Installation and Maintenance for Engineered Wood Fiber (EWF) by Building Products Plus

IPEMA believes that following the installation and maintenance recommendations below will result in greater accessibility and compliance with ADA requirements for EWF accessible surfacing under and around playground equipment. EWF accessible surfacing should meet the ASTM F1951 surface accessibility standard.
Request a copy of the manufacturer's ASTM F1951 surface testing report to confirm that the product meets the maneuverability performance requirements of the accessibility standard.

Installation:

1. Please visit the IPEMA website (www.ipema.org) to print a certificate showing the engineered wood fiber is IPEMA certified for ASTM F1292-impact attenuation within the use zone of the playground equipment, F2075- sieve analysis, tramp metals and hazardous metals.

2. Prepare the site in accordance with the project engineer's directions and project specifications. Remove all vegetation, rocks, roots and other protrusions to bare soil. Grade and level so that the area drains consistently and quickly after a rain. Do not use herbicides, insecticides, fungicides,or any other chemicals. Avoid using land that has been treated with chemicals in the past. The wood fiber material should be contained within borders which meet safety standards designated by the Consumer Product Safety Commission. Railroad ties are not suitable, neither is any kind of lumber which has been treated with chromated copper arsenate (CCA). A professional playground installer can guide the consumer to the purchase of proper border materials. A border is essential to keep the wood fiber in place and at its proper depth.

3. Install drainage as recommended by the manufacturer of the engineered wood fiber (EWF). Drainage installation is recommended to increase the life of EWF, reduce mold and fungus issues and help retain resiliency during cold temperatures. Different drainage systems are available. Pictured to the right is a typical gravel drainage model.

4. Installing one or more compliant ADA ramps into the play area is recommended to allow an accessible entrance to and from the play area.

5. Determining depth of material: We recommend 12” (twelve inch) compacted depth of wood fiber surfacing for all public play areas. “Compacted depth” takes into account the natural settling of wood fiber products. Our wood fiber compacts at a uniform 25%. Maximum practical impact attenuation is achieved with 12” (twelve inch) compacted depth of material, and this is the standard we recommend for all public play areas. This is also referred to as 16” „straight“ (non-compacted) depth

6. In kick-out areas, such as swings and slides, install wear mats on top of the EWF to prevent holes and to maintain a level surface. Be sure these mats are installed in such a way as they do not have an edge above the surface that will create an accessibility issue. Tapered edges are recommended.

7. Spread the playground surfacing evenly into the play area with shovels and rakes, either on the prepared sand or soil, or into the laid-out geotextile. Make sure there are no thin, shallow places lacking in wood fiber, which would cause it to fall short of providing sufficient impact attenuation.

We do not recommend placing playground surfacing over any sort of asphalt or pavement area, and specifically caution against it. We do recommend placing it upon sand, pea gravel,or properly prepared soil.

Spread the material to a uniform thickness to the appropriate depth. Take care when transporting the material to use only clean, chemical-free, grease-free wheelbarrows and tools.

Do not use any pesticides,herbicides, or fungicides on the wood fiber, except under the care of a licensed, bonded, professional exterminator or horticulturalist who is fully aware that this is a play area used by children as compared to a landscape area. Products that may be generally accepted as safe for lawn and garden use may not be safe for playground use. We do not endorse the use of any chemicals whatsoever on our wood mulch.

Our wood fiber has excellent drainage and longevity due to the removal of loose sawdust which holds moisture. It features the natural antimicrobial and antibacterial characteristics of both pine (aromatic resins) and oak(tannins)in its composition

Maintenance for Engineered Wood Fiber (EWF) Maintenance:

Maintaining your EWF surface is critical to keeping your surfacing ADA compliant. The frequency of the maintenance information below should be conducted in accordance with the manufacturers' recommendations.

1. Our playground wood fiber settles naturally into a stable play surface, but with use the material will most likely shift around. We recommend weekly inspection and maintenance under high-traffic toys, such as slides and swings, to make sure that the material has not been kicked out or ground down in those places. Wear mats designed specifically for use under playground structures are available through professional playground installers, and can help to keep down material loss.

2. Weekly inspection should also be done to remove any foreign object from the play area. Fallen branches, toys, or other objects could get worked down into the wood fiber and present an unseen potential hazard if not removed. Rakes or shovels may be used to move additional material into any worn down areas, taking it from lower traffic areas where it has not compacted.

3. Rake the EWF to keep the surface level and the thickness to the original recommended depth. A level surface is necessary for wheelchair access and compliance with ADA requirements. Wear mats can reduce or eliminate the need to rake the EWF in high traffic areas such as swings and slide exits. Be sure the transition between the wear mats and the EWF is level.

4. At accessible entrances onto the playground surface, ensure that the surface material, accessible route or the top of the access ramp is within ¼" of the top of the play area border. An ADA compliant access ramp into the play area will help reduce maintenance in this area.

5. In the highest use areas and around equipment footers, dig down to the subsurface or drain system and measure the depth of the EWF. Ensure that the depth is sufficient for the fall height of the structure or at the manufacturer's original recommended depth, whichever one is greater. Add EWF as necessary, level, wet and compact. The use of markings on the play structure supports or on the containment barriers is also recommended as a means to ensure depth of surface is kept to original thickness.

6. Check the performance of the drain system by ensuring that water is flowing from a drain system outflow pipe immediately after rain. Also, make sure there is no standing water on the playground surface. It is important to have a functioning drainage system to improve EWF life expectancy and the resilience of the surfacing.

7.Depending upon climate and usage, the material may need to be “topped off” with fresh playground surfacing at any time, but typically from every 2 (two) to 5 (five) years. In arid climates, the material may maintain its depth and integrity even longer. To determine if a playground needs additional material, first rake or shovel it into an even surface, filling in the highest traffic areas such as under swings and slides. Measure the overall surface of the playground at several places, and if the overall depth is less than the recommended depth for its usage, then we recommend topping off the playground with additional material.

8. Determine how many inches short of the necessary depth that figure comes to and that is the amount you need to add. Depending upon climate and drainage, under some circumstances when the material is frequently waterlogged, it may be necessary to remove the remaining material and completely replace it fresh. As a natural wood fiber, our playground surfacing will eventually decompose if left wet for long periods of time, and this factor is part of its natural life span. It remains a useful and wholesome product, but no longer provides the impact attenuation necessary for playground use.

Note: This is a technical document and in no way is an endorsement for any particular surfacing. It is intended to assist
the playground owner in making their playground a well-maintained and accessible area. It does not imply that an injury cannot occur. For more information about the IPEMA certification program, go to www.ipema.org.

By signing below you are stating that you have received the installation and maintenance instructions for Building Products Plus, engineered wood fiber, and you fully understand and will comply with the guidelines set in this document.

Print Name:

Signature:

Date: