

DESCRIPTION: Ultra Surface Metal Fusion is a three-dimensional metallic epoxy system designed to create elegant and exotic looking seamless floors. Metal Fusion is 100% solids, two component, epoxy formulation consisting of a high performance Bisphenol A epoxy resin blend combined with a Cycloaliphatic curing agent. It has attractive properties such as low viscosity, no VOC's [solvent free], low odor, moisture insensitivity, and excellent bonding on a variety of surfaces. It is packaged in 1 ½ and 3 gallon kits for convenient use in a 2:1 mixing ratio [2 parts A to 1 part B]. It is a versatile, high grade epoxy material for a variety of job applications. Available in 12 standard metallic colors. Always do a sample of the color selected and have it approved before starting a job.

TYPICAL USES: Ideal for residential and commercial use including, living rooms, kitchens, bathrooms, retail stores, office spaces, lobby areas, tattoo parlors, barber shops, hair salons, restaurants, clothing stores, casinos and showroom floors.

APPLICATION CONDITIONS: Apply Ultra Surface Metal Fusion to a properly prepared substrate at a temperature above 40 degrees Fahrenheit. Cures faster in warmer temperatures.

SURFACE PREPARATION: The surface to be coated should be thoroughly clean; free of any contaminants such as oil, grease or other incompatible materials. Shot blasting or dustless grinding are common surface preparation methods to clean and etch the surface. Some surfaces may also require scrubbing with detergent following by rinsing and wet/dry vacuuming.

MIXING INSTRUCTIONS: The mixing ratio for Metal Fusion is 2 parts A to 1 part B. Mix thoroughly for 3-5 minutes using a drill motor and mixing paddle. Scrape the sides and bottom of the container while mixing. Mix up no more material than can be used in a 15 minute time period.

CURING: Ultra Surface Metal Fusion is generally tack free in about 6 hours at approximately 70 degrees Fahrenheit. Cooler temperatures result in longer drying times, while in warmer temperatures the drying time is accelerated.

CHEMICAL RESISTANCE: Excellent resistance to the following reagents: Xylene, 1,1,1, 5% Detergent Solution, 50% Sodium Hydroxide, 70% Sulfuric Acid, 10% Hydrochloric Acid, Skydrol, Synthetic Gasohol, Mogas, Diesel [No. 2 and 3] oils, JP-4, 5,7,8, Diethylene Glycol, Monomethyl Ether; Good resistance to Toluene, MEK, EB, 10% Acetic Acid, Ethyl Alcohol, Methyl Alcohol. When chemical resistance is a factor, it is recommended to do a test to determine suitability.

APPLICATION INSTRUCTIONS: **Important – Before applying Metal fusion always blow the entire surface to be coated, including around all the edges, corners and under walls to be sure no loose debris will come out during the Metal Fusion application. Loose debris hidden under drywall can become imbedded in the Metal Fusion if not removed ahead of time.**

Ultra Surface Metal Fusion

Advantages:

1. 100% Solids, Zero VOC
2. Low Viscosity.
3. Excellent Adhesion. Bonds well to concrete and other substrates.
4. Adheres to damp concrete.
5. Self Leveling
6. Resistant to Amine Blush, Resistant to Exudation.
7. Will not crystallize, even in cold environments.
8. Insensitive to moisture.
9. Not regulated by the DOT.

Follow the step by step instructions below to achieve the best results. It is recommended to use Ultra Surface Epoxy 200 as a primer to help guard against possible moisture vapor transmission problems from below the concrete surface. Epoxy 200 also helps to fill in pin holes in the surface to avoid bubbles in the Metal Fusion that can rarely be caused from out gassing. **Wear proper OSHA approved dual cartridge type respirator during application.**

Step 1 - Once the surface preparation and any patching required is completed, apply Ultra Surface Epoxy 200 at a coverage rate of approximately 200-300 sq. ft. per gallon using our Metal Edge Squeegee and a 1/4" nap shed resistant roller. Allow the Epoxy 200 to cure for 12-15 hours (overnight) or until dry enough to walk on.

