

**DLR IDProtect™**

Advanced holographic laminate for use in Passports to protect the bio-data page from the threat of counterfeit by replication or simulation.

The ICAO 9303 document specifications recommend a holographic element should be used to protect the bio-data page of all passports to avoid counterfeit attack.

The reason that holography is best suited to deliver the protection required for ID documents is because of the wide range and versatility of optical feature effects it can provide, from Fresnels to rainbow iridescence and kinetic animation to stereograms. The ability to combine these effects across HRI (transparent holograms) and metalised areas ensure that the data behind the hologram remains protected but can still be easily authenticated.

De La Rue has been a global leader in secure classical 'rainbow' holography since the early 1990s. In line with the changing needs of the market we have innovatively evolved our capabilities and processes. Using a combination of both design and effects based imaging, De La Rue has developed a direct-write holographic imaging platform, which enables new, distinguished effects with higher brightness, preferred for use in transparent (and therefore lower reflectivity) holographic laminates present in most passports.

Used in their own right, or in combination these origination platforms provide De La Rue with a unique proposition to the market which is secure, engaging and cutting edge.

De La Rue is a leading provider of sophisticated products and services that keep nations, their economies and their populations secure. At the forefront of identity management and security, De La Rue is a trusted partner of governments, central banks and commercial organisations around the globe.

De La Rue is listed on the London Stock Exchange (LON: DLAR).

If you would like to find out more  
or visit [www.delarue.com](http://www.delarue.com)

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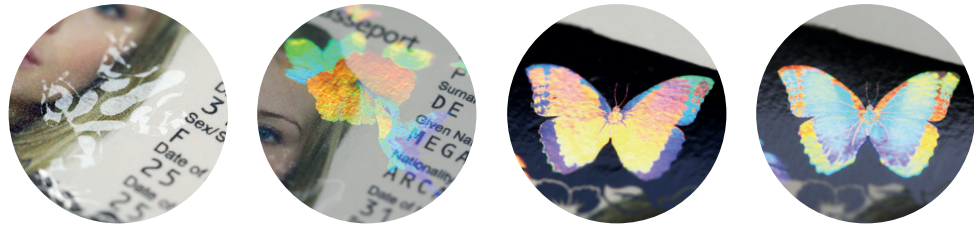
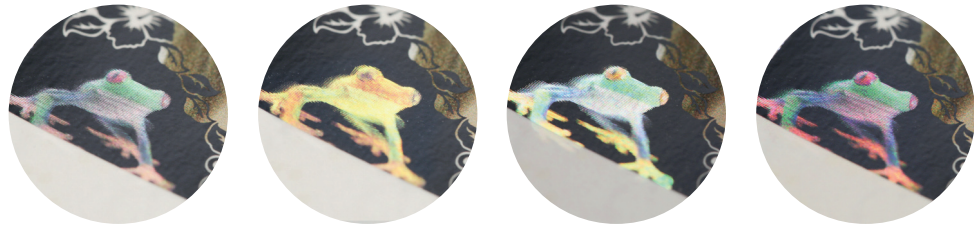
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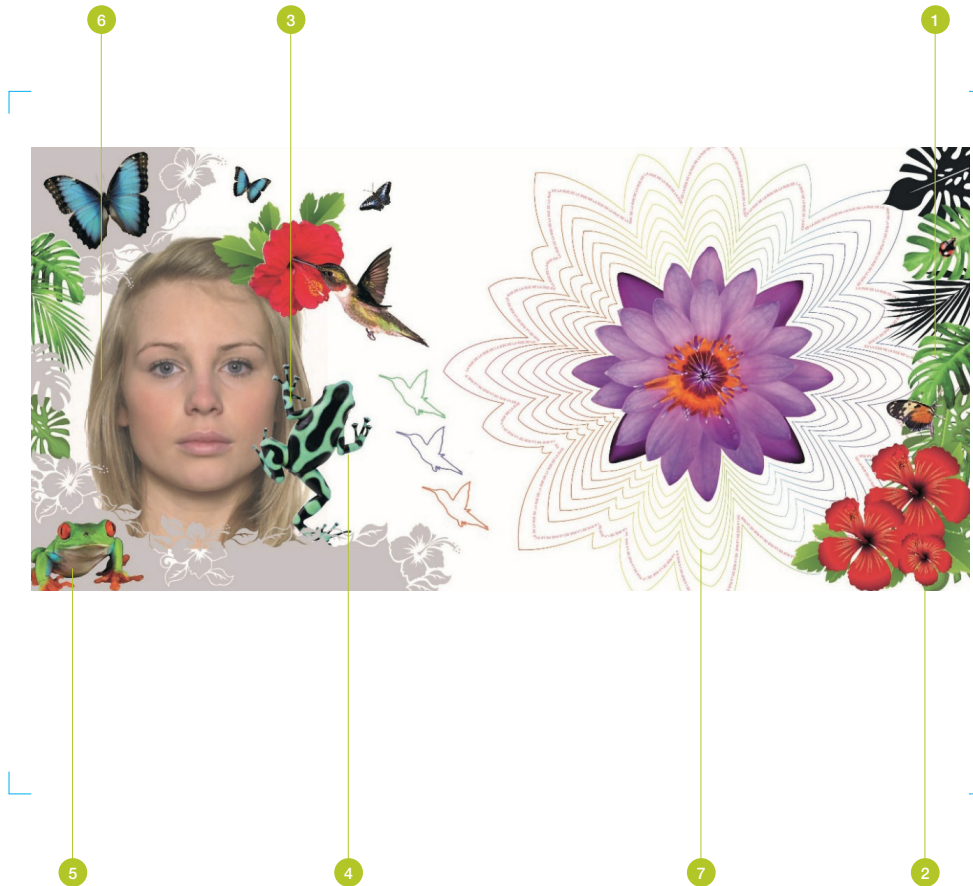
DeLaRue

