

## ME-2101 RFID Portal Isolation Curtains

Effectively reduce signal leakage and solve portal isolation issues



*Our Portal Isolation curtains are made to your exact size specification*



*An optional clear window section is available for larger curtains, allowing for line of sight & safe passage*

Our very flexible ME-2101 RFID Portal Isolation Curtains utilize two layers of panels. Both the exterior panels and the interior ones contain an RF reflective ground plane to reject outside RFID signals. Our technology is more effective in isolating the RFID read area from outside than any competitive product.

### APPLICATIONS

- RFID Isolation on Conveyor belt readers
- Applicable at all RFID frequencies.
- For applications with light weight packages that might be displaced
- For situations where crosstalk inside the portal is not an issue
- For larger RFID portals where cost is a major factor

### FEATURES

- Minimum of -80 dB Isolation from 100 MHz to 26 GHz (covers all RFID frequencies)
- Custom designed slits for package transport through curtains
- Custom cut and fit to RFID conveyor size with top mount grommets
- Clear safety window section is available for larger curtains
- Both exterior and interior panels contain high performance isolation material for signal isolation
- Durable Outer Surfaces
- High Wear resistance
- Tear Resistant
- High Tensile Strength
- POL (Petroleum, Oil, Lubricant) Resistant

## **GENERAL SPECIFICATIONS**

### **CONSTRUCTION**

<b>Panels:</b>	Dual sided isolation composite flexible panels consisting of multiple ground planes and separators encapsulated in a durable waterproof outer cover of urethane coated nylon
<b>Size:</b>	Custom made to meet requirement
<b>Thickness:</b>	Typically, 0.20 inches (0.51 cm)
<b>Weight:</b>	Typically, less than 0.5 lbs. per square foot (2.4 kg/m <sup>2</sup> )
<b>Color:</b>	Gray standard (custom colors available)

### **MECHANICAL PROPERTIES**

<b>Effects of Liquids - Oil:</b>	No adverse effects after 1000 hours (ASTM-B-117)
<b>Effects of Liquids - Water:</b>	Less than 6% increase in volume (ASTM-D-471)
<b>Hydrostatic Resistance:</b>	No water leaks after 20-min./15 psi (ASTM-D-751)

### **ELECTRICAL PERFORMANCE**

<b>Isolation:</b>	More than -90 dB when closed
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### **INSTALLATION NOTES:**

Our Portal Isolation Curtains are custom sewn to your specifications. Curtains should be measured carefully and just touch the belt without product on them. Entry curtains should be installed inside the portal and exit curtains outside the portal. We suggest they overlap the portal by 1" (3 cm) to allow for optimal RFID signal seal. Outer panels can be attached to the portal with Velcro to ensure the seal. You should allow a minimum 3" (8 cm) for a horizontal header to which the vertical slats hang and grommets are located for attachment to the portal. We can include design details (notches in the side panels, varying panel length, etc.) to allow for satisfactory seal and maximum signal isolation.