



**Counterfeit and transfer resistant
self adhesive labels for vehicle
windcreens or license plates,
that allow clean removal for
renewal**

Domenica Kirchmeyer
3M Deutschland GmbH

Content

- Why do we need transfer resistant labels on vehicle windscreens or license plates (3rd. License Plate)
- Available technologies
- Security requirements (ASTM)
- Sample labels
- Example for decentralized issuing

3rd. License Plate Definition



- A secure label, preferably applied on inside vehicle windscreen, repeating number-plate data by use of pressure sensitive adhesive
- Containing overt and covert security features
- Transfer resistant to prevent misuse
- Easily and cleanly removable for renewal
- Impossible to be reused after removal



Issues to be solved by 3rd. License Plate

License plate theft in order to commit criminal acts

- Vehicle theft
- Insurance and tax violation
- Disguise cars used in activities like ram-raiding or driving from petrol stations without paying
- Evade congestion charges, parking and speeding fines
- Approx. 40,000 stolen plates last year in UK (source DVLR)

Particular requirements for PSA adhesives used

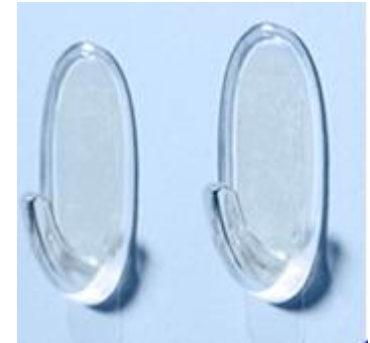
When applied to windscreen inside the vehicle:

- Adhesive must be applied to the „face“ of the secure label
- Crystal clear appearance to enable verification of security features through the windscreen
- Very good initial adhesion to prevent loose fixing
- Humidity stable
- UV-stability, no yellowing or discoloration during validation time
- Very good removability after expiration without the use of additional tools

In case of application on license plate:

- Very good weathering stability
- Cold and heat resistance
- Resistance against gasoline, salt-spray and oil
- No damage to license plate foil in case of removal

Stretchable adhesive technology



- Known in the market for various hook systems
- double coated adhesive technology



Technology Transfer for use with Secure Labels – adhesive is the key

Secure Label applied to windscreen



Secure Label removed, activation of tamper evident/transfer resistant features. Adhesive layer remains on the windscreen.



Clean removal of adhesive without leaving stains – no additional tools needed



New Adhesive Type

Stretch Release Pressure Sensitive Face Adhesive



Secure Labels compliant to ASTM Standard

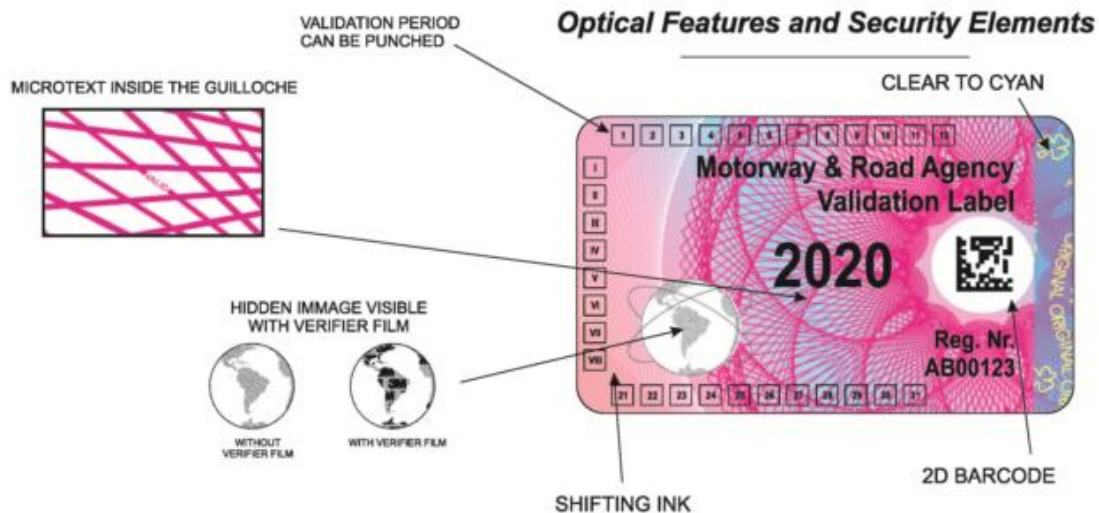


Designation: F 1448 – 93a (Reapproved 2006)

**Standard Guide for
Selection of Security Technology for Protection Against
Counterfeiting, Alteration, Diversion, Duplication,
Simulation, and Substitution (CADDSS) of Products or
Documents¹**

Overt and covert security features in combination with Stretch Release Pressure Sensitive Face Adhesive provide excellent protection against misuse and violation. Crystal clear adhesive allows verification of all security features included.

