



TECHNICAL BULLETIN

TUFFLEX RBC Solvent Free “TUFF” Resin Binder Concentrate (RBC) Water Catalyzed Urethane (WCU) Membrane Material

PRODUCT DESCRIPTION: TUFFLEX RBC Solvent Free “TUFF” is a liquid applied Water Catalyzed Urethane (WCU) elastomeric membrane that is used in many of the TUFFLEX Specified Systems.

BASIC USES: When properly applied, this material will provide a seamless and flexible membrane that protects against water damage. It is commonly used in the TUFFLEX Specifications for protecting concrete and plywood pedestrian walking decks—including hard usage ski resort sun decks, vehicle parking decks, mechanical equipment room waterproofing and as a under tile waterproofing membrane. (For use on plywood decking systems it is also recommended that you refer to the TRUFFLEX RBC Solvent Free “SOFT” Technical bulletin for further information.) It is also used to provide seamless and cushioned membranes and mats over porous concrete in veterinary and locker room areas. This material is also widely used to provide seamless and flexible waterproofing and rustproofing decking systems on ships. TUFFLEX Solvent Free Systems allow for ease of application in interior areas as well as exterior areas. Refer to the TUFFLEX Specifications for further information and ideas.

SURFACE TEXTURES: Depending on the intended usage, TUFFLEX Membranes may be used with various surface textures. Surface textures can range from very rough for maximum slip resistance to very smooth for ease of cleaning. Refer to the TUFFLEX Advisory “SURFACE TEXTURES ON TUFFLEX MEMBRANES” for further information and ideas.

PRODUCT ECONOMY & VERSATILITY: TUFFLEX Resin Binder Concentrate (RBC) is just that—a concentrate! When you add the 25% catalyzing water you also increase the yield of the product by that amount. If filler materials, such as sand or rubber, are added for sloping, filling or coving purposes, the product yield increases further and the actual price per gallon again decreases. Please review the TUFFLEX Photo Job Histories on our web site or on our CD. The TUFFLEX CD contains a much larger selection of photo job histories and can be ordered through our web site. It is a reference for the many uses for this versatile material and systems.

LIMITATIONS:

a) All surfaces to receive **TUFFLEX RBC SOLVENT FREE “TUFF”** must meet all applicable building and safety codes in the prescribed city, county or state, which ever has jurisdiction. Substrate must be structurally sound and sloped for proper drainage (see **TRUFFLEX** Guide Specifications for complete information). **NO LIABILITY IS ASSUMED BY MANUFACTURER FOR SUBSTRATE DEFECTS.**

b) Successful bonding requires structurally sound, strong, and clean substrates. The substrate must be cleaned to ensure that it is free for all oils, “laitances”, greases and other contaminations, such as concrete curing compounds, that may cause poor adhesion of TUFFLEX RBC SOLVENT FREE “TUFF”. After cleaning, the surfaces should be rinsed thoroughly to remove loose particles and traces of the cleaning membranes, etc., should not be applied until the surface is dry. Refer to the TUFFLEX Specification for the appropriate TUFFLEX Primer to be used and for further technical information.

SHELF LIFE: Nine months in unopened metal containers stored in moderate temperate conditions.

TECHNICAL ASSISTANCE: Technical information, assistance and literature is available from TUFFLEX and their authorized materials distributors. Also please use the TUFFLEX web site for further information and ideas: www.TUFFLEXPOLYMERS.com

MAINTENANCE: If the TUFFLEX Membrane is damaged it can be repaired in order to return it to a monolithic state. Clean and abrade the damaged area. Solvent wipe clean the area with an environmentally safe solvent as permitted under local regulations. Ensure that the surface is free of all dust, dirt, oils or other foreign matter that will impair bonding. Allow the area to completely dry before priming and reapplying the TUFFLEX Membrane, texture and/or topcoat as needed. Refer to the TUFFLEX Advisory “MAINTENANCE AND CLEANING GUIDELINES FOR SURFACING SYSTEMS” for routine cleaning. Refer to the TUFFLEX Advisory “APPLICATION OF A NEW TOPCOAT” when re-topcoating the entire deck.

WASTE DISPOSAL: Any liquid material that is not saved should be disposed of by mixing the material with the appropriate amount of catalyzing water and disposed of as an inert solid.

TECHNICAL DATA

		<u>Moisture cured</u>	<u>Water cured</u>
Tensile Strength	ASTM D-412	1300 – 1500 psi	1000 – 1200 psi
Elongation	ASTM D-412	700 – 800%	600 – 700%
Tear Strength	ASTM D-1004	140 pli	130 pli
Hardness	ASTM D-2240		65 +/- 5 Shore A
VOC Content	Calculated		70 gm/ltr
Temp. Service Range	Fed. Std. 141		-50 to +200 F
Composition	Polyurethane- Polyurea Hybrid		

PRECAUTIONS: This product contains isocyanates. Before using this product read the container precautionary label and the MSDS data sheet carefully. Exposure to isocyanates may cause allergic skin or respiratory reaction. Do not get into eyes, skin, or clothing. If contact occurs, flush affected areas with water. Wash skin and clothing with soap and water. Personnel applying this membrane should wear protective clothing and gloves and should use with only adequate ventilation. In confined areas wear appropriate MSHA/NIOSH approved respirators. Seek medical help for all-over exposures. **THIS PRODUCT IS FOR PROFESSIONAL USE ONLY.**

LIMITED WARRANTY: Tufflex Polymers, LLC (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 effect 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 his limited warranty shall not exceed the purchase price of the TUFFLEX material in question.

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