

Professional Summary:

Mr. Hansen is a licensed professional electrical and mechanical engineer. He has over 9 years of combined experience in Mechanical/Electrical/Plumbing (MEP) consulting, electrical design build construction, and forensic engineering. As a design engineer, he successfully coordinated and designed commercial, industrial, and residential construction projects. He oversaw a wide variety of high-profile projects from the initial planning phase to installation, testing, and troubleshooting of the completed product. His background in construction has given him a clear understanding of subjects related to electrical, HVAC, plumbing, and building codes.

His design expertise includes, but is not limited to:

- Design for office, retail, sports arena, food service, healthcare facilities, and industrial buildings
- Photometric lighting analysis
- Power distribution
- Electrical protection, coordination and power studies
- Electrical code compliance
- Lighting selection, layout, and controls
- Electrical cost estimating
- Photovoltaic solar design
- Uninterruptable Power Supply (UPS) systems
- Title 24 compliance

As a forensic engineer his experience includes, but is not limited to:

- Assessing commercial and residential building damage due to fire, flood, and vandalism
- Root cause analysis of consumer product and appliance failures
- Electrical repair cost estimating and code compliance
- Diesel generator failure assessment and repair cost estimate
- Medium voltage switch gear failure analysis
- Transformer testing and failure analysis
- Electrical bus duct failure analysis
- Electrical shock and injury investigations
- Electric vehicle charger testing and root cause failure analysis
- Photovoltaic solar system and BESS failure analysis
- Utility system failure investigations
- Boat lift failure analysis
- Mining equipment failure analysis

Licenses and Certifications:

Professional Electrical Engineer, California, License E22878

Professional Electrical Engineer, Nevada, License 028502

Professional Electrical Engineer, Arizona, License 73103

Professional Electrical Engineer, Hawaii, License 19399
Professional Mechanical Engineer, California, License 41152
Professional Mechanical Engineer, Nevada, License 028502
Professional Mechanical Engineer, Arizona, License 76385
Professional Mechanical Engineer, Utah, License 12937233-2202
Professional Mechanical Engineer, Colorado, License PE.0061089
Professional Mechanical Engineer, New Mexico, License 28011
F.I.R.E., Certified Fireplace and Chimney Inspector
OSHA 10 Certified
EFI Global - Advanced Roofing Certificate
FAA - Part 107 Remote Pilot Certificate

Project Experience:

Facebook, Menlo Park, 125 & 135 Constitution Drive New construction of commercial office campus

Lead engineer for a team of (6) electrical designers and drafters. Completed (2) adjacent 8 level, 225,000 square foot office building permit drawing sets for new construction. Design included, lighting layout and controls, power distribution for office and food service areas, and MEP coordination.

Apple Computer, Cupertino, 4 Infinite Office campus tenant improvement

Lead engineer for complete electrical permit drawings for a 2 level 33,600 square foot office campus building. Design included, lighting layout and controls, power distribution for office and food service areas, and MEP coordination.

Levis Stadium, Santa Clara, 4949 Centennial Blvd Tenant improvement

Electrical engineer for all TI work of Levis stadium. Design work included, lighting layout and controls for indoor and outdoor lighting, power distribution for stadium and food service areas, and MEP coordination.

Professional Experience:

EFI Global Inc, Forensic Electrical Engineer, 2020- Present
Cupertino Electric Inc, Electrical Engineer, 2016 – 2020
Sacramento Engineering Consultants, Electrical design Intern, 2015 – 2016

Education:

Bachelor of Science, Electrical and Electronic Engineering, California State University
Sacramento, California, 2016

Specialized Education:

Fire Sprinkler Systems & Failures: EFI Global Training (1 hr.), October 23
Carbon Monoxide Incidents: EFI Global Training (1 hr.), May 23
Transmission and Distribution Service Installation: Vector Solutions (1 hr.), Jan 24
Elevator and Escalators: EFI Global Training (1 hr.), Feb 24
Fireplace and Chimney Inspection Program: F.I.R.E. Services (48 hr.), Apr 24
Corrosion Science and Engineering: University of Manchester, May 24
Ceramic Failures: EFI Global Training (1 hr.), May 24
Deposition Preparation: EFI Global Training (1 hr.), May 24
Equipment Damage Assessment – CAT Water Exposure: EFI Global Training (1 hr.), May 24
Advanced Roof Training – EFI Global Training (24 hr.), June 24
The Scientific Method – EFI Global Training (1 hr.), July 24
Forensic Engineering of Off-Site Fabricated Structures – EFI Global Training (1 hr.), Aug 24
Common Mistakes When Cleaning Circuit Assemblies – Aqueous Technology (1 hr.), Aug 24
Concrete Tile Roof Assessment- EFI Global Training (1 hr.), Aug 24
CSST- Products, Codes, Lightning Interaction and Related Fires- EFI Global Training (1 hr.), Sept 24
Fraudulent Water Losses & Case Studies – EFI Global Training (1 hr.), Sept 24
Alkali- Aggregate Reactions: The Silent Culprit Behind Concrete Degradation- EFI Global Training (1 hr.), Oct 24