

Lamin-Art® has always pushed the limits of creativity with its line of innovative design-statement decorative laminates. We support and encourage both designers and fabricators to view HPL as more than simply a flat, inflexible surface. In fact, high-pressure decorative laminate can be used to create some very dramatic design effects on a wide range of curved surfaces from soft, easy bends to column wraps of realtively small radii. The following information is intended to help you determine the grade and forming method required to achieve maximum design impact.

■ COLD BENDING

Realtively soft, easy bends can be achieved with everyday general purpose laminate. Lamin-Art® **Standard Grade GP48** material is approximately 0.048" thick (1.2mm). Under typical fabrication conditions, this material can be bent without the addition of heat to a **12"** radius (304.8mm). **Lamin-Art GP 38** material is slightly thinner at approximately 0.038" (1mm) and can be cold bent to an **8"** radius (203.2mm). When looking to perform a cold bend to even smaller radius, we recommend using Lamin-Art **Vertical Grade GP28** material. This grade is manufactured with fewer sheets of phenolic resin-impregnated kraft paper to create a more pliable sheet (approximate thickness 0.028" [0.7mm]). Vertical grade material can be cold bent to a **7"** radius (177.8mm).

■ BENDING WITH THE APPLICATION OF HEAT

Smaller radii can be achieved with the application of heat during the installation process. Using suitable equipment, Lamin-Art® high-pressure decorative laminates require **325°F (163°C)-350°F (177°C)** to form. **Standard Grade GP48** material can be formed with heat to a **4"** (101.6mm) radius. Heat can be used to form **GP38** material to a **3"** (76.2mm) radius. **Vertical Grade GP28** material achieves the smalled possible radius when formed with heat, **5/8"** (15.88mm). Items identified with a **P** on our Stock List and on www.laminart.com are Pearlescence® items. Pearlescent laminates are made using different chemicals than regular laminates. These chemicals are less resistant to heat and can boil at a lower temperature. When attempting to form Pearlescence laminates with the temperature required to achieve a tight radius, the laminate may start to bubble and crack. **Therefore we do not recommend forming pearlescent laminates with heat.**

■ WHEN DO I NEED POST-FORMING GRADE?

Although most bends can be performed using any of Lamin-Art®'s standard selection of Grade options, occassionally a special Post-Forming grade may be necessary in order to achieve an even tighter radius than 5/8," or to perform an extremely tight inside bend. Lamin-Art Post-Forming Grade is manufactured using a different kraft paper and resins than our standard laminate selection. This grade may be specified for counter top applications where an extremely tight radius or inside bend may be required. There is a slight upcharge and minimum order requirement for those items available in Post-Forming Grade. Please contact our Customer Service Department at 1.800.323.7624 for current pricing and availability of Post-Forming Grade material.

STANDARD GRADE GP48 THICKNESS: 0.048" (1.2MM)		GP38 THICKNESS: 0.038" (1MM)		VERTICAL GRADE GP28 THICKNESS: 0.028" (0.7MM)	
NO HEAT	HEAT	NO HEAT	HEAT	NO HEAT	HEAT
12" (304.8mm)	4" (101.6mm)	8" (203.2mm)	3" (76.2mm)	7" (177.8mm)	5/8" (15.88mm)

For more details on how to bend HPL or other technical information regarding Lamin-Art® high-pressure decorative laminates or Veneer-Art™ pre-finished real wood veneers, please contact our Customer Service Department at 1.800.323.7624 or visit our website, www.laminart.com.