WALMART RFID PLAYBOOK

General Merchandise

For Walmart U.S. Stores

The requirements in this version supersede all previous playbooks.

Version 4.2
Revised October 28, 2024

General Overview

What Industry Standards to Follow?

Walmart is following all industry standards set forth by the GS1 EPC Tag Data Standard, and Auburn University RFID Lab ARC inlay standard. All tagging requirements must meet these standards prior to arriving in our stores.

Departments are already in scope:

All items within the following Walmart Home, ETS, and Hardline 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. Walmart will not decide or grant approval on tag spec and location. All items must be validated and approved by Auburn RFID lab.

Home Departments:

D14 - Kitchen
D17 – Home Decor
D20 – Bath and Shower
D22 – Bedding
D71 – Furniture
D74 – Home Management

ETS Departments:

D5 – Media & Gaming
D6 – Cameras & Supplies
D7 - Toys
D21 - Books
D72 - Electronics
D87 - Wireless

Hardline Departments:

D3 - Stationary
D9 – Sporting Goods
D10 - Automotive
D11 – Hardware
D12 – Paint
D16 – Lawn & Garden
D19 - Crafts

Apparel

The scope of this playbook is only the General Merchandise categories. Please refer to the Apparel RFID Playbook available in Retail link for information related to RFID tagging of Apparel items. https://supplieracademy.wal-mart.com/mod/wiki/view.php?id=647

Out of Scope:

- DSV (Direct Ship Vendors), Pay from scan items, 3rd Party WFS

- D18 Seasonal (e.g. holiday décor)

- D56 Horticulture,

- D67 Celebration (e.g., holiday décor, greeting cards)

- Items where RFID tags are not compatible with the product, as identified through the Auburn University RFID Lab.

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.

- Identify the ways that RFID can help improve your operations. Refer to the "RFID Use Cases for Suppliers" section for details
- Develop an internal team
- Engage with your packaging provider and if needed you will also need to 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

Select RFID Inlay Spec

Walmart has a set of ARC inlay specifications that are performance approved from the Auburn University RFID Lab. The Auburn University ARC standard ensures RFID tags meet or exceed the levels of performance and quality necessary to provide benefit in a consistent and cost-effective manner.

Refer to the chart at https://rfid.auburn.edu/walmartspec/ to see what spec has been assigned to each category. You can only use an approved inlay from an item's associated inlay list.

Any General Merchandise item tagged with a previously approved inlay spec (W1, W3, W4, Y) will need to transition to a Spec Y2 inlay and no later than August 1, 2025 MABD (must arrive by date).

Note: Suppliers can, and should, begin using Spec Y2 inlays at once – no need to wait until this date if the transition can happen sooner.

Home

Department	Subcategory	Inlay Spec	Approved Inlay List	MABD for Transitioning to the updated ARC Specs
D14 – Kitchen	Backer Card	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D14 – Kitchen	Cookware, Toasters, Small Appliances, Soda Makers, Bakeware, Coffee makers – Boxed	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D14 – Kitchen	Food Prep, Gadgets, Drinkware, Serve Ware – Boxed	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D14 – Kitchen	Header Card	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D14 – Kitchen	Other	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D17 – Home Decor	Boxed Blinds, Boxed Clocks	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D17 – Home Decor	Decoration, Picture Frame, Mirrors	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D17 – Home Decor	Decorative Pillows, Back rest	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D17 – Home Decor	Candles – Ceramic/Glass	C2	https://rfidlab.org/arc/spec-c2.php	January 6, 2025
D17 – Home Decor	Candles, Wax Melts – Plastic Packaged	Y2	https://rfidlab.org/arc/spec-y2.php	January 6, 2025
D17 – Home Decor	Fragrance, Scents	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D17 – Home Decor	Lamps – Boxed or Hangtag	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D17 – Home Decor	Non-Boxed Blinds, Non-Boxed Clocks	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D17 – Home Decor	Rugs – C Cards	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D17 – Home Decor	Rugs – Other	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D17 – Home Decor	Vases, Candle Holder	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D17 – Home Decor	Others	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025

