



**HÜBNER-LEE**

**Feelgood surfaces for horses**

**Paddock/exercise area**

**Horse exerciser**

**Lunging area & much more**



**3 million m<sup>2</sup>** in Europe.  
**25 years** of happy customers.  
TTE<sup>®</sup> stands for **quality!**

**TTE<sup>®</sup> SYSTEM**



**material** neutral to the environment made out of 100 % recycled plastic (Duales System Deutschland)

**dimensions** about 80 × 40 × 6 cm with 32 chambers (size 8 × 8 cm), 1 m<sup>2</sup> = 3.125 pieces

**web thickness** inside about 15 mm, outside about 20 mm

**weight** ca. 8.7 kg (about 27 kg/m<sup>2</sup>)



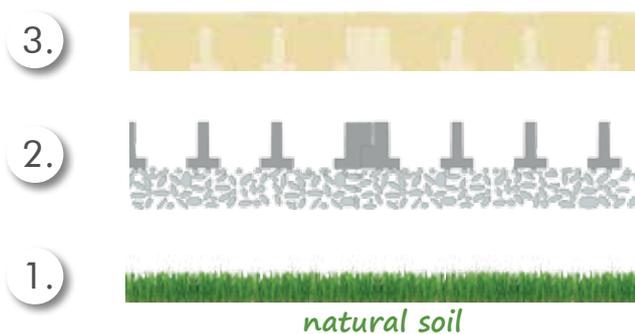
The TTE® system is **TÜV certified**, it is loadable up to a 20 t axle load, UV stable, neutral for the environment, dimensionally stable, as well as weather and resistant to chemicals.



The first and only system that has passed the DLG Signum Test. The test result proves the suitability of the TTE® system for riding arena and exercise area reinforcements. To do this both technical and animal-related criteria are checked.

The whole certificate can be seen at [www.huebner-lee.de/dlg-signumtest](http://www.huebner-lee.de/dlg-signumtest)

## The concept OnTop construction instead of a trough



**chamber filling + covering layer**  
e.g. sand, TTE® forest floor or TTE® paving stones

**TTE® element 80 x 40 cm**  
on the compensation layer 3-5 cm  
(e.g. fine gravel or TTE® Forest floor)



## Cost savings quality at a small price

The TTE® system replaces the majority of the material and labour costs, whereby the **total construction costs** are significantly lower compared to the conventional construction principle (with or without a light grid). One further large potential for making savings is offered by the option to simply lay the TTE® system oneself.

**Conventional construction principle**



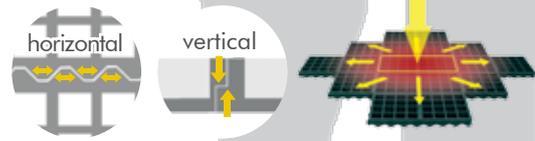
**TTE® construction principle**



# The function TTE® separates bears drains

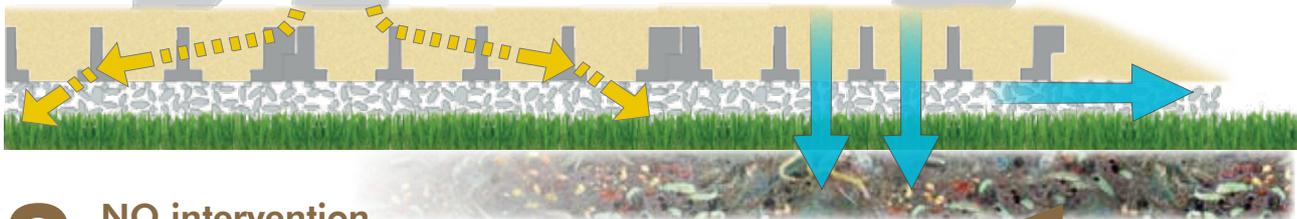
## 1 EVENESS AND LOAD DISTRIBUTION

The horizontal-vertical interlocking system of the solid TTE® elements (about 27 kg/m<sup>2</sup>) has a load distribution effect (snow shoe effect), and thus replaces the classical ballast base layer and prevents unevennesses.



## 2 100% DRAINAGE

The water permeable, uncompressed On-Top structure lies above the surrounding level (no trough) and prevents accumulation of stagnant water.



## 3 NO intervention

The living ground zone (up to 1 million micro and macro-organisms per m<sup>2</sup>) remains intact with its seepage and breathing function. It decomposes odour-producing substances such as nitrate and ammonia and thus protects the ground water.



## 4 EASY ON THE JOINTS

The area-elastic property is gentle on the joints without loading the tendons and ligaments of the horse.



