

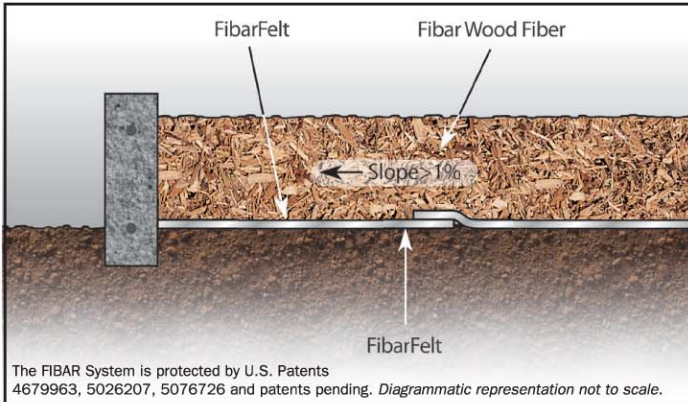
Fibar® System 100

Specifications, Installation and Maintenance Instructions

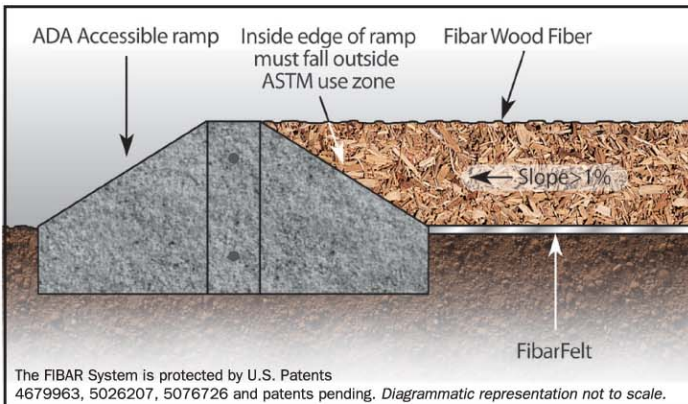
Fibar Systems are unique playground surface products, covered by one or more patents owned by The Fibar Group, LLC. Award contractors *must obtain a license* from The Fibar Group, LLC prior to construction.

Fibar System 100 comes with a **15-year Warranty**.

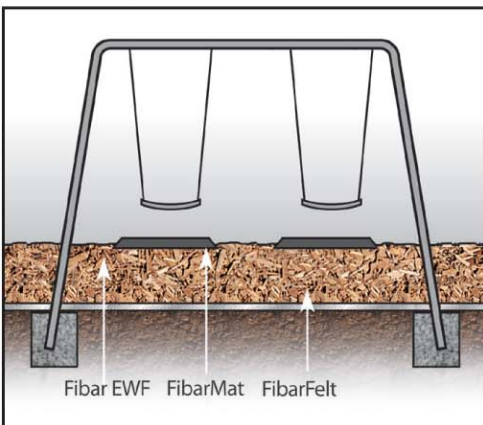
1. Fibar System 100: Above-ground



2. Fibar System 100: Above-ground Accessibility Detail



3. Fibar System 100: FibarMat Wear Mats



Designed with a beveled edge on all four sides for accessibility, these black rubber mats provide extra protection in hard-use areas such as under swings and at slide exits. To prevent displacement of the Fibar in high-use areas, to preserve your warranty, and reduce maintenance, FibarMat wear mats must be installed under all

swings, tire swings, slide exits, and all other wear areas including sliding poles. This will help to ensure compliance with the Federal Accessibility Law of March 15, 2012.



www.ipema.org

IPEMA CERTIFIED



"In the interest of public playground safety, the International Play Equipment Manufacturers Association (IPEMA) provides a Third-Party Certification service whereby an independent laboratory, TÜV SÜD America Inc., validates a manufacturer's certification of conformance to **ASTM F 1292**, *Standard Specification for Impact Attenuation Under and Around Playground Equipment* and **ASTM F 2075**, *Standard Specification for Engineered Wood Fiber for Use as a Playground Safety Surface Under and Around Playground Equipment*. The use of the IPEMA Playground Surfacing Certification Seals signify that Fibar Systems have received written validation from TÜV SÜD America Inc. that a specified thickness of the product associated with the seal conforms with the requirements of **ASTM F 1292** at a specified critical fall height and with the requirements of **ASTM F 2075** for engineered wood fiber quality and purity, and has certified that the associated product is made with the same materials and in the same manner as the original representative product sample as validated by TÜV. A list of current TÜV-validated products may be viewed at www.ipema.org."

