

Vikuiti™ Clear Card Filter

Plastic takes a new creative direction



Visually amazing



Want to be clearly different?

Now you can, because the Vikuiti™ Clear Card Filter enables manufacturing of truly clear payment cards which are ISO 7810-compliant.

Powered by 3M's revolutionary new Vikuiti™ IR Filter technology, the Clear Card's unique appeal and creative edge will elevate your brand and move your cards to the top of customers' wallets.

Goodbye opaques. Hello new cool clears.

Goodbye opaques



Think clear.

Think creative.

Think opportunities.

**A new material,
a new approach for
card designers.**

Think clear...

Be bold and maximise clear areas – it's what makes Clear Card unique, after all.

Use them to enhance the brand-building images you are portraying.

Think translucent...

Remember, the new substrate allows for printing translucent elements and backgrounds. The contrasts achieved between translucents and clears can be amazing.

Hello new



And don't forget to think opaque...

Don't be afraid to incorporate opaque elements, either. Used selectively, you'll be amazed at how you can revitalise opaque colours – even whites and grays – when partnered with translucents and clears.

Design direction.

Some tips to help you get more from Clear Card.

- Clear Cards are produced on a clear plastic substrate. Typography, solids, patterns, illustrations and photographs will all reproduce well. If it works for a 4-colour print job, it will work for Clear Card!
- You may want to lay down a solid colour behind a designated area to create an opaque effect.
- White is a printable solid colour. However, two coatings will improve the appearance and effect.
- To create dramatic opaque it is recommended that the solid area of colour be a pixel smaller than the overlaid image.
- Don't forget the back of the card – you can design to be seen through both sides – get creative!



cool clears

- Consider the magnetic stripe – even though the stripe will show through the front of the card you can always integrate it into your design.
- As with any project, review a proof to make sure your designs turn out just as you planned!



73%

would like
their next
credit card
to be
clear



Customers, like businesses, are always looking for something different. Something unique. Something to place them above the ordinary. According to research recently commissioned by 3M UK PLC, of the 987 over-16s questioned, 56% said they'd be happy for their next payment card to be clear. Delve a little deeper and the survey reveals that a further 17% would actually prefer a clear card over a traditional opaque one. Based on an adult European population of over 380m this equates to more than 275 million potential Clear Card customers.

Clearly an opportunity to good to miss?

Technical overview

- Less than 5% loss over the visible spectrum
- Enables transparent, fully ATM-functioning cards
- ISO 7810-compliant
- Easy adoption by adhering to PVC
- Custom sheet sizes available

What is a Vikuiti™ Clear Card Filter?

The filter is a proprietary film from 3M that effectively blocks infrared light, so you can now create fully transparent cards that work in standard ATMs, POS scanners and other LED-related devices exactly like conventional opaque cards.

How is it incorporated into the card?

Laminated between two clear sheets of PVC, the clear, IR light-blocking filter allows virtually 90% transmission of light. The result is a clear card with all the functionality of pigmented cards.

Printing

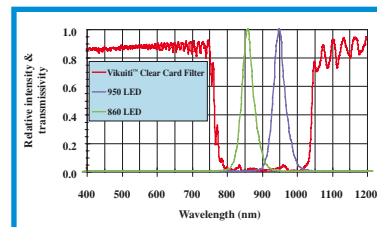
Cards can accept four-colour printing as well as a wide range of translucent and opaque inks, opening up whole new worlds of design and marketing possibilities.

How does it work?

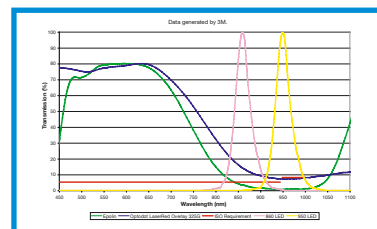
3M's multi-layer optical film reflects more than 90% of the light generated by LEDs used by ATMs to detect the presence of a card.

Typical Clear Card Filter Properties

| Filter Properties | Performance |
|------------------------------------|----------------|
| Visible Transmission (420-680nm) | >95% |
| IR Transmission (860 and 950 LEDs) | 8% |
| Corner Impact (NCITS 322:2002) | PASS |
| Flexure Test (NCITS 322:2002) | >20,000 flexes |
| Peel Test (ISO 10373-1) | 10 lbsf/in |
| Thickness | 0.28 mils |



Typical Spectrum Vikuiti™ Clear Card Filter



Other IR Blocking Technologies



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