VAPROSHIELD®
Breathable Membrane Systems for Roofs & Walls

Mass Timber Moisture Protection

vapor permeable membranes for comprehensive mass timber moisture protection during and after construction. Roof Deck/Floor Deck Protection: SlopeShield Plus Self-Adhered, Framework Protection: WallShield IT, Wall WRB/Air Barrier: PanelShield SA

Overview

SlopeShield Plus Self-Adhered roofing underlayment offers permanent mass timber roof deck/floor deck protection by allowing vapor to pass through (breathable) but not air or liquid water.

WallShield IT Integrated Tape water resistive barrier (WRB) membrane offers mass timber post, column, and beam protection by allowing vapor and air to pass through but not liquid water.

PanelShield SA is a permeable polyester air barrier (AB) and water resistive barrier (WRB) sheet membrane offers permanent protection for exterior walls by allowing vapor to escape through but not air or liquid water.

Basic Use

SlopeShield Plus SA is installed on the roof deck/floor deck as the structure is erected and taped using VaproTape on the seams. The underlayment can be installed on a low slope (1/4":12 to 2:12) assembly or a steep slope (2:12 or greater) assembly.

WallShield IT is wrapped around post/columns and beams, and uses VaproTape at the seams.

PanelShield SA is designed for exterior walls with rainscreen cladding materials. VaproShield offers additional WRB air barrier membranes for walls including open joint cladding, see individual product data sheets.

Materials

SlopeShield Plus SA: spun-bond polyester

WallShield IT: multiple layers of spun-bonded polypropylene

PanelShield SA: spun-bond polyester

Compatible Substrates

- All mass timber types:
- Cross-laminated timber (CLT)
- Nail-laminated timber (NLT)
- Dowel-laminated timber (DLT)
- Vertically laminated veneer lumber (LVL)
- Glue-laminated timber (GLT)
- Laminated strand lumber (LSL)
- Timber-concrete composites (TCC)
- Parallel strand lumber (PSL)
- Mass plywood panel (MPP)

For additional substrates view individual product data sheets or contact VaproShield Technical.

Installation

STORAGE AND HANDLING

Store materials on end in original packaging at temperatures between 40°F and 120°F (4.4°C and 48.9°C). Protect materials from direct sunlight and inclement weather until ready for use.

SAFETY

CAUTION: Release liners are slippery. To prevent injury, liner should be removed from under foot as soon as membrane is installed and disposed of properly.

Work crews are safe around VaproShield membranes they contain zero VOCs or toxins.

Persons who access any roofs, involved with roof construction, repair or maintenance shall use appropriate personal protective equipment including, but not limited to, hard hats, eye protection, and leather gloves and must be trained on safe practices relevant to their work.

Where the use of ladders, scaffolds, platforms, or temporary floors are utilized, safety lines and safety harnesses shall be used. Please access the OSHA Web site at www.osha. gov, contact your local OSHA office, or visit the local federal bookstore to obtain the most current information on OSHA 29 CFR 1926.
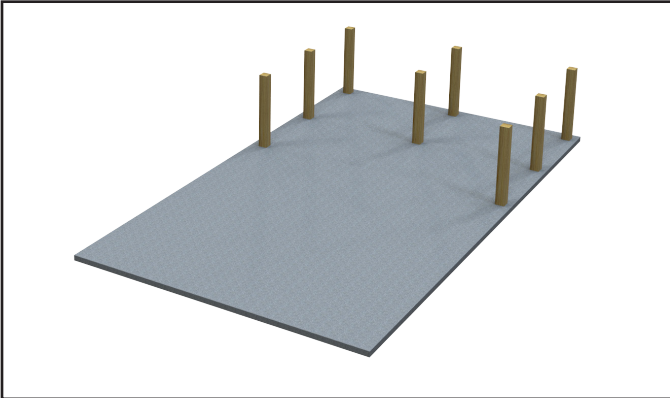
PREPARATION

For self-adhered membranes all surfaces must be dry, sound, clean, "as new" condition, and free of oil, grease, dirt, excess mortar or other contaminants detrimental to the adhesion of the roofing underlayment or WRB air barrier. Fill voids and gaps in substrate greater than ½" (12.7 mm) in width to provide an even surface.

LIMITATIONS

SlopeShield Plus Self-Adhered should be covered within 180 (6 months) of installation with permanent roofing/flooring material. Minimum recommended application temperature of 20°F (- 6.0°C) and rising.

PanelShield SA should be covered with cladding within 12 months of field assembly. Minimum field assembly recommended installation temperature of 20° F (- 6.0° C) and rising.

