



TECHNICAL DATA SHEET – ST-100

Revised:03/2025

PRODUCT SPECIFICATION

ST-100 is a decorative flooring consisting of epoxy resins and colored marble chip aggregate suitable for application in a single trowel step requiring no sealer or topcoat. Fire retardant in the cured state, **ST-100** is intended for use on interior metal decks in habitability, sanitary or other wet places.

SURFACE PREPARATION

Existing deck covering must be 100% removed. It is imperative that surfaces to which deck covering is to be applied be thoroughly cleaned of all foreign matter such as dirt, oil, grease, wax, paint, rust, scale, moisture, and other contamination before installation is begun.

Preparation shall be by methods most feasible, such as grinding, sanding, or using needle point gun to expose bright metal to SSPC-SP11 Standards. Concrete should be clean and sound prior to application. Consult surface preparation sheets available from American Safety for more detailed procedures.

Remove all dust and other loose matter from area. Clean deck free of remaining contaminants with an approved degreasing solvent.

If exposed surface requires corrosion protection, apply MS-7CZ Primer.

MIXING AND APPLICATION

ST-100 is pre-package in a kit containing a two-component epoxy resin and colored marble chip aggregate to cover 16-22 square feet. Bond Coat, Underlayment, Grout Coat and Seal Coat are available from American Safety Technologies and must be purchased separately.

1. Remove Part A and Part B from the five gallon pail.
2. Pre-mix dry aggregates 2 minutes before adding catalyzed resin. Use J-7 heavy-duty mixer or powered paddle mixer.
3. Mix resin by pouring Part B and Part A into a separate container and mix thoroughly for 3 minutes scraping sides and bottom of can.
4. Pour mixed resin into pail with pre-mixed aggregates; continue mixing until all aggregates are thoroughly wet, pulling paddle from side to side of mixing unit. For requirements of MIL-PRF-32584 Type IV Class 1 Comp E.
5. Remove from mixing unit and take pail to deck area. Trowel material to deck using standard cement finishing tools, compacting as you go. Use low-level lighting to avoid trowel marks.
6. Allow 24 hours at 70°F before opening area for light traffic. If material is still tacky to the touch do not use until tack is gone and surface dry. If a high gloss finish is desired, use optional SC-100 Seal Coat. A Seal Coat is recommended to provide a consistent surface appearance.
7. Use EU-100 Epoxy Underlayment prior to applying **ST-100** when desired to change contour grade or eliminate weld seams. EU-100 is applied over BC-100 Bond Coat. **ST-100** may be applied directly over underlayment once it has cured hard and is no longer tacky.

For requirements of MIL-PRF-32584 Type IV Class 1 Comp E / MIL-PRF-24613 Type I Class 3 Grade B, Type III Class 3 Grade B

ST-100

POLYMERIC DECORATIVE FLOORING

MIL-PRF-32584 TYPE IV, CLASS 1, COMP E /

MIL-PRF-24613 TYPE I CLASS 3 GRADE B, TYPE III CLASS 3 GRADE B

STEP 1; BOND COAT (IF REQUIRED)

- a. See BC-100 ASTM F718 or manufactures technical data sheets for further information.
- b. Allow Bond Coat to remain on deck no more than 30 minutes before applying underlayment. Underlayment or **ST-100** must be applied while Bond Coat is still tacky.

STEP 2; UNDERLAYMENT (IF REQUIRED)

- a. See EU-100/ or EU-100 Lightweight ASTM F718 or manufactures technical data sheets for further information.
- b. EU-100/ or EU-100 Lightweight Epoxy Underlayment may be used when deck requires change in contour or grade. Follow mixing and application instructions for Trowel Coat. Allow to cure 6 hours or until hard; apply another coat to Bond Coat before application of Trowel Coat.
- c. Trowel Coat may be applied thicker to level and pitch to drain. In this instance Underlayment is not required.

STEP 3; ST-100 TROWEL COAT

- a. Follow mixing direction on front page.
- b. Apply **ST-100** directly over tacky Bond Coat to a minimum thickness of 3/16”.
- c. Compact **ST-100** into dense surface using standard cement finishing tools. Use low light to avoid trowel marks.
- d. Allow material to cure for minimum 6 hours or until hard.
- e. Sand or grind surface as may be necessary to make surface smooth.

STEP 4; GROUT COAT (2 COATS REQUIRED)

- a. See GC-100 ASTM F718 or manufactures technical data sheets for further information.

STEP 5; SEAL COAT (HIGH GLOSS FINISH)

- a. See SC-100 ASTM F718 or manufactures technical data sheets for further information.

SURFACE MAINTENANCE

To maintain the performance of **ST-100**, we recommend periodic cleaning with an approved cleaner/degreaser in accordance with military directives. Scrub surface with a long handled, fiber-bristled brush or floor machine. Rinse with clean water and dry. Foreign matter such as chewing gum should be gently removed with a scraper or putty knife and then cleaned as describe earlier.

STANDARD COLORS

Black Cherry, Gold and Red, Houndstooth, Brown, Seafoam Green, Starlight Blue, and Black Cherry PT 606.

Custom Colors are available and subject to minimum order requirements.

PRODUCT SPECIFICATIONS

V.O.C	“0” lbs per gallon (“0” grams/ liter)
VOLUME SOLIDS	100 % by volume
POT LIFE	60 Min. @ 70°F (21°C)
DRY TIME	24 Hrs. @ 70°F (21°C)
CURE TIME	4 Days. @ 70°F (21°C)
ESTIMATE COVERAGE	16-22 sq. ft./ kit @ ¼”
WEIGHT	2.5 lbs./sq. ft. @ ¼”
FLASH POINT	240°F
PACKAGING	5 Gallon kit in a 6½ Gallon Pail
SHELF LIFE	2 Years

The responsibility for surface preparation and product application rests with the customer. ITW Polymers Sealants North America, Inc. will assume no liability or imply any warranty as to the serviceability of the products or application due to the fact we have no control over surface preparation, environmental conditions or application procedures. ITW Polymers Sealants North America, Inc. technical assistance is advisory only unless otherwise specified

American Safety Technologies is a © Registered Trademark of Holcim Solutions and Products US, LLC. © Copyright 2023 Holcim Solutions and Products US, LLC. All rights reserved. Published technical data and instructions are subject to change without notice. Please visit the online catalog at www.holcimast.com for the most current technical data and instructions. Or you may contact your Holcim representative for current technical data and instructions. EXCLUSION OF WARRANTIES: INSTALL AS DIRECTED ON AMERICAN SAFETY TECHNOLOGIES PRODUCT DATA SHEET. USER DETERMINES SUITABILITY FOR INTENDED USE AND ASSUMES ALL RISK AND LIABILITY. THIS PRODUCT IS SOLD “AS IS”; EXCEPT AS REQUIRED BY LAW, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF TERMS ARE NOT ACCEPTABLE, RETURN UNOPENED PRODUCT TO PLACE OF PURCHASE.