

# Birth certificates & Breeder documents

## The requirement

Vital event certificates are official documents that record the key life events of birth, death and marriage as well as adoption and divorce. Once an event has been registered and recorded with the relevant government authority, the appropriate certificate will be issued. A secure document, this certificate is then accepted as formal proof of the event and can be used to access any related services or entitlements.

Sitting at the very foundation of identity and the first vital events document to be issued is the birth certificate. Birth certificates are used as a credible source (or trust anchor) for the issuance of other identity documents, such as a passport or identity card.

This makes the birth certificate an extremely valuable document, therefore amplifying the need for enhanced integrity and inherent security. In acknowledgement of this requirement for heightened protection, the ICAO<sup>1</sup> TRIP roadmap (2019)<sup>2</sup> refers to the application of security features in breeder documents such as birth certificates from 2022.

1. ICAO: International Civil Aviation Authority: A specialist function of the United Nations that is responsible for the security specifications of passports.
2. TRIP: Traveller Identification Program: Strategy roadmap that addresses the enhancement security for breeder documents under the section entitled "Evidence of Identity" as a trust anchor for the issuance of passport.

## The threats

Worryingly, many of the birth certificates and breeder documents in use today, come with little or no security. This makes them an easy target for counterfeiters to create false documents in order to fraudulently obtain those other identity documents higher up the chain, that have greater entitlements associated with them.

Document alteration is also a threat to such certificates, but is less of an issue than that of counterfeited documents.

Failures in data collection is another concern, alongside the globally estimated 50 million births per annum that go unregistered and therefore no documents can be issued. Both these scenarios contribute to official authorities' not knowing exactly how many valid identity documents are being issued based on a counterfeit or altered vital record.

## The solution

Enhancing the physical security of the certificate is an easy and quick option to implement, not only because the cost is relatively low, but also because it can be incorporated into existing workflows, and training requirements would be minimal. There are a number of ways to do this, as detailed over on the following page.

By upgrading the physical security features to include those commonly used in currency and passports means that they are trusted and document checkers are already familiar with them.

Security paper additions will not only protect the integrity of such documents, they can also help to enhance authenticity too.



**VICTORIA**  
AUSTRALIA  
BIRTHS, DEATHS AND MARRIAGES REGISTRATION ACT 1996

REGISTRATION NUMBER  
**123/2017**

BIRTH CERTIFICATE		
1 CHILD	Family name Given name(s) Sex Date of birth Place of birth	CITIZEN John Male 01 October 2017 Carlton
2 MOTHER	Family name Family name at birth (if different) Given name(s) Occupation Age Place of birth	CITIZEN Olivia Manager 27 years London, England
3 FATHER	Family name Family name at birth (if different) Given name(s) Occupation Age Place of birth	CITIZEN George Teacher 27 years Melbourne, Victoria
4 MARRIAGE OF PARENTS	Date of marriage Place of marriage	05 September 2009 Rome, Italy
5 PREVIOUS CHILDREN OF RELATIONSHIP		Not applicable

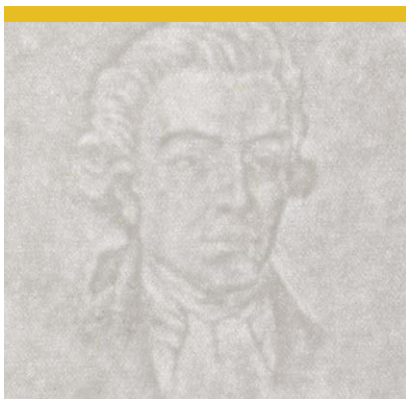
# Portals recommendations:

## Multi-tonal cylinder mould VAT formed watermarks

**Description:** three-dimensional multi tonal watermarks are formed during the paper making process and are therefore integral to the certificate paper. With a mix of high contrast light and dark tones, they offer beautiful clarity and high image definition that cannot be matched with other watermarking techniques.

**Benefits:** recognised by Interpol as being the most secure paper feature available, immediately recognisable, easy to authenticate and virtually impossible to simulate.

**Security options:** Portals can offer a range of designs such as include wallpaper, registered and specialist or enhanced watermarks techniques. These more complex options can include bespoke and customised designs, combined with electrotype features (to add bright contrast or highlights), and / or Textmark™ (combination of positive and negative lettering and numbers).

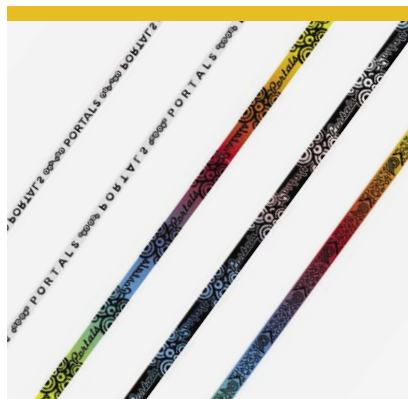


## Security threads

**Description:** an additional security feature that is embedded directly into the substance of the sheet during the manufacturing process.

