## **Heat Bending StyleLite**

The ability to bend StyleLite using heat (thermoform) is a distinct advantage over inferior panels and laminates other including acrylics, PETs, TFLs and HPLs, especially solid core types such as Formica ColorCore.

Note the ability to thermoform StyleLite is a direct result of the properties of the StyleLite sheet, not the substrate. Consequently all StyleLite panels (including StyleLite Mirror), irrespective of substrate type can be bent.

#### **Tools & Materials Required**

- StyleLite Panel
- CNC Router
- 45° Router Bit
- Heat Bar (also known as Line Bender or Heat Strip)
- Wood Glue (preferably fast setting)
- Table saw with miter function and sharp fine tooth blade if CNC Router is unavailable

### Method

#### **Preparing the Heat Bar**

 If bending larger panels or components, set up applicable jig incorporating the heat bar to support weight.



• When constructing the jig, ensure one side is at the same height as the heat bar.

 The other side should be approximately 1/4" higher (no more) than the height of the heat bar as seen in the image below. It's important that the high side of the jig is no more than 1/4" above the heat bar otherwise the panel can be affected by excessive heat buildup.



• If bending small components that can be managed by hand, then a jig is not generally required.

 Turn on heat bar and wait for it to reach maximum or near maximum temperature (600 to 800° Fahrenheit) before attempting to bend. This will take at least 8 to 10 minutes.

#### **Preparing StyleLite Panel**

# Leave all peel coats on during the heating and bending process.

- Program CNC to cut and miter StyleLite component as follows:
- Cut StyleLite component 1/4" to 1/2" longer than the required length of the miter. It's important to do this because when bending StyleLite, each end may slightly turn up. The extra length allows the component to be trimmed to the required size.
- Miter to depth equivalent to distance from the rear surface of the panel down to rear surface of StyleLite

face sheet. The depth will vary from around 16.8mm to 17.3mm depending on which StyleLite panel is being used. If routing StyleLite Decor Fusion panels (eg. Wired Mercury or Lavato Oak), be very precise with the router ensuring it does not contact the rear side of the face sheet as the pattern is applied to this side.

- Ensure a 1mm strip (width) of the rear surface of the face StyleLite sheet is clearly visible. If using a sharp point router bit, several passes at the correct depth maybe required to achieve the 1mm wide strip. <u>Do</u> not penetrate the StyleLite face sheet.
- Ensure no substrate residue is left on the rear surface of the StyleLite face sheet inside the miter.
- Use air to remove any loose residue or foreign matter from inside the miter.

#### StyleLite Mitred Component Ready for Heat Bending



#### **Bending StyleLite**

 Sparingly apply fast setting glue along the top of each length of the miter. Ensure glue does not drip or run down into the miter near the back of the StyleLite face sheet.

### For Small Components

- Place area to be bent directly over the element of the heat bar resting it on the heat bar surface.
- Apply light hand pressure to one side. At around 15 seconds (longer for Mirror), the StyleLite panel should bend easily. Bend to form the miter and immediately remove from the heat bar and clamp in position or do a second bend if creating a thick finished end or shelf. Clamp until glue has cured.
- Do not touch or allow anything to contact the area of the bend for at least 30 seconds because it may cause unsightly imperfections such as dents, dimples or ripples.
- Trim component to correct length.

For Larger Panels

Suggest two people are involved for safety and ease of bending

- Place the larger side (if there is one) of the panel on the high side of the jig ensuring the area to be heated and bent is directly over the heating element
- Ensure the panel is supported well on the high side of the jig and does not move away from the heating element
- At approximately 15 seconds the panel will fall and come into contact with the lower side of the jig. At that point manually bend the panel up at the miter and remove from the heat.
- Do not touch or allow anything to contact the area of the bend for at least 30 seconds because it may cause unsightly imperfections such as dents, dimples or ripples.

• Clamp in place or do second bend then clamp accordingly.

Remove all peel coats after installation and wipe down with VuPlex and clean, soft microfiber cloth.

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