





# structure of stresan<sup>®</sup> – equestrian surfaces **outdoor arena**

*We can't emphasize often enough that you shouldn't begin „just like that“ with the construction of a equestrian surface! It is very important to clarify the following points in advance:*

-  A planning permission is necessary for the construction of indoor arenas and also outdoor arenas
-  If you'd like to use RC (recycling) material, a suitable approval must be obtained in advance by the lower water authority (UWB)
-  The location should be carefully selected: An outdoor arena should be placed at the highest point of the area, so if it is raining no additional rainwater collects on the outdoor arena
-  To guarantee the stability of the ground, a ground certificate must be obtained that states whether the substructure is firm enough and load-bearing

## *How much stresan<sup>®</sup>-riding sand is required for a tread layer?*

We recommend a tread layer level of twelve centimeters for outdoor arenas. The formula to calculate the individually required sand quantity is as follows:

$$(length (m) \times wide (m) \times tread layer level (m)) \times specific weight of sand (t/m^3) = quantity (t)$$

### **Example**

An outdoor arena with the dimensions 20 m x 40 m:  
 $(20 \text{ m} \times 40 \text{ m} \times 0,12 \text{ m}) \times 1,7 \text{ t/m}^3 = 163,2 \text{ t}$

Even if it is possible to build the equestrian surface by yourself, we highly recommend to get professional support of a riding arena constructor. This constructor does not only have the needed expertise, but also has the suitable devices such as a laser grader to insert the material in an optimum manner. With pleasure we give you suitable contact data.

# Exemplary substructure *outdoor riding arena*



Surface drainage with a lateral slope of 1-2%







Vertical drainage via substructure



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# structure of stresan<sup>®</sup> – equestrian surfaces *indoor arena*

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## *How much stresan<sup>®</sup>-riding sand is required for a tread layer?*

We recommend a tread layer level of ten centimeters for indoor arenas. The formula to calculate the individually required sand quantity is as follows:

$$(length (m) \times wide (m) \times tread layer level (m)) \times specific weight of sand (t/m^3) = quantity (t)$$

### **Example**

An indoor arena with the masses 20 m x 60 m:  
(20 m x 60 m x 0,10 m) x 1,7 t/m<sup>3</sup> = 204 t

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# Exemplary substructure *indoor arena*



Footing made of pure sand  
with separating layer



Tread layer with screening  
on concrete floor



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