



americhem
PERFORMANCE | SOLUTIONS | TRUST

CASE STUDY

Paint-Free Aesthetics for Outdoor Body Panels

Customer

Global Recreational Vehicle OEM

End Use

Front and rear body panels for a premium outdoor vehicle platform

Customer Challenge

A global OEM in the recreational vehicle space sought to eliminate the painting step from its body panel production process. These panels required a deep-gloss, weatherable finish that could hold up to sun, moisture, and impact across rugged terrains. The challenge was to replicate the aesthetic richness of a painted surface using a molded-in-color approach, while maintaining tight dimensional control, color consistency across multiple parts, and throughput at commercial volumes. The challenge lay in finding a material that could match the look and performance of painted parts, support efficient processing, and maintain color fidelity across a broad palette of vibrant shades.

Americhem Solution

Americhem formulated a Surlyn-based version of ColorFast® NY15030HF from its proprietary Surlyn Reflection Series®—a patented PA6/ionomer alloy engineered for high-gloss, outdoor-grade performance. This customized solution delivered:

- Paint-like aesthetics with deep gloss, high image clarity, and scratch/mar resistance, achieved via Class A molded-in-color surfaces
- Robust outdoor durability including UV stability, low-temperature impact strength, and chemical resistance suited for powersport-grade exposure
- Improved mold flow and formability, with a melt flow index of 7, enabling cycle time gains and better fill in complex geometries

Value Proposition

Americhem's solution enabled the OEM to completely eliminate the painting step, streamlining production while enhancing part consistency and visual appeal. By integrating color and performance into a single compound, Americhem reduced the customer's risk of post-processing defects, VOC emissions, and extended lead times. The color-matched compound family ensured a seamless appearance across multiple parts and SKUs, supporting the OEM's design goals and brand integrity.

Customer Success Story

The customer successfully transitioned to a molded-in-color platform for its front and rear body panels, launching with a full palette of durable colors including sapphire, black, cashmere, sangria, charcoal, platinum, green, beige, red, and white. With Americhem's material support and color matching expertise, the customer met their performance targets while accelerating production cycles and reducing environmental impact. The new solution delivered the desired showroom finish straight from the mold—no painting, no compromises.

Fast Facts

End Application

Front and rear body panels

Customer Type

Outdoor recreational vehicle
OEM

Materials Supplied

ColorFast® NY15030HF
(Surlyn Reflection Series® alloy)

Key Requirements

High gloss, impact resistance, surface finish, flow rate,
chemical resistance

Color Portfolio

Sapphire, black, cashmere, sangria, charcoal, platinum,
green, beige, red, white

Processing Advantage

Improved flow for better cycle time

Market Suitability

Ideal for exterior applications in automotive, motorcycles,
ATVs, tractors, snowmobiles, watercraft, and recreational
vehicles

Paint Replacement Outcome

Fully eliminated the painting step, reducing cost,
complexity, and risk of surface chipping while
maintaining a showroom-quality finish

