



HYDROLITE LIGHTWEIGHT AGGREGATE PLAYS KEY ROLE IN RECORD-BREAKING STRUCTURE

QUICK FACTS:

Project :

Wilshire Grand Center
Los Angeles, CA

Providers:

Conco Cement Pumps
Catalina Pacific Concrete

Notes:

The Wilshire Grand Center is an upscale world-class 73-story skyscraper in the heart of Downtown, Los Angeles. It will be the tallest structure in the Los Angeles skyline, adding to the rich cultural and economic revival of Downtown.



As if constructing the tallest building in the western U.S. weren't enough of an accolade, Korean Air recently set a record when a new addition to its property portfolio set an official Guinness World Record for the highest volume of concrete placed within an 18-hour period. Situated in the heart of Los Angeles, the building's contractors placed more than 80 million pounds of concrete for a new 73-story InterContinental Hotel.

To make the foundation for the Wilshire Grand Center required more than 2,100 truckloads of concrete - a feat that entered the building in the Guinness Book of World Records for the largest continuous concrete placement in history. The structure boasts 900 hotel rooms, a 70th-floor sky lobby, and 445,000 square feet of office and retail space, and it is considered to be the tallest structure in the western U.S.



To date, the project encompasses over 1.2 million square feet of lightweight concrete slab on metal deck. Once the hotel is finished, its structure will include 15,000+ cubic yards of concrete that on metal deck - of which 10,000+ cubic yards will include HydroLite® Lightweight Aggregate from Trinity Lightweight. According to Charles Kerzic, Trinity Lightweight Sales Representative, the lightweight concrete helps meet the fire rating without the need for an additional fire proofing cover. And because the lightweight aggregate is presoaked, pumping it up to the building's very high floors is easier than if traditional materials had been used.

"When the last deck is completed," Kerzic adds, "the lightweight concrete needed to finish that deck will need to be pumped 1,300 feet, of which 1,100 feet was vertical."

Headed up by general contractor Turner Construction, the project also involves Conco Cement Company (the concrete pumper) and Catalina Pacific Concrete (a division of the CalPortland Company).

For the project, Trinity Lightweight is providing the lightweight aggregate for the concrete that's being installed on the metal decking that surrounds the building's core/elevator towers.

"That concrete needed to be lighter than normal concrete for engineering purposes," says Kerzic. Trinity Lightweight manufactures the structural lightweight aggregate used for the project at its plant in Frazier Park, California. The ready-mix supplier replaces the "regular" weight granite with the lighter material. "The HydroLite lowers the concrete's unit weight from 147 pounds per cubic foot to just 115 pcf," Kerzic says.



EXCEEDING EXPECTATIONS

Already exceeding expectations, the project is a great example of excellent teamwork among a general contractor, ready-mix concrete supplier, concrete placement subcontractor, pumping subcontractor, and lightweight aggregate supplier.

"Everyone is working together to make sure the overall project is successfully pulled off," says Jeff Speck, Director of Technical Sales for Trinity Lightweight. "This truly is a testament to the value of having a great team that works together well."



Trinity Lightweight is the largest producer of rotary kiln expanded shale and clay lightweight aggregate in North America and is a leading supporter of research, independent testing and field studies to improve the manufacturing process and expand the beneficial uses of the product.

www.trinitylightweight.com