



POLARTM

REFRIGERATED LINERS



EVOLUTIONARY INNOVATION THROUGH ENGINEERING



INNOVATIVE TECHNOLOGY



SPECIFY THE MOST INNOVATIVE LINER ON THE MARKET

The Ridge Polar X Integral Liner is manufactured to the highest quality standards in the industry. Our innovative product design combined with advanced materials and assembly processes set us apart from the competition. Ridge has established a new benchmark in reefer wall performance.

FOAM INSULATION

Thermal barrier between exterior and interior surfaces.

FOAM ADHESION LAYER (SCRIM)

This layer provides the maximum mechanical adhesion between the liner and the polyurethane foam.

SIDEWALL LINER

A CONTINUOUS-GLASS reinforced multi-layered thermoplastic composite that provides industry-leading protection from impact.

LOWER INTEGRAL SCUFF

Several thickness and height options provide maximum protection against fork truck abuse.

DOOR INTEGRAL SCUFF

Protects the rear and side doors from abuse caused by shoring or shifting loads.



Ridge Polar X Integral Liner U.S. Patent No. 7,829,165. Polar X is a registered trademark of Ridge Corporation.

ADDITIONAL INTEGRAL SCUFF

Allows custom location for added protection in high traffic areas that experience concentrated impacts.

TRAILER EXTERIOR WALL

WALL LINER

FOAM ADHESION LAYER

Scrim layer produces the best foam adhesion in the industry. Resists delamination and promotes thermal efficiency.

SCUFF/WALL PANELS

Lightweight thermoplastic materials offer superior puncture strength over existing wall liners.

TRANSITION

Wall transitions to plane of scuff to eliminate snag points. (Transition is unique to OEM foaming process and is not designed by Ridge Corp.)

SCUFF PLACEMENT

Scuff located in front of joint for weld protection.

FUSED JOINT

Fused joint that joins scuff and wall material for unique one-piece design.

HIGH GLASS CONTENT

The scuff liner's unique use of new high glass content ballistic technology helps you reduce weight, cost and gain superior protection.

FUSED JOINT

Concentrated weld energy fuses the joint together to provide a continuously sealed joint with excellent strength and reparability.

INSULATION

CONTINUOUS BONDED LAYER

SCUFF LINER

FUSED JOINT



The design flexibility of the Ridge Polar X Integral Liner opens the opportunity to address damage-prone areas within the trailer. Fleets can now specify their custom protection package on sidewalls, ceilings and doors without using a single fastener.

POLAR X PRODUCT

ADVANTAGES

LIGHTWEIGHT BALLISTIC STRENGTH

Ridge high glass content panels and scuff liners incorporate the highest strength-to-weight ratio in the market. In many cases, Ridge scuff liners out-perform aluminum scuff in puncture strength.

FASTENER-LESS DESIGN

Ridge Polar X Integral liners eliminate snag points that damage cargo. At the interface, Ridge-welded seams have a higher strength than the surrounding materials. Caulk is not required for sealing seams that expand and contract at differing rates as in conventional aluminum and FRP construction.

LOWER MAINTENANCE COSTS

Ridge ballistic-grade materials do not bend, dent, or deform into new shapes like traditional aluminum scuffs.

THERMAL LIFE SPAN

Combining the insulative benefits of the thermoplastic composite material, the multi-layered high strength/high-pressure laminate structure, and the Polar X one-piece wall design helps prevent out-gassing and supports the integrity of the foam insulation.

LONG LASTING AESTHETICS

Ridge Polar X Integral liners are produced white, smooth, and flat. They retain their original shape after repeated impact, whiten with age, and use their ballistic characteristics to maintain a smooth appearance.

FOAM ADHESION

Ridge Polar X Integral liners incorporate unique scrim cloths to provide a maximum surface area for foam adhesion.

NO STYRENE

Ridge products do not release **STYRENE** and are fully recyclable.



ABRASION RESISTANCE

Ridge thermoplastic integral scuffs show far superior abrasion resistance when compared to aluminum or FRP.

EASE OF REPAIR

Thermoplastics can be repaired quickly and easily with readily available tools. View a repair at ridgecorp.com.



WHO WE ARE

Ridge is an innovative company using the most advanced technologies to produce lining for the trailer and truck body industry. Using high-performance glass-reinforced thermoplastics, Ridge delivers lining solutions that meet or exceed our customers' expectations. As Ridge creates the next generation of high-performance products, we remain grounded in solid manufacturing techniques that ensure cost-effective and repeatable product quality.

