

**A. Product Data:** Submit manufacturer's product data, including warranty, maintenance and installation instructions, ASTM F1292, F1951, F2075 test results, IPEMA certificates of compliance, and samples.

**B. Manufacturer Qualifications:**

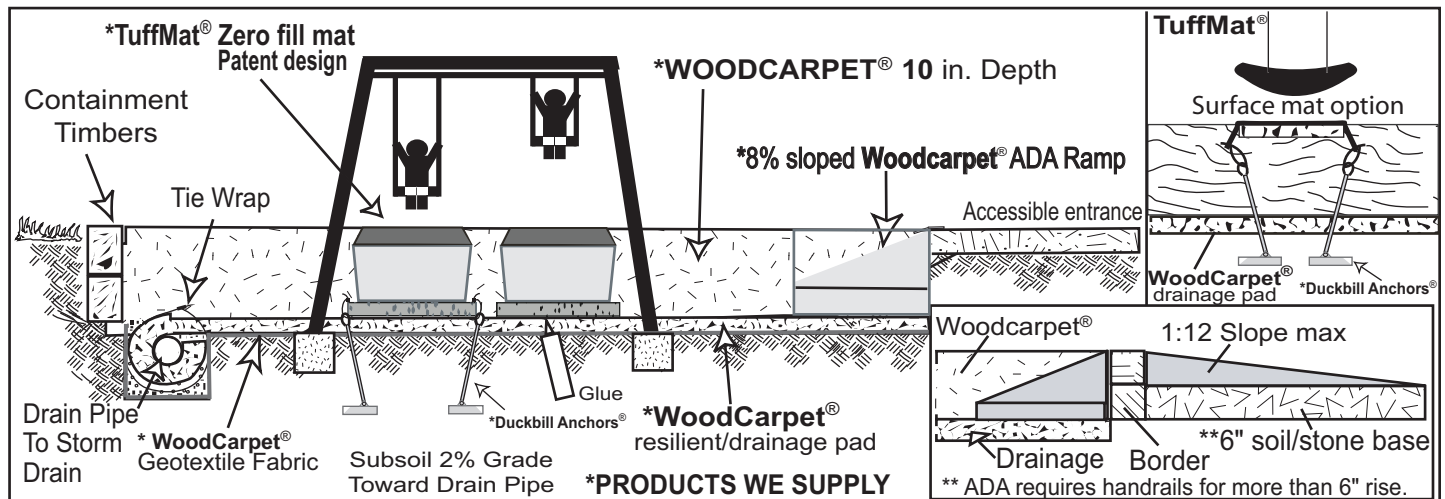
1. Member of International Play Equipment Manufacturer's Association (IPEMA).
2. Total Liability Insurance Coverage: \$11,000,000.
3. Sales Representatives attend National Playground Safety Institute (NPSI) training.

**C. Warranty Covers Playground Surfacing for Following Periods:**

1. Engineered Wood Fiber Playground Surfacing: 20 years
2. Playground Surfacing Wear Mat: 5 years

**D. Manufacturer:**

1. Main office: Zeager Bros., Inc., 4000 East Harrisburg Pike, Middletown, PA 17057. Toll Free (800) 346-8524
2. KY office: 1-800-296-9227 . / WY office : 307-220-3972



**E. Application:** Outdoor playground surface using resilient foam drain.

**F. Critical Height:** Soil, resilient foam drain and 10 in. of Woodcarpet® provides 12 feet of fall protection. Over hard surface, use 1" resilient foam and 12 inches provides 12 feet of fall protection (See spec for system 13- outdoor playground area installed over hard surface for more info).

