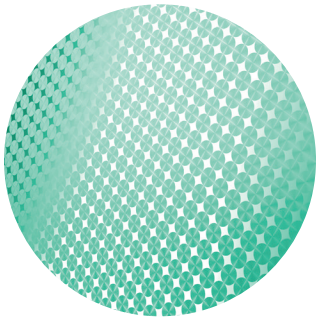
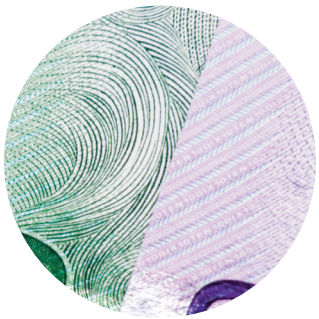
TRADITION &
INNOVATION

sustana security papers™







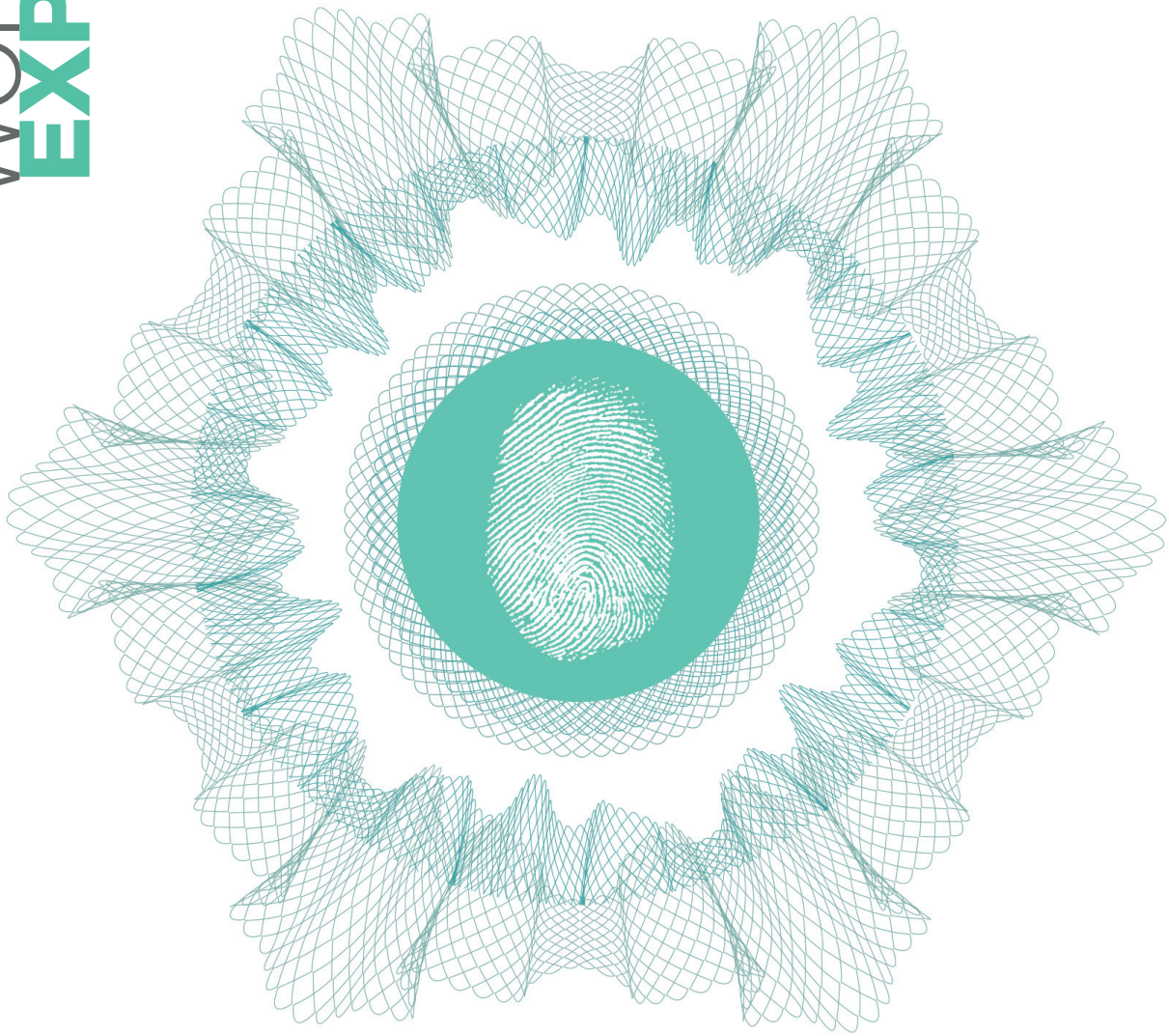
sustana®


sustana
security
papers™



Unrivaled reputation. Inimitable products.