D20 – Bath and Shower	Hardlines – Boxed	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D20 – Bath and Shower	Hardlines – Header Card	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D20 – Bath and Shower	Hardlines – Backer Card	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D20 – Bath and Shower	Hardlines	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D20 – Bath and Shower	Softlines – Bath Rugs, Bathmats, Outdoor blankets	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D20 – Bath and Shower	Softlines – Toilet Lid Cover	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D20 – Bath and Shower	Others	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D22 – Bedding	Adhesive labels	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D22 – Bedding	Airbeds	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D22 – Bedding	Bedding Sets, Sheet Set	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D22 – Bedding	Boxed Pillows	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D22 – Bedding	Boxed Mattress Topper, Boxed Mattress/Pillow Protector, Boxed Pillowcase	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D22 – Bedding	Boxed Blankets	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D22 – Bedding	Mattress Pad	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D22 – Bedding	Non-Boxed Pillows	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D22 – Bedding	Polybag Mattress Topper, Polybag Mattress/Pillow Protector, Polybag Pillowcase	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D22 – Bedding	Shams, Quilts, Throws, Blankets – Hangtag only	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D22 – Bedding	Sheet Grippers	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D22 – Bedding	Others	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D71- Furniture	Boxed items	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D71- Furniture	Hang Tag	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D71- Furniture	Belly Band	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025

D71- Furniture	Adhesive Label directly on product	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D71- Furniture	Polybag with cardstock insert	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D71- Furniture	Others	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D74 – Home Management	Carpet cleaner	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D74 – Home Management	Hangers – Belly Band	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D74 – Home Management	Hangers – Boxed	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D74 – Home Management	Ironing board	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D74 – Home Management	Irons, Steamers, Steam Mop, Shoe Racks	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D74 – Home Management	Laundry Baskets, Organizers, Storage, Trash Cans	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D74 – Home Management	Luggage	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D74 – Home Management	Vacuum Cleaners	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D74 – Home Management	Vacuum Bags	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D74 – Home Management	Other	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025

ETS

Department	Subcategory	Inlay Spec	Approved Inlay List	MABD for Transitioning to the updated ARC Specs
D05 – Media & Gaming	DVDs	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D05 – Media & Gaming	Music Hardware	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D05 – Media & Gaming	Video Game Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D05 – Media & Gaming	Video Game Hardware	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025

D05 – Media & Gaming	Video & Computer Game Software	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D05 – Media & Gaming	Video Game Interactive	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D05 – Media & Gaming	Other	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D06 – Cameras & Supplies	Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D06 – Cameras & Supplies	Cameras, Drones, Action Cameras, Pegged Cameras	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D06 – Cameras & Supplies	Instant Cameras & Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D06 – Cameras & Supplies	Mobile Photography	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D06 – Cameras & Supplies	Photo Memory & Frames	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D06 – Cameras & Supplies	Other	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D7 – Toys	Adhesive Labels	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Backer Card – Toys	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Bicycles	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Bike Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Boxed – Toys	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Hangtag – Toys	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Header Card – Toys	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Helmets	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Play Ball	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Polybag – Toys	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Playdoh	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Pool/Beach Toys	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Pools	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Ride on Batteries	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D7 – Toys	Ride-ons	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D7 – Toys	Other	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025

D21 – Books	Adult & Children's Books	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D72 – Electronics	Audio Hardware	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Av Accessories & Blu Ray	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Blank Media	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Computer Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Computers	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Connected Electronics	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Cut The Cable	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Digital Storage	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Headphones	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Ink	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Laptops	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Led Light	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Networking & Connectivity	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	PC Software	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Printers	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Sound Bars	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Speakers	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Tablets	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Telephones	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025

D72 – Electronics	TV Wall Mounts	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	TV	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D72 – Electronics	Other	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D87 – Wireless Devices	Phones	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D87 – Wireless Devices	Power & Connectivity	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D87 – Wireless Devices	Prepaid Cards	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D87 – Wireless Devices	Tablet Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D87 – Wireless Devices	Wearables	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D87 – Wireless Devices	Wearables Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D87 – Wireless Devices	Wireless Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D87 – Wireless Devices	Other	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025

Hardlines

Department	Subcategory	Inlay Spec	Approved Inlay List	MABD for Transitioning to the updated ARC Specs
D03 – Stationery	Activities Supplies	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D03 – Stationery	Office Supplies	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D03 – Stationery	School Supplies	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D03 – Stationery	Envelopes Mailers	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D03 – Stationery	Flags	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D03 – Stationery	Notetaking	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025

