General RFID Tagging Guideline by Packaging Type

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Introduction

The purpose of this document is to serve as a general guideline for RFID tag placement. Please use this guideline as a starting point, but the final tagging location should be determined based on considering all the factors that affect the readability of RFID tags. The tagging location should be validated for each product type through the Auburn University RFID Lab ALEC program before mass production.

Improvements and changes are periodically made to this document. Please refer to the Auburn University RFID Lab website at https://rfidlab.org/wp-content/uploads/battery.pdf for the most current version available.

General Guidelines

1. Ensure there is only ONE RFID tag per product.
2. 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.
3. No metal foils, holograms, or metallic inks should be used on any packaging containing the RFID inlay.
4. RFID cannot be applied to an EAS tag.
5. No staples, perforations, swift tach, or die cuts through the inlay as it will make the inlay unreadable.
6. Close proximity of RFID tags should be considered in stacking when determining tag formats and placement. RFID tags cannot be in very close proximity of each other when displayed/stored.
7. The product should be easily identified as RFID tagged. A consistent tagging location should be used across similar products.
8. The RFID tag should not fall off from product easily.
9. The RFID tag should be placed such that it is easily removable by the customer after purchase.
10. The RFID tag should not be folded.
11. The RFID tag should not be integrated into the physical item.
12. The RFID tag should not be loosely placed within the product and/or packaging.
13. The RFID tag cannot cover any text or images.
14. 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.

EPC Symbol

1. The EPC logo example represents the bare minimum of information that should be shown on your packaging to identify RFID tagging.
2. 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.
3. 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.
4. EPC Symbol image file and related documentation: https://www.gs1.org/standards/epc-rfid/guidelines

Guideline by Packaging Type

The orange labels on the photos are used to illustrate a potential tagging location. The final tagging format (embedded or integrated or secondary) and tagging location should be determined based on all packaging requirements and factors that affect the readability of RFID tags.

Car/Truck Batteries

Preferred Tagging location

- RFID Adhesive label on the top of the battery.

Alternative Tagging location

- N/A

Notes

- The RFID label can be integrated into the existing label or be placed as a secondary label on the battery.
- Please place a minimum of two layers of hex comb separators between batteries when they are palletized, three layers would be preferable.

Boxed Batteries (e.g. Lawn and Garden)

Preferred Tagging location

- RFID Adhesive label on the top of the box.

Alternative Tagging location

- N/A

Notes

- Please ensure that the boxed batteries are not stacked on top of each other.

Others

If your packaging type is not listed, please contact the RFID Lab at https://rfidlab.org/walmartbatterycontact/.

Contacts

Auburn University RFID Lab

General Questions https://rfidlab.org/walmartbatterycontact/

RFID tag samples validation submission form *https://rfidlab.org/WalmartBattery/*

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