

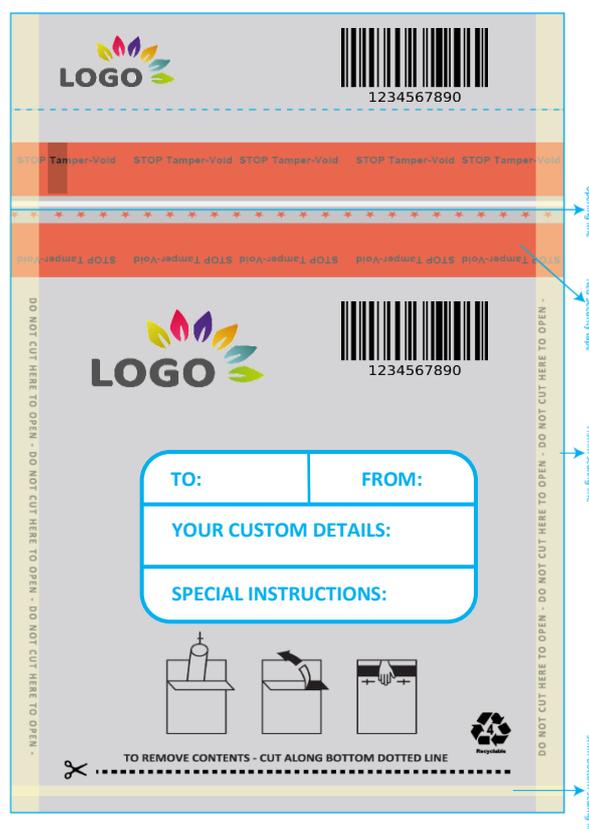
The Universeal UK Guide to... Customised Single-Trip Security Envelopes

Single-trip tamper-evident security bags provide for the secure storage and transportation of sensitive documentation, valuables, personal possessions and many other items. Popular applications include the collection of forensic evidence at crime scenes, transportation of examination papers, transit of hazardous materials such as blood samples, safe custody of personal property, election & ballot papers, and others.

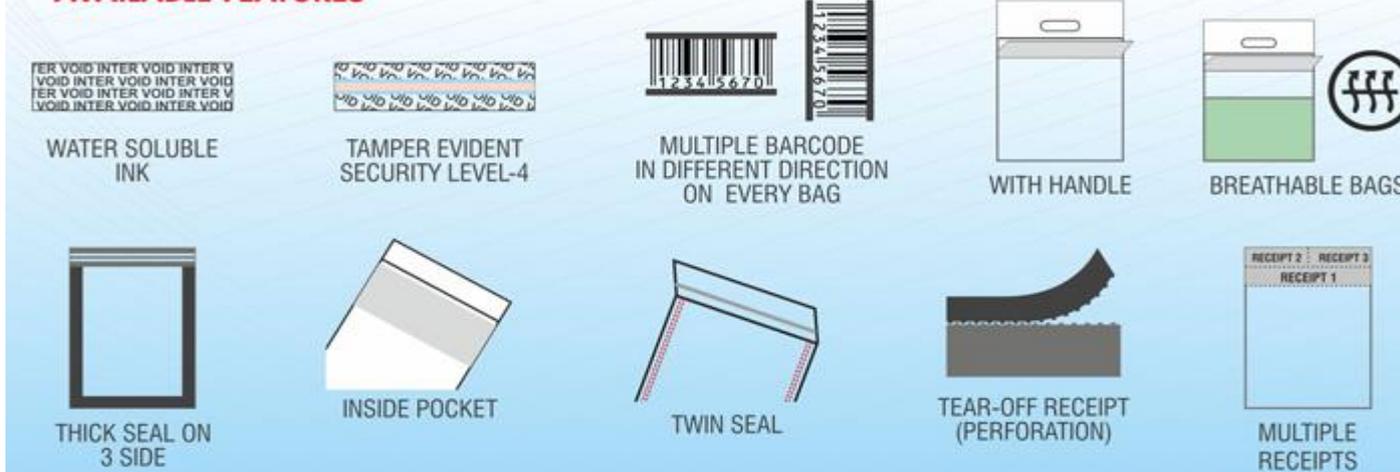
To achieve a high level of confidence in the integrity of a sealed security bag and establish a secure chain of custody over items contained therein, careful assessment should be made of bespoke security bag solutions. It is crucial that relevant quality, security and print features are incorporated into tamper-evident bags if they are to be fit for their intended purpose, and this includes suitable sealing closures capable of withstanding known methods of intrusion. Universeal UK has been supplying customised security bags for many years and we have put together the below guide to help you navigate the important issues for consideration when choosing a solution for your needs.