D03 – Stationery	Binders	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D03 – Stationery	Journals	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D03 – Stationery	Other	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D9 – Sporting Goods	Adhesive Labels	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D9 – Sporting Goods	Apparel – All Packaging Types	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D9 – Sporting Goods	Backer Card	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D9 – Sporting Goods	Backpacks – All Packaging Types	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D9 – Sporting Goods	Boxed	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D9 – Sporting Goods	Clam Shell	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D9 – Sporting Goods	Footwear – All Packaging Types	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D9 – Sporting Goods	Hangtag	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D9 – Sporting Goods	Header Card	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D9 – Sporting Goods	Polybag	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D9 – Sporting Goods	Terminal Tackle	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D9 – Sporting Goods	Others	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D10 – Automotive	Tires	T	https://rfidlab.org/arc/spec-t.php	August 1, 2025
D10 – Automotive	Car and Truck Batteries	P	https://rfidlab.org/arc/spec-p.php	August 1, 2025
D10 – Automotive	Auto Electrical	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D10 – Automotive	Auto Car Care Wipers and Maintenance	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D10 – Automotive	Auto Chemicals	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025

D10 – Automotive	Auto Equipment	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D10 – Automotive	Auto Motor Oil	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D10 – Automotive	Filters	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D10 – Automotive	Auto Seasonal RV Towing	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D10 – Automotive	Auto Accessories Safety	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D10 – Automotive	Power and Cleaning	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D10 – Automotive	Other	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D11 – Hardware	Air & Water	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D11 – Hardware	Cooling & Heating	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D11 – Hardware	DIY Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D11 – Hardware	Fans & Winter	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D11 – Hardware	Flooring & Industrial	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D11 – Hardware	Home Hardware	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D11 – Hardware	Lighting	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D11 – Hardware	Fasteners	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D11 – Hardware	Plumbing & Electrical	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D11 – Hardware	Tools	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D11 – Hardware	Power & Cleaning	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D11 – Hardware	Other	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D12 – Paint	Adhesives DIY	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D12 – Paint	Bathroom Remodel	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025

D12 –Paint	Casters Sliders	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D12 –Paint	Floorcare	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D12 –Paint	Caulking	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D12 –Paint	Paints, Stains, Primers & Protectants	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D12 –Paint	Fashion Plumbing	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D12 –Paint	Flooring	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D12 –Paint	Home Hardware &Hardware Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D12 –Paint	Tapes	R	https://rfidlab.org/arc/spec-r.php	August 1, 2025
D12 –Paint	Ladders	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D12 –Paint	Paint Applicators	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D12 –Paint	Spray Paint	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D12 –Paint	Sundries	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D12 –Paint	Other	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Grill Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Grill Fuel	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Landscaping	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Watering and Gardening Tools	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Lawn & Garden Chemicals	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Outdoor Cooking	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Outdoor Power Equipment	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Patio Décor & Storage	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Patio Furniture	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Bird Feeders	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Planters	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025

D16 – Lawn & Garden	Pool & Salt	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D16 – Lawn & Garden	Other	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D19 – Art and Adult Craft	Paper	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D19 – Art and Adult Craft	Canvas	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D19 – Art and Adult Craft	Photo Albums	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D19 – Art and Adult Craft	Glue Guns	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D19 – Art and Adult Craft	Adhesives	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D19 – Art and Adult Craft	Art Brushes	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D19 – Art and Adult Craft	Art Paint	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D19 – Art and Adult Craft	Celebration Sets	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D19 – Art and Adult Craft	Other	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D19 – Fabric and Sewing	Fabric Coloring	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D19 – Fabric and Sewing	Fabric – Cut	R	https://rfidlab.org/arc/spec-r.php	August 1, 2025
D19 – Fabric and Sewing	Fabric – Uncut	Contact RFID Lab	https://rfidlab.org/aleccontactform/	August 1, 2025
D19 – Fabric and Sewing	Notions	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D19 – Fabric and Sewing	Notion Tools	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D19 – Fabric and Sewing	Ribbon	R	https://rfidlab.org/arc/spec-r.php	August 1, 2025
D19 – Fabric and Sewing	Ribbon Accessories	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D19 – Fabric and Sewing	Sewing Machine and Sewing Machines Accessories	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025

D19 – Fabric and Sewing	Sewing Accessories	O	https://rfidlab.org/arc/spec-o.php	August 1, 2025
D19 – Fabric and Sewing	Others	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025
D19 – Floral	Artificial Plants	Y2	https://rfidlab.org/arc/spec-y2.php	August 1, 2025

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 Walmart. Even if using an approved inlay provider, you must still submit the final production samples to the Auburn University RFID Lab for approval.

