RFID PLAYBOOK

Apparel Packaging For Walmart Canada Stores



General Overview

What industry standards to follow?

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

What carries RFID tagging?

All apparel brands that are being shipped into and sold at any of our Walmart CA stores. This includes all national, proprietary, supplier, and private brands.

In Scope:

Apparel Departments:

23 - Men's Wear	30 - Kids Basics & Sleep	29 - Womens Basics & sleep
24 - Boys Wear	31 - Accessories	35 - Womens Plus
25 - Footwear	32 - Jewelry/Watches & Sunglasses	36 - Womens Seasonal
26 - Baby	33 - Girls	
27 - Men's Basics & sleep	34 – Womenswear	

- All Basic/Replenishable SKU's
- All hanging fashion apparel, footwear and non pay for scan accessories
- All Omni Channel items (shared items)

Out of Scope:

- PFS
- Dot com only items

What do I need to do to get my RFID tags approved?

Follow the process in this Playbook. Please send RFID tag samples to Auburn for approval prior to bulk production and follow all guidance provided in this Playbook for that submission.

General RFID information:

3 Steps to RFID Success: https://site.gs1us.org/RFID-success.html

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

National, Proprietary & Supplier Brands

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.

Private Brands Apparel / Shoes / Accessories

All Walmart private brands apparel/ shoes/ accessories must use one of the following approved inlay manufacturers from Auburn University website using one of the W1 - W6 specs. Note, this is not about serialization of the tags as it pertains to the manufacturing of the blank inlays only. Even if using an approved inlay provider, you must still submit samples to Auburn for final approval.

Determine Packaging Resource, RFID Encoder/Service Bureau

National, Proprietary & Supplier Brands

Brand owners 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.

Private Brands (must use Walmart nominated service bureaus)

Product suppliers will continue to use our same nominated packaging suppliers that we have in our private brand packaging toolkits posted on Retail Link (also as page 3). The only change is you will now incorporate RFID inlays into those branded or generic packaging types.

Walmart nominated packaging resources are required to purchase their blank inlays from one of the four / five companies below:

- Avery Dennison Shoes: - Nan Chieh - Friendon

Checkpoint
 NATCO
 R-Pac
 Shangyang
 Calson
 Lian Sheng

Retail Link path to apparel private brand packaging toolkits can be found at:

Retail Link/Docs/Radio Frequency Identification Technology (RFID)

Select RFID Inlay Spec

Walmart 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.*

DEPARTMENT	SUBCATEGORY	INLAY SPEC	APPROVED INLAY LIST
D23 - Mens	Apparel	W1	https://rfidlab.org/arc/spec-w1.php
D27 – Mens basics	Socks, Polybagged underwear, Banded underwear, Boxed apparel	W2	https://rfidlab.org/arc/spec-w2.php
D23 - Mens	Belts, Wallets, Pouches, Gloves, Accessories	W3	https://rfidlab.org/arc/spec-w3.php
D24 - Boys	Apparel	W1	https://rfidlab.org/arc/spec-w1.php
D30 – kids basics	Socks, Polybagged underwear, Banded underwear, Boxed apparel	W2	https://rfidlab.org/arc/spec-w2.php
D24 - Boys	Belts, Accessories	W3	https://rfidlab.org/arc/spec-w3.php
D25 - Shoes	Shoe Hangtags only (no boxes)	W4	https://rfidlab.org/arc/spec-w4.php
D25 - Shoes	Shoe care, Shoe accessories	Contact RFID Lab, Auburn University	https://rfidlab.org/walmartapparelcontact/

