

## **SECTION 32 18 16.13 PLAYGROUND RESILIENT SURFACING TOTTURF PIP REFRESH**

### **PART 1 – GENERAL**

#### **1.01 POURED IN PLACE PLAYGROUND SURFACING**

Robertson Industries, Inc. ReFresh and Patching Repairs shall consist of a polyurethane binder, EPDM/TPV rubber granules and 100% recycled shredded tire buffing's or organic SBR crumb rubber. Urethane ReFresh Roll Coats are applied in two perpendicular layers with additional coats in high traffic areas. Ten square feet of EPDM/TPV granules mixed with aromatic or aliphatic binder in addition to SBR tire buffing's or SBR granules will be installed for patching and repairs to each project location.

Robertson Industries, Inc. surfaces and repairs comply with ADA and CPSC guidelines as well as ASTM standards. Robertson Industries, Inc. is certified by IPEMA, a third-party testing organization for playground surfaces and equipment.

#### **1.02 PERFORMANCE REQUIREMENTS**

A. Patching & Repairs – Note (see Robertson Industries, Inc. EPDM or TPV Product Specification) All performance requirement submittals, IPEMA Certification, product scope, cushion layer, wear course, binder materials, execution & installation shall apply to this specification.

B. APPLICABLE STANDARDS ASTM International:

- ASTM D2047- Standard Test Method for Determining the Static Coefficient of friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull Meter Method – This standard replaces ASTM C1028
- ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers – Tension
- ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
- ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials
- ASTM E303 Standard Test Method for Measuring Surface Frictional Properties using the British Pendulum Tester

- ASTM F1292-18 Standard Specification for Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment
  
  - ASTM F1951 Standard Specification for Determination of Accessibility of Surface Systems under and around Playground Equipment
  
  
  - ASTM F2479-12 Standard Specification for Purchase, Installation and Maintenance
- C. Poured in place surfaces shall be manufactured and installed by trained, experienced company employees or certified installers who have successfully completed the “Certified Installers Training Program” required by Robertson Industries, Inc.
- D. Submittals: The Following shall be submitted:
1. One original hard copy of the submittal package will be provided. Additional copies are available by request. All specifications/details/testing data can be obtained from your sales representative or found on the Robertson Industries, Inc. website [www.totturf.com](http://www.totturf.com).
  2. Products submitted as equal must include copies of manufacturer’s written specifications and warranty.
  3. Manufacturer’s descriptive data and installation instructions.
  4. Manufacturer’s details showing depths of Wear Course and sub-base materials, anchoring systems and edge details.
  5. Upon request, a listing of at least five installations where products similar to those proposed for use have been installed and have been in service for a minimum period of 3 years. This list shall include owner or purchaser, address of installation, date of installation, contact person, and phone number.
  6. A signed statement by an authorized official certifying that the surfacing system meets the requirements of ASTM F1292-18 for a head-first fall from the highest accessible portion of the specified playground equipment.
  7. A signed statement from the manufacturer of the poured in place surfacing attesting that all materials under this section shall be installed only by the Manufacturer’s Trained Installers.
  8. A certificate of Insurance shall be provided by Robertson Industries, Inc. for poured in place surfacing for use as playground safety surfacing, covering general and product liability, of not less than \$1,000,000 for each occurrence, \$2,000,000 general aggregate, with an excess/umbrella liability of \$25,000,000. The issuing underwriter

shall be AA rated.

9. Upon request, samples of the proposed material for this project.

## **10. IPEMA CERTIFICATION MANDATORY.**

- E. Delivery, Storage and Handling: Materials and equipment shall be delivered and stored in accordance with the manufacturer's recommendations.
- F. Project Site Conditions: Poured in Place surfacing must be installed on a dry sub- surface, with no prospect of rain within the initial drying period, and within the recommended temperature range of the manufacturer. Installation in weather conditions of extreme heat, cold (less than 55 degrees F), and/or high humidity may affect cure time and the structural integrity of the final product. Immediate surrounding sites must be reasonably free of dust conditions or this could affect the final surface look.
- G. The manufacturer's Service Center Manager reserves the right to control the installation based on such factors without penalty to Robertson Industries, Inc.
- H. Sequencing and Scheduling: Poured in place surfacing shall be installed after all playground equipment, shade structures, signs and any other items that will be within the surfacing area. Surface installation is coordinated by a Robertson Industries, Inc. representative.
- I. Warranty: Warranty is focused on product safety (ASTM F1292-18) and accessibility (ASTM 1951-14) and does not cover normal wear and tear. Urethane roll coats are highly recommended to protect the warranty of this product.

