

Cold Storage Condensation Challenges and Cures

TECHNICAL DINNER MEETING: 07 September, 2022

Presented by:

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Synopsis of Presentation:

Insulated metal panels (IMP) are often used to form exterior walls of cold-storage buildings. The panels are near perfect vapor barriers. Joints between panels and flashings applied to panels, not so much. When water vapor finds a way in, it condenses on the first surface it contacts below its dewpoint. The condensed water accumulates until it drips inside or forms ice. This presentation will review the results of condensation investigations at several large cold storage buildings to illustrate common water vapor intrusion pathways and some novel repairs techniques to block them.

Learning Objectives:

1. Understand the non-intuitive hygrothermal physics of cold storage buildings (e.g., cold air sinks).
2. Review common air/water intrusion pathways (e.g., IMP side laps, roof to IMP flashings, IMP penetrations).
3. Discuss how air movement between laps of metal roof deck panels can bypass “vapor dams” above partition walls separating high and low humidity environments inside.
4. Understand how to promote “drying” of condensed water to the inside.
5. Discuss the advantages of using reinforced fluid-applied flashings in lieu of conventional membrane flashings at terminations and transitions.

Meet your Presenter:



Phil Dregger is a Professional Engineer, a Registered Roof Consultant, and has investigated roof problems for over 35 years. He has special expertise in wind, building codes, solar PV and condensation. Mr. Dregger has authored many articles on roof technology and has spoken to many industry groups. Phil received the ASTM D08 William C Cullen Award and the IIBEC/RCI Lifetime Achievement Award.

When:

Wednesday September 7, 2022

Where:

2200 Powell Street Conference Center

Registration & Networking: 5:30 - 6:45 pm
Dinner Served: 6:45 pm
Presentation / Q & A: 7:00 - 8:15 pm

2200 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:
\$55 (IIBEC Members) / \$65 (Non-Members)

How to Register:

Online Registration at:
NorcallIIBEC.org

Tabletop Sponsorship
\$175 (Tabletop + 1 Dinner)

72-hour cancellation is requested for a full refund.

Map:

