

# Product & Technical Information



## SYN-PLY®

The synthetic advantage underneath

### PRODUCT OVERVIEW

**SYN-PLY®**, **GATOR-PLY®** and **LUXCELL®** comprise three unique product lines of specialty engineered, man-made wood-fiber veneers manufactured by 3A Composites USA. GATOR-PLY, the specialty engineered man-made wood-fiber veneer, is described in its own Product and Technical Information bulletin. LUXCELL, the facer for painting or printing, is described in its own Product and Technical Information bulletin.

SYN-PLY, the synthetic crossband, is a specialty engineered wood-fiber veneer that has been impregnated with a proprietary resin system providing certain characteristics that allow for successful use in five-ply panel construction.

SYN-PLY provides the following unsurpassed benefits:

- Better yields than wood veneers
- Omni-directional product that lays up in any direction
- Uniform color in Almond
- Consistent availability and short lead times
- Custom size sheets cut to your specifications
- Minimizes inventory, labor and waste

Testing has revealed no undersirable features with SYN-PLY; however, caution should be observed when using particleboard and medium-density fiberboard cores of less than 5/8" thickness.

### ADDITIONAL PRODUCT INFORMATION

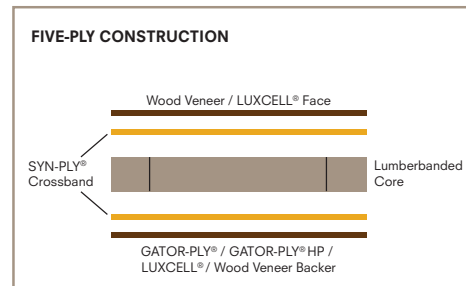
- Product dimensional changes are less than 1% of gross dimension in both directions
- Density of products is 40 lbs per msf +/- 10%
- Weight per msf is 96 lbs. +/- 8 lbs.
- SYN-PLY has a Class A Flame Spread rating
- SYN-PLY products are FSC®-Certified (FSC-C074317)

### PRODUCT AVAILABILITY

SKU #	Gauge	Color	Standard Sizes
SYN-PLY 20606	.026" (.66mm)	Almond	Widths: 31", 37", 49", 61", 98" Lengths: 50", 62", 97", 121", 145" Custom sizes available

### PROCESSING

SYN-PLY can be used with normal manufacturing equipment such as standard plywood and feed-through presses, and can be used with normal adhesives such as Urea Formaldehyde and polyvinyl acetate (PVA). Consult glue suppliers for optimum viscosity for running SYN-PLY. The product is used in five-ply applications where a lumber-banded core is used but can be used on solid cores that are within acceptable industry standards in construction, moisture and thickness.



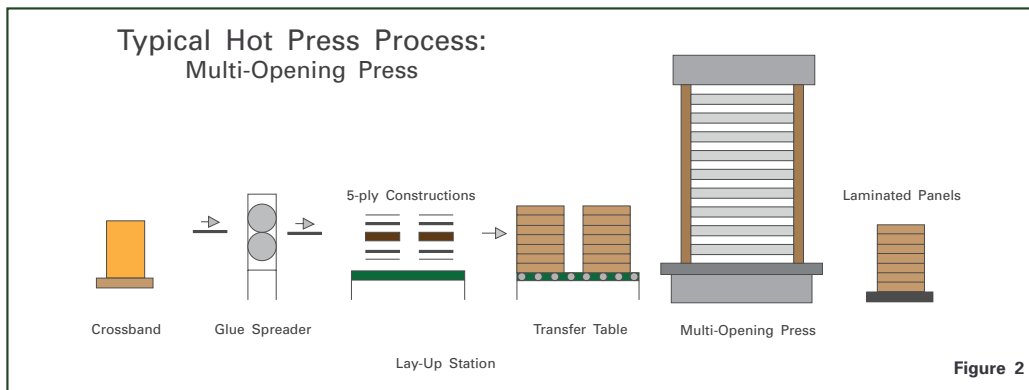
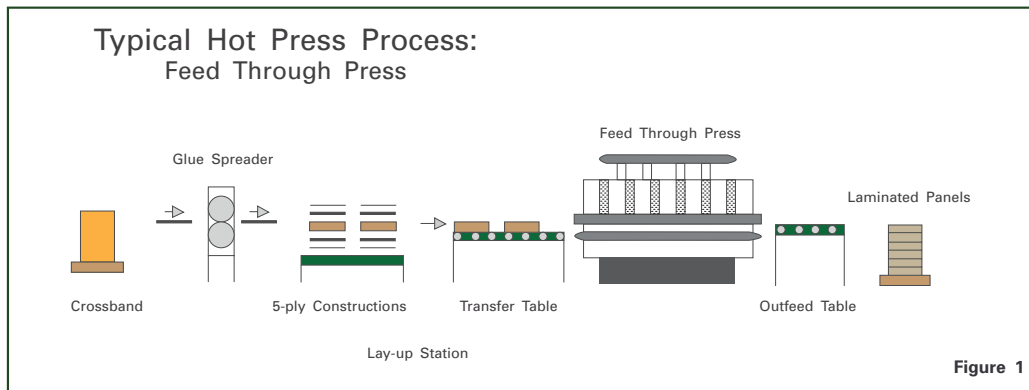
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### PROCESSING