**G. Installation Procedure:**

1. Review project plans and verify that playground equipment use zones, clearances, and reach ranges will comply with ASTM F1487 sections 8, 9, and 10, and with CAN/CSA-Z614 sections 14 and 15.
2. Prepare the site in accordance with the project engineer's directions and project specifications. Ensure that site drainage is routed away from or around the playground area to prevent sand, soil, silt, or other foreign material from contaminating the WOODCARPET®. Grade subsoil to a min. 2% grade toward the drain pipe. Max 7-8% with stable subsurface.
3. Install playground equipment.
4. Excavate a minimum 8 in. w. x 8 in. d. (20cm x 20cm) trench along the low end of the area to a storm drain. Line ditch with fabric & install drain pipe.
5. Install WoodCarpet® geotextile fabric over subsoil before installing the WoodCarpet® resilient/drainage pad.
6. Install timbers or an alternate containment system above or below grade. Provide for an accessible entrance using ramp assembly for above grade installs. Use Zeager Woodcarpet ramp kit to provide access into play area to allow for proper access and to maintain an area to meet ADA change in level limitations (1/4" staight, 1/2" beveled). Zeager Woodcarpet ramp spec is available upon request.
- 7a. Install WoodCarpet® resilient/drainage pad., fabric side up, over fabric. Panels have dove tail joints to speed installation. Trim w/ utility knife. At the low end of the area, wrap drainage pads around drain pipe using a plastic cable tie to hold it. See detail above.
- \*7b. Tuffmat ZeroFill subsurface mount (low maintenance option): Anchor ZeroFill mats at each high traffic location using approved glue and duckbill anchors supplied with mat. Follow instructions supplied with mat.
8. Spread WoodCarpet® to a minimum depth of 7 in. after compaction for play equipment under 4 ft. high and to a minimum depth of 10 in. after compaction for play equipment over 4 ft. high. To make WoodCarpet® accessible, install it in 6 in. maximum layers. Rake level, wet, and mechanically compact each layer twice with a flat surface compactor. Change direction 90 degrees on second compaction. Exercise caution to prevent damaging the WoodCarpet® resilient/drainage pad if using heavy equipment.
- \*9. TuffMat® Surface Mount Option: First position mat for installation and dig a channel down to the drainage base under the flaps out from the foam base of the mat to allow the flaps of the mat to slope down into the wood fiber at an angle. Use a tamper to compact & angle the wood fiber base so the flaps slope at a 45 deg angle. Anchor mat edges as instructed in anchoring kit. Refill the channel with WoodCarpet® and compact. A smooth transition (within 1/2") should be attained between mat edge and surrounding surface to be ADA compliant.
10. Inspect the playground and verify that playground equipment use zones, clearances, and reach ranges comply with ASTM F1487 sections 8, 9, and 10, and with CAN/CSA-Z614 sections 14 and 15.
11. Rake WOODCARPET® level a second time 2 weeks after installation is finished or as needed thereafter. Check thickness of Woodcarpet® and top off as necessary following Zeager's maintenance recommendations available on [www.zeager.com](http://www.zeager.com) or call 1-800-346-8524.

\*Installation of wear mats under all swings and other high-use areas is required in the state of California.

H. Notes:

1. Using drainage & wear mats as specified by Zeager is required for warranty coverage. Inadequate drainage may hasten decomposition & decrease impact absorption.
2. If not installing using a plate compactor and wetting procedure that is described in the previous installation information, the surface may not meet accessibility standards & will require as much as 15% less WoodCarpet®.
3. Periodic maintenance should include removing debris, raking and topping off by performing steps 9 and 11. Be sure to keep surfacing up to within 1/4" of the top of border where accessible entrance is to meet ADA standards. See also Wood-Carpet® maintenance recommendations.

