



# RFID NATIONAL BRAND PLAYBOOK

Softline & Hardline Packaging  
For Academy Sports + Outdoors

# General Overview

## *What industry standards to follow?*

Academy Sports + Outdoors is following all industry standards set forth by GS1 RFID serialized encoding standard, GS1 RFID tag placement standards, and Auburn University RFID Lab ARC inlay standards. All tagging requirements must meet these standards prior to arriving in our stores.

## *What carries RFID tagging?*

**All Softline & Hardline brands** that are being shipped into and sold at any of our Academy Sports + Outdoors retail stores. This includes all **national, proprietary, supplier and private brands**.

# Getting Started

The following outlines a standard framework to integrate RFID into packaging. This includes major points and areas that should be considered; however, every company must tailor the steps to fit the needs of their business and supply chains.

- Develop an internal team.
- Identify ways that RFID can help improve your operations.
- Engage with your Packaging Provider to determine their RFID capabilities, if needed, also engage with an approved RFID Inlay Manufacturer.
- Begin procurement discussions and be prepared to provide forecasts, products tagging and estimated timelines.
- Begin data management/serialization discussions with your packaging provider.
- Develop an internal quality check process to ensure compliance according to all the requirements within this playbook.

## *In Scope:*

- Softline & Hardline Departments:
- All seasonal program items
- All Basic/Replenishable SKU's
- All Omni Channel items and Dot com items (sold in-stores and/or online)
- Chase Buys: in scope if it can be implemented in time without jeopardizing delivery and adhering to Academy Sport's retail specs. Otherwise, work back with your Academy Sport's Merchant to determine.

## *Out of Scope:*

- Ecomm only items - Drop Ship items.
- Hot Market (Seasonal, Super Bowl, World Series, Etc.)
- Items where RFID tags are not compatible with the product, as identified through the Auburn University RFID Lab

Academy Sports + Outdoors is referencing a set of inlay specifications that are performance approved from the Auburn University RFID ARC Lab. Refer to the chart to see what specs and categories have been assigned. ***You can only use an approved inlay from an item's associated inlay list.***

Product Departments Reference	ARC Inlay	In Store Deadline	Approved Inlay List
Apparel & Apparel Accessories			
Athletic Apparel – Men’s, Women’s, Youth (Boy’s, Girl's, Toddler), Athletic Apparel Accessories (Headwear, Bags)	R	Phase 1: Spring 2026	<a href="https://rfidarc.auburn.edu/templates/inlays/spec-r.php">https://rfidarc.auburn.edu/tem p/inlays/spec-r.php</a>
Outdoor Apparel - Men, Women, Youth (Boy’s, Girl’s, Toddler), Outdoor Apparel Accessories (Headwear, Bags)  Seasonal Apparel – Outerwear, Gloves, Base layers/Thermals, Headwear	R	Phase 1: Spring 2026	
Licensed Apparel - Men’s, Women’s, Youth (Boy’s, Girl’s, Toddler) Licensed Accessories - Footwear, Socks, Drinkware, Coolers, Blankets, Car Accessories, Home Décor, Backyard Games, Sports Balls, Toys/Inflatables, Electronics/Phone Accessories, Tailgate Accessories (Canopies, Chairs, Coolers)	R	Phase 1: Spring 2026	
Footwear			
Casual FW, Active FW, Sandals, Outdoor FW, Running FW, Training FW, Lifestyle FW	R	Phase 1: Spring 2026	<a href="https://rfidarc.auburn.edu/templates/inlays/spec-r.php">https://rfidarc.auburn.edu/tem p/inlays/spec-r.php</a>
Adult Baseball FW, Adult Football FW, Adult Soccer FW, Adult Basketball FW, Women’s Baseball FW, Women’s Soccer FW, Women’s Basketball FW	R	Phase 1: Spring 2026	

