
Warehouse Aisle Restriping and Safety Line Painting SOP

1.0 Objective & Intent

This SOP defines the safety protocols for restriping warehouse aisles and painting safety lines in a cabinet and millwork manufacturing facility. The primary objective is to maintain clear, visible pedestrian walkways and material handling routes to prevent collisions, slips, trips, and falls. This procedure ensures compliance with WorkSafeBC regulations regarding workplace traffic management and housekeeping.

The specific risk mitigated by this SOP is the hazard of obscured or faded floor markings, which can lead to forklift-pedestrian incidents, misdirected traffic flow, and ergonomic strain from improper aisle spacing. Restoring clear markings reduces confusion and enforces safe separation between workers and mobile equipment.

2.0 Operational Scope

This procedure applies to all maintenance personnel, warehouse associates, and external contractors tasked with restriping or painting safety lines on warehouse floors, production aisles, and pedestrian walkways within the facility. It covers all areas where floor markings are required, including main aisles, cross aisles, loading zones, and pedestrian crossing points.

Excluded from this scope are tasks involving high-traffic areas during active production hours unless a full work stoppage is coordinated. This SOP does not cover the application of epoxy coatings or floor repair work beyond surface preparation for paint adhesion.

3.0 Hazard Identification & Mandatory PPE

- Slip/Trip Hazards: Wet paint, loose debris, and equipment cords on the floor.
- Chemical Exposure: Inhalation or skin contact with paint fumes, solvents, and cleaning agents.
- Mobile Equipment Collision: Forklifts, pallet jacks, and other vehicles operating in adjacent aisles.
- Ergonomic Strain: Repetitive bending, kneeling, and reaching during painting.
- Fire Hazard: Flammable vapors from paint and solvents near ignition sources.
- CSA-Approved Steel Toed Boots with slip-resistant soles.
- Safety Glasses or chemical splash goggles.
- Nitrile or chemical-resistant gloves.
- High-Visibility Safety Vest (Class 2 or higher).
- Half-face respirator with organic vapor cartridges (if using solvent-based paint).
- Hard hat (if working near overhead racks or mezzanines).

4.0 Required Safety Equipment & Tools

- Lockout/Tagout (LOTO) kit with personal lock and hasp (if isolating conveyor or automated guided vehicle zones).
- Portable traffic cones, barricades, and warning signs (e.g., 'Wet Paint', 'Floor Work Ahead').
- Floor marking tape (temporary) or stencils for layout.
- Paint applicator: roller, brush, or aerosol can with extension handle.

- Paint tray and liners.
- Measuring tape (25 ft) and chalk line.
- Shop vacuum or broom and dustpan for debris removal.
- Spill kit (absorbent pads, gloves, disposal bags) for paint spills.
- Fire extinguisher (Class B) within 10 meters of work area.

5.0 Step-by-Step Safety Procedure

1. Obtain a written work permit from the Plant Safety Officer or Shift Supervisor. Confirm that the work area is scheduled for a production downtime or that traffic can be safely rerouted.
2. Conduct a pre-task hazard assessment using the SafeDesk mobile app or paper form. Identify all energy sources (e.g., automated guided vehicles, conveyor systems) in the work zone and apply lockout/tagout if necessary.
3. Set up physical barriers: place traffic cones and barricades at all entry points to the work zone. Post warning signs at least 10 meters from the area. Ensure no forklift or pedestrian traffic enters the zone.
4. Prepare the floor surface: sweep or vacuum the entire area to remove dust, debris, and loose paint. If the floor is greasy or oily, clean with a degreaser and allow to dry completely. Verify surface is dry before painting.
5. Lay out the stripe pattern using a chalk line and measuring tape. Mark the centerline or edge lines according to the facility floor plan. Use temporary tape to outline corners and curves if needed.
6. Don all required PPE, including respirator if using solvent-based paint. Ensure the respirator is fit-tested and cartridges are within expiration date. Verify that the fire extinguisher is accessible.
7. Apply paint using a roller, brush, or aerosol can. Work in sections, maintaining a wet edge to avoid lap marks. Do not over-apply; use thin, even coats. If using aerosol, hold can 12-18 inches from surface and spray in steady passes.
8. Immediately clean up any paint spills using the spill kit. Place saturated absorbent pads in a designated hazardous waste container. Do not wash paint down drains.
9. Allow paint to dry completely according to manufacturer's instructions (typically 30-60 minutes for water-based, 2-4 hours for solvent-based). Post 'Wet Paint' signs and keep barriers in place until dry.
10. Remove barriers and signs only after confirming paint is dry to the touch. Conduct a final inspection with the supervisor to verify line visibility and compliance with facility standards. Sign off the work permit and log the task in SafeDesk.

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.