



PRODUCT DESCRIPTION:

Bulletproof Commercial Grade 100% Solids Epoxy is a two-component, high-performance coating engineered for industrial and commercial floors. This 100% solids formulation delivers superior bonding and a seamless, durable finish. Ideal as both a basecoat or topcoat, it can be enhanced with decorative elements like Color Chips, Quartz, or Silica Sand. Bulletproof Epoxy ensures long-lasting protection and outstanding performance on prepared concrete surfaces.

KEY FEATURES AND BENEFITS:

- High Sheen
- Subtle scent
- Self-priming
- High color stability
- Higher UV Resistance
- VOC Compliant
- Withstands medium traffic as thin as 8 mil
- Chemical resistance
- Seamless

EXAMINATION:

Not all surfaces exhibit identical characteristics. Prior to commencing the project, it is advisable to establish a sampling area. This test should be conducted onsite, following the method suggested by your **BULLETPROOF** representative, to guarantee optimal adhesion and uniformity. Additionally, sampling should be conducted on existing coatings to identify the presence of contaminants or potential delamination issues.

SURFACE PREP:

- Dry – Ensure absence of wet areas (<4% moisture content).
- Clean – Remove all contaminants including dust, grease, coatings, delaminated layers, laitance, or any other substances that could impede or diminish adhesion. Clean the surface with 99% ISO or Xylene.
- Profiled – Achieve a mechanically profiled surface with a CSP 2-3 rating.
- Sound – Repair all cracks and areas exhibiting signs of deterioration.
- Concrete preparation must be carried out using mechanical techniques, or alternative methods authorized by **BULLETPROOF**.



INSTRUCTIONS:

Cracks and Repairs:

If concrete repairs are not conducted adequately, cavities, cracks, and imperfections may remain visible in the coating. Fill and level concrete voids using **C4 Multi-Patch Kit** or **Fast-Crack Quick Cure Crack Filler**. After curing, address any flaws through diamond sanding. Should an alternative repair material be employed, seek approval from a **BULLETPROOF Representative** to ensure compatibility.

Mixing:

The ratio for **Commercial Grade** is 3A to 1B, meaning 3 parts A (resin) to one part B (hardener). For optimal application, it is recommended to mix three gallons of **Commercial Grade** at a time. Mixing should be done using a drill and mixing paddle. Note: When using a drill mixer, keep the speed low (not exceeding 300 rpm) to prevent air entrapment.

1. Unit 1 Kit: Utilize the **Commercial Grade** Part A container as the mixing container. Add the entire contents of the pre-measured Part B and mix for 2-3 minutes.
2. Bulk 15-Gallon Kit: Premix Part A for 30-45 seconds. Transfer 2 gallons into an empty 5-gallon bucket, which will serve as the mixing bucket.
3. 3-Gallon Kit: Premix Part A in its 3.5-gallon pail.
4. Add Part B (following correct mixing ratio of 3A to 1B) of **Commercial Grade** Part B into the premixed 2 gallons of Part A and continue mixing for another 2-3 minutes.
5. **Commercial Grade** is intended to be immediately poured onto the floor. Leaving the mixed product in the container will significantly reduce working time. Once poured onto the floor, expect a working time of 15-25 minutes.



INSTRUCTIONS (CONT'D):

Application:

Application of **Commercial Grade** for a solid color coat system involves applying it in two coats or in a single pass as a topcoat over **Commercial Grade**. For estimation purposes, allocate 150-200 square feet per gallon in either scenario.

1. Always apply in descending temperatures. Concrete is porous and can trap air. In rising temperatures (typically mornings), air expands and may lead to outgassing in the coating. It's advisable to apply coatings in the late afternoon, especially for exterior applications.
2. The optimum ambient temperature should range between 65-90°F during application.
3. Mix three gallons of resin following the provided mixing instructions.
4. Apply approximately 150-200 square feet per gallon by pouring it out immediately onto the surface in a ribbon, while simultaneously walking and pouring until the bucket is empty.
5. Use a squeegee on a pole to spread **Commercial Grade** over the substrate. For the first coat on bare concrete, spread the resin as thinly as possible while still ensuring complete coverage of the surface. This facilitates easier escape of trapped air. To apply in a single coat over **Commercial Grade**, spread it at about 150-200 square feet per gallon.
6. Employ a 10mm non-shedding roller to roll the coating forwards and backwards.
7. Finally, back roll in the opposite direction as in step 6.
8. Apply the second coat by repeating steps 1-7 on the following day.
9. Sweep the floor and sand any high spots or defects.
10. Apply the Top-Coat at approximately 150 square feet per gallon. Follow the same procedure as in Step 4, but without broadcasting.
11. For a double broadcast system of 100-125 mil, repeat the above steps.
12. If additional chemical and abrasion protection is needed, consult your **Commercial Grade** representative for recommendations.



