EcoLast Mat Material Guide: Why Polyurethane?

iMovR's Commitment to Quality

iMovR values quality products designed for the ultimate customer experience. The EcoLast standing mat line was developed to give standing desk and treadmill desk users an innovative anti-fatigue comfort solution. EcoLast mats offer unparalleled durability and support because they are made in America with high-density 100% polyurethane.

Why Polyurethane?

EcoLast standing mats are made of polyurethane cast in a unibody mold. This means that each mat is one solid block of material with no additional materials layered or blended in that could compromise quality. Polyurethane is a flexible, resilient manufactured material that gives the EcoLast standing mat line many unique properties:

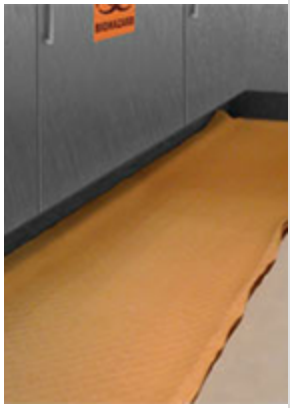
- Ergonomics – Long-lasting support and comfort is key to avoiding muscle strain and injury. The resilient buoyancy of EcoLast polyurethane provides many health benefits such as constant foot, back, and leg pain relief, balance improvement, reduction of spinal compression, and improvement of sit-reach flexibility (refer to "The Science Behind EcoLast Mats" for details).
- Long life span – Polyurethane will not compress over time, so EcoLast mats will never lose the buoyancy that gives them their superior ergonomic cushion factor.
- Wear and Tear Resistance – Polyurethane is impressively durable. EcoLast mats will not only hold up against chairs, dress shoes, and high heels, but will also resist delamination, tearing, abrasion, puncture, chemical damage, and heat up to 400°F.
- Surface Qualities – An EcoLast mat will never separate or delaminate since it is made of solid polyurethane, and the top surface is easy to clean, anti-microbial, and stain-proof.
- Non-Trip Properties – Polyurethane has anti-travel properties that reduce an EcoLast mat's ability to scoot across the floor, plus high-integrity edges that will never curl up to create a tripping hazard.
- Eco-Friendly – Polyurethane contains no plasticizers, so it doesn't release harmful smells or chemicals. Since EcoLast mats are ultra durable, they will last a lifetime, and investing in one means reducing your consumer waste. They are also recyclable, so you never have to worry about adding to the landfill when you retire your mat.

Other Options Will Leave You Dissatisfied

Due to the use of alternative materials, many standing mats are easily damaged, will lose their buoyancy over time, and are not firm enough to provide sufficient anti-fatigue support or pain

relief. Various construction methods result in performance issues and short lifespans in a workplace environment. These include vinyl, rubber, sponge, foam, PVC, gel, two-piece construction, and multi-layer construction.

For example, consider an expensive mat with an outer surface of polyurethane and layers of “luxurious” gel and foam on the inside. While this sounds state-of-the-art, it actually increases the mat’s cost while compromising its long-term comfort and durability. Below are examples of what these types of anti-fatigue products look like after extensive use:

		
Foam-bottom mats rip and shred easily.	A two-piece construction mat will inevitably wear through and delaminate.	Impressions linger on insufficiently buoyant mats.
		
Layered mats, like rubber over sponge, will lift and separate.	Rubber is not durable enough to perform as a standing mat.	Gel mat edges create a trip hazard when they roll up with age.

When it comes to standing surfaces during the workday, the bare essentials of a low-quality mat won't be enough. With EcoLast's 100% polyurethane formulation, you can depend on a long lasting, durable, supportive standing mat for years to come.

The Science Behind EcoLast Mats

According to a research study conducted by the Health Science Center at Texas A&M University, polyurethane provides superior health benefits compared with other materials. The TAMU team tested how spinal compression and sit-reach flexibility changed over the course of an eight-hour day when workers used no mat, a 100% polyurethane mat, and three other mats made from various combinations of rubber, foam, sponge, and vinyl. As compared to no mat at all, the multi-layer mats provided a reduction in spinal compression of 10%-12% and a sit-reach improvement of only 33%. In contrast, the solid polyurethane mat achieved a spinal compression decrease of almost 40% and improved sit-reach flexibility by almost 300%. This scientific data confirms that other materials are inferior to polyurethane when it comes to standing mat performance.

In addition, solid polyurethane mats help improve balance. After years of walking on hard, flat surfaces, your balance can degrade from a lack of proprioceptor stimulation, which are nerves in the joints of your feet. Polyurethane provides a buoyant surface with a bit of give that stimulates these nerves. So, standing on an EcoLast mat will combat the type of balance loss caused by the modern world tendency to always find ourselves on unvaried terrain such as concrete sidewalks and level office floors.

If you're interested in how the revolutionary iMovR EcoLast polyurethane formulation is created, here is a brief scientific explanation. Using a process called thermosetting, the mat's thick elastomeric core is bonded to a thin outer layer that is resistant to abrasion, staining, and microbes. The outer layer and core are made of cross-linked polyurethane molecules that bond permanently by being manufactured in this way. This is what makes EcoLast mats inherently comfortable and durable.

Satisfaction with EcoLast

We created the iMovR EcoLast standing mat line with users of sit-stand-walk workstations in mind. Experiencing comfort and pain relief allows workers to have more energized, productive workdays, and our solid polyurethane mats will never degrade in performance. You can stand assured that your EcoLast mat will give you all the benefits that come along with superior quality, durability, and ergonomics.