

THE VAPROSHIELD SYSTEMS APPROACH

VaproShield promotes a systems approach to building envelope design, incorporating Breathable Membranes, Rain Screen Design Components and 3D Window and Flashing Elements, resulting in High Performance Building Envelope Solutions.

Complete System of Breathable Membranes + Rain Screen Design Components + 3D Window Flashing Elements = High Performance Building Envelope Solutions

WallShield is the most weather resistive vapor and air permeable underlayment for rain screen building envelope designs on the market today. With a rating of 212 perms, WallShield allows trapped interior moisture to escape, reducing the risk of mold, mildew and rot.

Drying Capacity

- The highest drying capacity in the industry (see chart page 2) allowing interior moisture to escape the building envelope.
- Ensures water-saturated sheathings dry quickly, preventing mold, mildew, rot, metal corrosion and reduced insulation thermal values.

Durability and Cost Effectiveness

- Cost effective flashing system for windows.
- Sustains 9 months of UV and climate exposure.
- Self-cinching, minimizes penetration point leaks and the need for sealant.
- Tear, rip and puncture resistant during and after construction, reducing repairs and labor costs.
- Installs easily and can span framing members without solid substrate providing moisture protection, facilitating cost-effective completion of the "dry-in" phase.

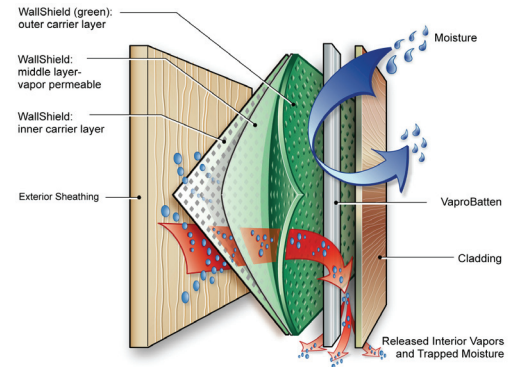
Environmental Sustainability

- Contributes to LEED points in Indoor Environmental Quality and Energy & Atmosphere.
- Is 100% recyclable.

Compatibility

- Compatible with multiple substrates: gypsum, OSB, plywood sheathing, rigid insulation, concrete block and pour-in-place concrete.
- Compatible with most major cladding systems; zinc, steel or aluminum siding, architectural composite wall panels, traditional or cement board stucco, EIFS, exterior insulation assemblies, natural or cultured stone, fire-rated panel assemblies to NFPA 285, face sealed systems, masonry veneer, and reclaimed wood.

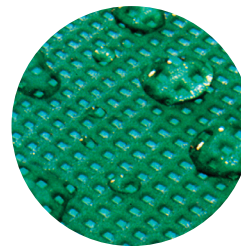
WALLSHIELD® UNSURPASSED IN PERFORMANCE



WallShield Membrane Construction



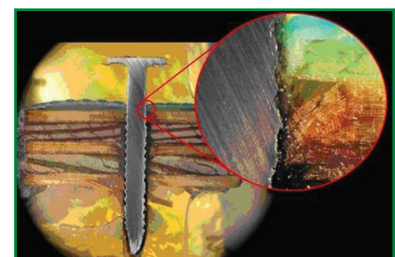
WallShield, a high-end weather barrier, allows any consequential moisture in the wall system to breathe out, as seen on the Covenant House in Anchorage, Alaska.



WallShield water vapor transmission: 212 perms, highest in the industry.



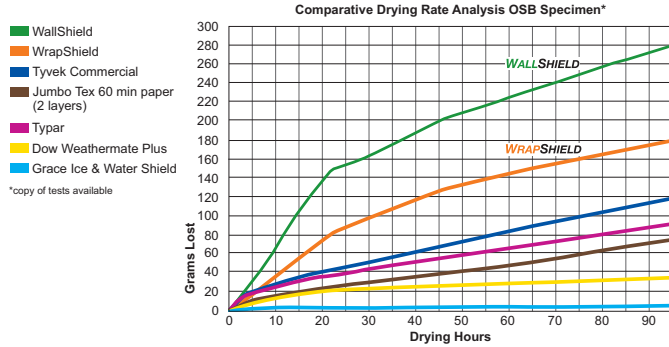
WallShield triple layer spun bond polypropylene.



