



Track Use and Maintenance Guidelines

The following information is intended to provide you with some maintenance guidelines that will help you maintain your track surface. The overall objective of this surface is to provide running athletes a resilient surface that will minimize injuries both in training and in competition for many years. If a few precautions are taken with respect to track use, a long track life is virtually guaranteed.

Wheeled Vehicles on the Track

This is one area that always comes up for discussion, and we try to address it early and often. "If it has wheels on it, it does not belong on the track."

The rubberized track surface is not designed to support the stresses that are created by the tire friction when driving vehicles on the track. The lateral stresses placed on the track surfacing materials during transitions onto the surface, starting and stopping on the surface, and turning the wheels on the surface while stopped or driving on the surface can be sufficient to break the bond between the surface and the base. This can lead to early deterioration of the surface. Damage caused by driving on the track surface, except in emergency circumstances, is not covered by any warranty. Driving on the synthetic track surfacing will make the warranty null and void.

Field maintenance vehicles must cross the track to mow and care for the infield. Whenever this takes place, protective mats should be placed across the track at the crossing point. When infield work is completed, the mats should be removed until the next maintenance period. Leaving the mats on the track surface will trap moisture between the mat and the surface, and will lead to surface breakdown over the long term.

Footgear

The track is designed for running, jogging and walking. Running shoes, cross-training shoes and tennis shoes are appropriate for track use. All of these shoes have a flat sole surface. While occasional track access will not be a problem, footwear that has a defined heel should not be used for exercise on this surface

When running spikes are used on the track, they should be limited to 1/8" pyramid spikes. The surface is designed to support the use of these devices. Longer pyramid and all 'needle' spikes should not be used on the rubberized surface. These will cause excessive wear, and

lead to early deterioration of the surface. Since the track surface is not designed to support these spikes, their use can void the warranty for the track surface. (It should also be noted that the use of these types of spikes, rather than enhance the performance of the runner can actually produce more drag and could lead to potential runner injury.)

Since the track surrounds an infield area that is used for football and/or soccer, the other footwear issue is walking on or across the track wearing shoes for these sports. The larger 'spikes' on football or soccer shoes creates a 'wobble' motion on a flat surface like the track. High traffic from these shoes will cause damage to the track surface. Occasional access on the track is not a problem. However, constant traffic on the track in this footwear will affect the surface. The two most critical areas are the entry/exit point of teams to the field and the areas immediately behind the team benches.

Crossing mats should be utilized in all crossing areas to minimize the possibility of damage. If multiple entry points are designed into the facility, then all paths should be protected. All coaches and athletes should be made aware of these areas and instructed to use them. Similar mats should be used behind the bench areas during football and soccer games as added protection from inadvertent traffic on the running surface.

You should also consider using the same type of crossing mat in the area in front of the stands where the cheerleaders perform for football games. The twisting movements of their feet on the track surface as they go through their cheers can cause excessive wear in this area. These protections are precautionary measures. A small investment in protection can lead to a reduction in maintenance costs in the long run

In all cases, the mats should be put in place when required and removed during periods when not in use. Leaving the mats in place across the track surface will allow moisture to accumulate and remain under the mat. This excessive moisture can, over time, lead to the deterioration of the surface mat. While the mat is designed to maintain its integrity in a variety of weather conditions, it is not designed to remain stable while constantly moist.

Event/Practice Equipment

There is a variety of equipment used for events on the track, hurdles and starting blocks to name two. Placement of these items on the track should be done in a prescribed manner. This will prevent damage to the surface over the long term.

Starting Blocks

There are two types of blocks commonly used for high school facilities. The first required a hole in the track and base to support the installation pins built in to the starting blocks. These are an older design and not used in most new facilities. They have been phased out because of the problems associated with keeping the pin hole cleared of debris.

The second type has spikes, like the spikes on the track shoes, installed on their base. These are placed on the track and the spikes help to hold them in place. These can be used with and installed all-weather surface, and cause no damage to the surface in use.

NOTE: When using the 'spike based' blocks, it is a general practice to have someone behind the runner, 'backing up' the blocks. By supporting the blocks with their feet, the stability of the starting blocks is improved.

Hurdles

Moving hurdles on and off of the track should be done with care. The hurdles should be carried to their event position and set in place. At no time should the hurdles be dragged across the track. This is unnecessary wear on the surface, and while most hurdles will not damage the surface, it only takes one sharp end to require a costly repair. By establishing a consistent practice, long-term security of the surface is maintained.

Running Sleds

These devices, which are used to help improve the runners 'power' performance, are not designed to be used on the track surface. When bringing the device to the field it should be carried across the track, or pulled across the track crossing mats. The sled is designed to be used on a grass surface and not on the running track. Like the comments on the hurdles above, it only takes one sharp corner to cause a significant amount of damage.

Other Event Practice

The running track surface is designed for running. It is an open inviting surface for use in practicing a number of events. These uses should be discouraged.

Shot and Discus

Especially during periods of snow cover, a clear track surface is an ideal spot to practice throwing motions. The spinning and dragging foot actions of these two events can be harmful to the track surface. These can cause excessive wear on the surface and lead to early repairs.

Pole Vault

The expanse of the track surface is an inviting additional practice area for the pole vault participants. Problems can arise if the pole is allowed to land and drag on the track surface. Unusual abrasion and damage from sharp edges can result in repairs.

Alternate Track Uses

Because of its large open, clear area, the running track is an inviting area for use by other groups. Bands, cheerleaders, etc will find its space ideal for their purposes. These uses should be discouraged.

