

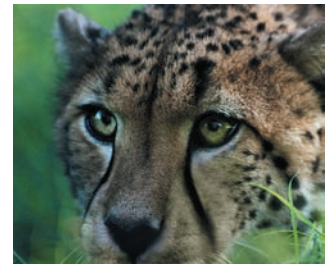
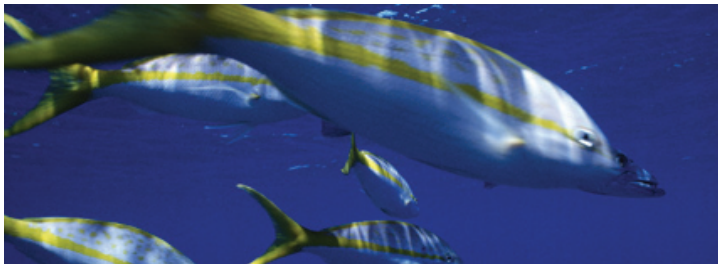
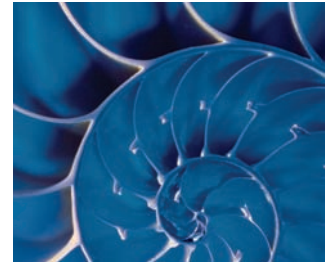
Care & Conserve™



3A Composites USA is committed to caring for the Earth and conserving its natural resources. Recent sustainability or “green” initiatives bring focus to a company’s entire supply chain from raw materials to disposal. With great awareness of the human demand on the Earth’s ecosystems, we have intensified our efforts to ensure that our ecological footprints are small and green.

3A Composites

Operations Perspective



3A Composites USA, Inc. manufactures products for a wide variety of applications, including graphic display, building cladding, furniture, home construction and transportation. Our brand names include: Alucobond®, Dibond®, Fome-Cor®, Sintra®, Gator®, Gator-Ply®, Syn-Ply® and Luxcell®. Manufacturing facilities for these product lines are located in Benton, KY; Statesville, NC; and Glasgow, KY.

Earlier best practice business programs (*Continuous Improvement Program, Six Sigma, LEAN*) typically focused on a process improvement such as manufacturing. The *Care & Conserve™* sustainability program initiated by 3A Composites is focused on achieving sustainability through continual, ongoing improvements that safeguard our people, our planet and our business profitability.

The *Care & Conserve* program requires that we assess our products' impacts throughout their life cycles, i.e., cradle to grave. At the end of a product's life cycle, we all seem to have three choices – Resource Recovery (reuse/recycle), Energy Recovery (incinerate) or Disposal (landfill). Our products have been evaluated for Energy Recovery, and incineration is not an option due to carbon residue. Therefore, our *Care & Conserve* best practices are focused on reusing/recycling materials and on reducing material consumption/disposal in landfills. These practices have been developed from both an "operational perspective" and a "product perspective."

Customer Service

In 2008, 3A Composites allowed customers to receive all of its order acknowledgements and invoices electronically. This activity reduced paper consumption for documents and envelopes as well as reduced fuel consumption to deliver the documents. Customers were encouraged to go paperless as well by storing our documents electronically.

Plant Operation

All three of our facilities (Benton, KY/Glasgow, KY/ Statesville, NC) utilize ISO 14001 for environmental management as well as OSHA 18001 for health and safety management. Health initiatives for all employees include a wellness program, zero accident target and an employee medical plan.

Plants are challenged to reduce emissions, waste water and energy consumption. A plant program for the return of fabricated material is not economically feasible for these reasons:

- More energy and resources would be consumed in the actual recycling process of our materials than would be recovered for future use.
- Although our products are well known and highly specified, the amount of material consumed is not large enough when shipped to all parts of the United States and Canada to cost-effectively return to our facilities.
- Composite materials – such as those comprising Fome-Cor® and Gatorfoam® – have to be separated, often yielding very little material to recycle.



Product Perspective

Alucobond® and Dibond® – Building Cladding, Display and Signage, Transportation

These aluminum-faced panels are manufactured with a polyethylene core in thicknesses ranging from 2mm to 6mm.

- ✦ The aluminum facers used in these panels contain a weighted average of 70% recycled content, consisting of both post-manufacturing* and post-consumer content. (Recycled content for LEED purposes are calculated differently; for more info please refer to the Alucobond Environmental guide).
- ✦ The polyethylene core of these products contains a minimum of 5% recycled post-manufacturing* content.

Fome-Cor® Board – Construction, Display and Signage

Fome-Cor is a paper-faced foam board with a foamed polystyrene core manufactured in thicknesses ranging from 1/8" to 3/8". Paper facers are either clay-coated, natural kraft (brown or black) or acid-free. Some products feature either self-adhesive or heat-activated coatings.

