Carpet and Textile Composite Flooring Can Help Reduce Injuries from Extended Walking and Standing. Prolonged standing at work has been shown to be associated with a number of potentially serious health outcomes, such as lower back and leg pain, cardiovascular problems, fatigue, discomfort, and pregnancy related health outcomes. Many of the workers who go long stretches without sitting down are in service industries, such as healthcare, education, retail, and food service. The type of flooring surface can cause increased stress on the structure of the foot, as well as contribute to joint compression, and poor blood circulation. Several studies have examined the influence of floor surfaces on the body during prolonged standing, and results show that softer floor surfaces usually result in less postural discomfort than standing on hard floor surfaces.

TECHNICAL BRIEF

Insights on Wellness & Flooring: Comfort

inform.



Prolonged standing on softer floor surfaces usually results in less postural discomfort than standing on hard floor surfaces.

What is the most common injury to feet? Heel spurs are a repetitive stress injury caused by recurring impact of the foot against a surface. It is the most common lower extremity injury suffered by bedside care providers in healthcare facilities. This condition is marked by a painful inflammation of the connective tissue on the sole of the foot. Heel spurs often require surgery.

How can flooring help prevent heel spurs? Specifying flooring with anti-fatigue properties can help prevent heel spurs. An anti-fatigue surface has low compression resistance, or crush resistance. This means it compresses when stepped on and dissipates foot pressure. A surface lacking anti-fatigue properties does not absorb energy, putting greater pressure on feet.





What types of flooring have anti-fatigue properties? Although there are few standards for flooring anti-fatigue performance, the type of testing that's used in the athletic footwear industry to develop running shoes and man-made athletic surfaces suggests that rubber and resilient vinyl flooring are not anti-fatigue surfaces, whereas some types of carpet and tile are. Also, independent laboratory test data shows that carpet tile and textile composite flooring are the only two floorcoverings with anti-fatigue properties.

How does additional cushioning affect anti-fatigue performance? Additional cushioning is not necessary to achieve anti-fatigue performance. In fact, independent laboratory tests show that non-cushioned carpet tile and textile composite flooring are just as effective in preventing standing fatigue as cushioned carpet tile. And, both carpet tiles and textile composite flooring with a high-density backing have demonstrated the ability to absorb foot pressure and potentially reduce repetitive foot stress injuries and injuries related to frequent walking and standing.

Cushioning Properties of Flooring



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