KOHL'S RFID PLAYBOOK

All Required Categories

The requirements in this version supersede all previous RFID playbooks.

Version 1.0
Revised April 16, 2026

General Overview

Industry Standards to Follow

- Kohl's is following all industry standards set forth by the GS1 EPC Tag Data Standard, Auburn RFID tag placement standard, GS1 tag placement standard, and Auburn University ARC inlay standard.
- All tagging requirements must meet these standards and should be validated through the Auburn RFID Lab ALEC Program prior to arriving in our stores.

In-Scope:

- All items within the following Kohl's Departments are required to have RFID tags, unless listed in the Out-of-Scope section of this playbook.
- All items in these departments are in scope for RFID with no minimum price. Kohl's will not decide or grant approval on tag spec and location. All items must be validated and approved by the Auburn RFID lab.
- **Deadline:** All **National Brand Apparel Product** arriving at stores must be RFID tagged by **April 01, 2027**.

Categories
National Brand Apparel

Out of Scope:

- All **Online Exclusive** items.
    - If the in-scope item is sold both in-store and on ecommerce, it must be RFID tagged.
- Items where RFID tags are not compatible with the product, as determined through the Auburn University RFID Lab ALEC Program.

Getting Started

- The following outlines a standard framework to integrate RFID into packaging. This includes major points that should be considered; However, every company must tailor these steps to fit the needs of their business and supply chains.
    - Develop an internal team.
    - Engage with your packaging provider, and if needed, also engage with an approved RFID Inlay Manufacturer.
    - Begin procurement discussions and provide forecasts to your packaging and RFID Inlay provider.
    - Begin data management and serialization discussions with your RFID packaging provider. Refer to the "RFID Encoding & Serialization Requirements" section for details.
    - Develop quality check process to ensure all items are tagged according to all requirements in this Playbook.
    - Identify ways that RFID can help improve your operations

Select RFID Inlay Spec

- Kohl's references a set of inlay specifications that are performance approved from the Auburn University RFID Lab. Refer to the chart below to see what spec has been assigned to each category. ***You can only use an approved inlay from an item's associated inlay list.***

Category	Buyer/Department	Inlay Spec	Approved Inlay List	Must Arrive by Date (MABD)
Apparel	All	R	https://rfidlab.org/arc/spec-r.php	April 01, 2027
Accessories	All	R	https://rfidlab.org/arc/spec-r.php	TBD
Footwear	All	R	https://rfidlab.org/arc/spec-r.php	TBD
Home	Candles & Fragrance (Glass/Ceramic)	C2	https://rfidlab.org/arc/spec-c2.php	TBD
Home	Personal Care - Grooming	Contact RFID Lab	https://rfidlab.org/aleccontactform/	TBD
Home	All Else	Y2	https://rfidlab.org/arc/spec-y2.php	TBD

Determine Inlay Manufacturer & Packaging Resources

- All product suppliers must use RFID inlays from ARC approved inlay manufacturers. The latest version of the ARC approved RFID inlay manufacturer contact information is available at https://rfidlab.org/inlaycontacts/.
- Any packaging resource can be used, so long as ARC approved inlays are sourced for your approved spec. A list of packaging resources is available at: https://rfidpackagingresources.org/rfid-packaging-providers/

Identify Inlay Size

- Use the largest RFID inlay size available that fits your packaging.
- If your packaging does not 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.
- For additional clarification, please contact the RFID lab at https://rfidlab.org/aleccontactform/ to discuss any additional options for your item.

Determine Placement of RFID tag

- Please consult the RFID tagging guidelines below for guidance on RFID tag placement:
  - Auburn RFID Tag Placement Guideline: https://rfid.auburn.edu/tagging-location-guide/
  - GS1 RFID Tag 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
- If your item is not represented in the RFID Tag Placement Guidelines, please contact the RFID lab at https://rfidlab.org/aleccontactform/.

Review RFID Application Formats

- Please consult the Kohl's packaging guideline for preferred application formats and packaging requirements.
- If the preferred tagging location in the RFID Tagging Guidelines does not align with the Kohl's packaging guidelines, please contact the RFID Lab at https://rfidlab.org/aleccontactform/.

