

# No Fault Bonded Rubber Mulch

## Product Specification

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By No Fault Sport Group, LLC

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### POURED-IN-PLACE RUBBER MULCH SURFACING FOR PLAYGROUNDS

#### PART 1 – GENERAL

##### 1.01 WORK INCLUDED

This work includes furnishing and installing the No Fault Bonded Rubber Mulch. The surfacing manufacturer/installer shall be responsible for all labor, materials, tools, and equipment to perform all work and services for the installation of the surface.

##### 1.02 DESCRIPTION OF SYSTEM & GENERAL CONDITIONS

No Fault Bonded Rubber Mulch Safety Surface shall be one-layer, poured-in-place and towelled to provide for a resilient, seamless rubber surface installed over the specified rigid base. The surface shall be composed of post consumer recycled rubber shred mixed with a non-flammable, non-shrinking, one part moisture cured polyurethane adhesive capable of bonding rubber to sub-base. No Fault Bonded Rubber Mulch Safety Surface shall be stable to comply with all requirements set forth in the Americans with Disabilities Act (ADA) and the American Standard Testing Methods (ASTM) and Consumer Products Safety Commission (CPSC) for manufactured Safety Surfaces as detailed below.

##### 1.03 QUALITY ASSURANCE

###### A. Test Results

1. Impact Attenuation - ASTM F 1292: Surfacing within playground equipment use zones shall meet or exceed the performance requirements of CPSC, ASTM F 1292 and/or CSA Z614-98 that a surface yield both a peak deceleration of no more than 200 g's and a Head Injury Criteria (HIC) value of no more than 1,000 for a head-first fall from the highest accessible portion of play equipment being installed as shown on drawings. Manufactured Safety Surface: For surfaces manufactured for the purpose of playground safety surface, the impact attenuation performance shall be documented by a certificate of compliance provided by third party at owner or contractor's expense
2. Accessibility of Surface Systems – ASTM F1951: All playground surfacing products must pass testing to ensure wheelchair access under and around playground equipment as required by the American Disabilities Act.

###### B. Contractor Pre-Qualifications

1. A list of ten (10) surfacing projects completed with a similar product. List shall include names of project representatives and respective telephone numbers. At least three (3) of these projects must be at least five (5) years old. This list shall also contain projects which require the same level of difficulty, size of project, type of project, e.g. color transitions and special graphics.
2. All bidders must also submit Material Safety Data sheets (MSDS) and Product Data Sheets on all materials.

###### C. Insurance Requirements

- 1) \$1,000,000 General Liability Per Occurrence
- 2) \$2,000,000 General Aggregate
- 3) \$2,000,000 Products Completed Operations
- 4) \$5,000,000 Excess Liability
- 5) \$1,000,000 Workers Comp. & Employers Liability
- 6) \$1,000,000 Automobile Liability (any Auto)

##### 1.04 SUBMITTALS

- A. One original hard copy of the submittal package will be supplied with additional copies on individual CD's. Upon request only hard copies shall be supplied.
- B. Manufacturer's descriptive data and installation instructions.

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- C. Manufacturer's details showing depths of wear surface and sub-base materials, anchoring systems and edge details.
- D. A list of all materials and components to be installed, including manufacturer's name, storage requirements, and precautions, and shall state chemical composition and test results to which material has been subjected in compliance with these specifications.
- E. Test results to substantiate that the product meets or exceeds all ASTM & ADA requirements for each standard listed in Section 1.03 Quality Assurance. Test must be performed and certified by an independent laboratory.
- F. Documentation of Contractor Pre-Qualification as stated in Section 1.03 Quality Assurance.
- G. Documentation of Insurance Requirements as stated in Section 1.03 Quality Assurance.
- H. Statement signed by the Manufacturer of the synthetic safety surfacing attesting that all materials under this section shall be installed by the Manufacturer or its Certified Installers and that playground surfacing installation shall not be performed by anyone other than the Manufacturer or its Certified Installers.
- I. Upon request, a sample specimen of safety surface proposed for this project.
- J. Upon request, a list of all organizations and affiliations of the company offering the product(s).

