Accessible Playground Surfacing

Providing a playspace that is accessible to children of varying abilities is a laudable goal. At the present time the CSA Z614-98 standard for Children's Playspaces and Equipment does not deal with this issue. As a result we must look to the United States where ASTM has developed a performance standard for the determination of an appropriate surface for this purpose. This standard, previously known as ASTM PS-83, has now been republished as ASTM F1951.

The traditional accessible surface has been the synthetic such as the EVERPLAY poured in place or EVERPLAY mats systems. These surfaces allow for persons of all abilities access to the play structure and as well meet the impact attenuation required for the surface. In addition the EVERPLAY can be installed at a slope to allow for transition from one grade to another. The alternative to the total EVERPLAY surface is one consisting of Engineered Wood and EVERPLAY Mats in the high traffic and high maintenance areas. These Mats are permeable to air and water. This allows for the transpiration of moisture and does not allow for rodents and insects to build a habitat as can happen with solid mats.

The ASTM F1951 relates specifically to passage across the play surface of a wheelchair. At the present time the test is only performed at one location in California and manufacturers of surfaces must submit their materials there for testing. Although the test can be performed on any play surface, the typical surfaces being tested are loose fill materials and are primarily Engineered Wood systems. Traditional surface materials such as sand or pea gravel will not pass this test and are therefore eliminated from use as an accessible surface.

The Engineered Wood systems that have passed the ASTM F1951 are manufactured specifically to meet the performance of the standard. Not all wood mulch or chip systems will comply with ASTM F1951. As a result, it is important that the supplier of the surface for an accessible playground be able to provide a certificate of compliance. There will always be areas where high traffic dislodges the wood system. These areas require regular maintenance to fill and smooth the surface to be passable. The solution for these areas is the EVERPLAY Play Mats bonded together to provide a 2'x 4' or 4'x 4' rubberized, maintenance free surface. The 4' dimension is very important in that it allows for sure footing for an adult and a wheelchair beside each other.

The highest traffic area of an accessible playspace will be the junction of where the hard surface terminates at the protective surface. A ramp must be installed into the Engineered Wood system to allow for a smooth transition of travel from the hard surface on the wood surface. Ramps of concrete might work where there is sufficient space to keep the concrete outside the 6' distance from the play structure, however this is not always the case. Any concrete within the protective surface area for the play structure will be a hazard. An EVERPLAY Transition Ramp can be installed to provide

an accessible route that can extend into the protective surface area. The minimum width of the ramp is 60" to allow for the passage of two wheelchairs. The Transition Ramp extends a minimum of 6', with no maximum, into the wood system at a maximum slope of 1:12. This will allow the mat to start flush with the walkway and extend to 6" below the wood system. An EVERPLAY Transition Ramp can be easily achieved using the EVERPLAY adhesive to bond the EVERPLAY Play Mats to form a continuous rubberized sheet. The EVERPLAY mats are fastened to the edge of the hard surface.