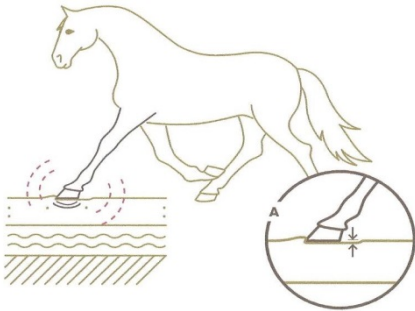


ARENAS, THEIR FUNCTION AND PROPERTIES

Cited from "Equestrian Surface – a Guide" by the Swedish Equestrian Federation April 2014

How a riding surface functions must be characterized based on how it responds to the load from the horse. There are 5 characteristics to a riding surface as explained below:

CHARACTERISTICS OF A RIDING SURFACE:

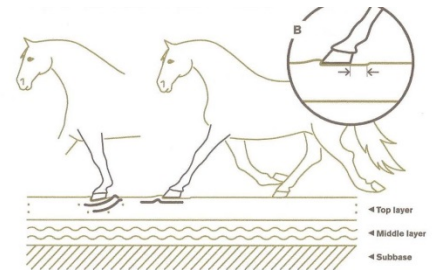


IMPACT FIRMNESS

Influences the mechanical shock experienced by the horse when the hoof first hits the ground. This relates to the hardness of the top layer of the surface.

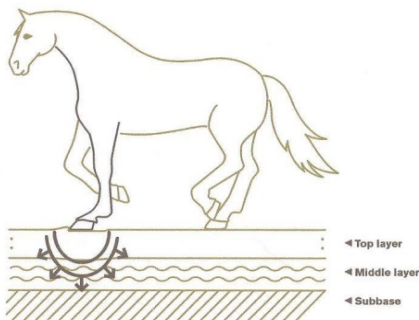
GRIP

Affects how much of the horses' hoof slides during landing, turning, and pushing off. Grip is determined by both surface friction and how well the top layer and the materials beneath interlock and hold the surface together to provide traction.



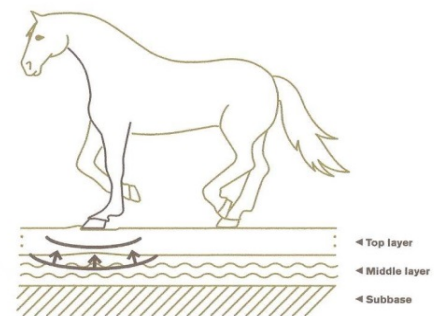
CUSHIONING

How the surface is able to dampen and reduce the maximum force, when the horse puts its full weight on the leg during the support phase. Cushioning refers to how ALL the layers of the riding surface react to the force applied when it is loaded from above by the weight of the horse.



RESPONSIVENESS or REBOUND

How active or springy the surface FEELS to the horse. Responsiveness in a surface can be likened to using a trampoline; after the surface has been pushed downwards by the weight of the horse, it can spring back and aid the horse in pushing off into the next stride.



UNIFORMITY AND CONSISTENCY

These properties are concerned with how uniform the surface FEELS from stride to stride as the horse moves over it. Remember that an arena can look even and yet not be uniform!

REMEMBER....

THE PROFILE OR PROPERTIES OF AN ARENA WILL CHANGE DEPENDING ON MOISTURE CONTENT AND MAINTENANCE.