### 1.05 DELIVERY, STORAGE and HANDLING:

Materials and equipment shall be delivered and/or stored in accordance with the manufacturer's recommendations.

### 1.06 PROJECT SITE CONDITIONS:

- A. Synthetic safety surfacing shall be installed on a dry subsurface, with no prospect of rain within the initial drying period, at temperatures recommended by the manufacturer.
- B. Installation in weather condition of extreme heat, temperatures less than 40 degrees (F), and/or high humidity may impact cure time, and/or the structural integrity of the final product. Immediate surroundings of the site shall be reasonably free of dust conditions and poor particulate air quality will impact the final surface look.
- C. The manufacturer's installation manager shall reserve the right to control the project schedule installation based on such factor without penalty to No Fault Sport Group, LLC.
- D. Safety surfacing shall be installed after the playground equipment is installed unless otherwise noted.
- E. Surface installation shall be coordinated by the project manager or designated individual of playground equipment and sub-base installation, with No Fault Sport Group's local production manager and in accordance with No Fault's sub-base requirements.

### 1.07 WARRANTY:

Surfacing shall maintain required impact attenuation characteristics and be guaranteed against defects in workmanship and material for a period of no less than one (1) year or as specified and agreed upon per contract.

## PART 2 – PRODUCTS

**No Fault Bonded Rubber Mulch** shall consist of a one layer synthetic safety surfacing system meeting requirements of this specification and shall be manufactured and installed by No Fault Sport Group, LLC (866-637-7678 [www.nofault.com](http://www.nofault.com)) and its certified installation crews.

**NOTE** – Other products will be allowed only if prior approved as per Section 2.02 Product Substitutions & Approved Equals

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### 2.01 MATERIALS

- A. Primer: Single component moisture cured polyurethane primer is required
- B. Polyurethane Binder
  - 1. Binder for safety surfacing shall be specifically designed for use with rubber material for outdoor installations.
  - 2. Binder is a 100% MDI based elastic polyurethane pre-polymer with minimal odor, excellent weathering and binding characteristics.
  - 3. No toluene diphenyl isocyanate (TDI) shall be used.
  - 4. No filler materials shall be used in urethane such as plasticizers and the catalyzing agent shall contain no heavy metals.
  - 5. Weight of polyurethane shall be no less than 8.5 lbs/gal (1.02 Kg/1) and no more than 9.5 lbs/gal (1.14 Kg/1)
  - 6. COLOR TINTED BINDER WILL NOT BE ALLOWED.
- C. Rubber Mulch
  - 1. 100% post consumer recycled rubber shred material derived from recycled tires
  - 2. Loose material must not have unwanted characteristics of whole tire recycling, including steel or fabric.
  - 3. The loose fill rubber must consist of rubber particles ranging in size from 3/8" to 2".
  - 4. Rubber shall be organically color blended and tested for color retention.
  - 5. Only Polyurethane color coatings should be used to assure maximum color bonding and longevity.

### 2.02 PRODUCT SUBSTITUTIONS & APPROVED EQUALS

- A. All product substitutions must be submitted for preapproval at least fourteen (14) days prior to bid opening date. A complete submittal package, as outlined in Section 1.03 Submittals, must be provided before a substitute product will be considered for preapproval. If the product submitted for preapproval cannot meet all requirements of the submittal package, it will not be considered.
- B. Once all products submitted for substitution have been reviewed, a list of the approved substitutes will be circulated and made available to bidders.