Before applying the Metal Fusion over Epoxy 200, check the surface for any tiny open pinholes or open fine cracks in the 200. If everything looks tight and covered you can proceed with step 2. If you see any open pinholes or fine cracks that didn't get filled in, they should be patched with our fast setting Unitex Propoxy 300 (see price list page 1 under crack repair products) or something equivalent. Feather the Unitex Propoxy 300 to zero using a putty knife. Do not leave a build up on the surface.

Step 2 - Metal Fusion Application - Mix 2 parts A to 1 part B for 4 minutes using a slow speed drill and mixing paddle. Mix the sides and bottom of the mixing container to ensure proper blending. Don't let it sit in the bucket for more than 5 minutes after mixing or it will begin to set up in the container. Pour the entire mix in a thin row next to the starting edge. Once it's poured in a thin row you should have at least 20-30 minutes to spread it around.

Spread the Metal Fusion using our 3/16" Notched Squeegee and back roll using a 3/8" nap paint roller. Use a good quality paint roller and wash the roller with a high-pressure water hose nozzle and allow to dry prior to use to remove any loose hair.

After back rolling, mix up the next batch of Metal Fusion within 15 minutes of the first mix to keep a wet edge where the two mixes will blend together. After spreading and rolling the second mix you can now blow the 1st section that's been sitting for at least 15 minutes with an electric or cordless blower. Wear spike shoes and hold the blower 4-6" away from the surface. Move it around randomly in a circular motion. The blower will wrinkle up the metal fusion and then it should self level smooth again. You can blow the surface between 15 - 30 minutes after you spread. It's okay to blow the Metal Fusion immediately after spreading as long as you also blow it a second time after 20-30 minutes to achieve the best results. **Another option to create different effects is to spray Acetone after blowing the surface using an acetone resistant pump up sprayer. Spray in random spots in a fog coat or spray in a straight stream to create drip marks that look like moon craters. Experiment on a sample board. Do not spray too heavy, especially over the green colors (Metallic Jade and Meteorite) which are more sensitive to Acetone. Light fog sprays or drips only. You won't see the results right away from the acetone; it takes time to react with the Metal Fusion. Always do a sample board first before doing a job. Turn off all pilot lights and open flames when using Acetone and wear a proper respirator.**

Keep doing the above process until the entire floor is completed or you've reached a designated stopping point. Measure the coverage rate of the first kit of Metal Fusion to make sure you have enough to cover your job. Clean tools with Acetone. Allow the Metal Fusion to cure for 12 - 15 hours or more before walking on.

Step 3 – Apply Topcoat Sealer - (Warning Flammable) Turn off any pilot lights or open flame sources. Wear the proper dual cartridge OSHA approved breathing mask. Apply Ultra Surface HP Urethane within 24 hours of applying the Metal Fusion. After 24 hours the Metal Fusion will need to be sanded using 80-100 grit sandpaper on an orbital sander before applying HP Urethane. Mix the HP Urethane 2 parts A to 1 part B. Spread thin using a washed clean 1/4" nap shed resistant paint roller or mohair roller at a coverage rate of 300-400 sq. ft. per gallon. Allow the HP to dry for 24 hours before opening to traffic. For a faster cure time Ultra Surface Polyaspartic sealer can be used in place of the HP Urethane.

COVERAGE RATE: Approximately 40 - 50 sq. ft. per gallon.

FLASH POINT: Resin = 400 F., Hardener = 210 F.

CURED PROPERTIES:

Shore D Hardness: 82

Compressive Strength: 10,000 psi min.

Flexural Strength: 11,900 psi

Tensile Strength: 7,500 psi

Elongation: 4%

Bond Strength 300 psi min. [to concrete]

SHELF LIFE: Minimum of one year in unopened containers.

WARRANTY AND LIABILITY: The applicator is responsible to make his or her own assessment of the products suitability for a particular purpose. Our liability is limited to the purchase price of any product proven to be defective.