- ✦ All paper facers are purchased from paper suppliers that participate in either the Sustainable Forestry Initiative Standard (SFIS) or Forestry Stewardship Council (FSC). Both organizations have developed forestry standards designed to improve the sustainability practices of American Forestry.
- ✦ White-foamed polystyrene core is manufactured with a minimum monthly average of 25% post-manufacturing/industrial* recycled content. Black-foamed polystyrene core is manufactured with a minimum monthly average of 40% post-manufacturing/industrial* recycled content.

Sintra® – Display and Signage

Sintra consists of a foamed polyvinyl chloride (PVC) sheet that is manufactured in thicknesses ranging from 1mm to 13mm. Sintra is a homogenous product.

- ✦ Sheets contain a minimum monthly average of 3% post-manufacturing recycled content.

Gator® – Display and Signage

Each of the three composite products in this group utilizes a polystyrene foam core ranging in thickness from 3/16" to 3". Gatorblanks® is our foam-only product. Two of our products have facers affixed to both sides of the panel; Gatorfoam® has rigid man-made veneer facers and Gatorplast® has polystyrene facers.

- ✦ Gatorblanks – The white foam product contains 0% recycled content, while the black foam product utilizes a minimum monthly average of 15% post-manufacturing/industrial* recycled material.
- ✦ Gatorfoam – The white foam product contains 0% recycled content, while the black foam product utilizes a minimum monthly average of 15% post-manufacturing/industrial* recycled material. All facers are purchased from paper suppliers that participate in either the Sustainable Forestry Initiative Standard (SFIS) or Forestry Stewardship Council (FSC). Both organizations have developed forestry standards designed to improve the sustainability practices of American Forestry.
- ✦ Gatorplast – The white foam product contains 0% recycled content, while the black foam product utilizes a minimum monthly average of 15% post-manufacturing/industrial* recycled material.

Gator-Ply®, Luxcell®, Syn-Ply® – Furniture

This product line includes three products consisting of resinated paper sheets.

- ✦ All paper is purchased from paper suppliers that participate in either the Sustainable Forestry Initiative Standard (SFIS) or Forestry Stewardship Council (FSC). Both organizations have developed forestry standards designed to improve the sustainability practices of American Forestry.
- ✦ Gator-Ply Enviro-Backer™ and Gator-Ply Green Gator™ are manufactured with alternative resin systems that do not require the addition of formaldehyde. They've been designed to meet industry green initiatives for improved indoor air quality. And, both are certified by the GREEN-GUARD Environmental Institute (GEI), which means that they're in compliance with the stringent emission guidelines set by GEI.

*Post-manufacturing denotes the recycling of our own off-cut manufactured material; post-industrial material is purchased from other manufacturers for recycling. We will utilize both as needed.

Sustainability and Your Projects

Project designers can play a vital role in reducing the environmental impacts of our products. 3A Composites begins the sustainability process through its purchase of raw materials and their conversion into boards, panels or sheets. Designers consider color, shape, location and functionality when selecting our products for their projects. But, within this design step, it's important to consider ways to reduce or reuse/recycle these materials.

Design or Signage Projects

Let's use the example of a point-of-purchase display project that is being designed with a service life of approximately 8 months:

🌿 A question could be asked to aid reuse/recycle initiatives: *Could the project be returned to the fabricator following its initial use for another use? Could the panels be mounted with new graphics over those direct printed for the first project?*

🌿 A question could be asked about reducing shipping inefficiencies and/or scrap.

Long-haul trucks are usually 98" wide. If a design is created that requires 36"-wide skids, only two skids can be loaded across the width of the truck. This leaves 16" of unused space across the truck width. The result is a 16% loss of capacity, wasted fuel and increased shipping costs. *Could the project be designed to fit on a 32" skid so three skids could be loaded across the 98" truck width instead of only two?*

We sell a 5' x 10' panel for projects that often renders 3' of dead space on a truck. *Could you use a 4' x 10' panel or a 5' x 8' panel that can be shipped much more effectively?*

🌿 The design shape can impact scrap when die-cutting. Even with a cut-to-size initial piece, if the die-cut produces a great deal of scrap, a new design could be considered to reduce the amount of scrap sent to the landfill.

Furniture Projects

Ordering cut-to-size sheets reduces waste and landfill contributions.

Construction Projects

Whether you are using Alucobond aluminum composite material as building cladding or Fome-Cor as a house wrap or sheathing board, ordering these products in sizes nearest your wall size reduces waste. Aluminum is the most expensive of our product facers and has the best chance to be locally recycled should building cladding panels be retrofitted in modernization projects.



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™Enviro-Backer is a trademark of 3A Composites USA, Inc.

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