# The advantages Building in harmony with man, animals and nature

### QUALITY SAVINGS PACKAGE

- simple and rapid implementation (do-it-yourself construction possible)
- savings on costs and materials
- long-term functions & a high service life of TTE®
- can be laid flexibly and can be removed again

### APPROPRIATE ANIMAL HUSBANDRY

- permanently dry surfaces protect against the presence of pathogens
- an impact dampening elastic surface for permanent gentle treatment of the joints

### A LANDSCAPE PROTECTION CONCEPT

- The original surface is gently build on and preserved
- no intervention in the living ground zone with its functions
- groundwater protection
- simple to obtain approval for

# HÜBNER-LEE

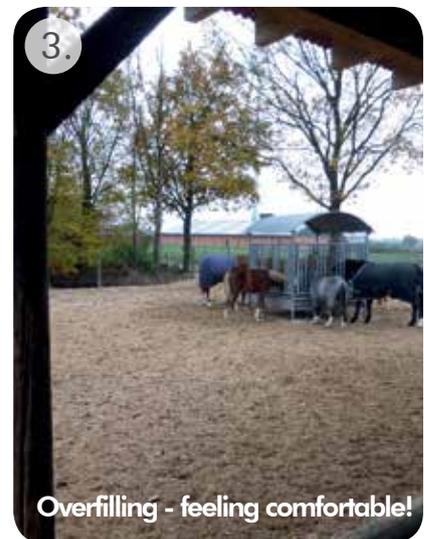
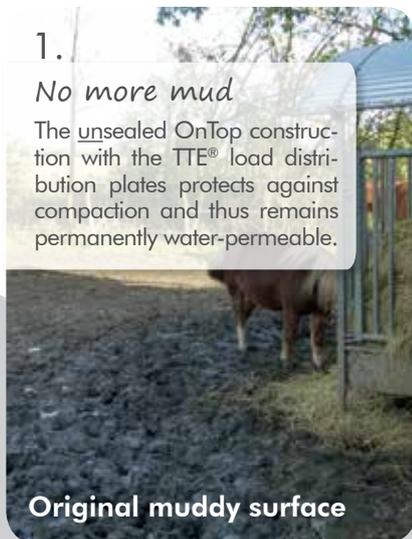
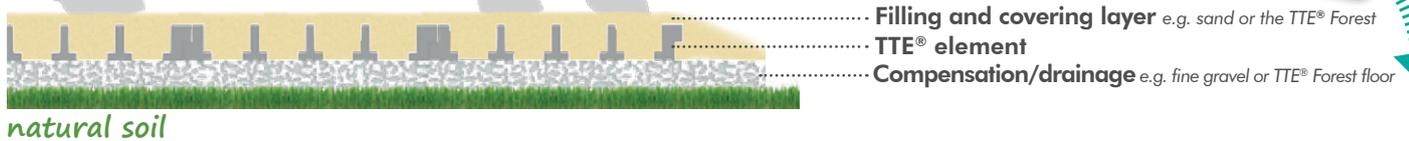
# TTE® Standard dry exercise areas for your horses

The **TTE® system** is the 'ToTal Einfach (Simple) solution' for exercise areas. From a paddock over partial surface area reinforcement of, for example, a beaten path through to a running or active stall. TTE® - simple to lay on the top soil and thus to remain flexible.

precise material recommendations in the "Construction manual for a horse exercise area"

- rapid and simple implementation (ideal for do-it-yourself construction)
- flexible use without intervention in the existing surfaces ► easy to get permission for
- appropriate ground conditions and protection against hoof diseases
- savings on costs/time and care efforts for the livestock owner

**TTE® Forest floor**  
We recommend a wood layer under the TTE® system for even better functionality → TTE® Forest floor



## TTE® paving for the washing, feeding place and machine demolishing



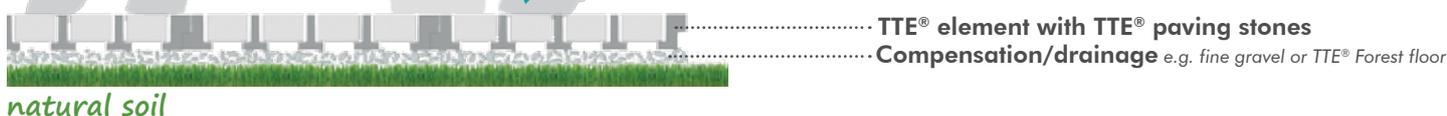
TTE® paving areas are, above all, suitable for areas which should be clean and easy to clean. They are, for example, ideal for **for the washing and feeding place and dung removal areas**. Also unsealed ways arranged around the stables are simply realisable in this way without a conventional base course layer (can be driven over up to 3.5 t).

- water permeable paving areas (unsealed)
- simple and quick to lay
- a force-fitting interlocking "paving float"
- ideal for keeping clean



TTE® paving in ruby red, grey and anthracite

**Also for courtyard fortifications**  
The TTE® seepage paving is also suitable for your outside facilities. Higher loads than 3.5 t? No problem Contact us.





