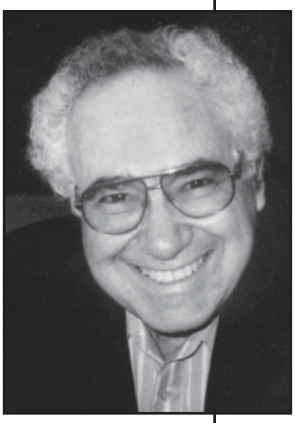
Recent Trends in Concrete Construction



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In preparing for this, my sixth lecture for American Concrete Institute, 14 years since my last lecture and 38 years since my first, I began to reminisce about all the great times I have had serving with the ACI. I was faced with the dilemma of defining "recent trends." I spent a few restless hours preparing for my presentation and creating a Power Point presentation.

When the day finally came, I decided to just "wing it"—a form of speaking I always preferred, being much more casual than the monotone presentations of a formal lecture. So writing this synopsis gives me a chance to reiterate my profusions of opinion and cover points I may have missed.

Getting back to "Recent Trends in New York City Concrete Construction," I usually think about two things. The first is Safety. Concrete has become more and more thought of as the "Safe" material. The second is Commercial Structures in Concrete. Though it is not new to my office, I believe that my colleagues, who are also featured in this issue, will soon be designing commercial structures in concrete as well.

505 Fifth Avenue is a recent example of how concrete has penetrated the commercial market because of safety requirements. The owner, Kipp Stawski Group, requested that studies be carried out in both steel and concrete. Concrete was chosen due to the safety enhancements naturally occurring in concrete. In either the choice of concrete or steel, the egresses would have been surrounded in concrete.

The owner also chose to use two separate stairwells rather than the more conventional and less expensive scissor-stair system. This is a provision that will soon be required in taller New York City commercial structures. The class "A" commercial space achieved 35-foot spans and 14-foot cantilevers utilizing 11-inch slabs with 18-inch capitols, and the space will surely command some of the highest rents in the city. The structure was designed with safety in mind, a provision that was very important to the owner. To deter the chance of an automobile or explosion taking out a column at the base of the building, the exterior columns up to the second floor are encased in a steel shell.

Currently our offices are coordinating several stair openings throughout the structure. These are being located with little difficulty and with minimal hindrance to the structural system, just as the industry has done with residential towers.

The New York construction market is in a boom. Buildings are being designed at surprising rates and the need to be "in the

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505 FIFTH AVENUE:
An example of how concrete has penetrated the commercial market because of safety requirements.

Recent trends in concrete construction

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ground yesterday" is at an all time high. Driven by ballooning apartment costs, developers are seeing a greater price per square foot than ever before.

There have been rumors that 30 to 50 large concrete structures are being designed to go out to bid in the next several months. Judging by the amount that my firm alone is designing, I feel that this estimate is very likely true.

The problem with this is that there aren't enough experienced concrete crews available to build so many projects. To top it off, there is also a shortage of cranes in the metropolitan area, an item that is actually at a site longer than a concrete crew. This will result in one of many outcomes.

First of all, there will be a handful of designed buildings that just won't be built resulting in either unpaid consultants or financially crippled developers. Someone is always hurt when a structure is developed but not built.

Second, developers may be forced to use less experienced concrete crews, which certainly isn't good for the industry or the structures. Third, the influx of need for builders drives up the price of construction. This will reverse the opportunity for moderate and responsible growth. Union trades must proceed to develop and train new personnel to fulfill the needs of the city. Concrete allows local labor and local trades to better participate in economic growth of the city.

As always, I had a wonderful time speaking in front of such a great audience. I thank the ACI for allowing me such an honor and congratulate them on a successful convention. I also want to thank the Concrete Industry Board who has always been a friend of our firm and an important part of New York City concrete promotion. Finally I want to thank my fellow speakers for allowing me to present first.