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Architectural PRODUCTS

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market of choice:

hospitality + entertainment

accent on the lobby

Spaces that are becoming a more critical components in many hotels—even if it's simply to connect to WiFi—are lobbies and public spaces. Given the growing attention paid to these areas, it's become even more important to design them with greater flair and accents.

Dimensional Panels
modularArts, Stella InterlockingRock



In Case of Emergency Use Elevator

One idea that developers and lenders may be more willing to pioneer is occupant evacuation operation (OEO) protocol for elevators. OEO allows developers to eliminate the second staircase in a building, and instead implement OEO in the building's fire, safety and elevator system to mobilize building occupants in case of an emergency. "The taller that buildings get, we can't expect people to be going down hundreds of stairs," says Scott Day, executive VP product and business strategy at ThyssenKrupp.

After years of being instructed to use the stairs to evacuate a building in case of an emergency, using the elevators might seem counterintuitive; but in fact, elevators' OEO protocol in tall buildings makes it much more feasible to safely evacuate all building occupants from supertall and megatall buildings. It came about when the Council on Tall Buildings and Urban Habitats (CTBUH) conducted a study of the events of 9-11; after the council released its findings about the Twin Towers' evacuations, OEO began to be more widely recognized and adopted. "The eventual outcome was the development of provisions in ASME A17.1/CSA B44, NFPA and ICC building codes, as well as the fire alarm codes, to define the requirements for the use of elevators for evacuations," explains Kevin Brinkman, NEII codes and safety director.

Implementation of OEO standards and codes will require specialized building designs that require compartmentalization, fire-resistive construction, and coordination between the elevator systems and fire protection systems, says Brinkman.

Lerch Bates' Popp says the firm is actively involved in the design and construction of several projects using the new OEI allowed by the North American ASME Elevator Code and NFPA Fire Life Safety code. Installation of these additional control features also requires a written evacuation plan and practice use, says Popp; however, in his opinion, the codes do not

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yet provide adequate detail about how OEO is to be specifically designed. This leaves the industry with a wide variety of building-specific "variations."

ThyssenKrupp's Day reports that OEO protocol is becoming sought-after on the West Coast due to the frequency of earthquakes and anticipated seismic retrofit ordinances. The company's OEO protocol will be active in a San Francisco tall tower project in August, but there aren't any "earthquake drills" scheduled yet, says Day; so far, the OEO technology will rely on signage to inform occupants to use—or not to use—the elevator.

Elevator companies and code-making bodies have years of research and refinement to perfect implementation of the new OEO protocol, says Popp. "Currently, elevator manufacturers are behind in the development of the necessary software and signal fixtures for this operation. This is due in part to the lack of consistent definition in the code." Perfecting OEO will require coordination among all building systems to address every angle of potential evacuation situations, says Brinkman: "Designers and developers have shown a lot of interest in evacuation issues, prompting more discussion about Intelligent Buildings that integrate all of the building control systems including Elevators, Fire Safety, Security, HVAC and Accessibility."