

VT 5-PLY HOT PRESS CONSTRUCTION

VT Industries exclusively manufactures 5-ply, hot press architectural wood veneer or HPDL doors to assure the best and most consistent door construction possible. In fact VT is the only architectural wood door manufacturer that double hot presses doors. We use hot press technology to press the crossband material, and then the face material separately. This achieves additional control and consistency in lieu of pressing the crossband and face material at the same time as most 5-ply manufacturers.

The technology used to press the plies to the core is more critical than the number of plies in door construction. There are four major factors involved in the pressing process to assure the adhesives are fully cured, creating a strong bond. Hot press technology controls these factors, where as none of these are controlled during cold press technology.

Hot Press Technology involves pressing each door individually in a platen under controlled pressure, temperature and time, based on the type and thickness of material.

Cold Press Technology involves stacking a pile of doors (one on top of another) creating uneven pressure and placing this pile of doors in a press at the ambient building temperature until the adhesives are cured depending on the surrounding temperature and humidity conditions.

	HOT PRESS*	COLD PRESS
Pressure	Controlled - (Individually pressed)	Uncontrolled -(Bottom door of pile will have more pressure than the top door)
Temperature	Controlled - (Based on the type of material and thickness for each door)	Uncontrolled - (Ambient Conditions of the building)
Time	Controlled - (Based on the type of material and thickness for each door)	Uncontrolled - (30 minutes to one hour, plus 4-8 hours to allow glue curing time)
Platen	Controlled - (Individually pressed)	Uncontrolled - (Stacked door to door to door in one press opening)

*VT double hot press technology allows us to adjust pressure, temperature and time for crossband and face material

Note: 5-ply construction consists of face, crossband, core, crossband, and face materials, and usually denotes hot press technology. 7-ply construction consists of 3-ply veneer skin, core, 3-ply veneer skin and usually denotes cold press technology. Some 5-ply door manufacturers use 2-ply skins that have been cold pressed and most 7-ply door manufacturers outsource the 3-ply skins from others, further diluting the control the door manufacturer has over the quality of the door construction.

In order to assure the greatest degree of control, consistency and quality in the door construction be sure to specify Double Hot Press, 5-Ply Door Construction by VT Industries.