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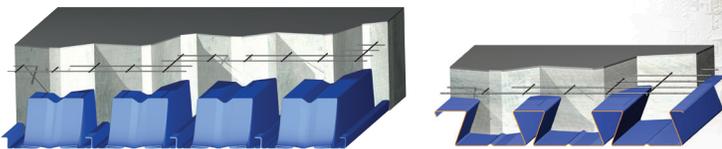
**DESIGN IDEAS**

April 13, 2016

## Time on your side

### *Iconic Miami Beach hotel gets accelerated renovation*

An innovative long-span composite flooring system was used to build a new floor and roof atop a historic Miami hotel without shoring and with minimal disruption to the neighborhood.



The Plymouth Hotel, located in bustling Miami Beach, is an integral part of the art-deco architectural styling of the city and preservation of the original appearance was important to the owner. To achieve this task quickly and easily, Versa-Floor™ long-span composite floor deck was the logical choice.

#### **Support challenge**

The renovation of the three-story hotel called for an additional floor with balconies and a new roof. With the addition of the fourth floor, a support challenge arose, as the existing flooring consists of the original wood from 1940. Therefore, shoring during the concrete pouring was not an option because of potential damage to the floors. To avoid shoring, Versa-Floor™ Deep-Dek® Composite 7.5 with 18 gage steel was used over the 20-ft. span, which also met the requirements of a 2-hour UL fire rating.

#### **Systematic construction method saves money**

Taking the building owner's point of view, the Versa-Floor™ team re-examined the design of the new balconies for cost

efficiencies. They followed up with the recommendation of 4.5-in. long-span steel composite deck system rather than the original 7.5-in. profile specification. This reduced the deck thickness by 3 in. and resulted in construction and concrete cost reductions. Additionally, the balcony structure was engineered to slope for drainage, extending service life and reducing maintenance costs for the owner.

To minimize disruption to the busy neighborhood, the building systems manufacturer and supplier provided numerous just-in-time deliveries to the hotel's congested location.

"Knowing all of the hurdles that we had to overcome to complete the hotel, the engineer of record stated he would specify Versa-Floor™ systems instead of what he was previously specifying on long-span projects," said Christopher C. Allen, project manager at Steel Fabricators.

By taking an owner's point of view, the project was a success. The proactive steel building systems manufacturer emphasized total project cost on an accelerated four-week schedule: from final design to delivery.

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