# Workplace Health and Safety Bulletin WORK SAFE

## **Anti-Fatigue Matting**

Workers such as supermarket cashiers, meat cutters, assembly line workers, and machinists stand for long periods of time while working. At the end of their workday, many of these workers have sore, swollen legs and a tired feeling in their lower back. Fatigue and discomfort are not unusual if their workstations and the work they do limit their ability to move around.

Workers who stand or sit for long periods of time should change their working position as often as possible. A chair or sit/stand stool, and some kind of footrest encourage movement and frequent changes of body position. Alternating between standing and sitting workstations offers variety and a break from always working in one position.

Floors made of concrete or other hard materials are the least comfortable to stand on for long periods of time. Anti-fatigue mats, as their name suggests, reduce the fatigue of standing by providing just the right amount of cushioning. Too much and it may be difficult to maintain balance. Too little and there is no benefit.

If a job requires walking on hard surfaces, jarring of the ankle, knee and lower back may cause fatigue. In this case, the use of shockabsorbent insoles, particularly with some of the newer materials that provide long-lasting cushioning, may help. Workers who stand or sit for long periods of time should change their working position as often as possible.

Government of Alberta Employment and Immigration



### How do the mats really work?

Standing for long periods of time can restrict the flow of blood to the muscles of the lower legs, leading to pain and discomfort. Blood pools and has difficulty returning upwards and back to the heart. This explains the swollen ankles and calves at the end of the day. Cushioned matting provides a slightly unstable standing surface that forces the muscles of the feet and legs to continually contract and relax while maintaining balance.

As the muscles contract, old blood flows out, fresh blood flows in, and blood is pushed or pumped upwards to the heart. Which is the reason for stressing the importance of moving around and changing positions as much as possible.

## Factors to consider during purchase

Before investing in anti-fatigue matting, try redesigning the job, the tasks, or the workstation so that the problem is reduced or eliminated. If matting is being considered, trial it first. Consider the following factors when selecting a particular type.

#### Cushioning

How much cushioning is required? The answer to this question is very subjective and will vary from worker to worker. More cushioning is not necessarily better. Workers need to be involved in the purchase process, including trialling a variety of products.

#### Grip

Some matting provides better grip in slippery or wet conditions. At oily or wet work areas, the matting's anti-slip properties will be important.

#### Form

The form in which the matting is available e.g. strips, blocks, or rolls, may influence the choice of brand or type.

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#### Operation of equipment

Wheeled equipment such as carts and dollies may be difficult to operate on some types of matting. Make sure that the solution to one problem – fatigue from standing – does not create another – muscle injury from straining against extra resistance.

#### Chemical resistance

Some matting is more resistant to the effects of certain chemicals than other matting. Check the specifications of the matting being considered to make sure that chemicals used at the work site will not damage it.

#### Resistance to physical damage

Matting may be exposed to sources of physical damage such as hot materials e.g. solder or welding splatter, cold environments, or abrasion e.g. wear in high traffic areas, cuts or punctures. These sources of physical damage should be considered when selecting the most appropriate type of matting.

#### Ease of cleaning

Some types of matting are more easily cleaned than others. This is a particularly important characteristic in food processing industries.

#### Cost

The price per square metre of matting can vary significantly depending on materials, design, and other factors. Shop around.

#### Aesthetics

The design, colour, pattern, and shape of the matting may need to be considered in areas viewed by the public.

### Beware of impersonators

Indoor/outdoor entrance mats, door mats, and sheets of foam on the floor are not anti-fatigue mats. Some of these products may provide an anti-slip surface or keep feet dry but at the end of the day, those sore and swollen legs will still be sore and swollen.

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