

Medical Anti-Fatigue Matting

Anti-fatigue mats work by making the body sway naturally and imperceptibly to encourage subtle movement of the calf and leg muscles. This promotes blood flow without stagnation in the veins that causes fatigue.

University studies have made observations of the differences between workers standing on hard and soft floors. These studies have concluded the use of anti-fatigue mats can significantly reduce fatigue and increase comfort in different body regions.

Standing on hard surfaces can lead to several incapacitating problems. As we have all probably experienced muscles and joints can hurt as a result of stagnating blood flow. Additionally long-term standing can cause pronation (flat feet and fallen arches) and plantar fasciitis (heel and arch pain due to irritation and inflammation of the tissue between the heel and the arch of the foot).

Back Pain!

Lower back pain is also frequently seen in workers who stand for more than 4 hours a day and this includes surgeons, nursing staff, morticians and other medical workers.

In an article of "Occupational Health & Safety", written by James M. Kendrick is described the cushioning effect of anti-fatigue mats and the continuous micro movements of the feet minimizing pooling of blood in the legs of workers.

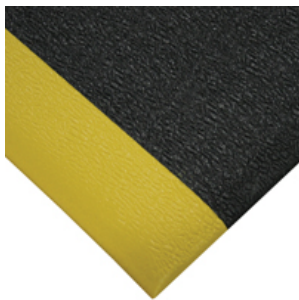
Safety!

There is also good reason to believe that reducing fatigue leads to an reduction of accidents and an increase in general work efficiency. Certainly there are fewer days lost to injuries and fewer medical claims when employers meet the Health and Safety requirements.

It is worth noting that if the matting is too soft the fatigue level can increase because it overworks the leg muscles - think of trying to stand on your bed mattress for two hours and you will understand!

Cost Effective!

It has been estimated that the cost of lost time due to fatigue in all its forms is £100 for every minute! This equates to £6,000 per hour because of all the knock-on effects of time lost by co-workers. This makes anti-fatigue mats a 'no brainer' in terms of value for money.

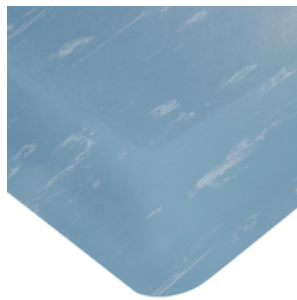


Soft Step

Low cost
Disposable or reusable
Laminated top layer

Standard sizes:

2' x 3' (600 x 900mm)
3' x 5' (900 x 1500mm)

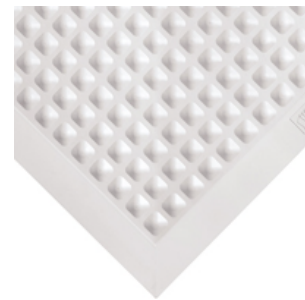


Tile Top

Anti-bacterial
Anti-slip finish
Reusable
Long lasting
Clean by AAGBI guidelines

Standard sizes:

2' x 3' (600 x 900mm)
3' x 5' (900 x 1500mm)



Autoclavable

Reusable
Long lasting
Autoclave

Standard sizes:

2' x 3' (600 x 900mm)

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Benefits of Anti-Fatigue Matting in Manufacturing Industry

The Company in this case study had identified discomfort issues and relatively high absenteeism amongst shop floor employees who stood at their work for prolonged periods. Anti-fatigue matting was provided in exchange for their participation in a long-term study. The study was designed to determine if the use of anti-fatigue matting could be linked to increased productivity. Correlations were anticipated between the use of anti-fatigue matting and reductions in standing fatigue, since this had already been widely confirmed in other research.

The company was a manufacturer of commercial ovens. It was the largest and “best” employer (in terms of wages and benefits) in a 30-mile radius. The company faced some difficult employment issues, including a high rate of absenteeism, especially on Mondays when it could reach 10%. It was hoped that the use of anti-fatigue matting would moderate these issues.

- Number of Employees: 175 in Manufacturing/Assembly
- Number of Shifts: 2
- Location: Small town (population < 5,000)
- Employee service: Average of 4 years
- Employee Age: Average 41

The Process

One type of matting was installed throughout the manufacturing area to eliminate any deviation in test results. A questionnaire assessed employees perceptions of their current work surface (i.e. concrete), overall level of fatigue before and after work, and fatigue and discomfort in the legs and feet before and after work. Employees filled out the questionnaire three times a week for two weeks before the matting was installed. After collecting that data, the matting was installed. As a comparison, employees filled out the same questionnaires during a 12 month study.

The results of the “employee perception” were very clear. Participants felt considerably less fatigued before and after work following the installation of anti-fatigue matting. In addition, the “at risk” areas of their bodies such as legs, feet and lower back, were much less uncomfortable when anti-fatigue matting was used.

The study revealed a strong correlation between the use of anti-fatigue matting and productivity. Before the installation of anti-fatigue matting, the rate of absenteeism and stress related injuries was very high. Post installation, absenteeism reduction and “lost time” injuries resulted in a significant productivity gain.

<u>Average Absenteeism</u>	Without Matting: 5.2%	With Matting: 4.0%
<u>Injury (lost time) Ratio</u>	Without Matting: > 3 per month	With Matting: < 1 per month

By comparing the statistics of the 12 months prior to the study, to the study period itself, the conclusion was that the installation of anti-fatigue matting resulted in an estimated 2.2% increase in productivity. It should be noted that the Company had an established workforce and during the study period did not implement any other procedural changes that might have affected productivity.

Return on Investment

Increased productivity during the study period impacted favourably on this company’s bottom line. There were substantial “hard cost” savings (costs that can be specifically documented) and other cost savings related to the use of anti-fatigue matting. According to the Human Resources department, the staff turnover rate dropped significantly so that less time and effort was spent recruiting and retraining. This also impacted on productivity. Savings such as these are called “soft cost” savings, which are typically calculated by multiplying the “hard cost” savings between 2 and 6 times.

The following conclusion may be conservative in that the lowest multiplier (x2) has been applied. All figures are approximate.

Investment in Matting: £10k

Impact on Business:

Reduced Absenteeism: Avg. 23%

Increased Productivity: 2.2% (worth £300k)

Calculated “Soft Cost” Savings: £600k