JULIAN MERCER

STRUCTURAL ENGINEER

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PROFESSIONAL SUMMARY

Licensed Structural Engineer with 10+ years designing steel, concrete, and seismic systems for commercial, healthcare, and mixed-use buildings. Delivers efficient frames and clear drawing sets that contractors can build with few field questions.

PROFESSIONAL EXPERIENCE

Associate Principal Jan 2023 - Present
Thornton Tomasetti, San Francisco, CA

- Direct structural design for a 22-story mixed-use tower in a seismic zone, managing a team of six engineers and delivering permit drawings on schedule.
- Switched a transfer level from a thick slab to post-tensioned beams, saving about 600 cubic yards of concrete.
- Reviewed peer calculations and approved shop drawings for steel connections across three active projects.
- Coordinated with the geotechnical consultant on mat foundation options, choosing a scheme that shortened excavation by about three weeks.
- Mentor five engineers through licensure study, and four passed the PE exam on their first attempt.
- Reviewed construction sequencing with the steel erector to confirm temporary bracing during erection.

Senior Project Engineer Feb 2019 - Dec 2022

- Designed a 5-story hospital addition with steel braced frames in ETABS and RAM, meeting state review comments in a single round.
- Answered 180 contractor RFIs and issued revised details within three days on average.
- Developed a seismic retrofit scheme for a 1960s concrete office building that avoided relocating tenants during construction.
- Prepared the structural basis of design and load criteria memo that guided the whole design team and the plan checker.
- Evaluated three alternative framing schemes with the architect and picked the one with the lowest steel tonnage per square foot.
- Observed rebar and welding at key stages and wrote field reports for the owner.

Project Engineer Jul 2016 - Jan 2019

- Produced gravity and lateral calculations for mid-rise steel and concrete buildings, checking results against hand estimates.
- Drafted plans and sections in Revit and coordinated clashes with MEP in weekly model reviews, closing about 90 issues per project.
- Inspected existing conditions on four renovations and wrote assessment letters for owners.
- Checked shop drawings for rebar and miscellaneous steel and returned markups on 45 sheets within the review window.
- Developed a spreadsheet for composite beam checks that the group reused on later buildings.

CORE SKILLS

ETABS | RAM Structural System | SAP2000 | Revit | AutoCAD | Seismic design | Steel and concrete design | Post-tensioned concrete | ASCE 7 and IBC | Structural calculations | Retrofit and assessment | RFI and submittal review | Peer review | Project management

EDUCATION

M.S. in Structural Engineering, University of California, Berkeley, Berkeley, CA

CERTIFICATIONS

Structural Engineer (SE) License, California | Professional Engineer (PE), Civil | Fundamentals of Engineering (FE) Exam Passed