

## SECTION 32 18 16.13 TOTTURF ENGINEERED WOOD FIBER

### PART 1 – GENERAL

#### Work Details

The work specified in this section consists of the installation of TotTurf Engineered Wood Fiber in accordance with these specifications, and in conformity with the dimensions and notes shown in the plans.

#### Quality Assurance and Compliance Details

*Accessibility of Surface Systems - ASTM F1951:* Determination of accessibility of surface systems under and around playground equipment.

*Impact Attenuation - ASTM F1292:* Impact attenuation of surface systems under and around playground equipment.

*Standard for Engineered Wood Fiber - ASTM F2075:* Minimum characteristics for those factors that determine particle size, consistency, purity and ability to drain.

*IPEMA Certification:* Manufacturer must provide proof of certification. “In the interest of public playground safety, IPEMA provides an independent laboratory which validates a manufacturer’s certification of conformance to ASTM F1292 and ASTM F2075. A list of current validated products, their thickness and critical heights may be viewed at [www.ipema.org](http://www.ipema.org).”

### PART 2 – MATERIAL DATA

Product is manufactured of a ground wood fiber comprised of softwoods and/or hardwoods, consisting of randomly sized wood fibers the majority of which do not exceed 2” in length and no more than 15% fines to aid in compaction.

Product to have minimal bark and to be free of twigs, leaf debris and other organic material.

Product depth, after installation, must be in accordance with the procedure described in ASTM F1292 and meet guidelines for critical height as set forth by the Consumer Product Safety Commission for use of wood products for protective surfacing.

## **PART 3 – SUB-BASE TYPES & DETAILS**

TotTurf Engineered Wood Fiber may be installed over compacted earth. If it is deemed that additional drainage is necessary; a layer of gravel can also be a suitable substrate.

## **PART 4 – SITE PREPARATION AND REQUIREMENTS**

For in-ground (i.e. on grade) installations, excavate area to proper depth (12 in. for 12 in. system, 8 in. for 8 in. system).

Both in-ground and above-ground systems must be properly graded. A (1) percent grade is recommended for proper drainage. TotTurf engineered wood fiber systems should not be installed on grades exceeding 10 percent. Substrate (for both in-ground and above-ground systems) must be firmly compacted, especially when additional fill material has been provided. The substrate should be free of stones, roots and other vegetation.

## **PART 5 – INSTALLATION**

Robertson Industries, Inc., recommends that all materials provided by Robertson Industries, Inc., including product data, specifications, installation instructions and maintenance procedures, as well as all site specific plans, instructions and specifications, be reviewed by a certified engineer, architect or landscape architect familiar with local soil and climatic conditions.

Further, purchaser should determine and specify fall heights and equipment use zones as required by the Consumer Product Safety Commission's *Handbook for Playground Public Safety*, applicable ASTM standards, and state and local codes and regulations.

### **Installation Instructions**

1. Install playground equipment
2. For above-ground systems, install retaining wall.
3. Install applicable drainage system.
4. If manufactured drainage is being used, the Terraflow should be laid out in parallel strips on six-foot centers. The strips must run from the high side of the playground to the low side. Terraflow drains should be placed directly on the sub-grade and should be covered with geotextile cloth after layout is complete. As an option for playgrounds with poor drainage, a Terraflow header strip may be cut and placed perpendicularly to the parallel strips already in place. This header strip should be placed on the low end of the playground. Any joints can be taped with a waterproof tape to maximize drainage.

5. If gravel drainage is used, place 3 in. of drainage gravel on a layer of geotextile fabric. The lower end of the site should be connected to drainage to channel collected water away from the site. Overlap all seams a minimum of 3 in. Slit fabric to fit around equipment uprights. Where possible, overlap all slits with next piece of fabric.
6. Cover drainage system (either manufactured drainage or gravel) or earth substrate with geotextile fabric. Overlap all seams a minimum of 3 in. Slit fabric to fit around equipment uprights. Where possible, overlap at slits with next piece of fabric.
7. With permanent marker or warning label, mark uprights of equipment with compacted system depth (i.e. 8 in. or 12 in.).
8. Install the TotTurf engineered wood fiber to the proper depth, mounding in the center of the play areas of the playground. Extra materials will be provided to allow for compaction. Use a small front-end loader to spread surfacing. Operator should be careful not to travel on the fabric or turn sharply on the TotTurf engineered wood fiber. It will also be necessary to spread manually. Install all the material delivered and please note that the surfacing will be several inches above grade until it compacts. TotTurf engineered wood fiber needs to be compacted in order to be considered handicapped accessible. This can be achieved over time and usage, or with a mechanical compactor. Saturating the initial load with water will help with compaction.
9. Install Robertson Industries, Inc., wear mats in excessive wear areas, such as slide exits, under swings, and sliding poles.
10. For a smooth finished surface, hand rake. After two weeks of active use, surface should be raked again.
  - *Periodical adjustments of TotTurf engineered wood fiber are required under slides, swings and other concentrated use zones. Installing Robertson Industries, Inc., mats in these areas will help control displacement in these high use zones. **WARNING: Failure to maintain TotTurf engineered wood fiber at the initial installation depth may result in an injury and void your warranty.***

## **PART 6 – WARRANTY**

TotTurf Engineered Wood Fiber comes with a 25-year system or 15-year performance warranty. Ask your Robertson Industries, Inc., representative for a copy of our full TotTurf Engineered Wood Fiber warranty.

## **PART 7 – MAINTENANCE**

Ask your Robertson Industries, Inc., representative for a copy of our full TotTurf Engineered Wood Fiber maintenance details.