RFID PLAYBOOK

DICK'S Sporting Goods

General Overview

What industry standards to follow?

DICK'S Sporting Goods is following all industry standards set forth by the GS1 EPC Tag Data Standard, GS1 tag placement standard, and Auburn University ARC inlay standard. All tagging requirements must meet these standards prior to arriving in our stores.

In Scope:

All brands that are being shipped into and sold at any of our stores. This includes all national and vertical brands.

Division	Department	Receipt Date
1 – Golf Equipment	All	TBD
2 - Lodge Hunting	240 - Hunting Clothing	January 1, 2024
2 - Lodge Hunting	All other Departments	TBD
3 - Outdoor Equipment	All	TBD
4 - Sports	All	TBD
5 – Footwear Athletic	All	January 1, 2024
6 – Outdoor Footwear	All	January 1, 2024
7 – Apparel Athletic	All	January 1, 2024
8 – Outdoor Apparel	All	January 1, 2024
9 – Golf apparel	All	January 1, 2024
10 - Licensed	Apparel, Footwear, and Headwear	January 1, 2024
10 - Licensed	Hardgoods and All Other Departments	TBD
11 - Fitness	All	TBD
13 – Accessories	310 - Sunglasses	January 1, 2024
13 – Accessories	311 - Genaccess Outdoor Equipment	TBD
13 – Accessories	312 - Genaccess Footwear	January 1, 2024
13 – Accessories	313- Seasonal	January 1, 2024
13 – Accessories	590 - Socks	January 1, 2024
13 – Accessories	591 - Bags	January 1, 2024
13 – Accessories	595 - Electronics	TBD
14 – Fishing	All	TBD
15 – Licensed Special Events	All	TBD

- All Basic/Replenishable SKU's
- All Omni Channel and Dot com items (Sold In-Stores and/or online)

Out of Scope:

- VDC (Vendor Direct to Consumer) only items
- Division 10, Department Championship

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 these steps to fit the needs of their business and supply chains.

- Develop an internal team
- Engage with an approved Inlay Manufacturer and determine if you will also need to engage with your Packaging Provider
- Begin procurement discussions
- Begin data management/serialization discussions
- Develop quality check process

Determine Inlay Manufacturer

Suppliers may only select from the approved list provided on the Auburn University RFID Lab's Website from the appropriate Spec. Any inlay manufacturer not listed on the appropriate Spec cannot produce inlays for packaging being shipped to DICK'S sporting Goods. Even if using an approved inlay provider, you must still submit the final production samples to the Auburn University RFID Lab for approval.

Determine Packaging Resource, RFID Service Bureau

National Brands

National brands can utilize their own RFID packaging resource to develop and print their RFID inlays but must adhere to the GS1 standards and ARC standards and obtain approvals from the Auburn University RFID Lab.

Vertical Brands

Product suppliers will continue to use the same nominated packaging providers. The only change is you will now incorporate RFID inlays into those branded or generic packaging types. Please contact Wendy Pun – Assistant Merch Manager, DSG Hong Kong Global Office (Wendy.Pun@dcsg.com) for any questions on nominated packaging providers for vertical brands.

You must adhere to the GS1 standards and ARC standards and obtain approvals from the Auburn University RFID Lab.

Select RFID Inlay Spec

DICK'S Sporting Goods has 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.**