The Fibar Group, LLC is a member of IPEMA, the International Play Equipment Manufacturers Association. IPEMA is a member-driven organization whose mission is to assist in providing creative, fun, and safe play environments for children.

Fibar® System 100

Specifications

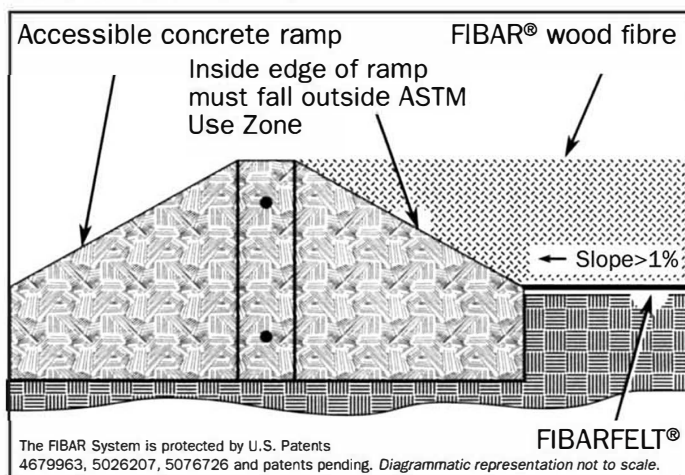
System	Description	Critical Hgt.	Use
112	12" Fibar, FibarFelt	12'	Playground
110	10" Fibar, FibarFelt	10'	Playground
108	8" Fibar, FibarFelt	8'	Playground
106	6" Fibar, FibarFelt	Not Applicable	Jogging Track
All	36" x 36" x 1.5" FibarMat	Not Applicable	Playground

Depth measurements are approximate after compaction.

Part 1: General

A license to construct a Fibar System according to these specifications must first be obtained from The Fibar Group, LLC, as licensor of the patent rights reflected in U. S. Patent Numbers 4,679,963; 5,026,207; 5,076,726; and other patents pending.

To prevent displacement of the Fibar in high-use areas, to preserve your warranty, and reduce maintenance, FibarMat wear mats must be installed under all swings, tire swings, slide exits, and all other wear areas including sliding poles.



- 1.1 Provide Fibar System Playground Safety Surface in areas indicated on plans.
- 1.2 Provide Safety Surface immediately after installing playground equipment.
- 1.3 Fibar Systems and FibarMats are available from your local Representative:
Name: _____
Phone: _____
or directly from The Fibar Group, LLC, 80 Business Park Drive, Suite 300, Armonk, NY 10504-1705
You can call ☎ 800-342-2721 or ☎ 914-273-8770 or email info@Fibar.com

PART 2: Materials

- 2.1 Provide Fibar® Engineered Wood Fiber to a compacted depth of approximately _____ (choose System) over FibarFelt (100% polyester non-woven geotextile).
- 2.2 The amount of Fibar Engineered Wood Fiber necessary to provide the approximate depth, after compaction, is as follows:

Depth	Quantity (for 1,000 sq. ft. playground)
8"	38 cubic yards
10"	42 cubic yards
11"	46 cubic yards
12"	50 cubic yards

- 2.3 Provide one (1) FibarMat wear mat (minimum size: 36" x 36" x 1.5" with 2" beveled edge on all sides) under each swing seat, tire swing, slide exit, and sliding pole. Double and triple slides may require multiple FibarMats. Total quantity required is _____.

PART 3: QUALITY CONTROL

Surfacing shall be **IPEMA-CERTIFIED** Engineered Wood Fiber. Standard wood chips or bark mulch will not be acceptable.

- 3.1 Supplier must provide test results for Engineered Wood Fiber and FibarMats for impact attenuation in accordance with **ASTM F 1292** Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
- 3.2 Testing of Engineered Wood Fiber in accordance with **ASTM F 1292** must show G-max values of less than 155G for the 8" thick system, or 120G for the 12" system at 12' drop heights.
- 3.3 Supplier must provide test results for the Engineered Wood Fiber in accordance with **ASTM F 2075** Specification for Engineered Wood Fiber For Use as a Playground Safety Surface Under and Around Playground Equipment.
- 3.4 Testing of FibarMat wear mats in accordance with ASTM F 1292 must show values of less than 200G and HIC values of less than 1,000 for a 3' drop height.
- 3.5 Supplier must provide test results in accordance with **ASTM F 1951**, Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.
- 3.6 Supplier must certify that the surface meets the intent of the Americans with Disabilities Act (ADA).
- 3.7 Supplier must provide written manufacturer's **15-Year Warranty** against loss of resiliency, and lifetime warranty on FibarFelt.
- 3.8 Supplier must provide **\$10 Million** product liability insurance certificate with project owner named as certificate holder, prior to delivery.
- 3.9 In Canada, supplier must meet CSA guidelines.

