

# POLY-TUFF SYSTEMS INTERNATIONAL

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## RECOMMENDED CARE & INSPECTIONS AND MAINTENANCE PROCEDURES MANUAL FOR IRMA WATERPROOFING MEMBRANES

**Poly-Tuff Systems International Material Warranty the following is recommended to maintain a limited warranty.**

### GENERAL

In order to properly maintain a PSI coated deck that is under warranty, the following should be done at regular intervals every 6-12 months or when changes have been made to the structure near or around the installed waterproofing membrane.

1. Physical Inspection
2. Regular Cleaning
3. Snow and Ice Removal from coating
4. Repair of damaged surfaces
5. Periodic replacement of sealant in control or expansion joints within the deck.

### INSPECTIONS

Inspections provide a basis for proper maintenance to ensure the life expectancy of the PSI Coating. At the completion of the project a final inspection should be initiated within 14-30 days of completion or immediately before concealing with pavers or topping slab to correct any punch list items. It is recommended that the deck be inspected semi-annually for defects. That inspection should include the underside of the deck if possible, cracking in the field of the waterproofing, inspection of drains and scuppers, all flashings and perimeter waterproofing. General Inspections are to be completed by a knowledgeable and well informed person with waterproofing and roofing background, every 6-12 months or any time modifications have been made to the building near, around, above or below the waterproofing installation.

### GENERAL INSPECTONS:

1. Inspect all underside of a expansion and control joints where possible.
2. Inspect all related joints at windows or curtain wall joints every 6-12 months.
3. Inspect all beams that are resting on columns for evidence of stress cracking or excess movement.
4. Inspect all other penetrations through the deck for cracking.
5. Inspect all drains and fixtures attached in or through the deck for cracking
6. Inspect all stairs, stair treads, doorways and door thresholds.
7. Inspect all railings for cracking and loose fittings.
8. Inspect for changes and modifications of or to the deck.
9. Inspect all landings and landing attachments for cracking and rusting.
10. Inspect all flashing details to the deck for loose, damaged or unadhered membrane.

### CLEANING

The frequency of cleaning the deck will vary based on its location and use.

1. Vacuum or sweep deck to remove all loose debris and dirt at least once a month.
2. Remove oil, grease drippings, dirt, and other spills by using a non-sudsing detergent with water.
3. Avoid the use of strong solvents, especially any hydrocarbon type solvents.

### SNOW & ICE REMOVAL (where applicable)

It is recognized that snow and ice can load a deck beyond its design capacity resulting in structural

cracks and serious damage to the coating. Therefore immediate removal of snow and ice is recommended. The use of metal blades should be avoided at all times to prevent physical damage to the coating. Snow blowers and snow brooms are recommended, as opposed to heavy snow removal equipment etc. from the deck. Ice should be removed with chemical deicing materials.

### DECK ABUSE

Because deck coatings are applied generally in a horizontal condition, they may be subject to abuse beyond their intended design. These areas of abuse are but not limited to the following:

1. Racing and tire burning.
2. Dropping or dragging of heavy equipment .
3. Latent hairline fissures or significant cracking from structural settlement or movement.
4. Damaged caused by snow equipment.
5. Hitting curbs and bumper stops.
6. cleaned spills of oils and acids.

### DECK REPAIRS

Minor repairs may be made by the owner, it is however, recommended that to protect the PSI coating, repairs should be performed by the original applicator.

### REPLACEMENT OF WATERPROOFING MEMBRANE

To maintain the performance of the PSI Coating, it is recommended that the waterproofing membrane be replaced where damage has occurred. (actual time required for recoating will depend use) by the original applicator.

### REPAIR PROCEDURES FOR DAMAGED DECK COATING

The content below is a brief description of the application procedure for the recoating over **new PolyTuff** urethane coating application:

1. If bubbles or blisters have formed, remove the bubbles or blisters down to an adhered membrane by cutting or grinding. Featheredge and bevel the outer perimeter of each blister by use of a turbo abradar or other mechanical means. Do not leave square perimeters where blisters or loose membrane has been removed. Blisters are an indication of water infiltration from outside sources and require a full inspection of the deck and surroundings.
2. **APPLY APPROPRIATE PRIMER AND COATING COMPLYING WITH THE LOCAL VOC CODES. (All Terra-shield membranes except Terra-Shield LRM) ENVIRO-GRIP #5 FOR PEDESTRIAN DECKS AND ENVRO-GRIP #1, ENVIRO-GRIP #2 FOR VEHICULAR DECK COATING APPLICATIONS, AND ENVIRO-GRIP #555 FOR INTERLAMINATE PRIMER OVER EXISTING CLEAN URETHANE COATINGS. IF NO TOP COAT HAS BEEN APPLIED AND THE AGGREGATE SURFACE IS EXPOSED AND IN GOOD CONDITION AFTER IT HAS BEEN CLEANED - NO PRIMER IS NECESSARY ON A SINGLE BROADCAST OF EXPOSED SAND TO REFUSAL. TERRA-SHIELD LRM OR LRW MAY BE LIGHTLY WASHED WITH WATER AND XYLENE WIPED. NO PRIMER IS REQUIRED UNLESS AN ALIPHATIC TOP COAT HAS BEEN APPLIED) REAPPLY TERRA-SHIELD LRM AS NEEDED TO MAKE REPAIRS.**

