

# FREEDOMTUFF® PRODUCT INFORMATION BULLETIN

FREEDOMTUFF® 4295 is a two-component hand applied hybrid aliphatic elastomeric polyurea topcoat used as a protective/waterproof coating for interior/exterior concrete, wood, and metal surfaces. It's fast setting/curing which allows for applications in temperatures below freezing 40° F (4.4° C).

#### **ADVANTAGES**

- Applied at any thickness
- Excellent low temperature applications
- Good chemical resistance
- Insensitive to moisture
- Meets USDA criteria
- No noxious odors
- Non-Gassing
- Thermal Stability
- USGBC LEED, EQ Credit 4.2: Low-emitting VOC Compliant Materials

# USES

- Balconies
- Mechanical Rooms
- Pedestrian Traffic
- Vehicular Parking Structures

# PROFESSIONAL USE ONLY

Read and understand all the information contained in the Product Information Bulletin's, SDS's and product labels prior to starting any project. Nothing contained in any of Freedom® Chemical Corporation's materials relieves the end user of the obligation to read and follow the warnings and instructions for each of Freedom® Chemical Corporation's products.

# **PREPARATION**

Concrete should be cured for 28 days (less than 28 days a Moisture Vapor Reducing primer maybe required) prior to product application and have at least 3000 psi compressive and 220 psi tensile strength.

Surface preparation is the essential first stage treatment of a substrate before the application of any coating. The performance of a coating is significantly influenced by its ability to adhere properly to the substrate material. It is generally established that correct surface preparation is the most important factor affecting the total success of surface treatment. Surfaces will be clean, dry, and sound, the presence of even small amounts of surface contaminants, dust, efflorescence, laitance, salts, curing compounds, dirt, oil, form release agents, and other foreign matter can physically impair and prevent coating adhesion to the substrate.

Shot Blast concrete between CSP 3 - 5. Profile steel between 4-6 mils.

Grinding is permitted only in areas that are inaccessible to shot blasting equipment.

COLOR – Grey, special colors are available with a minimum 250-gallon (945 liters) order call for pricing.

### **COVERAGE RATE**

Freedom® Chemical Corporation's coverage rates for all products are approximate and vary based on type of substrate, substrate porosity, and roughness and size of broadcast aggregate.

1-gallon (3.785 liters) per 100 square feet (9.29030m²) yields a theoretical 16 mils dry (406.4 microns) film thickness.

#### PACKAGING

5 Gallon Kit: 4 gallons (15.12 liters Part A) and 1 gallon (3.570-liters Part-B).

# **PRIMER**

Select appropriate primer from individual Product Information Bulletin's. FreedomTuff® primer is required on most substrates, its optional on new plywood and properly prepared steel (steel immersion requires primer).

# **MIXING**

Do not mix partial containers of multi-component materials.

Do not dilute under any circumstances.

FreedomTuff® 4295 Part-B should be mixed individually prior to combining, add Part-A to Part-B while mixing, using a mechanical mixer at medium speed making sure not to encapsulate any air. Mix until a homogeneous mixture and color is obtained approximately 1 to 2 minutes and box the materials.

Transfer newly mixed material into smaller containers or pour onto the substrate to prolong working time.

#### APPLICATION

Throughout the application the sand surface must be clean and dry.

For optimum results proceed with application while air and substrate temperatures are between 40° F (4.4° C) and 104° F (40° C).

Allow primer to become tack free prior to application of FreedomTuff® 4295.

Do not apply more primer to substrate than can be coated with FreedomTuff® 4295 the same day or within forty eighteen (18) hours of application. If primer is not coated within the allotted time, re-apply primer.

Apply FreedomTuff® 4295 in enough quantity to obtain a minimum film thickness to meet the architectural specification. Immediately pour the FreedomTuff® 4295 onto the horizontal surface and spread evenly over the entire surface using notched trowel or squeegee then back roll using a ¼ "mohair roller with a phenolic resin core.

FreedomTuff® 4295 should be applied in a smooth pattern to establish uniform thickness and appearance.

When FreedomTuff® 4295 is applied in sections, each application must overlap the previous one to a neat straight line.