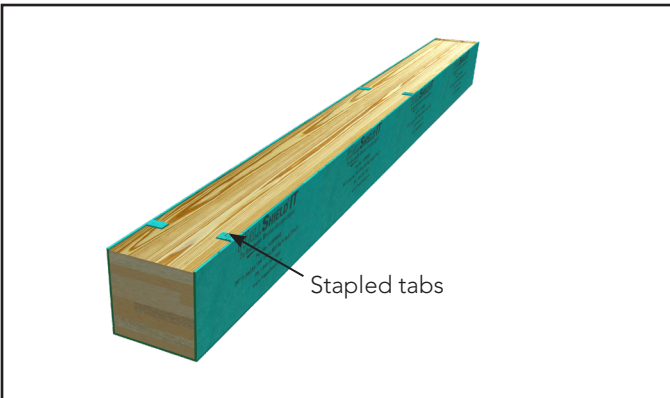## Best Practice Installation Sequence for Mass Timber Protection

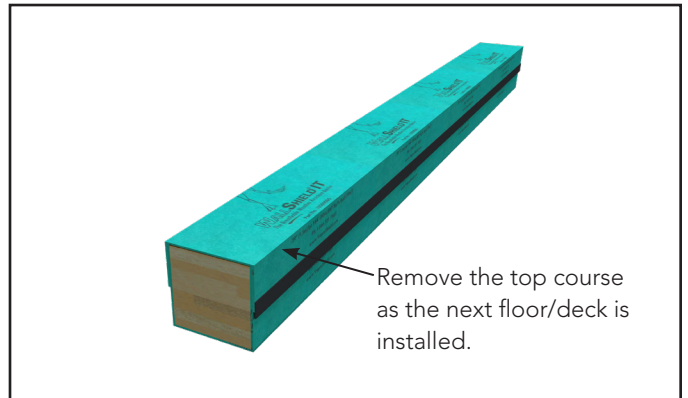1.Remove temporary factory wrap. Install posts/columns.
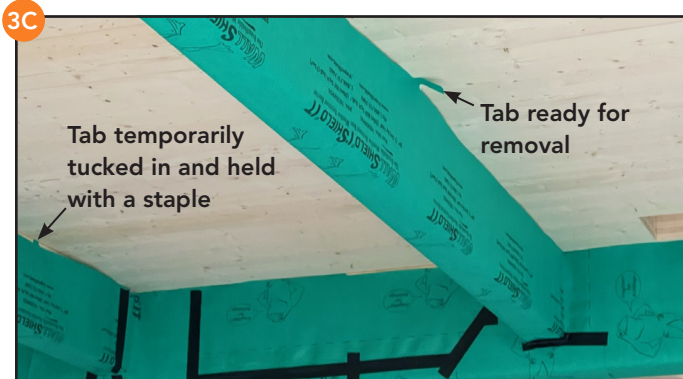
RIBBIT TIP: Beam Wrapping

2. Wrap post/columns with WallShield IT to protect against moisture, mold, and construction damage. Use VaproTape to hold seams together when required, add corner protection (by others).

Stapled tabs

3A. Measure and cut WallShield IT to fit around the entire beam. Cut tabs on top and secure with staples to ease removal.
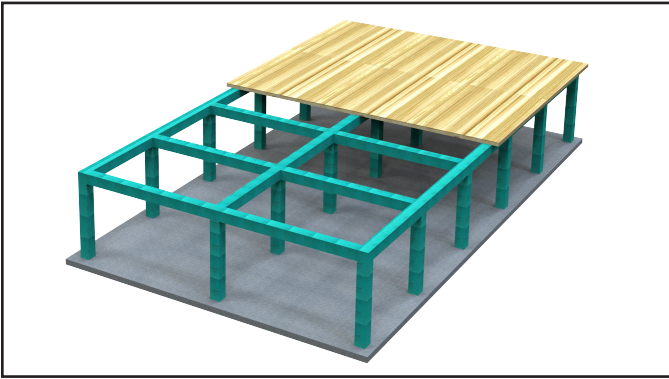

Remove the top course as the next floor/deck is installed.

3B. Place WallShield IT over the top of the beam and secure temporarily with a few pieces of VaproTape on the sides.

