

# MOHAMED ELNABAWY

Senior Mechanical Engineer

+966566168618 | mohamedelnabawy14@gmail.com | Riyadh , Saudi Arabia

<https://www.linkedin.com/in/mohamed-elnabawy14/>

## ABOUT ME

ASHRAE Certified HVAC Designer Engineer (CHD) and Healthcare Facility Design Professional (HFDP) with a Bachelor's Degree in Mechanical Power Engineering from Mansoura University and licensed Professional Mechanical Engineer by the Saudi Council of Engineers (SCE). A Mechanical Engineer with over 10 years of experience in HVAC, firefighting, and plumbing system design and execution, showcasing strong proficiency in AutoCAD, CAD-based design, and the preparation of technical drawings and engineering documentation, with strict compliance to international codes and standards. Proven track record in coordinating with project managers and multidisciplinary engineering teams to deliver high-quality, compliant, and efficient projects.

## CERTIFICATIONS

**Ashrae HVAC Designer Engineer Certification (CHD)**

**ASHRAE Healthcare Facility Design Professional (HFDP)**

**icensed Professional Mechanical Engineer by the Saudi Council of Engineers (SCE)**

## WORK

**Senior Mechanical Engineer at RUM CO. | Riyadh | Oct 2016 - Present**

## WORK EXPERIENCE

**KINGDOM HOSPITAL EXTENSION | Riyadh, KSA**

- Prepared tender drawings for HVAC systems in accordance with project specifications and design requirements
- Developed technical drawings for drainage layouts, ensuring proper routing and coordination with other building services
- Produced detailed water supply system drawings, reflecting design intent and compliance with relevant standards
- Drafted firefighting system drawings, including routing of pipes and placement of key components as per design guidelines
- Coordinated with design documents and engineering inputs to ensure accuracy and consistency across all MEP drawings

**AMAZON DRY03 Warehouse | Riyadh, KSA**

- Led the execution of HVAC, firefighting, and plumbing system projects from installation through commissioning
- Developed detailed shop drawings for HVAC, fire protection, drainage, and water supply systems in accordance with project specifications
- Compiled, organized, and submitted all mechanical documentation for consultant review and approval
- Installed central split units, ensuring proper configuration and optimal system performance
- Executed the installation of FCU and split units with a focus on quality, alignment, and accessibility for maintenance
- Installed pre-insulated ductwork and air outlets in compliance with industry standards and project requirements
- Implemented complete drainage and water supply systems, including pipes, pumps, tanks, and heaters
- Installed fire protection systems, including fire protection piping, fire hose cabinets, and pumps in line with design and safety standards
- Installed fire smoke fans to support smoke control, safety, and regulatory compliance
- Configured and installed FM200 and foam fire suppression systems according to manufacturer and project guidelines
- Prepared accurate as-built drawings for mechanical systems to support handover, operations, and maintenance
- Managed preparation and tracking of mechanical consultant submittals to facilitate timely approvals
- Implemented fire safety and water supply systems in coordination with other trades and stakeholders

**King Saud university-college of tourism and antiquities | Riyadh,KSA**

- Developed comprehensive shop drawings and mechanical submittals for HVAC and firefighting systems, ensuring compliance with consultant specifications.
- Successfully installed 12 Air Handling Units (AHUs) and 4 Fresh Air Handling Units (FAHUs), enhancing air quality and circulation.
- Executed the installation of both round and rectangular ductwork for supply, return, relief, and fresh air systems.
- Fitted plenum boxes with air outlets to optimize airflow distribution.
- Installed complete chilled and hot water piping systems, ensuring efficient temperature control.
- Managed all HVAC hookups, guaranteeing seamless integration with existing systems.
- Coordinated meetings with project stakeholders, including owners and consultants, to proactively address and resolve any project issues.
- Installed comprehensive sprinkler systems, valves, and FM200 systems, reinforcing fire safety measures.

**Abdullah Al-Outhim Market | Riyadh, KSA**

**Execution HVAC, Firefighting and Plumbing systems Install all AC units (package-FCU-split)**

- Executed HVAC system setups
- Installed AC & duct work
- Set up pumps & plumbing
- Implemented fire safety systems

**Ministry Of Economy and Planning Head Office | Riyadh, KSA**

- Executed comprehensive HVAC and firefighting systems across 10 floors of Tamkeen Tower.
- Developed detailed shop drawings for system installation and integration.
- Installed and connected all Fan Coil Units (FCUs) with associated chilled piping systems.
- Implemented complete ductwork installation, including air outlets for optimal airflow.
- Installed a full sprinkler system to ensure fire safety compliance.
- Installed FM200 fire suppression system for advanced hazard protection.
- Prepared as-built drawings for accurate record-keeping and maintenance reference.

**king Abdelaziz University Hospital | Riyadh, KSA**

- Renewed 5 chillers & 8 AHUs
- Dismantled & installed 5 chillers
- Replaced 6 AHUs & 2 FAHUs
- Updated chill water pipes/valves

**Risho Restaurant | Riyadh, KSA**

- Designed kitchen hood ventilation
- Calculated specs for hood systems
- Prepared tender drawings & BOQs
- Installed fans & ductwork

**Saudi Ceramic | Jeddah – Jizan – Hafir Albatin – Medina**

- Designed HVAC for 4 branches
- Conducted thermal calculations
- Installed FCUs & ductwork
- Prepared BOQs & as-built drawings

**Bridge Connection Between Parking of Prince Sultan and Existing Bridge Between Faculty of Medicine and Medical in King Saud University. | Riyadh, KSA**

- Engineered and implemented HVAC and firefighting systems, ensuring compliance with industry standards.
- Conducted comprehensive HVAC load calculations and crafted tender drawings and Bill of Quantities (BOQs).
- Developed detailed shop drawings to guide project execution.
- Managed the preparation of all mechanical submittals for consultant approval.
- Executed the installation of package units, optimizing system performance.
- Installed air ductwork and air outlets, enhancing indoor air quality.
- Installed comprehensive firefighting systems, including piping, valves, fire hose cabinets, and sprinklers.
- Prepared accurate as-built drawings for project documentation and future reference.

**Residential Compound Dr. Abdulrahman Alnaeem | Riyadh, KSA**

- Engineered and implemented HVAC and plumbing systems for a high-profile project consisting of 1 palace and 4 villas.
- Conducted detailed plumbing and HVAC calculations to ensure system efficiency and compliance.
- Developed comprehensive tender drawings and Bill of Quantities (BOQs) for accurate project bidding.
- Produced precise builder's work drawings to guide construction teams effectively.
- Installed a variety of pumps, including booster, transfer, and submersible types, to optimize water flow.
- Fitted all Fan Coil Units (FCUs) and split units, enhancing the performance of air conditioning systems.
- Executed the installation of water supply and drainage piping systems to ensure robust functionality.
- Installed complete ductwork with air outlets, ensuring optimal air distribution and indoor air quality.
- Created meticulous as-built drawings for thorough documentation and future reference.

**Residential Compound Dr. Mohamed Alturky | Riyadh, KSA**

**Design and execution HVAC and plumbing systems for (1 palace, 10 villas and 1 masjid)**

Prepare plumbing calculations, tender drawings and BOQs Prepare HVAC calculations, tender drawings and BOQs Prepare builder's work drawings

Install booster, transfer, submersible pumps.

Install all Package, FCUs and split units for AC systems Install all ventilation fans

install all water supply and drain pipes install all duct work with air outlets

Prepare as-built drawings

**Commercial and Offices Building for Princess Haya Bint Abdullah Bin Thania Al Saud. | Riyadh, KSA**

**Design and execution HVAC, firefighting and plumbing systems.**

Prepare HVAC, plumbing, firefighting calculations

Prepare tender drawing and BOQs Prepare shop drawings

Install all AC units (FCU) and duct work with air outlet.

Install all ventilation fans

install all drainage and water supply system (pipes - pumps - tanks) Install all firefighting system (pipes - valves - FHC - Pump)

**STC Head Offices | Riyadh, KSA**

**Design and execution HVAC system (207 fcus)**

Prepare thermal calculations, tender drawings

Prepare shop drawings.

Prepare HVAC submittals for consultant

Install all FCU units and ventilation fans Install all duct work with air outlets

prepare as-built drawings

**Amazon Warehouse | Macca- Dammam – Riyadh-Abha-Jedah-Almadina**

**Execution HVAC, firefighting and plumbing systems**

Prepare shop drawings.

Prepare all mechanical submittals for consultant Install all FCU and split units

Install all duct work with air outlets

install all drainage and water supply system ( pipes -pumps - tanks- heaters) Install all firefighting system ( pipes-FHC - fire hydrant - pumps )

Install fire smoke fans

install FM200 and foam systems

prepare as-built drawings

**Healthy club in Naif Arab university for S.S | Riyadh, KSA**

**Design and execution plumbing system.**

Prepare drain and water supply calculations

prepare tender drawings

Prepare all Plumbing submittals for consultant

prepare shop drawings

install all pipes, valves, heaters for the systems

**Awqaf Alrajhi | Riyadh, KSA**

**Execution firefighting system.**

Prepare firefighting shop drawings for 3 floors

Prepare all firefighting submittals for consultant

install all firefighting pipes, sprinklers, valves, FHC

Install FM200 system

Prepare as-built drawing.

**Public Investment Fund head office. (PIF) | Riyadh, KSA**

**Execution firefighting system for 2 floors at KAFD building 5.08.**

Prepare firefighting shop drawings for 2 floors

install all firefighting pipes, sprinklers, valves, FHC

Install FM200 system

Prepare as-built drawing.

**King Salman Park Head offices | Riyadh, KSA**

**Execution firefighting system for 2 floors at KAFD building 3.05**

Prepare firefighting shop drawings for 2 floors

install all firefighting pipes, sprinklers, valves, FHC

Install FM200 system

Prepare as-built drawing.

