

# Home Performance Diagnostics – Extreme Peeling Paint Case Study

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# How Science and Math Differ

Science is based on Observation,  
Testing Hypotheses

May even lead to a theory!







Paint does not adhere to...



# Moisture Probe Results

26% saturation.

Limit?

10-12% depending on manufacturer.

# Why Holistic??

- Already had bid from drain tile installer
- Basement Moisture from previous remodel
- ...
- ...
- What Changed?
  - When did this begin?
  - If it hasn't always done this, what changed?

# Establish History

- **2000** – Remodel adds section to rear of home between two existing legs, connecting upper level wings with flat rubber roof and skylight, crawlspace beneath.
- **Date unknown (2007 - 2008?)** Remodel to lower level lowers basement slab 10-12" to allow for 8' ceiling height. Basement finish, other exterior improvements including gutters and roof?
- **2008?** - Fire damage to lower level requires full interior gut of home down to studs, exterior sheathing and wood lap siding remains. Renovation company sprays smoke encapsulant over entire interior of affected wood frame prior to reinsulating and sheetrocking. Exterior paint still needs to be done.
- **2008-2011** - Homeowner notes continuing issues with basement water intrusion, especially on front side of home.
- **2009-2010** - Landscaping redone around perimeter of home, still sinking.
- **2010 - 2011?** Exterior paint applied to entire exterior, including soffit, fascia, etc. Paint peels within 6 months of being applied, paint chip tests by manufacturer reveal no paint failure, primarily no adhesion due to moisture in surface.







































































































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# Questions?

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**Thank you for your attention!**

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