1. Lay the TTE® on the levelling layer



2. Fill with TTE® paving



3. Finished - good appetite!

## TTE® Forest floor natural construction material & impact dampening



**You absolutely must not intervene in a surface or you wish to build near-natural?** You wish to offer your horses particularly gentle and natural ground conditions? Then we recommend our **TTE® forest floor** made based on the model of the forest floor. Simple wood chip is used here instead of a gravel compensation layer (also possible for chamber filling and a covering layer). **Wood can additionally be used for increased impact dampening for every TTE® application.**

*(observe the respective installation manual)*

- natural materials for problem-free removal
- natural impact dampening for still easy on the joints walking
- a cost-effective purchase
- insulates from the cold (promotes rapid thawing of ice and snow)
- wood improves nitrate decomposition and also odour reduction

**Do not have any worries about wood!**  
Parts of it rot over the years - but the raw fibre remains unchanged and continues to provide the functionality. Over the last 20 years satisfied customers can confirm use of this natural construction principle.



..... TTE® element filled and overfilled with wood  
..... wood as a natural compensation layer

natural soil



1.

### The Forest floor

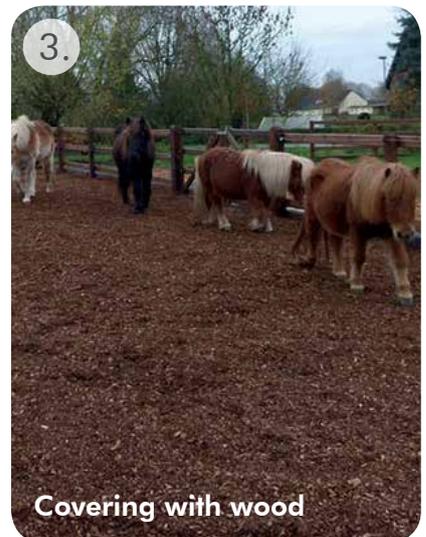
The TTE® forest floor is oriented on the model of the forest floor and stands for permanent water permeability and natural impact dampening.

wooden compensation layer



2.

TTE® on a laying network



3.

Covering with wood

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# TTE<sup>®</sup> lunging disc the intelligent solution



The design of the disc compensates for the tilt of the horse so the moving apparatus is always loaded evenly. For the first time ever the springy behaviour of the structure allows **lunging which is easy on the joints**.  
Request our construction manual for a lunging disc

- a concave form for ergonomic lunging
- joints are treated in a gentle manner by the elastic layer
- impact dampening protects against wear on the body structure



natural soil



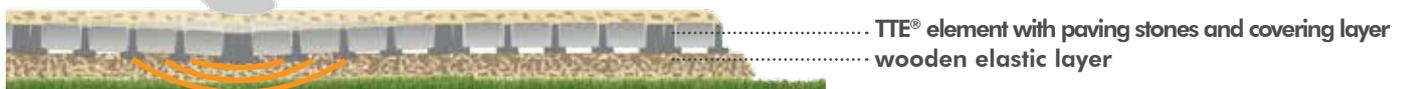
# TTE<sup>®</sup> horse exerciser healthy movement through suspension



A **non-slip paved surface which is impact dampening sprung** due to the underlying elastic layer, which for the first time allows **easy on the joints movement** of the horse. In this way the wear of the covering is reduced enormously at the same time. The interlocking of the individual TTE<sup>®</sup> elements permanently protects against unevennesses and against compaction of the surface.  
Request our construction manual for a horse exerciser

- a non-slip, loadable paving cover layer
- gentle treatment of the joints due to a springy elastic layer
- impact dampening protects against wear on the body structure
- unevennesses are impossible
- rapid and simple implementation

**Naturally springy**  
Just as is the case with a forest floor, the wood chip layer ensures impact dampening for easy on the joints movement on the TTE<sup>®</sup> surface.



natural soil



## TTE® diminishing steps an optimal walking experience in hillside locations

Using the TTE® diminishing steps can even develop surfaces with a strong slope, simply and economicaly. Concrete sleepers are simply manufactured directly on the grid. Levelling out of the slope allows **safe walking** and **prevents material removal and runoff**.

Request our construction manual for diminishing steps

- secure walking in hillside locations
- protection against material removal / erosion.
- very simple implementation

diminishing steps (concrete) .....  
TTE® construction (see TTE® Standard) .....



### Do you have any further questions?

Call us on +49 (0)8393 / 9229-0 or send us your request by email [info@huebner-lee.de](mailto:info@huebner-lee.de)

We accompany you from the idea up to implementation. The TTE® system is the ToTal Einfach (Simple) and functions as a unique system without a substructure!. You save on costs & work and decide for an ecological solution which retains its value. **NEW: WE build completely for YOU, or offer you our competent construction management. For a perfect result.**

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**Request more documentation:**

- All-weather riding arena
- Outdoor reining ground
- Riding hall floor
- Stable mats

HÜBNER-LEE GmbH & Co. KG  
Gewerbestraße 1, D-87752 Holzgünz  
Telefon: +49 (0)8393-9229-0, Fax: -22  
E-Mail: [info@huebner-lee.de](mailto:info@huebner-lee.de), [www.tte.eu](http://www.tte.eu)

*Im... Pictures*  
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