WORLDWIDE
EXPERTISE



SUSTANA'S SECURITY LEGACY **IS UNMATCHED**

Our premium security papers protect customers worldwide

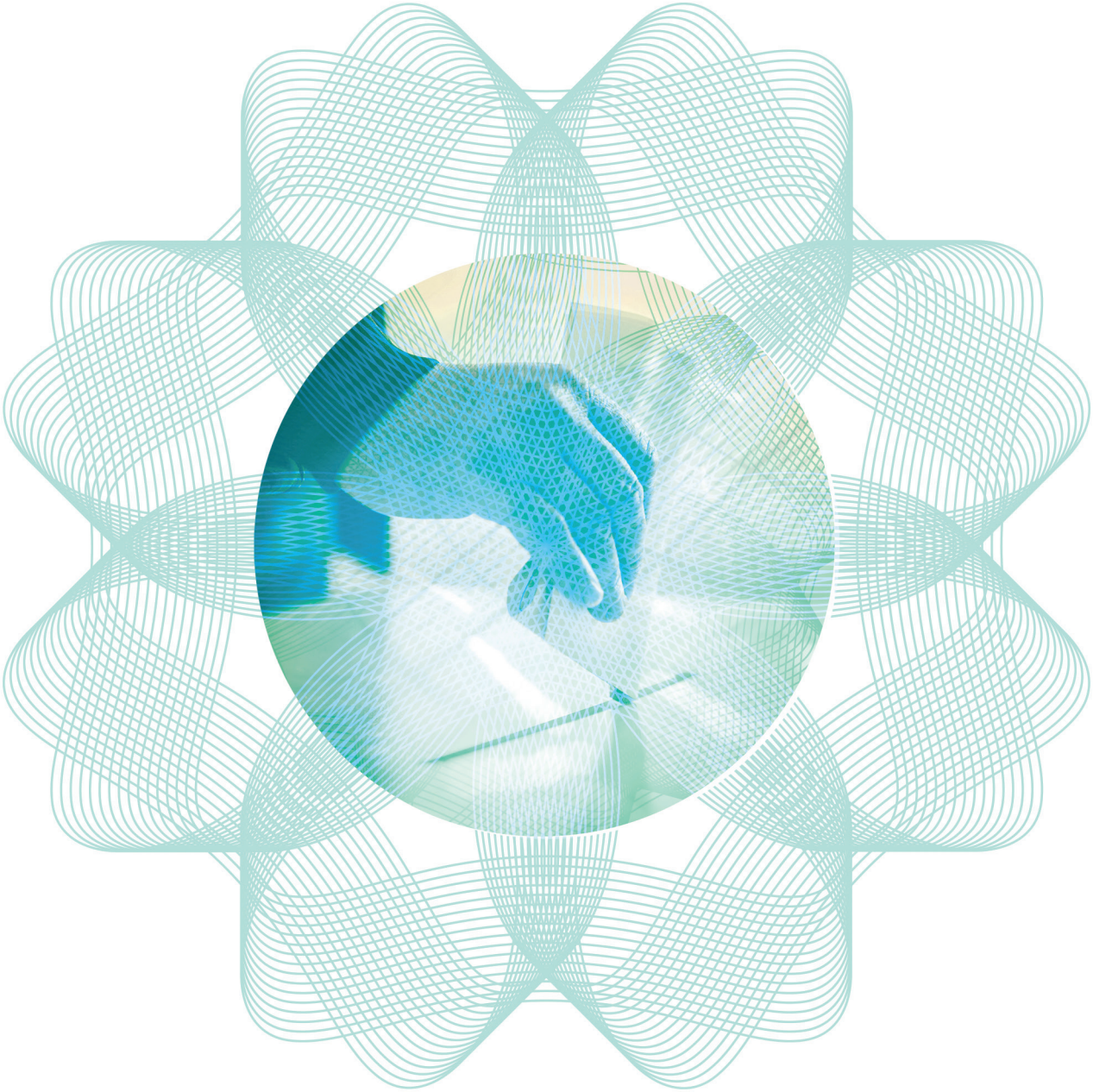
Sustana's security papers protect the authenticity of passports, checks, ballots and other valuable documents. The essence of our business is protecting the good name of your organization with our superior products, expertise and service.

