

## Construction of a riding arena (outside arena)

FLL "Forschungsgesellschaft fuer Landschaftsentwicklung und Landschaftsbau" is the Research Institute for Landscape Development and Landscaping in Germany which releases general guidelines for outdoor riding arena construction in Europe.

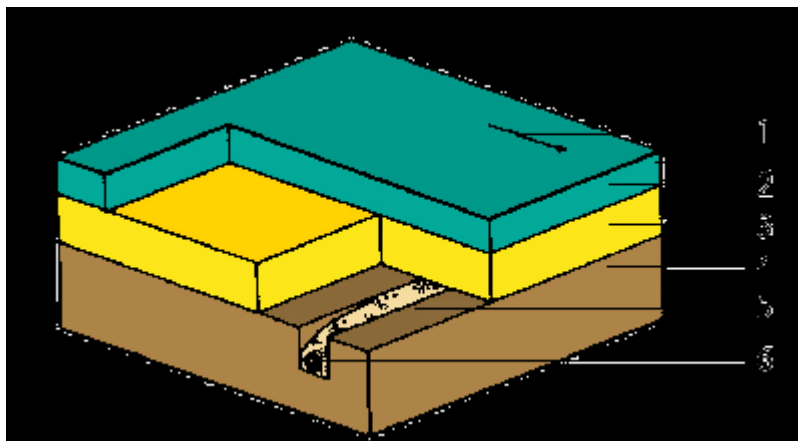
The most common **methods of arena construction** are 2-Layer and 3-Layer arena construction. Each type has to ensure that the particles from one layer do not travel into the neighboring layer or into the ground. Separation layers can be used to help prevent intermixing.

### 2-layer construction:

**Version 1** consists of footing, base and sub-base

**Version 2** consists of footing , separation layer and sub-base

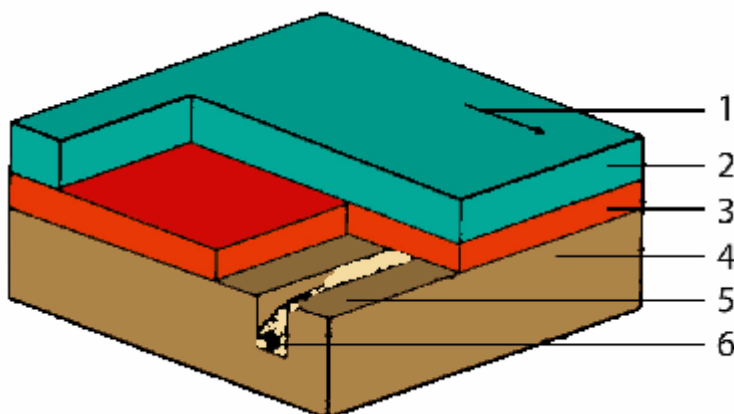
**Version 1** is used when the ground doesn't have enough load capacity and when the selected materials guarantee that the footing and the sub-base will not intermix.



1. direction of slope
2. footing
3. base
4. sub-base
5. level surface of the sub-base
6. possible drainage pipe

Picture of 2-layer construction Version 1

Version 2 is used when the ground is stable, but a separation layer is needed to avoid the mixing of footing and ground.



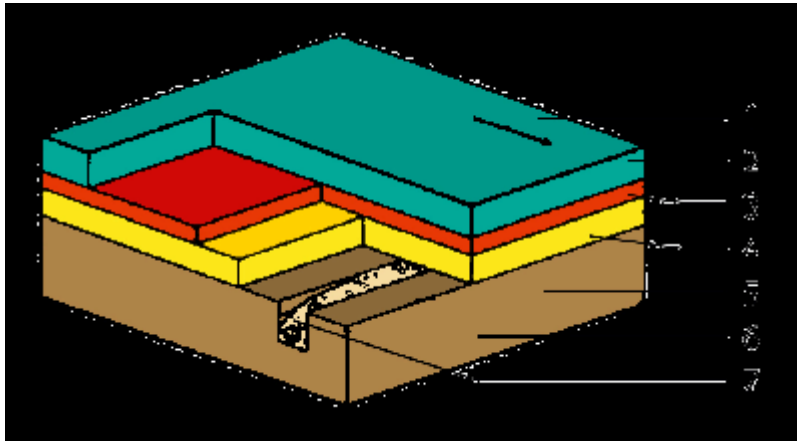
1. direction of slope
2. footing
3. separation layer
4. sub-base
5. level surface of the sub-base
6. possible drainage pipe

Picture of 2-layer construction Version 2

### 3-layer construction:

consists of: Footing, Separation layer, Base and Sub-base

3-layer construction is being used if the stability of the ground is compromised and when footing and base have to be separated



1. direction of slope
2. footing
3. separation layer
4. base
5. sub-base
6. level surface of the sub-base
7. possible drainage pipe

Picture of 2-layer construction Version 2

The selection process is depending on the regional condition and the types of materials being used.