

# RFID REQUIREMENTS & SPECIFICATIONS RADIO-FREQUENCY IDENTIFICATION (RFID)


Updated 4/26/22

## RFID Requirements Summary

Radio-Frequency Identification, or RFID, is a technology that uses low-power radio waves to transmit information from an embedded microchip to a nearby RFID reader. One of the many well-established use cases for RFID technology is in retail ticketing, where product tags and labels are embedded with RFID microchips and encoded with product information. This allows for product information to be retrieved wirelessly, and without the need to have direct line-of-sight to a barcode, QR code or other similar label. RFID product tags may also be read more quickly, and when used appropriately, are more accurate than traditional inventory management systems.

Nordstrom now requires use of RFID-encoded product tags. RFID-enabled ticketing is a critical advancement towards providing our customers with the best possible experience when shopping our brands. RFID-encoded product tags support better visibility and more accurate, real-time views of our inventory so that we can anticipate and proactively address our customers' expectations.

For applicable products as identified below, Nordstrom requires:

1. Product be tagged or labeled with an active RFID chip of the appropriate specification. This can be either:
  - a. A product tag or label with printed retail information and embedded with an RFID chip; or,
  - b. A sticker with an embedded RFID chip that is then applied to another tag or label with the printed retail information; or,
  - c. Two separate tags or labels, affixed to the product together; one with an embedded RFID chip and the other with printed retail information.
2. The RFID chip must be encoded with an Electronic Product Code (EPC). The EPC must be SGTIN-96 formatted, in accordance with the [GS1 Tag Data Standards](#).
3. The tag, label, or sticker that contains the RFID chip must be visually distinguished with a printed EPC Logo: 
4. The RFID-enabled ticket must be affixed to the product in accordance with the [GS1 Apparel and General Merchandise Placement Standards](#).

# RFID Requirements Applicability

Nordstrom requires RFID-ticketed product for all product channels: Nordstrom, Nordstrom CA, Nordstrom Rack, Nordstrom Rack CA, nordstrom.com, nordstromrack.com, and nordstrom.ca. RFID-ticketed product is *not* currently required for drop-ship suppliers.

While our long-term goal is to implement RFID-encoded tickets across all product types and categories, we currently only require RFID tickets on product types and categories that have been tested and confirmed reliable in the retail environment. It is possible that the RFID-ticketing requirement will expand to new product types and categories as RFID technology improves and further testing is completed.

The following tables define the current scope of Nordstrom’s RFID requirement. Table A identifies product types and categories that require RFID tickets, as well as the preferred inlay specification for those products. Table B identifies product types and categories for which an inlay specification has not yet been determined. Products in these categories are not currently subject to Nordstrom’s RFID ticketing requirements.

**Table A: RFID Required Product Types & Categories, and Associated Inlay Specifications**

Approved inlay lists are publicly available from Auburn University and may be found [here](#) for SPEC F and [here](#) for SPEC G

<b>Apparel: Women's, Men's &amp; Kid's</b>	<b>Tag Spec.</b>	<b>Accessories (cont.)</b>	<b>Tag Spec.</b>	<b>Home &amp; Gifts (cont.)</b>	<b>Tag Spec.</b>
Activewear	Spec G	Hats	Spec F	Furniture	Spec F
Bras	Spec G	Headphones	Spec F	Headphones	Spec F
Coats, Jackets, Blazers, Sport Coats	Spec G	Luggage & Travel	Spec F	Rugs & Mats	Spec F
Dress Shirts	Spec G	Phone Cases	Spec F	Serveware	Spec F
Dresses	Spec G	Pocket Squares	Spec F	Sheets & Bed Skirts	Spec F
Hosiery & Shapewear	Spec G	Scarves & Wraps	Spec F	Small Electronics	Spec F
Jeans & Denim	Spec G	Suspenders	Spec F	Speakers & Home Audio	Spec F
Jumpers & Rompers	Spec G	Ties	Spec F	Towels	Spec F
Leggings	Spec G	Umbrellas	Spec F	<b>Shoes: Women's, Men's &amp; Kid's</b>	<b>Tag Spec.</b>
Pants	Spec G	Wallets	Spec F	Boots	Spec F
Shearling / Fur	Spec G	<b>Baby Gear</b>	<b>Tag Spec.</b>	Cleats	Spec F
Shorts	Spec G	Baby Carriers	Spec F	Clogs	Spec F
Skirts	Spec G	Bath & Potty	Spec F	Espadrilles	Spec F
Sleepwear, Pajamas, Lounge, Robes	Spec G	Blankets & Swaddles	Spec F	Flats	Spec F
Socks	Spec G	Car Seats	Spec F	Flip Flops	Spec F
Suits	Spec G	Diaper Bags	Spec F	Heels	Spec F
Sweaters	Spec G	Feeding	Spec F	Lace Ups	Spec F
Sweatshirts & Hoodies	Spec G	High Chairs	Spec F	Loafers	Spec F
Swimwear & Cover-ups	Spec G	Nursery Furniture & Décor	Spec F	Mules & Slides	Spec F
Tops & Shirts	Spec G	Strollers	Spec F	Oxfords	Spec F
Underwear	Spec G	Toys	Spec F	Pumps	Spec F
<b>Accessories</b>	<b>Tag Spec.</b>	<b>Home &amp; Gifts</b>	<b>Tag Spec.</b>	Running, Sneakers & Athletic	Spec F
Backpacks	Spec F	Bedding Sets	Spec F	Sandals	Spec F
Belts	Spec F	Blankets, Throws & Pillows	Spec F	Slip Ons	Spec F
Clutch	Spec F	Books	Spec F	Slippers	Spec F
Duffle Bags	Spec F	Candy	Spec F	Wedges	Spec F
Eyewear	Spec F	Coffee/Tea	Spec F	<b>Cosmetics &amp; Grooming</b>	<b>Tag Spec.</b>
Gloves & Mittens	Spec F	Comforters & Quilts	Spec F	Hair Tools	Spec F
Handbags	Spec F	Duvet Covers & Shams	Spec F	Shaving Cream	Spec F

