

# EVERPLAY NEWS



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## WILL YOU Pay Twice?

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Standards and legal requirements such as the ADA require specific performance for playground surfaces. As a result of an attempt to reduce cost and make a specification generic, you may have to purchase your 'protective surface' twice or upgrade it within a few years of the initial installation. You may have to budget for a retrofit or replacement rather than expanding to new projects. If a synthetic surface fails to meet standards over time, you could well be paying twice the initial cost or more depending upon the failure of the existing surface.

According to the various standards for playground surfacing, you will install a 'protective playground surface' generally 6' from the perimeter of a play structure to absorb the impact from a fall. The degree of the impact absorbed is outlined in the ASTM F1292 standard for playground surfacing. The surface may also have to be firm, stable and slip resistant to provide accessibility. That surface can consist of a number of materials such as sand, metering stone, woodchips or a synthetic. The type of surface will

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### Compare with the Universal Quote Form

EVERPLAY is providing you with a quotation sheet on the back page of the Newsletter. This form assists with compliance for both impact attenuation and compliance to accessibility requirements.

You should copy this form onto your letterhead and require that everyone making a proposal to you, provide their quotation to you on this form. This will ensure that you will be receiving the same performance in the surface as well as the required warranties and certificates from the installer and chemical suppliers. Only with this requirement will you be able to know that you are getting the best value for your money for a very technical product.

At EVERPLAY, we believe that the client deserves the best product for today, tomorrow and into the future.

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depend upon your needs and the intensity of use of the play area. Where there is very little activity and a maintenance budget to keep loose materials clean and loose, you would potentially select the sand or metering stone. The woodchips would carry a higher cost to the loose surface, however depending upon the type of woodchip selected; the need for maintenance could be reduced. In any event all of the loose materials will have to be topped up annually and replaced from time to time. All of these activities cost money and the budget commitment must be made at the time of initial installation. A synthetic surface will provide for cleanliness, low maintenance and total accessibility, however this could well be at higher capital cost with the savings being in the future.

The selection of just any synthetic surface does not assure you that you will be able to combine the higher capital cost with future savings on maintenance resulting in a successful project with total costs being lower over time. If you are not careful in your surfacing selection, you may find your costs being beyond your expectation.

Protecting your investment in a synthetic surface will depend upon the questions you ask and the assurances and warranties you demand as part of your installation. To assist you and hopefully save money in the long term we are providing you with some insight as to some of the critical components that can cause premature failure of the surface in its performance.

Remember that you are placing a ‘protective

surface’ to absorb energy to the requirements of the ASTM F1292 as a minimum performance for the life of the surface not just the first few months after it has been installed.

In relation to all other loose ‘protective surfaces’ that consist of a single material installed to a certain depth, the synthetic is a complex system consisting of special chemical binders, selected rubber crumb and installation techniques. Invariably these components for any system are proprietary to the supplier of the system. For this reason specifying a surface by name, for nothing less than that of the benchmark expectation, may be your first level of protection.

The chemistry of the surface is very important for a number of reasons. First it must be polyurethane and contain no latex, due to the allergies to latex. Second the polyurethane must contain components that will allow it to stretch and let the rubber granules move in relation to one another at the time of installation and over the long run. This is provided by the chemical components of high quality binders that have not been ‘stripped’ of its monomer. For long term strength, durability and rigidity to accommodate the anticipated traffic a portion of the polyurethane must provide these properties. Simple polyurethanes that contain minimal components will get rigid over time and reduce the impact absorbing performance of the surface and cause the need for replacement. One way to assure yourself that the chemical has been formulated for applications as a ‘protective surface’ should be receiving from the installer a certificate of suitability from the chemical sup-

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plier. This will state that the polyurethane has been formulated for this purpose and the polyurethane manufacturer certifies that the polyurethane will not detrimentally affect the resilience of the surface over time in relation to the standard. You may also wish to request a statement as to how many years this particular formulation has been utilized for this purpose.