INSTRUCTIONS (CONT'D):

Flakes & Silica Sand:

1. Flake Broadcast: After completing Steps 1-4 of the Quartz broadcast process, proceed to broadcast Color Chips/Micro Chips (150-200 square feet per 25 lb. box) by tossing them into the air, allowing them to gently descend into the wet resin.
2. For a random broadcast, use 1 lb. of chips per 100 square feet.
3. Allow the coating to cure. Then, scrape the basecoat with a drywall scraper in all directions. Alternatively, lightly sand the chips using a floor maintainer machine (sanding will result in a smoother finish). Vacuum any small pieces and dust thoroughly (inadequate vacuuming may lead to improper bonding of the coating).
4. Silica Sand Broadcast: Following Step 6 above, gently scatter the silica sand into the air, ensuring even distribution without lumping in one spot or displacing the resin. Continue until the floor is fully saturated with silica sand and the resin cannot accept any more. Typically, this requires 1/2 to 3/4 lbs. per square foot. Allow the floor to dry for 8-12 hours.
5. Sweep the floor and sand any high spots.
6. Following either method, apply the final topcoat using **FALLOUT** or **AFTERSHOCK** Polyaspartic topcoat.



PRODUCT DATA:

Volumetric Ratio:	3A:1B
Solids:	100%
Coverage:	75 - 200 SF
Application temperature:	65-90°F (18-32°C)
Thinning:	Not required
Pot life:	8-12 minutes
Working time on floor:	15-25 minutes
Cure time:	8-12 Hours
	24 hours (traffic)
Critical recoat time:	24 hours
Shelf life:	12 months
USDA Food & Beverage:	Meets requirements



LIMITATIONS:

Concrete slabs at ground level naturally emit moisture vapor, which is often invisible. Acceptable moisture emissions for concrete should not exceed 3 lb. per 1000ft² over 24 hours (<4%) according to the calcium chloride test. Additionally, a relative humidity (RH) test, conducted per ASTM F2170, should yield results below 85%. Elevated humidity levels can lead to blistering and delamination of coatings.

To assess moisture levels, perform either a calcium chloride or relative humidity test. If humidity levels exceed 85% or 3 lbs. for calcium chloride, implement a concrete moisture vapor control system before applying the coating. Recommended systems for high humidity levels include **MRAP Moisture Vapor Barrier** or **MRAP Super Fast Cure Moisture Vapor Barrier**.

Since coatings can crack if the concrete shifts or separates beneath them, it's crucial to address joints and cracks before application. Control joints (saw cuts) and random cracks should be sawn or chiseled and filled with **C4 Multi-Patch Kit** or **Fast-Crack Quick Cure Crack Filler**. Construction or cold joints (where two slabs meet and may move) require treatment as well. After applying and curing the coating, saw off the coating over construction joints and apply elastomeric joint filler.

SAFETY WARNING:

Prevent skin contact, as epoxy resin may cause allergic reactions in certain individuals. It is advisable to wear protective gloves, eyewear, and clothing, and ensure proper ventilation. For further guidance on the safe handling, storage, and disposal of chemical products, users are encouraged to consult the latest **COMMERCIAL GRADE** SDS. This document contains comprehensive information on physical, ecological, toxicological, and other safety-related aspects.

The information provided, including recommendations for the application and usage of BULLETPROOF products, is offered in good faith based on BULLETPROOF current knowledge and experience of the products under proper storage, handling, and application within their shelf-life. However, variations in materials, substrates, and site conditions can impact performance. Therefore, no warranty regarding merchantability or fitness for a specific purpose, nor any liability arising from any legal relationship, can be derived from this information, recommendations, or any other advice provided. Users are responsible for testing the products for their intended application and purpose. Additionally, users must respect the proprietary rights of third parties. All orders are accepted subject to our current terms of sale and delivery. For the most up-to-date information, users should always consult the local product Technical Data Sheet, available upon request or for download from our website at:
www.supplyndesign.com