All our security papers are embedded with multiple levels of traditional and innovative features to protect you against document duplication and alteration. Our multilingual customer support team has the expertise to understand specialized security requirements and recommend the most appropriate solutions. As a business established in 1882, we have a longstanding tradition of providing reliable and discreet service to public and private sector customers worldwide.

COMPREHENSIVE **PROTECTION**

SECURITY STARTS WITH **SECURE PRACTICES**

Sustana Security Papers include features – designed to foil even the most advanced scanners and printers – into the paper substrate during the manufacturing process. It is virtually impossible to copy an embedded watermark, planchette or security fiber. When combined, these features ensure an even greater degree of security, protecting document authenticity and your organization's integrity.








USA



1. AT THE MILL

All paper stock, dandy rolls and other supplies are under strict supervision at all times. Several layers of advanced security and monitoring systems safeguard our facilities, personnel and integrity.

2. CUSTOMIZED, PROTECTED PRODUCT “RECIPES”

All our products are custom-made and employ a special combination of security features – and are closely guarded secrets.

3. LIMITED PRODUCTION

Since every product recipe is unique, we make just enough paper to meet your needs, preventing any overstock from falling into unauthorized hands.

4. LIMITED DISTRIBUTION

Sustana only ships security papers products to qualified security printers, ensuring the integrity of your documents by limiting distribution.

5. CUSTOMER AUDITS

Each new customer undergoes a security audit, which includes an investigation of the paper’s end use, to ensure legitimacy.



COMPREHENSIVE APPROACH TO SECURITY

Our comprehensive approach to security extends **beyond manufacturing,** to distribution and rigorous customer audits.

PRODUCT APPLICATIONS



PROTECTING YOUR DOCUMENTS AND YOUR **ORGANIZATION**

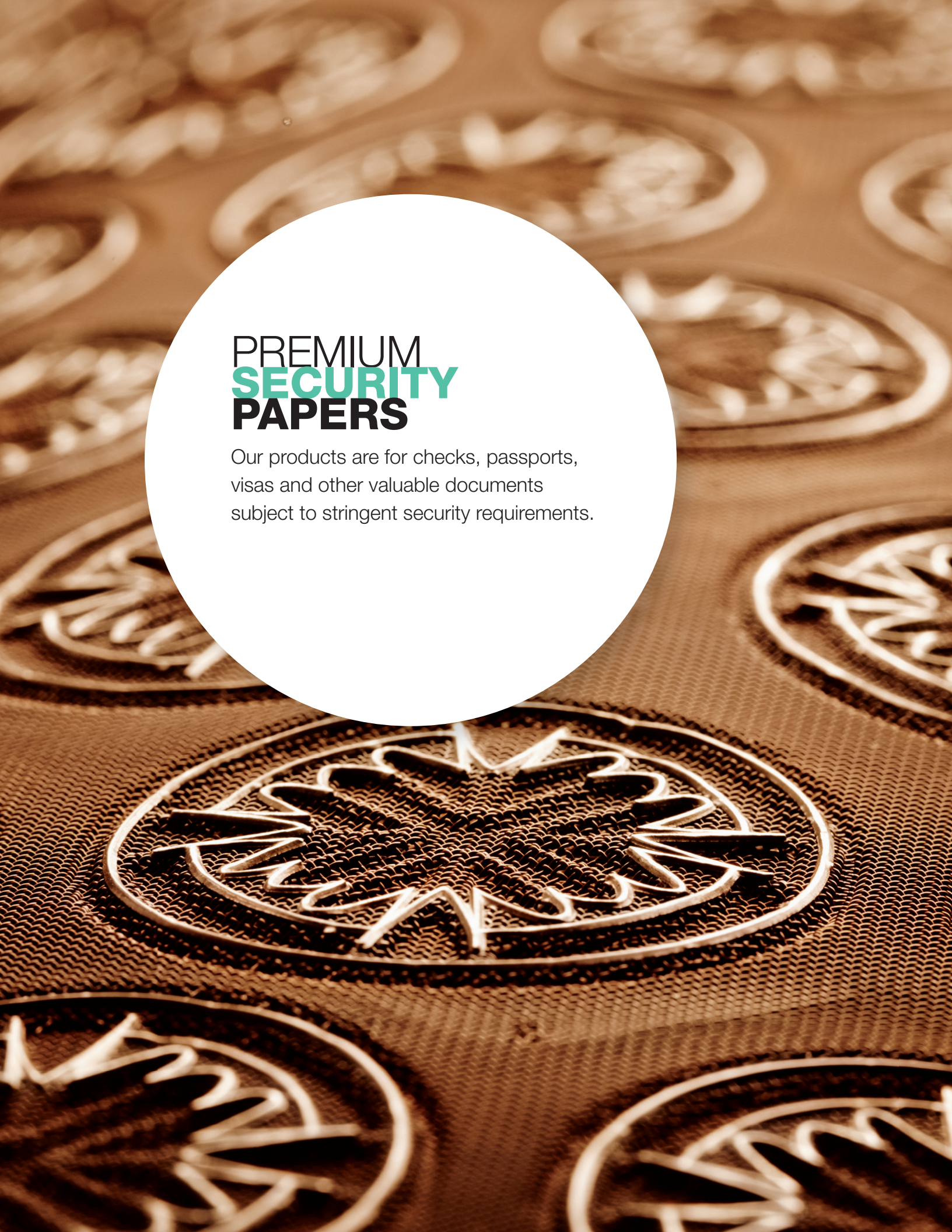
Most security papers are unique, as they are manufactured for a specific use, such as identification (passports, visas, civil registry) or payment (checks, lottery tickets, tax stamps).

