

ENGR. KAMAL RAM — SR. MECHANICAL (PROJECT / DESIGN) ENGINEER

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A Senior Design Engineer specializing in Plumbing and Fire Fighting Systems at NBTC (Naser Mohamed Al-Baddah Trading & Contracting Co.) in Kuwait. He has extensive experience in designing, executing, and installing these systems in residential & commercial high rise buildings, and military projects, including US military warehouses and aircraft hangers. Proficient in AutoCAD, hydraulic calculations, seismic brace design, and various fire protection and plumbing codes like NFPA and UFC.

At NBTC, been involved in major projects such as the Kuwait F-18 E/F Super Hornet project at Al- Jaber Air Base and APS 500 Warehouses in Camp Arifjan. His role includes creating design and shop drawings, performing hydraulic calculations, and ensuring compliance with relevant codes and regulations.

EDUCATION & CERTIFICATES

Bachelor of Technology (B. Tech) in Mechanical Engineering

from *Regional Engineering College(REC/NIT)*, Hamirpur, Himachal Pradesh University, India, Passed in May 2002 in FIRST Division.

Member of Kuwait Society of Engineers(KSE) Association

Kuwait Fire Brigade License [KFD Card].

KEY SKILLS

- Design of Fire Fighting System as per NPFA 13 and UFC codes
- Execution of Plumbing and Fire Fighting Works on site.
- Hydraulic Calculations and Seismic Brace Design
- Proficient in AutoCAD to create design and shop drawings
- Knowledge of UPC, NSPC, KFD Codes, NFPA 13 and UFC Codes
- Cost estimation and tendering works.

PROFESSIONAL PROFILE

21 years' Work Experience

- Experience in execution of Plumbing and Fire Sprinkler system, Fire Hydrants and Standpipe / Hose system.
- Experienced in design of Fire Protection and Plumbing system including detail shop drawings as per NFPA 13.
- Responsible for tender design drawings, BoQ, schedules and submission.
- Ability to design complete Fire Fighting and plumbing system to current legislations and codes of practice for various types of buildings (commercial and residential) based on client requirements and specifications.
- Ability to do hydraulic calculations for fire sprinkler system in HASS.
- Perform drainage load and water supply calculations for plumbing system.
- Ability to do Seismic Brace design and calculations.
- Experience of having worked on AutoCAD for preparing Design and detail Shop drawings as per NFPA 13.

- Knowledge of Plumbing and Fire Codes, UPC, NFPA and UFC (US Military codes for Aircraft Hangers/ Warehouse Buildings).
- Experience in design of Fire Protection system for US Military warehouses and hanger's projects
- Worked on cost estimation and tender submission.
- Fire Fighting Design of JPF 4 & 5 (Jurassic Production Facility-KOC)

**EMPLOYMENT
DETAILS**

04-Nov-2019 to Present (Four years)

NBTC – Naser Baddah Trading & Contracting Co., Kuwait

Designation: Sr. Design Engineer – Plumbing and Fire Fighting

Responsibilities:

- Responsibility for the overall design of Plumbing and Fire Protection System and, including Concept Design, Schematics, Hydraulic Calculation and Seismic Brace design etc.
- Responsible to create Design and Shop Drawings Fire Fighting System and Plumbing System for US Army Hanger and Warehouse projects.
- Project engineering works – review specifications, prepare BoQ, request quotations and prepare comparison sheet.
- Cost estimation and tendering works
- Prepare Fire Fighting Submittals to Kuwait Fire Brigade and follow up for approvals.

Major Project Highlights:

- Kuwait F-18 E/F Super Hornet, Al Jaber Air Base, US Air force and Navy
Duration: March 2022 – Present.
This project consists of overhead wet pipe sprinkler system and foam grate nozzle system. Created Fire Protection Shop drawings for Maintenance Hanger, Corrosion Control Hanger and Fire Pump House. Reviewed design given by USACE. Performed Hydraulic Calculations in HASS. Revised designed drawings given by USACE to meet NFPA and UFC codes. Designed Seismic Brace system and performed calculations as per NFPA 13. Worked under the supervision of Fire Protection Specialist from USA.
- APS 500 Warehouses in Camp Arifjan (US Army)
Duration: April 2020 to October 2021.
This project consists of 05 Nos of typical Warehouses each of area 60,000 SQFT used for vehicle storage. It was protected by overhead wet pipe sprinkler system. Responsible for complete design of overhead sprinkler system. Designed Seismic Brace system and performed calculations as per NFPA 13.
Supervise Site Engineer for installation of Fire Protection Works. Worked under the supervision of Fire Protection Specialist from USA.
- QCS Building at Al-Zour Refinery (KIPIC)
- Duct Workshop, NBTC

- New Workshop, NBTC
- Bar Bending Workshop and Steel Trading Yard, NBTC
- JPF 4 & 5 (Jurassic Production Facility) – Fire Fighting Design
- Construct 35th brigade multifunctional warehouses(USACE) – Fire Fighting Design as per UFC and NFPA 13 codes.