		_	
D26 - Infant	Apparel	W1	https://rfidlab.org/arc/spec-w1.php
D26 - Infant	Socks, Polybagged underwear, Banded underwear, Boxed apparel	W2	https://rfidlab.org/arc/spec-w2.php
D26 - Infant	Accessories	W3	https://rfidlab.org/arc/spec-w3.php
D29 - Socks		W2	https://rfidlab.org/arc/spec-w2.php
D29 - Hosiery		W1	https://rfidlab.org/arc/spec-w1.php
D29 - Hosiery	Boxed apparel	W2	https://rfidlab.org/arc/spec-w2.php
D29 - Ladies Sleepwear	Primary Hangtag	W1	https://rfidlab.org/arc/spec-w1.php
D29 - Ladies Sleepwear	Polybagged underwear, Boxed apparel	W1	https://rfidlab.org/arc/spec-w1.php
D29 - Bras & Shape wear		W2	https://rfidlab.org/arc/spec-w2.php
D29 - Bras & Shape wear	Polybagged underwear, Boxed apparel	W2	https://rfidlab.org/arc/spec-w2.php
D31 - Accessories/Purses		W3	https://rfidlab.org/arc/spec-w3.php
D32 - Jewelry	Sunglasses	W5	https://rfidlab.org/arc/spec-w5.php
D32 - Jewelry	Costume Carding	W6	https://rfidlab.org/arc/spec-w6.php
D32 - Jewelry	Watches	W4	https://rfidlab.org/arc/spec-w4.php
D33 - Girls	Apparel	W1	https://rfidlab.org/arc/spec-w1.php
D30 - Kids basics	Socks, Polybagged underwear, Banded underwear, Boxed apparel, Bras	W2	https://rfidlab.org/arc/spec-w2.php
D33 - Girls	Accessories	W3	https://rfidlab.org/arc/spec-w3.php
D34 - Womens	Apparel	W1	https://rfidlab.org/arc/spec-w1.php
D35 - Womens Plus	Apparel	W1	https://rfidlab.org/arc/spec-w1.php
D36 - WomensOuterwear	Apparel	W1	https://rfidlab.org/arc/spec-w1.php

D32 Jewelry (all brands)

SUB	Guidelines	INLAY SPEC	APPROVED INLAY LIST
CATEGORY		INCAT SI EC	ALT NO VED INTERT EIGH
Jewelry - Fine, Bridge	-No metal foils, metal containers, holograms or metallic inks should be used on the packaging. If so, you must receive Auburn approval prior to bulk production of the packaging -RFID sticker to be placed on	W6	https://rfidlab.org/arc/spec-w6.php
	-Out of box chains will use a rattail label		
Jewelry - Costume	- No metal foils, metal containers, holograms or metallic inks should be used on the packaging. If so, you must receive Auburn approval prior to bulk production of the packaging -RFID sticker to be placed in the back of carding, as far away from metal as possible	W6	https://rfidlab.org/arc/spec-w6.php
Jewelry - Care	- RFID Sticker cannot be placed on bottom; place on backside or side of packaging -For items containing liquid or metal, contact RFID Lab, Auburn University	W4	https://rfidlab.org/arc/spec-w4.php
Watches - cuff stands	-Watches displayed in a watch cuff only, requires a special inlay -RFID sticker must be placed in the top of the base	Contact RFID Lab, Auburn University	https://rfidlab.org/walmartapparelcontact/
Watches - Boxes	-RFID Sticker cannot be placed on the bottom; side of box is preferredNo metal foils, metal containers, holograms or metallic inks should be used on the packaging. If so, you must receive Auburn approval prior to bulk production of the packaging	W4	https://rfidlab.org/arc/spec-w4.php
Watches - Batteries	- Packaging may need to be redesigned to accommodate RFID inlay	Contact RFID Lab, Auburn University	https://rfidlab.org/walmartapparelcontact/

Hardware/Parts	Place sticker as far away from metal as possible within the packaging	Contact RFID Lab, Auburn University	https://rfidlab.org/walmartapparelcontact/
----------------	---	---	--

All Brands:

Due to its complexity, Jewelry Suppliers are required to follow Walmart designated suppliers listed on the Jewelry packaging toolkits on Retail Link

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://rfidlab.org/inlaycontacts/

Company	Contact Information
Avery Dennison / Smartrac	https://avydn.ca/AD-RFID
Boingtech	WalmartRFID@boingtech.com
Checkpoint	WalmartRFID@Checkpt.com
Paragon ID	WalmartRFID@paragon-id.com
R-Pac*	WMTCANRFID@r-pac.com
SML	WalmartRFID@sml.com
Tageos	Contact@tageos.com

Identify Inlay Size

Based on the Walmart inlay spec, use the largest inlay size available that fits your packaging.

