

# Mat Tips





## Dear Customer,

We hope you enjoy your Sport-Thieme mats.

With this booklet, we aim to provide you with information on **important decision-making factors** for you to consider when deciding on the right mat for your needs. In addition, this booklet also includes valuable tips about the **storage** and **transport** of gymnastics mats which help you to extend their lifespan.

Best wishes

Maximilian Hohe  
Managing Director, Sport-Thieme

## Decision-making factors for mat types



**The decision as to which type of mat to use should be based on the following criteria:**

- Age group / body weight (primary or secondary education)

- The pupils' performance level
- Exercises they will undertake
- The jumping/falling height
- Type of landing

**The mat should have optimal shock-absorbing qualities but also be sufficiently firm.**

### Density

This is an indication of the foam's quality, given in  $\text{kg}/\text{m}^3$ . The density tells you the foam's weight per  $\text{m}^3$ . The higher the density, the better and longer lasting the mat.

### Sinking Depth

The sinking depth is the ability of the mat to change shape on impact, and to maintain the gymnast's stability. It is divided into the following 3 levels:

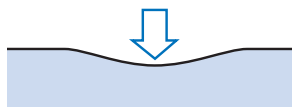
#### Low sinking depth:

- Artistic gymnastics mats, types 1–3
- Floor gymnastics mats, types 1–3



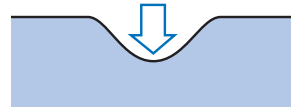
#### Moderate sinking depth with a flatter footprint:

- Mats, types 4–6, e.g. landing mats



#### High sinking depth:

- Soft floor mats, types 7–10



### For Your Safety:

Always use gymnastics mats for their intended purpose and, above all, ensure that you have enough shock absorption in line with the European standard.



Mats are essential for the **safety and the comfort** of any athlete. Regardless of whether it is for use in artistic gymnastics or floor exercises, in high jump or in playful exercises in children's gymnastics – we offer you a suitable mat **for any area of use.**

The entire range of products online at:  
**sport-thieme.com**  
Mats



## Gymnastics mats for different requirements

### Gymnastics mats

Gymnastics mats are versatile. In **artistic gymnastics**, they provide important fall protection and absorb the impact after dismounting or vaulting. They

provide a padded surface for **floor exercises**. In **toddler groups**, gymnastics mats form a soft, insulating surface that small children can feel comfort-

table on. Due to their low shock absorption properties, gymnastics mats are only suitable for use with jumps from a **maximum height of 60 cm.**

### Landing, soft floor and high jump mats

Regardless of whether they are for use in **artistic gymnastics**, **high jump** or **playful exercises in children's gymnastics**, soft floor and landing mats are a must-have

in any sports hall. Soft floor mats are the **ideal fall protection** for use in artistic gymnastics and optimally absorb the impact when landing after

**uncontrolled dismounts** and vaults. For **controlled dismounts**, we recommend firmer landing mats. They allow for a **safe landing in a standing position.**

### Floor exercise mats

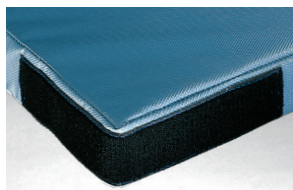
Floor exercise mats, or floor exercise runners, are special gymnastics mats that are perfect for **floor exercises** or for

**positioning on top of soft floor mats in artistic gymnastics.** They can be easily combined to form a large surface and are

predominantly used in **rhythmic gymnastics, acrobatics and for floor exercises.**

## Gymnastics mat accessories

Velcro fastener corners



For connecting several mats together to create a larger surface.

**Recommended:** An ideal accessory for gymnastics mats with a low net weight.

Carrying handles



Made from webbing (100% polypropylene), sit tightly against the mat.

**Recommended:** Make carrying mats with a higher net weight easier.

Leather corner



For protecting mat corners

# Safety in sports halls

In order to be able to guarantee safety during the everyday use of gymnastics mats, the **series of European standards EN 12503** was developed through years of collaboration between the European

standardisation and testing institutions as well as numerous experts. Basically, in EN 12503-1 mats are divided into **10 types** depending on their intended use. The corresponding classifications can be seen in

the table below. The corresponding type of mat listed should be used for each **area of use described**. The mats are subject to strict testing criteria.

