

# COMPREHENSIVE MASS TIMBER MOISTURE PROTECTION



## A FLOORS

*SlopeShield Plus Self-Adhered is designed to protect mass timber floors and decks and remains permanently installed.*



The Heartwood,  
Seattle, WA

## B FRAMEWORK

*WallShield IT provides **temporary protection** of vulnerable mass timber structural elements such as columns and beams.*



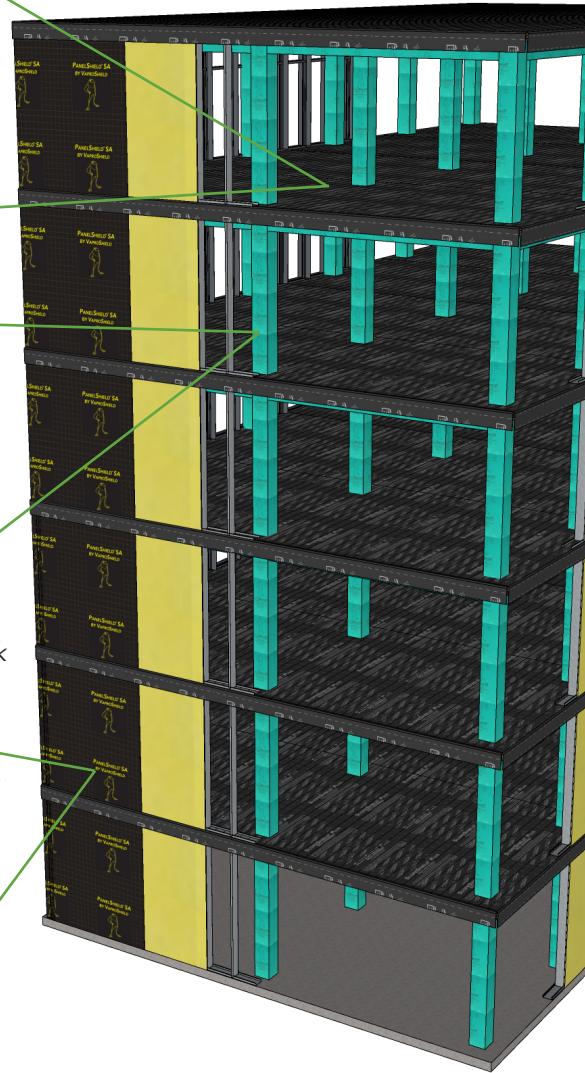
The Aliko Perroti and Seth Frank  
Lyceum, Amherst, MA

## C WALLS

*PanelShield SA guards walls from damaging moisture intrusion and remains permanently installed.*



400 W Elm,  
Conshohocken, PA



**SLOPESHIELD® PLUS**  
SELF-ADHERED

**WALLSHIELD® IT**  
INTEGRATED TAPE

**PANELSHIELD™ SA**

# MASS TIMBER MOISTURE MANAGEMENT

## MAXIMIZE DRYING, MINIMIZE WETTING

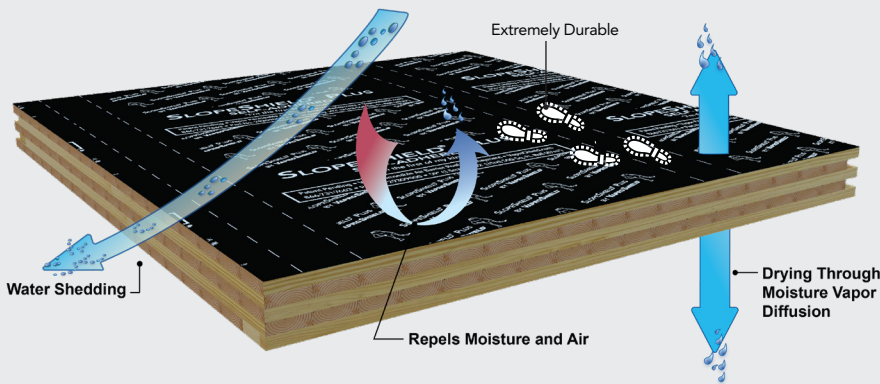
Mass timber projects can be susceptible to **mold, cracks, and potential structural damage** when a moisture protection strategy is not implemented. Builders can avoid costly damage by **using SlopeShield Plus SA**— a fully self-adhered, high drying capacity sheet membrane—to simultaneously **protect and dry** the mass timber structure. SlopeShield Plus SA is **tough and durable** to heavy machinery and foot traffic. It can be applied in below freezing temperatures and offers **six month UV and climate exposure** to meet the demands of today's **scheduling challenges**.



