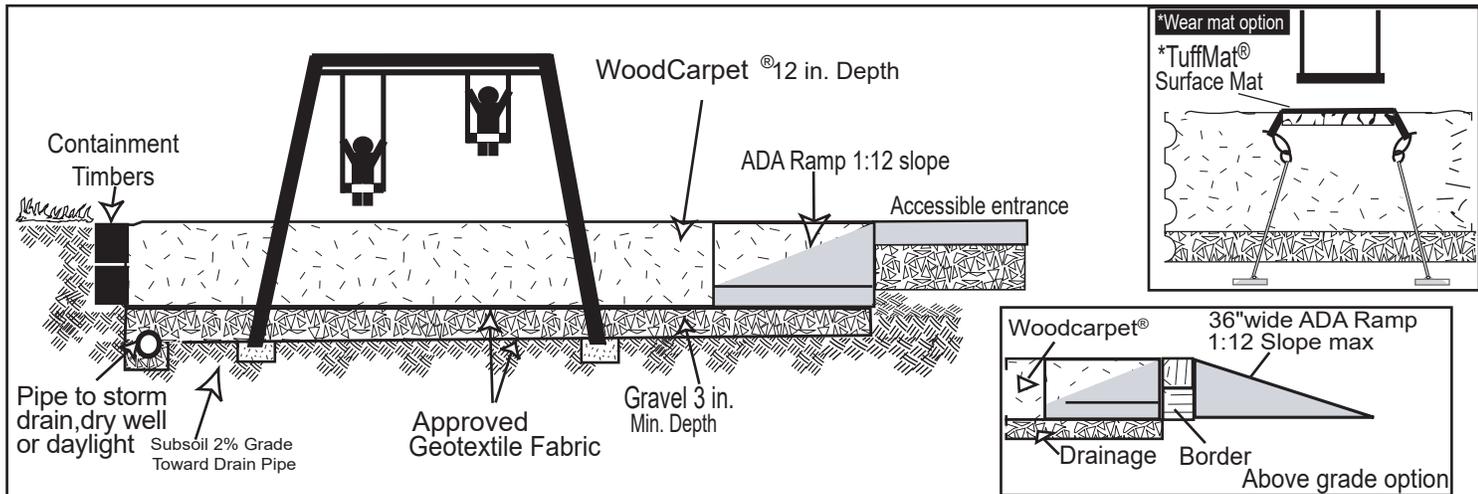


- A. Product Data:** Submit manufacturer's product data, including warranty, maintenance and installation instructions, ASTM F1292, F3351, F1951, and F2075 test results, Protect Plus+ certificates of compliance, and samples.
- B. Manufacturer Qualifications:**
1. Member of International Play Equipment 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: 15 years
- D. Manufacturer:**
1. Main office: Zeager Bros., Inc., 4000 East Harrisburg Pike, Middletown, PA 17057. Toll Free (800) 346-8524



E. Application: outdoor playground surface using drainage gravel.

F. Critical Height: WoodCarpet® -12" / 12 feet fall protection for >4ft CFH. 8" / 8 feet fall protection for <4ft CFH. Check with equipment manufacturer for CFH of individual equipment.

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 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 2% grade toward the drain pipe. Max 7-8% with stable subsurface.
3. Install playground equipment.
4. Place a layer of geotextile fabric on top of the subsoil. Overlap seams 10 in. (25cm), or 5 in. (63cm) if a double bead of exterior grade construction adhesive is applied to the overlap. Place seams parallel to direction of slides and travel of swings when ever possible. For below grade sites with no containment border, run fabric up the side of the excavated ground to avoid soil and Woodcarpet® engineered wood fiber from mixing together.
5. 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. Install drain pipe. Cover pipe with fabric.
6. Spread drainage gravel (1/2 - 1" in. [.127-2.54cm] clean gravel) to a minimum depth of 3 in. (8cm). Fill drainage trench.
7. Install timbers or an alternate containment system above or below grade. Provide for an accessible entrance using ramp assembly for above grade installs. Install ADA approved ramp 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).
8. As described in Step 4, place an additional layer of geotextile fabric on top of the drainage gravel.
9. Spread WoodCarpet® to a minimum depth of 8 in. after compaction for play equipment under 4 ft. high and to a minimum depth of 12 inches after compaction for play equipment over 4 ft. high. To make WoodCarpet® immediately accessible, install WoodCarpet® 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 geotextile fabric and drain materials. Care should be taken when operating equipment directly on the geotextile fabric.
10. Install Tuffmat surface mats in high use areas. Go to www.zeager.com/ installation & videos for more information.
11. 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.
12. Rake and compact WoodCarpet® level. Maintain as needed thereafter. See Zeager maintenance recommendations.



Scan the QR code to view a video on how to install Woodcarpet® Engineered Wood Fiber.

H. Notes:

1. Using drainage as recommended by Zeager is required for warranty coverage. Inadequate drainage may hasten decomposition and decrease impact absorption.
2. If not installing using mechanical compactors and wetting procedure described in the previous installation section 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 WoodCarpet® 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: CFH testing. 12 inches tested for critical fall height—see individual test results for actual CFH test results. Meets Criteria
 - g. Impact, ASTM F3351: 12 inches tested at 12 ft. fall height.—see individual test results for Gmax and HIC scores.
 - h. Accessibility, ASTM F1951-21: Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment. Meets criteria.
 - i. Resistance to flammability, ASTM D2859 Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials - meets criteria
 - j. Protect Plus+ Certification: 12"/12ft. Fall protection. F3351. Check with Zeager for CFH test results per ASTM F1292. Tramp metals, Sieve analysis, Heavy Metals per F2075. Firmness & stability reading per Rotational Penetrometer test.
2. Fabric: 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: Width and lengths vary manufacturer to manufacturer.
 - 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. TuffMat® Surface-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: 36in.x48in. [Universal size], 72"x72" [Tire Swing/Spinner], 88"x72" [swing bay],
 - e. Weight: 1.5 inches thick = 1.37 pounds per square foot.
 - f. Thickness: 1.55 inches.
 - g. ProtectPlus+ Certification: 1.55" thick mat over 11" of Woodcarpet rated to 12ft. fall protection.