Golf FW, Men's Tennis FW, Women's Tennis FW, Pickleball FW, Volleyball FW, Cheerleading FW, Dance FW, Track & Field FW, Wrestling FW, Other Sports FW Lacrosse FW, Adult Specialty Sports FW	R	<b>Phase 1:</b> Spring 2026	<a href="https://rfidarc.auburn.edu/template/inlays/spec-r.php">https://rfidarc.auburn.edu/template/inlays/spec-r.php</a>
Grade School FW, Preschool FW, Toddler FW	R	<b>Phase 1:</b> Spring 2026	
Youth Baseball FW, Youth Football FW, Youth Soccer FW, Youth Basketball FW, Youth Tennis FW, Youth Specialty Sports FW,	R	<b>Phase 1:</b> Spring 2026	
Men's Work Pull on Safety Toe, Men's Work Lace Soft Toe, Men's Work Lace Safety Toe, Men's Service Shoes, Men's Warehouse Work, Women's Warehouse Work, Women's Work Pull on Soft Toe, Women's Work Pull on Safety Toe, Women's Work Lace Soft Toe, Women's Work Lace Safety Toe, Women's Service Shoes	R	<b>Phase 1:</b> Spring 2026	
Men's Tactical Boots, Men's Western Boots, Men's Hunting Rubber Boots, Men's Hunting Boots, Women's Tactical Boots, Women's Western Boots, Women's Hunting Rubber Boots, Women's Hunting Boots, Rubber Boots, Youth Hunting Boots, Youth Hunting Rubber Boots	R	<b>Phase 1:</b> Spring 2026	
Men's Summer Seasonal FW, Women's Summer Seasonal FW, Men's Fall Seasonal FW, Women's Fall Seasonal FW, Youth Fall Seasonal FW, Youth Summer Seasonal FW, Boxed Crocs	R	<b>Phase 1:</b> Spring 2026	
Youth Hanging Crocs, Youth Summer Seasonal Crocs, Youth Fall Seasonal Crocs, Adult Hanging Crocs, Ath Slides, Ath Sandals, Adult Ath Slides, Sandals, Youth Ath Slides	R	<b>Phase 1:</b> Spring 2026	

Outdoor			
<b>Apparel</b> – Insulated Camo, Non-Insulated Camo, Bibs, Pants, Caps, Camo Accessories	R	<b>Phase 1:</b> Spring 2026	<a href="https://rfidarc.auburn.edu/template/inlays/spec-r.php">https://rfidarc.auburn.edu/template/inlays/spec-r.php</a>
<b>Coolers</b> - Hard Sided Coolers, Soft Sided Coolers, Drinkware, Plastic Jugs	Y2	<b>Phase 1:</b> Spring 2026	<a href="https://rfidarc.auburn.edu/template/inlays/spec-y2.php">https://rfidarc.auburn.edu/template/inlays/spec-y2.php</a>
<b>Camp</b> - Tents, Sleeping Bags, Air Beds, Cots, Technical Packs Headlamps, Camping Accessories, Flashlights, Batteries Outdoor Cooking, Cookware	Y2	<b>Phase 1:</b> Spring 2026	
<b>Fishing</b> - Rods, Reels, Fishing Line, Freshwater Baits, Saltwater Baits, Hooks & Tackle, Fish Finders, Tackle Storage, Fishing Accessories, Nets, Aerators	Y2	<b>Phase 1:</b> Spring 2026	
<b>Boating</b> - Paddles + Accessories, Marine Electronics, Boat Accessories, Boat Cleaning, Boat Oil, Marine Batteries, Trailer Accessories	Y2	<b>Phase 1:</b> Spring 2026	
<b>Water Sports</b> – Life Vests, Pet Vests, Learn to Swim Floats, Inflatables, Pools, Pool Toys, Swim Goggles, Swim Caps, Beach Bags, Water Fitness Accessories, Bodyboards, Skim boards, Wake Boards, Water Skis, Inflatable Waterparks, Snorkeling (Sets, Fins, Masks, Combos) Beach Toys, Towels, Beach Chairs, Pool Floats, River Tubes, Swim Diapers, Water Guns & Balloons	Y2	<b>Phase 1:</b> Spring 2026	
<b>Paddle Sports</b> – John Boats, Canoes, Kayaks, Pedal Boats, Paddles & Oars, Paddle Accessories - (PFD / Dry Bags / Carts / Storage / Safety)	Y2	<b>Phase 1:</b> Spring 2026	
<b>Bikes</b> – Adult & Youth Bikes, Ebikes, Bike Helmets & Protection, Bike Tubes & Tires, Bike Pumps & Accessories, Bike Carriers, Bike Trailers	Y2	<b>Phase 1:</b> Spring 2026	