Types that comply with  
EN 12503-1 standards  
Classification by types  
and areas of use

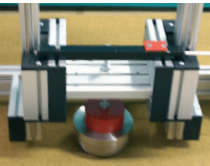
Safety requirements  
on absorption properties

Type	Typical use	Max. braking acceleration g (1 g = 9.81 m/s)	Sinking depth (mm)	Restore coefficient % (rebound height)	Exercise use	Area of use	Recommended mats
1	Mat for floor exercises without vaulting (beginners)	≤ 80	Not required	Not required	Floor exercises	Nurseries, pre- and primary schools	<b>Sport-Thieme</b> children's mat, <b>Reivo</b> gymnastics mat
2	Mat for floor exercises with vaults (floor exercises mat, 4 cm)	≤ 65	≤ 35	20 – 60	Floor exercises, rhythmic gymnastics	Schools and clubs	<b>Sport-Thieme</b> floor exercise mat (35/40 mm)
3	Mat for floor exercises with a vault for landings (gymnastics mat, 6 cm)	≤ 40	≤ 50	≤ 55	Floor exercises, landings from max. 60-cm drop height	Nurseries, schools and clubs	<b>Sport-Thieme</b> gymnastics mats with min. thickness of 6 cm
4	Mat for simple dismounts from apparatus with controlled landing (landing mat, 12 cm)	≤ 40	≤ 110	≤ 50	Landing from more than 60 cm drop height	Schools and clubs	<b>Sport-Thieme</b> artistic gymnastics mat (8 cm), <b>Reivo® Kombi</b> reversible mat, <b>Sport-Thieme</b> landing mat (12 cm)
5	Landing mat (landing mat, 15 cm)	≤ 25	≤ 110	≤ 30	Landing from more than 60 cm drop height	Schools and clubs	<b>Sport-Thieme</b> landing mat (15 cm)
6	Mat for difficult dismounts (competition landing mat, 20 cm)	≤ 14	≤ 105	≤ 15	Landing from more than 60 cm drop height	Schools and clubs	<b>Sport-Thieme</b> competition landing mat (20 cm)
7	Soft floor mat for simple exercises (30 or 40 cm)	≤ 35	≤ 185	≤ 25	High jump, max. drop height 2 m	Schools and clubs	<b>Sport-Thieme</b> soft floor mat (30 or 40 cm)
8	Soft floor mat (30 cm), density 22 kg	≤ 20	≤ 250	≤ 25	High jump, max. drop height 2 m	Schools and clubs	<b>Sport-Thieme</b> soft floor mat (30 cm)
9	Mats for high jump	≤ 10	≤ 70	≤ 20	High jump, max. drop height 2 m	Schools and clubs	<b>Sport-Thieme</b> standard high jump mat
10	Mats for high jump (competition)	≤ 10	≤ 60	≤ 20	High jump, max. drop height 2 m	Schools and clubs	<b>Sport-Thieme</b> super high jump mat

## Sport-Thieme gymnastics mats

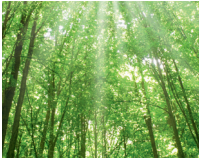
### Proven Quality

Sport-Thieme mats continually undergo in-house quality control checks. This is the only way to guarantee that the quality the customer demands is delivered.



### Sustainability

Upon request, we will take back your old gymnastics and soft floor mats when you buy new mats from us. **The foam core will be recycled and used again in the manufacturing process.** Please enquire about collection costs in advance.





## Gymnastics mat cores

**Composite foam**



- Foam from foam flakes that have undergone a special pressing and gluing process
- Particularly resistant yet also flexible
- Density: 80, 100 or 120 kg/m<sup>3</sup>
- Use: gymnastics mat

**Light foam**



- Expanded polypropylene foam, mainly sealed foam particles
- Good resilience to static and dynamic loads
- Density: low
- Use: gymnastics mat

**PE foam**



- Several layers of polyethylene foam glued on top of one another (sandwich design)
- Highly stable yet lightweight
- Density: 30 kg/m<sup>3</sup> (for gymnastics mats)
- Use: floor exercise mat

**PU foam**



- Polyurethane foam
- High shape stability
- Density: minimum 20 kg/m<sup>3</sup>
- Use: soft floor mat

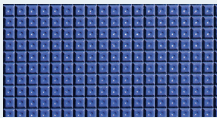
## Gymnastics mat surfaces

**Polygrip mat material**



- Grained structure
- Non-slip
- 100% polyester
- Tensile strength: 2,500 N
- 600 g/m<sup>2</sup>

**Textured mat material**



- Non-slip
- Pimpled structure
- Protects against skin grazes
- 100% polyester
- Tensile strength: min. 2,500 N

**Canvas**



- Smooth surface
- 100% polyester
- Tensile strength: 2,500 N
- 650 g/m<sup>2</sup>

**Needle felt**



- No wrinkling due to a strong bond between the core and cover
- No burns
- Skin friendly
- Stable underfoot

## Gymnastics mat undersides

**Polygrip mat material**



- Non-slip

**Textured mat material**



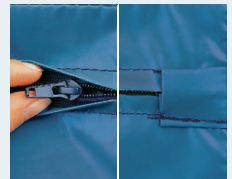
- Particularly non-slip thanks to special pimpled surface

**'Waffle' design**



- Extremely non-slip

## Safety



- **Particularly safe:** concealed zip improves safety!

