



VERSA-DECK Plus

ICC ER # 6036

PRODUCT DESCRIPTION

VERSA-DECK PLUS is an extremely tough, four-step, metal lath reinforced fiberglass deck coating system that is designed to be used over new and previously coated plywood walking deck surfaces. VERSA-DECK PLUS provides a durable, waterproof deck surface that is resistant to UV degradation and freeze-thaw cycling, while providing a one hour fire resistive assembly when combined with appropriate construction.

PRODUCT COMPOSITION

VERSA-DECK PLUS is a four-step system made up of: **1)** 1.75lb galvanized expanded metal lath stapled to the plywood with corrosion resistant staples, buried with Metal Lath Cement, a high quality mortar made up of polymer, fine aggregate, and specially formulated high strength cements and additives. **2)** Fiberglass layer made up of 0.75oz/ft² fiberglass mat applied to the Metal Lath Cement using Laminating Resin, a flexible, acrylic adhesive coating. **3)** Texture Basecoat, a specially filled 100% acrylic coating formulated for spray, trowel, and roll applications to provide texture and light-medium non-slip profile to the deck surface. **4)** Finish Resins, specially formulated 100% acrylic topcoat formulated for spray and roller application to provide a durable, colored sealer coat resistant to light abrasion and UV degradation.

COVERAGE RATIOS

Metal Lath Cement	30 sq. ft. per bag
1.75 Lb Metal Lath	18 sq ft per sheet- 10 sheets per bundle- 500 sheets per pallet
5/8-inch Staples	625 sq. ft. per box- 10,000 staples per box
Laminating Resin	50 sq. ft. per gallon
Texture Basecoat	
(Rolled)	80 sq. ft. per gallon
(Sprayed)	70 sq. ft. per gallon
Finish Resin	
(1-Coat over sprayed texture)	110 sq. ft. per gallon
(1-Coat over rolled texture)	220 sq. ft. per gallon

SURFACE REQUIREMENTS

PLYWOOD (NEW):

Use minimum 5/8" exterior glue plywood. The plywood shall be secured to the support in a manner conforming to the building code using 3 1/2" - 4" long ringshanked nails or decking screws. All plywood edges shall be blocked or tongue and groove. Plywood surface must be dry and free of foreign matter that may impair adhesion. All angles and perimeter of the deck must be flashed with appropriate 26 gauge galvanized metal flashing according to local building codes. (*Note: Copper flashing will not be compatible with metal lath and staple.*) All slider thresholds, door-jambs, posts or any other objects that protrude through the deck surface must be flashed prior to the installation of sliders and doors. All joints on plywood stairs must be flashed using "L" metal flashing so that plywood joint is covered. All scuppers and overflows must be installed before flashing. All flashing should have a minimum of 2" overlap between individual pieces. Solder or caulk at all points where flashing overlaps. Plywood shall have a slope of 1/4" per foot to allow for proper water drainage. If sloping requirements cannot be met, install drains or provide additional slope to deck after metal lath installation using Metal Lath Cement.

PREVIOUSLY COATED PLYWOOD SURFACE PREPARATION:

Do not coat surface if staples do not penetrate through coating and into plywood. Remove any loose coating from plywood. Replace all rotten plywood with exterior grade plywood. Block all seams of replaced plywood. Inspect all flashing, railbases and other protrusions through deck and make repairs, if necessary. Repair any low spots or areas that have pooling water by shimming plywood, installing drains, or sloping with the Metal Lath Cement after laying metal lath. Correct any other defects that may exist.

DRAINS AND SCUPPERS:

Drain and Scupper should be lower than the finished deck surface for proper drainage. Use one-piece metal drains and scuppers, available at Versatile Building Products. Fiberglass, texture, and final sealer will be brought down the drain throat to ensure waterproofing is secure around the drain.

ONE HOUR FIRE RESISTIVE CONSTRUCTION (optional)

Consult Versatile Building Products Representative for supplemental requirements.

STEP 1) INSTALLATION OF METAL LATH AND METAL LATH CEMENT

INSTALLATION OF LATH:

Lay out the 1.75 LB galvanized expanded metal lath in a staggered pattern over the entire surface being coated while butting the seams together and placing the edges of the lath no closer than 2 inches to the seams in plywood. All lath shall cover deck and flashing metal from base of all vertical walls to the edge of the gravel stop on all drip edge metal. Attach metal lath to plywood with corrosion resistant staples of minimum 7/8" crown by 5/8" leg length using pneumatic staple gun. Use a minimum of 16 staples per square foot in the lath field while stapling lath seams at a spacing of 1", placing the staple such that it goes through both pieces of lath connecting them together. Lath shall be placed over flashing with staples spaced no more than 1" apart where lath overlaps metal flashing. Inspect surface when complete, checking for proper staple density, proper staple penetration into deck, and bulges in the lath. Protruding staples and lath seams should be cut and removed if they cannot be sunk using a hammer. Bulges in the lath should be secured flat with more staples.