Outer portions of mass timber layers may dry disproportionately faster compared to the inner layers, causing checking, staining, dimensional changes, and compromising structural values.

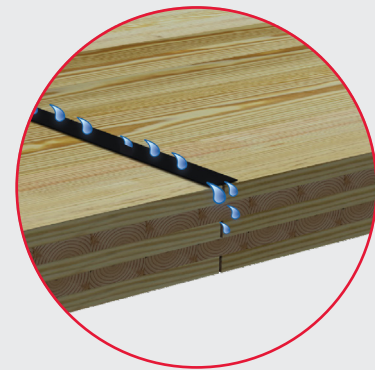
## MOISTURE PROTECTION STRATEGIES

### SlopeShield Plus SA



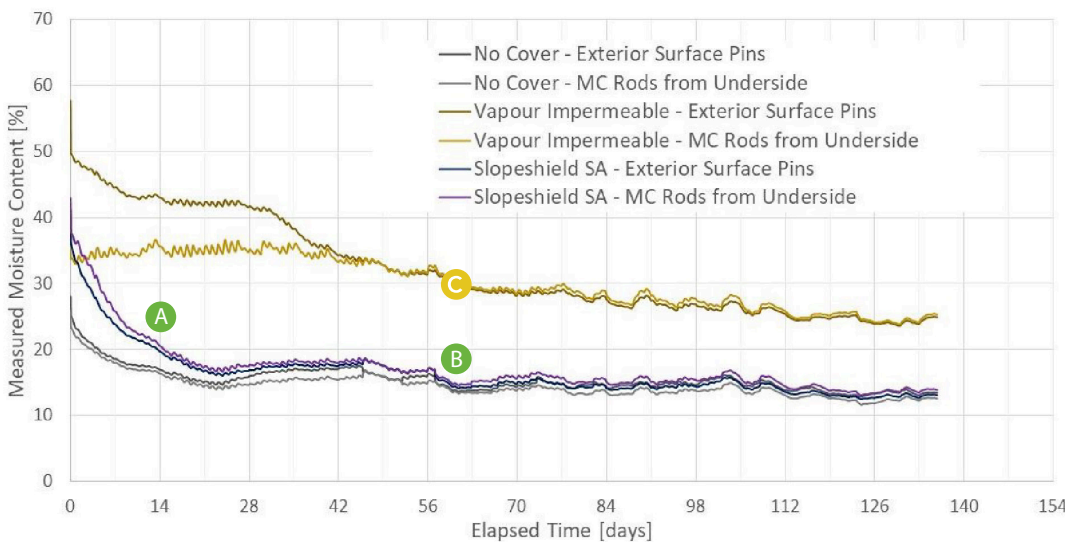
SlopeShield Plus SA protects mass timber from bulk water intrusion and concurrently dries mass timber through moisture vapor diffusion.

### Taped Splines Will Leak



Alternative protection such as taped splines will leak and less durable lower perm sheet goods offer little to no drying capacity, resulting in water damage and mold.

## WHY USE A VAPOR PERMEABLE MATERIAL?



Slopeshield Plus SA vapor permeable moisture protection **does not inhibit drying**. Once the mass timber dries, it will not get wetter and the mass timber deck is protected from future rain events compared to a vapor barrier that can indefinitely delay drying and trap moisture, causing unseen rot and decay.

- A** In a drying study, conducted by RDH Building Science Laboratories, SlopeShield Plus SA allowed a wet (42% moisture content) mass timber panel to dry to **below 20% moisture content in 14 days**.
- B** After 60 days, vapor permeable SlopeShield Plus SA is **nearly twice as dry** as the impermeable alternative, highlighting its superior moisture vapor diffusion performance and CLT protection.
- C** **Impermeable** membrane, with little drying capacity shows **30% moisture content**, clearly increasing the risk of mold, decay and potential structural damage.