**Benefits:** easy to verify and identify if absent or altered in any way. Effective deterrent against counterfeiting with both overt and covert options available. A windowed thread is also extremely effective as an anti-scan and anti-copy feature.

**Security options:** the use of an embedded text-based security thread with microprint text has become the de-facto standard. Threads can be fully embedded or windowed, clear, coloured or with colour shifting properties and / or reactive to friction / heat. Threads can also include fluorescent, patterned, or text features in their design.

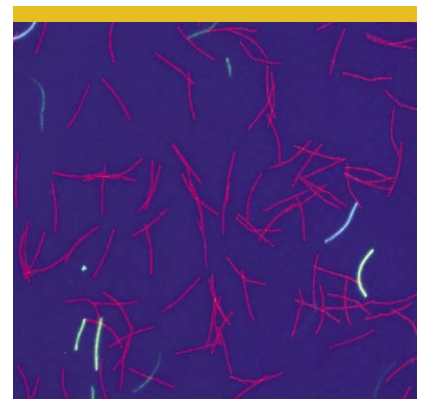


## Fibres

**Description:** silk fibres and planchettes are combined into the paper during production and therefore integrated fully into the core of the paper.

**Benefits:** an extremely effective authentication feature, fibres are easy to verify and identify if absent or altered in any way. Effective deterrent against counterfeiting with both overt and covert options available.

**Security options:** single-coloured fibres can be randomly distributed fibres across the sheet of paper. Alternatively, you can adopt a 'banded fibres' option, where the security fibres are constrained within a band across the sheet making it significantly harder for the counterfeiter to replicate. A switch from a single colour mix to a combination of colours or multicoloured 'candy stripes' with visible or invisible fluorescent options will also enhance the security of the document.



## Holographic features

**Description:** strikingly beautiful metalized threads, patches or stripes that can feature multiple combinations of effects and features.

**Benefits:** distinctive, eye catching and being virtually impossible to replicate, makes holographic features a quick and easy document authentication tool.

**Security options:** ideally these should offer a combination of multiple overt effects and covert features (including micro images, nano-texts, kinetic effects, switch effects, Covert Laser Readable images etc) into a distinctive and beautiful holographic security feature.

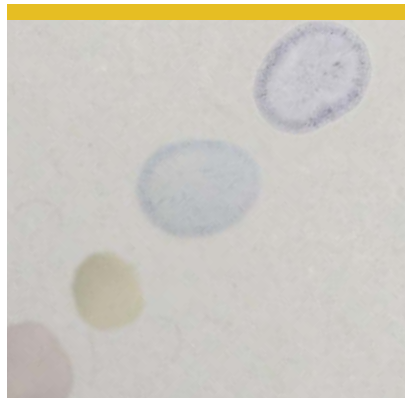


## Sensitisation to chemical abrasion

**Description:** the substrate can also be treated with hidden chemical sensitisation dyes that react when it comes into contact with specific substances typically used for attempted alteration purposes.

**Benefits:** any attempted use of chemical solutions to alter the details on a certificate are immediately obvious, highly visible, permanent and clearly indicate the area of attack with strong tamper evidence.

**Security options:** available sensitisation agents include reactions to: Ethanol, Cellosolve, Methanol, Acetone, Bleach, Pet Ether, Isopropanol, Sulphuric Acid and Sodium Hydroxide.



## Toner adhesion

**Description:** a specialist additive, included in the size bath to help absorb and lock in printing inks and as the title suggests, improve toner adhesion.

**Benefits:** good toner adhesion allows for better and more secure absorption of personalisation inks which in turn is an essential part if the document's objective.

**Security options:** toner adhesion aids the paper and print and allows more secure printing of personalisation data or barcodes and QR codes. Barcodes or QR codes allows the document to be compatible with the digital infrastructure of the bearer's records.



## Portals credentials

- As security paper and component experts across the globe, Portals is the ideal partner to help ensure your birth certificates and breeder documents are sufficiently robust and resilient to manage today's specific security challenges.
- We are experts in delivering security paper solutions that our customers trust. With more than 300 years of experience, supplying into the banknote, passport and security document industries, we certainly have the know how to help.
- At Portals, all of our high security papers are specially designed for easy printability. They also offer excellent toner adhesion properties that ensure reliable and durable ink adhesion, important for both certificate alphanumeric text and QR code personalisation.
- By truly understanding the threats being faced, we can work with you to define the optimal specification for your certificates.

Talk to us to find out how we could tailor your designs and enhance your level of certificate security.

Find out more at [portalsinternational.com](https://portalsinternational.com)