These and other valuable documents are susceptible to forgery and fraud, so protecting them guards the integrity of institutions — even public safety and civil government. Our purpose-specific product features protect and authenticate evidence — and reveal tampering — in the event of fraud.









PREMIUM SECURITY PAPERS

Our products are for checks, passports, visas and other valuable documents subject to stringent security requirements.



1. IDENTIFICATION

Documents used for identification purposes:

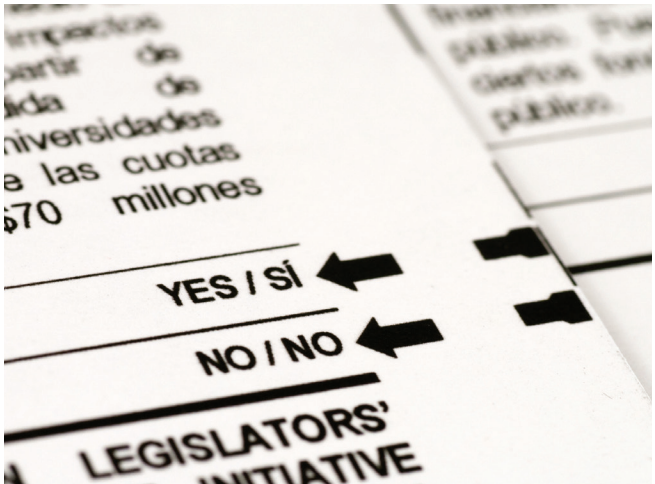
- Passports
- Civil registry
- Visa labels
- Credentials
- Title certificates



2. PAYMENT

Documents representing monetary value:

- Checks
- Lottery tickets
- Tax stamps
- Fiscal stamps
- Stock/Bond certificates
- Vouchers/Coupons
- Admission tickets