PART 4: INSTALLATION

- 4.1 Install the Fibar Engineered Wood Fiber, FibarFelt, and FibarMat wear mats in accordance with manufacturer's instructions.

PART 5: MAINTENANCE

- 5.1 Maintain the Fibar Engineered Wood Fiber in accordance with manufacturer's instructions.

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The Fibar Group, LLC, 80 Business Park Dr., Ste. 300, Armonk, NY 10504-1705.
☎ 800-342-2721 ☎ 914-273-8770 Fax 914-273-8659
Email: info@Fibar.com Website: www.Fibar.com

Fibar® System 100

Installation

PLEASE NOTE:

In accordance with standard design and construction practices, The Fibar Group, LLC and its Representatives recommend using the services of a certified engineer, architect, or landscape architect who is familiar with local soil and climate conditions to evaluate and interpret any information provided by The Fibar Group, LLC and its Representatives.

The Fibar Group, LLC assumes no responsibility for determining the size of the playground or the Use Zone between the equipment and the border. Installer must thoroughly examine the site and specifications, carefully checking the dimensions before starting work.

All instructions are subject to equipment manufacturers' installation specifications.

Read Fibar System 100 Specifications, Installation and Maintenance Instructions, all available from The Fibar Group, LLC ☎ 800-342-2721 or ☎ 914-273-8770 or email info@Fibar.com or contact your local Representative.

ABOVE-GROUND INSTALLATION ONLY

1. The area should be well-compacted and accurately graded, especially in areas where additional fill has been brought in. It is not recommended that a Fibar System be installed on a grade greater than 10%. All roots, stones, and vegetation must be removed.
2. Layout should allow for water to flow to a storm drain or similar device to take water collected from the playground away from the site.
3. Install playground equipment.
4. Cover sub-grade with FibarFelt geotextile. Overlap all seams 3". It will be necessary to slit the FibarFelt to fit around the footings of the equipment. Where possible, overlap all slits with next piece of FibarFelt.
5. **IMPORTANT:** With an indelible marker, **mark off all the legs** of the equipment with the compacted System design depth.
6. Spread Fibar Engineered Wood Fiber, using a Bobcat or a small front-end loader. Operator should be careful not to travel on the FibarFelt or turn sharply on the Fibar. It will also be necessary to use hand labor to spread. To allow for natural compaction, we supply additional material. Important: **Install all the material delivered.** The Fibar will be several inches above grade or border until it compacts. Feather the edges to make a smooth transition to existing grade or border.
To speed up the natural compaction process, once drainage is installed, install the Fibar in layers, 5" at a time. Rake, level and we recommend wetting the surface before com-pacting with a mechanical compactor after each layer is installed. Change direction 90 degrees between each layer. Repeat these steps until the desired surface thick-ness is achieved.
7. Hand-rake for a perfectly smooth, finished surface.
8. Install FibarMat rubber wear mats on top of the Engineered Wood Fiber. **To help ensure compliance with 2012 ADA Federal Law for accessibility, FibarMat wear mats should be installed under all swings, tire swings,**

and at slide exits. They should also be installed at other heavy-use areas such sliding poles. FibarMats are available through your local Fibar Representative.

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

9. After two weeks of active use, rake again.
10. CPSC and ASTM Recommended Use Zones.
A Use Zone of at least 6 feet must surround all equipment with the exception of:
 - a. Swings. A Use Zone equal to 2 times the height of the top rail is needed in front of swings and 2 times behind swings.
 - b. Slides. A Use Zone equal to the height of the slide up to 8 feet, extending a minimum of 6 feet, is needed in front of slide exits.

For complete information on Use Zones, contact CPSC and ASTM or contact your local Fibar Representative.
11. See Fibar System 100 Maintenance Instructions for requirements with respect to inspections, raking, top-off, and other maintenance advice.



Compliance with 2012 ADA Federal Law To prevent displacement of the Fibar in high-use areas, to preserve your warranty, and reduce maintenance, FibarMat wear mats must be installed under all swings, tire swings, slide exits, and all other wear areas including sliding poles. This will help to ensure compliance with the Federal Accessibility Law of March 15, 2012.



