



# Improving Victorian tenement windows



- How South Seeds delivered warmer homes, health improvements and lower bills

# Options for upgrading windows in southside tenements

## Hang thermal curtains

Thermal lining looks like a heavy cotton and is generally available in white or cream, or with blackout properties. Curtains should be made to reach the floor to minimise heat loss through the windows and stop any draughts. South Seeds has a free factsheet available at the office (see back page).

## Draughtproof frames

PVC frames can be draughtproofed with silicon; wooden frames with strips. GTI, an insulation firm based in Dunoon, has a wide variety of purpose-made strips. We recommend Q-LON Retro B seals for sash-and-case windows.

## Install temporary secondary glazing

Temporary glazing film fits over existing single glazing and reduces heat loss through the windows. It can be bought for less than £20 online or at a hardware shop. South Seeds has a how-to-guide for installing glazing film.

## Install removable secondary glazing

Polycarbonate secondary glazing is an effective alternative to double glazing. It uses a rigid sheet attached to the frame of

your window with magnetic strips. It can be added during winter/ removed during summer as necessary.

## Maintain your frames for longer

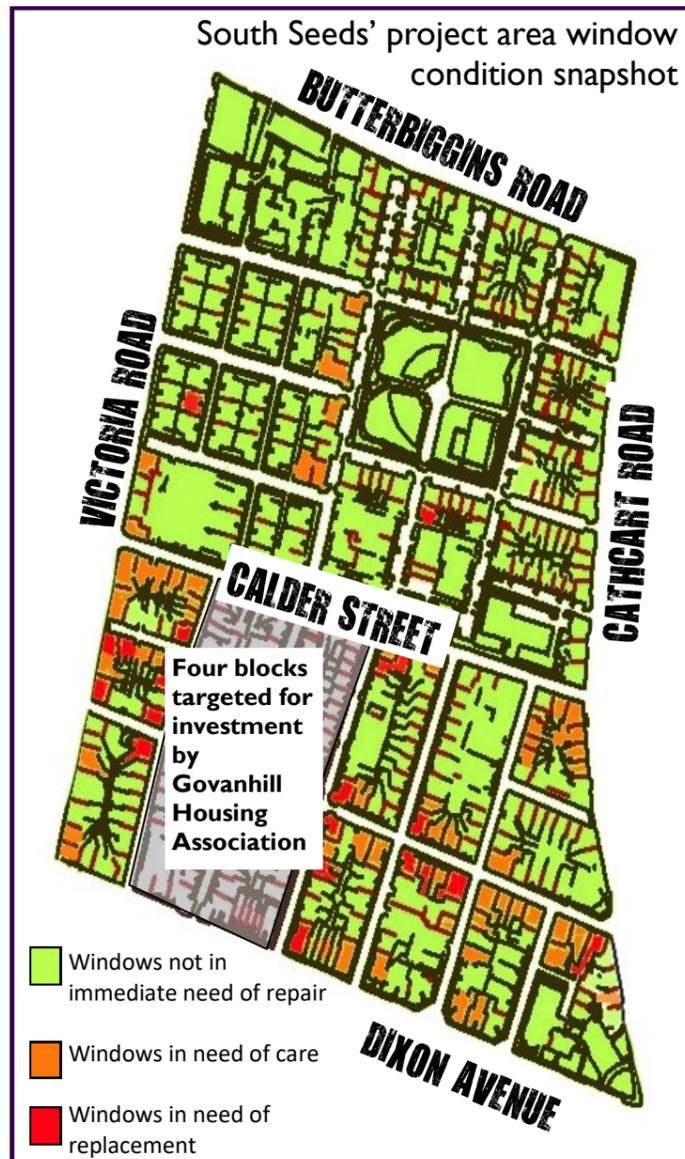
Make sure you regularly paint any wooden frames with exterior paint, and block any gaps in PVC frames with silicon.

## Restore your traditional windows

Window preservation firms can restore traditional windows by replacing rotten wood, ensuring windows are properly weighted and painting the restored frames. Draughtproofing can be added at the same time for a fraction of the total cost. Glasgow City Heritage Trust has a list of preservation companies and may have grants available for properties in conservation areas.

## Upgrade to PVC double-glazed windows

As long as there are no restrictions (for example, properties which fall in conservation areas must maintain the original windows), PVC double-glazed windows are probably the most efficient windows available for a reasonable price. We



suggest you get three quotes from window fitters before you decide who will fit your windows.

## Install sash-and-case double-glazed windows

Traditional window manufacturers make sash-and-case double-glazed windows, which are a lot lighter to lift and a lot easier to fit than their traditional counterparts. However, be aware that as the window is thicker you may need to replace the casements as well as the frames, which will add to

the cost. We suggest you call three different fitters and manufacturers for quotes.

## Get coated glass

The coating reflects heat back into the room while letting in heat from the sun, known as passive solar gain. This glass is pricy but you will only need a single pane per window. By using coated glass in your windows you can achieve a window energy rating (WER) band A, therefore exceeding the latest energy-saving building regulations.

# A vital issue in the frame

WINDOWS are an essential feature in a home: they let in natural light and fresh air, and keep in the heat.