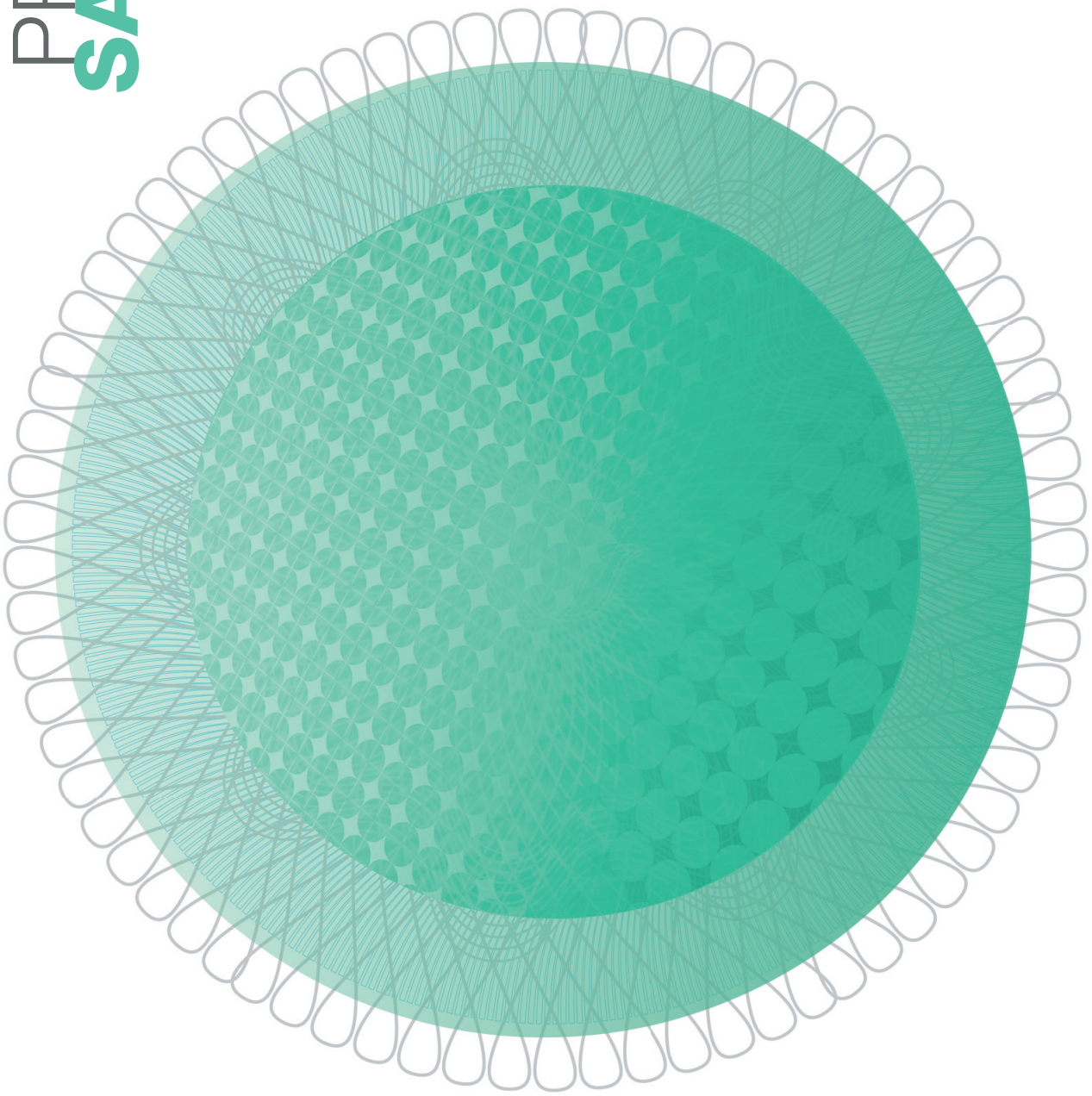


3. VARIOUS APPLICATIONS

Documents for a range of important purposes:

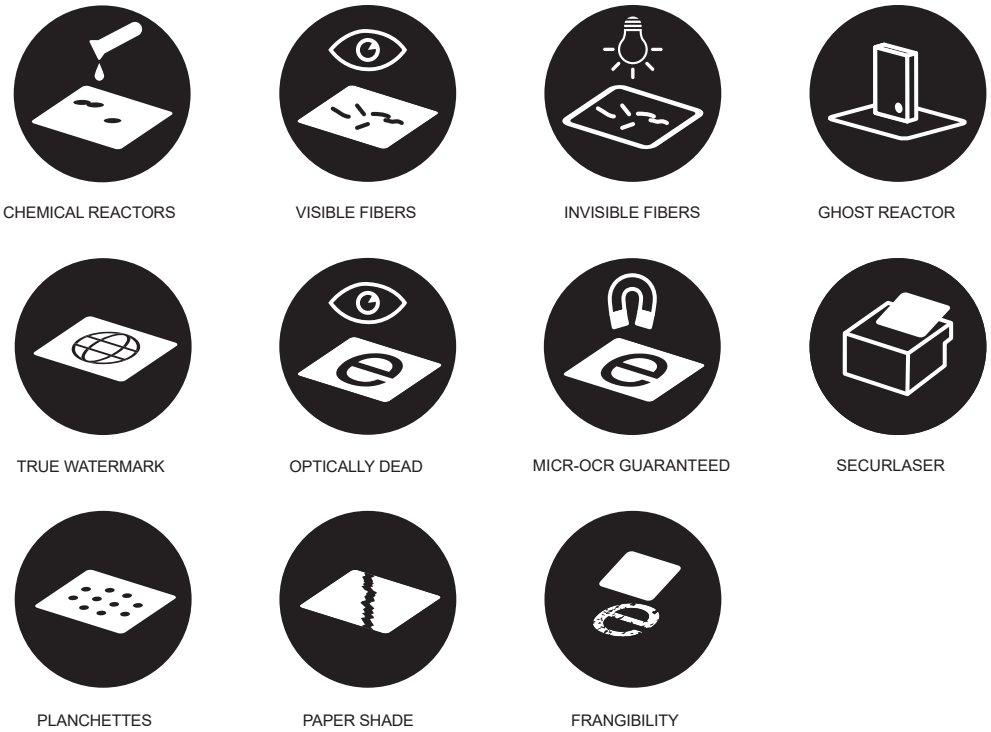
- Election ballots
- Medical prescriptions
- Academic transcripts
- Vehicle decals
- Brand protection labels

PRODUCT SAMPLES

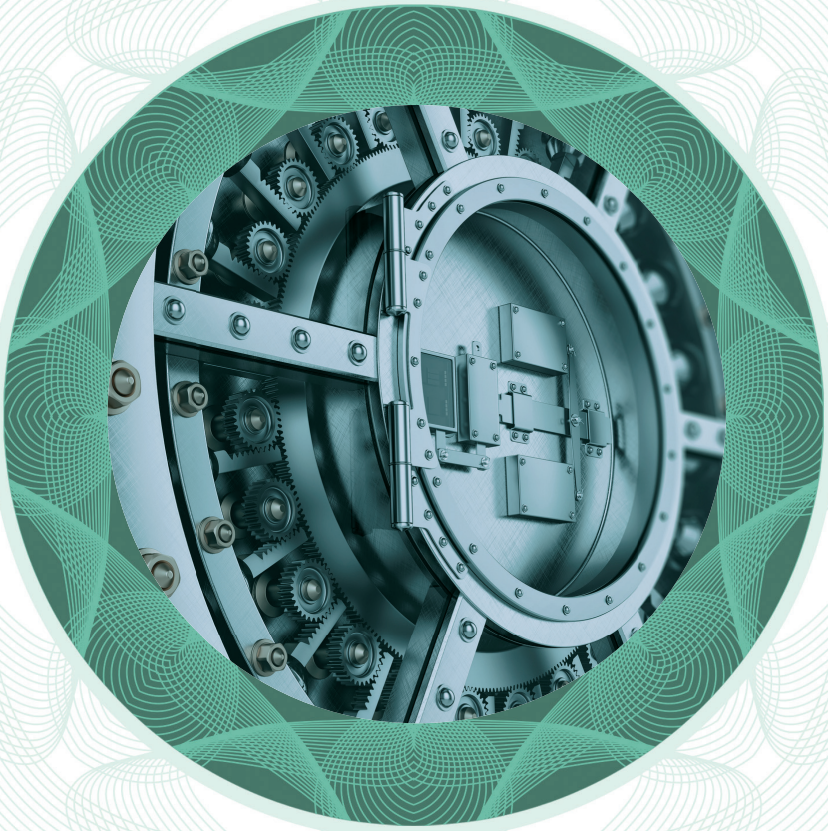


SPECIFIC SECURITY FEATURES FOR **EACH PRODUCT**

Our products incorporate purpose-specific security features to provide the required degree of protection.



EMBEDDED SECURITY FEATURES



TRADITIONAL
AND
HIGH-TECH PROTECTION

Sustana uses a full range of traditional and innovative high-tech security features that are embedded into the paper during the manufacturing process. These features underlie our ability to manufacture security papers that meet the most demanding security requirements, and provide the best possible protection against counterfeiting.