<b>Wheeled Goods</b> – Skates, Skateboards, Scooters, Motorized Scooters, Gas & Battery Ride Ones	TBD	TBD	
<b>Games</b> - Billiards, Table Tennis, Darts, Mini Games, Bowling, Lawn Games, Tailgate Games, Flying Discs, Outdoor Novelties	Y2	<b>Phase 1:</b> Spring 2026	<a href="https://rfidarc.auburn.edu/tem p/inlays/spec-y2.php">https://rfidarc.auburn.edu/tem p/inlays/spec-y2.php</a>
<b>BBQ</b> – Grills, Smokers, Fryers, Boilers, Grilling Fuel, Seasonings, Cooking Accessories, Grill Accessories, Cast Iron, Game Processing	Y2	<b>Phase 1:</b> Spring 2026	
<b>Furniture</b> – Canopies, Wagons, Folding Chairs, Folding Tables, Patio Sets, Patio Heaters, Firepits	Y2	TBD	
<b>Team Sports</b>			
<b>Sports</b> – Baseball & Softball, Basketball, Soccer, Football, Volleyball, Lacrosse, Wrestling, Ice Hockey, Street Hockey, Cricket, Field Hockey	R	<b>Phase 1:</b> Spring 2026	<a href="https://rfidarc.auburn.edu/tem p/inlays/spec-r.php">https://rfidarc.auburn.edu/tem p/inlays/spec-r.php</a>
<b>Health &amp; Fitness</b>			
<b>Strength</b> - Gym Units, Weight Benches, Barbell Sets, Weight Bars, Dumbbells, Weights Plates, Kettlebells, Weight Storage	TBD	TBD	
<b>Cardio</b> - Ellipticals, Treadmills, Fitness Bikes, Rowers, Stair mills	TBD	TBD	
<b>Combat</b> - Heavy Bags, Free Standing Bags, Speed Bags Stands & Combos, Combat Accessories	TBD	TBD	
<b>Combat</b> - Boxing Gloves, MMA Gloves, Wrist Wraps	Y2	<b>Phase 1:</b> Spring 2026	<a href="https://rfidarc.auburn.edu/tem p/inlays/spec-y2.php">https://rfidarc.auburn.edu/tem p/inlays/spec-y2.php</a>
<b>Accessories</b> - Balance & Stability, Blocks, Foam Rollers, Medicine Balls, Flooring, Fitness Mats, Resistance Bands, Weights Gloves & Belts, Massage Guns	Y2	<b>Phase 1:</b> Spring 2026	
<b>Sports Nutrition</b> – Protein, Weight Gainers, Pre Workout,	TBD	TBD	

Health Supplements, Hydration Powders			
<b>Sports Medicine</b> – Leg Braces, Arm Braces, Back Braces, Support Tape, Massage Guns	Y2	<b>Phase 1:</b> Spring 2026	<a href="https://rfidarc.auburn.edu/tem p/inlays/spec-y2.php">https://rfidarc.auburn.edu/tem p/inlays/spec-y2.php</a>
<b>Sunglasses</b> – Sunglasses, Sunglasses Accessories	W5	<b>Phase 1:</b> Spring 2026	<a href="https://rfidarc.auburn.edu/tem p/inlays/spec-w5.php">https://rfidarc.auburn.edu/tem p/inlays/spec-w5.php</a>
<b>Electronics</b> – Phone Chargers, Headphones, Bluetooth Speakers	Y2	<b>Phase 1:</b> Spring 2026	<a href="https://rfidarc.auburn.edu/tem p/inlays/spec-y2.php">https://rfidarc.auburn.edu/tem p/inlays/spec-y2.php</a>
<b>Hunting</b>			
<b>Firearms</b> – Rifles, Shotguns, Pistols,	TBD	TBD	
<b>Firearm Accessories</b> - Soft Cases, Hard Cases, Safes, Safe Accessories, Holsters, Firearm Cleaning, Firearm Accessories & Attachments	TBD	TBD	
<b>Optics</b> – Rifle Scopes, Pistol Sights, Range Finders, Binoculars	TBD	TBD	
<b>Hunting Accessories</b> – Blinds, Feeders, Attractants, Scents, Hunting Furniture, Hunting Bags, Game Cameras, Knives,	TBD	TBD	
<b>Ammo</b> – Pistol Ammo, Rifle Ammo, Shotgun Shells, Steel & Paper Targets, Tannerite, Black Powder, Reloading	TBD	TBD	
<b>Archery</b> – Crossbows, Compound Bows, Youth Bows, Arrows, Bolts, Bow Accessories, Bow Cases	TBD	TBD	
<b>Airsoft &amp; BB</b> – BB Guns, BB Gun Accessories, Airsoft Guns, Airsoft Guns Accessories, Paintball	TBD	TBD	

