



WALMART RFID PLAYBOOK

General Merchandise
For Walmart U.S. Stores

The requirements in this version supersede all previous playbooks.

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:

The following departments should currently be arriving in store with RFID tags:

Home Departments:

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

Electronics Departments:

D72 - Electronics
D87 - Wireless

Toys Department:

D07 - Toys

Sporting Goods Departments:

D09 – Sporting Goods

Automotive Departments:

D10 – Automotive Tires (Modular)
D10 – Automotive Batteries Car and Truck Batteries Lawn & Garden Batteries Motorcycle Batteries

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.walmart.com/mod/wiki/view.php?id=647>

New Departments Where Any Items That Arrive in Store on or before February 1, 2024 Should be Tagged:

Home Departments:

D19 – Crafts

Entertainment Departments:

D05 – Media & Gaming
D06 – Cameras and Supplies
D21 – Books

Hardlines Departments:

D03 – Stationery
D10 – Automotive
D11 – Hardware
D12 – Paint
D16 – Lawn & Garden

- All national, proprietary, supplier, and private brands.
- Walmart U.S. Stores (including Puerto Rico, Alaska & Hawaii)
- First party (1P) items that pass through our Fulfillment Centers, Distribution Centers, or Stores
- SOTC (Store Of The Community) are in scope
- All seasonal program items
- All Basic/Replenishable SKU’s
- All 1P Omni Channel 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 Walmart specs. Otherwise, work back with your Walmart Merchant to determine.
- Annual Event

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)

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://rfidlab.org/arc/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.

Home

Department	Subcategory	Inlay Spec	Approved Inlay List
D14 – Kitchen	Backer Card	W4	https://rfidlab.org/arc/spec-w4.php
D14 – Kitchen	Cookware, Toasters, Small Appliances, Soda Makers, Bakeware, Coffee makers – Boxed	W3	https://rfidlab.org/arc/spec-w3.php
D14 – Kitchen	Food Prep, Gadgets, Drinkware, Serve Ware – Boxed	W4	https://rfidlab.org/arc/spec-w4.php
D14 – Kitchen	Header Card	W4	https://rfidlab.org/arc/spec-w4.php
D14 – Kitchen	Other	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D17 – Home Decor	Boxed Blinds, Boxed Clocks	W4	https://rfidlab.org/arc/spec-w4.php
D17 – Home Decor	Decoration, Picture Frame, Mirrors	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D17 – Home Decor	Decorative Pillows, Back rest	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D17 – Home Decor	Fragrance, Scents	Contact RFID Lab	https://rfidlab.org/walmartcontact/

D17 – Home Decor	Lamps – Boxed or Hangtag	W3	https://rfidlab.org/arc/spec-w3.php
D17 – Home Decor	Non-Boxed Blinds, Non-Boxed Clocks	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D17 – Home Decor	Rugs – C Cards	W4	https://rfidlab.org/arc/spec-w4.php
D17 – Home Decor	Rugs – Other	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D17 – Home Decor	Vases, Candle Holder	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D17 – Home Decor	Others	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D20 – Bath and Shower	Hardlines – Boxed	W4	https://rfidlab.org/arc/spec-w4.php
D20 – Bath and Shower	Hardlines – Header Card	W4	https://rfidlab.org/arc/spec-w4.php
D20 – Bath and Shower	Hardlines – Backer Card	W4	https://rfidlab.org/arc/spec-w4.php
D20 – Bath and Shower	Hardlines	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D20 – Bath and Shower	Softlines – Bath Rugs, Bathmats, Outdoor blankets	W4	https://rfidlab.org/arc/spec-w4.php
D20 – Bath and Shower	Softlines – Toilet Lid Cover	W4	https://rfidlab.org/arc/spec-w4.php
D20 – Bath and Shower	Others	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D22 – Bedding	Adhesive labels	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D22 – Bedding	Airbeds	W1	https://rfidlab.org/arc/spec-w1.php
D22 – Bedding	Bedding Sets, Sheet Set	W4	https://rfidlab.org/arc/spec-w4.php
D22 – Bedding	Boxed Pillows	W1	https://rfidlab.org/arc/spec-w1.php
D22 – Bedding	Boxed Mattress Topper, Boxed Mattress/Pillow Protector, Boxed Pillowcase	W1	https://rfidlab.org/arc/spec-w1.php
D22 – Bedding	Boxed Blankets	W1	https://rfidlab.org/arc/spec-w1.php
D22 – Bedding	Mattress Pad	W4	https://rfidlab.org/arc/spec-w4.php
D22 – Bedding	Non-Boxed Pillows	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D22 – Bedding	Polybag Mattress Topper, Polybag Mattress/Pillow Protector, Polybag Pillowcase	W4	https://rfidlab.org/arc/spec-w4.php

