

How Diamond-Tex® Works

Diamond-Tex® is a clay-based infield mix that compacts to form a firm playing surface that provides good footing, true hops, and a safer infield. There is a common misunderstanding as to how Diamond-Tex® drains water from the playing surface that prevents many groundskeepers from getting the best performance in their skinned areas.

The common misunderstanding is the assumption that Diamond-Tex® drains water down through the soil profile into the sub-surface... in other words percs. Because of the compaction characteristics of Diamond-Tex®, it *does not perc*. Instead, the majority of water during a rain is drained off the field due to the ½-1% slope that should be designed into your field. The water that is absorbed by the clay in the Diamond-Tex® actually rises to the surface and dissipates through evaporation.

Now that we understand how Diamond-Tex® works, we can change some of the methods we use to manage water problems and maximize the playability benefits of Diamond-Tex®. There are a few major considerations that apply to Diamond-Tex® that you should consider when you are building a new field or renovating an old one:

The most important component of the skinned surface for successfully handling water issues is the grade of the field. There should be a $\frac{1}{2}$ -1% grade on the skinned surface. There are several ways to do this; including a slope from home plate towards the outfield or crowning the field in all directions from the pitcher's mound. Having an experienced grader with a high quality laser grading system is critical to get this slope as accurate as possible.

Because the water is not going to drain down through the Diamond-Tex®, there is no need for an elaborate drainage system under the skinned areas of your field. In most cases, crushed stone, sand, French drains, and other sub-surface drainage systems under your skinned areas are a waste of money and effort. The water will not reach these areas to be drained away.

When adding thin layers of Diamond-Tex® to an existing field you should be sure to mix at least one inch of Diamond-Tex® with the top inch of material that you're adding it to. You don't want two separate layers of material because the top layer will completely separate when it rains, and you'll have a mucky mess on your surface.

It will take several weeks for your Diamond-Tex® to settle to its optimum level of compaction. If you can do your installation in the fall or several weeks before play begins, your field will be easier to maintain at the start of play.

Punching holes in your infield to try and drain puddles from your field will not fix problems associated with standing water. The solution to puddles on your field is to re-level your field on a regular basis to eliminate low spots. This will allow the water to shed off the skin into the grass areas where it will perc through into the sub-surface.

Underground drainage systems do work very well under the *turf* areas of your field. An ideal system will include underground drains under the turf at the edges of your skinned areas so the water that is shed off your skinned areas will fall into those drains and be carried away-- rather than causing severe wet areas at the edges of your turf adjacent to the skinned surfaces.

If you have any questions concerning this information, please feel free to contact Diamond-Tex® to discuss your specific situation.