Preferred inlay sizes (+/- 2mm) in order of importance

- 1. 70mm x 14mm
- 2. 70mm x 10mm
- 3. 50mm x 30mm
- 4. 42mm x 16mm (only used if necessary and if available within the spec). This inlay is only available for specs W2, W5 and W6
 - * 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.

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

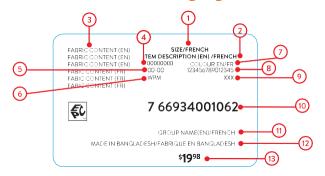
The below guidelines are general in nature. Please consult the GS1 Apparel Placement Guideline manual for product specific placement and adhere to GS1 standards.

https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core Download&EntryId=429 & language=en-US&PortalId=0&TabId=134

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

Review RFID Application Formats

Generic Embedded Hangtag Format



Ref #: GNN0219-1727

RFID Embedded Generic Sticker (no barcode)

- All Info is Variable
- All info must be Bilingual (EN/FR) for Canada *Used stacked format when there is longer copy

- 1) *Size (OPTIONAL, at discretion of WMC PD team) *Variable/Must be in (En/Fr)
 2 *Item Description (MANDATORY) *Variable/Must be in (En/Fr) i.e. PANT/PANTALON
 3 *Fabric Content (MANDATORY) *Variable/Must be in (En/Fr) Max 6 lines of copy (3 lines English/ 3 lines French)
 4 *Sub/Fineline (MANDATORY) FAPPLICABLE) *Variable/Must be in (En/Fr)

 5 *Season Code (MANDATORY) *Variable/Must be in (En/Fr)
- 6 *Replenishment Code (MANDATORY IF APPLICABLE) *Variable/Must be in (En/Fr)
- 7) *Colour (OPTIONAL) *Variable/Must be in (En/Fr) i.e. BROWN/BRUN
- 8 --- *Style/Vsn# (MANDATORY) *Variable/Must be in (En/Fr) i.e. BROWN/BRUN
- 9 *Agency Code (Nominated Packaging Supplier Code/Corresponds with factory ID) (MANDATORY) *Variable
- 10 * UPC Number (MANDATORY) *Variable
- 11 *Group Name (OPTIONAL at discretion of PD team) *Variable/Must be in (En/Fr)
- 12 *Country of Origin (MANDATORY) *Variable/Must be in (En/Fr)
- (13) *Retail Price (MANDATORY) *Variable/Must be in (En/Fr)

Generic Embedded RFID Sticker without

Hangtag dimensions: 54mm x 35mm

INLAY Size: XXmm x XXmm (+/-2mm) (information not available ask print supplier)

Minimum Copy Requirements:

- Size (at discretion of WM PD team, ie. Alpha/Numeric, or Numeric, or Alpha)
- Bilingual Item Description (En/Fr) i.e. Pant/Pantalon
- Fabric Content (max 6 lines 3 lines En, 3 lines Fr)
- Deptartment Number (i.e. D34)
- Season Code (i.e. XXX)
- Replenishment Code (WPM)
- Colour (En/Fr) written format i.e BROWN/BRUN
- Style Number (i.e. 0000000000 12 digits)
- 3 digit Agency Code (to track Print Supplier/Factory ID) (i.e. 000)
- UPC# Number Only (human readable)
- Group Name (En/Fr)
- Tracking Code (00000)
- EPC logo (Justified to the left placed as shown- Prints: Black ink on 1 side of sticker
- Country of Origin (En/Fr) (i.e. Made in China/ Fabrique en Chine)
- Retail Price

