

# Bulletproof: Metallix

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## Product Overview

Metallix is a high-performance, two-component epoxy system designed for metallic floor applications. With a crystal-clear finish, zero VOCs, and long working time, it delivers a seamless, high-gloss surface that's durable, odorless, and easy to apply making it the top choice for luxury-grade coatings.



## Key Benefits

- ✓ Seamless high-gloss finish
- ✓ VOC compliant in all 50 states
- ✓ FDA / CFIA food-safe certified
- ✓ Bubble-Reducing Formula
- ✓ Crystal-Clear Finish
- ✓ Ensures consistent pigment suspension and even coverage
- ✓ Long working time and easy flow
- ✓ Excellent chemical resistance
- ✓ Odorless and self-leveling
- ✓ UV Blocker for prolonged protection.
- ✓ Mold & Moisture Resistant



## Application Areas

Metallix is ideal for residential garages, commercial kitchens, retail spaces, showrooms, laboratories, and medical environments. Its high-gloss, seamless finish makes it especially effective for spaces that require durability, easy maintenance, and chemical resistance.



## Mixing & Installation

Combine 2 parts Resin (Part A) with 1 part Hardener (Part B) by volume. Mix thoroughly for 3 minutes using a low-speed drill and paddle. Immediately pour the mixed material onto the prepared surface. Spread evenly using a notched squeegee, then back-roll with a microfiber roller to ensure uniform coverage and air release.



## Performance Specs

- 100% solids, zero VOCs
- Pot life: ~20 minutes @ 70°F
- Working time: ~40 minutes
  - Foot traffic: 36 hours
  - Full cure: 72 hours
- Shore D Hardness: >80
- Compressive Strength: 14,000 psi
- Excellent resistance to chemicals, abrasion, and UV exposure



# Technical Overview

MetalliX is formulated for advanced performance and installer confidence. Its high-build viscosity ensures excellent pigment suspension and flow, while advanced additives reduce surface tension, helping eliminate pinholes and microbubbles.

The result is a flawless, glass-like finish across a wide range of surface conditions. Whether used in artwork, retail floors, or residential showrooms, Metallix brings clarity, depth, and long-lasting strength to every install.

## Advantages



### Advanced Additive Formula

Improves flow and leveling by reducing surface tension, minimizing installation flaws for a smooth, glass-like result.



### Installer-Friendly Viscosity

High-build formula ensures smooth pigment suspension and consistent flow during application.



### Versatile Across Substrates

Performs reliably on a wide range of concrete conditions and floor types.



### Long-Lasting Clarity

Maintains its glass-like appearance and depth, even in high-traffic spaces.

## Application Tools



### Microfiber Roller

Ensures smooth, even back-rolling and aids in air release for a flawless finish.



### Low-speed drill with paddle mixer

Used to mix resin and hardener thoroughly without introducing excess air.



### Notched squeegee

Spreads material at the correct thickness and promotes even distribution before back-rolling.



### Spiked Shoes

Allows installers to walk over wet epoxy without disturbing the surface during application.

## System Type & Mixing

- 100% solids, two-component epoxy system
- Ideal for metallics and pigment-rich designs
- Mixing Ratio 2A:1B
- Mix for 3 minutes using low-speed drill & paddle

## Pigment Load

- Up to 6 oz of metallic pigment per mixed gallon
- Compatible with all standard metallic pigments.

## Surface Prep

- Requires ICRI CSP-2 to CSP-3
- Substrate must be clean, dry, and free of contaminants.

