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Fighting Fatigue From the Ground Up

Anti-fatigue mats are an important part of the big picture when it comes to improving worker productivity and reducing costs.

By JoAnne Boston Jul 01, 2011

If facility managers have learned anything after the rough and tumble winter of 2011, it is that effective, high-performance matting systems are a must. Placed at key entries around a facility, these mats are designed to perform two essential tasks: They keep soil and moisture outside and, in so doing, foster safety, cleanliness, and occupant health.

With winter now a distant memory, managers can concentrate on other ways of keeping their workers healthy and productive. Another type of matting system--anti-fatigue matting--is indispensable in this regard. When used properly, anti-fatigue matting provides an overall healthier work environment, fostering enhanced worker productivity. This can also result in significant cost savings for employers in a variety of business sectors, especially in industrial locations.

Anti-fatigue matting systems improve employee safety by helping to reduce slip-and-fall accidents, which can be more common in situations where workers become fatigued and/or must be on their feet for prolonged periods of time.

Focusing on the Need

At one time, the only competition for American companies was the company "down the street" or in the next state. Today, competition has become global in nearly every segment of our economy. This means that improving worker productivity must always be seen as an ongoing journey in which employers continuously look for new methods and products that can do more in less time and for less money.

Anti-fatigue matting can be surprisingly helpful in this regard. Many people may not know that standing in one place for long periods of time can be hazardous to a worker's health. At the very least, it can cause fatigue. Several studies have shown that workers who stand for more than four hours with minimal movement often become fatigued. Employers and managers can reduce or eliminate this fatigue -- along with the related health and safety hazards -- by installing anti-fatigue matting.

A November 2003 study published in the *Journal of the American Medical Association* (JAMA) found that lost worker productivity in a variety of work settings often can be attributed to worker aches and pains. What's more, these routine health problems are costing American employers more than \$61 billion annually. Surprisingly, the study also reported that this lost worker productivity was not the result of worker absenteeism. While workers acknowledge they experience aches and pains due to standing for long periods of time at work, they view these ailments as "bothersome but not requiring them to take time off from work."

But how does this situation cause a problem for employers if workers continue to come to work every day despite their discomfort? According to the study, the problem is that these aches and pains reduce worker performance. Workers move more slowly, lean against walls or supports to alleviate their pain, or stop working to stretch their legs and rub their feet. This reduced worker performance caused by pain and discomfort costs employers nearly four hours of work per week, amounting to more than 23 days of lost worker productivity time per worker per year.

And fatigue is only one of the harmful health issues that can be caused by standing on hard floors for long periods of time. Other symptoms can include headaches, back pain, musculoskeletal pain, and arthritic pain.

Why Choosing 'High-Performance' Matters

Many facility managers are surprised to learn there is an important difference between rental mats and what those in the professional cleaning industry refer to as "high-performance" matting systems.

High-performance matting is designed and engineered to provide specific benefits for a

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prolonged period of time, while mats that are typically rented to facilities on a weekly/monthly basis are designed to last for only a few months, at best. This means rental matting can endure only so much traffic and so many cleanings before the wear and tear makes them ineffective. Typically, they are then discarded and end up in landfills.

A high-performance mat, on the other hand, is typically purchased from a distributor and includes a warrantee guaranteeing its performance for one or two years. They may last even longer than that. This makes them more cost effective over the long term, as well as more environmentally responsible.

Anti-fatigue mats are designed to prevent the health problems caused by working on hard flooring, as discussed earlier. These mats provide a cushion or bounce on the work surface, which in turn increases body movement, disperses the worker's weight evenly over the surface, and enhances blood flow and circulation. These changes help eliminate the aches and pains workers complain about after standing for long periods of time. Some light-duty anti-fatigue mats are designed with thousands of air bubbles that create a soft, comfortable cushion. Medium- to heavy-duty anti-fatigue mats use foam padding to provide this cushion and bounce. They are also more durable and can better withstand both foot traffic and light cart traffic. Some of these mats are designed using a patented material called Zedlan™, which has proven to be especially effective at reducing worker fatigue and increasing the lifespan of the mat.

Facility managers need to know that a variety of anti-fatigue matting products are available that are specially designed to suit different types of indoor environments. The foam mats described here are designed for dry locations, but in situations where water, oils, grease, or other kinds of fluids might be present, a rubber anti-fatigue matting system is necessary. These wet-area mats often provide drainage as well as cushioning, improving the safety of the area. Workers stand in comfort, elevated above slippery contaminants such as liquids, grease, and oils, which are drained away below.

How to Select an Anti-Fatigue Mat

The expression "you get what you pay for" is especially true when it comes to matting. A mat does not necessarily have to be expensive to be good, but low-cost mats are invariably made with poorer quality and inferior materials, and they are likely to last only a few months. One example is vinyl matting, which tends to be popular because it is relatively inexpensive. Although there may be situations where vinyl mats are a logical choice, these mats tend to lose their buoyancy comparatively quickly, making them ineffective when it comes to reducing fatigue and other aches and pains.

One good way to select a mat is to look at its warranty. Mats of poor quality probably will have only a three-month warranty. Mats with lengthier warrantees -- a year or more, such as the high-performance matting systems discussed earlier -- are likely to be made of higher-quality ingredients that will continue to perform well for an extended period of time.

An important step when it comes to choosing the right anti-fatigue matting for your facility is to "test drive" it before making a selection. Manufacturers are now marketing a number of different anti-fatigue matting systems that have been designed to fit a variety of applications and settings. They may "feel" different to different workers. After trying several systems, most workers generally find that one or two products stand out as feeling the most comfortable.

Cleaning and Care

Mats can accumulate dust and soils after long periods of use. Depending on the material used, mats should be swept or vacuumed on a regular, if not daily, basis. If the mat is made of rubber or vinyl, such as those used in wet areas, the mat should also be damp mopped to remove grease, oil, and moisture that may accumulate on the mat.

Entry mats, which typically have a carpet-like surface, also should be vacuumed regularly. In some busy facilities, they may need to be vacuumed several times during the course of the day. These mats also must be cleaned periodically, usually by custodial crews using carpet extractors. Low-moisture extractors should be used to help facilitate a quick drying time, and air movers can also be placed around cleaned carpets to speed drying time.

The Bottom Line

Worker productivity does not always increase dramatically just because an employer has installed high-performance, anti-fatigue matting. However, we can be certain that such products help to eliminate many of the work-related health problems caused by standing in one location for long periods of time, and these health problems can definitely cause worker productivity to decline. Making use of these systems is an important part of the big picture when it comes to improving worker productivity and reducing employer costs.



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- Definitely
- No, current controls are sufficient
- No, its risks are overblown
- No, it's a useful mineral
- I'm not sure

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