### *If I am a new supplier, what do I need to do to get my RFID tags approved?*

You will follow the Academy Sports process shown in this Playbook. If you have any questions, be sure to contact your Academy Sports + Outdoor Buyer or review the Vendor Portal - <https://vendor.academy.com>

## Tagging Requirements

- RFID inlay stickers should be placed on packaging only.
- RFID tags or inlays cannot cover any text or images.
- If an item is being stickered, the domicile with the country of origin should not be covered up - it needs to be visible to the customer. The supplier can print the country of origin on the RFID sticker if needed.
- No staples, perforations, swift tach, folding or die cuts through the inlay as it could impact the inlay performance and become unreadable.
- No RFID inlay placement on bottom of polybags, bottom of boxed items or near the under wire for bras, on glass, on liquids, on Silvadur, or near metal/foil
- RFID cannot be applied to an EAS tag.
- No metal foils, holograms or metallic inks should be used on any packaging containing the RFID inlay. If so, you MUST receive approval from Academy Sports + Outdoors directly.
- **Please make sure that there is only ONE RFID tag per product.**

## Determine Inlay Manufacturer & Packaging Resources

Suppliers may only select from the approved list provided on the [Auburn RFID ARC Website](#) from the appropriate Spec. Any inlay manufacturer not listed on the appropriate Spec cannot produce inlays for packaging being shipped to Academy Sports + Outdoor. The latest version of the ARC approved RFID inlay manufacturer contact information is available at <https://rfidlab.org/inlaycontacts/>

Please note: For suppliers already tagging products please send a sample of your tag to our RFID Project Team. We will test, validate, and send conclusions in a timely manner.

### **Academy Sports + Outdoors**

ATTN: Store Operations RFID Business Lead

1540 North Mason Road

Katy, Texas 77449



Avery Dennison and Artech are Academy's preferred source for RFID. They are the nominated sources for private branded apparel, accessories, and hosiery merchandise. Contact information listed below to purchase RFID trims.

**AVERY CONTACTS:**

**Apparel & Hosiery**

Global Initial Contact/Inquiry

Holly Chen

Customer Service Manager

Phone: +86-20-3233-5351

Email: [holly.chen@ap.averydennison.com](mailto:holly.chen@ap.averydennison.com)

John Marshall

Account Specialist

Phone: 469-507-1655

Email:

[john.marshall@averydennison.com](mailto:john.marshall@averydennison.com)

**ARTECH CONTACT:**

**Footwear**

Susan Lee

Customer Service Manager

Phone: +86-13-9229-13574

Email: [susan-lee@artechpms.com](mailto:susan-lee@artechpms.com)

## Identify Inlay Size *(all brands; mandatory)*

Based on the Academy Sports + Outdoors inlay spec, use the largest inlay size available that fits your packaging. If your packaging doesn't fit the smallest inlay size available within the approved Spec, add a generic embedded inlay hangtag or a separate paper-based sticker to your item.

**Preferred inlay sizes (+/- 2mm) in order of importance due to higher performance and range**

1. 70mm x 14mm
2. 70mm x 10mm
3. 50mm x 30mm
4. 44mm x 20mm

### Minimum Copy Requirements

- UPC # (no bars; human readable)
- EPC logo: Must adhere to GS1 Standards
- Prints: Black ink on 1 side of tag
- Additional information is allowed.

**Ensure your product still maintains a human readable UPC and scan-able barcode on each individual selling product.**

## Select what type of RFID application to use based on packaging type

The below guidelines are general in nature. Please consult the GS1 Apparel Placement Guideline manual (see last page of this document for [link](#)) for product specific placement and adhere to GS1 standards.

