



# TECHNICAL DATA

## UREA-TUFF 6500-RC

### TWO COMPONENT ALIPHATIC, 100% SOLIDS POLYUREA ROOF COATING

#### 1. GENERAL

**UREA-TUFF 6500-RC** is a two component, fast setting, rapid curing and solvent free Aliphatic Polyurea Elastomeric Coating. It is designed for roof decks, mechanical equipment areas as well as pedestrian decks. **UREA-TUFF 6500-RC** can be applied to properly-prepared interior or exterior concrete and metal surfaces. It is suitable for application in temperatures as low as 32°F and is rather insensitive to moisture during cure.

#### 2. PRODUCT DESCRIPTION

**2.1 Composition:** Liquid applied, two-component, flexible, extremely low odor, hybrid polyurea elastomeric coating.

**2.2 Basic Uses:** For waterproofing walking decks, roof decks, mechanical room floors, etc. Designed for areas heavy duty mechanical equipment traffic.

**2.3 Limitations:** All surfaces must be completely free of foreign matter and many may require priming with TUFF-POXY #3 Primer. **UREA-TUFF 6500-RC** has a relatively short work life, so once it is mixed, the coating must be poured onto the surface and applied immediately.

**2.4 Colors:** White. Custom matched colors are available with minimum required manufacturing quantities.

**2.5 Sizes:** Available in 4.5 gallon kits.

#### 3. TECHNICAL DATA

(See chart on Page 2)

#### 4. INSTALLATION

**Surface Preparation:** All surfaces which are to receive **UREA-TUFF 6500-RC** shall be free of contamination such as water, curing compounds, hardeners, bond breakers, paint, etc. Power troweling followed by a light broom finish is recommended for concrete surfaces. It is desirable to watercure concrete in lieu of using curing compounds. The concrete surface must be thoroughly cleaned by sandblasting, mechanical grinding or acid-etching (followed by neutralizing), with the thorough removal of any resulting residue.

Except for non-moving shrinkage cracks, all other cracks and seams must be sealed with **UREA-TUFF 6500-RC** and taped with 4" PW Polyester Reinforcing Fabric. All surfaces, as required, should be primed with the appropriate TUFFLEX primer prior to application of the coating system. Apply primer at a rate of 300-400 square feet per gallon.

**Application:** Lightly stir the A-Component (pigmented side) for 2-3 minutes using a Jiffy mixing blade to evenly distribute the pigments that may have settled to the bottom of the container. Then pour the "B" Component (clear side) into the "A" Component. Scrape the container to drain all the "B" Component into the "A" Component. Mix thoroughly using a Jiffy mixing blade attached to a low speed drill (400-500 RPM) to a uniform color without any streaks. Mix for 2-3 minutes. Once mixed, immediately pour **UREA-TUFF 6500-RC** onto the surface of the substrate to be coated.

Use a notched squeegee to evenly apply the material, then backroll using a short nap roller to break air bubbles. **NOTE:** Higher temperatures will reduce the work life. **UREA-TUFF 6500-RC** shall be applied to the primed surface at a rate of 2 gallons per 100 square feet. Following a 6-18 hour cure time of the first coat, apply a second coat of the **UREA-TUFF 6500-RC** at the rate of 2 gallons per 100 square feet.

When a granulated and textured or decorative aggregate surfacing is required, apply a third coat of **UREA-TUFF 6500-RC** at a rate of 100 square feet. per gallon. Immediately broadcast the selected size and gradation of roofing granules at the rate of 40-60 lbs. per 100 square feet. Allow 24 to 48 hours cure time (depending on temperature) before allowing either moderate or heavy traffic on the finished system.

#### 5. AVAILABILITY AND COST

**UREA-TUFF 6500-RC** is supplied through Building Material Distributors. Prices vary with quantity and packaging. For the name of your nearest Distributor or Sales Representative please contact the factory. **THESE PRODUCTS ARE DESIGNED AND MANUFACTURED TO BE INSTALLED BY PROFESSIONAL INSTALLERS FAMILIAR WITH SURFACE PREPARATION AND APPLICATION PROCEDURES. ALL OTHERS SHOULD CONSULT A PROFESSIONAL INSTALLER. THOSE WHO CHOOSE TO INSTALL THESE PRODUCTS WITHOUT PROFESSIONAL ASSISTANCE DO SO AT THEIR OWN RISK.**

#### 6. MAINTENANCE

Since, as with all roof and deck coatings, this topcoat may be subject to staining by such foreign matter as nitrates, fertilizers, hard water and other mechanical equipment related liquids, it must be maintained. Please refer to the Maintenance Manual for proper maintenance procedures.

If **UREA-TUFF 6500-RC** is damaged, it can be repaired by abrading the surface, cleaning the surface with acetone or xylene and recoating it with the **UREA-TUFF 6500-RC** coating.

#### 7. WARNINGS AND HAZARDS:

Before using the products, always refer to the Safety Data Sheet (SDS) for important warnings and safety information. Use only in areas with adequate ventilation. Avoid breathing vapors. Keep away from heat and flame. Avoid contact with eyes and skin. In the event of skin contact, remove immediately and wash with warm, soapy water. Wear suitable eye protection. Always wash hands before eating. This material is for professional use only.

#### 8. TECHNICAL SERVICES

All of the latest updates to product data and specifications are available by contacting the TUFFLEX Polymers Technical Service Dept. at 888-TUFFLEX. Since product data and specifications change, it is the user's responsibility to make certain the most current versions of product data and specifications are being used.

#### 9. LIMITED WARRANTY

TUFFLEX Polymers (TUFFLEX) warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any TUFFLEX materials prove to contain manufacturing defects that substantially affect their performance, TUFFLEX will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by TUFFLEX with respect to its materials. There are no other warranties, including the implied warranties of merchantability and fitness for a particular purpose. TUFFLEX specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever.

The dollar value of TUFFLEX's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the UPI material in question.

10. TECHNICAL DATA

**UREA-TUFF 6500-RC**

<b>PROPERTY</b>	<b>TYPICAL VALUE</b>	<b>TEST METHOD</b>
Work Life	20-30 minutes	@77°F, 50% R.H.
Cure Time (Initial)	2-4 hours	@77°F, 50% R.H.
Viscosity at 77°F	60±10 poise	Brookfield
Weight per gallon A-Component B-Component	9.3 pounds 8.3 pounds	
Percent Solids Content	100% (weight) 100% (volume)	ASTM D-2369
Hardness	80 Shore A ± 3	ASTM D-2240
Tensile Strength	3200 psi ± 400	ASTM D-412
Percent Elongation	400% ± 50	ASTM D-412
Adhesive Peel Strength on Primed Concrete	35 pli	ASTM D-903
Water Absorption	1.2% by weight	ASTM D-471
Moisture Vapor Transmission	3.9 perms	ASTM E-96
Chemical Resistance (Commonly encountered roofing acids, salts, and oils)	Superior Resistance	D-3476
Abrasion Resistance	2 mg. wt. loss	ASTM D-4060 30 dry mil film on 4"x4" metal C-17 wheel, 1000 rev., 1000 gr. weight
Tear Resistance	280 pli ± 30	ASTM D-624
V.O.C Content	0 grams/liter	Calculated
U.V. Stability (2000 Hours)	No cracking or crazing	Q Panel Weather-O-Meter

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