



### **Architectural/Bid Specification**

*Playsafer™ Rubber Mulch is a unique, environment-friendly safety surface, manufactured from recycled automotive tires at Rubberecycle's state-of-the-art facility. Properly installed, Playsafer™ provides an enjoyable play area that meets the guidelines set forth by the Consumer Product Safety Commission (CPSC), the American Standard for Testing Materials (ASTM), ADA and the International Playground Equipment Manufacturers Association (IPEMA).*

## **1.0 Description**

### **1.1 Composition**

Playsafer™ is composed of 100% recycled shredded rubber made from whole passenger tires. Loose fiber and foreign materials have been systematically removed. Playsafer™ is 99.9% free of steel content.

### **1.2 Toxicity**

Playsafer™ Rubber Mulch is organic, non-hazardous and non-toxic.

### **1.3 Appearance**

Playsafer™ is a loose-fill mixture of 3/8"-3/4" rubber granules and chunks, available in standard black or in a variety of colors.

## **2.0 Certifications**

### **2.1 IPEMA certified**

Almost twice as effective as other surfacing products, Playsafer™ exceeds ASTM Standard F1292-04 for impact attenuation. IPEMA has awarded Playsafer™ with an independent certification for conformance to this standard. IPEMA works to promote an open market for its members and to increase the quality of children's play equipment and surfacing.

### **2.2 Flammability**

Based on testing conducted by the "Scrap Tire Management Council", rubber mulch is non-flammable, in accordance with the Federal Hazardous Substance Act, 16 CFR 1500.44. A flammable substance ignites and burns with a self sustained flame at a rate that exceeds 0.1 inches per second along its major axis. Recycled rubber burns at a rate of <0.01 inches per second.

### **2.3 ADA compliant**

Playsafer™ Rubber Mulch, installed at a non-compacted depth of 6" / 14 pounds per sq. ft., is handicap accessible, according to ASTM F1951-08, Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playgrounds. Playsafer™ must be compacted at 3" and again at 6" using a pneumatic tamper, Bobcat, or similar.

## 3.0 Site Preparation

### 3.1 Site Analysis

Prior to design of the playground, a certified engineer or landscape architect knowledgeable of area climate and topography should be consulted. The consultant must be familiar with updated versions of applicable ASTM standards, CPSC's *Handbook for Public Playground Safety*, and state and local codes.

### 3.2 Base Preparation

Intended installation area must be cleared of rocks, stumps and other debris, including wood mulch or other surface material. Pre-existing surface material impedes the safety performance of Playsafer™ Rubber Mulch. It is not recommended to install Playsafer™ over asphalt or concrete, as these surfaces severely compromise Playsafer™'s safety performance. Chemicals in asphalt also break down the coloring agent on Playsafer™ colored mulch.

### 3.3 Grade

Area must be properly graded according to intended playground level, and firmly compacted. For in-ground installation, area must be excavated to a minimum depth of 6". A proper drainage system should be in place as water tends to move towards the lowest point. We do not recommend a recessed installation unless proper drainage is installed.

### 3.4 Retaining Wall

Above-ground installation of Playsafer™ material requires a retaining wall. Playsafer™ Rubber Curbs, available in 6" and 8" heights, are strongly recommended. Specifications may be obtained from the Rubberecycle. Rubber Curbs effectively contain Playsafer™ Rubber Mulch, preventing excessive kick-out of material, thereby minimizing the need for replacement material in the future.

### 3.5 Filter Fabric

A quality geo-textile fabric, secured with landscaping staples, may be installed beneath Playsafer™ to prevent weed growth and percolation of foreign materials. Filter fabric will "Initially" prevent growth of weeds and grasses. Although the fabrics are permeable, they will collect debris and dirt and may actually promote growth over time.

Fabric must be cut to fit tightly around all playground structures. All seams should be taped in order to prevent separation during installation and to prevent dirt or debris from mixing with the mulch.

Filter fabrics are available in a variety of types, sizes and thicknesses. Individual specifications may be obtained from the manufacturer.

### 3.6 Drainage System

Excessive pooling of water can impair Playsafer's™ safety performance. To prevent this situation, a drainage system may be necessary. For manufactured drainage system, refer to manufacturer's installation instructions.

If drainage stone is used beneath Playsafer™ mulch, we suggest using a fabric. If it is placed over sand and compacted earth, the owner may opt to not use a filter fabric. For gravel drainage, gravel must be installed below the filter fabric directly beneath Playsafer™ Rubber Mulch.

## 4.0 Quantity

### 4.1 Area Coverage

When calculating required amount of mulch, calculation should be based on poundage. Although other manufacturers recommend less, fourteen pounds of Playsafer™ per square foot is the necessary amount to achieve 6” **prior to compaction** and a safe 12’ critical fall height.

### 4.2 Depth

Playsafer™ must be installed at a minimum depth of 6” / 14 pounds per square foot prior to compaction, in order to maintain safety standards. The critical fall height may allow for variation in the depth of the surface. Some areas may require greater depth, depending upon the height or risk level of playground equipment. Please contact your Playsafer™ representative to see if lower depths of rubber mulch may meet your critical fall height needs. We have test data to support your requirement.

### 4.3 Surface Area

Playsafer™ must surround play equipment by a minimum use zone of six feet, with the exception of swings, slides and mobile equipment. Current safety guidelines from CPSC /ASTM must be reviewed for these playground fixtures and for periodic updates and / or changes.

## 5.0 Installation

### 5.1 Delivery

Playsafer™ Rubber Mulch can be delivered in bulk or in supersacks. If space is adequate, a dump truck/trailer may unload the material directly into the play area. Supersacks may be transferred to the play area by bobcat or wheelbarrow.

### 5.2 Colored Mulch

Depending on weather conditions, Playsafer™ colored mulch may require two to three days after delivery to sufficiently dry and cure before installation.

### 5.3 Tools

Playsafer™ may be spread on play area manually, with rake or shovel, or by machine for larger playgrounds. Installer must exercise care not to disturb the geo-textile filter fabric while spreading. A final hand-raking provides a smooth finished playground surface.

### 5.4 Rubber Wear Mats

Playsafer™ Rubber mats or equal are strongly recommended to be installed in high traffic areas, such as beneath swings and sliding poles, and at slide exits. The rubber mats are to be laid midway through the rubber mulch, as they minimize displacement of Playsafer™ Rubber Mulch. These mats may be used with any loose fill surfacing product.

Playsafer™ rubber wear mats should not be used alone. The maximum critical fall height for each mat is 3 feet.

They should only be used in conjunction with Playsafer™ Rubber Mulch.

## **6.0 Maintenance**

### **6.1 Benchmark**

Immediately following installation and inspection, the level of Playsafer™ Rubber Mulch should be marked off on the playground equipment, using a permanent marker or the like. Especially in high traffic areas, Playsafer™ requires periodic raking to restore the material to its safe and proper depth.

### **6.2 Aesthetic Care**

Playsafer™ may be cleared of foreign objects and debris using rake or leaf blower.

## **7.0 Manufacturer**

### **7.1 Playsafer™ Rubber Mulch is manufactured by:**

Rubberecycle  
1985 Rutgers University Blvd.  
Lakewood, NJ 08701  
888.436.6846  
[www.rubberecycle.com](http://www.rubberecycle.com)

### **7.2 Warranty**

Rubberecycle guarantees the impact performance of Playsafer™ Rubber Mulch for fifty years and provides an eight-year warranty against total color loss. Note: Failure to maintain appropriate depth, as determined according to the highest potential fall height, may void manufacturer warranty and cause permanent injury or harm.