D22 – Bedding	Shams, Quilts, Throws, Blankets – Hangtag only	W4	https://rfidlab.org/arc/spec-w4.php
D22 – Bedding	Sheet Grippers	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D22 – Bedding	Others	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D71- Furniture	Boxed items	W1	https://rfidlab.org/arc/spec-w1.php
D71- Furniture	Hang Tag	W3	https://rfidlab.org/arc/spec-w3.php
D71- Furniture	Belly Band	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D71- Furniture	Adhesive Label directly on product	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D71- Furniture	Polybag with cardstock insert	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D71- Furniture	Others	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D74 – Home Management	Carpet cleaner	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D74 – Home Management	Hangers – Belly Band	W3	https://rfidlab.org/arc/spec-w3.php
D74 – Home Management	Hangers – Boxed	W1	https://rfidlab.org/arc/spec-w1.php
D74 – Home Management	Ironing board	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D74 – Home Management	Irons, Steamers, Steam Mop, Shoe Racks	W4	https://rfidlab.org/arc/spec-w4.php
D74 – Home Management	Laundry Baskets, Organizers, Storage, Trash Cans	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D74 – Home Management	Luggage	W3	https://rfidlab.org/arc/spec-w3.php
D74 – Home Management	Vacuum Cleaners	W1	https://rfidlab.org/arc/spec-w1.php
D74 – Home Management	Vacuum Bags	W3	https://rfidlab.org/arc/spec-w3.php
D74 – Home Management	Other	Contact RFID Lab	https://rfidlab.org/walmartcontact/

Electronics

Department	Subcategory	Inlay Spec	Approved Inlay List
D72 – Electronics	Audio Hardware	Y	https://rfidlab.org/arc/spec-y.php

D72 – Electronics	Av Accessories & Blu Ray	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Blank Media	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D72 – Electronics	Computer Accessories	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Computers	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Connected Electronics	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Cut The Cable	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Digital Storage	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Headphones	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Ink	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D72 – Electronics	Laptops	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Led Light	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Networking & Connectivity	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	PC Software	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Printers	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Sound Bars	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Speakers	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Tablets	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Telephones	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	TV Wall Mounts	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D72 – Electronics	TV	Y	https://rfidlab.org/arc/spec-y.php
D72 – Electronics	Other	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D87 – Wireless Devices	Phones	Y	https://rfidlab.org/arc/spec-y.php
D87 – Wireless Devices	Power & Connectivity	Y	https://rfidlab.org/arc/spec-y.php
D87 – Wireless Devices	Prepaid Cards	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D87 – Wireless Devices	Tablet Accessories	Y	https://rfidlab.org/arc/spec-y.php
D87 – Wireless Devices	Wearables	Y	https://rfidlab.org/arc/spec-y.php
D87 – Wireless Devices	Wearables Accessories	Y	https://rfidlab.org/arc/spec-y.php

D87 – Wireless Devices	Wireless Accessories	Y	https://rfidlab.org/arc/spec-y.php
D87 – Wireless Devices	Other	Contact RFID Lab	https://rfidlab.org/walmartcontact/

Toys

Department	Subcategory	Inlay Spec	Approved Inlay List
D7 – Toys	Adhesive Labels	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D7 – Toys	Backer Card – Toys	Y	https://rfidlab.org/arc/spec-y.php
D7 – Toys	Bicycles	Y	https://rfidlab.org/arc/spec-y.php
D7 – Toys	Bike Accessories	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D7 – Toys	Boxed – Toys	Y	https://rfidlab.org/arc/spec-y.php
D7 – Toys	Hangtag – Toys	Y	https://rfidlab.org/arc/spec-y.php
D7 – Toys	Header Card – Toys	Y	https://rfidlab.org/arc/spec-y.php
D7 – Toys	Helmets	Y	https://rfidlab.org/arc/spec-y.php
D7 – Toys	Play Ball	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D7 – Toys	Polybag – Toys	Y	https://rfidlab.org/arc/spec-y.php
D7 – Toys	Playdoh	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D7 – Toys	Pool/Beach Toys	Y	https://rfidlab.org/arc/spec-y.php
D7 – Toys	Pools	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D7 – Toys	Ride on Batteries	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D7 – Toys	Ride-ons	Y	https://rfidlab.org/arc/spec-y.php
D7 – Toys	Other	Contact RFID Lab	https://rfidlab.org/walmartcontact/

