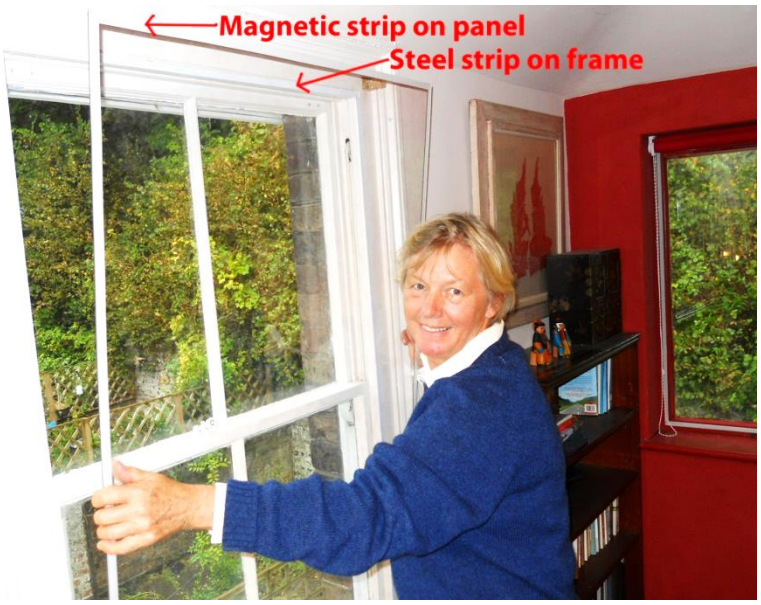
MAGNETIC STRIP SECONDARY GLAZING:

a low-cost, unobtrusive, well-established solution
to draughty, chilly windows and high heating bills
See our video on http://tinyurl.com/EcoLewes (or search for Eco Lewes)



What is it?

A simple DIY retro-fit system for secondary-glazing a wide range of windows, using clear plastic sheets and self-adhesive magnetic and steel strip

How does it work?

Self-adhesive white steel strip is fixed onto the window-frame, and flexible magnetic strip onto a matching-size sheet of acrylic or other plastic. The sheet clicks magnetically onto and off the steel strip

Why should I use it?

Low cost: a small fraction of the cost of conventional double glazing
Immediate reduction in heating bills
Stops draughts, reduces condensation: no more chilly areas of the room, major reduction in steamy windows
Good acoustic insulation for all those Lewes houses right on the street
Neat and unobtrusive: ideal for conservation areas and listed buildings. And acrylic is clearer than glass!
Easy to remove and store: in summer, just pull the sheet off, and store behind furniture/ under bed
Well-established technology: I've used this system for decades, and there's no deterioration

What are the minuses?

Not ideal for windows which you open frequently
Might get unwieldy for windows over c.2.5 x 1.5 metres; and I tried insulating individual sashes but that involves problems with sash weights

What about maintenance and life?

No maintenance, lasts indefinitely
Wrap the sheets in a dustsheet when storing and moving, to avoid scratching. They can be stored in wardrobes/ behind chests of drawers/ under beds or even in a shed
Cleaning: the acrylic sheet doesn't get dirty unless handled a lot. Never use special cleaners/ sprays, acids/ alkalinesGosh, or anything but a very soft cloth and water with a little washing-up liquid

How do I buy it? What does it cost?

The materials can be bought as a kit per window, or the magnetic/ steel strip and plastic sheets can be bought separately. A kit consists of cut-to-size plastic sheet plus a paired set of reels of strip sufficient to do the window(s) specified. This is good if you're a novice or are only doing one window, and it's not that much more expensive than buying the materials separately; but if you're doing several windows it's worth buying larger (better-value) reels of strip and the sheets separately, via the firms below or searching for cheap deals on individual materials, e.g. on eBay. Don't forget VAT and delivery costs.

How do I install it?

Installation can be a simple DIY job, as it just involves cutting the self-adhesive steel and magnetic strip and sticking it onto the window and acrylic sheet, as I've done. Measuring for the sheet size before ordering requires a LOT of care, and sometimes there are difficulties with uneven window-frame surfaces, so if you're not DIY-minded you might prefer to use a local handyperson; I've had several reports of people asking the handyperson to watch our video and he/ she then being very happy to do the installation. He/ she will visit to measure up and assess any preparations/ alterations needed, and tell you what dimensions to order; when the materials have arrived he/ she will return to fit them.