FIRST LEVEL PROTECTION: OVERT SECURITY –
VISIBLE TO THE NAKED EYE

SECOND LEVEL PROTECTION: COVERT SECURITY –
STANDARD TOOLS INVISIBLE TO THE NAKED EYE

THIRD LEVEL PROTECTION: COVERT CONTROL –
PROPRIETARY TECHNOLOGY INVISIBLE TO THE NAKED EYE

LEVEL 1
OVERT SECURITY **VISIBLE**

Overt security – **Visible to the naked eye**

WATERMARKS

Used for hundreds of years, watermarks remain one of the most reliable security features. Interpol considers multi-tone watermarks to be one of the best deterrents against forgery. Random or localized watermarks (best seen when held up to a light), which can be raised, shadowed or multi-tone, cannot be photocopied, scanned or altered by chemicals.

Sustana offers pre-designed security watermarks as well as custom-made marks that remain the customer's property.



VISIBLE SECURITY FIBERS

Visible security fibers cannot be reproduced. They are available in a range of colors and shapes, and Sustana recommends a combination of the following:

- Visible and invisible fibers
- Non-fluorescent and fluorescent (visible only under ultraviolet light) fibers
- Fibers (3-6 mm) and microfibers (0.375 mm)

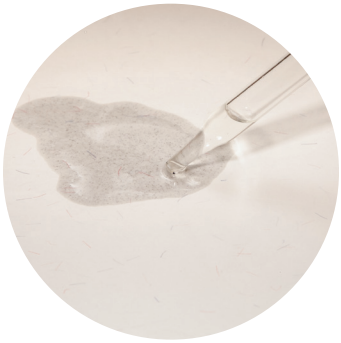


KEY BENEFIT: OUR ACTIVE SOLVENT AND OXIDANT REACTORS PROVIDE PERMANENT EVIDENCE OF CHEMICAL ATTACKS.

CHEMICAL REACTORS

Chemically reactive security papers are treated with agents that become visible the instant a chemical alteration is attempted. The various chemical reactors can be used alone or in combination, and include sensitivity to:

- Oxidants
- Polar and non-polar solvents
- Inorganic acids
- Bases (alkalis)
- Reducers



PAPER SHADE

Fully tinted paper protects against color duplication, because counterfeit printed sheets use white paper.



PLANCHETTES

Embedded and randomly distributed during the papermaking process, security planchettes are tiny non-reproducible dots that help end-users validate a document's authenticity:

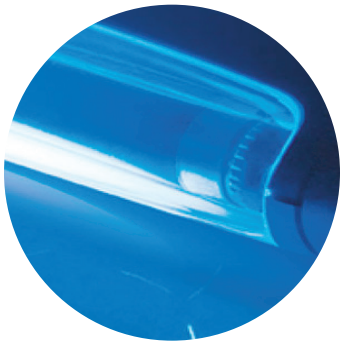
- Fluorescent planchettes change color under ultraviolet light
- Non-fluorescent planchettes can be manually removed from the paper surface
- Chemically-reactive planchettes change color upon contact with an alkaline solution
- Thermochromic planchettes change color on heat contact
- Bi-thermochromic planchettes change to two different colors on heat contact




LEVEL 2
COVERT
SECURITY
INVISIBLE
Covert security – **Standard tools invisible to the naked eye**

UV DULL/DEAD

This distinctive property is the first security barrier for any security paper, showing very limited (dull) or absent (dead) fluorescence when the paper is exposed to ultraviolet light.



INVISIBLE SECURITY FIBERS

Invisible security fibers cannot be reproduced. They are available in a range of colors and shapes, and Sustana recommends a combination of the following:

- Invisible and visible fibers
- Non-fluorescent and fluorescent fibers (visible only under ultraviolet light)
- Fibers (3-6 mm) and microfibers (0.375 mm)



SECURLASER

SecurLaser is a unique double-sided surface treatment that increases the bonding of toner to the surface of the sheet. Attempts to remove laser-printed variable information will cause the paper to delaminate.
The visible evidence of fraud will thwart the most sophisticated fraudsters. Our security paper products are guaranteed for MICR and OCR applications, meeting banking standards for high-speed optical readers and magnetic ink recognition.



FRANGIBILITY

Paper designed to break into pieces following attempts to remove or mechanically attack the paper surface.





LEVEL 3
COVERT CONTROL **INVISIBLE**

Covert security – **Proprietary technology invisible to the naked eye**

GHOST REACTOR

An invisible taggant embedded in paper, Ghost Reactor is a proprietary technology that instantly distinguishes a genuine document from a fraud with the help of a miniature portable detector or desktop reader. This technology can also be built into a high-speed scanner.