For the band, the problem arises from the footwear and the foot movement on the surface. Heeled shoes have hard sharp edges that can damage the surface of the track during continued use. The design of shoes today includes coarse abrasive 'lug' soles and sharp 'platform' heels. While fashion conscious, they create awkward striding motions and twisting sole contact with the surface. The band maneuvers of turning and reversing directions also causes unnatural twisting motions on the surface, and could damage the track integrity.

The issue of cheerleaders was addressed in the footgear section above. As with game performances, any practice sessions held on the track should use the surface protection mats.

Cold Weather Use and Maintenance

The track surfacing materials have been designed to be used in applications for a wide variety of weather conditions. Wet, cold, freezing weather is just one of those conditions. The rubber and binders in the surface mat were selected to withstand the variations of weather and to perform under a variety of conditions.

While the most effective periods for use of your track facility are during the warm months, when the rubber and binder are most resilient, as the name implies, all-weather tracks can and should be used throughout the year. There are several things to keep in mind when using the facility during cold and inclement weather.

The track surface is designed for the use of soft-soled running shoes and running spikes as described in the section above. Having said this, it is best to limit the use of the spikes during extreme cold conditions. Both the rubber and the binder in the track surface are more brittle under these conditions and there could be a loss of some surface material. In general this will not be significant, but the precaution should, nevertheless, be heeded.

Use of the running track facility during periods of snow cover is not a problem. The best method of clearing the facility for longer-term use is to walk or run on the track with the snow cover. The process of exposing some areas of the track through traffic will assist the natural melting and snow removal by the sun. Under no conditions should scraping, shoveling, sweeping, blowing or other mechanical means of snow removal be used. These processes could inadvertently damage the track surface resulting in patching and repairs.

If large amounts of snow are on the ground and the track is clearing faster than the interior perimeter of the field, pathways for exit of the melting snow should be made at intervals around the track. This will facilitate the drainage of the track and prevent water buildup along the edge and possible refreezing overnight. These pathways can be created in the same way as the track, simply walking in that area and allowing the sun to complete the task.

Grass Maintenance

There are two areas that need to be addressed with respect to turf maintenance. First, a minimum of a 6" border should be established between the track base and the edge of the maintained turf. This prevents grass from growing onto the surface, and allows water flowing off of the surface to have an unobstructed exit path. A water-based, non-selective herbicide, such as ROUNDUP, should be used for this purpose. The field events are often overlooked in this border maintenance process; however, these should receive the same treatment as the track edges.

The second grass maintenance issue is the actual mowing process. As cited in the discussion above on wheeled vehicles on the track, driving on the track should be minimized. The pattern for mowing the infield should be as follows:

1. The normal cutting pattern for the infield area should be followed (perpendicular, parallel or diagonal to yard-lines), with all turns being made inside of the track such that the mower and mower deck do not cross the base boundary. The turns should be made so that the exit chute from the mower faces away from the track.
2. To clean up the non-mowed areas adjacent to the track, a perimeter pass should be cut parallel to the track or event surface with the grass exit chute pointed away from the track surface. If required, a second perimeter pass should then be cut. It is best that the grass chute be pointed away from the surface on this pass also to minimize the amount of grass cuttings that are blown onto the track surface.
3. Any grass clipping which have accumulated on the track surface during the mowing process should be blown off of the surface. Leaving debris on the surface allows for the accumulation of moisture and silt that will clog the pores of the surface and lead to early deterioration.

NOTE: AT NO TIME SHOULD THE MOWING EQUIPMENT USE THE TRACK SURFACE TO MAKE TURNS BETWEEN PASSES. THE MOWER SURFACE SHOULD NOT PASS OVER THE TRACK SURFACE DURING ANY CUTTING PASSES.

Drainage and Sprinkler Systems

One of the primary causes of early track surface failure is poor surface drainage. When the track is constructed, a cross-slope of 1-2% is established to provide for adequate surface drainage. This removes the water from the surface however, since both the surface and the infield slope to the same area, the track inside perimeter, measures should be taken to

insure proper drainage of this area. The steps described in the Grass Maintenance section to establish a clear 6" border around the surfaces is the first step toward this effort.

Sprinkler systems should not water the track. Heads should be adjusted so that they water the grass as intended and not the track surfaces. Additionally, sprinkler systems should be monitored and adjusted so that only an amount of water necessary for healthy turf is applied. Over saturation of turf areas will keep areas adjacent to the track surface wet all the times. In addition, there should be no standing water adjacent to the running track surfacing after a rainfall. Excessive amounts of water can then migrate under the track base and create problems. Exposing the synthetic surfacing to these conditions will make the warranty null and void.

Over time, modifications to the infield area may change the grade difference between the track and the infield. When changes are made, care should be taken to maintain the positive slope away from the track surface. This will prevent standing water from accumulating and potentially undermining the track base and surface.

Periodically, after heavy rains, the track should be checked to insure that water is properly draining from the surface. Any problems should be resolved as soon as possible to reduce the chances of affecting the surface integrity.

If interior perimeter drain systems have been installed, these should be examined on an annual basis to determine the silt buildup. The lines should be flushed, as required to maintain the drainage to the area.

If at any time, bubbles appear in the track surface, it is a sure sign that water is getting up under the track pavement and is not being allowed to exit efficiently. French drains built adjacent to the track and field event pavements are effective at eliminating this type of drainage problem.

Sediment and Debris

Sand, dirt and any other foreign debris must be kept off a synthetic running track surface to assure the longevity of the surfacing. The structural integrity of the surfacing will deteriorate after being exposed to accumulation of this type of material. Lack of keeping the surfacing clean of such material will make the warranty null and void.