Sporting Goods

Department	Subcategory	Inlay Spec	Approved Inlay List
D9 – Sporting Goods	Adhesive Labels	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D9 – Sporting Goods	Apparel – All Packaging Types	W3	https://rfidlab.org/arc/spec-w3.php
D9 – Sporting Goods	Backer Card	Y	https://rfidlab.org/arc/spec-y.php
D9 – Sporting Goods	Backpacks – All Packaging Types	W3	https://rfidlab.org/arc/spec-w3.php

D9 – Sporting Goods	Boxed	Y	https://rfidlab.org/arc/spec-y.php
D9 – Sporting Goods	Clam Shell	Y	https://rfidlab.org/arc/spec-y.php
D9 – Sporting Goods	Footwear – All Packaging Types	W4	https://rfidlab.org/arc/spec-w4.php
D9 – Sporting Goods	Hangtag	Y	https://rfidlab.org/arc/spec-y.php
D9 – Sporting Goods	Header Card	Y	https://rfidlab.org/arc/spec-y.php
D9 – Sporting Goods	Polybag	Y	https://rfidlab.org/arc/spec-y.php
D9 – Sporting Goods	Terminal Tackle	O	https://rfidlab.org/arc/spec-o.php
D9 – Sporting Goods	Others	Contact RFID Lab	https://rfidlab.org/walmartcontact/

Cameras & Supplies

Department	Subcategory	Inlay Spec	Approved Inlay List
D06 – Cameras & Supplies	Accessories	Y	https://rfidlab.org/arc/spec-y.php
D06 – Cameras & Supplies	Cameras, Drones, Action Cameras, Pegged Cameras	Y	https://rfidlab.org/arc/spec-y.php
D06 – Cameras & Supplies	Instant Cameras & Accessories	Y	https://rfidlab.org/arc/spec-y.php
D06 – Cameras & Supplies	Mobile Photography	Y	https://rfidlab.org/arc/spec-y.php
D06 – Cameras & Supplies	Photo Memory & Frames	Y	https://rfidlab.org/arc/spec-y.php

Media & Gaming

Department	Subcategory	Inlay Spec	Approved Inlay List
D05 – Media & Gaming	DVDs	Y	https://rfidlab.org/arc/spec-y.php
D05 – Media & Gaming	Music Hardware	Y	https://rfidlab.org/arc/spec-y.php
D05 – Media & Gaming	Video Game Accessories	Y	https://rfidlab.org/arc/spec-y.php
D05 – Media & Gaming	Video Game Hardware	Y	https://rfidlab.org/arc/spec-y.php
D05 – Media & Gaming	Video & Computer Game Software	Y	https://rfidlab.org/arc/spec-y.php
D05 – Media & Gaming	Video Game Interactive	Y	https://rfidlab.org/arc/spec-y.php

Automotive

Department	Subcategory	Inlay Spec	Approved Inlay List
D10 – Automotive	Tires	T	https://rfidlab.org/arc/spec-t.php
D10 – Automotive	Car and Truck Batteries	P	https://rfidlab.org/arc/spec-p.php
D10 – Automotive	Auto Electrical	Y	https://rfidlab.org/arc/spec-y.php
D10 – Automotive	Auto Car Care Wipers and Maintenance	Y	https://rfidlab.org/arc/spec-y.php
D10 – Automotive	Auto Chemicals	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D10 – Automotive	Auto Equipment	Y	https://rfidlab.org/arc/spec-y.php
D10 – Automotive	Auto Motor Oil	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D10 – Automotive	Filters	Y	https://rfidlab.org/arc/spec-y.php
D10 – Automotive	Auto Seasonal RV Towing	Y	https://rfidlab.org/arc/spec-y.php
D10 – Automotive	Auto Accessories Safety	Y	https://rfidlab.org/arc/spec-y.php
D10 – Automotive	Power and Cleaning	Y	https://rfidlab.org/arc/spec-y.php
D10 – Automotive	Other	Y	https://rfidlab.org/arc/spec-y.php