\*Note: for **Rack Shoes** only, see special requirements section in the **FAQ**.

**Table B: Products for which RFID Tickets are Not Currently Required**

<b>Accessories</b>	<b>Tag Spec.</b>	<b>Home &amp; Gifts</b>	<b>Tag Spec.</b>	<b>Jewelry</b>	<b>Tag Spec.</b>
Hair Accessories	TBD	Appliances	TBD	Bracelets	TBD
<b>Cosmetics &amp; Grooming</b>	<b>Tag Spec.</b>	Art, Wall Décor & Mirrors	TBD	Brooches / Pins	TBD
Eye Shadow	TBD	Bar Accessories	TBD	Charms	TBD
Eyebrow / Eyeliner	TBD	Bath Accessories	TBD	Cuff Links	TBD
Face Serum	TBD	Candles & Diffusers	TBD	Earrings	TBD
Facial Moisturizer	TBD	Cookware & Bakeware	TBD	Necklaces	TBD
Foundation / Powder / Concealer	TBD	Desk Accessories & Stationary	TBD	Rings	TBD
Fragrance	TBD	Dinnerware & Glassware	TBD	Watches	TBD
Lashes	TBD	Faux Flowers & Plants	TBD	Watch Straps	TBD
Lip Balm	TBD	Flatware & Utensils	TBD		TBD
Lip Color	TBD	Home Improvement Tools	TBD		TBD
Lip Gloss	TBD	Lighting & Lamps	TBD		TBD
Lip Liner	TBD	Mattresses	TBD		TBD
Liquid Fragrance Diffusers	TBD	Picture Frames	TBD		TBD
Mascara	TBD	Tabletop & Kitchen	TBD		TBD
Sunscreen	TBD	Window Coverings	TBD		TBD
Supplements	TBD	Window Hardware	TBD		TBD

Nordstrom does not dictate an approach to RFID-ticketing compliance, however RFID-ticket adoption most commonly follows one of two primary paths: ordering RFID tickets from a third-party, or printing and encoding RFID tickets in-house.

### **Third-Party Ticket Providers**

The simplest way to approach RFID-ticketing is to obtain pre-printed, pre-encoded RFID tickets from a third-party ticket provider. Ordering RFID tickets from a third-party provider is quicker and easier to implement than other RFID ticketing solutions as it usually requires little adjustment to your factory or warehouse processes. As tickets arrive pre-encoded with a unique EPC, no capital investment in RFID scanners or encoders is required. Additionally, third-party ticket providers typically manage ticket requirements and changes on your behalf.

While Nordstrom does not require vendors to source third-party tickets from a particular provider, we have coordinated in advance with external ticket providers to ensure RFID-encoded tickets that comply with Nordstrom's requirements are available for order.

#### **FineLine**

FineLine offers pre-encoded, requirements-compliant RFID tickets for all product types and categories required by Nordstrom. Nordstrom purchase orders are automatically loaded into FineLine's FASTtrak system, allowing you to view and order tickets for all your Nordstrom purchase orders at once with ease. FineLine commits to shipping ticket orders within 48 business hours of order placement.

Contacts - Domestic: [support@finelinetech.com](mailto:support@finelinetech.com)

International: [support@fineline.hk](mailto:support@fineline.hk)

#### **Other Third-Party Ticketers**


Nordstrom does not require the use of any particular third-party ticket provider. Other ticket providers may be used, so long as the provided tickets use the appropriate inlays and contain the correct encoded EPC information.

