

● Efficiency in Tight Spaces Des Plaines, Ill.

A jobsite alongside a busy urban road does not make for an easy construction project. However, SREE Construction, Lombard, Ill., overcame limited jobsite access caused by existing buildings surrounding three sides of the jobsite and rush hour traffic from the fourth side to complete a 1400-square-foot multifamily concrete building.

To battle the small jobsite and busy downtown traffic along River Road in Des Plaines, Ill., SREE Construction had to take over one lane of River Road for a limited amount of time each day to maneuver the panels into place. “We had to build the building from the back to the

front because of limited space,” says Mike Betker, project manager, SREE Construction. “We had to erect a crane on River Road for six hours a day to lift up the panels.”

Housing 60 condo units and a three-floor parking garage, the eight-story structure was built using Dukane Precast cast-in-place panels delivered onsite direct from the factory. Within each panel, embedded cast-in-place steel angles allow the walls to be secured and welded together. Windows and coring were precut at the factory according to the project’s specifications—outlined in great detail ahead of time—and then

configured by the onsite construction crew. “This is a very efficient way to build a building, and I didn’t find a lot of problems because of efficient quality control,” says Betker. “In some respects, it can save a lot of money on coring for plumbing pipes.”

The 8-inch exterior walls contain an insulated core of 4 inches of insulation with structural reinforcing as well. Interior walls except for the hallway also are solid concrete. Each unit was sprayed with 4 to 6 inches of fiber glass insulation and then covered with a drywall overlay. “It takes out the voids in the walls and reduces moisture and mildew,” says Betker. In total, the walls have 8 to 10 inches of insulation on the perimeter of each unit.

The floor panels were cast-in-place similar to the walls and also contain the same insulation core. Each condo unit has a balcony cast as part of the floor as well. After the panels were placed, 2 inches of lightweight concrete with sand aggregate was smoothed out across the entire floor to even out any ridges. On the floors of the three-level parking garage, a 2-inch coating of a structural concrete mix with pea gravel was placed for a more durable surface.

— Kate Hamilton

Below: The crew worked from the back of the lot to the front, erecting each section of the building up eight floors and moving onto the next section. Photo: Brian Bock/Dukane Precast



Right: Taking over River Road for six hours each day, a crane erected the panels into place. Photo: Brian Bock/Dukane Precast



Balconies were cast with the floor panels and topped with 2 inches of lightweight concrete to create a seamless floor.
Photo: Joe Nasvik

