Gerflor Sports Floors – Indentation & Recovery Technical Bulletin

Recovery from indentation is directly affected by temperature, the amount of weight, and the duration for which that weight is applied. With safety and comfort being the primary goal for Gerflor Taraflex® and Recreation Sport Floorings, it must be understood that to achieve high performance in both categories, the materials are designed to indent under the athlete to absorb the force applied to it very quickly and recover much more slowly. If the foam does not respond to the athlete's impact quickly or it recovers from impact too quickly, then good shock absorption is not achieved. So, it is by design that this process occurs in this way and should be considered a natural process. It is also a good indicator the flooring is performing the way it should.

All Gerflor sports floorings are rated at a maximum of 175 P.S.I. for static loads. This limit is appropriate for most types of portable tables and chairs utilized in multi-purpose rooms. When Gerflor sports floors are used for multi-purpose activities which involve chairs, table, and other objects that apply point loads, it is advisable to remove these items as soon as possible afterwards to minimize the length of time the floor is subjected to the loads. Also, if chairs or other objects are placed on the flooring for long periods of time, it is recommended to place a larger footing beneath the legs such as furniture protectors, a small piece of plywood, or similar to help displace the point load and reduce the risk of permanent indentations. Indentations will, in most cases, completely recover when given enough time after the point load is removed.

Heavy objects or point loads that are placed in the same area repeatedly can cause permanent indentations. Examples include large bleachers, wall mounted cafeteria tables, portable basketball backstops or drivable hydraulic lifts. It is imperative to know the load exerted by any equipment before subjecting the floor to it, and to have a plan to disperse that load. Gerflor recommends BleacherBlok to target specific areas in the gym that will be repeatedly subjected to loads. BleacherBlok can withstand up to 750 P.S.I. Installing the optional BleacherBlok under wheel tracking paths of large bleachers is common and effective. For uncommon or occasional situations that require placing heavy loads on the sport flooring, such as drivable hydraulic lifts to perform overhead work, Gerflor recommends plywood sheets be placed on the flooring to distribute the load.

Gerflor offers a wide range of flooring for specialty applications. These range from very dense industrial grade products for areas where heavy objects and machinery are used such as warehouses, to commercial sheet flooring where harsh chemicals are used such as laboratories and hospitals, to sports flooring where schools, colleges, and even Olympic level games are played. We pride ourselves in providing the best flooring solutions to meet the needs of these specialty applications. Not one product will fit every application and perform equally in all categories. To get a certain performance characteristic for a specific application, it is inevitable that other desirable product characteristics may be diminished. For example, we sell industrial grade flooring that can withstand forklifts traversing on it every day, but safety performance in the event of a slip and fall is reduced due to loss of force reduction and by design of the product. In the case of our sports flooring, the opposite of this would apply. Our sports floorings offer unsurpassed force reduction and shock absorption for safety but perform to a lesser degree with static and dynamic loads, or even with harsh chemicals. Finding this balance of what the primary function of the flooring is needed for and understanding that other performance traits may be negatively affected is sometimes difficult to understand.

We hope this document provides insight and clarity into this subject and if you have further question, please contact Gerflor Technical Services.