WHAT WE DO

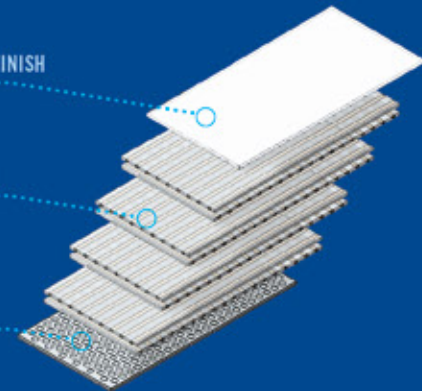
Ridge Corporation uses the most advanced fusion technology to assemble high-strength durable composite structures. Our patented process allows for the union of varying thicknesses throughout the trailer or truck body's walls, ceilings, or doors to provide our customers with the design flexibility to place impact protection where it is needed. These fused liners are thoroughly inspected and rigorously tested to guarantee product performance. While providing versatility, Ridge-fused liners are produced in a cost-efficient manner to supply our customers with premium long-life asset protection at affordable pricing.

SCUFF DIAGRAM

DURABLE,
BRIGHT WHITE FINISH

0-90
CONSTRUCTION

SCRIM LAYER



THE SCIENCE BEHIND POLAR X

At Ridge, fiber orientation and resins used in our composite products combined with our unique processes are as variable as the customers we serve. The Ridge approach in a word is INNOVATION: Our thermoforming capabilities, coupled with our patented sonic welding process, enable us to offer solutions to whatever problems you want to resolve. The solution might be a new application or an improvement on an existing design.

The Polar X Integral liner specifically shows how Ridge can bring all areas of its expertise together to uniquely solve a problem. The bottom fused scuff liner is constructed of continuous 0 to 90-degree-oriented fibers to maximize impact protection. Engineered fiber orientation and layering increases overall panel stiffness to spread impact – thus better protecting your investment. The scuff liner's unique use of new **HIGH GLASS CONTENT** ballistic technology helps you reduce weight, cost and gain superior protection as more and more reefer trailers are used for dry freight backhauls. The Polar X Integral upper liner incorporates similar advantages with glass content of 60% to 70% that satisfies impact concerns in the real world – your world. Talk to Ridge – we're listening.

***SPECIFY RIDGE POLAR X LINERS AND
WATCH THE POUNDS FALL OFF YOUR TRAILER.***

RIDGE POLAR X

INTEGRAL LINERS INCLUDE:

- ▶ *One Piece Design*
- ▶ *Highest Strength-to-Weight Ratio*
- ▶ *Low Maintenance Cost*
- ▶ *Ease of Repair*
- ▶ *No Metal Deformation*
- ▶ *Improved Thermal Efficiency*
- ▶ *Cleanability*
- ▶ *Superior Foam Adhesion*
- ▶ *No Snag Points*
- ▶ *Environmentally Friendly*

SPECIFY POLAR X BY RIDGE TO MEET YOUR NEEDS

SPECIFICATIONS WORKSHEET

Polar X Refrigerated Liners – Sonic Welded Integral Liners by Ridge Corporation

Polar X Subpan Options	<input type="checkbox"/> PP030 S 0.19 LB./ft ²		
Polar X Door Liner Options		<input type="checkbox"/> PP050 0.33 LB./ft ²	
Polar X Front Wall Options	<input type="checkbox"/> PP030 0.19 LB./ft ²	<input type="checkbox"/> PP050 0.33 LB./ft ²	<input type="checkbox"/> PP060 0.39 LB./ft ²
Polar X Ceiling Liner Options	<input type="checkbox"/> PP030 0.19 LB./ft ²	<input type="checkbox"/> PP050 0.33 LB./ft ²	<input type="checkbox"/> PP060 0.39 LB./ft ²
Polar X Upper Wall Options	<input type="checkbox"/> PP050 0.33 LB./ft ²	<input type="checkbox"/> PP060 (Ridge Standard) 0.39 LB./ft ²	<input type="checkbox"/> PP070 (Ridge Heavy Duty) 0.47 LB./ft ²
Polar X Scuff Options – thickness	<input type="checkbox"/> PP120 0.88 LB./ft ²	<input type="checkbox"/> PP140 (Ridge Standard) 0.95 LB./ft ²	<input type="checkbox"/> PP160 (Ridge Heavy Duty) 1.16 LB./ft ²
Polar X Scuff Options – height*	<input type="checkbox"/> 12" <input type="checkbox"/> 18" <input type="checkbox"/> 24" <input type="checkbox"/> 36" <input type="checkbox"/> 48"		

* Polar X Scuff heights listed represent OVERALL dimensions including floor-mounted aluminum extrusion.

All Ridge Standards listed above meet or exceed all industry-known strengths at equivalent weights.

TRUST RIDGE TO BUILD POLAR X LINERS THAT MEET OR EXCEED YOUR OEM "SPECIFICATION"

CONTACT YOUR RIDGE SALES ENGINEER FOR YOUR CUSTOM "SPECIFICATION"
ONLY POLAR X INTEGRAL LINERS ASSURES YOU THE HIGHEST TRADE IN VALUE



1201 Etna Parkway | Pataskala, Ohio 43062 | Office: 614.421.7434 Fax: 614.294.7434

