Anti-fatigue Mats – Fact Sheets

WHAT ARE ANTI-FATIGUE MATS?

Anti-fatigue mats are mats designed to reduce fatigue caused by standing for long periods on a hard surface (e.g., cement floors). Fatigue-reducing mats can be made of various materials including rubber, carpeting materials, vinyl, and wood.

WHY USE ANTI-FATIGUE MATS?

Anti-fatigue mats are often used to decrease foot and lower limb disorders for workers who stand in one position for long periods. However, providing a mat may not solve the entire problem. Discomfort, tiredness, and sore feet, legs, knees or hips after long hours of standing are the combined effect of several factors, namely the design of the work, the workers' footwear, and the flooring material. According to scientific data, standing for long periods of time is particularly stressful and fatiguing. Regardless of the quality of shoes and quality of the floor covering, standing itself can cause tiredness after an entire working day.

WHAT SHOULD BE CONSIDERED FIRST WHEN A PERSON STANDS ALL DAY AT WORK?

When considering the use of anti-fatigue mats, there are other factors that should be considered at the same time, such as allowing changes in working/standing position, footwear, and flooring.

- **Changes in working/standing position:** Work should be organized so that the worker has some choice about his/her working position and an opportunity to change position frequently. A workplace that includes an optional seat (chair, sit/stand stool) and some kind of footrest increases the variety of body positions and encourages frequent changes between them.
- **Footwear:** Footwear is a factor which, if properly chosen, may further reduce the harmful effects of prolonged standing. There is no doubt that the choice of footwear is an important consideration for people who work on their feet. Shoes should ensure adequate arch and heel support and cushioning while providing comfort to the wearer.
- **Flooring:** The type of flooring used in the workplace has an equally important influence on comfort, especially on tender feet. Hard, unyielding floors, like concrete, are the least comfortable surface to work on. Walking on a hard floor is similar to the impact of a hammer pounding the

heel at every step. Wood, cork, carpeting, or rubber – anything that provides some elasticity – is generally gentler on workers' feet. More than that, softer floor coverings reduce fatigue and improve safety by reducing slips and falls on slippery floors.

WHEN SHOULD ANTI-FATIGUE MATS BE USED?

There are two options to alleviate foot discomfort where resilient floors are not practical. One is footwear with thick insulating soles and shock-absorbing insoles.

Anti-fatigue matting is the other option. Anti-fatigue mats absorb the shock due to walking and this cushioning effect reduces foot fatigue. However, the use of matting requires caution because mats can lead to tripping and falling accidents when installed improperly.

Another type of floor covering, namely, anti-slip matting, is useful in increasing foot comfort and safety. However, workers may find that their feet burn and feel sore, because the non-slip properties of anti-slip matting cause their shoes to grab suddenly on the flooring, making their feet slide forward inside the shoes. Friction inside the shoes produces heat which creates soreness. Non-slip resilient insoles can reduce this discomfort.

In summary, the use of anti-fatigue mats or placing carpeting on the floor does not eliminate sore feet by itself, but, when combined with proper work design and quality footwear, it should improve working conditions.

HOW DO I SELECT AN ANTI-FATIGUE MAT?

There are many types of mats that are sold as "anti-fatigue" mats. When choosing a mat, consider the following:

- Know the purpose of the mat. Anti-slip or other mats are not the same as anti-fatigue mats. Choose a mat that matches your needs best.
- The thickness of the mat. Softer and thicker may not always be better. Choose a mat that provides some elasticity, but at the same time is not so soft that a person feels they cannot stand comfortably.
- Know the environment the mat will be used in.
    - Mats should not slip, or create a trip hazard.
    - Mats should have sloped edges (sloped edges are less of a trip hazard, and allows carts to roll over them more easily)
    - Mats may need to be cleaned. In some areas, such as food preparation, being able to adequately clean the mats will be important.

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