

FLEXIBLE GROUNDING STRAPS

FOR CRITICAL AEROSPACE/DEFENSE APPLICATIONS

Grounding straps are essential to ensure the safe and efficient operation of electronic systems, where they prevent the build-up of static electricity that can damage sensitive components or interfere with critical systems.

Fralock offers flexible, ultra-thin grounding straps that can bend, fold, and twist, and are designed for exceptional performance in a variety of demanding aerospace and defense applications.

With a low-profile configuration, our grounding straps are copper laminated with polyimide, using either adhesive-based or Adhesiveless Lamination Technology (ALT)TM bonding.



Our engineering team works closely with yours to design, engineer, and manufacture grounding strap solutions to satisfy your most stringent requirements.

BENEFITS AND APPLICATIONS

Features and Benefits

Our flexible grounding straps offer several benefits for high-performance applications when replacing round wire is desired.

- Reduced mass
- 130 Amp capacity
- Flat, low profile as thin as 0.006"
- Shock and vibration resistant
- Complex routing made easy improves assembly efficiency, easily routes around corners and through tight spaces
- Adhesiveless or adhesive bonding
- Withstands creasing and repetitive flex cycling even at high voltages
- High durability
- Dimensions: Up to 110"L (279.4 cm). For lengths over 110" please contact Fralock

Applications

- Avionics and Electronic Equipment: Connects sensitive electronic components to a grounded surface to prevent (ESD) and interference.
- Aircraft and Defense Vehicle Structures: Installed between moving parts and the main aircraft or vehicle structure to ensure a continuous electrical ground.
- **Cable Harnesses and Wiring:** Integrated into cable harnesses and wiring systems to maintain grounding integrity throughout the system.
- Fuel Systems: Prevents static build-up which could lead to sparking and hazardous situations.
- Test and Assembly Stations: Grounds personnel, tools, and equipment, reducing the risk of ESD during the manufacturing process.





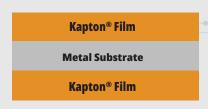


ALT DURA™ POLYIMIDE ADHESIVELESS PRODUCTS

Fralock's flexible grounding straps bonded with Adhesiveless Lamination Technology (ALT)™ are part of our ALT Dura™ product line. Laminated without any adhesives, these products afford a high-strength monolithic bond that can withstand extreme environments without delaminating.

ALT Dura™ grounding straps offer advantages over traditional adhesive lamination, providing superior performance for demanding applications:

- Temperature tolerance: -269°C to 300°C (-452°F to 572°F)
- Mass reduction up to 30%
- Resists delamination with repeated bending and folding
- Longer lifetime than traditional wire constructions



ALT Dura™ (Fralock's Adhesiveless Lamination Technology (ALT™)

Kapton Film
Acrylic Adhesive
Metal Substrate
Acrylic Adhesive
Kapton Film

Acrylic Adhesive







