

Team on The Case

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IEA Project Purpose- Initial Assessment

Document obvious moisture and/or fungal concerns associated with the removal and replacement of the facility roof on the building perimeters and areas of water damage concern identified the investigation phase of the project.



First, Inside: Water Impact

Appears Low-Key Source for Moisture



- Upper Floor Occupants concerned with fungal growth on gypsum ceiling & musty odors.
- Isolated locations – appeared to be “common” leak issues.
- Ceiling areas opened: Exhaust venting for bathrooms & dryers appeared to be source.
- Ducts cleaned/sealed and light remediation work occurred. Buttoned back up.
- Months later –issue redeveloped and was determined bigger source for issues.



Move Outside: The Roof



IEA Project Purpose- Roof Assessment

Document obvious moisture and/or fungal concerns with the exposed roof and interior roof structure materials in pre-determined access locations identified by INSPEC and the building representatives.

The Investigation included visual inspection, moisture testing, and sampling of suspect materials in the test cut openings conducted by appointed roofing contractor.



Challenges: Plenty





Facility was “young” – approximately 5 Years Old

Roof design and construction called to question:

- Design challenges
- Construction challenges

Cost Saving Construction/Design measures resulted in expensive roof covering and deck, structural repairs and insulation replacement.

Mold remediation activities involved

Building occupant IAQ Concerns

Litigation

Technical Expertise



Litigation projects typical include lots of “cooks in the kitchen”

- Lawyers
- Install Contractors/Construction Administration (and opposing side experts)
- Project Architects/Designers (and opposing side experts)
- Buildings Owner/Representatives
- Opposing side representatives
- Building Envelope/IAQ Experts (and Opposing side experts)



Importance of Your Team

Why 3rd Party Has Value

When working with litigation, or potential litigation projects, it is optimal to have 3rd party technical resources.

Trusted resources with experience and qualifications provide a path to project success.



Communication: Between lawyers/experts, contractors, Building Owners/Managers, Building Occupants



Technical Documentation: Reviewed by lawyers, identifies parties/design at fault, gives litigation direction, provides clear repair path.



Expert Witness: Litigation witness for depositions / court cases

Documentation is the Lynchpin

Name

- A8
- A9
- A10
- A11
- A12
- A13
- A14
- A15
- A16
- A17
- A18
- A19
- A20
- A21
- A22
- A23
- A24
- A25
- A26
- A27
- A28
- A29
- A30
- A31



See Appendix A for specific test cut locations. A copy of the laboratory analysis report can be found in Appendix B. Sampling methodologies and existing guidelines can be found in Appendix C. The testing of the samples was performed by Prestige EnviroMicrobiology, Inc. Remediation Scope of work can be found in Appendix D.

Specific test cut locations where no issues were identified:

A2-A4, A8, A11-A13, A15, A17, A20, A21, A23, A24, A28, A30, A38

- The OSB sheathing was dry at time of assessment. Moisture meter readings were 8-16%.
- The cellulose insulation appeared and felt dry.
- The wood joists were dry. Moisture meter readings were 6-15%.
- No obvious signs of water intrusion or fungal growth were observed at the time of the site visit.
- No odors were detected associated with the test cut locations.

Specific test cut locations where issues were identified:

Test Cut Location A5

- IEA observed evidence of moisture intrusion, including water staining and discoloration of OSB sheathing. Moisture meter readings were 16-32%.