INSTALLATION OF METAL LATH CEMENT:

(Note: Metal Lath Cement is normally applied at a coverage rate of 30ft² per 50lb bag. Normal drying time is 1-2 hours at 70F. Drying time is effected by environmental conditions. Do not apply below 55F. Do not apply if rain is imminent.)

Mixing:

Add 3-4 quarts of water to a mixing bucket and add 50lb Metal Lath Cement slowly while mixing with a heavy-duty drill with paddle blade, bucket mixer, or portable cement mixer. Mix material for a minimum of 2 minutes. Normal working time is 15 minutes once material is mixed. Additional working time can be achieved using cold water. *(Note: Do Not Overwater! Do not mix with ice!)*

Tips: Carry a spray bottle of water to help slick the surface of the mortar when finishing, to achieve a smooth, tight surface. When more working time is needed, run a hose through a bucket of ice water to chill mixing water before mixing with mortar powder.

Application:

Start at outer edge by troweling the mix into the metal lath where it meets the metal flashing. Pour mix directly onto metal lath and start troweling it firmly back and forth using the metal lath as a screed. *(Do not over trowel the mix.)* Trowel mix tight to the surface over all metal lath from base of wall to the gravel stop of outside edge drip metal. The lath should be completely covered by the Metal Lath Cement mix. Clean all tools with water when complete. Allow to Metal Lath Cement to dry completely before proceeding to the next step.

STEP 2) INSTALLATION OF FIBERGLASS MAT AND LAMINATING RESIN

METAL LATH CEMENT INSPECTION:

Grind or scrape any rough edges, trowel marks, and protrusions to create a flat, uniform surface for the fiberglass to lay evenly. Clean and remove foreign matter and dust before application.

FIBERGLASS MAT:

Field and Flashing:

Lay fiberglass mat onto deck surface. Cove fiberglass mat up onto walls and/or deck to wall flashing approximately 1" to 2". Make sure that fiberglass mat comes in contact with all perimeter edge flashing. Cove the fiberglass underneath sliding doors and under thresholds, if possible. When it is not possible to cove underneath thresholds, bring fiberglass over threshold approximately 1/2". *(Note: When coving fiberglass over thresholds make sure there is no movement in the slider or the threshold as this may cause the coating to tear. Do not cover over weep holes.)* Use a razor blade or sharpened shears to cut fiberglass mat approximately 1/4" to 1/2" from outside edge of deck and cove fiberglass up and around any and all rail bases or other protrusions 1 1/2" to 2". Butt fiberglass pieces together by cutting to approximate size and ripping outer edge so that the fiberglass pieces will feather together. *(Do not overlap seams!)*

Stairs:

Cut individual pieces of fiberglass for each step. The starting and stopping point for each piece should occur on the beginning of the riser on each step. Pull edges off of fiberglass so that it will feather, but not completely cover, the inner corner of the riser.

Tip: It is easier to lay the fiberglass and laminating resin along every other step, and then do the skipped steps after the initial steps have dried.

APPLYING LAMINATING RESIN:

(Note: Laminating Resin covers approximately 50 ft² per gallon when used with 0.75 oz. mat and takes approximately 3-4 hours to dry on a 70 degree day. Dry time is effected by environmental conditions. Do not apply below 55F. Do not apply if conditions are near the dew point or rain is eminent.)

Tips: Use spiked shoes when working over wet material. Use specialized fiberglass rollers for the edges and field to ensure a strong bond.

Begin by cutting in the coves and edges with a 4" wide paintbrush. Completely saturate the fiberglass, working in the Laminating Resins until the fiberglass conforms to the cove, edge and/or rail base(s). It is important to maintain a wet edge on the material; avoid working the edges far beyond the field application area. (*Caution: Working dried edges can result in wrinkles and bubbles that will impair the waterproofing and the finished appearance of the system.*) Begin rolling Laminating Resins into fiberglass by pouring approximately 1/2 to 3/4 gallon of Laminating Resin onto fiberglass to create a puddle. Work resin into fiberglass using a 3/4" nap roller connected to a 6' extension pole. Be sure roller rolls freely instead of sliding. Start spreading the Laminating Resin over fiberglass evenly. (*Caution: Avoid dry rolling and do not dip and roll! The fiberglass must be saturated!*) It is essential to completely saturate the fiberglass mat in order to provide a good bond to the substrate and create a flexible waterproof membrane. If the surface appears uneven, or appears to have pinholes, roll additional material to properly cover and saturate the fiberglass. Allow to material dry before proceeding to the next step.

BUBBLES AND WRINKLES:

If a bubble or wrinkle is noticed while the material is still wet, use a razor to slit down the middle of the bubble or wrinkle and then apply moderate pressure with roller to the area until it disappears. Similarly, bubbles and wrinkles may be addressed using a metal fiberglass roller, which can chop up and roll down bubbles and wrinkles with much greater ease.

