



Hermetic seal to keep meat fresh

Paperboard made from renewable plant-based fiber from sustainable sources


High-quality graphics for great on-shelf impact




Rhug Estate Organic Farm Cuts Down on Single-Use Plastic by Switching to the Sustainable PaperSeal™ Tray

Rhug Estate Organic Farm spans nearly 8,000 acres in North Wales, UK. A true “field-to-plate” operation, Rhug Estate applies sustainable farming practices to produce high-quality organic meat sold in its Farm Shop and Takeaway. Committed to sustainability in every aspect of the business, Rhug Estate is constantly improving its carbon-negative status by generating its own power through solar, hydro, and wind systems and replacing single-use plastic in its food and foodservice packaging with biodegradable and recyclable alternatives.


Case Study overview: Sustainability | Elevated Experience | Convenience

Challenge 

- **Sustainability**
Improve the company’s carbon footprint by replacing single-use plastics.
- **Branding**
Educate consumers about sustainable farming and organic origins of the meat.
- **Performance**
Extend the product shelf life by preserving freshness longer.

Solutions 

- **Paperboard Packaging**
Paperboard tray made from renewable plant-based fiber from sustainable sources with a liner. Tray and liner can be easily separated to promote easy recycling of the paperboard tray.
- **Maximized Marketing Potential**
High-quality offset graphics can be printed on the internal and external surfaces of the tray for high on-shelf impact.
- **Hermetic Seal**
The continuous sealing flange maintains excellent hermetic seal integrity to maintain shelf life.

Results 

- **80 Percent Plastic Reduction**
Fully recyclable paperboard tray uses 80% less plastic than traditional trays.
- **On-Shelf Differentiation**
Packaging design delivers more merchandising real estate to tell the brand story and set the product apart.
- **Improved Shelf Life**
The PaperSeal™ tray extended shelf life by two days for total 12-day shelf life.

Challenge

As part of its commitment to sustainability, Rhug Estate Organic Farms had already adopted biodegradable packaging for its takeaway coffee cups, coffee trays, and lunch boxes. To further reduce single-use plastics, the farm partnered with Graphic Packaging International (Graphic Packaging) to transition to recyclable packaging for its organic fresh meat range.

While sustainability was the top priority, the new packaging also had to meet high-performance expectations to keep meat fresh as long as possible. Additionally, Rhug Estate wanted the packaging to convey important brand messaging about the organic origins of the meat.

Solution

Graphic Packaging provided Rhug Estate with the PaperSeal Skin tray, a barrier-lined paperboard alternative to traditional Vacuum Skin Packaging (VSP) trays. Made from renewable plant-based fiber from sustainable sources, the paperboard trays align perfectly with the farm's commitment to sustainability—while also offering additional functionality and performance benefits.

The tray's continuous one-piece sealing flange delivers excellent hermetic seal integrity to preserve the freshness of the organic meats inside. Meanwhile, the tray maximizes the marketing potential of the package, providing 360-degrees of internal and external printable real estate to convey messaging about sustainable farming.

Results

Compared to traditional plastic VSP trays, PaperSeal™ uses 80 percent less plastic¹, helping Rhug Estate reduce its consumption of single-use plastics to support its carbon-negative position.

This packaging solution gives Rhug Estate a greater opportunity to educate consumers about the sustainable farming practices used to produce its organic meat. Meanwhile, the hermetically-sealed tray keeps meat fresh even longer than the previous packaging—Rhug Estate report that it extends the use-by date by two extra days for a total shelf life of 12 days.

The innovative packaging design improves the consumer experience while supporting Rhug Farm's highest standards of sustainability. The liner can be easily removed from the paperboard tray after use for easy recycling by the consumer.

1. Plastic reduction figures are for the tray and exclude the lidding film, which is not supplied by Graphic Packaging but is expected to be similar to film used for current trays. Each PaperSeal tray is specified on a case-by-case basis to minimize plastic content, at levels even below 10% where possible.