Site Visit Report

Generated: May 10, 2025

Project Details

Project:	random test
Report Number:	#1
Subject:	test with team

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Site Observations and Discussions

Building Envelope Related Observations:

1. DuPont Tyvek weather barrier system with visible wrinkles and improper sealing at seam junctions, highlighted as a potential water intrusion point.
2. DuPont Tyvek housewrap with three flexible metallic conduit penetrations.
3. QuickFlash flashing panel installed beneath the mechanical penetrations, serving as a waterproofing seal.
4. Improper DuPont Tyvek Tape application at seams, compromising the weather barrier system's integrity.

Other Observations:

1. Multiple mechanical service entry points through the building envelope via flexible metallic conduits.
2. Commercial building application of weather barrier systems.

</summary_of_observations>

<discussion>

The observations indicate several concerning issues with the building envelope's weather-resistive barrier (WRB) installation that may compromise the structure's moisture management system.

The wrinkled and improperly sealed Tyvek tape application at seam junctions presents a significant vulnerability. Weather barriers like DuPont Tyvek are designed to create a continuous drainage plane that directs water away from the building structure. When seams are not properly sealed, these junctions become the weakest link in the moisture protection system, allowing water to penetrate behind the WRB and potentially reach the sheathing and framing.

While QuickFlash flashing panels have been employed at the mechanical penetrations, the overall effectiveness of these components is contingent upon proper integration with the primary weather barrier. The presence of three flexible metallic conduits penetrating through the housewrap creates complex geometries that require meticulous sealing. If the interface between the QuickFlash panel and the Tyvek housewrap isn't properly sealed, water can infiltrate at these

critical junctions.

The long-term implications of these deficiencies include:

1. Moisture intrusion leading to deterioration of structural components (wood rot, steel corrosion)
2. Mold and mildew growth within wall cavities
3. Reduced thermal performance due to wet insulation
4. Potential electrical hazards where water intrusion meets the conduit pathways
5. Premature failure of exterior cladding systems
6. Increased maintenance and repair costs
7. Possible warranty issues with the DuPont Tyvek system, as improper installation may void manufacturer warranties

These issues are particularly concerning in a commercial building where the scale of potential damage is greater and remediation is more complex and costly than in residential construction.
</discussion>

<recommendations>
Priority 1 (Immediate Action Required):

1. Remove and properly reinstall the wrinkled Tyvek tape at all affected seam junctions. Ensure the surface is clean and dry before application, with proper overlapping and firm pressure applied to activate the adhesive.
2. Inspect all weather barrier seams throughout the project, not just in the documented areas, as systematic installation issues are likely to be widespread.

Priority 2 (High Importance):

3. Verify the proper integration of QuickFlash panels with the Tyvek housewrap at all mechanical penetrations. Reinstall as necessary using DuPont-approved sealants and following manufacturer-specified overlapping and shingling techniques.
4. Document the remediation process with photographs for quality control records and potential warranty claims.

Priority 3 (Procedural Improvements):

5. Conduct a toolbox talk or training session with installation crews on proper DuPont Tyvek system installation techniques, with specific focus on seam tape application and penetration details.
6. Implement a comprehensive quality control inspection protocol for weather barrier installations, including sign-off requirements at key stages:

* Initial WRB installation
* Seam taping completion
* Penetration flashing
* Pre-cladding final inspection

7. Consider engaging a DuPont technical representative to conduct an on-site inspection of the remediated work and provide additional training as needed.

8. Develop a standard operating procedure for weather barrier installation that includes:

* Proper surface preparation requirements
* Temperature range limitations for tape installation
* Specific sequencing of overlaps and penetration flashing
* Required inspection points
* Documentation standards

9. For future projects, consider implementing third-party inspection of critical building envelope components, particularly in areas with high complexity or multiple trades interface points.

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Action Items

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</recommendations>

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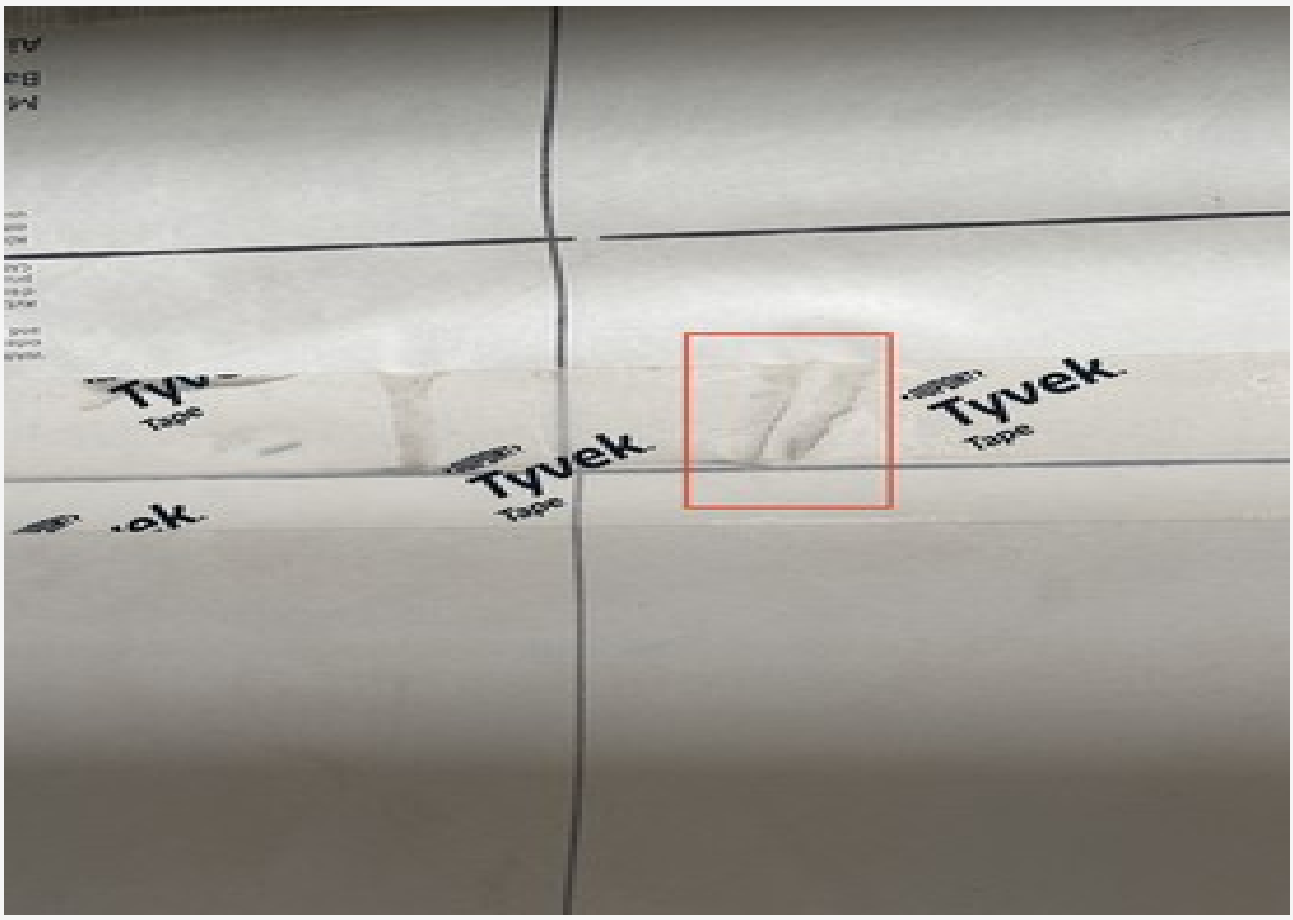
Site Photos

Photo 1



DuPont Tyvek Tape application on a commercial weather barrier system with visible wrinkles and improper sealing highlighted in the red box, indicating a potential water intrusion point at the seam junction.

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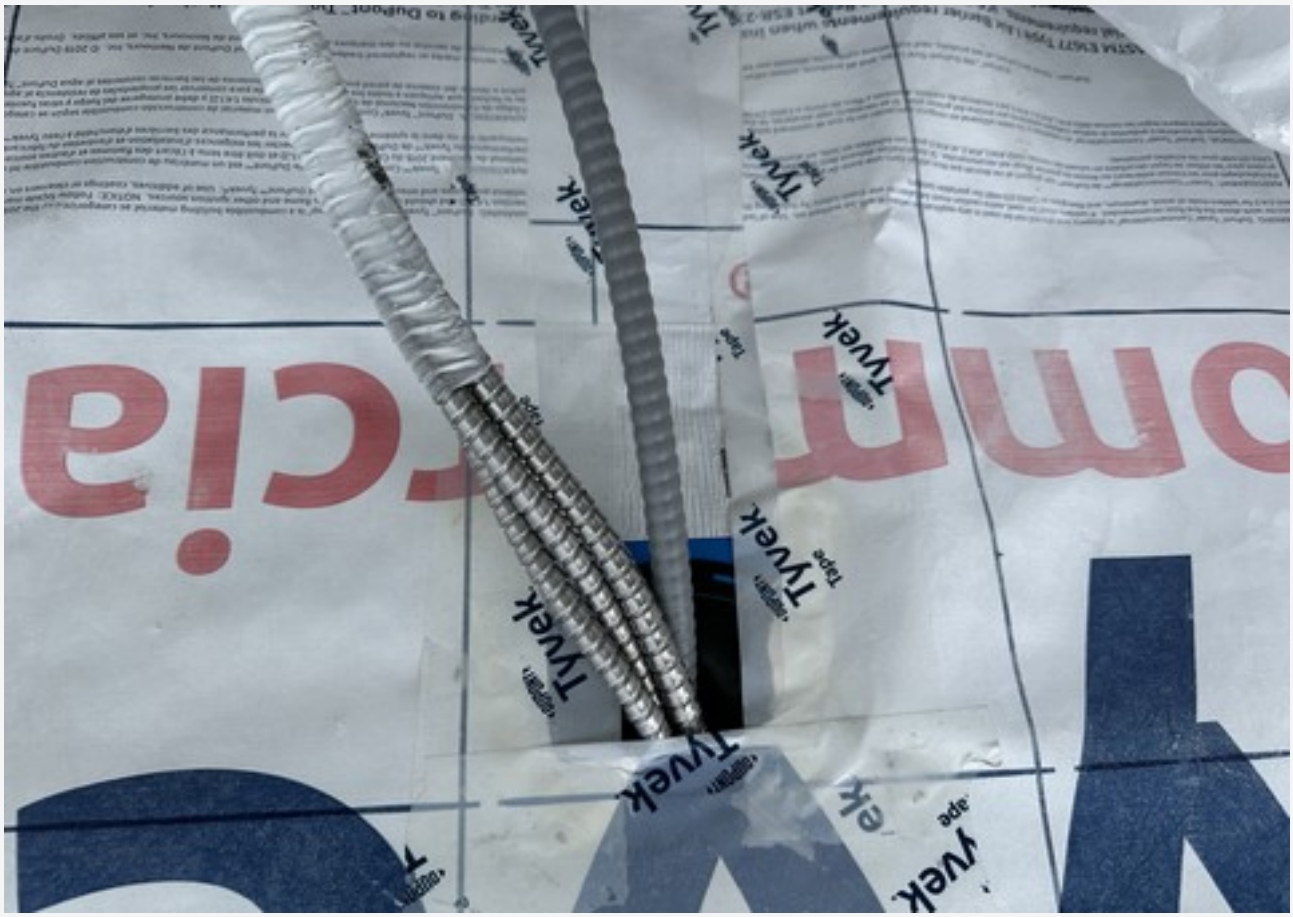
Photo 2



Three flexible metallic conduits penetrate through a DuPont Tyvek housewrap installation, with a QuickFlash flashing panel visible beneath the penetration, serving as a waterproofing seal at this mechanical service entry point.