The latest version of the ARC approved RFID inlay manufacturer and contact information is available at https://rfidlab.org/inlaycontacts/

RFID Inlay Providers	Contact Information
Arizon	business@arizonrfid.com
Avery Dennison / Smartrac	https://avydn.co/AD-RFID
Checkpoint	https://walmartrfid.checkpointsystems.com
Hana	info@hanarfid.com
LabID - Beontag	arc@beontag.com
Paragon ID	retailrfid@paragon-id.com
r-pac*	wmtrfid@r-pac.com
SML	smlrfid@sml.com
Tageos	Contact@tageos.com

*Designated printer for Pioneer Women and onn. Other Brands can utilize their own RFID packaging resource, but the label provider or packaging resource will need to source an Auburn University ARC approved inlay.

Determine Packaging Resource, RFID Encoder/Service Bureau

Suppliers 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. Some private brand programs may have designated printers in place, please refer to the Walmart contract for questions.

A list of RFID packaging resources is available at https://rfidpackagingresources.org/ These are packaging providers that have supplied packaging for the Walmart RFID Program. This is NOT an endorsement or list of nominated suppliers.

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

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 Auburn University RFID Lab Tag Placement Guideline for product specific placement at https://rfid.auburn.edu/tagging-location-guide/.

If your item is not represented in the Auburn University RFID Lab Tag Placement Guideline, Please contact the RFID lab at https://rfidlab.org/aleccontactform/.

Review RFID Application Formats

Please consult the Auburn University RFID Lab Tag Placement Guideline for all available application formats. Please contact the RFID lab at https://rfidlab.org/aleccontactform/ for any questions.

Branded Embedded Hangtag (Private Brands Only)
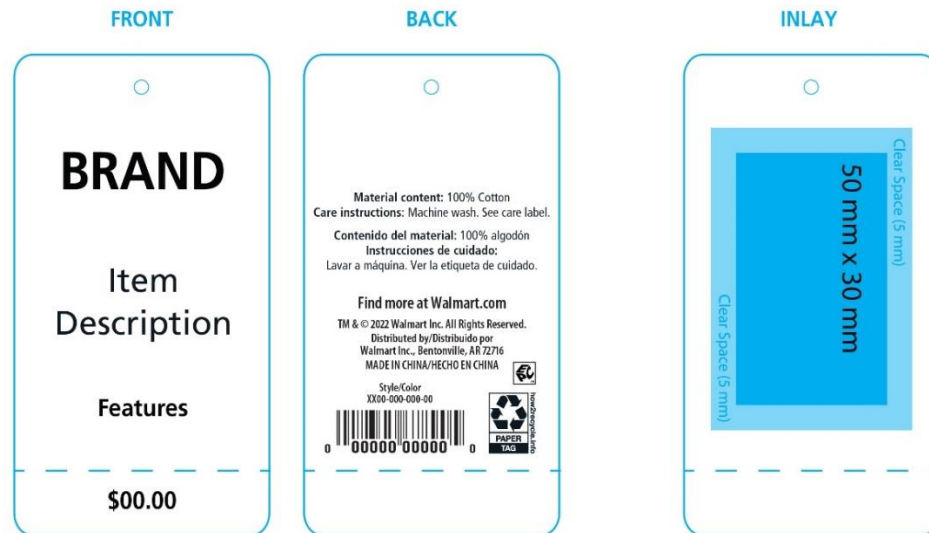
- Any changes to die lines or artwork will be managed through Walmart U.S. Packaging Team
- Inlays must be embedded into branded hangtag
- 4 mm gutter or greater around the embedded inlay

Generic Embedded Hangtag Format or Insert
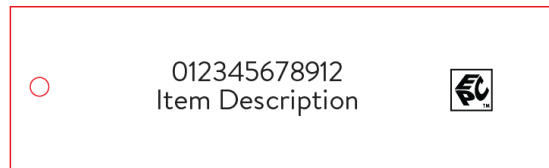
Hangtag dimensions: 83mm x 25mm