Crafts

Department	Subcategory	Inlay Spec	Approved Inlay List
D19 – Art and Adult Craft	Paper	O	https://rfidlab.org/arc/spec-o.php
D19 – Art and Adult Craft	Canvas	O	https://rfidlab.org/arc/spec-o.php
D19 – Art and Adult Craft	Photo Albums	O	https://rfidlab.org/arc/spec-o.php
D19 – Art and Adult Craft	Glue Guns	Y	https://rfidlab.org/arc/spec-y.php
D19 – Art and Adult Craft	Adhesives	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D19 – Art and Adult Craft	Art Brushes	Y	https://rfidlab.org/arc/spec-y.php
D19 – Art and Adult Craft	Art Paint	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D19 – Art and Adult Craft	Celebration Sets	Y	https://rfidlab.org/arc/spec-y.php
D19 – Art and Adult Craft	Other	Y	https://rfidlab.org/arc/spec-y.php
D19 – Fabric and Sewing	Fabric Coloring	Contact RFID Lab	https://rfidlab.org/walmartcontact/

D19 – Fabric and Sewing	Fabric – Cut	R	https://rfidlab.org/arc/spec-r.php
D19 – Fabric and Sewing	Fabric – Uncut	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D19 – Fabric and Sewing	Notions	O	https://rfidlab.org/arc/spec-o.php
D19 – Fabric and Sewing	Notion Tools	Y	https://rfidlab.org/arc/spec-y.php
D19 – Fabric and Sewing	Ribbon	R	https://rfidlab.org/arc/spec-r.php
D19 – Fabric and Sewing	Ribbon Accessories	O	https://rfidlab.org/arc/spec-o.php
D19 – Fabric and Sewing	Sewing Machine and Sewing Machines Accessories	Y	https://rfidlab.org/arc/spec-y.php
D19 – Fabric and Sewing	Sewing Accessories	O	https://rfidlab.org/arc/spec-o.php
D19 – Fabric and Sewing	Others	Y	https://rfidlab.org/arc/spec-y.php
D19 – Floral	Artificial Plants	Y	https://rfidlab.org/arc/spec-y.php

Stationery

Department	Subcategory	Inlay Spec	Approved Inlay List
D03 – Stationery	Activities Supplies	O	https://rfidlab.org/arc/spec-o.php
D03 – Stationery	Office Supplies	O	https://rfidlab.org/arc/spec-o.php
D03 – Stationery	School Supplies	O	https://rfidlab.org/arc/spec-o.php
D03 – Stationery	Envelopes Mailers	O	https://rfidlab.org/arc/spec-o.php
D03 – Stationery	Flags	Y	https://rfidlab.org/arc/spec-y.php
D03 – Stationery	Notetaking	O	https://rfidlab.org/arc/spec-o.php
D03 – Stationery	Binders	O	https://rfidlab.org/arc/spec-o.php
D03 – Stationery	Journals	O	https://rfidlab.org/arc/spec-o.php
D03 – Stationery	Other	Y	https://rfidlab.org/arc/spec-y.php

Hardware

Department	Subcategory	Inlay Spec	Approved Inlay List
D11 – Hardware	Air & Water	Y	https://rfidlab.org/arc/spec-y.php
D11 – Hardware	Cooling & Heating	Y	https://rfidlab.org/arc/spec-y.php
D11 – Hardware	DIY Accessories	Contact RFID Lab	https://rfidlab.org/walmartcontact/

D11 – Hardware	Fans & Winter	Y	https://rfidlab.org/arc/spec-y.php
D11 – Hardware	Flooring & Industrial	Y	https://rfidlab.org/arc/spec-y.php
D11 – Hardware	Home Hardware	Y	https://rfidlab.org/arc/spec-y.php
D11 – Hardware	Lighting	Y	https://rfidlab.org/arc/spec-y.php
D11 – Hardware	Fasteners	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D11 – Hardware	Plumbing & Electrical	Y	https://rfidlab.org/arc/spec-y.php
D11 – Hardware	Tools	Y	https://rfidlab.org/arc/spec-y.php
D11 – Hardware	Power & Cleaning	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D11 – Hardware	Other	Contact RFID Lab	https://rfidlab.org/walmartcontact/