The rubber crumb used in the system must be carefully selected to allow the polyurethane to provide the performance required. This crumb must not be larger than 4mm in size in that a larger crumb will readily allow foreign materials to go in to the surface and lessen the resilience. In addition these larger granules are very abrasive to the child. A crumb in the size of 1-4mm will provide a smaller opening between the crumbs, while still providing good slip resistance in wet and dry conditions. There could well be circumstances where a smaller crumb size is desirable due to special requirements of a site. Be aware that this will change the properties of the surface and must be tested that only minimal loss of performance results. There are cases where a shredded rubber is used to provide for a mechanical adhesion that will enhance the lower quality of the binders that can be utilized to save cost. These surfaces have a very smooth texture and will demonstrate a lower degree of slip resistance than the rubber crumb surfaces.

Installation procedures, numbers of layers in the system, cure times between layers

and the techniques utilized will have an effect on the final product and the ability of the surface to perform as an impact absorbing surface. The quality of workmanship will be seen here with regard to a consistent and clean installation.

The standard for playground surfacing, ASTM F1292, provides for the surface to meet the performance standard ‘when tested’, which means at any time during the life of the play environment. There are test instruments and independent organizations capable of performing site tests according to the requirement of the standard. Any warranty for a synthetic surface should not only cover the durability of the surface, but also that it will meet the criteria of the standard at the end of the warranty period, with an expectation that this performance will continue into the future. **If you are not getting a warranty that ensures the conformance to ASTM F1292 at the end of the warranty period, you will be upgrading and PAYING TWICE.**



Test surfaces regularly

# UNIVERSAL QUOTE FORM

Place your letterhead here and have the supplier of a protective surface submit on this form to allow for true comparison

Quotation  
For 'Protective' Surface

Date: \_\_\_\_\_

Proponents are asked to fill in the appropriate locations confirming compliance and/or conformance to the statement and the cost of the work described.

Excavation of existing play area and/or compacted granular base \$ \_\_\_\_\_

Supply and installation of the protective play surface for a performance criteria of Gmax less than 150 and HIC less than 800 from the maximum accessible points (i.e. tops of railings, guardrails and climbers) when site tested 10 to 54 days after installation, using the free fall test method of the ASTM F1292-04.

Approximate total area \_\_\_\_\_ ft<sup>2</sup>/M2 \$ \_\_\_\_\_

Total cost of surface and base before taxes \$ \_\_\_\_\_

gst \$ \_\_\_\_\_

Total cost \$ \_\_\_\_\_

Colour of a rubberized Surface to be installed \_\_\_\_\_

The surface installed under this quotation will be warranted for a period of 5 years for materials and workmanship and covers a rubber surface for wear through, cracking, deterioration and that the maintained surface will remain resilient for the warranty period to provide for the performance required by the CSA Z614-07, ASTM F1292 and F1951 for the drop heights and locations initially tested in the temperature range of  $-1^{\circ}$  to  $49^{\circ}\text{C}$  in a dry condition. Damage as a result of vandalism will not be covered.

The surface will be firm, stable and slip resistant as required by the ADA prior to and during 5 year warranty period.

A rubberized surface installer will provide a certificate from the manufacturer of the polyurethane binders stating that the binders employed are suitable for the application of playground surfacing and will remain stable and resilient for the warranty period.

The protective surface installer will provide a certificate that the installed surface meets the dimensional requirements of the CSA Z614-07/ASTM F1487 standard.

The surface installer will provide a maintenance procedure for the installed surface.

Quotation valid for \_\_\_\_\_ days

Signature \_\_\_\_\_, Name: \_\_\_\_\_ Title: \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ Prov. \_\_\_\_\_

Postal \_\_\_\_\_ Phone \_\_\_\_\_ Fax \_\_\_\_\_ Email \_\_\_\_\_

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

**EVERPLAY International Inc.**