DuraDestruct RFID Tracking Stickers

DuraDestruct Security RFID Tag's specialized construction for glass surfaces eliminates the transferability of the RFID tag and incorporates two levels of destructibility. If someone attempts to remove the tag the RFID antenna construction breaks into separate pieces making the read range of the tag mere inches. The portion that is still adhered to will literally disintegrate if an attempt is made to remove it from the object.

Features	Ideal for security applications such as access control Deters transferability as tag is rendered useless upon removal from original surface Read range up to 40’ on glass Custom printing and logos on tags available Patented product design Compatible with RFID Tracking Software
Product Print Options	Barcode . Data Matrix . QR Code . RFID . Serial Number . Text
Product Functionality	Abrasion Resistance . Chemical Resistance . Heat Resistance . UV/Outdoor Durability
Popular Applications	Non-metal surfaces . Windshields
Category	Equipment Rental - RFID . Access Control - RFID . Asset Tracking - RFID . RFID for Glass Surfaces

METAL CRAFT
ID MADE BETTER

2019 Metalcraft, Inc.
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UNIVERSAL RFID BY METAL CRAFT

Specifications Data

Material	Polyester
Serialization	Bar code and human-readable equivalent are produced using the latest high-resolution digital technology available, which provides excellent clarity and easy scanning. Code 39 is the standard symbology with a range of 2.7 to 5.4 CPI (characters per inch). Optional symbology is Code 128.
Label Copy	The label copy may include block type, stylized type, logos or other designs.
Colors	Standard colors include black, red, yellow, green, dark blue, orange, purple or blue. Custom spot colors also are available at no additional charge. Because of contrast needed for the bar code scanner, all bar codes are black.
Standard Adhesive	Pressure-sensitive acrylic adhesive
Frequency Range	Worldwide UHF RFID Operation (840 – 960 MHz)
Sizes	3" x .75"
Packaging	Produced and shipped in roll form

Chemical Testing

Samples applied to glass panels, allowed to wet out for 72 hours, immersed in chemicals below at ambient room temperature conditions. Inlays in all samples still reading after 48 hours of exposure. Key: NE = No effect; AO = adhesive ooze; PE = print erosion under laminate

Chemical Test Data

	Water	Salt Water 5% NaCl	Bathroom Cleaner	Glass Cleaner Windex Commercial Line	Isopropanol	Brake Fluid DOT 3	Acetone	Diesel Fuel	Nitric Acid pH 1.0 =/- 0.01	Hydrochloric Acid pH 1.0 =/- 0.01	Sodium Hydroxide pH 12.0 =/- 0.01
2 hours	NE	NE	NE	NE	AO	AO	AO	AO	NE	NE	NE
24 hours	NE	NE	NE	NE	AO	AO	AO	AO	NE	NE	NE
48 hours	NE	NE	NE	PE	AO	AO	AO	AO	NE	NE	NE

Destructive Testing

Destructive Test Data

Temperature Testing

Samples applied to glass panels at ambient room temperature conditions, sit for 72 hours, then placed in freezer set to -40F for 24 hours. All inlays reading prior to removal from the freezer, all tags still destructible prior to removal from the freezer. Samples then exposed to each temperature noted below for 1 hour. All tags still destructible while at 200F. Inlays quit reading after exposure to 400F. Key: NE = no effect; TD = Sample materials discolored; TP = Sample print degradation; TM = Tag melted/destroyed; SS = sample shrinking; adhesive ooze at edges

Temperature Test Data

200°	250°	300°	350°	400°	450°	500°
NE	NE	NE	SS	TD, SS	TP, TD, SS	TM

Read Range Testing

Read Range Test Data

DuraDestruct Voyanic Anechoic Chamber test results

Substrate	ETSI	FCC
Windshield glass	26.78	34.8
Tempered glass	19.8	29.88
Polypropylene	5.6	11.24
HDPE	4.55	8.35
Wood	5.0	9.73
Corrugated Paper	1.9	3.73

Barcode Readibility Testing

Barcode Readability Test Data

Abrasion Testing

Tags survived 6,000 revolutions on Taber Abrader with CS-10 wheels, 1000g total load.

Abrasion Test Data

Label Adhesion Testing

Label Adhesion Test Data

Pull Testing

Pull Test Data

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