

XYLEMMAT® PLAYGROUND CHIPS - INSTALLATION INSTRUCTIONS

Xylem, Ltd. recommends the use of qualified professionals in the design and construction of all playground areas and surfaces, in particular in regards to proper drainage. Xylem, Ltd. assumes no responsibility for determining the proper size of the playground or the extended area of the safety zone required between the equipment and the “border”. All of this work must be performed by the installer prior to beginning installation of the playground.

1. Excavate area 12” with a 1%-2% grade to ensure proper drainage. Our recommendation is that nothing be installed on a grade greater than 10%. All vegetation and rocks should be removed.
2. Area must then be compacted and graded. Particular attention should be given to areas where additional fill has been brought in.
3. Install drain tile on 6’ centers or as specified by the architect, in the direction of the grade. Connect the lowest end to a storm drain or properly constructed dry well to remove water collected from the playground site.
4. Install Equipment.
5. Cover sub-grade with felt material. Overlap seams a minimum of 3”-4”. Fit felt around footings of the equipment by slitting felt. Then overlap all slits with the next piece of felt.
6. Install retaining border if required. Contact your local Xylem rep for suggestions and a variety of different types of border materials.
7. Spread XYLEMMAT® wood fiber, using a skid steer or small end loader. Operator should be careful not to travel on the felt or turn sharply on the XYLEMMAT® fiber. Spread material by hand once it has all been deposited in the work area. The finished grade of the material should be several inches higher than “grade” to allow for natural compaction. If not, you need to install additional material. Feather edges to make a smooth transition to existing grade.
8. Rake for a smooth professional finished appearance.
9. Following initial break-in period and during periods of extreme activity, the surface should be raked again to ensure uniform height throughout the entire play surface area.

FALL ZONE: (CPSC & ASTM)

Fall zone is defined as the area under and around playground equipment where children may fall. The total surfacing space is dependent on the type of equipment at the playground. In general, the surface should extend a MINIMUM of 6 feet in all directions from the edge of stationary playground equipment. Because of the momentum of children playing on slides and swings, different calculations for those fall zones need to be made.

The fall zone for slides higher than 4’ can be determined by adding 4’ to the height of the slide. For example, a 6’ slide should have 10’ of surfacing extending beyond the exit of the slide. The maximum amount of surfacing for the end of any slide is 14’.

Fall zones for swings are twice the height of the pivot or swing hanger in front and in back of the swing seats. For example, if the hanger pivot height is 10’, the fall zone must be 20’ in front and 20’ in back of the stationary swing seat. Surfacing should also extend 6’ to each side of the support structures.

How to determine how much loose-fill surfacing is needed

Information based on CPSC critical height testing. The National Program for Playground Safety recommends that in general 12” of uncompressed loose-fill material be used for equipment up to 8’ in height.

9” of compressed uniform wood chips will provide safety for equipment with critical heights up to 6’.

Materials are effective only when properly maintained. Materials should be checked periodically and replenished as to maintain correct depth as determined necessary for your equipment. However, it should be recognized that all injuries due to falls cannot be prevented no matter what surfacing material is used.