

Marwan Ali Ahmed Mohamed

Mechanical Engineer

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SUMMARY

Innovative Mechanical Engineer with over 2 years of experience in MEP system design, specializing in HVAC, plumbing, and fire protection for residential and commercial buildings. Proficient in CAD and BIM, ensuring precise designs and seamless project coordination. Recognized for strong analytical skills and a collaborative approach, contributing to enhanced project outcomes. Seeking to advance my career in MEP engineering by applying my technical expertise to a progressive company.

PROFESSIONAL EXPERIENCE

HVAC Engineer (Online)

Fadhel Al Ajmi Consultant Engineering

01/2025 – 05/2025
Riyadh, Saudi Arabia

- Designed and developed HVAC systems for residential and commercial buildings in compliance with ASHRAE and international standards.
- Performed heat load calculations, duct sizing, and equipment selection using software such as HAP, Revit, and AutoCAD.
- Prepared detailed HVAC drawings, specifications, and BOQs ensuring accuracy and alignment with project requirements.
- Coordinated HVAC design with plumbing, fire protection, and electrical systems to prevent clashes and ensure smooth integration.
- Assisted in value engineering by optimizing system designs for performance and cost savings.

Mechanical Engineer

Tekno Consultancy

10/2022 – 01/2024
Khartoum State,
Sudan

- Spearheaded the design and development of HVAC, firefighting, and plumbing systems, ensuring compliance with project requirements and regulatory standards.
- Developed comprehensive design plans and calculation reports, streamlining the approval process and facilitating smooth project execution.
- Collaborated with procurement teams to produce detailed BOQs, optimizing resource allocation and enhancing project accuracy.
- Drafted precise equipment drawings for mechanical and plumbing systems, ensuring strict adherence to industry standards.
- Optimized Revit libraries, decreasing design time by 25% and enhancing overall team productivity.

MEP Design Engineer

U.G.C International Company

11/2021 – 08/2022
Khartoum State,
Sudan

- Engineered MEP systems for residential and commercial projects, ensuring compliance with industry standards and delivering high-quality designs.
- Utilized CAD and BIM software to create accurate and detailed design models, enhancing communication with stakeholders and construction teams.
- Maintained comprehensive design documentation, supporting project continuity and ensuring efficient handovers between phases.

SKILLS

- Microsoft Office
- Autodesk AutoCAD
- Autodesk Revit
- VariTrane Duct Designer
- Autofluid
- Elite Fire Software
- Hourly Analysis Program (HAP)
- Regulatory Standards (ASHRAE, NFPA, IPC)
- Analytical Problem-Solving
- Continuous Learning
- Effective Communication
- Collaborative Teamwork
- Project Time Management
- Critical Thinking
- Adaptability in Dynamic Environments
- Creative Engineering Solutions

EDUCATION

Bachelor of Mechanical Engineering (Power)
Sudan University of Science and Technology

12/2018
Khartoum State,
Sudan

LANGUAGES

Arabic — Native/Bilingual

English — Proficient