3C

Tab temporarily tucked in and held with a staple
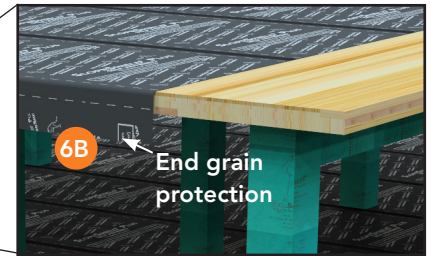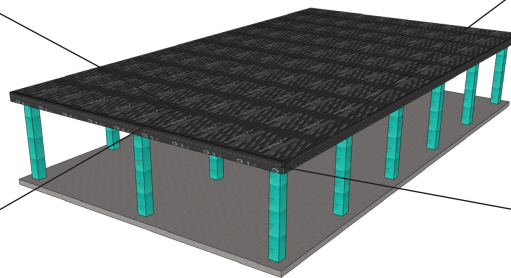
Tab ready for removal

4. Connect and/or install wrapped post/column to wrapped beam. Use VaproTape as required on seams.

Best Practice Installation Sequence for Mass Timber Protection

5. Construct mass timber floor/deck. Remove top pieces of Wallshield IT just before panels are laid.

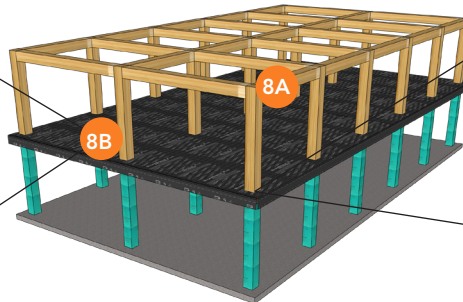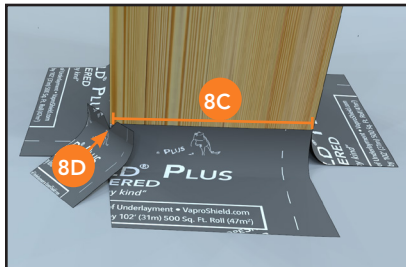

6A

6B — End grain protection

CAUTION: Release liners are slippery. To prevent injury, liner should be removed from under foot as soon as membrane is installed and disposed of properly.

6A. Install SlopeShield Plus SA over mass timber deck/floor to protect the mass timber from moisture intrusion and construction damage. Tape allseams/laps using VaproTape.
Note: Panels with factory-applied SlopeShield Plus SA also require VaproTape at all seams and laps.

6B. Allow SlopeShield Plus SA to hang over the edge, leave release film on overhang. Secure with cap fasteners or nailing strip
Note: With factory-applied SlopeShield Plus SA, use a separate field-applied perimeter strip of SlopeShield Plus SA for the overhang.

8C
8D
8A
8B
8E

8A. Install the next level of post/columns and beams and repeat steps 2 - 4 to protect posts/columns and beams

8B. Protect the base of each post/column from moisture infiltration and construction damage.

8C. Cut SlopeShield Plus SA to post/column size base width and wrap around the base of the post/column. Remove release film and adhere to floor/deck and up posts/columns to the height of the topping slab surface.
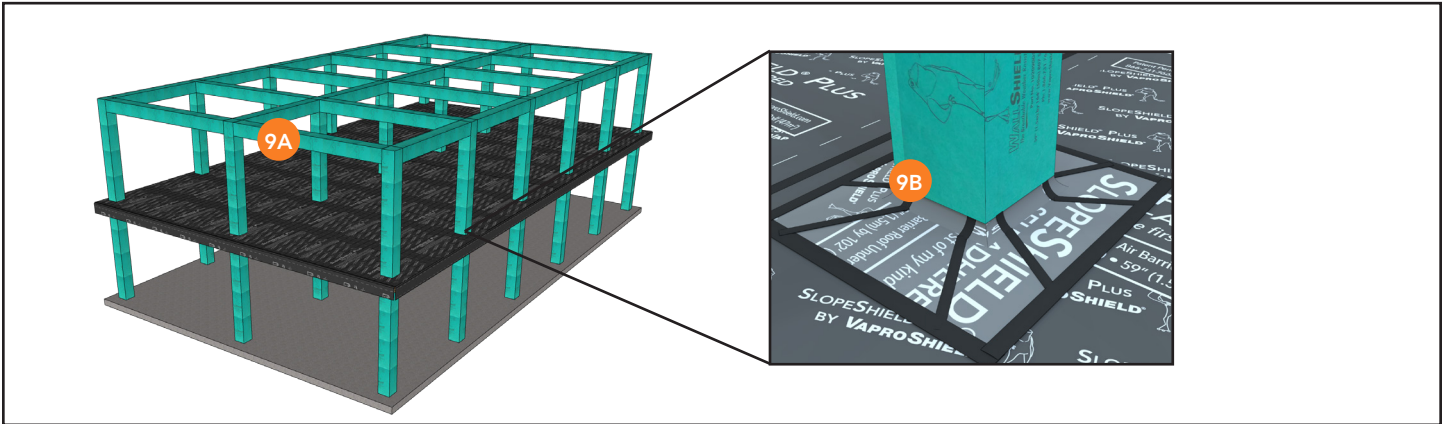
8D. Cut strips of SlopeShield Plus SA and notch to protect corners. Remove release film and adhere to floor/deck and post/column.