STEP 3) APPLICATION OF TEXTURE BASECOAT

PREPARING FIBERGLASS FOR TEXTURE:

- 1) Check dried fiberglass for defects and irregularities, such as protrusions and bubbles. Bubbles typically occur in areas with pinholes and high spots, and will have a hollow sound when tapped lightly. Bubbles 1-2cm in diameter can be cut out and filled with Patching Compound. Larger bubbles should be 'X' cut and peeled back so that a fresh coat of Laminating Resin can be used to adhere the underside of the fiberglass down to the surface. For bubbles greater than 10cm, and areas with a high number of smaller bubbles, cut out and replace fiberglass.
- 2) Wrinkles in the fiberglass should be shaved down with a razor blade and subsequently smoothed with Patching Compound.
- 3) Surface imperfections, repairs, seams, and fiberglass edges should be smoothed with a coat of Patching Compound prior to texturing.
- 4) Proceed to the next step after the Patching Compound and repairs have dried.

APPLYING TEXTURE BASECOAT:

(Note: Texture Basecoat covers approximately 70 square feet per gallon when sprayed or troweled, 80 square feet per gallon when rolled, and takes approximately 3-4 hours to dry on a 70F day. Dry time is effected by environmental conditions. Do not apply below 60F. Do not apply if conditions are near the dew point or rain is eminent.)

Application of Texture Basecoat by Spray:

Application by hopper gun is the most common method of spray texture and the method outlined here. Use 18" masking paper to cover all surrounding areas to protect from overspray. Stir Texture Basecoat with a drill and Jiffy mixing blade before use. Use a 4" brush and stipple along all edges and around railbases or any other protrusions to create a simulated texture. Spray edges of deck first and then center, using a circular motion, to obtain uniformity of texture. Application thickness should not exceed 1/8" in one coat. Allow surface to dry completely before going to the next step.

For spray equipment recommendations and settings, consult with a Versatile Building Products technical representative.

Tip: Spray a small section masking paper or into a bucket to adjust spray settings before applying to deck surface.

Application of Texture Basecoat by Roller:

Dilute Texture Basecoat to roller viscosity by mixing up to 1qt of water per gallon of Texture Basecoat using a jiffy-type mixing blade. Use a 4" brush and stipple in along all edges and around railbases or other protrusions to create a simulated texture. Use a 3/8" nap, standard waterborne roller, pre-moistened with water to prevent nap from absorbing acrylic resins. Pour a small amount of Texture Basecoat mixture onto the fiberglass and roll back and forth until a uniform pattern has been reached. Do not dip roller. Work in small areas and maintain a wet edge for uniform appearance. *(Do not back-roll dried areas as it will cause clumping of the texture.)* A second coat may be applied at a 90-degree angle (right angle) for a more uniform appearance once the first coat has dried. Allow to dry completely before proceeding to the next step.

STEP 4) APPLICATION OF FINISH RESINS

(Note: Finish Resin covers approximately 220 square feet per gallon with 1 coat, and takes approximately 1 hour to dry on a 70F day. Dry time is effected by environmental conditions. Do not apply below 60F. Do not apply near dew point or if rain is eminent. Caution should be exercised when applying in hot, dry conditions as flashing and streaking may occur.)

Tip: If the product batch numbers on the Finish Resin containers differ, then all containers should be blended together to ensure 100% color uniformity.

Preparation for Finish Resins:

Lightly skim the dried Texture Basecoat surface with a putty/broad knife to remove any clumps and blemishes. Sweep off all areas or use commercial air blowers to remove loose texture and dust.

Application of Finish Resins:

Use a 4" brush and cut in edges, rail bases, etc. while maintaining a wet edge during application. *(Note: If a wet edge is not maintained, color shading and streaks may occur.)* Use a 3/4" nap roller and roll Finish Resins onto all areas of deck, keeping pace with the cut-in edges. Two coats are recommended to ensure complete sealing of the deck surface. Roll second coat at a 90-degree angle from the first coat. Allow Finish Resin to dry completely.

FINAL DETAILS

Install aluminum stair nosing over all plywood steps where possible to prevent damage to the coating at corner of step. Leave 2" on either side of step open to allow water to drain off. Use stainless steel screws and imbed screw thread in caulk when attaching to step.

ADDITIONAL CAUTIONS AND RECOMENDATIONS

- Clean flashing prior to coating to remove residual cutting oils and contamination.
- Do not apply Metal Lath Cement if substrate temperature cannot be maintained at 55F for the first four hours after application. Warmer temperatures require less time.
- Do not force dry any components of the Versa-Deck Plus system.
- Coverage rates will vary. Coverage rates do not include sloping.
- Water test deck surface after Laminating Resin and fiberglass have dried.
- Mask all areas that need protection. If overspray or splatter occurs, cleanup with water immediately.