



What Is Vulcanization?

Vulcanization is the technical term used to describe the process of converting raw rubber into a more durable cured material, by forming cross-links (bridges) between individual polymer chains under high heat and pressure.

How Do We Make Our Vulcanized Flooring?

End-of-life tires are ground down to fine particles for recycling. The resulting tire crumb rubber is placed in molds within large presses, and then vulcanized using high heat and pressure. Once the heating cycle is completed, the recycled rubber material is cooled and then cut to the finished shape and size.











Recycled Tires

Rubber Crumb Particles Vulcanized Rubber Mat

Why Do We Vulcanize?

While the same type of recycled crumb rubber is used in both vulcanized and polyurethane-bound rubber products, vulcanized rubber is more durable and denser than polyurethane rubber because of the strong bond between the fine crumb rubber particles used in our high heat and pressure manufacturing process.

Vulcanized rubber flooring is non-porous and does not absorb moisture from melting ice or drinking bottles, cleaning liquids, perspiration, etc. Independent testing has shown that vulcanized rubber flooring is up to 20 times less absorbent than polyurethane rubber flooring, so liquids remain on the surface for easy removal and maintenance regimes.

The non-porous nature of vulcanized rubber also keeps the surface cleaner and is much more effective in reducing bacteria growth and infections such as MRSA.

Third party testing shows that NWR vulcanized rubber flooring eliminates 99.5% of all microbial build-up with a simple cleaning regimen.

POLYURETHANE RUBBER FLOORING

What Is Polyurethane Rubber?

Polyurethane rubber flooring contains a mixture of large particles of recycled crumb rubber and liquid polyurethane binder. This binder is used to glue the crumb rubber together, forming it into cubes for tile products or logs for rolled products.

The Polyurethane Rubber **Manufacturing Process**

After loading the crumb rubber and polyurethane mixture into a molding cavity, the material is cured under pressure until it is sufficiently set and the mold can be removed. Once cured, the cubes or logs of material can then be sliced into rolls or sheets of various thicknesses.





More durable

Non-absorbent Easy-clean and hygienic

Polyurethane **Rubber Flooring**

Both roll and tile formats

Lower initial investment

Wider range of thicknesses

Cons

Pros

Mats or tiles only Rubber odor Larger initial investment

Less durable, wears out faster

More difficult to clean and maintain

Harbors bacteria more easily

Requires sealer to close pores

Stamina Vulcanized Recycled Rubber Flooring

Polyurethane Rubber Flooring



NORTH WEST RUBBER

1.800.663.8724

HAS SPEELLING AND SPACING BEEN CHECKED

33850 Industrial Ave, Abbotsford, BC Canada V2S 7T9

FILENAME	Vulcanization Comparison_2021 Update_R115	TRIM	16"x10"	APPROVALS	SEEN	APPROVED
CLIENT	NORTH WEST RUBBER	BLEED	0.125"	DESIGNER	May Yang	Brian Ho
CREATION DATE	JANUARY 31, 2018	SCALE	1:1	COPY WRITER		
OUTPUT DATE	DEC 16, 2021	RESOLUTION	300dpi	CLIENT		
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