

ZeraTuf™ W-102

High Performance Clear Waterborne Urethane Coating



DESCRIPTION

ZeraTuf™ W-102 is a high performance single-component self-crosslinking clear waterborne urethane coating for interior applications. It produces a highly durable hard surface with excellent abrasion, mar and scuff resistance. It is available in high gloss and satin finishes.

WHERE TO USE

ZeraTuf™ W-102 is designed primarily as a clear topcoat for interior applications over 100% solids epoxy floors or over ZeraPrime W-48FS (waterborne epoxy primer). Typical areas of use include restaurants, bars, studios, lofts, showrooms, retail stores, shopping malls, offices, hotel lobbies, casinos, public buildings and residential floors. It is the ideal product for use on concrete countertops over a clear epoxy coating such as ZeraKlear™. ZeraTuf™ W-102 is also ideal for applications to internal wood furnitures as well as hardwood floors.

BENEFITS

- Not toxic, low odour; contains no volatile solvents, isocyanate or other hazard materials
- Fast drying; multiple coats per day
- Excellent adhesion to epoxy primers & coatings
- Resistant to black heel or rubber burn marks
- Superior scuff and scratch resistance
- Flexible with high impact resistance
- Resistant to UV, stains, caustic, water and cleaners
- Ideal to “do it yourself” for wood floors and furniture
- Easy to clean and maintain with water and detergents
- Approved by the “Canadian Food Inspection Agency” to be used in food processing facilities.

HANDLING & CURING PROPERTIES @ 23°C (74°F)

Application Temperature.....	12°C-30°C (54°F-86°F)
Density Kg/Litre (Ib/US gal)	1.04 (8.7)
Solids.....	30%
Tack free time, minutes.....	30-60
Re-coat time, hours	2-3
Light foot traffic.....	4 hours
Full cure/ normal traffic	3 hours

DATA – Cured Film (All tests are conducted after 7 days cure @ 23°C/74°F)

Sward Hardness	36
VOC, g/l.....	192
Gloss:	
High Gloss	88-90/
Satin Finish	28-30/
Matte Finish	8-10/

Pull Out Tensile Adhesion (to epoxy coating) (ASTM D4541).....	over 5 MPa (725 psi)
Concrete Failure	
Abrasion Resistance (ASTM D4060)	
.....	32 mg loss
(Taber Abrasion, CS-17 Wheel, 1000 Cycles)	
Impact Resistance	pass 160 in/lb
(ASTM D2794)	
Scratch Resistance	89
(200 scrubs with a weighted abrasive pad, 100=no change in gloss)	
Finger-nail Resistance	8
(10=no scratch marks)	
Black Heel Resistance	8
(Pendulum Scuff Test, 10=no scuff marks)	
Chemical & Stain Resistance:	
The product has excellent over all resistance to household chemicals. Please refer to chemical resistant.	

APPLICATION

Concrete:

New concrete must be cured for a minimum of 28 days (or 7 days using ZeraPrime W-30FS) before applying a 100% solids epoxy primer/coating. The substrate must be above 12°C (54°F) and must be dry and free of all dirt, waxes, previously applied coatings, oil, grease, laitance and any foreign matter that may interfere with the bond of the coating to the substrate. Cracks and surface defects should be repaired prior to the application of coating (for clear application use ZeraBond Type 3). Concrete surfaces to be coated should be shot blasted or mechanically abraded to provide a clean tooth for the coating.

Apply ZeraTuf™ W-102 with a roller, spray or brush. A spray technique offers the best performance for film consistency, lack of roll marks and a smoother finish. For spray applications, ZeraTuf™ W-102 may be thinned with water (5% by volume) to a viscosity of 22 sec (Din cup #4, nozzle size 1.8- 2.0 mm and atomizing air 2.8-3.2 bar) before applying the first coat. Allow the surface to dry, sand it, then apply the topcoat.

For roller applications, use a lint free 9 mm nap roller and back roll the applied material to provide an even coat. Two coats are recommended at a 5 mils wet film thickness. Apply the second coat in the same manner as the first.

Curing:

The finished floor will take normal foot traffic after overnight drying but may remain susceptible to marking by furniture or heavy traffic until fully cured for 3 days after application. **Do not cover the coating until fully cured. (minimum 3 days).**

LIMITATIONS

- We recommend that **ZeraTuf™ W-102** must be used over a concrete floor in conjunction with a 100% solids epoxy primer/coating or **ZeraPrime W-30FS** for optimal performance.
- Do not use over white surfaces as the product has a light amber colour.
- Do not use over old painted or sealed floor without testing the adhesion beforehand.
- The coating tends to darken in colour if it is covered (turns to a dark amber or brownish colour) but it will recover to the original shade once it is exposed to the light again.
- Not recommended for vehicular traffic or garage floor coatings.
- You must use in a well-ventilated area.
- You must use within 24 hours of applying the epoxy otherwise the floor must be sanded to ensure a good adhesion.
- If **ZeraTuf™ W-102** is to be used in multiple coats, it should be done in the same day, otherwise light sanding or warm water/detergent wash is needed.
- Do not use in areas of high humidity or condensation.
- A minimum temperature of 12°C (54°F) is needed during the application and drying process.

TROUBLE SHOOTING

Slow dry or clearing: Low curing temperatures; high humidity; lack of ventilation after application.

Streaks: Product applied too thin.

Fish eyes: A foreign material on the surface, like oil, grease, or silicone.

Bubbling: Overworking the product with applicator: shaking the finish before applying; or, high temperatures during application.

Peeling: Improper floor preparation.

Screen marks: Using too aggressive a screen between coats.

Hazy film: High humidity during drying.

COVERAGE

A two-coat application (over primer) is required in most applications.

Roller: 10.5 m²/L (420ft²/U.S. gallon) per coat

Spray: 16 m²/L (650ft²/U.S. gallon cut 5% by volume)

PACKAGING

3.79 Litre (1 U.S. gal.)

18.9 Litre (5 U.S. gal.)

CLEAN UP

Clean up all equipment with water.

SAFETY PRECAUTION

Consult the Material Safety Data Sheet (MSDS) for specific instructions.

STORAGE

Store in a heated warehouse. Do Not Freeze.

WARRANTY

“The recommendations made and the information herein is the result of accurate laboratory and field tests under controlled conditions. We guarantee that the quality and properties of the materials supplied conform to our standards. Zeraus Products Inc. makes no warranties, expressed or implied, as uses and applications are beyond our control. Zeraus Products Inc. shall not be liable for any injury, loss, or damage (direct or consequential) arising from use or inability to use the products. Before using, the user is urged to pre-test the products in his/her own environment to determine the suitability of the products for their intended use, and the user assumes all risk and liability whatsoever in connection therewith.

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