

Development Engineer (Sustainable Buildings)

Job Description:

The Development Engineer (Sustainable Buildings) will have two primary areas of responsibility: (1) Perform seismic damage analysis and calculations for the specific factory-manufactured buildings under development, using performance-based engineering concepts and formulas; and (2) develop details for structural and building components that are factory-manufactured and bolted together onsite as finished, ready-to-occupy facilities.

More specific job duties include:

- Implement understanding of performance-based engineering to conduct non-standard seismic design that is informed by structure performance goals and level of acceptable damage.
- Develop procedures and software for the seismic damage analyses applicable to the factory manufactured buildings and comparisons with typical code compliant construction.
- Implement MATLAB software routines to perform the seismic damage analyses that are integrated with the other EPS MATLAB routines for structural and building performance evaluations.
- Implement FEMA P-58 damage calculation packages for the factory-manufactured buildings and typical code compliant construction.
- Develop techniques for the site assembly connections of factory-manufactured building components, resulting in efficient and effective site assembly of complete usable facilities.

Position Requirements:

- Education/Experience Requirements: Master of Science degree or foreign equivalent in Civil Engineering, Structural Engineering, or a closely related field; and 1 year of post-baccalaureate, progressive experience in the same or similar occupation.
- 1 year of employment experience, graduate-level research, or graduate-level coursework on performance-based seismic engineering concepts, including methods for designing and optimizing structures based on performance criteria.
- Ability, gained through employment experience, research, or coursework, to conduct complex design and analysis of non-standard earthquake solutions, including isolation and rocking systems.
- 1 year of experience with factory-manufactured structural and building components that are site-assembled.

- 1 year of experience conducting seismic damage analysis and calculations for factory-manufactured buildings.
- 1 year of experience with MATLAB software routines.
- Software development skills, gained through coursework or employment experience, to develop software for conducting seismic performance risk analysis.
- Knowledge of conventional construction practices, gained through coursework or employment experience, to serve as background for an understanding of EPS' competition.

Job Location:

Based out of Earthquake Protection Systems offices located at 451 Azuar Drive, Building 759, Mare Island, Vallejo, California 94592.

About Us:

EPS engineers are the world's leading seismic isolation engineering experts. EPS has three principal engineers that each have over 20 year's professional experience specializing in implementing state-of-the-art seismic isolation solutions. EPS seismic isolation solutions have substantially improved the seismic performance for many of the world's most important seismically isolated structures while significantly reducing construction costs. EPS's Friction Pendulum solutions are engineered for each application considering seismic performance criteria, structure requirements, seismic hazards, and construction costs.

To Apply:

Email resume and cover letter to victor@earthquakeprotection.com.