



---

## EXECUTIVE SUMMARY

Fourteen years of design and management experience as a structural engineer. Varied work experience ranging from producing structural calculations to high-level client maintenance. Exceptional ability to maintain effective working relationships, and to mentor less experienced engineers. Extensive solar experience and knowledge in methods and trends in the solar structural space.

---

## CENTERS OF EXCELANCE

### Code Material:

- IBC - International Building Code
- CBC - California Building Code
- IEBC – International Existing Building Code
- FEMA 807-P – Seismic Evaluation and Retrofit of Multi-Unit Wood-Framed Buildings with Weak First Stories
- AISC - Specification for Structural Steel Buildings
- ACI 318 – Building Code Requirements for Structural Concrete and Commentary
- NDS - National Design Specifications for Wood Construction
- ACSE 7 – Minimum Design Loads for Buildings and Other Structures

### Software:

RISA 3D, AutoCAD, Forte

---

## RELEVANT EXPERIENCE

RJM Structural Engineering – Private Engineering Consulting Firm

**2004 – Present**

### **Principal Engineer** (12 years)

I provide structural engineering consulting services to architects, contractors, and commercial clients. I am often the primary design professional. The bulk of my current practice consists of the repair/reconstruction of fire damaged buildings. In addition, I have extensive experience in wood framed residential, in commercial construction, and in producing structural calculations and drawings related to solar power production. Previous solar related clients include, Powerlight Corporation, SunPower Corporation, PVT Solar, Sun Edison, Energy Innovations, and Solyendra. My experience in the solar industry includes:

- Evaluated existing roof structures of various types for their ability to support the added load of solar panels.
- Routinely applied ASCE 7 loading criteria and International Building Code requirements, along with local standards, to the design of solar components and their connections.
- Structural design of numerous solar plants including large scale array installations in Southern California, Nevada and Spain.
- Developed spreadsheets and other design tools to aid in the design and installation of standardized solar products.

- Worked with wind engineering professionals to developed effective wind tunnel test regimens. Developed spreadsheets to import, and apply wind tunnel data to solar tracker designs.
- Developed testing regimens and supervised testing to demonstrate product compliance for ECC acceptance.
- Routinely work in tandem with other engineering disciplines (Mechanical, Electrical) and computer programmers to develop efficient, easy to fabricate, and cost effecting tracker designs.

#### ZFA Structural Engineers

2002 - 2004

##### **Project Engineer** (2 years)

I was responsible for a number of large and complex projects. Due to the nature of this firm, I performed the complete set of analysis and design tasks, in addition to interfacing with clients and other design professionals. Projects I was responsible for include:

- The structural design of a very large library (145,000 sq ft) for a community college client.
- A library building for a new high school.
- A new high school classroom building.
- A new wood framed multi-purpose building for an elementary school.

#### DASSE Design, Inc.,

1995 - 2001

##### **Project Engineer** (6 years)

I was involved in projects that required me to manage staff engineers and also required significant interaction and coordination with other design professionals. Projects I was responsible for include:

- The structural design of a new local theater building.
- A series of large new commercial buildings for a national client.
- Numerous seismic retrofits of school buildings in the San Francisco Bay Area.
- A number of seismic retrofit projects for high tech firms.

---

#### REGISTRATION

- S.E., Registered Structural Engineer, State of California, License number: S 4439.
- P.E., Registered Professional Civil Engineer, State of California, License number: C 054389.

---

#### EDUCATION

- M.S., Civil Engineering, University of Illinois, Urbana, IL  
Curriculum complemented my undergraduate background in structures. Studies included Finite Element Analysis, Structural Dynamics and course work in materials engineering with a concentration on concrete.
- B.S., Civil Engineering, University of Illinois, Urbana, IL.  
Emphasis on structural design and

---

#### PROFESSIONAL ACTIVITIES

- Structural Engineers Association of Northern California.
- San Francisco Planning and Urban Research Association RES1016