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.
- There should be no staples, perforations, swift tach, folding or die cuts through the inlay, as inlay performance may be affected.
- RFID inlays should not be placed on the bottom of polybags, bottom of boxed items, near the under wire for bras, on liquids, on Silvadur, or near metal/foil, including metallic inks.
- RFID cannot be placed on top of an EAS tag. They can be used together but cannot overlap.
- RFID tags can be sewn into the physical item if the tag can be easily removed.
- For items that are typically stored in metal locked cases, the RFID tag should be on the side of the item that is most likely to be facing outwards.
- Please ensure there is only ONE RFID tag per product.

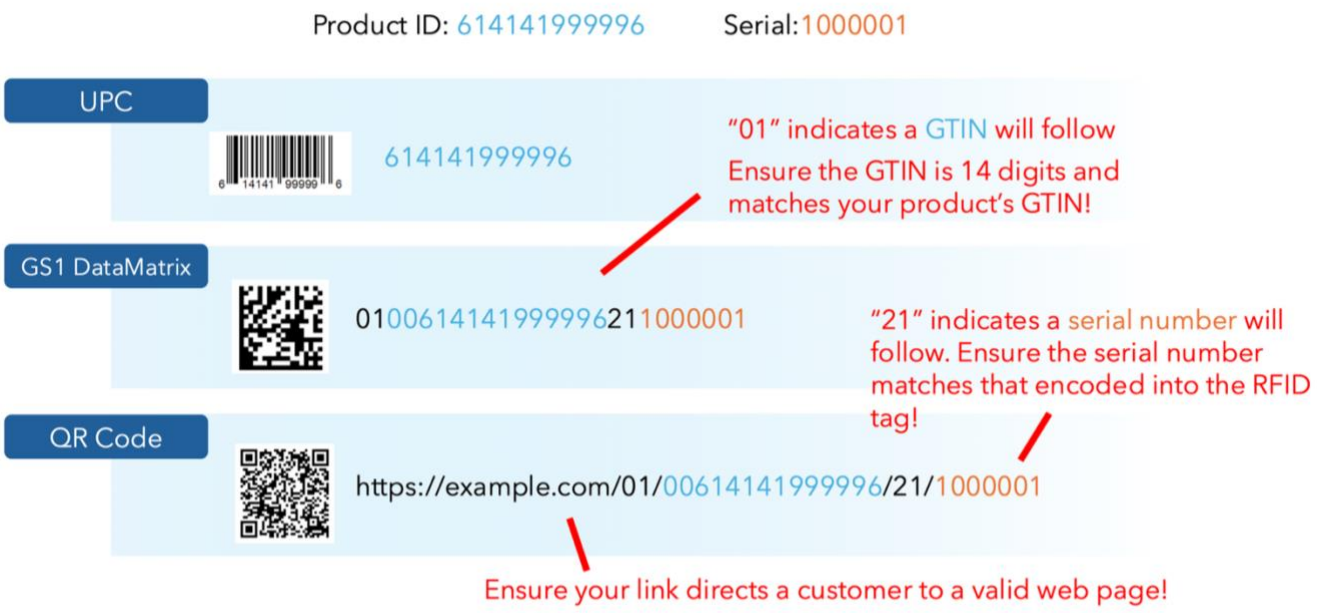
EPC Symbol

- Kohl's requires that the EPC Symbol be shown externally on your packaging to communicate to customers and store associates that your product is RFID tagged.

- The EPC symbol should not be shown on any packaging that does not contain an RFID inlay.
- See this link for the EPC Symbol image file and related documentation:
  - https://www.gs1.org/standards/epc-rfid/guidelines

2D Barcodes (Optional)

- In support of Sunrise 2027 and the migration to 2D barcodes to be used for point-of-sale transactions, Kohl's is encouraging the use of a **GS1 Data Matrix** or **GS1 Digital Link Enabled QR Code**.
- The 2D barcode enables the **use of the GTIN** *and* **Serial Number** as the product identifier in both the RFID tag and 2D barcode. 2D barcodes allow retailers to leverage serialized data at the point-of-sale, enabling instance level tracking at checkout.
- Please see examples below as well as the reference material for further information.