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

License Hangtags (All Brands)
- May use RFID embedded Walmart generic price ticket

Generic Embedded Sticker WITH Scannable UPC Code

- If you DO NOT already have a scannable UPC barcode already shown on pack, Walmart prefers to use an EPC combo sticker as shown below. Please make sure that the UPC barcodes cannot be placed in the front of packaging.
- The example below is from an apparel item. Please include all the data fields as applicable to your item.
- Example: For a GM item you may not have size or color. Leave this off your finished RFID tag.
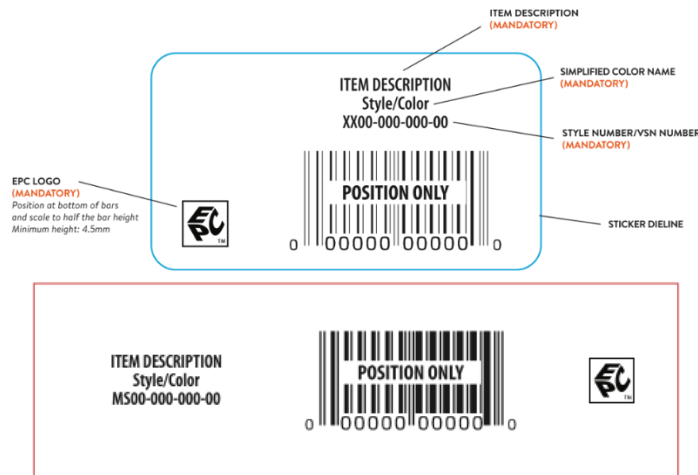
MINIMUM REQUIREMENTS

- Barcode/UPC #
- EPC Logo
- Item Description (picked up from other primary packaging)
- Additional information is allowed
- 4 mm gutter or greater around the embedded inlay

Tire Labels

The RFID tags for tires should have a scannable SGTIN UCC 128 barcode.

Tv's & Computer Monitors

The RFID tag for tv's & computer monitors should be placed on the top or underside of the top flap of the box. This will prevent the RFID tag from contacting the metal shelves when this item is merchandised in store.

RFID tag on top of box

Laptops

The RFID tag and EPC logo for laptops should be placed on the side of the box that contains the product information label. This side of the box will most likely be facing outwards when these items are merchandised in store and will prevent the RFID tag from contacting the metal shelves.

RFID tag on this side of box

Private Brands Only

Tag options for plastic packaging are:

- If the packaging contains both paper and plastic, suppliers must place the RFID tag on the paper instead of plastic

- If plastic is the only packaging for the product, suppliers must choose one of the following options:

  1. Place the RFID tag loosely inside the packaging. Ensure that the tag won't reach the bottom of the package during transportation/handling and touch the metal shelves

  2. A hangtag attached to the packaging or product

Please contact RFIDpackagingUpdates@walmart.com for any questions.

Tagging Requirements

- Please make sure that that there is only ONE RFID tag per product

- RFID tags must be removable by the customer. If sewn in, they must be removable.

- RFID tags can be placed inside the packaging as long as the EPC symbol is placed outside.

- RFID tags cannot be integrated into product.

- 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.

- The RFID tag should not fall off from product easily.

- No staples, perforations, swift tachs, folding or die cuts through the inlay as it will make the inlay unreadable.

- When choosing the tagging location, RFID readability should be considered while product is in salesfloor, backroom, and case pack. For example, the RFID tag cannot be placed on bottom of product since the tag will most likely be in direct contact with metal.

- RFID tags can be used in parallel with EAS tags but **CANNOT** be used on top of each other.

- If the product could be merchandised without the packaging, the RFID tag should be attached to the product. For example, Bikes, Grills, Furniture.

- 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.

- 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.

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

- The performance of the RFID inlays could be affected by metals, foils, liquids, and glass. Special consideration must be taken when choosing tagging format and location for such products. Please contact the RFID lab at https://rfidlab.org/aleccontactform/.

- For Electronic items that are typically stored in lock cases, the RFID tag should be on the side of the item that contains all the product information. This is the side that will be facing out in a locked cage, and will also be facing up, if stacked on a metal shelf.