SYN-PLY is typically fed through a conventional glue spreader where glue is applied to both sides of the material. It is critical that the glue rolls are in good condition to ensure that glue spread is applied evenly to both surfaces. SYN-PLY is then placed in between the backer and core and the face and core, creating a five-ply construction. Depending on the type of press used, the construction is then placed/fed into the press and pressed for 2 - 5 minutes at a temperature of 200-270° F. The press time is determined by the curing reaction of the glue used. Our recommendation is **not** to go below 2 minutes on press time. When using SYN-PLY, press pressure can be reduced to the lowest level possible. This will reduce the possibility of telegraphing of core imperfections. Caution should be taken to make sure panels are adhered after pressing when pressure is reduced - see figures below.



After the panels are pressed, normal stacking procedures are recommended. It is recommended that after pressing the panels, they are allowed to stabilize for approximately 24 hours before further processing. This allows the panel to reach final cure and to equilibrate with the ambient surroundings.

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### LAMINATION

#### HOT PRESS PARAMETERS

Solids:	U.F. 60-65% / PVA 45-55%
Glue Spread:	30 - 35 lbs/MSF/side (hot press)
Lay-Up or Assembly Time:	Dependant on glue and process utilized, please check with our technical service support
Stacking:	Normal stacking is sufficient
Press Temperature:	U.F. - 270° F short cycle; 240° F long cycle PVA - 240° F short cycle; 220° F long cycle
Press Pressure:	90 - 125 psi.
Press Time:	2 - 5 minutes minimum cycle
Cure Time:	24 hour minimum before finishing

The above recommendations were developed based on proven applications. There may be some cases where the recommendations do not apply.

### STORAGE

Ideally, SYN-PLY should be stored in the same area as the cores and facers to allow each to reach equilibrium at the same relative humidity. This tends to minimize differences in expansion and contraction characteristics between panel components once they are combined. Storage areas should not have excessive temperatures (in either direction) or moisture. SYN-PLY has an unlimited shelf life, but like with all veneer products, control of the above mentioned conditions is critical.

For more details about our line of SYN-PLY crossband material, call 800-626-3365 (select "1" for customer service) to request printed product literature; or visit our website at [www.gatorply.com](http://www.gatorply.com) to view and/or download all available literature.

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### LIMITED WARRANTY

Disclaimer of implied warranties and limitation of remedies: Except where seller has provided a written limited warranty for its product(s) seller warrants only that at the time of shipment the goods sold hereunder will be as described in the order. Seller makes no other warranties of any kind, express or implied, including without limitation, any implied warranty of merchantability or fitness for a particular purpose. Seller shall have no liability of any incidental or consequential damages. The sole and exclusive remedy provided by seller on account of any warranties or claims of any kind shall be limited to the replacement of the goods in question or at the seller's option, a credit to buyer of the purchase price paid. No person is authorized to make any representation of warranty on behalf of seller except as expressly set forth above and any such statement shall not be binding on seller.