Incorrect Installation or maintenance. Failure to install all the materials delivered, failure to maintain the depth of the Fibar System at the original design depth, failure to use FibarMat wear mats at slide exits, under all swings and tire swings (except enclosed or tot swings), other wear areas (a wear area is any area in the playground where the surface depth falls below the System design depth for the playground surface), use of the Fibar System and/or materials with others not provided by The Fibar Group, LLC, abnormal use, lack of proper maintenance, or vandalism can result in serious injury or death. Be aware that no playground surface can prevent all accidents or injuries.



Winter Conditions Should there be moisture retention in the Fibar System, it will freeze when the temperature drops below the freezing mark. Please check your surface frequently in winter weather. **WARNING** When the surface is frozen, the impact attenuation properties of Fibar are lost and for this reason, the play area should not be used.



Reread the Installation and Maintenance Instructions periodically. If at any time you are concerned about the surface and its performance, please contact us at ☎ 800-342-2721 or ☎ 914-273-8770 or email info@Fibar.com.

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Fibar® System 100

Maintenance Instructions

- 1. Visual Inspection.** Look for debris—especially stones, broken glass, or other foreign objects and remove them. Check to make sure that the level or depth of the Fibar surface doesn't fall below the System design depth. The legs of the equipment should have been marked with a bold horizontal mark showing the System design depth when originally installed. If they are not, take the time to mark the legs with an indelible marker at the System design depth, measuring from the bottom of the Fibar surface. This will allow you to readily see when Fibar needs to be redistributed or topped off to maintain proper System design depth. If the equipment was not marked, or you choose not to mark it, the surface must be checked at a number of points using a long-handled screwdriver marked in inches to determine the actual depth. If the actual depth is below the System design depth, redistribution and/or top-off is needed. See Paragraph 4, Raking, and top off if the depth of the Fibar is below the System design depth. Inspect the surface daily.
- 2. FibarMat wear mats.** To help comply with 2012 ADA Federal Law, FibarMat wear mats must be installed under all swings, tire swings, and slide exits. They should also be installed at other excessive wear areas, including sliding poles. The preferred method is to place the mats on top of the Fibar Engineered Wood Fiber. If these wear mats were not ordered when you ordered the Fibar System, please call your local Representative or The Fibar Group, LLC ☎ 800-342-2721 or ☎ 914-273-8770 or email info@Fibar.com.
- 3. Top-Off.** Experience has shown us that installations typically require top-offs after three (3) years of use (on some playgrounds, maybe sooner). Top-Offs can sometimes be scheduled with other deliveries to minimize the freight cost. See Paragraph 1, Visual Inspection, for guidelines on how to know when you need a surface top-off.
- 4. Raking.** Wear areas should be raked level (See Incorrect Installation or Maintenance) and maintained at the original design depth as measured from the bottom of the Fibar surfacing to the top of the Fibar surface. See Paragraph 3, Top-Off, if more Fibar is needed to maintain the original design depth. See Paragraph 1, Visual Inspection, regarding the use of the marks on the legs of the equipment to readily determine the relationship between the actual depth and the original design depth. When a Fibar System installation is close enough to a sand pit that sand gets tracked into the Fibar surface, this could adversely change the impact attenuation characteristics of the Fibar System.
- 5. Accessibility.** Depending on weather and usage, a Fibar surface will compact to provide access for wheelchairs, crutches, walkers, and wheeled vehicles.

At accessible entrances onto the playground surface, ensure that the Fibar material, accessible route or the top of the access ramp is within $\frac{1}{4}$ inch of the top of the play area border. An ADA-compliant access ramp into the play area will help reduce maintenance in this area.

- 6. Drainage.** 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 Fibar's life expectancy and the resilience of the surfacing.
- 7. Weeds.** Conditions could occur that might cause weed growth. You can remedy this situation by use of a safe weed killer (call your local Cooperative Extension office for recommendation) or pull out weeds by hand.



WARNING

Compliance with 2012 ADA Federal Law

To prevent displacement of the Fibar in high-use areas, to preserve your warranty, and reduce maintenance, FibarMat wear mats must be installed under all swings, tire swings, slide exits, and all other wear areas including sliding poles. This will help to ensure compliance with the Federal Accessibility Law of March 15, 2012.



WARNING

Incorrect Installation or Maintenance

Failure to install all the materials delivered, failure to maintain original design depth, failure to use FibarMat wear mats at slide exits, under all swings and tire swings (except enclosed or tot swings), other wear areas (a wear area is any area in the playground where the surface depth falls below the System design depth for the playground surface), use of the Fibar System and/or materials with others not provided by The Fibar Group, LLC, abnormal use, lack of proper maintenance, or vandalism can result in serious injury or death. Be aware that no playground surface can prevent all accidents or injuries.



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