



## **SAM BRUNSWICK, P.E.**

### **SENIOR ENGINEER**

Sam Brunswick is a Senior Engineer at Taylor Engineering with a commitment to sustainable design and operation for new and existing buildings. Mr. Brunswick has over eight years of experience in building science and mechanical systems. Prior to Taylor Engineering, he spent four years in the Building Technologies Division at Lawrence Berkeley National Laboratory. While there, he focused on passive and low energy design strategies for commercial buildings, developing, coding and implementing new natural ventilation models in the simulation software EnergyPlus and creating tools for rapid parametric analysis of thousands of building design options.

At Taylor Engineering, Mr. Brunswick enjoys working with a team of creative, experienced and inspired engineers who drive the building industry toward low energy, cost effective and occupant-driven building designs. In his three years with Taylor Engineering, he has developed a proficiency in design and project management for new construction and existing buildings, including data centers, commercial kitchens, natatoriums, and office buildings and has guided many of his projects through LEED certification. In addition, he leverages his expertise in building science and energy simulation in helping to develop Taylor Engineering's in-house energy modeling and load calculation standards.

### **EDUCATION**

B.A. Physics, Claremont McKenna College, 2007

M.S. Mechanical Engineering (Heat Transfer) University of California Berkeley, 2012

### **REGISTRATIONS**

Mechanical Engineer, California #38099

### **AFFILIATIONS**

American Society of Heating, Refrigeration, and Air-Conditioning Engineers

International Building Performance Simulation Association

### **YEARS OF EXPERIENCE**

4 years with Taylor Engineering

### **PREVIOUS EXPERIENCE**

2010 – 2014 Lawrence Berkeley National Laboratory, Berkeley, CA. Building Energy Modeling Researcher.

Developed and utilized energy simulation software and tools, including EnergyPlus, with a focus on the modeling of passive design strategies and low energy HVAC systems.

2009-2010 Center for Maximum Potential Building Systems, Austin, TX. Sustainability Researcher.

### **SELECTED PUBLICATIONS**

*Health and Economic Implications of Natural Ventilation in California Offices.* Building and Environment, Volume 67, September 2013, Pages 97-104.

*A Framework for Estimating the Potential Energy Savings of Natural Ventilation Retrofits for California Commercial Buildings.*



Proceedings of SimBuild 2012: 5th National Conference of International Building Performance Simulation Association, Madison.

*Application of a Stochastic Window Use Model in EnergyPlus.* Proceedings of SimBuild 2012: 5th National Conference of International Building Performance Simulation Association, Madison.

## **REPRESENTATIVE PROJECTS**

1330 Broadway	Oakland, CA 200,000 ft <sup>2</sup> . HVAC Commissioning.
Dolby Headquarters	San Francisco, CA 315,000 ft <sup>2</sup> , LEED NC Gold.
Emerald Glen Aquatic Center	Dublin, CA, 30,000 ft <sup>2</sup> , LEED NC Platinum.
Faxon Residence	Atherton, CA 20,000 ft <sup>2</sup> . HVAC Design.
ISE Campus	Sunnyvale, CA 250,000 ft <sup>2</sup> . HVAC Design.
NDA 20MW Data Center	Salt Lake City, UT. HVAC Commissioning.
NDA 24MW Data Center	Maiden, NC 200,000 ft <sup>2</sup> . HVAC Design.
NDA Data Center Logistics Building	Maiden, NC 40,000 ft <sup>2</sup> , LEED Gold. HVAC Design.
Oceanwide Towers	San Francisco, CA 2,000,000 ft <sup>2</sup> . HVAC Design.
San Francisco General Hospital	San Francisco, CA, 415,000 ft <sup>2</sup> , LEED NC Gold.
SDSU Aztec Student Union	San Diego, CA. 150,000 ft <sup>2</sup> . HVAC Commissioning.
Stanford University Green Earth Sciences	Stanford, CA, 104,000 ft <sup>2</sup> . Lab Controls Retrofit.
UC Berkeley I-House Kitchen	Berkeley, CA, 10,000 ft <sup>2</sup> . HVAC Design.
UC Berkeley I-House Office	Berkeley, CA, 5,000 ft <sup>2</sup> . HVAC Design.