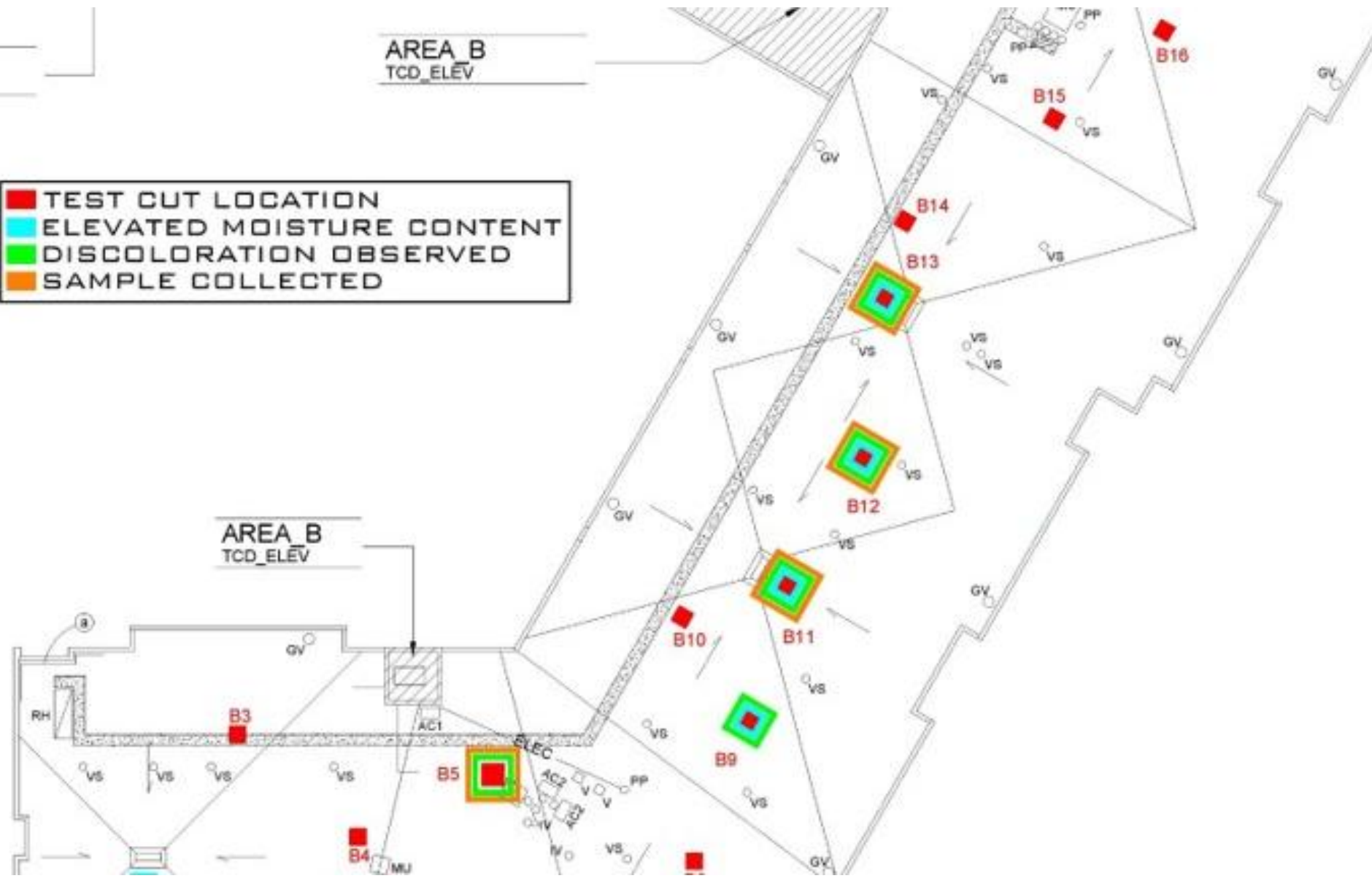


Discoloration
Underside of
Sheathing



AREA B
TCD_ELEV

- TEST CUT LOCATION
- ELEVATED MOISTURE CONTENT
- DISCOLORATION OBSERVED
- SAMPLE COLLECTED



AREA B
TCD_ELEV



Remediation Activities

Risk Challenge: Remediation contractor on “standby” or roofing contractor capable of tackling?

- How extensive of a remediation scope
- Expertise and Comfort of Roofing Contractor
- Litigation/Owner concerns with risk/liability

Clear Contractor Directives

Provided For Efficient Roof Repairs

The extensive investigation, technical review of impacted roofing/structural materials and clarity on needed repair activity allowed for remediation response from roofing contractor.



Remediation Scope: Developed by IEA and addressed impacted materials:

- Roofing Materials
- Interior Insulation
- Wood joists/supports
- Gypsum Ceiling



Remediation Activities: Included materials to removed, HEPA Vacuuming, disinfecting, moisture determination



Post Remediation Verification: Per IICRC S520

- IEA contacted for consult when remediation activities needed
- Provided consultation on each process
- Conducted final visual (onsite, photo verification)
- Documentation

The Final Challenge...





SPRING...

THANK YOU!



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