
Winter Slip Prevention: Entrance Matting and Ice Melt Application

1.0 Objective & Intent

This SOP establishes mandatory safety protocols for preventing slip and fall injuries at all facility entrances during winter conditions. The primary objective is to eliminate the risk of workers and visitors slipping on wet, icy, or snow-covered surfaces by ensuring proper entrance matting systems are deployed and ice melt products are applied correctly. This procedure supports compliance with WorkSafeBC regulations (OHS Regulation Part 4: General Conditions) and mitigates the specific hazard of winter-related slips, which are a leading cause of workplace injuries in Canadian manufacturing environments.

2.0 Operational Scope

This procedure applies to all personnel responsible for facility maintenance, janitorial staff, and any employee assigned to entrance area upkeep during winter months (November through March, or as weather conditions dictate). It covers all pedestrian entrances, including main employee entrances, visitor entrances, shipping/receiving doors, and emergency exits used for egress. The scope includes the deployment, inspection, and replacement of entrance matting, as well as the application of ice melt products on exterior walkways, steps, and ramps leading to these entrances. This SOP does not cover parking lot snow removal, which is addressed under a separate procedure.

3.0 Hazard Identification & Mandatory PPE

- Slip Hazard: Wet or icy entrance floors from melted snow and ice tracked in by footwear.
- Trip Hazard: Curled or bunched mat edges creating uneven walking surfaces.
- Chemical Exposure: Skin or eye contact with ice melt products (calcium chloride, magnesium chloride, or sodium chloride).
- Cold Stress: Prolonged exposure to freezing temperatures during outdoor application.
- Slip Hazard on Ice: Icy exterior walkways during ice melt application.
- CSA-Approved Steel Toed Boots with slip-resistant rubber soles (minimum 5/16-inch tread depth).
- Cut-Resistant Gloves (ANSI A4 level or higher) for handling ice melt bags and mat edges.
- Safety Glasses or Face Shield when applying ice melt to prevent splash or dust contact with eyes.
- Hi-Visibility Vest (Class 2) when working near vehicle traffic areas (e.g., shipping/receiving doors).
- Winter Hat and Insulated Jacket for outdoor work in freezing temperatures.

4.0 Required Safety Equipment & Tools

- Heavy-duty entrance matting (scraper/wiper combination type, minimum 3x5 feet per entrance, with beveled edges).
- Ice melt product (calcium chloride or magnesium chloride based, labeled for use on concrete).
- Plastic scoop or measuring cup for ice melt application (no metal tools to avoid concrete damage).
- Push broom with stiff bristles for spreading ice melt and sweeping debris.
- Wet floor warning signs (yellow, freestanding, with slip hazard pictogram).
- Absorbent spill pads (for any ice melt spills or tracked-in water puddles).
- Ice scraper or snow shovel for clearing heavy accumulation before mat placement.
- First aid kit (located in the nearest maintenance closet).

- Mobile phone or two-way radio for communication in case of emergency.

5.0 Step-by-Step Safety Procedure

1. Inspect the entrance area for existing ice, snow, or water accumulation. If heavy snow or ice is present, clear it using a snow shovel or ice scraper before proceeding. Do not apply ice melt over deep snow; remove bulk accumulation first.
2. Place wet floor warning signs at the entrance threshold and at least 3 feet inside the building to alert all personnel and visitors of potentially slippery surfaces. Ensure signs are visible and not obstructed by doors or foot traffic.
3. Deploy heavy-duty entrance matting directly inside the entrance door. Position the mat so the scraper section faces outward (toward the door) to remove snow and debris from footwear, and the wiper section faces inward to absorb moisture. Ensure mat lies flat with no curled edges or gaps; use double-sided tape if needed to secure edges to the floor.
4. Apply ice melt product to exterior walkways, steps, and ramps leading to the entrance. Using a plastic scoop, broadcast the ice melt evenly at a rate of approximately 1 cup per 10 square feet. Focus on high-traffic areas and shaded spots where ice tends to persist. Do not over-apply, as excess can damage concrete and create a slippery paste.
5. Spread the ice melt using a push broom to ensure even coverage and to break up any existing ice patches. Work from the building outward to avoid walking on untreated surfaces. Maintain a stable stance and use short, controlled strokes to prevent slipping.
6. Monitor the entrance matting throughout the day. If the mat becomes saturated with water or snow, replace it with a dry mat from storage. Do not flip or shake saturated mats indoors, as this can spread water onto the floor. Place saturated mats in a designated drying area (e.g., utility room with floor drain).
7. Reapply ice melt as needed based on weather conditions (e.g., after additional snowfall, freezing rain, or if walkways become icy again). Check at least every 2 hours during active precipitation. Document each application on the daily safety log.
8. At the end of each shift, remove and store entrance matting in a clean, dry area. Sweep the entrance floor to remove any residual water, ice melt dust, or debris. Dispose of any damaged mats or empty ice melt bags in accordance with facility waste procedures.
9. Report any slip incidents, near misses, or matting failures (e.g., torn mats, persistent ice buildup) to the Plant Safety Officer immediately. Complete an incident report form within 24 hours. Do not modify the matting or ice melt procedure without prior authorization from the Safety Officer.

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.