



Postforming

Bold design with rounded corners and edges

Formiline PF is a heat moldable, high resistance decorative laminate, which differs from others because it has the property that it can be bent when heated using a specific piece of equipment. It can be applied to rounded edges with a minimum internal and external radius of 12.7mm, enabling original design options for horizontal and vertical coverings. It is highly resistant to wear, heat, impact and stains making it practical and durable. It is made by impregnating successive layers of cellulosic materials (paper) with thermostable (melamine and phenolic) resins, to make a slurry which is then compressed using heat and high pressures.

How to work with Postforming

The first step is to cut the wood (plywood, chipboard, MDP or MDF), using a suitable saw. Then, machine the edges with the help of a shaper, using the correct cutters.



Cut panel



Machining



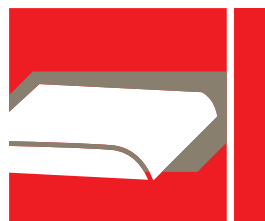
Machining panel

Note:

Use cutters with a minimum radius of curvature of 12.7mm.



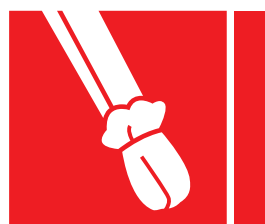
Sandpaper down to remove sharp edges, taking care not to leave the base uneven, as this will jeopardize the quality of the adhesion to the Formiline PF to the wood, because the laminate will take the shape of



the surface it is being stuck to and will, therefore, also be as uneven. The **Formiline** PF must be cut down to roughly the size of the item being covered, leaving sufficient extra at the place where it is to be molded. Next, remove any dust residues and apply a uniform coat of **Formiline** Contact Adhesive to the surface of the wood and to the back of the PF laminate. Apply a greater amount of glue to the machined edges.

Note:

The glue's drying time when applied to the laminate should be the same as usual (15 to 30 minutes). In the postforming area, the drying time should be at least 6 and no more than 12 hours.



When applying **Formiline** PF, it is necessary to use a wooden slat with a rounded point, which has been wrapped with a soft cloth, or a rubber roller. This protection prevents the surface of the laminate from getting damaged. Pressure must be applied to the **Formiline** PF from the center to the edges in order to eliminate any air bubbles that may form. The postforming equipment used must be pre-heated, and have resistances that warm up the **Formiline** PF, softening it and enabling it to be molded.



FORMILINE INDÚSTRIA DE LAMINADOS LTDA

PHONE +55 11 4741-6200

Estrada Portão do Honda, 120 - Rio Baixo

Zip Code 08694-080 - Suzano - São Paulo - Brazil

Ask for Formiline. The best laminate.



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How to work with the product

It is, however, always necessary to perform a bubble test before starting work, in order to find the ideal time for molding the **Formiline PF**. To do this, put a small sample (10 x 20 cm) of the **Formiline PF** on the equipment table, exposing it to the heat of the resistance, with the decorative surface face down. Measure the time it takes for a bubble to form in the laminate. The test may give different results as these can vary depending on the batch and the surrounding temperature.

Buble time	Reduce by
30 - 40 s.	10 s.
40 - 45 s.	12 s.
45 - 50 s.	15 s.
50 - 55 s.	17 s.

Use the table above to determine the ideal postforming time. For example: if it takes 30s for the **Formiline PF** to form a bubble, the material should be molded after 20s.

When the time taken for a bubble to form is under 10 seconds, we recommend reducing exposure to 4 - 5 seconds, or increasing the distance between the laminate and the resistance, to get a satisfactory time.

Once the ideal time has been found, put the item to be molded into the equipment. If manual equipment is used, it will be the joiner that applies the pressure with the rubber roller or rounded wooden slat, which will

always be protected as recommended earlier. When finishing off, glue the edging tape (made of ABS, PVC or laminate) and then removing rough edges and filing down the edges.

Note:

- **Never use a wet cloth after molding, because the cold water may spoil the laminate, due to thermal shock.**
- **We recommend repeating the bubble test every 2 hours.**

Important:

If it is necessary to remove **Formiline PF**, do so in the following way:

- 1-** Use a tube to inject **Formiline Solvent** under the corner of the material to be removed and, using a chisel, lift this corner up;
- 2-** Repeat the procedure of injecting the **Formiline Solvent**, carefully forcing the **Formiline PF** to come unstuck using a chisel, until the entire sheet has been removed;
- 3-** To reuse the material, remove any **Formiline Contact Adhesive** residues using a spatula and wiping them with **Formiline Solvent**;
- 4-** Spread the material out on a flat surface, with the decorated side facing down leave to dry.



Postforming

Properties, performance and applicable standards

Properties	Standards	Clause	Units	PF	Notes
Wear Resistance	NEMA LD-3 ISO 4586-1/2	3.0 16	Cycles \geq	350	Abrasion of the laminate with standardized sandpaper until the decorative surface is worn.
Stain Resistance	ISO 4586-1/2	15	Appearance Group 1 + 2 \geq Group 3 + 4 \geq	5 3	The laminate is subjected to attack by the chemical products defined in the Standard, for a standardized length of time
High temperature resistance	ISO 4586-1/2	8	Appearance Gloss finish \geq Other finishes \geq	3 4	A hot pan (at a standardized temperature) is placed on the laminate for 20 minutes. Then, the wear is assessed.
Formability	NEMA LD-3	3.14	Thickness (mm) 0,8 - Raio, mm \geq 1,0 - Raio, mm \geq	12,7 15,8	The PF laminate is subjected to the formability test. This involves heating it to 163°C and using a device to bend it.
Blister resistance	NEMA LD-3	3.15	Thickness (mm) 0,8 - seg, mm \geq 1,0 - seg, mm \geq	40 55	The time taken for blisters to form in the laminate is measured, when it is exposed to standardized temperature conditions.
Impact resistance	NEMA LD-3	3.3	Thickness (mm) 0,8 - mm \geq 1,0 - mm \geq	508 762	A sphere with a standardized mass is dropped from a minimum height that is also standardized. The damage that the laminate suffers is analyzed

Storage

The laminate must be stored in a covered place, which is protected against bad weather, keeping it away from damp areas and out of direct sunlight or other sources of heat.

Cleaning

As it has a smooth, non-porous surface, the laminate does not accumulate dirt, therefore making it difficult for fungi and bacteria to proliferate. It is, therefore, very easy to conserve: just wipe down with a damp cloth soaked in a household cleaning product that does not contain solvents or any highly aggressive cleaning agents, such as abrasive materials.



Wax (or silicone) must also not be used, because when applied to the surface of the laminate, it forms a greasy film that makes it difficult to clean and spoils its appearance.

Dimensions	Thicknesses	Finishes	
1,25 x 2,51 m 1,25 x 3,08 m 1,56 x 3,66 m	0,6 mm	Gloss (BR)	Textured (TX)
	0,8 mm	Brush (BS)	Top Matte (TM)
		Ribbed (CT)	Wood Pore (WP)
		Frost (FT)	Stone (ST)
		Lakan (LK)	Nature (NT)
		Matte (MT)	Rustic (RU)