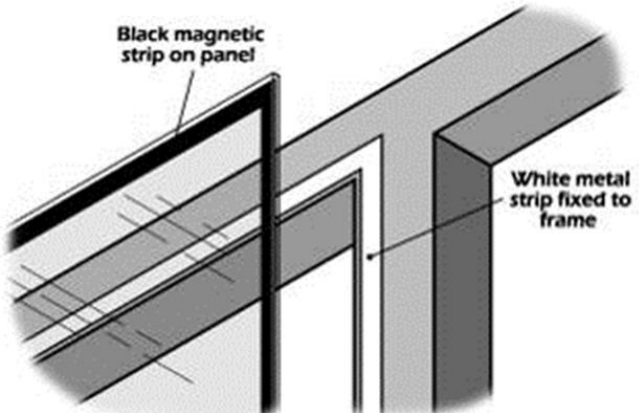
Tell me more about the materials?

Plastic sheet

- Acrylic (Plexiglass, Perspex), polycarbonate and PET sheet don't yellow or deteriorate over time, unlike cheaper polystyrene. All plastic sheet is clearer than glass!
- Polycarbonate is often more expensive than acrylic, with no relevant extra advantages, and it scratches a bit more easily
- PET is recyclable, but is significantly heavier than acrylic
- Glass is cheaper but much heavier (so unsuitable for anything but small windows) & less easy to handle
- You can get 4mm, 3mm or 2mm sheet: there isn't a massive difference in insulation properties, so 3mm is fine; 2mm is very bendy
- Acrylic sheet may be offered with polished edges: this is useful as the edges look neater
- For glass and large sheets, and old/uneven frames, it's a good idea to nail a small wooden batten or studs under the bottom edge, and perhaps a few small nylon swivel-clips at the top and sides; www.brightonandhoveplastics.co.uk stock clips, or here are some suppliers:
  https://www.theplasticpeople.co.uk/fixings-pack-of-24/
  https://www.omegabuild.com/shop/shop.php?category=secondary-glazing-secondary-glazing-accessories
  https://ecoease.co.uk/shop/secondary-glazing-accessories/fixing-clips-white/
  https://plasticsheetsshop.co.uk/product/glazing-clips/

Magnetic & steel strip

- The strips are typically sold in matched pairs of reels, of magnetic strip and steel strip. The steel strip is put on the window-frame, and the magnetic strip on the plastic sheet
- Magnetic strip is a brown rubbery flexible material with a magnetic charge. It's self-adhesive, and **the colour of the adhesive is important** as that's the side that will be seen, attached to the plastic sheet, when the secondary glazing is in position. Check carefully when ordering, as some strip adhesive is brown or black. Magnetic strip can be easily cut with scissors



MagnetGlaze illustration of the system

- Steel strip is a white flexible strip, also self-adhesive. The strip can be painted to match frames. Steel strip can be cut with scissors or a hacksaw, or bent in half till it snaps; or lay the strip across a piece of waste wood, align a chisel with the mark for cutting, and hit the chisel smartly with a hammer
- The quality of the adhesive on the steel strip is really important, so bear in mind that cheap steel strip may just fall off the window! Remember that this is a long-term investment, worth getting right. MagnetGlaze steel strip has better-quality adhesive than some others. If the window-frame is not very smooth and flat, you might prefer to buy a separate very strong adhesive (the strip suppliers don't recommend it, but in practice I find that this works very well); or you can do a bit of work on the window, planing protruding beading, or nailing slim stripwood round the window as a base

Alternatives and additional options

- An alternative to steel/magnetic offered by some companies is two differently-polarised magnetic strips which will bond together. It's said to be a much stronger bond than mag to steel, and using magnetic strip on a uneven window-frame may be advantageous over the more rigid steel; NB the face of the strip attached to the window-frame (so visible when the sheet is removed in the summer) is brown
- There are also systems offered by some suppliers which instead use plastic clips to hold the plastic sheet to the window-frame, or a plastic surround with a magnetic strip; these are possible alternatives though less unobtrusive than the plain magnetic system, and a much less good seal than magnetic strip

Who are the suppliers?

Here are suppliers which I've used or which have been recommended to me by satisfied customers; it's a changing market so check out what each offers, and check carefully the materials, quality, dimensions etc, and what the price includes (VAT, delivery, minimum order surcharge).
A point to note is that **there are no major specialist companies supplying to the retail market** – mainly industrial companies which have a sideline. You can buy kits online, and strip online; also acrylic sheet online, but you might like to support a local business by going to Brighton & Hove Plastics in Portslade.

