



LAMINATE  
PROCESSING  
GUIDELINES

High-Pressure Laminates (HPL) are versatile materials used in various interior applications due to their durability and aesthetic appeal. To ensure optimal performance and longevity of Stylam HPL, adhere to the following detailed processing guidelines:

## 1. Storage and Handling

- **Storage Conditions:** Store HPL sheets horizontally in a clean, dry environment with temperatures between 18–25°C and relative humidity of 50–65%. Protect them from direct sunlight, moisture, and temperature fluctuations to prevent warping or surface defects.
- **Stacking:** Place sheets flat with protective coverings between them to avoid scratches. Avoid leaning sheets against walls or storing them vertically, as this can cause bending.
- **Handling:** Lift sheets carefully to prevent bending or cracking. Avoid dragging or sliding sheets over surfaces to maintain edge and surface integrity.

## 2. Conditioning

**Acclimatization:** Before fabrication, allow HPL sheets and substrates to acclimate to the working environment for at least 48 hours. This ensures dimensional stability during processing.

## 3. Substrate Preparation

- **Suitable Substrates:** Use dry, clean, and defect-free substrates such as MDF, particleboard, or plywood. Ensure substrates are flat and free from contaminants like dust, grease, or oil.
- **Surface Treatment:** Sand substrates lightly to promote better adhesive bonding. Remove all dust and debris after sanding.

## 4. Adhesive Application

- **Adhesive Selection:** Choose adhesives compatible with both HPL and the substrate, such as contact adhesives, urea-formaldehyde, or polyvinyl acetate (PVA) glues. Follow the adhesive manufacturer's recommendations for suitability and application.
- **Application Method:** Apply adhesive uniformly to both the HPL and substrate surfaces using a suitable tool (e.g., roller or brush). Ensure complete coverage to prevent voids or weak bonds.

## 5. Bonding Process

- **Assembly:** Carefully align the HPL sheet with the substrate to avoid misalignment. Once positioned, apply uniform pressure across the entire surface using a mechanical press or hand roller to ensure a strong bond.
- **Pressure Specifications:** Apply a pressure of 10–30 N/cm<sup>2</sup> (14–43 psi) during the bonding process. For specific finishes, such as mirror finishes, a pressure of 10 N/cm<sup>2</sup> is recommended.
- **Curing:** Maintain pressure for the adhesive's recommended curing time. Avoid disturbing the assembly during this period to ensure optimal bonding strength.

## 6. Trimming and Edging

- **Trimming:** After bonding, use a router with a carbide-tipped bit to trim excess laminate flush with the substrate edges. Perform trimming from the decorative side to minimize chipping.
- **Edge Finishing:** Smooth edges with fine-grit sandpaper or files. For enhanced durability and aesthetics, consider applying edge banding or sealants.

## 7. Machining and Drilling

- **Cutting Tools:** Utilize carbide-tipped saw blades or routers for laminate processing. Ensure tools are sharp to achieve clean cuts and reduce chipping.
- **Drilling:** Use drill bits with a point angle of 60°–80° and a cutting angle of 0°–5°. Drill from the decorative side and support the laminate underneath to prevent splintering.
- **Feed Rate and Speed:** Maintain appropriate feed rates and speeds to prevent overheating and burning of the laminate edges.

## 8. Post-Forming (If Applicable)

- **Temperature Control:** For post-formable HPL grades, heat the laminate to the manufacturer's specified temperature, typically around 140–150°C, to allow bending without cracking.
- **Forming Radius:** Avoid the minimum recommended bending radius to prevent stress fractures. Consult Stylam's technical data sheets for specific post-forming parameters.

## 9. Cleaning and Maintenance

- **Initial Cleaning:** After installation, clean the HPL surface with a soft cloth dampened with mild detergent and water. Avoid abrasive cleaners that may damage the surface.
- **Regular Maintenance:** Maintain cleanliness by regularly wiping surfaces with a damp cloth. Promptly remove any spills to prevent staining.

## 10. Safety Considerations

- **Protective Equipment:** Wear appropriate personal protective equipment (PPE), including gloves, safety glasses, and dust masks, during processing to safeguard against dust and debris.
- **Ventilation:** Ensure adequate ventilation in the workspace, especially when using adhesives and during cutting or sanding operations, to minimize inhalation of fumes and dust.

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BY FOLLOWING THESE COMPREHENSIVE PROCESSING GUIDELINES, YOU CAN ACHIEVE HIGH-QUALITY INSTALLATIONS OF STYLAM HIGH-PRESSURE LAMINATES, ENSURING THEIR DURABILITY AND AESTHETIC APPEAL IN VARIOUS APPLICATIONS.

# Reach out!



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