



**Bulletproof TC**  
CEMENTITIOUS POLYURETHANE TOP COAT  
MAT FINISH FOR FLOORING

BEYOND FLOORS...

**PRODUCT DESCRIPTION**

**Bulletproof TC** is solvent free high build mat finish coating based upon cementitious polyurethane technology. Although it is designed as a topcoat for **Bulletproof V**, STS and EG, it can be used as a stand alone coating system (2 coats).

**BENEFITS**

- Odorless, Non-toxic, Non-tainting
- Pre-measured unit for easy handling and mixing
- Easy application
- Co-efficient of thermal expansion similar to concrete
- Meets Canadian Food Inspection Agency standards
- Superior Adhesion
- Superior Chemical Resistance
- Excellent performance under thermally induced stresses such as steam cleaning
- Easy Maintenance
- No ventilation required
- Thermal Shock Resistant
- Self-extinguishing
- Resistant to fungi and to mold growth
- Can be applied on to 7-10 days old concrete.

**COLORS**

**Bulletproof TC** is available in six (6) standard colors :  
Steel Gray, Charcoal, Deep Blue, Tile Red, Green and Sandalwood

**TYPICAL USES**

**Bulletproof TC** is used to topcoat **Bulletproof V**, EG, and STS and provides a uniform look for coving and floors.

- Chemical Processing
- Food Processing Areas
- Cook / Chill Areas
- Bottling Areas
- Sanitize / Wash Areas
- Plant Vehicle Aisles

**TECHNICAL INFORMATION**

Colors	6 standard colors
Cure Time @ <b>70°F</b>	8-10 hours
Foot traffic	8-10 hours
Recoat	12-16 hours
Light wheel traffic	18-24 hours
Full service	
Mix Ratio (by volume)	3 component kit Part 1 (resin) Part 2 (hardener) Part 3 (aggregate)
Coverage	A unit will yield 150-160 sq. feet at 10 mils on the <b>Bulletproof STS</b> system (base on 32 mesh)
Pot Life @ <b>77°C</b>	15 minutes
Service temperature	-120° F to 220° F (live steam) Intermittently 260 °F
Toxicity	Non-toxic Odorless No ventilation required

PHYSICAL PROPERTY	TEST METHOD	RESULT
Adhesion to concrete		> 400 psi, concrete fails before loss of bond
Abrasion Resistance Taber H 10 Wheel 1000 GM Load 1000 Cycles	ASTM C-501	30 mg loss
Flexural Strength	ASTM D-790	4 400psi
Hardness (Shore D)	ASTM D-2240	85
Tensile Strength	ASTM D-638	2200, psi
- Pot life is shorter at higher temperature. Do not use below 5°C or above 30°C. - Before using any <b>Bulletproof</b> product, be sure the Safety Data Sheet (SDS) is read and understood.		

**BULLETPROOF RESINS**

11720 Main Street, Fredericksburg VA, 22408  
540-940-6698  
www.bulletproofresins.com

## BEYOND FLOORS...

### **Bulletproof TC** CEMENTITIOUS POLYURETHANE TOP COAT MAT FINISH FOR FLOORING TDSTCEN.V02

#### SURFACE PREPARATION

Surface preparation is required. Substrate must be profiled, dry, clean, oil free, and sound. Use **Bulletproof** Degreaser to removed all oily contaminants (oils, greases and others). Remove any dust, laitance, dirt, curing agent impregnations, wax, foreign matter, coatings and others from the surface by an appropriate mechanical to achieve a profile equivalent to ICRI CSP3 with Blastrac and/or scarifier and/or grinder with dust free collector. Need proper bonding to the substrate. Call the Technical Department for preparation recommendation.

#### PRIMING

No primer is required.

#### MIXING

Premix the resin (part 1) to unify the color and add slowly the full bag of aggregate (part 3) into the resin (part 1) and mix for further 1 to 2 minutes until a lump free mix is obtained, then add the hardener (part 2) until homogenous mix is attained (approximately 1 minute). Mix full unit.

#### APPLICATION

**Bulletproof** TC is applied with a squeegee and a 10mm nap roller or brush at 10 mils. Push the material into the surface, making sure the floor is fully wetted, then pull back lightly with the roller to the required thickness. Always use the same material that is being rolled out at that time. Application of the perimeter can be achieved with a paint brush beforehand. To be applied by licensed applicators.

#### CLEANING

This product is considered to be a low maintenance flooring solution; however, certain textures and service environments do require certain procedures. Please refer to the "Maintenance Recommendation".

#### STORAGE CONDITIONS

**Bulletproof** TC must be stored in a dry cool place between **59°F** and **70°F**. Exposure of the aggregate (Part 3) to moisture or water will make the systems unreliable. Do not allow resins to freeze. The shelf life of this product is 12 months for part 1 (resin) and part 2 (hardener) and 6 months for part 3 (aggregate) from ship date in the original unopened container. Exposure of the hardener to water will lead to pressure build-up from carbon dioxide generation. Do not reseal containers contaminated with moisture. Do not store near open flame.

#### CHEMICAL RESISTANCE

This product is resistant to many common chemicals. Please call the Technical Department for actual resistance to specific chemical/agents.

#### MOISTURE CONCERNS

Moisture vapor transmission in the slab should be measured prior to application of polymeric systems to ensure a long lasting, durable installation.

#### LIMITATIONS

This product is best suited for application in temperatures between **41° F** and **86° F**. Moisture content of substrate should not exceed 10%. Substrate must be clean, sound and dry. Protect substrate during application from condensation or any overhead leaks. If you have any questions, please contact the Technical Department.

#### CAUTION

Workers should wear protective clothing consisting of splash-proof goggles, impermeable gloves and, where exposure limits are exceeded, organic vapor respirators. Follow the Safety Data Sheet (SDS) for proper personal protective equipment to use when handling this product. Use only as directed. **KEEP OUT OF REACH OF CHILDREN.**

#### IMPORTANT NOTICE

All statements, recommendations and technical information contained in this document are based on tests and information, which Bulletproof Resins believes to be accurate as of this date. The buyer should test this product before use. Bulletproof Resins assumes no obligation or liability for results obtained from the use of this product. The product and information herein are furnished at the buyers request and risk. Bulletproof Resins will not be liable for any direct, indirect, consequential, economic or any other damage whatsoever except to replace the product and or refund the purchase price to the purchaser.

#### BULLETPROOF RESINS

11720 Main Street, Fredericksburg VA, 22408

540-940-6698

[www.bulletproofresins.com](http://www.bulletproofresins.com)