Apply an approved Freedom® Chemical Corporation topcoat to achieve a desired color.

Recoat window is within 48 hours of application, if not recoated within 48 hours, sand and re-prime the surface and proceed with recoat.

# SPECIFICATION AND FIELD ASSISTANCE

Contact Freedom® Chemical Corporation for assistance.

Jobsite visits by Freedom® Chemical Corporation's employees or its independent agents are solely for determining qualification for warranty.

#### **DISPOSAL**

All spilled material, unused contents of containers, empty containers and secondary containment spills/leaks, must be cleaned up and disposed of in accordance with local, state and federal regulations.

# **LIMITATIONS**

MIX RATIO BY VOLUME

The end user should check the suitability of this product and the substrate prior to its application. Freedom® Chemical Corporation assumes no liability for substrate defects.

Substrates that have previously been coated are subject to absorption, which may affect the adhesion of a new coating. Adhesion to substrate should be checked prior to starting any coating project.

Excess moisture vapor in concrete slabs may result in polyurethanes and/or coating to delaminate, discolor or cause improper curing.

FreedomTuff® Polyurethanes have a shelf life of 1 year from the date of manufacture, in factory-sealed containers.

High/Low temperatures and humidity can significantly affect pot life and extend the cure time.

# PRODUCT QUALITY AND STORAGE

Shipping and storage temperatures for Part-A and Part-B is between 65° F - 90° F (18° C - 32.22° C) at or below 50% Relative Humidity, avoiding freezing temperatures. If shipping or storage temperatures should fall below 65°F (18°C), some crystallization could result. Unless proper action is taken to re-form the original solution, subsequent dimerization will proceed quickly and will deteriorate the assay of the product.

Never store directly on concrete surface, always store on pallets.

Do not open until ready to use and keep containers sealed tightly.

#### **TESTING**

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Substrate adhesion test should be performed seven days after application. All testing should be performed by a qualified testing agency. Freedom® Chemical Corporation is not responsible for testing.

# FREEDOMTUFF® 4295 TYPICAL PROPERTIES

Ν/Δ

MIX TO DI VOLOME	11/7	TA. 10
HARDNESS: SHORE A	ASTM D-2240	85 ±2
TEAR RESISTANCE, DIE C	ASTM D-624	353 PIL
TENSILE STRENGTH	<b>ASTM D-412</b>	2500 PSI
ELONGATION	<b>ASTM D-412</b>	800 %
FLEXIBILITY (-40° F; 180° BEND)	PASS	
BOND STRENGTH (SUBSTRATE PRIMED WITH FT-6160)	ASTM D4541	CONCRETE FAILED >435 PSI
VOLATILE ORGANIC COMPOUNDS	ASTM D-2369	0 LB/GALLON, 0 GRAMS/LITER, 100% SOLIDS
POT LIFE @ 68° F (20° C)	N/A	12 - 18 MINUTES

# Incredible Stuff, ExceptionAL Service, And Friendly People™

Read all the information in this product information bulletin, and material safety data sheet (MSDS) before applying any material. The information contained herein is for purposes of identifying the product and does not constitute a warranty that the product will conform to this description. Product specifications and performance will vary depending on application methodologies, raw materials and other factors. Product information bulletins, recommendations, statements, and information contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy themselves, by their own information and tests, to determine suitability of the product. Are not suggest or guarantee that any hazards listed herein are the only ones that may exist. Neither seller now use of the product. We do not suggest or guarantee that any hazards listed herein are the only ones that may exist. Neither seller now use of the product. We do not suggest or guarantee that any hazards islated herein are the only ones that may exist. Neither seller now use of the product. We do not suggest or guarantee that any hazards islated herein are the only ones that may exist. Neither seller now use of the product. We do not suggest or guarantee that any hazards islated herein are the only ones that may exist. Neither seller new the analysis of the suggest of the purpose of sellations or statements, whether verbal or in writing, other than those contained herein shall not be binding upon to use of, or inability to use, the product. Recommendations or statements, whether verbal or in writing, other than those contained herein shall not be binding upon an adjustant or information is provided for the purpose of establishing a general profile of the material and proper application procedures. Performance results were obtained in a controlled environment and Freedom® Chemical Corp