EXISTING PACKAGING TYPE	RFID APPLICATION
Primary Branded Hangtag	Embed inlay into hangtag
Size Strip	Add a joker ticket or embed inlay into primary hangtag; RFID <u>cannot</u> be placed within the size strip.
Joker Ticket/Sunglasses	Add a separate paper-based sticker or embed inlay into joker
Backer Card	Add a separate paper-based sticker
Bellyband	Add a separate paper-based sticker
Blisters/Clamshells	Add a separate paper-based sticker
Header Card	Add a separate paper-based sticker
Folding Carton	Add a separate paper-based sticker
Jewelry Carding/Box	Add a separate paper-based sticker/E-mail Auburn for further direction
Wallet/Belt/Watch	Add a separate paper-based sticker or attach hangtag directly to item
Polybag	TBD
Collar Card	Add a generic embedded inlay hangtag
Plastic Bottle	Add a separate paper-based sticker
Metal Can	E-mail <a href="mailto:rfidlab@auburn.edu">rfidlab@auburn.edu</a> for further direction

## Determine Placement of RFID tag

- Please consult with the GS1 tag placement guideline for product specific placement, and adhere to standards: <https://www.gs1us.org/content/dam/gs1us/documents/industries-insights/by-industry/apparel-general->

[merchandise/guideline-toolkit/Guideline-Format-And-Symbol-Placement-for-the-Electronic-Product-Code-EPC.pdf](https://merchandise/guideline-toolkit/Guideline-Format-And-Symbol-Placement-for-the-Electronic-Product-Code-EPC.pdf)

- You may also want to refer to the Auburn RFID Lab tag placement guideline for product specific placement at <https://rfid.auburn.edu/tagging-location-guide/>

## Review RFID Application Formats

### Embedded Hangtag

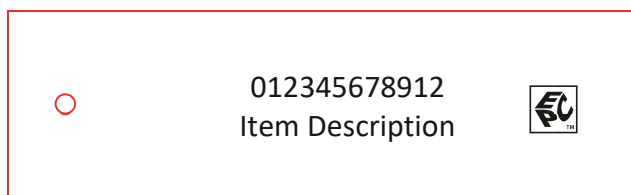
- Any changes to dielines or artwork will be managed through Academy Sport's U.S. Packaging Team & their nominated packaging resources.
- Must embed inlay into hangtag.
- All branded tags must have an RFID inlay in shipments arriving for Spring 2026

### Folded Programs Only with Size Strip

- Swift tack embedded inlay hangtag through the inside left neck/left waist seam. Swift tack length is ½ inch and the embedded hangtag will need to be tucked inside the shirt or pants. **This is an exception from the GS1 placement guidelines, for folded programs only.**
- If the item contains a joker ticket, embed inlay into the joker.

### Generic embedded Hangtag / Price Ticket

- If your packaging doesn't fit the smallest inlay size available within the approved Spec, add a generic embedded inlay hangtag or a separate paper-based sticker to your item.
- Minimum Requirements
  - UPC # (no bars; human readable)
  - EPC logo: Must adhere to GS1 Standards
  - Prints: Black ink on 1 side of tag



## Additional Design Requirements

- As a general guideline, use a 4mm gutter or greater around the embedded inlay.
- No metal foils, holograms or metallic inks should be used on any packaging containing the RFID inlay. If so, you MUST receive Auburn approval prior to bulk production of the printed packaging.**

### EPC Symbol

- The EPC logo example represents the bare minimum of information that should be shown on your packaging to identify RFID tagging.

- Any packaging that has an RFID tag must have the Electronic Product Code (EPC) symbol displayed on the packaging for the customer and retail associates to recognize.
- The EPC symbol should not be shown on any packaging that does not contain an RFID inlay. *The EPC logo is an industry standard to inform the customer and retail employee that the tag contains RFID. Having tags with an EPC logo and/or inlay but not properly encoded can cause major confusion within the process.*
- See this link for the EPC Symbol image file and related documentation: GS1 Guidelines  
<https://www.gs1.org/standards/epc-rfid/guidelines>

## Encoding & Serialization Requirements

- All tags are to be encoded appropriately per EPC Tag Data Standards (TDS), resulting in unique serialization for each item. The SGTIN-96 tag encoding standard maintained by GS1 is to be used. [GS1 - Developing an RFID Serialization Plan](#)
- Please keep in mind that each serial number must be unique to that item and can run a risk of having duplicate numbers if not managed appropriately.
- Tags must be permalocked to prevent tampering.
- All tags must undergo quality and data integrity checks prior to entering the Academy Sport's supply chain.

