



2011

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## **ASSE Shoe Selection**

### **Shoe Selection for Workers in “Safe” and Light-Industrial Jobs**

Proper shoe selection and safety go hand in hand. Ill-fitting shoes cause not only pain and discomfort but fatigue as well, and fatigue can produce a variety of injuries in the workplace. Foot and leg injuries such as sprains, lacerations, punctures, and even crushing often can be traced back to ongoing pain and fatigue. Additionally, many slips, trips, and falls have their origins in worker fatigue, the result of foot pain and discomfort.

The Canadian Centre for Occupational Health and Safety states that two out of every three workers suffer some sort of foot problem for varying periods during their work experience. Even 15 to 20 percent of workers in so-called safe jobs, such as teachers and clerical workers sitting behind a desk, complain of foot pain and fatigue. These numbers jump considerably for those who work in light-industrial settings where workers typically wear heavier-duty-type shoes but not necessarily protective footwear that meets OSHA workplace requirements.\*

There can be a variety of causes for this foot pain and fatigue, but it often begins with improper shoe selection. It is fairly obvious, especially in an industrial-type setting where people must stand for long periods of time each workday, that wearing high heels or pointed shoes, shoes with poor arch support, or shoes that are too loose or too tight will ultimately result in foot pain. But some employers may not emphasize the importance of proper footwear in the workplace, and often workers either do not know how to select shoes that can help minimize pain and fatigue or simply do not take the time to do so.

## How to Select Shoes

Casual or business shoes are typically worn in offices or “safe” jobs. Shoes selected for light-industrial or warehouse settings are usually made of heavier-duty leathers with better grip to help prevent slipping. When choosing footwear for these settings, workers should consider the following suggestions:

- Always measure the feet before selecting new shoes, and do not rely on the size of your current pair of shoes. Feet can change size. This often happens to runners, hikers, and even those who walk long distances for exercise, who notice that in time their shoes feel tight and their feet start to hurt. The activity flattens and stretches the feet, causing them to change size. Further, as we age, the connective tissues in our feet loosen and our feet tend to get wider.
- Measure the feet while standing and not sitting, especially if a good deal of your workday is spent moving around from place to place, standing at a counter, or standing while working with industrial-type equipment. Feet can stretch when standing, and selecting slightly larger shoes can help minimize foot pain later on.
- Always measure both feet. It is not uncommon for one foot to be slightly larger or wider than the other. If that is the case, select shoes to fit the larger foot.
- Shop for shoes late in the afternoon. Feet can stretch not only as a result of activity or age but regularly during the course of the day. They may become swollen due to irritation with the current shoes.
- Always try on both shoes in a pair, and then spend a few minutes walking around the store wearing them. Often people select new casual or business shoes based on how they look. Appearance should not be the highest priority. Comfort must come first. And after wearing the shoes for a few minutes, if they hurt, try another pair that is slightly larger.
- Do not select uncomfortable or painful shoes believing that in time they will be broken in and feel better. While some shoes will become more flexible and more comfortable over time, this does not always happen. If they are going to be worn on a regular basis, especially for work, it is best to select shoes that feel comfortable from the start.

- When trying on shoes, wear the type of socks/stockings you expect to wear with the shoes, especially at work. For instance, athletic socks tend to be thicker than casual or business-attire socks, allowing them to absorb perspiration. But wearing athletic socks when selecting casual/business shoes can skew shoe measurements.

When choosing footwear to be worn in heavier-duty industrial settings, workers may also want to consider shoes with a steel toe cap covering the length of the toes for added protection. A steel but flexible midsole, which protects the foot against penetration by sharp objects, may also be necessary. Selection must take into account any possible job hazards.

## **Flooring and Foot Problems**

Even when workers have taken time and care to properly select shoes, painful feet and worker fatigue can still be problems, especially for those who must stand for long periods of time. In these cases, the type of flooring can be the culprit. Hard, unyielding floors such as concrete, often found in industrial settings, are typically the least comfortable to work on. Some workers have compared standing and walking on hard floor surfaces over long periods of time with pounding the feet with a hammer at every step.

In this situation, much of the problem can be rectified with the installation of antifatigue matting. Antifatigue mats work by providing a balance of softness and support. The softness helps cushion steps, reducing the amount of stress on feet, joints, and muscles. It also helps distribute weight over the entire foot to create a more natural position on the floor and reduce pressure points.

The support of antifatigue matting comes from the “push,” resilience, or bounce that the mat provides. Often in such a work setting, blood vessels are compressed, especially in the feet and the leg. The bounce creates a movement in the legs that helps increase blood flow through the lower extremities, helping to reduce pain and fatigue.

Employers are advised to select matting specifically designed as antifatigue matting. Soft matting, which may mistakenly be selected, does not offer the bounce and resilience that help to absorb energy and return it to the worker. Without the “dynamic” motion that antifatigue mats can provide, pain and fatigue will increase over time.

Although proper shoe selection and the installation of antifatigue matting for those workers who must stand for long periods of time can help reduce foot pain and fatigue and promote safety, there are other steps employers can also take. For instance, job rotation, moving workers from one job to another, especially from one that is mostly standing to one that is mostly sitting, can help alleviate foot pain.

Team work also can help. This is when work tasks are designed to allow workers to perform alternate tasks. This reduces risk of overloading the feet with one activity, such as standing, throughout the day. Finally, increasing the frequency of breaks can be helpful. Instead of one or two long breaks during the workday, studies indicate that frequent short breaks are preferable for the feet, resulting in less pain and fatigue as well as enhanced worker productivity.

Christopher Tricozzi is vice president of sales and marketing for Crown Mats and Matting, one of the oldest and largest U.S. manufacturers of matting systems in the country. He may be reached via the company Web site at [www.crown-mats.com](http://www.crown-mats.com).

\*The U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) has developed protective footwear standards (1910.136) for those people working in areas where there is danger of foot injuries.

## **About Crown Mats and Matting**

For more than 60 years, Crown Mats and Matting has been a pioneer in the development and manufacture of matting products. Beginning with the invention of walk-off matting by the company's founder, R.P. Johnson, the company now has the most diverse matting product line offered in our industry. Crown sells matting through an extensive network of highly trained sales representatives throughout the United States and worldwide. These sales experts are familiar with the features and benefits of all matting systems and are able to help their clients find the right system for virtually any application.

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