

Lamination Quick Reference Guide

Purpose: Ensure consistent, high-quality lamination while minimizing waste, failures, and rework.

1. Pre-Lamination Checklist

- Confirm lamination is required (durability, finish, compliance)
 - Print fully cured / outgassed:
 - Eco-solvent: **24-48 hrs minimum**
 - Latex: **Fully cured & cooled**
 - UV: **Ready immediately (verify adhesion)**
 - Inspect print for defects, dust, banding
 - Match laminate to media (cast-to-cast, calendered-to-calendered)
 - Review **manufacturer technical data sheets** for media & laminate
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2. Environment & Machine Setup

- Clean rollers, table, and work area
 - Room temperature: **65-80°F (18-27°C)**
 - Avoid extreme humidity (very dry or very humid)
 - Load laminate square and centered
 - Set **low to moderate tension** to avoid stretching
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3. Heat Assist Guidelines

Use heat assist when: - Laminating stiffer or thicker materials - Working with calendered vinyls - Seeing silvering or poor adhesive wet-out - Running higher production speeds

Avoid or minimize heat when: - Laminating cast vinyls - Using thin films - Risk of stretching, curl, or distortion

Typical Heat-Assist Temperature Ranges (Roller Temp)

- Cast vinyl + cast laminate: **No heat or 90-105°F (32-40°C)**
- Calendered vinyl: **100-120°F (38-49°C)**
- Floor graphics / textured laminates: **110-130°F (43-54°C)**
- Paper / photo media: **No heat or minimal only**

Important: Heat should soften adhesive—not stretch or deform media.

4. Lamination Process

- Start slow for first 12–24 inches
 - Apply even pressure across rollers
 - Monitor continuously for:
 - Silvering
 - Bubbles
 - Tunneling
 - Wrinkles
 - Adjust **speed first**, then pressure or heat if needed
 - Keep hands and tools clean at all times
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5. Post-Lamination Handling

- Trim clean edges (leave slight overhang when possible)
 - Allow print to rest flat or loosely rolled
 - Roll with laminate side out (unless specified otherwise)
 - Avoid tight rolls or stacking while warm
 - Label orientation for finishing or install
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6. Final Quality Check

- Smooth, consistent adhesion
 - No visible defects or edge lift
 - Correct finish (gloss, matte, texture)
 - Ready for finishing or installation
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REMINDER

Always follow media and laminate manufacturer recommended settings for heat, pressure, speed, and compatibility.

When in doubt: slow down, reduce heat, and test first.