

PERFORMANCE MAT

Unlike mats made of foams and vinyl, Performance Mats are resistant to most everything and do not lose their “bounce” over time, thus always suspending the body weight to minimize injury during falls. Many other products compress or lose their bounce after the first significant impact or within the first year of use.

SmartTech Polyurethane Technology (STP) is a revolutionary and proprietary engineered material system, and is key to the longevity and performance of our Performance Mats. STP allows the thick elastomeric and resilient core to permanently bond with the thin abrasion/stain/microbial resistant outer layer because both are made from the same cross-linked polyurethane molecules. The longevity of our mats is permanently locked into every fiber — they will never delaminate or curl at the edges. Because of this superior technology, Performance Mats will remain buoyant and resilient for at least three years.

100% SMARTTECH POLYURETHANE TECHNOLOGY

SmartTech Polyurethane Technology is a revolutionary and proprietary engineered material system. It's tested for shock absorbency and impact reduction against ASTM F355 standards utilizing Head Injury Criteria.

SLIP AND TRIP RESISTANT

- ▶ The material was formulated with slip resistance in mind.
- ▶ The low profile edges are designed so as not to create tripping hazards for staff working on or around the mat.
- ▶ All mat edges are tapered and sealed to prevent trip hazards and premature degradation. The gradual beveled edges will never curl up or prevent wheelchairs from moving over the mat.

DURABILITY

- ▶ Fluid and Chemical Resistance: Material resists absorption of water and contaminants. Mats are not recommended for constantly wet or oily environments.
- ▶ Puncture Resistance: the material is somewhat puncture resistant because of its good elongation properties. When punctures occur, they are somewhat self-sealing.
- ▶ Manufactured with one-piece construction technology which ensures the mats will not separate, bubble up or delaminate with prolonged use.
- ▶ The material takes a 2.8% compression set. Resilience reading is 35. The resilient memory material retains protective properties over time to withstand high traffic and multiple impacts. (See reverse for test data).



At 70" long, the Performance Mat helps protect the patient no matter where they exit the bed.



The Performance Mat's edge is beveled to prevent trip hazards and premature degradation.

ANTI-MICROBIAL/LATEX-FREE

The material shows 99.9% population reduction of Staphylococcus Aureus bacteria over 24 hours. It's an easy to clean surface that meets the ASTM G21 standards for antimicrobial properties.

DIMENSIONS AND DENSITY

Dimensions: 70" L x 30" W x 5/8" D. Increased length protects head and torso from high impact trauma and injury while the width allows for better fit in narrow room spaces. Low profile makes it easier to move patients on and off the mat.

COMPLIANCE

- ▶ The material complies with Consumer Product Safety Improvement Act of 2008 for lead, cadmium, and phthalate content. Material passes CFR 7630/1631 Standard for the Surface Flammability of Carpets and Rugs.
- ▶ 16° beveled mat edges are ADA-compliant and exceed OSHA specifications.

PERFORMANCE MAT TEST DATA

Independent engineering studies of the Performance Mat provided the following data on injury reduction — providing some comparison between protective mats and unprotected surfaces:

- ▶ Engineering testing on the unprotected Performance Mat surface showed that a HIC of 875 was produced from a fall of 6 inches. It also showed that a HIC of 1785 was produced from a fall of 12 inches. An AIS-3 injury classification is normally considered to include skull fractures. The HIC score of 1775 is associated with an AIS-3 injury probability of roughly 95% using the Prasad-Mertz formulas.
- ▶ The Performance Mat produced a HIC of 212 from 12" and a HIC of 655 from 18". Using the Prasad-Mertz formulas the probability of an AIS-3 injury occurring from a 12" fall would be reduced from 95% to 2.75%. Even at 18", 50% greater fall height than the unprotected surface, the AIS-3 injury probability would only be 22%.
- ▶ For testing surfaces with multiple impact uses (such as in a hospital environment), the recovery of the Performance Mat was tested against commonly used foam matting that is trifold and beveled on three edges. Performance Mats evidenced an increase in HIC scores of only 3-5% after the third impact test. The standard mat showed a HIC score increase of 67-109% after the third impact meaning standard mats are only effective in reducing HIC scores to an acceptable level with the initial impact. Subsequent impacts weren't studied as the standard mat had already failed after the third impact. After the initial impact, the standard mat loses its protective properties. On the other hand, Performance Mats demonstrate acceptable HIC scores with multiple impacts.
- ▶ Engineering testing revealed that Performance Mat also possesses antimicrobial properties similar to Microban®.
- ▶ Performance Mats have been certified by the National Flooring Institute, Senior Select and other agencies for safe flooring which also sets them apart from other mats.
- ▶ Performance Mats can also go down and stay down without staff having to remove them to provide routine care which is more efficient for nursing workflows, and they have triple the life expectancy.