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August 13, 2013

Ref : Accessibility and EWF

To whom this may concern;

Woodcarpet engineered wood fiber provides a safe, economical safety surfacing that meets fall safety standards as well as accessible standards provided it is installed and maintained properly. Zeager's installation specifications allow for 2 types of installation depending on the needs associated with the playground.

Some owners choose to install the Woodcarpet for immediate accessibility which includes installing the Woodcarpet in 6 inch layers, raking level, wetting and mechanically compacting each layer as it is installed until the desired thickness is achieved. This process takes longer and needs more material to accomplish but provides immediate results.

Other owners choose to install the Woodcarpet by installing the desired thickness all at once via blower service or using front end loaders, raking and leveling as they go but allowing the compaction process to be accomplished by natural occurrences such as rain and foot traffic. This natural compaction process takes anywhere from 2-6 weeks on average depending on weather and usage of the playground. This is also an acceptable method.

Maintaining the playground surface such as routinely raking and leveling high use areas still needs to occur in both types of installation to keep the surface accessible.

Remember, an accessible surface must meet these characteristics no matter what type of installation method is used:

- Firm and stable
- Relatively level (entry route to playground equipment and other routes are 60" wide & a maximum of 1:20 (5%) running slope, 1:48 (2%) cross slope.
- No changes in level between surfaces more than 1/2".
- No gaps more than 1/2".
- Make sure to maintain entry and exits of designated play accessible play equipment by maintaining a level, compacted surface that is at least 30"x48". Installing wear mats at these areas will help to maintain this but at the least, these areas should be well maintained by raking, leveling and compacting periodically as needed.
- Make sure at least 50% of the playground equipment is accessible. So if maintaining the entire play area is not possible, at least maintain half the area by maintaining these areas as often as needed.

Attached is more information to help keep your playground safe and accessible.

Sincerely,
Jeff Mrakovich
Director of Surfacing Products
Zeager Bros., Inc.

Reference: Department of Justice to enforce ADA regulations in 2012.

To whom this may concern,

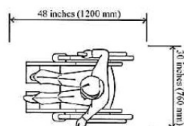
The D.O.J announced the adoption of ADA guidelines to be enforced starting in March of 2012. Part of these guidelines includes regulations in play areas including such requirements as no change in level greater than 1/2". Please keep this in mind when designing entrances and accessible routes into your play areas containing Woodcarpet®. Ramps leading into and out of the play area are easy remedies to these requirements.



Also remember that a 30"x48" ground space must be present at the accessible equipment as well as maintaining an accessible route 60" wide from the entrance and exit points. This includes 50% of the elevated components of your designated equipment must be on an accessible route so please maintain these areas by keeping them compacted and level.

Clear Floor or Ground Space

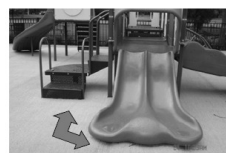
- 30 in. x 48 in. min.
- Discretionary placement
- Applies to ground-level & elevated components accessed by ramp



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Accessible Routes

- Route designed to provide access for individuals with disabilities
- Connects all entry and exit points of accessible play components



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Zeager Woodcarpet® wear mats and bonded Woodcarpet® are viable options to help keep your loose fill surface accessible in these areas.



Nowhere in the guidelines does it state that loose fill products such as engineered wood fiber are not acceptable play surfaces! The key is to maintain the surface. Remember, an accessible playground surface has these characteristics:

- Firm, stable and slip resistant. Meets ASTM F1951 test method.
- Resilient enough to meet ASTM F1292 for impact attenuation.
- Relatively level. 1:16 max slope on accessible route.
- No changes in level between surfaces greater than ½".
- No gaps between surfaces greater than ½".

Will this affect how much Woodcarpet® you need for a given area and will this change how you install the product? Yes.

It has been standard procedure in the past to determine how much Woodcarpet® engineered wood fiber needed for a play area with 2 options in mind; A) Taking the square footage divided (/) by 27 , and to multiply by 1.35 for an additional 35% to allow for natural compaction to occur within 2-6 weeks or B) Figure for immediate accessibility by taking the square footage divided by 27 and multiplying by 1.50 for an additional 50% to account for installing the surface in 6 inch levels- wetting and compacting mechanically until the desired thickness was achieved.

While this produces a wood fiber surface that is immediately accessible, it does require approximately 15% more wood fiber.

It is Zeager's recommendation that our customers install Woodcarpet® so that it will be immediately accessible and will meet ADA standards from the onset. Zeager's website is updated so that a 50% compaction rate is calculated for the amount needed in a given area and will update all of their



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specification and installation instructions to reflect this change. Please take this into account if you are using our slide rules which currently figure the additional 35% for compaction.



Use a compactor in small areas



Use a track loader to speed compaction in larger areas.

Thank you for your cooperation and for educating your customers on the need to keep their playgrounds accessible. You can see more information available at <http://www.access-board.gov/ada/index.htm> .

New multipliers to use for extra compaction factor:

| <u>DEPTH NEEDED</u> | <u>MULTIPLIER</u> | <u>Cubic Yards - 2000 sqft. Mechanically compacted</u> |
|-------------------------|-------------------|--|
| <u>16</u> | <u>0.074</u> | <u>148</u> |
| <u>12</u> | <u>0.056</u> | <u>112</u> |
| <u>10</u> | <u>0.047</u> | <u>94</u> |
| <u>9</u> | <u>0.042</u> | <u>84</u> |
| <u>8</u> | <u>0.038</u> | <u>76</u> |
| <u>7</u> | <u>0.033</u> | <u>66</u> |
| <u>6</u> | <u>0.028</u> | <u>56</u> |
| <u>4</u> | <u>0.0185</u> | <u>37</u> |
| <u>3</u> | <u>0.014</u> | <u>28</u> |
| <u>2</u> | <u>n/a</u> | <u>n/a</u> |

Jeff Mrakovich/ Director of Surfacing Products

Zeager Bros., Inc. www.zeager.com