Rachel J. Detwiler

Editor's Message

Earth, wind, and fire

This is our annual issue on extreme loading.

Our cover story in this issue describes two engineers' experiences with designing precast concrete buildings for blast resistance. It's a sad fact of modern life that we even have to consider blast loading among the design criteria. United States government installations outside this country have long been designed with physical security in mind—or at least retrofitted for it. When I lived in Toronto, ON, Canada, in the early 1990s, the United States consulate was recognizable from a distance; it was the only building on University Avenue with bollards on the sidewalk in front to keep car bombs from getting too close. Now bollards and massive concrete planters are common features near government buildings and other potential targets in the United States as well.

Also in keeping with our theme, we have two peer-reviewed papers relating to seismic loading. The first one gives us seismic design guidelines for hybrid precast concrete shear walls. The second deals with the effects of anchorage hardware on the cyclic response of unbonded monostrands. We also have a paper on modeling the behavior of hollow-core slabs exposed to fire.

In addition, we have a computational study of stress transfer in sheathed strand, a practical approach for modeling transfer length using end-slip methodology, an experimental study of shear transfer across the interface between lightweight-aggregate concretes cast at different times, and the implementation of 0.7 in. (18 mm) diameter strand in a bridge in Nebraska.

Please send correspondence to journal@pci.org or Precast/Prestressed Concrete Institute, c/o *PCI Journal*, 200 West Adams Street, Suite 2100, Chicago, IL 60606.

Rachel J. Detwiler, PhD, PE