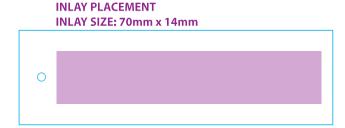
Specifications:

- Embed Inlay
- Material: Thermal Print Black
- Font: 5pt Bogle Regular

Generic Embedded Hangtag Format

*Generic embedded hangtags should only be used when size strip or hanger collar card is the core branded packaging, or if the inlay sizes available do not fit your current packaging. It must be placed behind the primary hangtag.





Ref#: GNN0218-1725

Hangtag dimensions: 83mm x 25mm INLAY size: 70mm x 14mm (+/- 2mm)

Specifications:

- Embed inlay between C1S paper stock
- Material: ~14pt. C1S (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

Minimum Copy Requirements:

- UPC # (no bars; human readable)
- EPC Logo
- Bilingual Item Description (EN/FR)(picked up from other primary packaging)
- Additional information is not allowed due to limited space for copy allowance in EN/FR

Hanging Programs - Long Sleeve (all brands)

- Armhole placement is allowed

D25 Shoe Hangtags (all brands)

- RFID hangtag must be affixed to shoe
- Embed inlay into branded hangtag
- RFID stickers cannot be used or attached anywhere on the shoe box

License Hangtags (all brands)

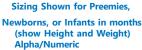
- May use RFID embedded Walmart generic price ticket.

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.

Review RFID Applications Formats

Generic Embedded Hangtag Format







Sizing Shown For

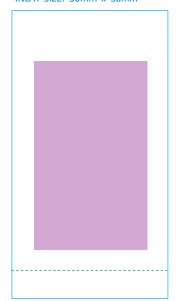




Sizing Shown For



INLAY PLACEMENT INLAY SIZE: 30mm x 50mm



Ref #: GNN0218-1724

Address placement for non-private label merchandise.



RFID Embedded **Generic Price Ticket**

- All Info is Variable
- All info must be Bilingual (EN/FR) for Canada *Used stacked format when there is longer copy
- Logo (fixed) (MANDATORY)
- *Size (MANDATORY) *Variable/Must be in (EN/FR)
- *Item Description (MANDATORY) Bogle Bold 5pt
- *Sub/Fineline Number (OPTIONAL if needed) *Numerical Only Bogle Bold 5pt
- *Replenishment Code (OPTIONAL if needed) *Variable/Must be in (EN/FR) Bogle Bold 5pt
- EPC Logo (MANDATORY)
- Colour (Optional) *Variable/Must be in (EN/FR) Bogle Bold 5pt
- Style Number/VSN Number (MANDATORY) *Variable Bogle Bold 5pt
- Agency (Packaging Supplier Code) (MANDATORY) *Variable Bogle Bold 5pt
- FSC Logo (MANDATORY) *Variable
- Retail Price (MANDATORY) *Variable Bogle Black (refer to artwork)
- CA Number (Importer on Record) (5 Digit Number) (MANDATORY) *Variable Bogle Black (refer to artwork)
- Dealer Identity Address (Company Name/Full Mailing Address Info) (MANDATORY IF REQUIRED) *Variable Info fields Required when Dealer Identity on product is not visible to purchaser, the dealer identity address must be on Price Ticket) Bogle Bold 5pt

Canada RFID Packaging References

Price Ticket Embedded HT Format

Generic Embedded Hangtag Format

Hangtag dimensions: 83mm x 25mm INLAY Size: 70mm x 14mm (+/-2mm)

Minimum Copy Requirements:

- UPC # (no bars; human readable)
- EPC logo
- Bilingual Item Description (EN/FR) (picked up from other primary packaging)
- Additional Information is not allowed do to limited space for copy allowance in En/Fr

