





Vulcanized Flooring

What Is Vulcanization?

Vulcanization is a process for converting raw rubber into more durable materials by forming cross-links (bridges) between individual polymer chains under heat and pressure.

How Do We Make Our Vulcanized Flooring?

Used, recycled tires are ground down to a specified particle size. The resulting tire crumb rubber is filled into individual molds within large presses and vulcanized using heat and high pressure. Once the specified heating cycle is completed, the mats are cooled for an appropriate time and then cut to finish shape and size for the designed function.











Recycled Tires

Particles

Vulcanized Mat



Polyurethane Manufacturing Method

Recycled rubber crumb, is mixed together with a specified amount of liquid urethane binder into either a 'cube' mold for tile products or a 'log' mold for roll products.

The Polyurethane Manufacturing Process

After loading the rubber/urethane mixture into the appropriate mold cavity, the material is left for a specified time until the urethane material is sufficiently set and the mold appliance can be removed. Once the urethane material has cured, the 'cube' or 'log' of material can then be slit into rolls or sheets of various thickness dimensions.





Stamina Vulcanized Flooring

Polyurethane Bound Flooring



Why Do We Vulcanize?

- While the same type of recycled rubber crumb is used in both vulcanized and urethane bound products, a vulcanized mat is more durable because the strength of the bond between crumb rubber particles in the vulcanized mat is stronger than in the Urethane mat. The vulcanized mat also has a higher density and is non-porous.
- A vulcanized mat does not absorb moisture from melting ice or drinking bottles, liquids from cleaning processes, perspiration, and other sources. Liquids remain on the top surface for easy removal and maintenance regimens.
- The non-porous nature of the finished material keeps the surface cleaner and much more effective in reducing the instances of bacteria growth and infections such as MRSA.
- A vulcanized mat has a much smoother finish texture making it much easier to maintain and clean, and provides a nicer finished appearance.

	Vulcanized Products	Urethane Bound Products
Pros	Long lastingDurableEasy careCleanliness	Both roll and tile formatsInexpensiveWider range of thickness
Cons	Mats or tiles onlyHigher cost	 Less durable, wear out faster Harder to clean and maintain Can harbor bacteria more easily Must have sealer applied to close pores











DK Green