fortera ReAct™

SIMPSON UNIVERSITY

Business, Technology, & Engineering Building

Low-Carbon Concrete Pour

Fortera provided 15 metric tons of ReAct™ to Simpson University for the new Business, Technology, and Engineering Building, which will be home to the Maurice & Marianne Johannessen Veteran Success Center (VSC) and STEM program facilities, that include some new engineering and technology labs.

"The footing concrete poured just like our traditional mix designs. For slab-on-grade, placement and finishing were very similar to mixes containing fly ash. Saw cut control joints held an edge better than typical fly ash mixes, and we've observed no abnormal cracking to date."

Brian Kamisky, President
SK Construction / Wards Concrete

At a Glance

Location
Redding, CA

Date Poured
January – March 2025

Yards Poured
590 lb/yd^3 (451 kg/m^3)

Project Partners
Simpson University

Placement Method
Boom Pump

Ready-Mix Partners
Shasta Redi-Mix

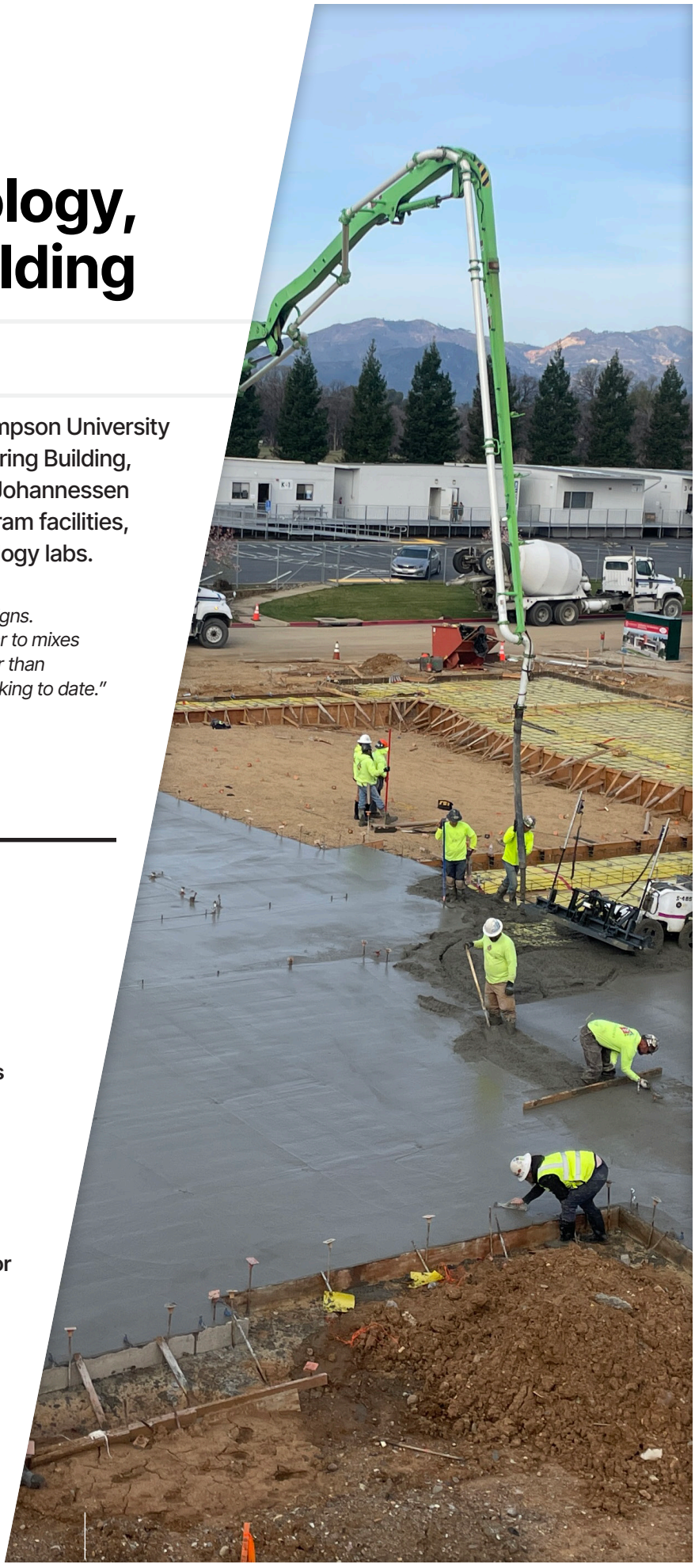
Traffic
Pedestrian

General Contractor
Gifford Construction

Usage
Foundation, Slab, and Columns

Concrete Contractor
SK Construction

7%
Reduction in CO_2



January 31, 2025 - Footings

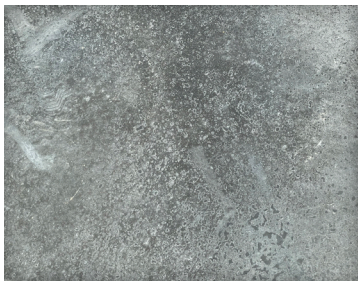



March 10, 2025 - Slab




March 20, 2025 - Slab & Columns



Mix Design

Total Cementitious Material:
541 lb/yd³ (321 kg/m³)

W/CM:
0.55

Cement:
90%

ReAct™:
10%

Aggregate
Gravel / Natural Sand

Slump:
4″ (10cm)

Air:
Non-Air-Entrained

Unit Weight:
148.4 lb/ft³ (2377 kg/m³)

Design Strength:
3,000 psi (21 MPa)

Business, Technology, and Engineering Building (Rendering)

Weather - Footings

January 31, 2025 — Light Rain / Low 43°F High 48°F

Weather - Slab

March 10, 2025 — Sunny / Low 45°F High 70°F

Weather - Slab & Columns

March 20, 2025 — Overcast / Low 39°F High 59°F