## In-House RFID Ticket Printing

Nordstrom does accept product with RFID-tickets that have been printed in-house by the product manufacturer. Nordstrom does not require the use of any specific RFID printers or encoders, but all RFID-tagged product must comply with Nordstrom's RFID ticketing requirements.

1. **RFID Inlays:** Nordstrom requires the use of either Spec F or Spec G RFID Inlays, as identified in Table A above. Vendors may select any of the chips included on the applicable specification lists, found A found [here](#) for SPEC F and [here](#) for SPEC G. Vendors may procure ticket stock that has already been embedded with the appropriate inlay, or may elect to purchase the inlays and tickets separately and perform the embedding process in-house.

*Nordstrom is not able to assist with determining the best sources or processes for procuring RFID inlays or embedded tickets.*

2. **Ticket Type & Format:** All tickets, including RFID tickets, must be formatted and printed with information as outlined in the [Nordstrom Ticket Standards](#). The only additional printing requirement is the addition of the EPC Logo as a visual identifier:  This may be placed in any otherwise blank space, on either side of the ticket, above any perforations.
3. **Encoding:** All RFID chips must be encoded with an Electronic Product Code(EPC). The EPC must be SGTIN-96 formatted, in accordance with the [GS1 Tag Data Standards](#). SGTIN-96 encoding requires that your system can concatenate an SGTIN-96 EPC and therefore requires, at minimum, the following key data:
  - a. GS1 Company Prefix **OR** Nordstrom Vendor Number
  - b. Product-Specific UPC Barcode Number
  - c. A unique, 38-digit serialized value generated by your printing or encoding software

*Questions about how to encode RFID tags with a serialized, SGTIN-96 formatted EPC number should be directed to your encoding software provider. Questions regarding the SGTIN-96 format itself should be directed to GS1.*

4. **Placement:** Tickets should be affixed to the product in accordance with the Placement section of the [Nordstrom Ticket Standards](#). For concerns specifically related to the alignment of RFID-inlayed tickets, consult the [GS1 Apparel and General Merchandise Placement Standards](#).
5. **Testing:** After December 1, 2021, any Vendors that are newly developing in-house RFID-printing capabilities must submit an encoded sample ticket for testing prior to shipping their first delivery of products tagged with in-house printed RFID tags. Testing is performed by FineLine on Nordstrom's behalf, at no additional cost to the vendor. Begin the process by contacting [nordstrom.rfid@finelinetech.com](mailto:nordstrom.rfid@finelinetech.com); FineLine will then provide a form to complete and a shipping address for the sample.

## Frequently Asked Questions

### **When are products required to have RFID-enabled tickets?**

All product types and categories listed under Table A are required to have RFID-enabled tickets as of August 1, 2021. Nordstrom reserves the right to expand the product types and categories listed under Table A.

### **Will I receive offset fees for shipping products without RFID-enabled tickets?**

Nordstrom reserves the right to issue offset fees for shipments containing products that do not comply with our requirements.

### **My In-House printing solution is in process but not yet complete. May I be temporarily exempted from the RFID requirements?**

Pre-printed and pre-encoded RFID-enabled tickets of all types are currently available from FineLine and some ticket types may also be available from other Third-Party Providers. Pre-printed and pre-encoded third-party RFID tickets are a good interim solution to meeting Nordstrom's RFID requirements before your In-House printing capabilities are fully developed.

### **My product is listed in Table A, but it contains some metal components or other material that may interfere with RFID technology. Am I still subject to the RFID requirements?**

All product types and categories listed in Table A have been demonstrated to work in a retail environment with inlays of the associated RFID Specification. Some metal components are generally not a concern for these products. If in doubt, refer to [GS1 Apparel and General Merchandise Placement Standards](#). For products specifically designed to block RFID technology, please reach out to [frm@nordstrom.com](mailto:frm@nordstrom.com) with information about your product and its packaging for additional instruction.

### **Does any other information need to be encoded in the RFID chips?**

Only an SGTIN-96 formatted EPC is required at this time. This one EPC number already contains the data necessary to track and manage products in our inventory. No other data encoding requirements exist at this time.

### **Do I need to print the EPC on the ticket, or include it anywhere else, like the ASN?**

You do not need to print the EPC on the ticket or include it in any other data transmission to Nordstrom. The only requirements change for the exterior of the tickets is the addition of the EPC logo as a visual identifier. The ASN requirements are not affected by the RFID requirements and you do not need to include EPC information anywhere in the ASN.

### **\*Rack Shoe RFID Requirements**

Our preferred ticketing strategy for Rack Shoes is: One non-RFID shoebox label, one non-RFID sticker label applied directly to one of the shoes, and one RFID-inlaid sticker label applied directly to the other shoe. This is **not** currently a requirement but may become a requirement in the future. Rack Shoes are currently still accepted without RFID tickets.

**For all other inquiries, please contact [frm@nordstrom.com](mailto:frm@nordstrom.com)**