Division	Department	ARC Spec	Approved Inlay List
1 – Golf Equipment	All	TBD	TBD
2 - Lodge Hunting	240 - Hunting Clothing	R	https://rfidlab.org/arc/spec-r.php
2 - Lodge Hunting	All other Departments	TBD	TBD
3 - Outdoor Equipment	All	TBD	TBD
4 - Sports	All	TBD	TBD
5 – Footwear Athletic	All	R	https://rfidlab.org/arc/spec-r.php
6 – Outdoor Footwear	All	R	https://rfidlab.org/arc/spec-r.php
7 – Apparel Athletic	All	R	https://rfidlab.org/arc/spec-r.php
8 – Outdoor Apparel	All	R	https://rfidlab.org/arc/spec-r.php
9 – Golf apparel	All	R	https://rfidlab.org/arc/spec-r.php
10 - Licensed	Apparel, Footwear, and Headwear	R	https://rfidlab.org/arc/spec-r.php
10 - Licensed	Hardgoods and All Other Departments	TBD	TBD
11 - Fitness	All	TBD	TBD
13 – Accessories	310 - Sunglasses	W5	https://rfidlab.org/arc/spec-w5.php
13 – Accessories	311 - Genaccess Outdoor Equipment	TBD	TBD
13 – Accessories	312 - Genaccess Footwear	R	https://rfidlab.org/arc/spec-r.php
13 – Accessories	313- Seasonal	R	https://rfidlab.org/arc/spec-r.php
13 – Accessories	590 - Socks	W2	https://rfidlab.org/arc/spec-w2.php

13 – Accessories	591 - Bags	R	https://rfidlab.org/arc/spec-r.php
13 – Accessories	595 - Electronics	TBD	TBD
14 – Fishing	All	TBD	TBD
15 – Licensed Special Events	All	TBD	TBD

Companies that can provide RFID Lab ARC approved RFID Inlays

The latest version of the ARC approved RFID inlay manufacturer contact information is available at https://rfid.auburn.edu/inlaycontacts/

Company	Contact Information
Avery Dennison Smartrac	avery.dennison.rbis.rfid@averydennison.com rfidinlays@averydennison.com
Checkpoint	rfidinfo@checkpt.com
Hana RFID	info@hanarfid.com
Paragon ID	retailRFID@paragon-id.com
SML	smlrfid@sml.com
Tageos	Contact@tageos.com
Arizon	Business@Arizonrfid.com
Beontag	arc@beontag.com

Companies that can provide RFID Packaging (National Brands only)

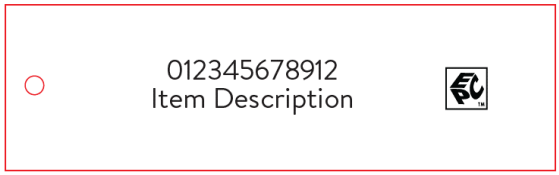
A list of RFID packaging resources is available at https://rfidpackagingresources.org/. This is NOT an endorsement. These are packaging providers that have supplied packaging for other RFID Programs and could help with your RFID packaging needs as well.

Suppliers and brand owners can also utilize other RFID packaging providers that are not listed. All packaging providers will need to source an Auburn university ARC approved inlay.

Identify Inlay Size

Based on the 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.

Generic Embedded Hangtag Format or Insert



Hangtag dimensions: 83mm x 25mm

Specifications:

- Embed inlay between C2S paper stock
- Material: ~14pt. C2S (minimum; glossy both sides)
- Font: 12pt. Bogle Regular (centered vertically & horizontally from left side of logo to right side of swift tack hole)
- EPC logo: Centered vertically and placed as shown
- Prints: Black ink on one side of tag
- 4 mm gutter or greater around the embedded inlay

Minimum Copy Requirements:

- UPC # (no bars; human readable)
- EPC Logo
- Prints: Black ink on one side of tag
- Additional information is allowed

Determine placement of RFID tag

Please consult the GS1 Apparel Placement Guideline manual for product specific placement.
https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=429&language=en-US&PortalId=0&TabId=134

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 will make the inlay unreadable.
- No RFID inlay placement on bottom of polybags, bottom of boxed items, on glass, on liquids, on Silvadur, or near metal/foil.

- RFID cannot be applied to an EAS tag.
- RFID tags can be sewn into the physical item as long as the tag can be easily removed.
- If the product comes in multiple cases (example, furniture set where the table is boxed separately from the chairs), ensure that there is only one tag on one of the cases. Please contact Auburn RFID Lab to determine the case to be tagged.
- Please make sure that that there is only ONE RFID tag per product.
- As a general guideline, use a 4 mm 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 the RFID Lab 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 store 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 store 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: https://www.gs1.org/standards/epc-rfid/guidelines

RFID 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.