# The Next Generation of Identity Management Solutions





The illustration below demonstrates some of the best effects that can be used in your laminate. Coupled with intelligent design, this will give you maximum impact and ultimate security.



## What to look for

### 1. Palm Leaves 2D-3D parallax effect

The palm leaves can be seen on the short sides of the hologram, with some appearing at the front near the surface and others further to the back behind. The tilting of the hologram left and right causes the leaves to move horizontally in opposing directions creating a strong illusion of depth.

### 2. Red Flowers with Water Droplets Miniature Fresnel lens

The red flowers in the bottom right of the hologram change colour from red to yellow when tilted. On the flower petals, small water droplets can be seen. These have been portrayed by miniature Fresnel lens elements to simulate an almost tactile effect of beads of water.

### 3. Hummingbird and Hibiscus

When tilted the hummingbird can be seen in 4 rainbow colours, deep blue, green-blue, yellow and orange-red. Below the hummingbird is a sequence of key-lined hummingbirds decreasing in size from top to bottom.

### 4. Poison Dart Frog 90-degree rotational switch effect

The naturally coloured areas of the poison dart frog appear as a holographic white (achromatic), whilst the naturally dark areas of the frog have no holographic replay. Rotation of the hologram by 90 degrees causes the previously white areas of the frog to switch off, whilst the previous dark areas of the frog switch on to replay a holographic white.

### 5. Red Eyed Tree Frog 3D stereogram with interlaced RGB

The true colour 3D stereogram of the red eyed tree frog can be seen to rotate when tilted left to right.

### 6. Butterflies

When tilting the hologram left to right the butterflies gradually change colour from orange to blue. The elements that appear blue in the left view will appear orange in the right view and vice versa.

### 7. Large Flower with Guilloche

The large flower in the centre of the hologram presents a highly iridescent, shimmering optical effect which when tilted vertically appears to expand outwards. The colour changes from the centre of the flower to the edge of the petals to accentuate the animation effect.

The guilloche animation around the outside of the large flower is driven by tilting the hologram north – south. Tilting the hologram away from the viewer causes the animation sequence to expand outwards and vice versa.

**Level 2 security:** The outermost guilloche path has been recorded with diffractive micro-text 200µm in height which is visible with an eye glass

**Level 3 security:** The third guilloche path stepping in has been recorded with diffractive micro-text 70µm in height which is visible with a microscope