



AIA East Bay

A Chapter of The American Institute of Architects



CSI-EAST BAY / RCI NORTHERN CA / AIA EAST BAY  
PRESENT:

# Construction Disasters Symposium 2018

Friday, April 20, 2018

1405 Clay Street  
Oakland, CA 94612

[www.aiaeb.org](http://www.aiaeb.org)

[info@aiaeb.org](mailto:info@aiaeb.org)

(510) 464-3600

Registration – 8:00 to 8:30 am  
Program – 8:30 am to 4:00 pm

Continuing Education Credits:  
6 AIA CES / HSW LUs and 6 RCI CEHs

Symposium Sponsor Tabletop Product Exhibits

Complimentary breakfast, box lunch, and  
afternoon snacks will be provided.



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## Morning Schedule and Program

**8:00AM- 8:30AM Registration**

**8:30AM- 9:30AM Joe Piñon & Erin Andes, RDH Building Science, Inc.**

*“Learning from Stucco Failures: The Importance of Drainage & How Changes in the Energy Code are Complicating Stucco Installations”*

In this presentation, we will explain the building science behind cement plaster and why, due to energy code improvements, it is more difficult for the cement plaster to perform well now than it was in the past. We will use case studies to highlight the significance of controlling water intrusion, air leakage, heat loss, and condensation risk. We will discuss various failure types including cracks, water intrusion, corrosion, and complications caused by continuous insulation. We will also apply the lessons learned and show how to use the concepts of drainage and control layers to improve assemblies and detailing.

**9:30AM- 10:30AM Chris Nelson, Technical Roof Services**

*“Water Intrusion Damage in a Supercomputer Facility”*

Damage investigations and subsequent repair recommendations originated from the designers and contractors failure to properly address the detailing and installation challenges, including the interface of the roof expansion joints and base of the curtain wall to prevent water intrusion. Furthermore the expected seismic movement was inadequately accommodated and did not provide floor to floor fire protection. The project required extensive interior protection, coordinating with worried computer scientists, cutting and redoing the bottom of the curtain wall, installing a fire blanket lower in the joint, installing a properly shaped and sized expansion joint, providing adequately sized and configured sealant joints, providing functioning weeps, some roof repairs and finally passing the required water tests.

**10:30AM- 10:55AM Morning Break**

**10:55AM- 11:55AM Dean Larsen & Ivan Chak, Larsen/ Zienkiewicz, Inc.**

*“Lessons Learned in Moisture Related Problems - Three Project Case Studies”*

The presentation will focus on three separate project case studies where moisture related problems occurred in the roof, walls, or waterproofing. The first case study involves internal air pressurization, vapor retarder, and air barrier design with respect to roofing and walls. The second case involves hygrothermal performance of an insulated roof on an industrial facility. The third case study reviews exterior expansion joint integration with waterproofing. Each case study will include a review of the failure mechanism, recommendation for repair, and new design.

**11:55AM- 12:35PM Lunch Break**



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## Afternoon Schedule and Program

**12:35PM- 1:35PM Mike Hilliard, Hilliard Architects**

***“Accessibility Disasters Will Crush You and Empty Your Errors and Omission Insurance Policy”***

Accessibility disasters can crush the lives of alternately enabled people who are denied access to public accommodations or housing. Accessibility disasters will also empty a design professional’s Errors-and-omissions insurance policy limits and cost the professional a substantial amount of unpaid time dealing with litigation. The “win-win” solution is for everyone in the construction industry to become aware of the requirements for accessibility so that our built environment becomes more accessible to the alternately enabled. Accessibility regulations and their enforcement are extremely complex. This one hour presentation will give you an understanding of the complexity of both regulations and their enforcement.

**1:35PM- 2:35PM Gary Weaver, Atlas Consulting, Inc.**

***“Death by a Thousand Cuts - Failures in Quality Control and Quality Assurance, Where Contractors, Owners, and Their Inspectors Don’t Inspect”***

A review of simple systematic failures on three new construction projects, each valued at more than 50 million dollars and all with disastrous results:

- 1) Sprayed polyurethane foam and coating.
- 2) Conventional insulated built-up roofing.
- 3) Fluid-applied air barriers and metal wall panels.

The specifications on each project failed to provide robust inspection protocols but the Contractors, their Sub-Contractors, and full time compliance with the construction documents, applicable code requirements, manufacturer’s installation independent QA Observers all failed to coordinate in providing guidelines and the industry standards necessary to provide a weather resistant assembly.

**2:35PM- 3:00PM Afternoon Break**

**3:00PM- 4:00PM Phil Dregger, PE, RRC- Pacific Building Consultants**

***“Hurricane Maria - Tips for Investigating Not So Obvious Wind Damage”***

When a roof covering is hanging off the edge of a building, you don’t need a rocket scientist to tell you that it has been damaged by the wind. But what about a roof that is still in place but has a few holes and funny looking “humps”? Is it wind damaged, and perhaps more importantly how extensive is the wind damage? This presentation will review several roofs in Puerto Rico where wind damage was not so obvious but more extensive than originally thought.

**4:00PM Closing Remarks**



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### Registration Form

PLEASE REGISTER ONLINE at [www.aiaeb.org](http://www.aiaeb.org), call 510/464-3600 or mail registration form to AIA East Bay, 1405 Clay Street, Oakland, CA 94612

Check enclosed payable to **CSI East Bay-Oakland**

Registration Fee (all proceeds to benefit CSI, AIA, and RCI):

Early Bird Sign Up:	\$195
after 4/1/18:	\$220
after 4/15/18:	\$245
Students:	\$30

Name (first and last): \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

CSI Member #: \_\_\_\_\_ RCI Member #: \_\_\_\_\_ AIA Member #: \_\_\_\_\_

All Payments must be received by Monday, April 16<sup>th</sup>, 2018.

To withdraw registration and receive full refund call or email AIA by Monday, April 16<sup>th</sup>, 2018 at (510) 464-3600 or [info@aiaeb.org](mailto:info@aiaeb.org).

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