27-Oct-2013 to 31-Oct-2019 (Six Years)

Gulf Engineering Company (GEC), Kuwait

Designation: Project Engineer – Plumbing and Fire Fighting

Responsibilities:

- Execution of Plumbing and Firefighting services
- Review contract, BoQ, specifications and design drawings
- Material take-off and request quotations from suppliers
- Prepare price comparison sheet and send to head office
- Prepare material submittal for consultant approval
- Prepare shop drawings for approval

Major Project Highlights:

- **Fawsec Campus at Sabah Al-Salem**
Duration: Apr 2016- Oct 2019
Fawsec campus, located in Sabah Al Salem Area of Kuwait City, has been designed as a group of interconnected midrise buildings, providing residential units (190 one-bedroom apartments), leisure and activity units. The total built up area is approximately 19,000 sqm and the buildings are finished to the highest standards.
This building was protected by wet pipe sprinkler system and fire hose system. Building was fed by 02 Nos electric fire pump and 227 m³ water tank. I was responsible for creating shop drawings and material approval for Plumbing and Fire Fighting System. Submit Fire Fighting drawings for KFF approval. Prepare technical and price comparison sheet for head office approval. Supervised on-going work on site. Testing and commissioning. KFF approvals. Worked under a supervision of Sr. Project Engineer.
- **C4i / Main Support Building in Ahmadi (Client: KNPC)**
Duration: Oct 2013- July 2014 & Feb 2017 to Sep 2019
C4i (Command, Control, Communication, Computers and Intelligence) project with KNPC (Kuwait National Petroleum Company) at Al Ahmadi.
This building was protected by wet pipe sprinkler system and fire hose system. Fire Extinguishers were uniformly distributed all over the building. I was responsible for creating shop drawings and material approval for Plumbing and Fire Fighting System. Prepare technical and price comparison sheet for head office approval. Supervised on-going work on site. Testing and commissioning. KFF approvals. Worked under a supervision of Sr. Project Engineer.
- **Egaila and Ahmadi NHC (Testing, Commissioning and As-Built Drawings)**
It consists of Supermarket & Shops, Social Development Center, Banks, Library, Mosque, Clinic and some Governmental Offices.
Each buildings are protected by a combined wet sprinkler and standpipe system. In addition, clean agent automatic flooded type fire suppression system is used for HT and LT rooms. Generator room is protected by Foam System. Pillar hydrants are distributed all over.

- Gulf Engineering New Workshop in Ahmadi
This is a three story office building with one basement as workshop.
The building is protected by a combined wet sprinkler in basement and Fire Hose Cabinet (FHC) on upper floor. Fire Extinguishers are distributed all over the building.

10-Nov-2009 to 11-July-2013 (Three Years)

Contracting and Construction Enterprises (CCE), Riyadh, KSA

Designation: Project Engineer – Plumbing and Fire Fighting

Responsibilities:

- Execution of plumbing and firefighting works
- Material take-off and prepare BoQ
- Create shop drawings in AutoCAD

Project Highlights:

- Five Star Hotel and Convention Center (ITCC)
This project calls for construction of Five Star Hotel and Convention Centre. The hotel will include 230 rooms and 40 suits. The package includes construction of 3 basements (for parking), ground & mezzanine floor and 5 storey hotel rooms & suits. Basement to Ground Floor Area=36,000 m²& 1st Floor to 5th Floor Area = 2,664 m².
Project Value: 150 Million US\$.

The building is protected by a combined wet sprinkler and standpipe system. In addition, clean agent automatic flooded type fire suppression system is used for server rooms, electrical rooms, communication rooms, etc. Portable fire extinguishers are distributed in corridors and designated areas.

- Study of project specifications and drawings
- Review material submittals and approvals
- Prepare technical queries for shop drawings clarifications
- Prepare builder works (MEP Openings) drawings
- Supervise mechanical work on the site and make sure that work is executed as per approved drawings
- Material take-off and prepare schedule of requirements
- Track on material deliver on site in time
- Created **shop drawings** for plumbing and fire protection.

26-Oct-2005 to 27-Aug-2009 (Four Years)

Amin Construction Pvt. Ltd, Male, Maldives

Designation: Mechanical Engineer

Responsibilities:

- Prepare shop drawings for approval
- Prepare as-built drawings
- Material take-off
- Execution of plumbing services

Project Highlights:

- Fourteen Story Velaanage Office Building, Male
 1. Study of contract document, designs and drawings.

2. Prepare plumbing and firefighting shop drawings in AutoCAD
 3. Preparing plumbing, electrical and air-conditioning schedule & material requirements
 4. Create fire protection riser diagrams
 5. Co-ordination with sub-contractors and consultants
 6. Responsible for preparing daily, weekly and monthly progress report
- Five Storey Basic Blocks Hulmale – Block 1 (Residential Building)
 1. Create as-built drawings of plumbing, electrical and fire-fighting.
 2. Meet with client to discuss these drawings.
 3. Prepare a organized set and submit these drawings for approval

02-Aug-2002 to 30-Sep-2005 (Three Years)

Smart Conveyor Design Solution Pvt. Ltd., Mohali, India.

Designation: Mechanical CAD Engineer

Smart Conveyor Design Solutions Pvt Ltd (Aerowerks Inc, Canada) – Specializes in the design and manufacturing of customized material handling system for dish room & food service industry. To meet growing business needs, Aerowerks opened an office in Chandigarh.

- Brought about a successful business and helped Aerowerks to setup a design and customer care office in India
- Review and create presentation drawings in AutoCAD and send to Canadian office
- Review, check and create fabrication / production drawings in AutoCAD and SolidEDGE and send to workshop in Canada
- Coordinate with Canadian staff
- Train and motivate a team of graduate engineers

**PERSONAL
DETAILS**

Date of Birth : 01 December, 1978

Nationality : Indian

Languages : English and Hindi

Marital Status : Married

Kuwait Driving License No : 278120109496 valid till 18/09/2024