 2023

Project: Ministry of Defense & Arms (MODA Housing Project)

Consultant: Zuhair Fayeze Partnership Consultants

Location: Al Qassim, Saudi Arabia

### **Responsibilities:**

- Managed all mechanical works including design review, execution, procurement, and site inspections (HVAC, firefighting, plumbing).
- Controlled procurement and construction for all mechanical systems ensuring compliance with project goals.
- Installed, tested, and commissioned Package Units, AHUs, FCUs, VAVs, and Split Units.
- Conducted heat load calculations and static pressure calculations (using HAP software).
- Installed, tested, and commissioned duct systems, insulation, cladding, and accessories as per approved drawings.
- Installed, tested, and commissioned PVC, UPVC, PPR & HDPE pipes for plumbing systems.
- Installed medical gas systems and accessories to meet healthcare standards.
- Installed, tested, and commissioned firefighting networks (Grooved & threaded), sprinklers, valves, and accessories per NFPA standards.
- Made calculations for firefighting systems using Elite software and selected appropriate pumps.
- Executed installation of underground HDPE & UPVC piping networks for potable water, irrigation, fire, sewer, and stormwater.
- Installed and commissioned GRP manholes, stormwater drainage systems, catch basins, and fire hydrants.
- Installed, tested, and commissioned irrigation systems including solenoid valves, drip lines, nozzles, and sprinklers.
- Reviewed execution plans with Cost & Planning Department and monitored progress reports (daily, weekly, monthly).

### **Infrastructural Works:**

- Installed and tested piping networks (HDPE, UPVC) for water, sewer, storm, irrigation, and fire systems.
- Commissioned valves, pumps, hydrants, drainage, irrigation, and water treatment systems.
- Installed GRP manholes, lifting stations, and stormwater catch basins.
- Handled hydro testing and system commissioning as per standards.

## **Raphelah Contracting**

Mechanical Design & Site Engineer

Nov 2018 – Nov 2021

Project: Al-Raidah Digital City (ITCC Compound), Riyadh, Saudi Arabia

### **Key Projects:**

- MU-04 Building (12 Floors) Fit-Out – Client: PIF (Public Investment Fund)
- CS-01 Building (1 Floor) Fit-Out – Client: Richard Attias & Associates
- CS-01 Building (1 Floor) Fit-Out – Client: Tanmiah Head Office (NEOM)

### **Responsibilities:**

- Prepared shop drawings and as-built drawings using AutoCAD 2D.
- Reviewed project specifications, design drawings, shop drawings, technical documents, and method statements.
- Prepared project schedules and Gantt Charts using Microsoft Project.
- Supervised and monitored HVAC, firefighting, and plumbing installations.

Executed installation of Air Handling Units (AHUs), Fan Coil Units (FCUs), ducting, and piping systems.  
Ensured quality compliance during installation as per ASHRAE, SMACNA, and project standards.  
Managed pre-commissioning and commissioning activities for HVAC, plumbing, and firefighting systems.  
Conducted leak/smoke tests, pressure tests, and other inspections with subcontractors before client/consultant approval.  
Performed system calculations using HAP (HVAC), Elite (Firefighting), and other selection tools for pump sizing.  
Coordinated with clients, subcontractors, and other departments for seamless project execution.

### **Abdullah & Sons Contracting Company**

Mechanical Engineer

Mar 2017 – Oct 2018

Location: Buraydah, Al Qassim, Saudi Arabia

#### **Responsibilities:**

- Reviewed and implemented approved HVAC shop drawings, MEP coordination drawings, work method statements, and project specifications.
- Supervised installation of HVAC ducts, chilled water piping, fittings, and accessories, ensuring all materials were inspected and approved before installation.
- Coordinated site clearance and interfaced with other disciplines to avoid conflicts and ensure smooth workflow.
- Ensured all HVAC and chilled water piping activities complied with company safety policies and quality standards.
- Notified and coordinated with QC personnel to carry out inspections and surveillance for ongoing site activities.
- Monitored daily site activities to ensure compliance with approved drawings and specifications, reporting progress to the Project Engineer/Manager.
- Prepared documentation and raised RFIs (Request for Inspection) for completed installations, ensuring all inspections were supported with IFC drawings, ITPs, and checklists.

### **Al Samaani Factory for Metal Industries Co. Ltd.**

Mechanical QA/QC Inspector & Safety Officer

Buraydah, Al Qassim, Saudi Arabia

July 2016 – Feb 2017

#### **Key Responsibilities:**

- Monitored production quality to ensure compliance with applicable international standards and company quality systems.
- Conducted inspections for incoming materials and finished products, ensuring alignment with client technical specifications.
- Supervised and guided QA/QC inspectors to ensure adherence to documented quality control procedures.
- Approved, monitored, and followed up on quality-related issues, including non-conformance reports (NCRs), resolving and escalating concerns as needed.
- Managed material quality issues across production lines, loading, and finishing areas to maintain high standards.
- Coordinated with department heads when raw materials failed quality checks and implemented corrective actions.
- Performed final product tests such as micron thickness testing to confirm product accuracy and quality.
- Ensured materials passed inspection prior to installation and production release.

## EDUCATION

### Bachelor's Degree

- Jawaharlal Nehru Technological University (JNTU), Hyderabad, Telangana, India
- 2012 – 2016

## SPECIALIZATION COURSES

### Certified Course in HVAC, Fire Fighting & Plumbing

- Designing & Drafting
- Refrigeration and Air Conditioning
- Heat Load Calculation, BOQ Preparation, and Duct Designing
- Plumbing and Pipe Designing & Drafting

### Certified Professional in Mechanical CADD

- AutoCAD (Expert Level)

### NEBOSH (Health and Safety at Work – HSW) Certified

## SKILLS

- Mechanical Design (HVAC, Firefighting, Plumbing)
- Project Management
- Procurement & Material Coordination
- Installation & Commissioning
- Safety Management
- QA/QC Compliance
- Cost Control & Budgeting
- Team Leadership
- Technical Documentation
- Client & Consultant Liaison

## LANGUAGES

- English
- Arabic
- Urdu
- Hindi

## PROSONAL INFO

- Iqama: Transferable
- Driving License: Valid
- Nationality: India
- Address: Riyadh