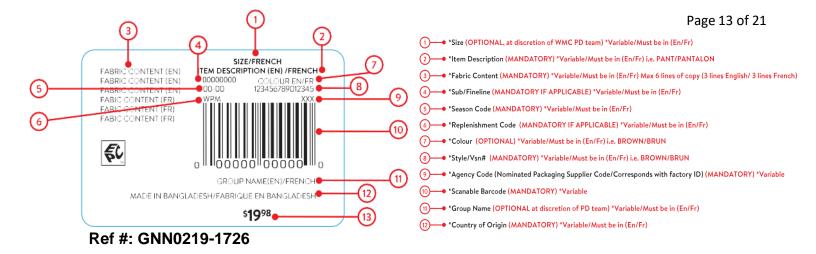
Specifications:

- Embed Inlay between C1S paper stock
- Material: ~14pt. C1S (minimum; glossy both sides)
- Font: Bogle Regular
- EPC logo: Centred vertically and placed as shown- Prints: Black ink on 1 side of tag



- All Info is Variable
- All info must be Bilingual (EN/FR) for Canada
 *Used stacked format when there is longer copy

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



Hangtag dimensions: 54mm x 35mm

INLAY Size: XXmm x XXmm (+/-2mm) (information not available ask print supplier)

Minimum Copy Requirements:

- Size (at discretion of WM PD team, ie. Alpha/Numeric, or Numeric, or Alpha)
- Bilingual Item Description (En/Fr) i.e. Pant/Pantalon
- Fabric Content (max 6 lines 3 lines En, 3 lines Fr)
- Deptartment Number (i.e. D34)
- Season Code (i.e. XXX)
- Replenishment Code (WPM)
- Colour (En/Fr) written format i.e BROWN/BRUN
- Style Number (i.e. 0000000000 12 digits)
- 3 digit Agency Code (to track Print Supplier/Factory ID) (i.e. 000)
- UPC#/Scannable Barcode; human readable)
- Group Name (En/Fr)
- Tracking Code (00000)
- EPC logo (Justified to the left placed as shown- Prints: Black ink on 1 side of sticker
- Country of Origin (En/Fr) (i.e. Made in China/ Fabrique en Chine)
- Retail Price

Specifications:

- Embed Inlay
- Material: Thermal Print Black
- Font: Bogle Regular

Please contact CA RFIDpackaging@walmart.com for any questions

Private Brands Only

All packaging that has recyclable plastic must have the following implemented for the start of RFID tagging.

If the packaging contains paper, please place the RFID tag on the paper instead of plastic.

If plastic is the only packaging in the product, consider either of the following,

- 1. Place the RFID tag loosely inside the packaging.
- 2. Use a clear wet inlay instead of a wet paper face inlay as a label on the plastic

Tagging Requirements

- RFID tags should not be sewn into the physical item.
- 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, near under wire for bras, on glass, on liquids, on Silvadur, or near metal/foil.
- RFID cannot be applied to an EAS tag.
- Please make sure that that there is only ONE RFID tag per product.

Additional Design Requirements

- No two (2) scannable UPC barcodes are allowed on the same item.
- 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

Coding & 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.
- Tags must be permalocked to prevent tampering.
- All tags must undergo quality and data integrity checks prior to entering the Walmart supply chain.

National, Proprietary & Supplier Brands Only

- You can choose to have your RFID tags encoded at the packaging resource or in your factory prior to bulk shipping
- 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?Command=Core_Download&Entryld=1946&_ga=2.42001189.1061360610.1644419937-546077369.1568401519&language=en-US&Portalld=0&Tabld=134

Private Brands Only

MUST use one of our current nominated packaging suppliers from our packaging toolkits for all serialization.

- Each private brand packaging supplier has been assigned their own unique 3 digit code issued from Walmart.