Paint

Department	Subcategory	Inlay Spec	Approved Inlay List
D12 –Paint	Adhesives DIY	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D12 –Paint	Bathroom Remodel	Y	https://rfidlab.org/arc/spec-y.php
D12 –Paint	Casters Sliders	Y	https://rfidlab.org/arc/spec-y.php
D12 –Paint	Floorcare	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D12 –Paint	Caulking	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D12 –Paint	Paints, Stains, Primers & Protectants	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D12 –Paint	Fashion Plumbing	Y	https://rfidlab.org/arc/spec-y.php
D12 –Paint	Flooring	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D12 –Paint	Home Hardware &Hardware Accessories	Y	https://rfidlab.org/arc/spec-y.php
D12 –Paint	Tapes	R	https://rfidlab.org/arc/spec-r.php
D12 –Paint	Ladders	Y	https://rfidlab.org/arc/spec-y.php
D12 –Paint	Paint Applicators	Y	https://rfidlab.org/arc/spec-y.php
D12 –Paint	Spray Paint	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D12 –Paint	Sundries	Y	https://rfidlab.org/arc/spec-y.php
D12 –Paint	Other	Y	https://rfidlab.org/arc/spec-y.php

Lawn & Garden

Department	Subcategory	Inlay Spec	Approved Inlay List
D16 – Lawn & Garden	Grill Accessories	Y	https://rfidlab.org/arc/spec-y.php
D16 – Lawn & Garden	Grill Fuel	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D16 – Lawn & Garden	Landscaping	Y	https://rfidlab.org/arc/spec-y.php
D16 – Lawn & Garden	Watering and Gardening Tools	Y	https://rfidlab.org/arc/spec-y.php
D16 – Lawn & Garden	Lawn & Garden Chemicals	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D16 – Lawn & Garden	Outdoor Cooking	Y	https://rfidlab.org/arc/spec-y.php
D16 – Lawn & Garden	Outdoor Power Equipment	Y	https://rfidlab.org/arc/spec-y.php
D16 – Lawn & Garden	Patio Décor & Storage	Y	https://rfidlab.org/arc/spec-y.php
D16 – Lawn & Garden	Patio Furniture	Y	https://rfidlab.org/arc/spec-y.php
D16 – Lawn & Garden	Bird Feeders	Y	https://rfidlab.org/arc/spec-y.php
D16 – Lawn & Garden	Planters	Contact RFID Lab	https://rfidlab.org/walmartcontact/
D16 – Lawn & Garden	Pool & Salt	Y	https://rfidlab.org/arc/spec-y.php
D16 – Lawn & Garden	Other	Contact RFID Lab	https://rfidlab.org/walmartcontact/

Books

Department	Subcategory	Inlay Spec	Approved Inlay List
D21 – Books	Adult & Children's Books	O	https://rfidlab.org/arc/spec-o.php

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
Boingtech	retailrfid@boingtech.com
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.

Determine Placement of RFID tag

Please consult the Walmart tag placement guideline for product specific placement at

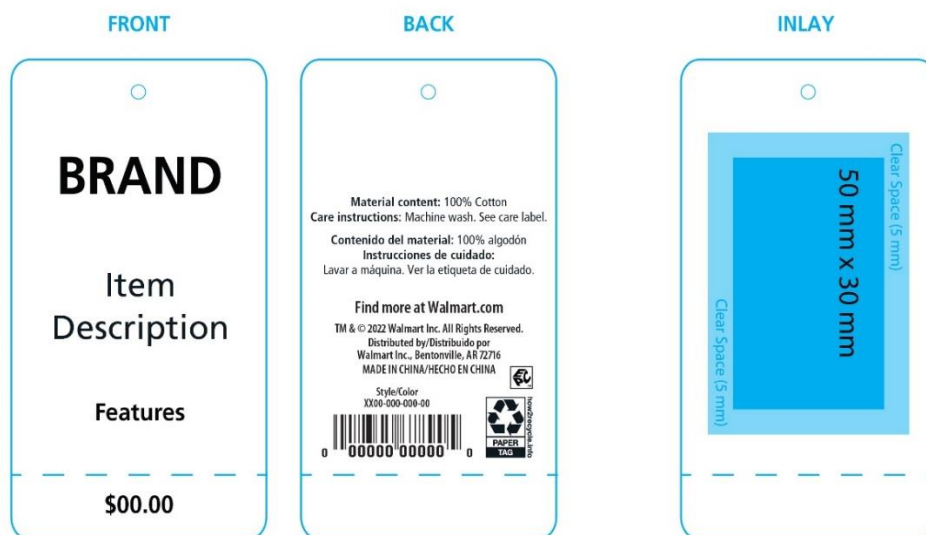
https://gecrm.my.salesforce.com/sfc/p/61000000ZKTc/a/8Y0000011Evm/ICdhwv6j_HKWqDjs5Zc25ancv6KfPeEv2TJM0xJW6RM

