

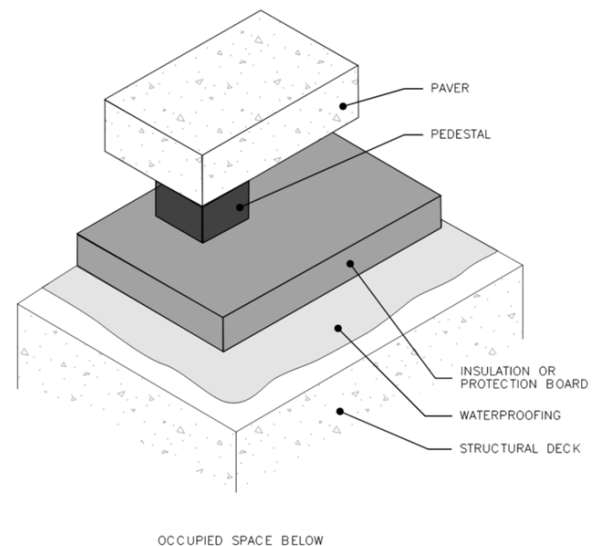
Blown Away: A Case Study for Wind Uplift on Pedestal Pavers and the Provisions of ANSI/SPRI RP-4

TECHNICAL DINNER MEETING: 7 September, 2023

Presented by:

James E, Mendygral, PE Senior Associate,

Simpson Gumpertz & Heger



Synopsis of Presentation:

Pedestal paver systems are a common and desirable finish system for use over exterior plaza decks, balconies and rooftop amenity spaces. In regions with historically lower wind loads, like the San Francisco Bay Area, pedestal paver systems typically consists of concrete or stone paver units gravity loaded over adjustable pedestals installed over insulation, drainage composite and waterproofing layers to form a complete enclosure assembly. One of the major advantages of these systems is their loose-laid nature and the relative ease with which they can be temporarily removed for performing maintenance, renovations and repairs. However, these systems can be highly sensitive to uplift forces generated during extreme windstorms. In some cases, the wind uplift forces can exceed the dead weight of the pavers resulting in displacement of the pavers or in some cases complete blow off from the underlying structure.

With the ferocity and frequency of extreme storms seemingly increasing, the risk for failures also appears to be growing. This presentation will use a recent case study to illustrate the key factors that must be considered for the successful design and construction of pedestal paver systems, including a case study of remedial paver tie-down system engineered to improve the uplift resistance of an existing plaza deck.

Learning Objectives:

1. Understanding the basic types of pedestal paver systems and their applications
2. Understanding the basics of wind loading and the effects uplift on paver stability
3. Understanding how local topography and urban environments can affect wind loading
4. Learn how to design and install a successful pedestal paver waterproofing system using the provisions of ANSI/SPRI RP-4
5. Learn from a case study of a pedestal paver failure and remedial repair

Meet your Presenter:



James E. Mendygral (Jim) has 25 years of industry experience with a diverse background in building enclosure and structural engineering. His expertise covers a full range of engineering services, including assessments, design, and construction administration to assist clients with the successful delivery of their most challenging projects. His recent projects range from contemporary building enclosure design for various Silicon Valley technology companies to the award-winning restoration of PG&E's historic headquarters in downtown San Francisco, CA. In addition to private consulting, Jim serves as an industry advisor to the Architectural Engineering Department at the Pennsylvania State University..

When:

Thursday September 7th, 2023

Where:

2000 Powell Street Conference Center

Registration & Networking: 5:30 - 6:30 pm

Dinner Served: 6:30 pm

Presentation / Q & A: 6:45 - 8:00 pm

2000 Powell Street, Second Floor

Emeryville CA, 94608

Parking Garage is Hourly, Parking on Powell Street is Free - *Subject to Availability* (see highlights below)

Cost:

Registration:

\$60 (IIBEC Members) / \$75 (Non-Members)

How to Register:

Online Registration at:

NorcallIIBEC.org

Tabletop Sponsorship

\$200 (Tabletop + 1 Dinner)

72-hour cancellation is requested for a full refund.

Map:

