



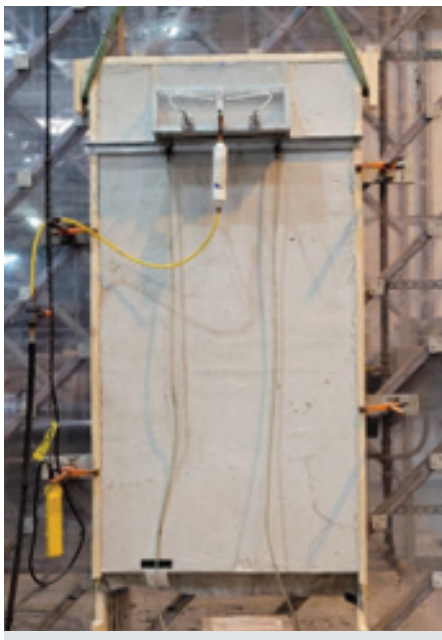
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DRAINAGE EFFICIENCY OF TYPAR® BUILDINGWRAP™ AND TYPAR® COMMERCIAL

Figure 1. Randomly-oriented orange polypropylene fibers on TYPAR DrainableWrap and TYPAR DrainableWrap Commercial.



Figure 2. ASTM E2273 Test setup at independent, third-party lab for TYPAR Commercial.



Drainage Efficiency of TYPAR® BuildingWrap™ and TYPAR® Commercial

Introduction to Drainable WRBs—The Next Generation of Moisture Management in Walls

Drainage is widely accepted as one of the most effective measures for reducing the risk of potential damage due to rain penetration, and is a critical component in allowing a building wrap to do its job—particularly in keeping walls dry. Historically, drainage has been achieved through the use of furring strips that separate the wrap from the structural sheathing and framing, but new technologies have emerged that are helping to simplify this process.

Today's most advanced building wrap products feature integrated drainage gaps through creping, embossing, weaving, or filament spacers. These new products eliminate the need for furring strips, helping to reduce material costs and streamline installation.

TYPAR® has two (2) building wrap products designed specifically to increase the drainage efficiency of the wall: TYPAR® DrainableWrap™ (for structures up to 3 stories in height) and TYPAR® DrainableWrap™ Commercial (for structures greater than 4 stories in height).

Thanks to an integrated layer of randomly-oriented orange polypropylene fibers (Figure 1), TYPAR DrainableWrap and TYPAR DrainableWrap Commercial have been shown to achieve a 94.8% and 96.7%, respectively, drainage efficiency per ASTM E2273. This added layer of protection is particularly important in coastal climates and in areas subject to heavy wind-driven rainfall.

TYPAR's line of drainable, weather-resistant barriers (WRBs) provides the best balance of properties—durability, bulk air and water holdout, vapor permeability, and enhanced drainability—and is backed by the only lifetime limited warranty in the industry! Moreover, TYPAR DrainableWrap and TYPAR DrainableWrap Commercial can be installed both vertically and horizontally and still achieve a minimum drainage requirement of 90%.

Introduction to ASTM E2273

ASTM E2273 or "Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies" is the industry standard for testing drainage efficiency of a water-resistant barrier. In simple terms, this test involves spraying water onto a wall assembly and measuring its collection over time.

In an effort to provide transparency on the drainage efficiency of all TYPAR® WRBs, we went ahead and tested TYPAR BuildingWrap and TYPAR Commercial in accordance to ASTM E2273. "At the end of the day, our priority is to provide our customers the right data, and with that, both flexibility and versatility in their product selection to fit their ever-evolving weatherization needs," said Andrew Irvine, product manager, TYPAR®.





Figure 2 shows actual setup of the ASTM E2273 drainage test on TYPAR® BuildingWrap and TYPAR® Commercial (pictured). Two 4 ft. by 8 ft. walls—one with TYPAR BuildingWrap and another with TYPAR Commercial—were assembled and tested for drainage efficiency by an independent, accredited third-party lab facility.

During the ASTM E2273 test, a spray box with two small openings allowing for water application was sealed to the wall. Next, water was sprayed onto the wall for a total of 75 minutes, with the amount of water collected measured at every 15-minute interval. Water flow and dispersion was held constant throughout the test.

Once the 75 minutes was complete, the wall sat idle for an additional 60 minutes before finally totaling the collected water that had drained from the wall assembly. If greater than 90% of the total applied water had drained and been collected, the wall assembly was said to be in accordance with ASTM E2273. Section R703.9.2 of the 2018 International Residential Code (IRC) and Section 1407.4.1 of the 2018 International Building Code (IBC) both require the wall to have an average minimum drainage efficiency of 90% when tested in accordance with ASTM E2273.

When tested at an independent third-party lab, both TYPAR BuildingWrap and TYPAR Commercial achieved a drainage efficiency of greater than 90%. For a full comparison of ASTM E2273 results across TYPAR® WRBs, please refer to the below summary chart.

Comparison of ASTM E2273 Results Across TYPAR Weather-Resistive Barriers

	TYPAR WRB	ASTM E2273 RESULTS	MEETS 2018 IRC/IBC MINIMUM OF 90%
	TYPAR® BuildingWrap™	>90%	✓
	TYPAR® Commercial	>90%	✓
	TYPAR® DrainableWrap™	≥95%	✓
	TYPAR® DrainableWrap™ Commercial	≥95%	✓

FOR MORE INFO, VISIT [TYPAR.COM](https://www.ty-par.com).



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