 This code is the first 3 digits of the serial number in decimal form.
- For example, if an agency had a leading RFID identifier of "099", then the serial number in the range of 99 billion (99,000,000,000 to 99,999,999) would be allowed.

UPC to EPC Conversion

For information regarding the EPC data structure, please visit the GS1 website. The EPC data structure is an industry standard and is maintained by GS1.

The EPC Encoder/Decoder Tool may be found here: https://www.gs1us.org/tools/epc-encoder-decoder

ALEC - Approval of Production RFID Packaging Samples

RFID Tag 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 performance testing 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 per brand per packaging type per packaging agency per RFID Inlay model per 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/WMCanadaApparel/
- Print the PDF confirmation and include it along with the samples.
- The RFID Lab's shipping information will be provided in the confirmation that you will receive after submitting the online submission form.
- Testing will not begin until the printed confirmation form has arrived at the lab.
- Watches, Fine Jewelry, Costume Jewelry and Shoe & Jewelry Care suppliers MUST send actual product packaging along with RFID tags attached to item
- Actual product 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 Handheld Scanner

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

RFID Isolation Cage:

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

RFID Tabletop Scanner:

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

RFID Tunnels:

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

RFID Shipper Case Markings

WHY ARE WE DOING THIS? In order for the stores to easily identify on master cartons which items have packaging with RFID labels. We are updating our master carton markings to include the words RFID. Any shipment the stores receives with RFID tagged items must carry the RFID case markings as per this outline.

RFID carton marking or markings done with stickers do not carry any RFID inlays. Only the selling unit packaging carries the RFID inlay. The RFID sticker/ marking is in addition to all other case markings and should not interfere with any other printed case markings, case labels, federal and provincial / territory laws or any other compliance related markings.

If the product inside the case or poly bag is not RFID labeled, do NOT use the updated RFID marking. If you have this situation, please contact your Merchant team immediately.

IN SCOPE:

- Walmart Canada Stores
- National, Proprietary, Licensed and Private Brands
- Departments 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36 (apparel, footwear, accessories)
- All season codes (0-4)
- Initial sets
- All replenishment
- Vendor pack cartons or warehouse pack poly bag
- Seasonal programs
- Shared items between store & dot com

OUT OF SCOPE:

- PFS
- Dot com only items

RFID Requirements:

- The RFID/IRF designation is to be added to ONLY cartons that contain product that have been RFID enabled.
- RFID/IRF is to be positioned in the upper right corner on all 4-face panels of the shipping carton.
- Please follow the colour coding and logo usage as outlined.



English: RFID (Radio Frequency Identification) French: IRF (Identification par radiofréquence)

Apparel Carton Markings

Master Cartons: Apparel, Basic and Accessories



Labels should include:

ASSORT# or ITEM#

PO#

ITEM DESCRIPTION:
DEPARTMENT #
TO: CANADA
SUPPLIER STOCK #
CASE QTY: pcs
CASE of
MADE IN:
GROSS WEIGHT:

NET WEIGHT: (Cambodia only)

Best before dates:

Season Code 1
BEST BEFORE MARCH

Season Code 2
BEST BEFORE JUNE
Season Code 3
BEST BEFORE OCT

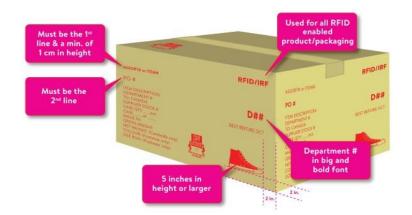
BEST BEFORE DEC Season code 0

Season Code 4

No best Before date

Footwear Carton Markings

Master Cartons: Footwear



Labels should include:

ASSORT# or ITEM#

PO#

ITEM DESCRIPTION:
DEPARTMENT #
TO: CANADA
SUPPLIER STOCK #
CASE QTY: pcs
CASE of
MADE IN:

GROSS WEIGHT:

NET WEIGHT: (Cambodia only) COLOUR: (FOOTWEAR ONLY) SIZE RUN: (FOOTWEAR ONLY)

Best before dates: Season Code 1

BEST BEFORE MARCH

Season Code 2
BEST BEFORE JUNE
Season Code 3
BEST BEFORE OCT
Season Code 4
BEST BEFORE DEC
Season code 0
No best Before date

Master shipping cartons are to be marked as shown in the illustrations on all four sides of the box and the top and bottoms. Apparel icons must be (2" or 5" depending on box size).