Ghost Reactor offers invincible, invisible embedded protection that renders your paper unique and impervious to duplication.

Different versions of Ghost Reactor are available.



SCAN-TO-CHECK GR

The latest evolution in document validation, this functionality combines Rolland's Ghost Reactor taggant with automated, high-speed document processing equipment such as check scanners or election ballot tabulators. The perfect solution for high-volume document validation processes.



SECURITY FEATURES CHART

PREMIUM SECURITY PAPERS FOR YOUR **VALUABLE DOCUMENTS**

Sustana uses a broad range of traditional and high-tech security features – visible and invisible – to provide your documents with different types of protection.

	Security features
	MULTI-TONE WATERMARK (RANDOM OR LOCALIZED)
	GHOST REACTOR
	SECURLASER
SECURITY FIBERS	VISIBLE FIBERS/MICROFIBERS (FLUORESCENT OR NON-FLUORESCENT)
	INVISIBLE FIBERS/MICROFIBERS (FLUORESCENT OR NON-FLUORESCENT)
PLANCHETTES	FLUORESCENT, NON-FLUORESCENT
	CHEMICAL REACTIVITY TO OXIDANTS
	THERMOCHROMIC
	BI-THERMOCHROMIC
CHEMICAL REACTIVITY	OXIDANTS
	REDUCERS
	BASES (ALKALI)
	POLAR SOLVENTS
	NON-POLAR SOLVENTS
	INORGANIC ACIDS
	PAPER SHADE
	FRANGIBILITY

TYPE OF PROTECTION



SCANNER	COPIER	CHEMICAL	MECHANICAL	REPRODUCTION	Security benefits
●	●	●	●	●	Multi-tone and multi-dimensional watermark resists photocopying and scanning, cannot be altered with chemicals or duplicated on press.
●	●			●	Detector-readable, invisible taggant that is embedded in the legitimate substrate; protects the document against scanning, photocopying or any other replication attempt on non-treated paper.
			●		Surface treatment applied on both sides of paper increases toner adhesion to prevent removal of printed area.
●	●			●	Multicolor UV-sensitive visible fibers embedded and randomly distributed throughout paper; cannot be duplicated using reproduction technologies.
●	●			●	Multicolor UV-sensitive invisible fibers embedded and randomly distributed throughout paper; cannot be duplicated using reproduction technologies.
●	●			●	Multicolor UV-sensitive visible planchettes embedded and randomly distributed throughout paper; cannot be duplicated using reproduction technologies.
●	●	●		●	Yellow chemically reactive planchettes embedded and randomly distributed throughout paper; cannot be duplicated using reproduction technologies.
●	●			●	Thermally reactive planchettes embedded and randomly distributed throughout paper; cannot be duplicated using reproduction technologies.
●	●			●	Thermally reactive planchettes embedded and randomly distributed throughout paper that change to two different colors on heat contact. Cannot be duplicated using reproduction technologies.
		●			Chemical reactivity to oxidants (bleach) foils attempts to alter document.
		●			Chemical reactivity to “ink eradicator” foils attempts to alter document.
		●			Chemical reactivity to bases (alkali), such as caustic agents foils attempts to alter document.
		●			Chemical reactivity to polar solvents, such as acetone, foils attempts to alter document.
		●			Chemical reactivity to non-polar solvents, such as toluene, foils attempts to alter document.
		●			Chemical reactivity to inorganic acids, such as sulfuric acid, foils attempts to alter document.
			●		Fully tinted paper protects against color-copying.
			●		Distinctive formulation causes paper to break apart after removal attempts or mechanical attacks to the printed surface.

SUSTANA
IS COMMITTED
TO ENVIRONMENTAL STEWARDSHIP

Committed to responsible sourcing and paper production, Sustana manufactures papers that are FSC®-certified supporting responsible forest management and are backed by independent third-party certifications that verify key environmental attributes.

OUR PRODUCTS ARE INDEPENDENTLY CERTIFIED BY LEADING ORGANIZATIONS:

FSC
www.fsc.org
FSC® C009908
The mark of responsible forestry

For custom made security papers, FSC certification is available upon request.

1 877 440-4140
sustanasolutions.com/products/premium-security-papers/



09-2026