**Sport Boulevard Head offices**

**Execution firefighting system for 2 floors at KAFD building 3.05**

Prepare firefighting shop drawings for 2 floors

install all firefighting pipes, sprinklers, valves, FHC

Install FM200 system

Prepare as-built drawing.

**Taqaful Alrajhi | Riyadh, KSA**

**Execution firefighting system at king Abdallah road.**

Prepare firefighting shop drawings for 6 floors

install all firefighting pipes, sprinklers, valves, FHC

Install FM200 system

Prepare as-built drawing.

**Tourism development fund (TDF) | Riyadh, KSA**

**Execution HVAC, firefighting and plumbing systems for 3 floors at KAFD building 3.05** Prepare shop drawing for HVAC system

Prepare shop drawing for drain and water supply systems

Prepare firefighting shop drawings for 3 floors

Install all duct work and air outlets

install all firefighting pipes, sprinklers, valves, FHC

Install FM200 system

Install all drainage and water supply system (pipes - pumps-valves)

Prepare as-built drawing.

**Renovation of Sultana Mall | Riyadh, KSA**

**RE-Design and execution HVAC, firefighting and plumbing systems**

Prepare calculations for HVAC, firefighting, water supply, drainage and rain water systems.

Prepare design drawings for HVAC, firefighting, water supply, drainage and rain water systems.

Prepare mechanical BOQs

Prepare shop drawings HVACs, firefighting, water supply, drainage, irrigation, LPG and rain water systems

Prepare all mechanical submittals for consultant

Install all Fire Fighting systems (AC units - ventilation fans - air ducts - air outlets)

Install all HVAC system (fire pump - B.S and HDPE pipes - FHC - fire hydrants - sprinklers - FM200)

Install all drainage and water supply systems (pipes - valves - pumps - heaters- manholes - catch basin)

Install all LPG system (tanks -vaporizers - regulators - Gas Boxes - pipes)

Install all water features systems (pipizes- nozzles - filtration pumps - valves)

**Oxygen Gym | Riyadh, KSA**

**Worked as a Mechanical Consultant**

Prepare calculations for HVAC, drainage and water supply (cold-hot)

Prepare BOQs for mechanical work

Reviews all mechanical submittals

Supervision of all mechanical work

**SAUDI POST | Riyadh, KSA**

**Design HVAC system for Alda'ery Branch**

Prepare HVAC calculations

Prepare tender drawings and BOQs

**Bupa Head Offices | Riyadh, KSA**

**Execution HVAC, firefighting and plumbing system – KAFD building 4.02.**

Prepare shop drawing for HVAC system for 2 floors

Prepare shop drawing for drain and water supply systems for 2 floors

Prepare firefighting shop drawings for 2 floors

Install all duct work and air outlets

install all firefighting pipes, sprinklers, valves, FHC

Install FM200 system

Install all drainage and water supply system (pipes - pumps-valves)

Prepare as-built drawing.

**Sport for All Head offices | Riyadh, KSA**

**Execution firefighting and plumbing system – KAFD building 4.07.**

Prepare firefighting shop drawings

install all firefighting pipes, sprinklers, valves, FHC

Install FM200 system

Prepare shop drawings for drainage and water supply systems

Install all drain and water supply systems (pipes - valves - pumps - heaters)

Prepare as-built drawing.

**NDMC Head Offices | Riyadh, KSA**

**Execution firefighting and plumbing system 3 floors – KAFD building 4.10.**

Prepare firefighting shop drawings

install all firefighting pipes, sprinklers, valves, FHC

Install FM200 system

Prepare shop drawings for drainage and water supply systems

Install all drain and water supply systems (pipes - valves - pumps - heaters)

Prepare as-built drawing.

**Ajlan Warehouse | Riyadh, KSA**

**Execution firefighting and HVAC systems** Prepare shop drawings.

Install Package units

Install all duct work (perforated fabricated duct)

Install all firefighting system (pipes-FHC - pumps)

install FM200

prepare as-built drawings

**MINISTRY OF CULTURE Head Offices (MOC) | Riyadh, KSA**

**Execution HVAC, firefighting and plumbing system – KAFD building 5.04**

Prepare shop drawing for HVAC system

Prepare shop drawing for drain and water supply systems

Prepare firefighting shop drawings for 3 floors

Install all duct work and air outlets

Install FCU with chilled water pipes and hookup

install all firefighting pipes, sprinklers, valves , FHC

Install FM200 system

Install all drainage and water supply system (pipes - pumps-valves)

Prepare as-built drawing.

## EDUCATION

**B. Sc. In Mechanical Power Engineering., Faculty of Engineering, Mansoura University | 2014**

## SKILLS

HVAC  Plumbing  Firefighting  Shop Drawing  Ventilation  Hydraulic Calculations  Chilled Water

## LANGUAGES

Arabic (Superior/Native)  English (Advanced High)

## PERSONAL DETAILS

| Nationality | Date of birth | Marital status | Driving license                 |
|-------------|---------------|----------------|---------------------------------|
| Egyptian    | 17 Mar 1992   | married        | Driver's Saudi license private. |