For detailed guidance on 2D barcode implementation, see section 5 in the implementation guideline below:
2D Barcodes at Retail Point of Sale Implementation Guideline

For more information on 2D barcodes and the Sunrise 2027 initiative, please visit:
https://www.gs1us.org/industries-and-insights/by-topic/sunrise-2027

RFID Encoding & Serialization Requirements

- All inlays must be encoded per the EPC Tag Data Standards (TDS), resulting in unique serialization for each item. The SGTIN-96 tag encoding standard maintained by GS1 must be used.

- Each RFID inlay must be uniquely serialized. Please ensure unique serialization is managed when using multiple packaging providers for the same UPC. Learn more about serialization below:
    - https://documents.gs1us.org/adobe/assets/deliver/urn:aaid:aem:5f88064e-0dbb-495b-9f29-a9ce3758caed/Developing-an-RFID-Serialization-Plan.pdf
- Tags must be permalocked to prevent tampering.
- All tags must undergo quality and data integrity checks prior to entering the Kohl's supply chain.

ALEC - Approval of Production RFID Packaging Samples

- Auburn University RFID Lab's ALEC program helps Product Suppliers ensure their RFID tagged items meet all industry requirements. Before any shipment of RFID-tagged goods can begin, you must receive RFID Lab approval.
- Refer to the ALEC website for questions and submission instructions:
    - https://rfid.auburn.edu/alec/alec-validation.php

ALEC Submission Process

- ALEC submission form: https://rfidlab.org/alec-submissionform/
- Submit one representative UPC per Submission Form
  - 5 RFID tag samples are required only for the representative UPC
- Like-items to the representative UPC should be included in the submission item file, and must share the same:
  - Brand, packaging type, packaging provider, RFID inlay model, and tagging location
- Print the confirmation of your submission form after submitting and include it with your shipment of RFID tag samples.
- Actual product or packaging will only need to be sent when specifically requested by the RFID Lab. Any product sent to the RFID Lab will NOT be returned to the product supplier.

ALEC – Updating Previously Approved Submissions

- To add Kohl's to an existing submission for another retailer, change inlay models, change packaging providers, change tagging locations, or add additional UPCs to a submission, complete the Submission Update Form: https://rfidlab.org/submissionupdate/
- All submission updates should only reflect items that meet the same criteria as the representative UPC of the submission, including:
  - Product supplier, brand, packaging type, packaging provider, RFID inlay model, tagging location

Supplier Accountability

- Product suppliers should ensure all items delivered to Kohl's have an ARC approved RFID tag.
- Product suppliers should ensure no duplicate serial numbers are used, and that each tag is properly encoded with the correct GTIN for the item it is on.
- Product suppliers will be responsible for all costs incurred for any RFID errors at store level.

Acronym Summary

Acronym	Meaning
ALEC	Auburn Lab EPC Compliance
ARC	Arkansas (Auburn) Radio Compliance
EAS	Electronic Article surveillance
EPC	Electronic Product Code
GS1	Global Standards Organization
RFID	Radio Frequency Identification
SGTIN	Serialized Global Trade Item Number
SKU	Stock Keeping Unit
TDS	Tag Data Standards
UPC	Universal Product Code

Contacts

Auburn University RFID Lab

General Questions: https://rfidlab.org/aleccontactform/

ALEC RFID Submission Form: https://rfidlab.org/alec-submissionform/

ALEC Submission Update Form: https://rfidlab.org/submissionupdate/

RFID Lab Website: https://rfid.auburn.edu/

Source Tagging Workshop: https://rfid.auburn.edu/webinar-videos.php

GS1 U.S.

Website: www.gs1us.org

Supplier-oriented introduction to RFID: https://site.gs1us.org/RFID-success.html

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

Tag Data Standard: https://www.gs1.org/standards/tds