## **PART 2 – PRODUCTS**

Robertson Industries, Inc. ReFresh and Patching shall consist of synthetic and recycled materials meeting the requirements of this specification. The type of safety surfacing shall be Robertson Industries, Inc. ReFresh, manufactured and installed by Robertson Industries Inc., a PLAYCORE company, telephone (800) 858-0519.

### **2.01 PRODUCT SCOPE**

- A. Poured in Place Surface: The poured in place surface shall consist of 100 percent recycled shredded and/or cryogenic crumb rubber tire material mixed with a polyurethane and capped with either an EPDM and/or SBR granule and mixed with polyurethane.
- B. It shall consist of a uniform material manufactured in such a way that the top portion

meets the requirements specified herein for wear surface.

- C. The type safety surfacing shall be a poured-in-place system and shall be indicated on the drawings.

## **2.02 CUSHION LAYER SECTION**

Note: See Robertson Industries, Inc. EPDM or TPV Product Specification

## **2.03 WEAR COURSE**

Note: See Robertson Industries, Inc. EPDM or TPV Product Specification

## **2.04 BINDER**

Note: See Robertson Industries, Inc. EPDM or TPV Product Specification

## **MATERIALS**

### **A. Wear Course–EPDM Granules and/or TPV Granules**

Manufacturer: NH Rubber Products and Rosehill Polymers

Distributed by: Robertson Industries, Inc. (800) 858-0519  
Location Used: Playground Area

### **B. Cushion Layer–Robertson Industries, Inc. Shredded SBR**

As Distributed by: Robertson Industries, Inc. (800) 858-0519  
Location Used: Playground Area

### **C. Binder – Aromatic VORAMER MR Products**

Manufacturer: DOW Chemical  
As Distributed by: Robertson Industries, Inc. (800) 858-0519  
Location Used: Playground Area

### **D. Binder – Aliphatic Urethane Premium, Non-Ambering**

Manufacturer: Accella Polyurethane Systems  
As Distributed by: Robertson Industries, Inc. (800) 858-0519  
Location Used: Playground Area

### **E. Xylene**

Manufacturer: Brenntag Pacific Inc.  
As Distributed by: Robertson Industries, Inc. (800) 858-0519  
Location Used: Playground Area

## **PART 3 – EXECUTION**

### **3.01 ReFresh Roll Coats**

#### **A. Pre-Installation Prep**

- a. Sidewalk and Curbing taped for protection
- b. Playground Equipment taped at bottom of base for protection.
- c. Surface to be swept/blown clean and free of all loose debris, or power washed. Note: Power washing is an alternate customer choice (not included). Surface must be completely dry before applying urethane.
- d. Prepare manufactured premixed urethane/Xylene. Mix ratio of 80% Urethane and 20% Xylene.

#### **B. Application**

- a. Roll-on application required to eliminate airborne inhalation.
- b. Urethane applied in TWO thick perpendicular coats.
  - i. First coat to be 75 SF per gallon.
  - ii. Second coat to be 125 SF per gallon.
- c. Additional thin coats may be applied if necessary, in heavier used areas.

#### **C. Post-Installation/Clean Up**

- a. Remove protective tape from equipment and curb/sidewalks.
- b. Staging area clean and all trash to be removed from site.
- c. Caution tape area provided, customer to remove.
- d. Temporary fencing available based on customer choice (not included).
- e. 12-24-hour dry time required.
- f. Pictures of completed project taken, dated and provided for customer files.

## **PART 4–WARRANTY**

### **4.01 ReFresh Roll Coats**

30-day warranty from applied date. Urethane wet look or shine will lessen due to use and weather. Ambering of the urethane and color granules may lighten due to sun, rain, and usage.

### **4.02 Patch and Repairs**

30 days from installation date, warranty does not include abnormal wear and tear, vandalism, or acts of God.

**END OF SECTION**