MINIMIZE MOISTURE, MINIMIZE RISK, MAXIMIZE DRYING

# FLOORS

## SLOPESHIELD PLUS SA PROTECTION BENEFITS

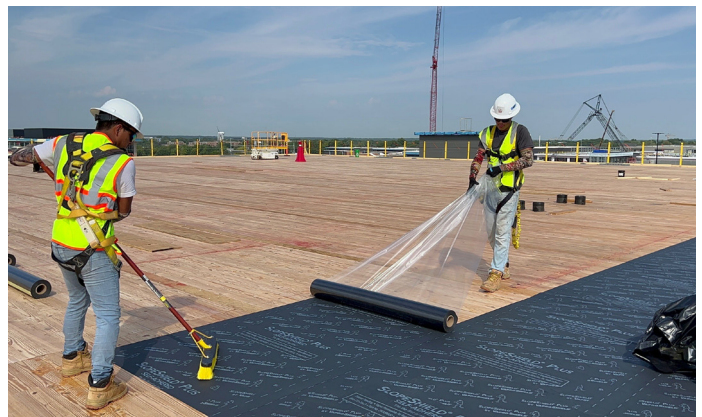
- Resists bulk water intrusion
- High drying capacity: 30 perms
- Permanent installation works in conjunction with acoustical mat and concrete topping slab
- Apply in wet or freezing weather
- Tough and durable to tools and machinery
- Excellent traction, slip resistant
- Six month UV and climate exposure
- Monolithically covers seams, splines
- Integrates with VaproShield's wall membranes for post/column and beam protection



SlopeShield Plus SA installed with VaproTape will protect the mass timber floor or deck from bulk water infiltration. *Installation College Building, Amherst, MA*



Durable to foot traffic and heavy equipment, SlopeShield Plus SA can withstand 6 months UV and climate exposure. *Installation College Building, Amherst, MA*



SlopeShield Plus SA offers superior UV resistance, mitigating the effects of prolonged exposure to sunlight and helps to maintain mass timber integrity. *Installation: Walmart Headquarters, AR*

## TOUGH AND DURABLE



End grains are especially susceptible to water intrusion. By allowing SlopeShield Plus SA to overhang the structure, end grains are protected when water is squeegeed from the deck after and during rain events. *Installation: College Building, Amherst, MA*



By protecting the interior floors with SlopeShield Plus SA, work can commence on the lower floors helping to keep the project on schedule. *Installation: Multi-Family, Seattle, WA*

# FRAMEWORK

## WALLSHIELD IT PROTECTION BENEFITS

- Temporary protection for framework and beams
- Protects against moisture infiltration, reducing structural compromise from wetting
- Guards against UV damage, mold, and wood discoloration
- Cutting-edge drying capacity, 123 perms, promotes rapid drying
- Durable and abrasion resistant
- Quickly installs in all weather conditions
- Easily removed, reused, or recycled



WallShield IT (green) temporarily protects beams and framework during construction from moisture infiltration, UV damage, wood discoloration, and is easily removed at the end of the project to showcase the beauty of the wood structure. *Installation: College Building, Amherst, MA*

# WALLS



PanelShield SA covered the rough openings and walls, protecting the inside construction materials against bulk water intrusion. When fenestration assemblies arrived, the crew quickly cut out PanelShield SA from the rough openings and utilized the field membrane as part of the flashing system. *Installation: Seattle, WA*

## PANELSHIELD SA PROTECTION BENEFITS

- Permanent vapor permeable air barrier wall protection
- Extremely durable, use to temporarily cover rough openings
- 12 months UV and climate exposure, ideal for long-term projects
- Aggressive adhesive firmly grips to all common substrates
- Superb drying capacity, 26 perms
- All weather installation, including below freezing
- Does NOT require primer
- Cost effective permeable polyester air barrier/WRB solution

Learn More About Mass Timber Moisture Protection at [VaproShield.com](http://VaproShield.com).



VaproShield's high drying capacity, breathable membranes offer a comprehensive mass timber moisture protection strategy; specified in Div. 1 or Div. 6.



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\*Mass timber is a broad term encompassing multiple types of products: cross-laminated timber (CLT), nail-laminated timber (NLT), interlocking cross-laminated timber (ICLT), glue-laminated timber (GLT), vertically laminated veneer lumber (LVL), laminated strand lumber (LSL). Multiple mass timber products can be used in the same building.