**Prime (ALL TERRA-SHIELD MEMBRANES OTHER THAN TERRA-SHIELD LRM OR LRW,) remainder of surface with Envirogrip® primer at a rate of 1 gallon (mixture of Part-A & Part-B) 300 sq. ft. (0.14 liters/m<sup>2</sup>). Apply using a brush or phenolic core roller. This will result in 3 dry mils (76 microns) of coating. Do not prime over Super Seal Tape. Use Primer 555 over existing urethane coatings. Surface pinholes and bug-holes in concrete may significantly change the coverage rate of the primer. If pinholing is apparent after or during the priming application, re-prime the surface filling in the pinholes within 24 hours.**

**B.** Allow PSI Primers to become firm and thumbprint tacky before proceeding to Coating First Application. Do not allow primer to puddle. Apply primer in an even thin coat. When applying the primer to fill pinholes or tiny bug holes into concrete, the primer will need to completely dry. Do not allow the primer to dry completely more than 4 hours before coating. The priming application be even and leave a pinhole free surface for the application of the deck coating.

**C.** Metal flashings should be wiped with a rag with xylene solvent wipe to remove loose particles or oil film. Apply Super Seal Tape on the metal flashing where coating will be applied. Super Seal Tape should be applied by firm downward hand pressure across the entire width and length of the tape or use a 4" putty knife down the length of the tape firmly pressing against the tape.

### RESURFACING WITH BASE MEMBRANE

1. Apply Enviro-Grip #1, 2, or 5 primer with a 3/8" lint free nap roller @300 sq/ft p/gal. DO NOT ALLOW PRIMER TO PUDDLE. Apply a thin even layer. Pinholed surfaces will require more primer to fill the pinhole and will need to cure until dry. Cured primer must be coated within 4 hours of its cure time.
2. Allow primer to become thumbprint tacky and begin coating (approximately 45-180 minutes). Temperature and sunlight will definitely shorten or lengthen the time necessary for the primer to become "thumbprint tacky" .
3. DO NOT allow primer to completely dry before applying coating. unless primer was applied to fill pinholes or small bug holes. Otherwise, contact PolyTuff Technical Service.
4. If primer dries for more than 6 hours, re-prime.
  - a. Sand can be broadcast into the primer while it is wet or tacky to prevent re-priming application.
  - b. DO NOT APPLY PRIMER TO SUPER SEAL TAPE.

#### **MIXING MATERIAL**

1. Open a 5 gallon pail of Terra-Shield WC-100 or and mix thoroughly with a 5 gallon pail mixing paddle. Keep the paddle submerged in the coating so as not to mix air into the coating.
2. **DO NOT ADD WATER TO TERRA-SHIELD LRM OR LRW.**
3. Pour ½ of a 5 gallon pail of into an empty 5 gallon pail. You should have 1 quart p/ 2 ½ gallon in each pail.
4. Mix ½ of the vial of catalyst into each of the pails.
5. **You must have (2) 2 ½ quart measured containers.** Fill them with water. Pour
  1. each 2 ½ quart container of water into the 2 ½ gallons of deck coating. Mix until the water totally disappears and is absorbed into the coating. .

#### **TROWELLING**

1. Apply coating using a 30-60 mil notched squeegee or steel trowel (Home Depot Tile Department). If you are recoating the deck with existing sand a flat squeegee is acceptable . The recoat application must be backrolled after the squeegee application.
2. Work from the high end to the low end of the deck. Smooth out any laps and apply just enough material to hide the imperfections using a wet mil gauge set for 20mils (recoat) 30 or 40 mil. A margin trowel may be required or useful at the perimeters or brush.
3. Install coating back to original thickness.

#### **CURING AND SAND BROADCASTS**

1. Allow to the coating to cure 16 or more hours until walkable and completely dry to touch.

#### **TOPCOAT(S)**

1. Mix Top Coat container thoroughly.
2. Add Accelerator to fast cure and 1 or 2 quarts of xylene. Mix Accelerator thoroughly into the topcoat.
3. Roll on top coat EVENLY with a 3/4" nap roller and apply a smooth consistent coat over the entire deck.
4. Coating over Rubber Granules (pedestrian decks only or roofing granules) will require two top coats. \* A 3/8" NAP ROLLER is acceptable to apply top coat where no coated sand is present. Coating must never cover sand as to create a slippery surface by hiding too much of the sand.
5. **DO NOT APPLY TOP COATS OVER TERRA-SHIELD WC-100. ROOFING GRANULES ONLY ARE TO BE APPLIED, IF DESIRED OVER THE TERRA-SHIELD WC-100.**

#### **Emergency Repair of Deck Coating:**

**THIS SECTION IS INTENDED TO GIVE A GUIDELINE FOR ONLY EMERGENCY REPAIR OF THE DECK COATING WHERE A WATERPROOFING CONTRACTOR OR OTHERWISE AUTHORIZED POLYTUFF APPLICATOR IS NOT IMMEDIATELY AVAILABLE.**

1. Remove all loose coating from damaged area by mechanical means until all the loose coating back to soundly adhered coating to the deck.
2. Clean the damaged deck area with xylene or toluene with a clean white cloth.
3. Fill the damaged area with PolyTuff E-101 Sealant and protect from traffic while allowing to cure.
4. Where warranties by contractor and or manufacture are in place, the final repairs should be made by an authorized applicator of the PolyTuff Deck Coating Systems.
5. DO NOT USE OTHER ASPHALTIC BASED PRODUCTS FOR REPAIRS.

**The content above is not intended to replace the thorough reading and understanding of the Poly-Tuff related Data Sheets, Instructional Guides and details.** Please read them and call us with any questions. Visit our website at [www.polytuffus.com](http://www.polytuffus.com) or call us at 866.977.8833.