EVERPLAY NEWS

EVERPLAY International Inc.

Volume 21, Issue 1,

January 2018

Protective SurfacingPurpose and History

Protective Surfacing in the Playground has been Evolving for the past 60 years.

Since the dawn of human history there has been the joy of play and for the longest time elevated places to see beyond the horizon were satisfied in climbing hills or trees. Only well after the beginnings of the industrial revolution did manufactured play structures arrive raising the user directly above the ground. With that so did the injuries on the surfacing under the play structures as surfacing was at best an afterthought. It was only after the 1970s, when there was a worldwide outcry to reduce injuries did standards begin to be written. These focused on fall prevention with guardrails and barriers.

Although impacts with the surface following a fall were by far the leading cause of serious, debilitating injuries and the fourth for deaths in playgrounds, surfacing remained an afterthought. During the 1980s the surface under playgrounds consisted of asphalt or concrete or the progressive dumping of sand into a box. The first performance measure set by the US CPSC was that the surface should not impart more than 200g to the instrumented headform, which left the felled child with a debilitating brain injury or a 10% risk of skull fracture and all of the consequences associated with that. This value was later embraced by ASTM in 1991 and in 1993 added the 1000 HIC, a 5% risk of a critical head injury and an 18% risk of a severe head injury. The CSA Z614 recognized the need for protective surfacing and referred to laboratory testing in 1990, with actual recognition of surface performance adopted in 1998 revision. Remarkably the performance requirements of <200g and <1000 HIC has not changed since 1980. Additional progress was made in Canada only in 2007 by raising the fall height from platforms to the tops of guardrails and barriers.

The leader of change has been EVERPLAY within its own published installation performance specifications, warranties and through advocacy for better performance and field testing at both the ASTM and CSA tables. This is important to every playground owner, but more importantly for owners of EVERPLAY “in situ” surfaces that are providing exceptional injury prevention performance to their playgrounds.

EVERPLAY was first developed in the mid-1980s with the development of a proprietary binder, that is still in use today, allowing for significant reductions in g and HIC values from heights up to 4.9m (16’) and a functional life up to 3 times the length of the 5 year standard warranty. EVERPLAY is fortunate in that within it’s major market of Ontario, Canada, surface testing is a regular occurrence. EVERPLAY surfaces that were installed as long ago as 1992 are still reporting to pass from the tops of barriers and guardrails. That exceptional performance is one of the reasons that EVERPLAY has such a loyal customer base, for which we are thankful.

Beyond the proprietary binder, EVERPLAY is designed to absorb the energy from a child falling without an expectation of the base, which could be hard, such as concrete or asphalt, or compacted granular, contributing to performance. The EVERPLAY with the inclusion of the geotextile between the compacted granular and the 30mm wearing course assist in providing a strength to the surface system that also allows for some bridging when the base unexpectedly settles. This leaves the surface as even more energy absorbing, while maintaining functionality.

With all these glowing aspects of EVERPLAY, the reader has every right to ask, OK all good, but what does go wrong and what do I have to watch out for? Generally not that much, but the largest problem is outside the system and the control of the installation crew. There are circumstances where the base under the EVERPLAY, either

through inappropriate backfilling of structure bases, poor selection of materials or undermining through water intrusion, etc. collapses to the point that the EVERPLAY becomes more of a trampoline, presents a trip hazard and affects the ability of persons with disabilities to navigate the playground.

When settlements occur, it is a simple matter of accepting the facts that a settlement has occurred and must be repaired. For small settlement around a single post, it might be possible to inject rigid foam or fine sand to fill the gap and support the EVERPLAY. Where the area is large there really is no choice but to remove a section of the EVERPLAY repair the base or the causes of the settlement. Once this is done the section of EVERPLAY can be reinstalled with no ill effects to the impact attenuating performance or the functional longevity.

EVERPLAY is a unique playground surfacing system which protects children and the investment owners have in their playgrounds. The system is maintainable and meets the goals of sustainability, with functional longevity and a high percentage of recycled tires finding their way into the playground. There is truly no other poured-in-place system with the functional history, commitment to performance and functional longevity as EVERPLAY.

EVERPLAY INTERNATIONAL INC.

18 Automatic Rd., Unit 12,
Brampton, Ontario,
L6S 5N5
Canada

Phone: 416-410-3056
Fax: 905-494-1136
Email: rolf@everplay.com
henry@everplay.com
adam@everplay.com
Web: www.EVERPLAY.com

EVERPLAY!!!! or *equal??*

EVERPLAY First pigmented PIP surface in North America,developed in 1985 with proprietary binder

Polystac SF138 longest continually formulated polyurethane playground binder since 1985

Polystac SF138 only available to EVERPLAY systems

EVERPLAY binder inherently UV stable

EVERPLAY first and only PIP system to advocate fall heights at tops of guardrails and barriers since early 1990's

ASTM F1292 test @ 14' (4.25M) 23F (-5C) <85 Gmax and <610 HIC

Functional Longevity Compliance after 20 years.

EVERPLAY first and only with 5 year warranty for maintained surface to meet CSA Z614, materials and workmanship including impact attenuation.

EVERPLAY first and only with 3 year warranty extension for total of 8 years for maintained surface to meet CSA Z614, & ASTM F1292

EVERPLAY has participated on the CSA Z614 Technical Committee since 1990, chairing surfacing, accessibility and risk assessment

EVERPLAY has participated on the ASTM F08.63 Surfacing sub-committee, as major contributor to ASTM F1292, F2223, F2479

EVERPLAY first and consistent advocate for Gmax <100 and HIC <570 for play structures for 18 months to 5 years and Gmax <125 and HIC <700 for structures for 5 to 12 years

EVERPLAY provides poured in place with EPDM topping with same performance as pigmented EVERPLAY

EVERPLAY first and only with "soft" termination to turf and grass

EVERPLAY first waterplay surface without asphalt or concrete base

EVERPLAY first with outdoor impermeable ice skate surface

There is no Equal to **EVERPLAY**

State of the art is not a limit, it is a point of departure