
Warehouse Ergonomic Matting Inspection And Replacement

1.0 Objective & Intent

The objective of this SOP is to establish a systematic procedure for the routine inspection and timely replacement of ergonomic anti-fatigue matting throughout the warehouse and production areas. This procedure is designed to mitigate the risk of slip, trip, and fall injuries caused by curled, torn, or uneven mat edges, and to reduce the incidence of lower limb and back musculoskeletal disorders (MSDs) by ensuring that matting continues to provide effective cushioning and support. Compliance with this SOP supports adherence to WorkSafeBC regulations regarding the maintenance of safe walking surfaces and the provision of ergonomic aids in standing workstations.

2.0 Operational Scope

This procedure applies to all ergonomic anti-fatigue matting installed in the warehouse, shipping/receiving docks, assembly lines, and any other production or storage areas within the facility. It is the responsibility of the Plant Safety Officer, shift supervisors, and designated maintenance personnel to perform inspections and coordinate replacements. All employees who work on or around these mats are required to report any observed damage or hazards immediately.

3.0 Hazard Identification & Mandatory PPE

- Trip Hazards: Curled, lifted, or overlapping mat edges create a significant trip hazard for pedestrians and forklift operators.
- Slip Hazards: Worn, cracked, or contaminated mat surfaces (e.g., oil, sawdust, water) reduce traction and increase slip risk.
- Ergonomic Failure: Compressed or delaminated matting no longer provides adequate anti-fatigue support, increasing the risk of MSDs in the lower back, hips, knees, and feet.
- Cut and Abrasion Hazards: Sharp edges on damaged mats or exposed subflooring can cause lacerations to hands and knees during inspection or replacement.
- CSA-Approved Steel Toed Boots (mandatory for all personnel in the inspection/replacement zone)
- Cut-Resistant Gloves (ANSI A4 or higher) for handling damaged matting
- Safety Glasses with side shields
- High-Visibility Safety Vest (when working near forklift traffic)
- Knee Pads (recommended for kneeling during inspection and replacement)

4.0 Required Safety Equipment & Tools

- Inspection Checklist (printed or digital on SafeDesk)
- Measuring tape (for verifying mat dimensions and gap tolerances)
- Utility knife with retractable blade and spare blades
- Straight edge or metal ruler (for cutting replacement mats)
- Double-sided carpet tape or anti-fatigue mat adhesive (as recommended by mat manufacturer)
- Floor scraper or putty knife (for removing old adhesive residue)
- Broom and dustpan or shop vacuum (for cleaning subfloor)
- Replacement anti-fatigue mat(s) matching original specifications (thickness, material, slip resistance)

- Warning cones or barricade tape (to cordon off work area)
- First aid kit (accessible nearby)

5.0 Step-by-Step Safety Procedure

1. Conduct a pre-inspection hazard assessment of the area. Identify any immediate slip, trip, or fall hazards such as spills, debris, or nearby forklift traffic. Cordon off the inspection zone with warning cones or barricade tape and post a 'Wet Floor' or 'Maintenance in Progress' sign if necessary.
2. Visually inspect the entire surface of each mat for signs of wear, damage, or contamination. Look for cracks, tears, delamination (separation of layers), compressed areas (loss of cushioning), curled edges, and any foreign substances (oil, grease, sawdust) that reduce slip resistance. Document findings on the inspection checklist.
3. Check mat edges and seams for lifting or overlapping. Use the measuring tape to verify that any gap between adjacent mats or between a mat and a fixed object (e.g., wall, machine base) does not exceed 6 mm (1/4 inch). Any gap larger than this constitutes a trip hazard and requires immediate correction.
4. Test the slip resistance of the mat surface by walking across it in a controlled manner. If the mat feels slippery underfoot, or if the surface is visibly worn smooth, note the mat for replacement. Also check the underside of the mat for debris or moisture that may cause the mat to shift.
5. If a mat fails inspection (e.g., curled edges, tears longer than 25 mm, loss of cushioning, or slip hazard), mark it for replacement. Remove the damaged mat by carefully lifting it from the floor. Use the floor scraper or putty knife to remove any old adhesive or tape residue from the subfloor. Sweep or vacuum the area thoroughly to ensure a clean, dry, and debris-free surface.
6. Position the new replacement mat in the designated location. If the mat requires cutting to fit around obstacles or to match the original footprint, use the straight edge and utility knife to make clean, straight cuts. Ensure the mat lies flat with no curled edges and that all edges are flush against adjacent mats or fixed objects with gaps no larger than 6 mm.
7. Secure the new mat to the subfloor using double-sided carpet tape or manufacturer-recommended adhesive applied to the entire perimeter and in a grid pattern across the underside. Press the mat firmly into place, working from the center outward to eliminate air pockets. For mats in high-traffic or forklift zones, use additional tape or adhesive at all edges and seams.
8. Perform a final walk-through inspection of the replaced mat. Verify that all edges are flat and secure, that there are no trip hazards, and that the mat provides adequate cushioning. Remove all barricade tape and cones. Update the inspection log in SafeDesk with the date of replacement, mat location, and condition of the new mat.
9. Dispose of the damaged mat in accordance with company waste management procedures. If the mat material is recyclable, place it in the designated recycling bin. Wash hands thoroughly after handling used matting and adhesive.

Regulatory Disclaimer: This document is a generic safety template provided for educational and informational purposes only. It does not constitute professional engineering, legal, or regulatory compliance advice. The end-user assumes all liability for validating all safety protocols against specific machinery manufacturer manuals and local occupational health and safety regulations (e.g., WorkSafeBC, CSA standards) before deployment.