
Hot Glue Gun Safety For Assembly

1.0 Objective & Intent

The objective of this SOP is to establish mandatory safety protocols for the use of hot glue guns during assembly operations. This procedure mitigates the risk of thermal burns, fire ignition from molten adhesive, electrical shock from damaged cords, and inhalation of fumes. Compliance with WorkSafeBC OHS Regulation Part 12 (Tools, Machinery and Equipment) and Part 5 (Chemical Agents and Biological Agents) is required.

2.0 Operational Scope

This procedure applies to all assembly line workers, maintenance personnel, and supervisors who operate or are in the vicinity of hot glue guns in the cabinet and millwork assembly area. It covers all electric hot glue guns used for bonding wood, trim, and decorative elements. This SOP does not cover pneumatic or industrial hot melt systems.

3.0 Hazard Identification & Mandatory PPE

- Thermal Burns: Direct contact with the heated nozzle (up to 200°C) or molten glue.
- Fire Hazard: Molten glue contacting combustible materials (wood dust, paper, rags).
- Electrical Shock: Damaged power cords or exposure to moisture.
- Fume Inhalation: Irritation from heated adhesive vapors, especially in confined spaces.
- Slip/Trip: Glue drips on floor surfaces.
- CSA-Approved Safety Glasses with side shields (Z94.3 compliant).
- Heat-Resistant Gloves (leather or Kevlar, rated for contact heat up to 250°C).
- Long-sleeve cotton or Nomex shirt (no synthetic fabrics that can melt).
- CSA-Approved Steel Toed Boots.

4.0 Required Safety Equipment & Tools

- Hot glue gun with integrated stand or separate metal stand.
- Approved glue sticks (low-odor, low-fume formulation preferred).
- Non-flammable silicone mat or metal drip tray for work surface.
- Class ABC fire extinguisher within 10 meters of work area.
- First aid kit with burn treatment supplies (sterile gauze, burn gel).
- Ventilation fan or local exhaust ventilation (LEV) if fume levels are high.
- Lockout/Tagout (LOTO) kit for electrical disconnection during maintenance.

5.0 Step-by-Step Safety Procedure

1. Inspect the hot glue gun and power cord for damage (cuts, fraying, exposed wires, cracked housing). Do not use if damaged. Tag and remove from service.

2. Ensure the work area is clean, dry, and free of combustible materials (wood dust, paper, solvents). Place the silicone mat or metal tray under the glue gun stand.
3. Verify the ventilation system is operating. If working in a confined space, use a portable fan to direct fumes away from the breathing zone.
4. Plug the glue gun directly into a GFCI-protected outlet. Do not use extension cords. Route the cord away from walkways and sharp edges.
5. Insert the glue stick and allow the gun to preheat for the manufacturer-specified time (typically 3-5 minutes). Never leave a hot glue gun unattended.
6. When applying glue, hold the gun at a 45-degree angle to the workpiece. Keep the nozzle at least 2 cm from your fingers. Apply steady, even pressure on the trigger.
7. Immediately after use, place the gun on its stand with the nozzle pointing downward. Do not lay it on its side. Allow the gun to cool for at least 10 minutes before handling or storing.
8. Clean excess glue drips from the work surface and floor using a scraper. Dispose of glue waste in a metal container with a lid. Do not mix with combustible trash.
9. If the glue gun requires maintenance (nozzle cleaning, cord replacement), unplug the unit and apply a personal LOTO lock to the plug. Only authorized maintenance personnel may service the tool.
10. Report any burns, near-misses, or equipment malfunctions to your supervisor immediately. Complete an incident report within 24 hours.

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.