Footwear Icons must be 5 inches in height or larger, if space permits.

All text and icons must be in the colour of the gender/dept as per the next page.

Must include SIZE RUN (also called "size ratio", a listing in matrix form of the number of pairs for each size) on the front and back markings.

Stock number must be printed, as indicated in the Walmart PO, bold and larger than the rest of the text, and at least two (2) inches in height if space permits.

Gender codes

Men's PANTONE 186 U Ladies **PANTONE** 362 U

Boys **PANTONE** Reflex Blue Ladies PLUS

PANTONE 7601 U

Infants/Toddlers PANTONE 7617 U Girls

> **PANTONE** 2612 U

Gender Inclusive PANTONE 7427 U Accessories **PANTONE BLACK U**

Icon Reference Chart

All icons must appear in correct gender code colour



Tops - Hanging Apparel

Used for tops, dresses, sets, sleepwear tops or sleepwear sets. All apparel departments.



Tops - Folded Apparel

Used for tops, dresses, sets, sleepwear tops or sleepwear sets. All apparel departments.



Bottoms - Hanging Apparel

Used for bottoms and sleepwear bottoms.

All apparel departments.



Bottoms - Folded Apparel

Used for bottoms and sleepwear bottoms.

All apparel departments.



Underwear

Used for all Men's and Kids underwear products



Socks & Hosiery

Used for all socks & hosiery products.



Socks & Hosiery Used for all watches.



Bra and Intimates apparel

Used for all Ladies underwear, bra & intimates products.



Socks & Hosiery

Used for all sunglasses.



Used for all caps and hats.



Socks & Hosiery

Used for seasonal accessories neckwear, ties, gloves, mittens, umbrellas, headgear & accessories.



Accessories

Accessories

Used for all handbags & wallets.



Footwear

No changes - Please continue to reference Retail Link.



Accessories

Used for all luggage & backpacks.



Events

Any item that will be placed in a promotional space - to be advised by the Category Manager. Including ugly Christmas items.



Used for all Canadiana apparel products.



Accessories

Used for all belts.



Contacts

Walmart Corporate

General questions CA RFID@walmart.com

Website https://corporate.walmart.com/newsroom/videos/how-walmart-uses-electronic-product-codes https://corporate.walmart.com/privacy-security/notices/

Walmart Private Brand Packaging

Generic stickers and hangtags are available through our nominated

packaging suppliers

Integrated hangtags and stickers for all private brands are under

development and will be made available when completed.

Any questions can be directed to: CA RFIDpackaging@walmart.com

Auburn University RFID Lab

General Questions https://rfidlab.org/walmartapparelcontact/
ALEC RFID tag samples validation submission form https://rfidlab.org/WMCanadaApparel/

Lab tours and business case WalmartApparel@rfidlab.org

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

GS1 U.S.

Tagging Location Guide

https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&Entryld=429&language=en-US&PortalId=0&TabId=134

Serialization Guide

 $\frac{\text{https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core}}{\text{d=1946\& ga=2.42001189.1061360610.1644419937-546077369.1568401519\&language=en-}}$

US&PortalId=0&TabId=134

3 Steps to RFID Success https://site.gs1us.org/RFID-success.html

Tag Data Standards https://www.gs1.org/standards/epcrfid-epcis-id-keys/epc-rfid-tds

Solution Partners https://www.gs1us.org/industries/apparel-general-merchandise/implementation-

resources/who-can-help