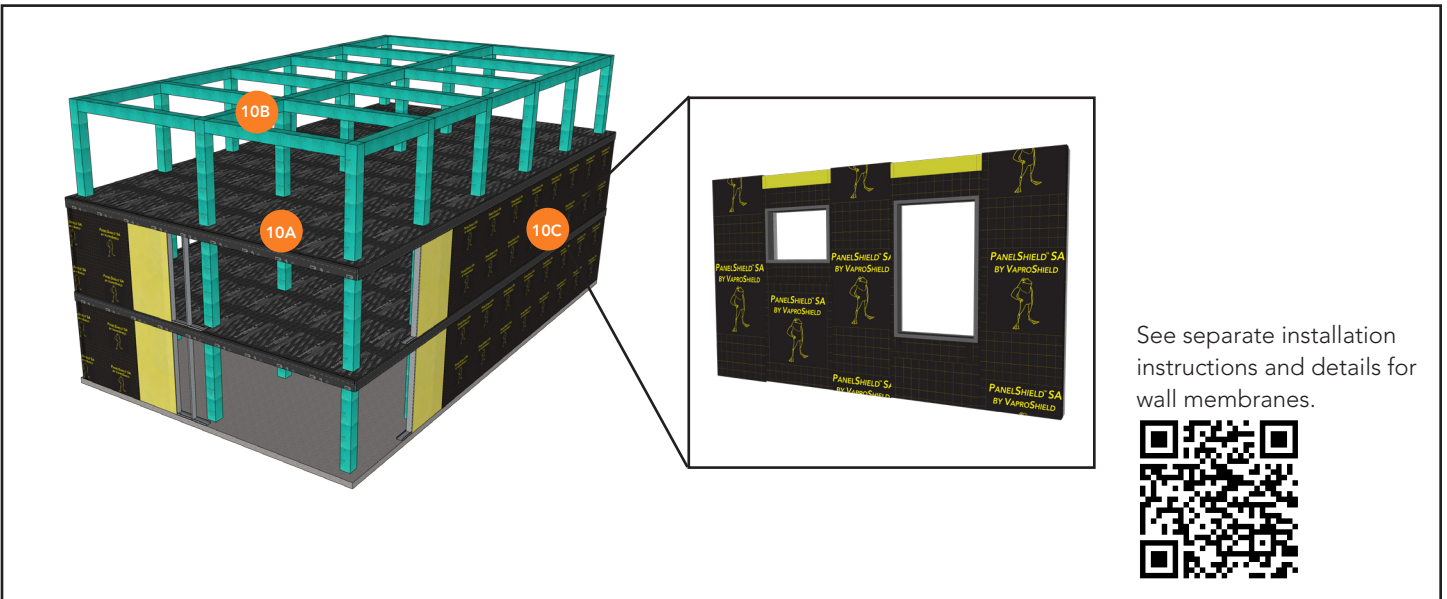8E. Use VaproTape to cover all seams and edges of the SlopeShield Plus SA.

SlopeShield Plus Self-Adhered, WrapShield IT Integrated Tape, PanelShield SA / SlopeFlashing Part No.: 41308000

Best Practice Installation Sequence for Mass Timber Protection

9A. Continue wrapping WallShield IT around the beams and posts/columns according to steps 2 - 4.

9B. Ensure Wallshield IT is installed over the previously installed SlopeShield Plus SA at the base.

See separate installation instructions and details for wall membranes.

10A. Continue installing deck/floor, protecting with SlopeShield Plus SA.

10B. Continue installation of post/columns and beams protecting with WallShield IT.

10C. As the wall substrate is erected install a VaproShield continuous vapor permeable air barrier to protect walls and rough openings.

Important Note: Protect each story along with the walls as the job progresses. This proven protection method greatly reduces the risk of long-term moisture damage, staining, and mold to the mass timber structure and preserves the natural beauty of the wood.

Additional Details and Sequences

Scan QR code for additional sequences and details including field/factory installation or Contact us at 866-731-7663, or email: technical@vaproshield.com

Warranty Information

Scan the QR code to complete a warranty request form.