

TECHNICAL BULLETIN



LuciteLux™ Strip Heat Bending & Cold Forming

Bending

Simple straight line bends which are relatively short (up to 24") can be easily and readily achieved in LuciteLux™ sheet by heating only the narrow area that needs to be formed. There is no need to heat the entire sheet in an oven when only simple angles are required. Because the piece stays cold, except for the narrow heated area in the center, both sides of the angle will remain flat and distortion-free. Bowing can, however, result from uneven heating and cooling. In addition, pieces longer than 24 inches may have a tendency to bow.

To prevent distortion or damage to the sheet surface, the LuciteLux™ should be kept at least 1/16 inch away from the hot tube. When using a flexible strip heater, the sheet may be placed on the heater but care must be taken to avoid overheating and marking the sheet.

For heating at a faster rate or for forming sheet over 0.250 inch thick, strip heaters should be placed on both sides of the sheet.

The masking must be removed in the bend area only, so the remainder of the part is protected from marks and scratches.

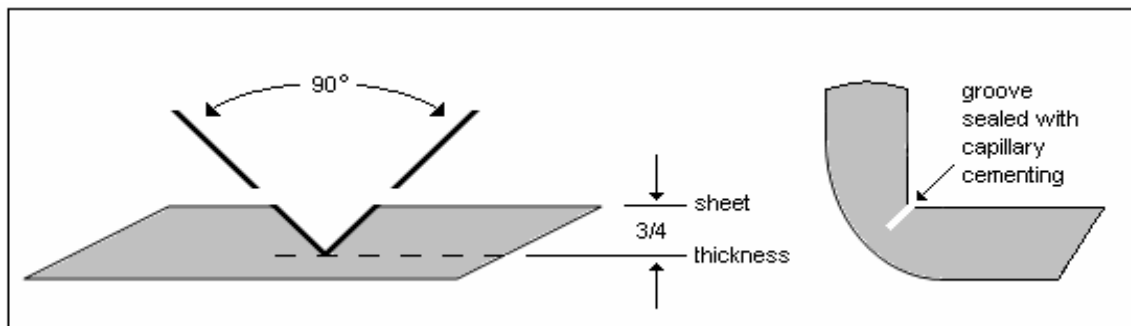
Sharper, straighter right angle bends can be achieved by machining a 90° groove along the inside of the bend line before heating. After bending, the groove can be sealed by capillary cementing. (See below)

Cold Forming

Unheated LuciteLux™ sheet can be bent into a curved frame provided the curve has a radius of at least 180 times the thickness of the sheet. Sharper bending of unheated LuciteLux™ may result in stress crazing.

Allowable curve radii are shown below:

LuciteLux™ Thickness	Minimum Radius of Curvature	Equal to Circle of
0.090"	17"	34" Dia.
0.118"	22"	44" Dia.
0.177"	33"	66" Dia.
0.236"	45"	90" Dia.



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