If your item is not represented in the Placement Guideline, please contact at RFIDpackagingUpdates@walmart.com.

Review RFID Application Formats

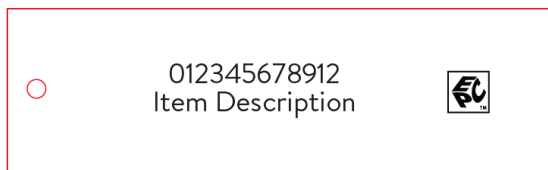
Please consult the Auburn University RFID Lab Tag Placement Guideline for all available application formats. Please contact RFIDpackagingUpdates@walmart.com for any questions.

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

Version 3.93

Revised December 12, 2023

Minimum Copy Requirements:

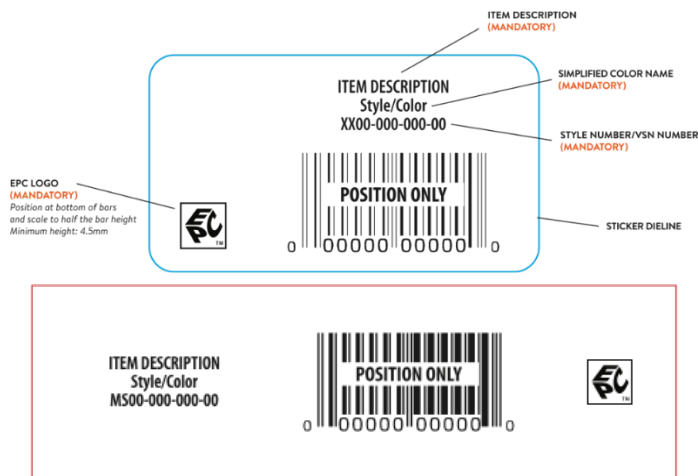
- UPC # (no bars; human readable)
- EPC Logo
- Prints: Black ink on one side of tag
- Additional information is allowed

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.



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.

481-5162-3	<p>800-925-627</p> <p>800-925-627</p> <p>800-925-627</p> <p>72716 800-925-627</p> <p>800-925-627</p> <p>800-925-627</p>	<p>STRONG ALL-TERRAIN P42 / WA11A6Y</p> <ul style="list-style-type: none"> • Durable • Traction • Round • Quiet • Snow • Off-road 	<p>TIRE BRAND SPECIALTY RADIAL</p> <p>200A</p>	<p>TIRE BRAND</p>
<p>(01) 001122334455667788 (21) 1234567890</p>				

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 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/walmartcontact/>.

- 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



- 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 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 at <https://rfidlab.org/wp-content/uploads/Auburn-RFID-Submission-Guide.pdf> for detailed instruction before starting this process.

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

You do not need to submit every individual sku separately. Only submit where differences occur from the list above.

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/Walmartalecform/>. 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
- 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, you are approved to move into bulk ordering and production
- Shipping dates for ARC approved RFID products must be communicated back to Walmart

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 at

<https://corporate.walmart.com/content/dam/corporate/documents/suppliers/requirements/supply-chain-packaging-guide.pdf>

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

For cases that contain only one SKU, the sellable unit must be RFID tagged and the case should be labeled "RFID" on the side.

For cases sent to the stores that contain a mix of RFID tagged SKUs and Out Of Scope SKUs, the cases should be labeled "RFID" on the side.

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 - [Walmart Packaging Standards](#)

Website <https://corporate.walmart.com/newsroom/videos/how-walmart-uses-electronic-product-codes>
<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/walmartcontact/>

ALEC RFID tag samples validation submission form <https://rfidlab.org/Walmartalecform/>

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://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?EntryId=1946>

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