### UPC to EPC Conversion

- For information regarding the EPC data structure, please visit the GS1 website. The EPC data structure is an industry standard and is maintained by GS1.
- The EPC Encoder/Decoder Tool may be found here: <https://www.gs1us.org/tools/epc-encoder-decoder>.

## Supplier Accountability

- Product suppliers are required to have a process in place to ensure all tags leaving your facility are completely unique.
- Quality checking includes ensuring there are no duplicate serial numbers and that each tag is properly encoded for the item it is on
- Any errors arriving at the stores will be the responsibility of product suppliers and all costs incurred.

## RFID Use Case & Technology Options for Suppliers

Please refer to the following research papers published by Auburn University for potential uses of RFID in your own operations and supply chain.

<https://rfid.auburn.edu/papers/rfid-item-level-quantity-auditing-for-apparel-supplier-distribution-centers-12/>

#### **RFID Handheld Scanner**

- Scan, search, and locate items of a specific SKU.
- Allows you to inventory all the RFID tagged items in an area.
- Allows you to validate that the barcode and the encoding of the RFID tag matches.

#### **RFID Isolation Cage:**

- Enclosure used to isolate and contain the Radio waves from a RFID scanner.
- Allows you to isolate and scan only a specific set of RFID tagged items.

#### **RFID Tabletop Scanner:**

- Tabletop unit that can be used to read tags in a case or carton.
- Allows you to validate the contents of a carton or case.

#### **RFID Tunnels:**

- RFID systems are designed to drop into existing conveyor systems.
- Reads RFID tags in a case or carton.
- Allows you to validate that the RFID tagged items matches the case label.

## **Contacts & Helpful Links:**

### **Academy Sports + Outdoors**

**Vendor Portal:** <https://vendor.academy.com>

### **Auburn University RFID Lab**

**ARC Website:** <https://rfid.auburn.edu/arc/>

**ARC Specification List:** <https://rfid.auburn.edu/documents/>

**RFID Lab Tag Placement Guideline:** <https://rfid.auburn.edu/tagging-location-guide/>

**Auburn Research Papers:** <https://rfid.auburn.edu/research-papers-php/>

### **GS1 U.S.**

**6 - Steps to Getting Started with RFID:** [https://www.gs1us.org/upcs-barcodes-prefixes/additional-ways-to-identify-products/epc-rfid/6-steps-to-get-started-with-rfid?\\_gl=1\\*jt5q8x\\*\\_gcl\\_au\\*MTY3MDU3MzM1NC4xNzQwNjg4Njc5\\*\\_ga\\*MTIwNTE3NDMxMy4xNzQwNjg4Njgw\\*\\_ga\\_XFFEM4HHZZ\\*MTc0MTI5MDMyOC41LjEuMTc0MTI5MDQwOC41Ny4wLjA](https://www.gs1us.org/upcs-barcodes-prefixes/additional-ways-to-identify-products/epc-rfid/6-steps-to-get-started-with-rfid?_gl=1*jt5q8x*_gcl_au*MTY3MDU3MzM1NC4xNzQwNjg4Njc5*_ga*MTIwNTE3NDMxMy4xNzQwNjg4Njgw*_ga_XFFEM4HHZZ*MTc0MTI5MDMyOC41LjEuMTc0MTI5MDQwOC41Ny4wLjA)

**GS1 EPC/RFID Guidelines:** <https://www.gs1.org/standards/epc-rfid/guidelines>

**Tag Data Standards:** <https://www.gs1.org/standards/epc/tag-data-standard/1-9#:~:text=GS1's%20EPC%20Tag%20Data%20Standard,information%2C%20and%20tag%20manufacture%20in%20formation>

**Developing a RFID Serialization Plan:**

<https://documents.gs1us.org/adobe/assets/deliver/urn:aaid:aem:5f88064e-0dbb-495b-9f29-a9ce3758caed/Developing-an-RFID-Serialization-Plan.pdf>

**EPC Encoder & Decoder:** <https://www.gs1us.org/tools/epc-encoder-and-decoder>

**Apparel & General Merchandise Placement Guideline:**

<https://www.gs1us.org/content/dam/gs1us/documents/industries-insights/by-industry/apparel-general-merchandise/guideline-toolkit/Guideline-Format-And-Symbol-Placement-for-the-Electronic-Product-Code-EPC.pdf>

**Solution Partners:** <https://www.gs1us.org/industries/apparel-general-merchandise/implementationresources/who-can-help>