Key Security Bag Considerations...

- ❖ Bag strength. Bag thicknesses typically range from around 50-150 micron, depending on strength characteristics required.
- ❖ Materials. High-performance materials should be resistant to oil / water and be 100% recyclable.
- ❖ Tracking & Security. Bags can be uniquely numbered / barcoded and tear-off receipts added with duplicate barcoding for improved traceability.
- ❖ Sealing Closure. Security closures should be able to withstand common intrusion methods, such as heat and freeze tampering.
- ❖ Print Considerations. Multi-colour prints, double-sided layouts and suitable write-on areas should be considered so that bags can be properly specified and costed.



AVAILABLE FEATURES



Features to Consider when choosing a Security Bag

Outlined below are a series of security bag considerations which should be explored to ensure that customised security bags have the relevant security, print, quality and additional features for your application.

Tear-off receipt with allows tracking and recording of security bag sealing and transit

Unique alphanumeric or numeric high-resolution barcode in various available formats. Printed in duplicate on body and tear-off receipt

Fully-customisable artworks, with up to 12 colours flexographic printing for high-quality, highly bespoke bag designs.

Sophisticated sealing closure should provide tamper-evidence protection against methods of intrusions, including mechanical, heat, freezing, liquid or solvent attacks

Custom write-on information panels prompt user to complete operation-critical info for full audit and record-keeping.



Quality side welds protects against sharp edges, leakages or intrusion attempts – security overprint deforms on attempt to manipulation attempts.

Fully customisable diagram panels assist user in how to properly seal contents



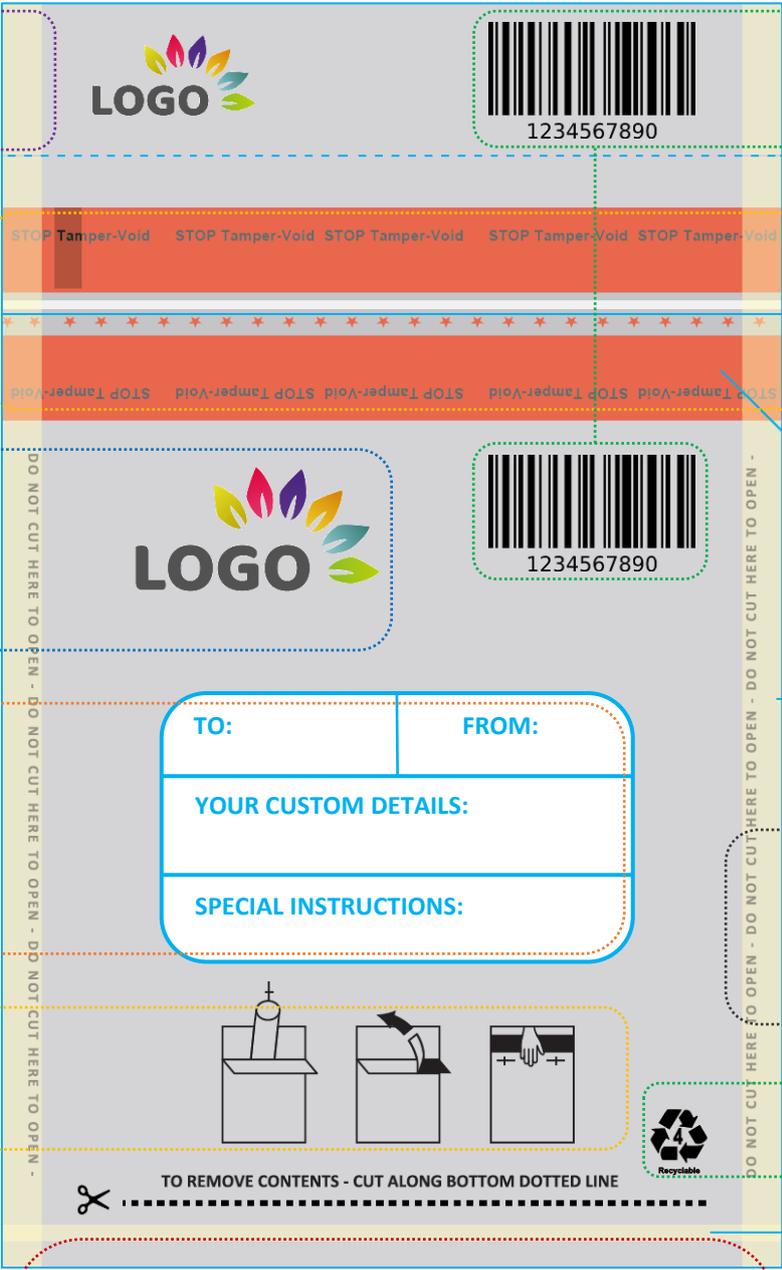
Environmentally friendly 100% recyclable 3-layer coextruded LDPE material