Acrylic sheet: You can buy a whole sheet and cut it yourself, but it's a lot easier to order it cut to size
Magnetic strip: generally paired magnetic strip & white steel strip; check whether adhesive is white or brown

Suppliers	Acrylic sheet cut to size	Strip set	Sheet and strip kit
Indigo https://indigo.co/Category/magnetic_magnet_self_adhesive_tape_strip_roll (i)		30m magnetic, ditto steel	
The Plastic People https://www.theplasticpeople.co.uk/home-and-garden/secondary-glazing/ (ii)	y	5 metres (iv)	y
The Plasticman https://www.theplasticman.co.uk/products/tapes-and-glues/magnetic-tape.html	y	y (with polarised mag strips)	y (with polarised mag strips)
Sheet Plastics www.sheetplastics.co.uk	y		
Cut My Plastic (Henfield); they deliver. 3mm but not 4mm https://www.cutmyplastic.co.uk/	y		
www.secondarydiyglazing.com/secondary-glazing-systems/secondary-glazing-systems-magnetglaze (iii); Tubeway wholesalers redirect to them for small quantities	polycarbonate – more exp.	y (v)	
Brighton & Hove Plastics (Portslade) www.brightonandhoveplastics.co.uk (ii) Small firm, friendly, don't deliver but you can collect from their shop	y (incl. while you wait)		
Ebay		magnetic and steel	

i) Their Tesa adhesive is good
ii) Sell nylon fixing clips
iii) Minimum order (e.g. £50)
iv) 5-m set, expensive – might as well buy a 30-metre set from another supplier for hardly less
v) Pack of 3 x 5-m sets, but hardly less expensive than their 30-m set so might as well get the latter

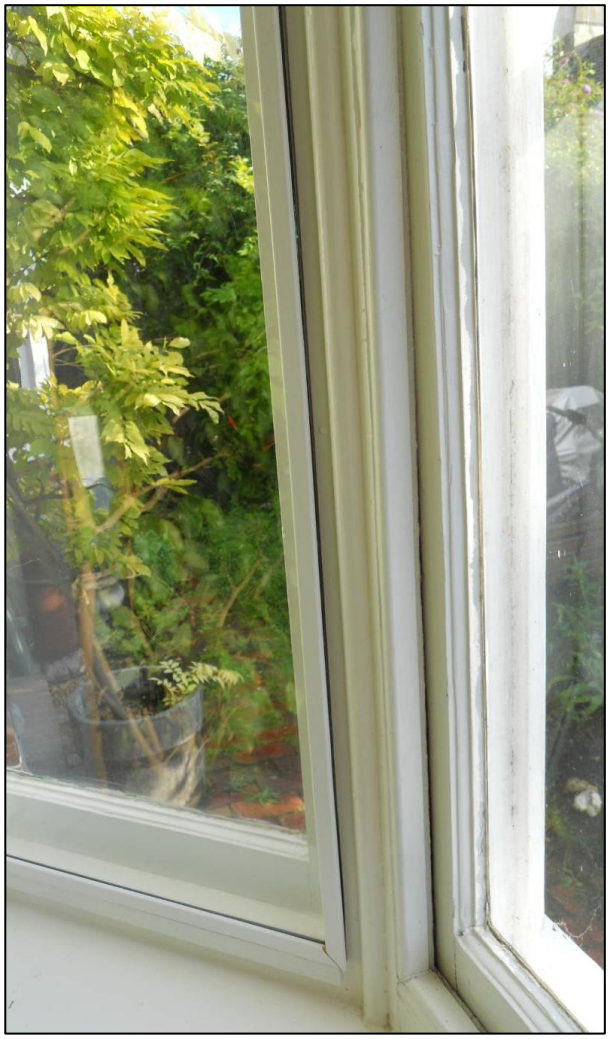
There's also a couple of companies which sell acrylic sheets with the magnetic strip ready-applied, although to be honest it's the work of a few minutes to apply the strip yourself.

SEE BELOW FOR SOME PHOTOS OF MAGNETIC STRIP 2NDARY GLAZING IN MY HOUSE (or at www.jillgoulder.plus.com/green)



Magnetic-strip acrylic secondary glazing on modern wooden windows







Magnetic-strip glass secondary glazing on non-opening sash window

Magnetic-strip glass secondary glazing on front door