## PART 3 – EXECUTION

### 3.01 SUB-BASE REQUIREMENTS

- A. Owner or owner's representative shall provide sub-surface in accordance with manufacturer's recommendation for the project location and application.
- B. The base shall be concrete, asphalt, or compacted stone installed in accordance with manufacturer's written specifications.
- C. The base shall have the specific minimum slope (2%) and shall vary no more than 1/8" when measured in any direction with a 10' foot straight edge. Verify that sub-surfacing drainage, if required, has been installed to provide positive drainage.
- D. Tolerance of concrete or bituminous subsurface shall be within 1/8 inch (3.0 mm) in 10 feet (3050 mm). Tolerance of aggregate subsurface shall be within 3/8 inch (10mm) in 10 ft (3050 mm). Verify that aggregate subsurface has been fully compacted in 2" lifts to 95 percent or greater.
- E. Asphalt base shall be allowed to cure a minimum of fourteen (14) days and new concrete shall be allowed to cure a minimum of seven (7) days prior to commencement of surfacing.
- F. All sub-bases shall be approved by Owner or Owner's Representative prior to installation of the safety surface.
- G. Alternate sub-base material must have prior approval from manufacturer.

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### 3.02 PREPARATION

- A. Scheduling – No Fault Bonded Rubber Mulch shall be installed after other sub-contractors are complete; the area is free from pedestrian traffic; and under the conditions as outlined in Section 1.06 Project Site Conditions.
- B. Cleaning - The entire subsurface shall be clean, dry and free from any foreign and loose material.

### 3.03 INSTALLATION

- A. Safety Surface System shall be installed as a one-part poured-in-place surface system.
- B. Polyurethane binder and Rubber Mulch will be mixed on site in a rotating tumbler to ensure components are thoroughly mixed and are in accordance with manufactures recommendations.
- C. Binder shall be not less than 18 percent, nor more than 22 percent, of the total weight of rubber, and shall provide 100 percent coating of the particles.
- D. The rubber and binder mixture will then be poured in place by means of screeding, and hand-trowelled to maintain a seamless application.
- E. Installation method shall use a measured screed rod 1/16” thicker than the required depth.
- F. Whenever practical, the safety surface shall be installed in one continuous pour on the same day. When a second pour is required, fully coat the edge of the previous work with polyurethane binder to ensure 100 percent bond with new work. Apply adhesive in small quantities so that new rubber mulch mixture can be placed before the adhesive dries.
- G. Total depth of the safety surface system throughout the playground equipment use zone shall be as required to meet the applicable critical fall height requirements or as specified by owner or architect, in accordance with ASTM F1292 requirements.
- H. Edges - Surface edges shall be flush with edge of adjacent area or tapered to provide safe transition. When connecting to a concrete curb or border the hardened edge shall be primed with adhesive.
- I. The rubber mulch safety surface shall be porous.

### 3.04 PROTECTION

- A. The synthetic safety surface shall be allowed to fully cure in accordance with manufacturer’s instructions. The surface shall be protected by the owner from all traffic during the curing period of 48 to 72 hours after surface installation is complete, or as instructed by the manufacturer.
- B. Surface installation crew shall be responsible for the protection of the No Fault Bonded Rubber Mulch during the installation process. Owner or general contractor shall be responsible for the protection of the surface during the crew’s off hours and during the curing period upon completion of the installation.

### 3.05 CLEAN UP

- A. Manufacturer’s installers shall not leave adhesive on adjacent surface or play equipment. Spills of excess adhesive shall be promptly cleaned.
- B. Manufacturer’s installers shall properly dispose of all material and packing waste before leaving the job site.
- C. Owner or contractor shall be responsible for supplying a dumpster at job site for all waste associated with installation of the safety surface.

**FOR INDIVIDUAL PROJECT SPECIFICATIONS OR OTHER INFORMATION INCLUDING FALL HEIGHT REQUIREMENTS PLEASE CONTACT NO FAULT SPORT GROUP, LLC**

**866-637-7678 [WWW.NOFAULT.COM](http://WWW.NOFAULT.COM)**