- 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 properly throughout the development process. Please ensure unique serialization is managed when using multiple packaging providers for the same SKU. See the link below for more information.
- https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?EntryId=1946
- Tags must be permalocked to prevent tampering.
- All tags must undergo quality and data integrity checks prior to entering the DICK'S Sporting Goods supply chain.

UPC to EPC Conversion

- The EPC data structure is an industry standard and is maintained by GS1. For information regarding the EPC data structure, please visit the GS1 website. A helpful video may be found here: https://site.gs1us.org/RFID-success.html
- The EPC Encoder/Decoder Tool may be found here: https://www.gs1.org/services/epc-encoderdecoder

ALEC - Approval of Production RFID Packaging Samples

RFID Lab approval is mandatory before any shipment of goods can begin from any agency you receive packaging from.

Send Five (5) EPC tag samples only (no product or packaging) to the RFID Lab for ALEC validation prior to bulk production. These may be branded hangtags, generic hangtags, or stickers.

- Submit one UPC per Submission Form.
- Not all UPCs supplied by a supplier requires a validation. Select one representative UPC (SKU) per
    - Product supplier
    - Brand
    - Packaging type
    - Packaging agency
    - RFID Inlay model
    - Tagging location.

    Send 5 inlay samples of the one representative UPC.
- RFID Tags MUST be production quality.
- Please complete and submit the online submission form at https://rfidlab.org/DicksSportingGoods/ Print the PDF confirmation and include it along with the samples.
- The RFID Lab's shipping information is available in the online submission form.
- Testing will not begin until the printed confirmation form has arrived at the lab.
- Actual product or packaging will only need to be sent when specifically requested by the RFID Lab. Please note: Any product sent to the RFID Lab will NOT be returned to the product supplier.
- Product Suppliers are responsible for submitting their own samples to the RFID Lab. Packaging resources CANNOT submit samples on behalf the Product Suppliers to the RFID Lab.
- Product Suppliers who decide to switch inlay models and/or inlay providers and/or Service Bureau AFTER receiving validation from the RFID Lab, will need to re-submit tag samples again for validation.
- Product Suppliers who decide to change/add new packaging with materials that may interfere with readability, will need to re-submit tag samples again for validation.
- Once you receive an email approval from the RFID Lab, no further action is needed, and you are approved to move into bulk ordering and production.

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 operations and supply chain.

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

RFID Shipper Case Markings

In order for the stores and DCs to easily identify on cases which items have packaging with RFID labels, we are updating the Shipper Case Markings to include the words RFID.

Case marking are required to be printed directly on the corrugated shipper; labels can be used at Suppliers discretion.

Carton or carton labels do not carry any RFID inlays. Only the selling unit packaging carries the RFID inlay.

The RFID marking is in addition to all other case markings and should not interfere with any other printed case markings, case labels, federal and state laws, or any other compliance related markings.

If the product inside the case is not RFID labeled, do NOT use the updated RFID marking.

Contacts

DICK'S Sporting Goods Corporate

General questions RFIDDSG@dcsg.com

Website dsgfreight.com

Vendor relations

General questions VendorRelationsComplianceTeam@dcsg.com

Website dsgfreight.com

Vertical Brand Packaging

General questions pdsystemssupport@dcsg.com

Auburn University RFID Lab

General Questions alec@rfidlab.org

ALEC RFID tag samples validation submission form https://rfidlab.org/DicksSportingGoods/

Lab tours and business case rfidlab@auburn.edu

ARC Website https://rfidlab.org/arc/

GS1 US

Standards or Encoding Questions: dcsg.rfid@gs1us.org

Website: www.gs1us.org

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

Serialization Guide https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?EntryId=1946

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