



Product & Technical Information

GATOR-PLY®

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GATOR-PLY® - We Back Your Business

The original specialty engineered man-made wood-fiber veneer. New Gator-Ply Green Gator-Backer™ is now available.

Gator-Ply®, Luxcell®, and Syn-Ply® comprise three unique product lines of specialty engineered man-made wood-fiber veneers manufactured by 3A Composites USA. Syn-Ply, the synthetic crossband material, is used specifically in five-ply composite construction and is described in its own Product Information and Technical Bulletin. Luxcell, the facer that can be painted or printed, is described in its own Product Information and Technical Bulletin.

Gator-Ply backer has been used for 30-plus years to cut manufacturing costs, simplify the manufacturing process and improve furniture products. Special cuts allow for less waste and greater yields with less labor costs. Gator-Ply helps to prevent warping; provides a smooth, uniform appearance; has no splices or seams; and maintains high quality in your furniture application.

Gator-Ply backers are low formaldehyde specialty engineered man-made wood-fiber veneers. They are impregnated with a proprietary resin system and possess certain characteristics that allow them to be used successfully as a balancing medium in both three-ply and five-ply panel constructions. Although many panel producers attest to Gator-Ply's usefulness, it must be recognized that it is an impregnated product with its own special characteristics that are not the same as those of wood veneer or high-pressure laminate. Gator-Ply is not to be used as a substitute for Syn-Ply synthetic crossband material. Gator-Ply can be used in either hot- or cold-press operations. Our testing has revealed no undesirable features with Gator-Ply; however, caution should be observed when using particleboard and medium-density fiberboard cores of less than 5/8" thickness.

NEW – Gator-Ply® Green Gator-Backer™ is manufactured with an alternative™ resin system with no VOC or added formaldehyde. Gator-Ply® Green Gator-Backer™ is a GreenGuard® certified product for improved indoor air quality.

Product Listing

Product	Sheet Color	Thickness – inches
30105	Dark Brown	.026 +/- .002”
30404	Black	.020 +/- .002”
30405	Dark Brown	.020 +/- .002”
30819 Green Gator-Backer™	Black	.015 +/- .002”
30419 Green Gator-Backer™	Black	.019 +/- .002”
30425 Green Gator-Backer™	Brown	.019 +/- .002”
30408	Tan	.020 +/- .002”
30604	Black	.026 +/- .002”
30804	Black	.016 +/- .002”
30809	Dark Brown	.016 +/- .002”

Additional Product Information:

- Gator-Ply has a Class A Flame Spread rating.
- Product dimensional changes for rigid backer is, equal to or less than 1% of gross dimension in both directions.
- Product dimensional changes for flexible backer is, equal to or less than 1.5% of gross dimension in both directions.
- Density of products is 40lbs per msf +/- 10%.
- Weight per msf is:
 - o .015 thickness = 56.0 +/- 7.0lbs per msf
 - o .016 thickness = 56.0 +/- 7.0lbs per msf
 - o .019 thickness = 66.5 +/- 6.5lbs per msf
 - o .020 thickness = 66.5 +/- 6.5lbs per msf
 - o .026 thickness = 86.0 +/- 8lbs per msf
- Gator-Ply may be requested with a grain orientation. Grain orientation is usually the long dimension of the sheet and is always denoted by the second dimension in the sheet size. Example: 48” x 96” = 96” is the grain direction.

Usage Instructions

Gator-Ply backers are convenient to use because they accommodate all normal lay-up, trimming and shaping operations commonly practiced in the furniture/cabinet industry. Gator-Ply backers are **not** to be used as a substitute for crossband material that can be used in five-ply applications.

Gator-Ply works with either particleboard or medium-density fiberboard (MDF). For best results, core material should be thicker than 5/8”.

Storage

Ideally, Gator-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.

Lamination

Gator-Ply may be used with normal adhesives such as Urea Formaldehyde and PVA. For the best lamination results, adhesive should be laid down uniformly on each side of the core material. We recommend the following for maximum results.

Cold Press

Solids:	45% minimum
Glue Spread:	22 - 30 lbs./MSF/side
Lay-up or Assembly Time:	5 - 20 minutes (adhesive dependent)
Stacking:	Face-to-face stacking is preferred although not always necessary
Press Pressure:	25 - 150 psi. depending on components
Press time:	30-minute minimum (adhesive dependent)
Cure time:	24-hour minimum before machining

Hot Press

Solids:	U.F. 60-65% PVA 45-55%
Glue Spread:	22 - 35 lbs./MSF/side (hot press)
Lay-up or Assembly Time:	5 - 45 minutes (adhesive dependent)
Stacking:	Face-to-face stacking is preferred although not always necessary
Press Temperature (hot press):	U.F. 270 degrees F short cycle, 240 degrees F long cycle PVA 240 degrees F short cycle, 220 degrees F long cycle
Press Pressure:	100 - 125 psi.
Press time:	¾ minute - 1 ½ minute short cycle (hot press) 1½ - 3 minute long cycle (hot press)
Cure time:	24 hours minimum before finishing

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

Trimming and Shaping

Gator-Ply backers are engineered to provide cleanly shaped edges on adequately cured cold- or hot-pressed panels; if trimmed edges should result in fuzz, the condition may be caused by:

- a. Inadequate glue-line cure time. Excess moisture from non-dried glue accumulated near the panel edges may temporarily soften the edges of Gator-Ply preventing a clean blade cut.
- b. Dull trimming or shaping tools. Where saws or tool heads are excessively worn down, nothing can prevent chipping or fuzz on surface materials.
- c. "Oscillating" tools or "out of true" saws also contribute to uneven edges regardless of tool sharpness.

Backing Properties and Panel Stability

Industry experience indicates that two of the most important properties needed in a backing sheet are:

- a. Mechanical tensile strength to help stabilize core stock in a multi-ply panel.
- b. Impedance of rapid moisture-level transmission to enable all panel components to reach equilibrium slowly, thus minimizing warping and cupping in the field.

For details about our full line of Gator-Ply backers, call (800) 438-1701 to request printed product literature; or visit our web site at www.gatorply.com to view and/or download all available literature.

Additional product/technical support documents are available from this service, including:

- **Syn-Ply® Product Information and Technical Bulletin** - including a complete listing of all Syn-Ply materials, the synthetic crossband for five-ply construction.
- **Luxcell® Product Information and Technical Bulletin** - including a complete listing of all Luxcell materials, the facer that can be painted or printed for three-ply construction.

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LIMITED WARRANTY

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