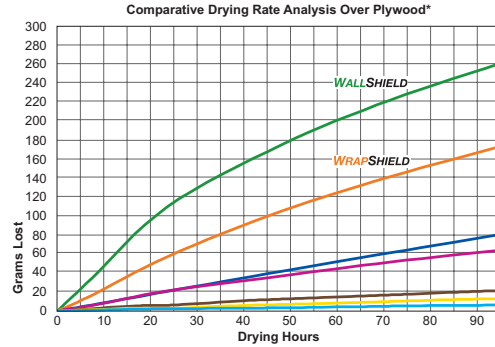
WallShield self-cinches around fasteners, minimizing the need for sealant reducing construction time and costs.

WALLSHIELD® TESTING

Drying Rates Comparisons



Actual test reports available from VaproShield



The superior drying capability of WallShield, the highest vapor permeable commercial breather membrane in the industry

Acceptance Criteria for Weather Resistant Barriers AC 38 (polymeric-based barriers).

PROPERTY	STANDARD/TEST	RESULT
Tensile Strength	ASTM D882	MD – 28.2 lbf/inch (4.94 N/mm) CD – 22.6 lbf/inch PASS
Water Resistance (control and weathered specimens)	AATCC 127 (55cm Hydrostatic Head of Water for 5 hrs)	No leakage noted on underside of control or weathered samples PASS
Water Vapor Transmission	ASTM E96* (Method B)	1309.7 g/m ² 24hrs 12126.4 ng/Pa/s/m ² 212 Perms PASS
Wall Assembly Fire Test	NFPA 285	PASS with diverse assemblies**
Flamespread Index	ASTM E-84	5 – Class A PASS
Smoke Development Index	ASTM E-84	70 – Class A PASS

VaproShield breathable membranes are unsurpassed in their ability to dry wet sheathing.

Third-party testing results clearly indicate the superior drying capability of both WallShield and WrapShield.

Drying is essential in preventing the damaging effects of mold, mildew and rot, resulting in repair costs, poor indoor air quality and strain on HVAC systems.

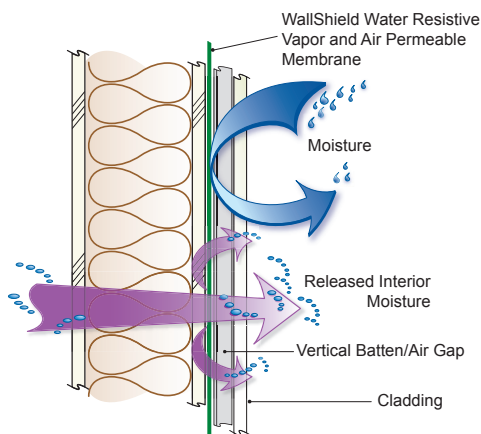
Tested in accordance with ICC-ES AC 38 criteria to meet IBC and IRC requirements for Weather Resistant Barriers (ICC Certificate #ESR-1916).

*ASTM E 96 - Method B (wet cup method) typically gives a more realistic result for permeance than does the Method A (dry cup/desiccant method).

**Contact the VaproShield Technical Team to learn more about NFPA compliance and testing.

MAXIMUM DRYING CAPACITY

WallShield water resistive barrier allows water vapor (gas) to permeate to the exterior and protects the building enclosure against liquid bulk water intrusion.



EXTERIOR INSULATION OPTIONS

Apply WallShield on either side of the exterior insulation, either alone, or used in conjunction with an air barrier membrane (WrapShield), located elsewhere in an assembly.