EPC Symbol

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

- The EPC logo is an industry standard to inform the customer and store associate that the product contains RFID

- 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

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

UPC ➕ **Unique Serial Number** ➖ **EPC (RFID)**

- 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://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 Walmart supply chain.

- The EPC Encoder/Decoder Tool may be found here:
  https://www.gs1.org/services/epc-encoderdecoder

ALEC - Approval of Production RFID Packaging Samples

Auburn University RFID Lab's ALEC program is to help Suppliers ensure that their RFID tagged item meets all the industry requirements.

Refer to the ALEC submission guide for detailed instruction before starting this process:

https://rfidlab.org/wp-content/uploads/General-Form-Submission-Guide.pdf

Before any shipment of goods can begin, you must receive RFID lab Approval.

Send Five (5) EPC tag samples of the same item 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

- You will need approval on a representative UPC (SKU) for

    - Every brand
    - Every packaging type used
    - Every agency used
    - Every RFID inlay model
    - Every Tagging location

    All items must be submitted for approval. You only need to pick one representative item per the list above to send RFID tag samples. You must include a full list of all items that share this packaging type to correctly make your submission.

    Send five inlay samples of the one representative UPC.

- The RFID Tags MUST be production quality.

- Within the submission form, you will be asked to add a list of all items that follow the same criteria as the representative sku.

- Please complete and submit the online submission form at https://rfidlab.org/alec-submissionform/. Print the PDF confirmation and include it along with the samples.

- 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 of the Product Suppliers to the RFID Lab.

- Once you receive an email approval from the RFID Lab, you are approved to move into bulk ordering and production.

ALEC – Updating Previously Approved Submissions

- Product Suppliers who decide to switch inlay models/providers and/or change tagging locations AFTER receiving validation from the RFID Lab will need to submit the changes using the Submission Update Form: https://rfidlab.org/submissionupdate/

- Product Suppliers who decide to switch Service Bureau or RFID Packaging Providers 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.

- Product Suppliers who would like to add additional skus to a previous approval can use the Item File Update Form: https://rfidlab.org/wmitemfileupdate/
  - Skus can only be added to a previous approval if they meet the below 6 requirements:
    - Same product supplier
    - Same brand
    - Same packaging type
    - Same packaging provider
    - Same RFID inlay model
    - Same tagging location

Supplier Accountability

- Product suppliers are required to have a process in place to ensure all items that are delivered to Walmart have an ARC approved RFID tag
- Quality checking includes ensuring there are no duplicate serial numbers 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

RFID Use Cases for Suppliers

Please refer to the following research paper 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/

https://rfid.auburn.edu/wp-content/uploads/2021/02/Empirical_Study_of_RFID_in_Supply_Chain.pdf

https://rfid.auburn.edu/wp-content/uploads/2021/02/CHIP-Proof-of-Concept-Results-Auburn-RFID-Lab.pdf

RFID is being used by suppliers to automate inbound audit processes, improve Inventory accuracy, and outbound validation.

RFID Shipper Case Markings

For the stores to easily identify on cases which items have packaging with RFID labels. The Shipper Case Markings must include the word RFID.

Please refer to the Walmart Packaging Standards Master Document HERE

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.

Please contact wmbarcodelabeling@walmart.com for any questions.

DSDC Suppliers
All master cases must be labeled with RFID even if there are mixed SKUs that are currently out of scope.

Contacts

Walmart Corporate

General questions: walmartrfid@walmart.com

Retail Link Page: https://supplieracademy.wal-mart.com/mod/wiki/view.php?id=647

Walmart Packaging Standards Master Document: CLICK HERE

Notices: https://corporate.walmart.com/privacy-security/notices/

Walmart Private Brand Packaging

RFIDpackagingUpdates@walmart.com

Generic sticker and hangtag templates are available for supplier:

https://brandfolder.com/s/q65rh4wc9sm72wphcnm5k8g

Supplier can fill out a request for sku-level artwork changes or for template requests:

https://brandfolder.com/s/b656stj39rt8s2kw4fq7n5p

Email to RFIDpackagingUpdates@walmart.com and include subject line "reference: Template or Sku-Level Artwork"

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/

ALEC Item File Update Form: https://rfidlab.org/wmitemfileupdate/

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

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