

Altitude Refrigeration Solutions Pte. Ltd is a progressive, specialist mechanical service and refrigeration contractor with a group head office in Nadi, a regional office in Australia, and a fabrication facility in Suva. We operate throughout Australia, New Zealand, and the South Pacific.

Electrical Engineer (HVAC-R)

We are seeking a highly skilled and experienced Electrical Engineer with expertise in Commercial / Industrial electrical applications, Fire Detection and Suppression Systems, and HVAC-R (Heating, Ventilation, Air Conditioning, and Refrigeration) Systems. The ideal candidate will be responsible for designing and specifying, implementing and maintaining electrical systems for a variety of commercial applications and ensuring optimal performance, efficiency, and compliance with industry standards.

The role is based at the Nadi Head Office.

Key Responsibilities:

1. Design and Development:

Designing and developing electrical components, systems, and products like motors, generators, and communication systems.

- Design, analyse, and optimize electrical systems for Commercial, Industrial, Fire Detection and Suppression and HVAC-R applications.
- Develop electrical schematics, wiring diagrams, and control systems.
- Perform electrical load calculations and energy efficiency assessments.
- MSSB / MCC / LMCP / DB Panel Design
- Load Schedule
- Cable Schedule
- Power & Lighting Layout Design
- Grounding System Design
- Wye Delta Motor Wiring connection

2. Testing and Evaluation:

- Testing and evaluating electrical systems and components to ensure they meet specifications and safety standards.
- Assist in commissioning, testing, and maintenance of electrical systems.
- Ensure all testing and commissioning protocols align with EFL's power quality, metering, and load control requirements.
- Wye Delta Motor Wiring connection

3. Project Management:

- Directing manufacturing, installation, and testing of electrical systems, often working with Project Managers to meet deadlines and budgets.
- All activities must be performed in adherence to Energy Fiji Limited (EFL) electrical codes and safety standards to ensure legal compliance, system integrity, and personal safety.

4. Troubleshooting and Maintenance:

- Identifying and resolving problems in electrical systems and equipment, as well as developing maintenance procedures.
- Troubleshoot, diagnose, and resolve electrical issues.
- Carry out regular audits of electrical systems to identify hazards and nonconformances with EFL compliance requirements.

5. Compliance and Safety:

- Ensure all electrical design, installation, testing, commissioning, and maintenance works strictly complies with:
 - Energy Fiji Limited (EFL) Electrical Installation Standards and Codes, including the EFL Supply Standards Manual.
 - Electricity Act 2017, including all associated regulations and amendments.
 - AS/NZS 3000:2018 Wiring Rules, where applicable, and integration with the Fiji National Building Code.
- Implement and enforce Lockout/Tagout (LOTO) protocols and safety procedures in line with the Fiji OHS regulations.

Key Responsibilities:

6. Research and Development:

- Conducting research to develop new electrical technologies and applications.
- Stay updated on emerging technologies and advancements in electrical, fire detection and suppression and HVAC-R engineering.

7. Communication and Collaboration:

- Collaborating with other engineers, technicians, and contractors to ensure successful integration of electrical systems and project outcomes.
- Liaise with EFL-authorized inspectors to certify installations and modifications before energization.

8. Documentation and Record Keeping:

- Creating and maintaining technical documentation, including drawings, specifications, and reports.
- Preparing engineering reports, recommendations and quotations for clients.
- Preparing material submissions to consulting engineers.
- Maintain compliance documentation for EFL inspections and maintain up-to-date knowledge on amendments to local electrical laws and standards.

9. Cost Estimation:

- Preparing cost estimates for projects and materials.
- Preparing tenders for electrical applications on multi-faceted projects.

10. Fire Detection and Suppression Systems:

- Knowledge in designing, installing, and maintaining electrical infrastructure and automation that powers and controls fire detection and suppression systems.
- This includes everything from the wiring and connection of smoke and heat detectors to the integration with other building systems like HVAC and elevators.

Required Skills/Abilities:

- Bachelor's degree in Electrical Engineering (or related field).
- 10 years of experience in electrical engineering with a focus on commercial applications, power generation, fire and HVAC-R systems.
- Strong knowledge of electrical circuits, motor controls, VFD's, and building automation systems.
- Proficiency in AutoCAD, Revit or other electrical design software.
- Familiarity with EFL Standards Manual, Electricity Act 2017, and AS/NZS 3000:2018 Wiring Rules.
- Excellent problem-solving and analytical skills.
- Ability to work independently and in a team environment.
- Effective communication and project management skills.
- Certification in HVAC-R systems, Fire Detection and Suppression and electrical engineering.
- Electrical Wireman's License will be an added advantage.
- Experience with smart building technologies and energy management systems.
- Knowledge of renewable energy integration in HVAC systems.
- Must possess a clean valid Group 2 driver's license.

Send us your application with an updated CV and work portfolio addressed to the HR Officer on email: **recruitment@altituderefrigeration.com.fj**
Please include the position you are applying for in the subject line.