Material and visual appearance. 3-layer coextruded LDPE material can be tailored to suit your requirements. Material can be produced in transparent "see-through" option for easy visual check of sealed contents, or opaque version preventing handlers from viewing contents. Detailed security overprints can be achieved on surface of bags for a highly secure and branded appearance.

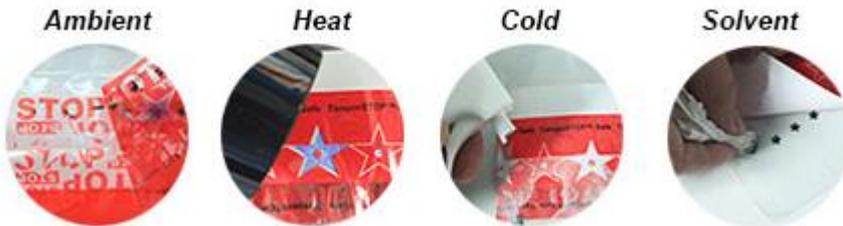






Security Closure Anti-Tamper Measures

We produce bags in two options: Level 1 basic security closure (mechanical tamper-evidence only), and Level 4 high-security sealing enclosures, with most sophisticated anti-tamper technologies. Level 4 security closures are the most secure, effective, and efficient way to secure your valuables in higher-risk applications. They are heat-resistant, freeze-proof and solvent-resistant closures, with security overprint along the welded seams, high-resolution bar code, and optional numbering of security closures.



Level 4 Security Closures have a number of in-built security features and tell-tale tamper indications, the precise details of which area confidential and disclosed to direct customers as necessary.

Technical Specification and Configuration

Material	Co-extruded LDPE material as standard. Clear or opaque finish. Other blends available: HDPE, Nylon/PE composite, PET/PE composite.
Available Sizes	Custom sizes from 50-1000mm as required by application
Bag Thickness	Thicknesses from 50-160 micron
Print Information	Up to 12 colour print (flexographic printing), according to customer design and agreed in design proof before manufacture.
Security Level	Level 1 (mechanical only) or Level 4 Security Level
Security Closure Info	At optimal temperature range 15-20°C, the tamper-evident feature should be functional within 1 minute of application. Additional curing time usually improves performance of feature; for best results allow 1-hour curing time after application.
Adhesive Type	High Strength Permanent Hot-melt Glue
Sides Weld	Standard sizes: 3mm, 7.5mm, 10mm, 15mm, 17.5mm.
Bottom Weld	Optional sizes (if required): 3mm, 10mm, 15mm.
Options	Optional features on request: bottom welds, tear-off receipts, inside pockets, outside pockets, vertical 2-pockets
Number Sequencing	Unique numbering can be printed on each bag. This number can be printed in human eye-readable form and in high definition barcode form. Barcode formats can be agreed with customer. Configurations available include picket and ladder and extra high barcodes (up to 50mm) for first time scanning.
Available barcodes	Code 39, Code 128, Code 25, QR code, 2D code, EAN-13 code
Storage	Recommended storage conditions are 18-22°C / 35-55% relative humidity. The envelopes must not be exposed to temperatures above 35°C for prolonged periods before use. The envelopes must be stored in cool dark conditions, in their original packaging until required for use. They should be exposed to sources of UV radiation, such as strong sunlight or positions close to fluorescent lamps.
Storage Shelf Life	2-3 years
Carton Packaging	Each carton label records date of manufacture, production reference number, quantity, and box number. If bags are uniquely numbered, number range contained within each carton will also be recorded.
Tolerances	All dimensions may vary within the following tolerances: Bag width up to 300mm: +/-5mm. Big width (300mm+): +/-10mm Bag Thickness: +/-10% Quantity variation tolerances: Due to nature of production the final finished bag total may vary by +/- 5%, and any over-production or under-production will be invoiced or discounted accordingly in the final invoice to client. This is industry standard practice.

Manufacturing Overview



**Extrusion
of Film**



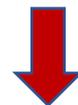
Printing



Barcoding



**Security
Closure**



**Cutting &
Packing**