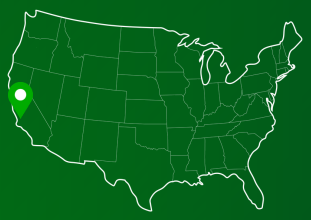
PROJECT PROFILE

William and Linda Frost Center for Research and Innovation
Cal Poly SATRC Complex
San Luis Obispo, California



THE BEAUTY OF BLOCK
CONCRETE MASONRY CHECKOFF

Photo Credit: © Magda Biernat/OTTO

PROJECT OVERVIEW

Awarded a Merit in Brick distinction, Cal Poly's Frost Center meets program criteria requiring at least 30% concrete masonry, pairing architectural clarity with structural rigor. Designed by ZGF Architects, the LEED Gold facility supports hands-on research within a flexible academic environment, where CMU contributes durability, fire resistance and long-term resilience in a region where building demands carry added importance.

PROJECT CHALLENGES

The Frost Center's scale and lab-driven program demanded a structural system that could support continuous use while meeting rigorous energy targets. Delivering durability and life safety alongside operational efficiency was central to the project.

WHAT MAKES THIS PROJECT UNIQUE?

The Frost Center translates Cal Poly's "Learn by Doing" approach into built form, shaping a complex academic program into an environment that supports hands-on work, visibility and continuous use. It is a building designed to withstand the pace and intensity of the work it supports.

CMU'S CONTRIBUTION TO PERFORMANCE & DESIGN

- CMU forms a substantial portion of the building's structural system, delivering durability, fire resistance and long-term reliability essential to a high-use academic facility.

ADVICE FOR OTHERS

> *"Masonry is at its best when materials work in concert, with block and brick combining to support both performance and architectural intent."*

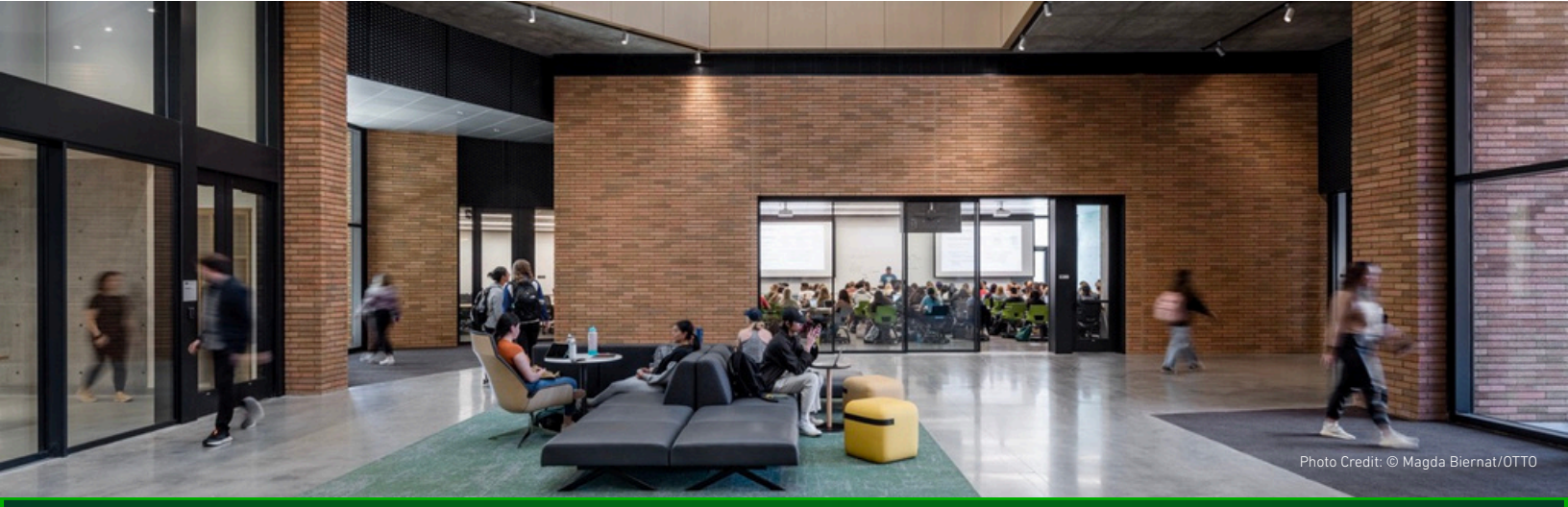
PROJECT INFO

- **Location -** *San Luis Obispo, California*
- **Completion Date -** Spring *2023*
- **Project Type -** *Education*
- **CMU Scope -** *Structural*

TEAM INFO

- **CMU Manufacturer -** *Basalite Concrete Products*
- **Architect -** *ZGF Architects LLP*
- **Structural Engineer** - *John A. Martin & Associates*
- **General Contractor** - *Gilbane Construction, Inc.*
- **Masonry Contractors -** *Winegardner Masonry, Inc.*

>> Certification: LEED Gold. | Awards: California Masonry Council — Merit in Brick Award, AIA California — 2024 Design Award Recipient



Cal Poly SATRC Complex

San Luis Obispo, California

Recognized with a Merit in Brick award from the California Masonry Council, the Frost Center illustrates how block and brick can work seamlessly together. Award criteria require that at least 30% of the structure incorporate concrete masonry units, underscoring CMU's integral role in the building. At Cal Poly San Luis Obispo, that role is foundational.

Designed by ZGF Architects, the Frost Center organizes a complex academic program into a series of interconnected volumes, breaking down its scale while maintaining a cohesive identity. The approach draws on a village-like arrangement, where circulation, collaboration and research unfold across a network of spaces rather than a single monolithic form. A central atrium connects laboratories, classrooms, and shared areas visually and spatially, placing research on display and reinforcing interdisciplinary exchange.

High-performing strategies are embedded throughout the building. Exterior shading fins are calibrated to reduce solar heat gain while allowing generous glazing, supporting daylight access without compromising energy efficiency. Locally sourced materials help reduce transportation impacts, and water systems are designed to limit potable use.

These elements operate as part of an integrated system, where architectural intent and building systems are closely aligned.

Within that system, concrete masonry serves as essential infrastructure. It provides the structural capacity required for a demanding academic environment, contributes to fire resistance and life safety in a region where those considerations are central, and supports long-term durability with reduced maintenance demands. Its inherent mass also helps stabilize interior conditions, reinforcing the building's day-to-day operation over time.

The project was also recognized as a 2024 AIA California Design Award recipient, reflecting its broader architectural achievement. At the same time, it offers a clear example of how material decisions shape that success.

At the Frost Center, masonry works in concert with the broader design, providing the strength and stability that allow the architecture to adapt, endure and remain relevant over time.