Rubber Designs Loose-Fill Mulch Minimum Specifications

Rubber Designs Loose Fill Rubber Mulch is the most innovative replacement for traditional loose-fill safety surfacing for Playgrounds. Rubber Mulch is manufactured from 100% recycled shredded SBR rubber tire buffing.

PART 1 GENERAL

1.1 SECTION INCLUDES

Rainbow Turf Loose Fill Rubber Mulch, Playground Safety Surfacing Product.

1.2 Product Description

Materials: SBR Shredded Rubber Buffing, Non-Toxic Iron Oxide Organic Pigments and Aromatic Polyurethane Binders

1.3 Appearance

Rainbow Turf Rubber Mulch is a loose fill mixture of 3/8"-1" strand of colored SBR rubber. Packaged in 50lb bags, 40 bags to pallet.

1.4 Finished Colors:

Black, Brown, Beige, Green, Red, Blue as well as our signature colors of Rainbow (Red, Yellow, Green), Rustic (Red and Brown, and Jungle (Red, Brown and Yellow)

2.0 REFERENCES

Loose Fill Rubber Mulch (Rainbow Turf Rubber Mulch) must meet or exceed the following:

- Loose Fill Rubber Mulch must be manufactured using a Long-Strand Shredded Rubber Particle mixed with Aromatic Urethane.
- Safety Surfacing shall have been marketed by name within the United States for at least (10) years. (Rubber Designs Mulch)
- ASTM F1292 Standard Specification for Impact Attenuation
- ASTM F1951-99 American with Disabilities Act Wheelchair Accessibility
- ASTM D2859 Test for Burning Pill Test
- ASTM F1551 Test for Water Permeability
- COLORFASTNESS AATCC Test Method 16E
- Passes California's Proposition 65. No chemicals listed on proposition 65 known to cause cancer or birth defects.

Leed Point Contributions (Environmental, Economic and Health & Community Benefits

- NC v2.2 MRc 4 (1-2 points) 96% Post-Consumer Recycled Content by Weight
- NC v2.2 MRc 5 (1-2 points) 100% Regional Material within 500 Miles of Project Site.
- Nc v2.2 Ssc6.1 (1 point) Semi-Pervious Surface on Site Infiltration.

3.0 SUBMITTALS

1



- 3.1 Submittal Procedures.
- **3.2** Product Data: Submit manufacturer's product data, including installation examples and/or subsurface recommendations
 - **a.** Samples: Submit manufacturer's Rubber Designs Rubber Mulch color sample 4"x 6" bag of loose fill safety surfacing material.
- **3.3** Warranty: Submit manufacturer's standard warranty.

4.0 Site Preparation

4.1 Site Evaluation

Have a knowledge of updated versions of applicable ASTM standards as well as the CPSC's Handbook for Public Playground Safety, and state and local codes.

4.2 Base Preparation

Installation areas must be clear of any debris as well as per-existing safety surfacing.

Wood mulch, sand or other per-existing surface can impedes the safety performance of Rubber Designs Loose-fill Safety Surfacing Rubber Mulch.

Consult a certified engineer or landscape architect with any drainage issues prior to installing new safety surfacing.

4.3 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 could be trapped in low areas. We do not recommend a recessed installation unless proper drainage in installed.

4.4 Retaining Wall

Above-ground installation of Rubber Designs Mulch will require a retaining wall. The Rubber Designs Flex Curb is strongly recommended and is available four sizes from 4" to 12" tall. Flex Curb will not only contain and minimize kick-out of your Rubber Designs Loose-fill Mulch they possess safety quality as well.

4.5 Filter Fabric

A quality go-textile fabric, secured with landscaping staple, maybe installed beneath Rubber Designs Loose-fill Mulch to prevent weed growth and percolation of foreign materials. Filter fabric must be cut to fit tightly round playground structures. All seams should be taped in order to prevent separation during installation and 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 manufacturer.



4.6 Drainage

Excessive pooling of water can impair Rubber Designs Loose-fill 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 Rubber Designs Loose-fill Rubber Mulch we suggest using a filter fabric.

5.0 Quantity

5.1 Area Coverage

When calculating required amount of rubber mulch, calculation should be based on poundage. Although other manufactures recommend less, 2lb per inch of desired depth per square foot. 6 pounds or 6" of Rubber Designs Loose-fill Rubber Mulch **prior to compaction** will achieve 8' Critical Fall Height protection. **(Compacted to 4.5")**

5.2 Depth

Rubber Designs Loose-fill Rubber Mulch must be installed at proper depth to maintain safety standards. The critical fall height may allow for variation in depth of the surface it will be necessary to maintain the level of material around playground equipment with a greater risk or height level. Rubber Designs Swing mat installed at the end of slide and under swings is a good solution for reducing required maintenance of mulch.

5.3 Surface Area

Rubber Designs Loose-fill Rubber Mulch must surround play equipment by a minimum use zone of six feet, with the exception of swing, slide and mobile equipment. Current safety guidelines from CPSC/ASTM must be reviewed for these playground fixture and periodic updates and /or changes.

6.0 Installation

6.1 Delivery

Rubber Designs Rubber Mulch can be delivered in bulk, super sacks 2,000lb or in 50lb bag 40 bags to a pallet. Material may be transferred to the play area by forklift, bobcat or wheelbarrow. Material may be installed immediately upon delivery.

- **1.)** Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- **2.)** Store Products in a dry area prior to installation.

6.2 Tools

Rubber Designs Rubber Mulch can be spread on play area manually, with rake or shovel, or by machine for larger projects. The installer must use care not to disturb the filter fabric while spreading the much. A final hand-rake provides a smooth finished playground surface,

7.0ACCESSORIES

- **7.1 Rubber Designs Flex Curbs**: Recycled flexible containment curb offered in 4 sizes to contain loose-fill materials
- **7.2 Rubber Designs Swing mat:** Swing Mat are strongly recommended to be installed in high traffic area, such as beneath swings and sliding poles and at slide exits. Swing mats should be installed midway through the rubber mulch, as to minimize displacement of Rubber Designs Loose-fill Rubber mulch. These mats can be used with any loose fill surfacing material products. Rubber Designs Swing Mat should only be used in conjunction with a loose fill or other safety surfacing. The maximum critical fall height for the swing mat is 4 foot.
- **7.3** Prepare subsurface in accordance with manufacturer's instructions to ensure proper support and drainage for Outdoor Surfacing Products.
- 7.4 Compacted well-drained soil.
- **7.5** Granular Aggregate Subsurface: Compacted, granular aggregate subsurface.

8.0 Maintenance

- **8.1 Benchmark:** Immediately following installation and inspection, the level of Rubber Designs Loose Fill Safety Surfacing should be marked off the playground equipment, using a permanent marker or the like. Especially in high traffic areas, Rubber Designs Mulch will require raking to restore the material to its safe and proper depth.
- **8.2 Aesthetic Care:** Rubber Designs Loose Fill Rubber Mulch may be cleared of foreign objects and debris using a rake or leaf blower.

PART 2: PRODUCTS

9.0 MANUFACTURER

9.1 Rubber Designs, LLC 3125 Skyway Circle, Melbourne FL 32934 Phone: 706-334-2331 Fax: 706-334-2403 www.rubberdesigns.com

10.0 WARRANTY

A. Materials and Workmanship: Outdoor surfacing Products shall be warranted against cracking, breaking and excessive degeneration based on normal wear and proper installation, cleaning and maintenance for a period of 10 years from date of purchase.

1