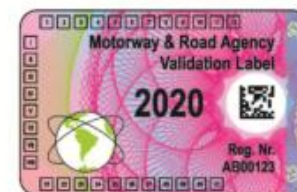
Secure Label Samples



LABEL VISIBLE UNDER UV SOURCE



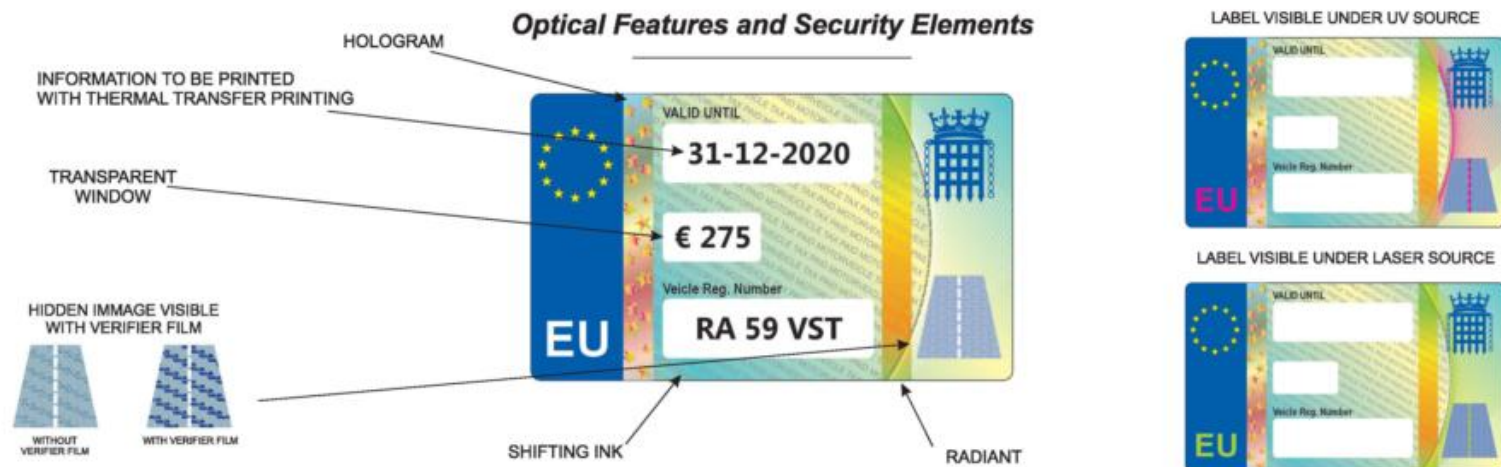
LABEL VISIBLE UNDER LASER SOURCE



Secure Label for centralized issuing:
Labelstock either retro-reflective or non-reflective material, including „VOID“ transfer resistant features.



Secure Label Samples



Secure Label for decentralized issuing:
Labelstock either retro-reflective or non-reflective material, including „VOID“ transfer resistant features.
Windows in Face Adhesive allow printing of variable, personalized information at issuing station.



Application on Licence Plate and as Temporary License Plate



Retroreflective LP Sheeting allows integration of tamper evident features as an integral component during production process

Decentralized issuing of Secure Label windowed construction



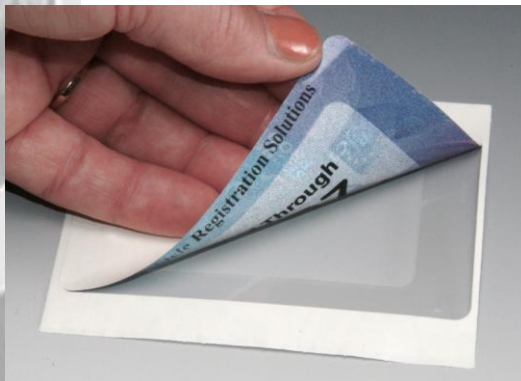
Secure Label on carrier
Print receipt on demand



Print variable information



Separate Secure Label
from carrier/receipt



Separate Secure Label from liner, and
apply on windscreen



Summary

- Stretch Release Pressure Sensitive Adhesive Technology is ideal for temporary Secure Label application on vehicle windscreens or license plates
- The adhesive eases the pain of removal and renewal of temporarily applied vignettes, ensurance or registration labels, etc.
- The adhesive layer can be removed in a clean and easy way, the new label can be applied immediately
- Crystal clear face adhesive layer for inside application allows verification of overt and covert security features
- The stretcheable adhesive layer guarantees transfer resistance and is impossible to be relaminated
- The stretch release adhesive technology provides the highest level of security (CADSS) and the best comfort for the vehicle owner in case of renewal