## Transport and storage

- Storing and transporting mats appropriately, as well as using them as intended, **extends a mat's service life and functional use.**
- Mats should **not be subjected to buckling or bending loads**, as this can damage the internal structure of the mat.

We therefore recommend that mats are stored flat – preferably on a **mat trolley**.

- Whilst being stored, mats should not be subjected to **extreme changes in temperature or high levels of humidity** and should also be protected from exposure to **direct sunlight**.

### Gymnastics mats

**Storage:** On a mat trolley (observe the manufacturer's information on max. load) that is suitable for the size of the mats (no overhangs); up to a maximum of 12 gymnastics mats per trolley.

**Transport:** Using mat trolleys; loading and unloading on the narrow side. In primary school usage, a minimum of four students is required to carry mats whilst in secondary schools a minimum of two students is required. Only carry mats vertically.



### Landing, soft floor mats and high jump mats

**Storage:** Optimally stored flat, alternatively they can be stored vertically against a wall and secured with 2 straps. The mats should not sag.

**Transport:** Carried vertically or transported on a special trolley.

### Floor exercises mats (runners)

**Storage:** Rolled up around a core with the felt covering on the outside and secured with a belt or Velcro strap. Can be stored standing or can be hung up.

**Transport:** Carried vertically or transported on a special trolley.

## Maintenance



### Maintaining mats yourself

In order to check whether the mat material is still fit for landings, the mats have to be **inspected regularly**.

The checks detailed in the **checklist** on page 7 are easy to perform and give a quick indication of whether the mat is fit for use.

# Checklist for checking the condition of your mat

## Visual check recommended every 3 months



- **Mat cover (rips due to wear and tear):**  
Does the cover of the mat have any visible damage or soiling?
- **Leather corners (completely stitched):**  
Are all of the leather corners still fully stitched?  
**CAUTION:** Accident risk!
- **Mat surface:**  
Does the mat have any obvious deformation or holes in the landing area? **CAUTION:** Accident risk!
- **Carrying handles/loops (completely stitched):** Are all of the carrying handles/straps still securely stitched? Handles cause damage to the mat if torn off!  
**Note:** Carrying handles/straps must not be used to hang mats!

## Checking the filling recommended once a year



- **Tears in the foam:**  
Has the foam developed tears?
- **The foam is no longer uniform or has split into pieces:**  
Is the foam still a solid block, or has it split into individual pieces?

## Checking the zip recommended after every use



- **Correct:**  
Zips must be completely closed.
- **CAUTION:**  
If the zip bulges outwards and some of the teeth no longer interlock, you can solve the issue by doing the following: carefully pull the zip pull back to the start of the zip and then close the zip once more.
- **Note:**  
The zip pull can often be found under a flap. If it is not possible to pull the zip pull with your fingers, a small pair of pliers or a paper clip should help.

## Maintenance and care



- **Cleaning:**  
We recommend cleaning dirty mats with water and soap-based detergents.
- **Care:**  
When looking after your mat, you should use care products suitable for use on plastic.
- If the mat shows any signs of wear or damage to the internal core, the mat should be put to one side and no longer used.
- Upon request we can send you a suitable replacement mat cover or core. We are happy to advise you!

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✉ [info@sport-thieme.com](mailto:info@sport-thieme.com)



## Your Service Benefits

### 1. Telephone support

We are here to answer all of your concerns, big or small, on **+49 5357 181 503**  
**Mon-Fri 7:30–20:00**

### 2. Minimum 3-year guarantee

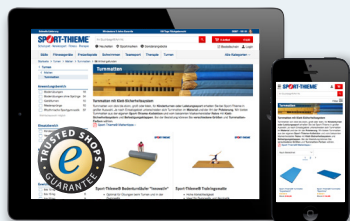
**At Sport-Thieme you are buying quality. Guaranteed!**

We go beyond the legal provisions and provide a minimum 3-year guarantee – often even longer, up to 25 years! You can find more information about this in the product descriptions in the particular article and in our terms and conditions at [sport-thieme.com/terms-and-conditions](http://sport-thieme.com/terms-and-conditions)

### 3. 100-day returns policy

**Buy from Sport-Thieme with peace of mind:**

You can return purchased products within 100 days of receipt without giving any reason. You can find more information about this in our terms and conditions at [sport-thieme.com/terms-and-conditions](http://sport-thieme.com/terms-and-conditions)



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Sport-Thieme online shop:**

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**Discover our wide range of mats, practical accessories and tips on how to use them!**

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