BUILT BETTER

Project: **POPULUS**

Place: Denver, CO

Cement Contractor:

Holcim

Completion: 2024

Developer: Urban Villages Architect: Studio Gang

Design / Build Contractor: The Beck Group





Project Engineer:

WTLS

Project: **POPULUS**



THE CHALLENGE

- Opening in Denver in 2024, Populus will be the first carbon-positive hotel in the U.S., an achievement realized through its strong commitment to sustainability in both the development and operational stages.
- The 13-story, 265-room hotel designed by famed architecture practice Studio Gang is being built on an expedited schedule through widely variant seasonal weather conditions.
- Strict specifications demanded intense testing and verification of Holcim's product performance to meet the project's environmental goals.
- The innovative nature of the project required highly coordinated planning, product education and collaboration among the developer, contractor and Holcim teams.

THE SOLUTION

- Holcim's innovative ECOPact concrete, which offers a minimum of 30% lower CO2 emissions compared to standard concrete, is one of many ways Populus is achieving its carbon positive goals.
- By using ECOPact for Populus' development, the embodied carbon of the concrete is expected to be 765 tons less than traditional concrete, minimizing the hotel's carbon footprint.
- According to Holcim's Global Warming Potential (GWP) savings calculator, the use of ECOPact in this building represents a 24% reduction in CO2 emissions of the total concrete volume, as compared to regional averages the equivalent of eliminating more than 1.5 million miles driven by an average passenger vehicle.
- With approximately **5,100** cubic yards of concrete used for the project's superstructure beams, slabs and other components, ECOPact mixes will account for 65% of the total volume.



BENEFITS



ENVIRONMENTAL SUCCESS

24%

REDUCTION IN CARBON DIOXIDE EMISSIONS

765

METRIC TONS OF CO2 SAVED FOR THE PROJECT