Owner Sokol Blosser Winery
Architect Allied Works Architecture

General Contractor R&H Construction Engineering Office KPFF Engineers Construction Period 09/2012 - 07/2013

The new 5,000-square-foot wood-framed building was created for a founder of Oregon's winemaking industry. In addition to a tasting room with wine bar and lounge, the building includes a kitchen and dining room, library, wine storage, and a sunken courtyard. The unique roof and ceiling shape were created using custom plywood box beams, with top and bottom chords shaped to follow the desired roof and ceiling lines. These beams cantilever 6 m+ (20'+) over a terrace, leaving dramatic open spaces that are not typically created with wood-framed structures.

Scia Engineer was chosen as the analysis package for the roof to accommodate the non-orthogonal, irregular design. Engineers utilized CAD drawings generated by the architect to lay out roof framing, which was then imported directly into Scia Engineer.

Fully modeling the plywood box beams with their varying depths created both a visual reference- useful for both the engineering and architecture teams- and a more accurate understanding of anticipated roof deflections under gravity, snow loads, and wind loading.

## **KPFF Consulting Engineers - Portland**

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KPFF Consulting Engineers is a multi-office, multi-disciplinary engineering firm that provides a wide variety of engineering services to the design and construction industry both in the United States and abroad. Services include structural engineering, civil engineering, construction management, project management, surveying and a variety of specialty engineering services. Significant broad-based experience provides us with the ability to solve the most difficult and challenging problems. We have built a reputation as creative and innovative engineers who are focused on a high level of client service and excellence in everything we undertake.











