

# How to protect your identity document against forgery?

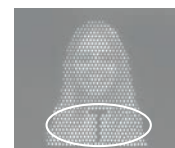
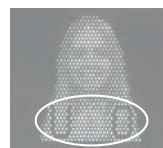
Thousands of identity and travel documents exist worldwide, making it challenging to verify their authenticity easily. To face these challenges, IAI industrial systems, as one of the most successful pioneers in laser and optics technologies, has developed high-level personalisation security features: ImagePerf® and ImagePerf®/REV.

ImagePerf® is a repetition of the holder's photograph used to verify the original holder's image, thus guaranteeing its authenticity.

Special laser technology is used to create minute holes right through the document's substrate. The holes are arranged to form an image that becomes clearly visible when the document is held to the light. Furthermore, the holes are so small that they do not interfere with the design of the document. This allows the combination of ImagePerf® and personalisation information within the limited space available on the document. The perforations can overlap with applied personal data and other security elements.

Additionally, an ICAO standard country prefix is applied in the lower right corner or next to the ImagePerf®. This three letter code is fixed and secured and prevents the

creation of false documents with a genuine ImagePerf® system. This can be done with Tilted Laser Image (TLI). TLI is an optically variable security feature that perforates the country prefix under two different angles, making it gradually visible under different viewing angles.



ID-card with ImagePerf®/TLI

ImagePerf®/REV goes a step further and connects the holder's photograph applied on the front side of the card/datapage to a secondary photo applied on the REVERSE side of the card/datapage.

This feature protects against manipulation of the main photograph especially when attacked from the REVERSE side of the card/datapage. When the document is compromised in order to change the main photograph, the forger has to replace the ImagePerf® which authenticates this main photo, and also this laser engraved reversed image on the back. These elements match closely together and are virtually impossible to change without being noticed. Therefore ImagePerf®/REV allows easy authentication of the main photo on the card/datapage and connects the back side of the document carrying the REV image to its front.

As the feature is perforated into the document substrate it is virtually impossible to remove it as it would mean that the original material has to be restored. The applied image is a negative of the original holder's photo. So in case the original image is tampered with, the forger would have to perform the inverse action on the perforated image. The secondary image at the back side of the card and the ImagePerf® perforations are matched on top of each other which makes it virtually impossible to perform such alterations successfully.

This personalised first-line security feature can easily be checked with the naked eye and validates that the front and back sides of the card/datapage have not been compromised and the integrity of the document is intact.

Highlights of ImagePerf® and ImagePerf®/REV:

- ▶ ImagePerf® has 20+ years of experiences and knowledge, more than 25 national documents in use with an excellent reputation
- ▶ High-level first line easy to inspect security feature
- ▶ Personalises irreversibly and protect against forgery
- ▶ Protects document's front and back sides
- ▶ Doesn't interfere with the document design
- ▶ Validates document's integrity
- ▶ Proven record of accomplishment

ImagePerf® and ImagePerf®/REV are used exclusively for governmental documents such as passports, ID cards, resident permits and driver licenses. ImagePerf® and ImagePerf®/REV are available as an option on IAI's BookMaster® and CardMaster® systems.



ImagePerf®/REV on ID card's front, back and through the light vision