## Coverage Rates

- Standard film thickness: 20–25 mils
- Average spread rate: 60–80 sq ft per gallon (depending on surface profile)
- Coverage may vary based on substrate texture and application technique

## Pot Life & Working Time

- Pot life: 20 min @ 70°F
- Working time: ~40 min
- After 24 hours, surface must be lightly abraded before recoating

## Recoat Window

- Minimum: 10–12 hours @ 70°F
- Maximum: 24 hours for chemical bond
- After 24 hours, surface must be lightly abraded before recoating

## Full Cure & Return to Service

- Light foot traffic: 36 hours
- Full chemical resistance: 7 days
- Do not expose to moisture during first 24 hours

## Storage & Shelf Life

- Store indoors between 60°F and 90°F
- Keep containers tightly sealed and upright
- Shelf life: 12 months in original unopened packaging

## Environmental & Moisture Requirements

- Concrete must be dry before coating. Verify using ASTM F1869 (calcium chloride) or ASTM F2170 (in-situ RH).
- Limits:  $\leq 3 \text{ lb}/1000 \text{ ft}^2/24 \text{ h}$  (F1869) or  $\leq 85\% \text{ RH}$  (F2170).
- Dew point: Surface temperature must be  $\geq 5^\circ\text{F}$  ( $3^\circ\text{C}$ ) above dew point.
- Ambient RH: Do not apply if ambient humidity is  $\geq 80\%$ .
- Temperatures:
  - Application (air):  $50\text{--}90^\circ\text{F}$  ( $10\text{--}32^\circ\text{C}$ )
  - Substrate:  $50\text{--}95^\circ\text{F}$  ( $10\text{--}35^\circ\text{C}$ )
  - Optimum working range:  $65\text{--}77^\circ\text{F}$  ( $18\text{--}25^\circ\text{C}$ )

## Concrete Surface Preparation

- Clean: Remove dust, oils, grease, laitance, sealers, and any bond breakers.
- Dry: No wet zones or standing water ( $\leq 4\%$  moisture).
- Profile: Mechanically prepare to ICRI CSP-2 or higher (grind/shot-blast).
- pH: Concrete pH  $\geq 9$ .
- Sound: Repair spalls and voids; remove all loose/weak material.
- Vacuum thoroughly before coating and between coats.

## Crack & Joint Treatment

- Control joints & random cracks: Saw/chisel clean and fill with a compatible epoxy or polyurea crack filler; tool flush.
- Construction/cold joints: After cure, saw through coating along the joint and fill with elastomeric joint filler to allow movement.
- Always confirm compatibility of repair materials with Metallix before installation.

PROPERTIES	VALUES	TEST METHOD
Compressive Strength	14,000 psi – 96 MPa	ASTM C 579
Flexural Strength	3,700 psi – 25.5 MPa	ASTM D 790
Tensile Strength	8,000 psi – 55.2 MPa	ASTM D 638
Adhesion to Concrete	350 psi (2.4 MPa) Substrate failure observed	ASTM D 4541
Flammability	Self-extinguishing	ASTM D 635
Hardness (Shore D)	$> 80$ after 24 hrs	ASTM D 2240
Moisture Uptake	$< 0.1\%$	ASTM D 570
Impact Resistance	No cracking, chipping, or delamination	MIL D 3134
Flash Point	$>200^\circ\text{F}$ – $>93^\circ\text{C}$	ASTM D 2240
Abrasion Loss	58 mg	ASTM D 4060
Mix Ratio	2:1 by volume	
Solids Content	100%	
VOC Levels	$<50 \text{ g/L}$	
Viscosity	Part A: 127 Ku / 760 g/m / 3500 cP Part B: 51.5 Ku / 67 g/m / 199 cP	
Density	Part A: 1.15 g/cm <sup>3</sup> Part B: 1.00 g/cm <sup>3</sup>	

### Disclaimer

- For areas requiring slip resistance, an anti-skid additive may be broadcast during the final coat.
- Final appearance may vary depending on lighting, substrate color, and application technique.
- Compatible with Bulletproof sealers and primers. Always perform a small-area test when combining systems.
- Dispose of contents and containers in accordance with local, state, and federal regulations.

### Warnings & Limitations

- Do not apply below  $60^\circ\text{F}$  or above  $90^\circ\text{F}$
- Keep containers tightly sealed and upright
- Do not apply over contaminated, damp, or unprepared surfaces
- Not designed for exterior exposure without a UV-stable topcoat
- Always test substrate for compatibility before large-scale use

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