



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.

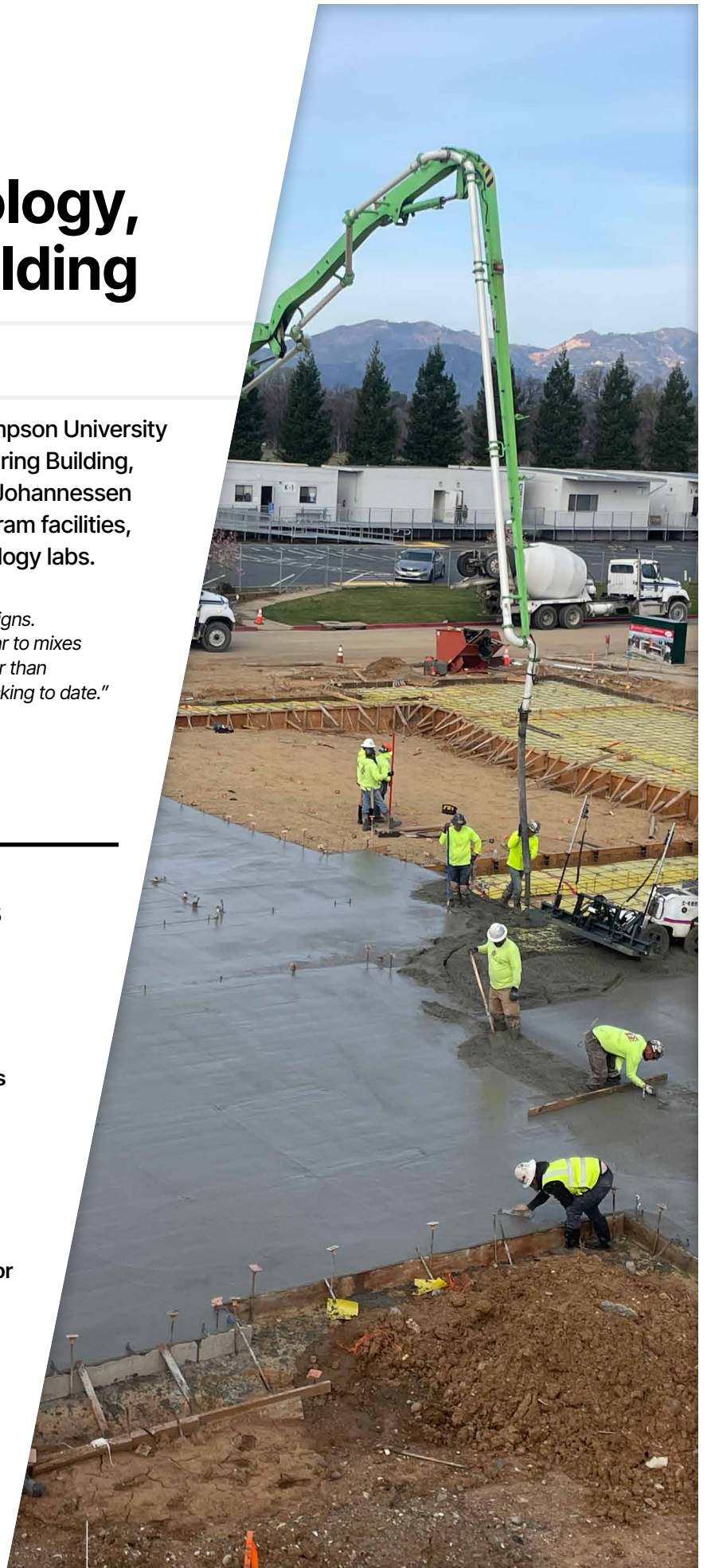
"The footing concrete poured just like our traditional mix designs. For slab-on-grade, placement and finishing were very similar to mixes containing fly ash. Saw cut control joints held an edge better than typical fly ash mixes, and we've observed no abnormal cracking to date."

Brian Kamisky, President
SK Construction / Wards Concrete

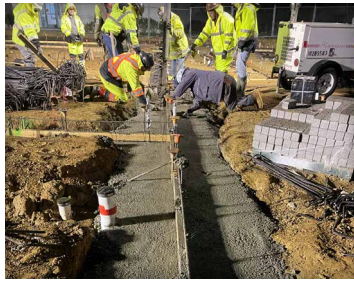
At a Glance

Location Redding, CA	Date Poured January – March 2025
Yards Poured 590 yd ³ (451 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 CO₂



January 31, 2025 - Footings



March 10, 2025 - Slab



March 20, 2025 - Slab & Columns



Mix Design
Total Cementitious Material: 541 lb/yd ³ (321 kg/m ³)
W/CM: 0.55
Cement: 90%
ReAct: 10%
Aggregate Gravel / Natural Sand
Slump: 4" (10 cm)
Air: Non-Air-Entrained
Unit Weight: 148.4 lb/ft ³ (2,377 kg/m ³)
Design Strength: 3,000 psi (21 MPa)

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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

