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Global Best Projects

Best Project, Residential/Hospitality: AIRA Residence



The newly constructed and separately transformed towers combine to deliver identical luxury in either building.

Photo by: Grand Dynamic Builders

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Scott Judy

AIRA Residence

Kuala Lumpur, Malaysia

BEST PROJECT

OWNER: Selangor Properties Berhad

LEAD DESIGN FIRM: Environmental Design Practice

LEAD CONTRACTOR: Grand Dynamic Builder Sdn Bhd

PROJECT MANAGEMENT: Turner International LLC

CIVIL AND STRUCTURAL ENGINEER: Asia Pacific Engineering Consortium Sdn Bhd

MEP ENGINEER: MEP Engineering Sdn Bhd

CONSULTANT: Piet Boon Studio PV

To deliver the AIRA Residences project in Kuala Lumpur, builders had to overcome the differing challenges of transforming an existing 17-story, 64-unit residential structure built more than 40 years ago into a near replica of the sparkling, brand-new 18-story “twin” they were constructing next to it.

For instance, the design for the new 18-story, 105-unit Tower A structure—which features a facade comprised of glazing with glass fiber-reinforced concrete and aluminum cladding—allowed only limited headroom for MEP installations to accommodate the taller ceiling heights of a luxury residential building.

As a result, the contractor early on switched the structural system from conventional reinforced concrete slabs to prestressed concrete elements, says Bojan Petkovic, construction project manager at Turner International. “Constant improvement of coordination between various trades” also was key to keeping construction on schedule, he adds.



Photo by Selangor Properties Berhad

At the same time, transforming Tower B—the existing residential structure that was built in the 1970s—into the same modern style of Tower A would generate its own unique hurdles, including the need to match the older building’s exterior and interior details, such as ceiling heights, with that of the new structure.

Tower B’s transformation required removal of the structure’s facade and demolition of portions of the structure down to bare concrete.



Photo by Selangor Properties Berhad

Also, contractors needed to strengthen beams while also reducing the depth of existing floors to achieve the designed ceiling heights that match those of the new tower.

Moreover, since Tower B originally featured more corners and angles than did the new building's design, contractors extended the existing slab in certain areas to enable the older structure to more closely reflect the shape of its newly built twin.

Additionally, the owner, project manager and construction team collaborated to implement an award-winning safety program that used FIVE-S lean practices, which help to achieve a cleaner, safer and more organized workplace.

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Scott Judy is Deputy Editor for Regions, and editor of ENR Southeast, one of Engineering News-Record's 10 Regional publications. His roughly 27 years as a construction journalist began with an 11-year stint covering Midwest construction projects. In 2000, Judy helped launch the publication now known as ENR Southeast. He often delves into controversial aspects of the construction industry such as bankruptcies and fatal accidents, and wishes he would never have to cover another accident but suspects that he might.