

Steve Barg Portfolio

Partial List of Projects

Outdoor Pergolas throughout California

Description: Aluminum framing with alternative moment frame lateral system and custom detailing

Role: EOR

St Stephen's Episcopal Church repairs Belvedere, CA

Description: Steel and light-framing repairs due to severe water damage

Role: EOR

Small Home Addition Half Moon Bay, CA

Description: light-framing on surface-mounted foundation system

Role: EOR

Seismic Retrofits Residential throughout California

Description: foundation bolting, crawlspace bracing, and soft story retrofits

Role: EOR

Structural Forensics Residential and commercial throughout western US and Canada

Description: in depth structural inspection to include management of destructive and nondestructive structural testing and foundation evaluations

Role: EOR

Home Renovation Teresita Blvd, San Francisco

Description: removal of structural walls, new window and door penetrations, new raised deck

Role: EOR

StructureCraft Office Expansion Abbotsford, BC. 3-story addition

Description: Mass timber framing and lateral system

Role: Lead engineer through permitting while at StructureCraft

Seventh Day Adventist Regional Office Abbotsford, BC. 6-story midrise.

Description: Mass timber framing with concrete cores and basement

Role: Lead engineer through construction while at StructureCraft

Waldo's 40 Boulevard NE Atlanta, GA. 6-story office development.

Description: Mass timber framing with hybrid steel-brace lateral system

Role: Lead engineer through permitting while at StructureCraft

UMT Community Recreation Center Upper Macungie Township, PA.

Description: Long-span hybrid steel-mass timber portal frames, cost-optimized parametric design

Role: Lead engineer through permitting while at StructureCraft

Warehouse addition Salinas, CA

Description: two-story, light framing

Role: EOR

Home Addition South Lake Tahoe, CA

Description: two-story, light framing

Role: EOR

Bridges North Cascades National Park, WA

Description: 70ft steel and timber vehicle and trail bridges

Role: EOR

Solar Project 322 kW Utility solar project

Description: Steel piles with single-axis lateral

Role: EOR

Aircraft Hangars Camp Buehring, Kuwait

Description: 7-hangar Aircraft Maintenance hangar development

Role: EOR through schematic

Military Training Facility Shindand Airbase, Afghanistan

Description: New \$20M training facility

Role: Project Engineer

Hydraulic Steel Structures Little Rock, AR

Description: \$120M fabrication of 60ft-span steel bulwarks and lifting beams

Role: EOR through design and fabrication

Partial List of Publications

[Barg, S., *PhD dissertation: Integrated Steel Design through Automation*. Stanford University. May 2020.](#)

[Barg, S., Flager, F., & Fischer, M. *A design-focused, cost-ranked, structural- frame sizing optimization*. Journal of Building Engineering, 30\(July 2020\).](#)

[Barg, S., Flager, F., & Fischer, M. *A Method to Provide Integrated Design through Systems-Level Automation*. ASCE International Conference on Computing in Civil Engineering \(June 17–19, 2019, Atlanta, Georgia\).](#)

[Barg, S., Flager, F., & Fischer, M. *An analytical method to estimate the total installed cost of structural steel building frames during early design*. Journal of Building Engineering, 15\(August 2017\), 41–50.](#)

[Barg, S., Flager, F., & Fischer, M. *Decomposition strategies for building envelope design optimization problems*. In Simulation Series \(Vol. 47\).](#)