I. Products

1. Engineered Wood Fiber Playground Surfacing: WoodCarpet®

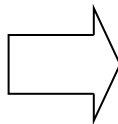
- a. Composition: Woodcarpet contains 100% pre-consumer recovered wood.
- b. Dimensions: Randomly sized wood fibers.
- c. Sieve Analysis, ASTM F2075: Meets criteria.
- d. Hazardous metal, ASTM F2075: Meets criteria.
- e. Tramp metal, ASTM F2075: Meets criteria.
- f. Impact, ASTM F1292-17: 12 inches/12ft meets criteria.
- g. Accessibility, ASTM F1951-14: Meets criteria.
- h. Resistance to Flammability, 16 FR Part 1630 Standard for Surface. Flammability of Carpets and Rugs (FFI-70), Modified Procedurer. Not Oven Dried: Meets Criteria.
- i. Flammability, 16 CFR 1500.44, Federal Hazardous Substances Act Title 16, Chapter II, Subchapter C for Rigid and Pliable Solids: Did not ignite.
- j. IPEMA Certification: 10.75"/12ft. Fall protection. F1292. Tramp metals, Sieve analysis, Heavy Metals. F2075– Meets spec

2. WoodCarpet® geotextile fabric

- a. Composition: nonwoven filter fabric of staple fibers that is formed into a random network, needle punched and heat-set for dimensional stability.
- b. Recycled content: N/A
- c. Size: 5 feet wide x 300 feet long. / 1.5 m wide x 91.4 m Long
- d. Weight, ASTM D5261 Min. 3.5 ounces per square yard
- e. Grab Tensile Strength: ASTM D4632 0.45 kN / 57 lbs
- f. Grab Tensile Elongation “ “ 50%
- g. CBR Puncture: ASTM D6241 .064kN/ 145 lbs
- h. UV Resistance: ASTM D4355 70% @500 hrs
- i. Trapezoidal Tear : ASTM D4533 0.13kN / 29 lbs
- j. Permittivity ASTM D4491 2.20 sec
- k. Water Flow Rate: “ “ 6112 lpm/m 150 gpm/ft
- l. Apparent Opening size ASTM D4751-0300 mm/50 US Std Sieve

3. WoodCarpet® resilient/drainage pad

- a. Composition: Closed-cell, cross-linked, polyethylene foam.
- b. Recycled content: 100% pre-consumer recovered foam.
- c. Top surface: Covered with polyester spun bound fabric.
- d. Size: 21.77 sq.ft / Dove tail cuts for easy installation
- e. Mass per unit area: .634 lbs/sq.ft \_ 3.1 kg/m<sup>2</sup>
- f. Thickness: .75"/ 18mm
- h. Force reduction: 50% using AAA(Advanced Artificial Athlete)
- i. Permeability : EN 12616—72,000 mm/hr (2,835 inches)
- k. Impact, ASTM F1292: Alone meets criteria at 1 foot.
- l. IPEMA Certified: Under 10 inches of Woodcarpet®, rated to 12ft



I. Products-cont.

3. Playground Surfacing Wear Mat: TuffMat® top mount wear mat
  - a. Composition: Base: Closed-cell, cross-linked, polyethylene foam.
  - b. Recycled content: 100% pre-consumer recovered foam.
  - c. Top surface: Covered with layer of heavy duty vinyl
  - d. Finished sizes: 32in.x32in. [slide exit], 32inx62in. [swing], 36in.x48in. [Universal size], 72"x72" [Tire Swing/Spinner], 88"x72" [swing bay], 88"x88"[Large Spinner toys], Custom sizes available.
  - f. Weight: 1.13 inches thick= 1.1 pounds per square foot.
  - g. Thickness: 1.25 inch.
  - h. IPEMA Certification: 1" thick mat over 11" of Woodcarpet rated to 12ft. fall protection.
4. TuffMat® Zero-Fill Wear Mats (sub-surface mount)
  - a. Composition: Combination of various types of foam.
  - b. Coating: Proprietary blend:
    - Hardness ASTM D2240/Shore A—65
    - Hardness ASTM D2240/Shore D—5
    - Elongation, 25°C ASTM D-412/ 500
  - c. Size : 42"x60"x11"H / finished surface: 30"x48". (Meets ADA guidelines: Sec. 305– clear floor or ground space.)
  - d. Weight: 35lbs / 14.6 Kg
  - e. Fall height testing; 8 foot fall protection.
5. WOODCARPET® Ramp kit  
See Zeager Specification for details.