Victorian sandstone tenement properties have windows which take up a larger proportion of the exterior wall than modern properties. As windows are less efficient than walls at keeping in the heat, most residents in Victorian tenements have higher energy bills than residents of more modern properties.

Anyone who has lived in a Victorian tenement knows how important it is to close the curtains when it starts to get dark to keep in the heat.

Windows in poor condition keep in much less heat and result in even higher bills. Where properties fail to meet the repairing standard in the



Housing Act 2006, tenants can contact the Private Rented Housing Panel on 0141 242 0142. Similarly, Glasgow City Council can request owners make improvement but we found little evidence of enforcement. Mending windows is expensive, so windows are often the last on the list of jobs which need done.

In South Seeds' project area there are people living with

leaking and broken windows, excessive noise and sky-high heating bills – and those having to choose between heating and eating.

South Seeds wanted to see how residents' lives would change following their windows being mended and improved, so we launched a pilot project and installed double glazing and secondary glazing where people lived in conservation areas. This opportunity for southside residents was highlighted in the Evening Times newspaper.

This project was made possible by funding from Energy Action Scotland redistributed from an energy provider through consumer redress.

Casey Dickson  
South Seeds energy officer

## Problem window types and what can go wrong



Single-glazed

The surface temperature of single-glazed windows is very low. Warm air becomes cold on the surface of the glass.



Broken glass

Possibility of glass shattering and falling on to pedestrians below.



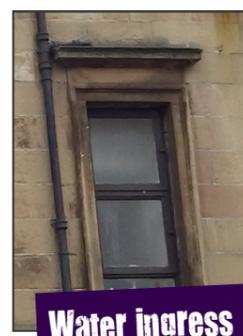
Poor design

The original windows have been replaced with tilt-and-swing units which are hard to clean, draughtproof and maintain.



Rotten frames

Frames have not been regularly painted and so have rotted. Heat now escapes through the ill-fitting frame.



Water ingress

The frame and seal will continue to perish until the pipe above is mended and the stone dries out.

## Metal-framed single panes swapped for efficient PVC double glazing

RAYMOND has lived in his ground-floor tenement flat for 30 years. In 1991 he installed single-glazed metal-framed windows thinking they were a good deal. But over time they developed draughts at the edges and the metal and glass retained cold. You could feel it if you went near any of his windows.

Condensation built up on the inside of the pane, as damp air met the cold glass and frame. It ran down the

### Raymond



**'Now I don't get ill all the time, and enjoy coming home'**

glass and collected in pools on the window ledge. He kept towels on the ledge to catch the water and wrung them out most days, but when it was really bad the water ran down and damaged the laminate floor.

Raymond tried to heat his home using an electric convector and a bottled gas heater which emits fumes, and large quantities of moisture, adding to the condensation. In his bedroom he has an old oil-filled radiator which doesn't work as well as it used to and his bedding was often damp. In winter ice formed on the windows and ledges in all the rooms. He says he caught a lot of colds and always wore extra jumpers at home.

When his daughter and granddaughter came to visit the first thing they said was: 'Gonna put that fire on, Papa. It's freezing in here.'

The industrial dehumidifier he sometimes used was expensive and he couldn't

afford proper curtains for his big windows as they'd have had to be handmade.

When given the offer of free windows, Raymond leaped at the chance.

'What a difference it's made,' he says. 'My bills have gone down and I spent the money on curtains. I don't get ill all the time, and enjoy coming home to a warm house instead of a freezer.'

He adds: 'And the best thing is the noise. It's so quiet. I notice it most at night when there's always vans and cars and people standing outside talking. I'm on the ground floor so the windows make a huge difference. You can hardly hear anything at all.'

There are many other advantages. 'There's no condensation,' says Raymond, so no towels under windows or listening to the 'drip drip drip' as the water hit the floor, and no mopping up puddles or emptying basins.

## Family who rent privately find new windows keep children safe and noise levels down

MARIA Covaci lives on the second floor of a traditional tenement with her husband and their two little girls. They have rented their home for eight months.

'There are many things wrong with the flat but the windows were the worst,' says Maria. 'Several panes were cracked and there were draughts round the edges.'

Worst of all there were no locks. One day her three-year-old managed to open the window by herself while Maria was in the other room. On another occasion, Maria found her with her finger in the hole in the pane. 'Safety was a constant worry,' she says.

Now the family have proper double glazing, no broken glass, no draughts and with child locks and keys for extra security.

'We are really pleased and happy with the change,' says Maria. 'There's still a lot to be done but this was by far the biggest problem. The best thing is that the kids are safe now.'

'We had the heating on until seven hours ago and the house is still warm even though there was frost last night.' She smiles happily in a thin T-shirt. 'We could never sit in T-shirts before.'

They often got colds and flu, and one of the girls regularly



Maria

**'Safety was a constant worry due to the broken panes'**

got ear infections. They also used to sleep in their clothes for extra warmth. Sometimes they'd have a bath just to warm up – an expensive way to stay warm and one which doesn't last. At other times they'd go to a friend's house for a heat.

The flat has two rooms which overlook Allison Street, a narrow thoroughfare which is busy with pedestrians and traffic 24 hours a day. 'The noise used to be terrible too,' she says. 'People shouting at night and all the traffic all day. We sleep much better now.'

# High energy bills cut for mother on low income

IN CONTRAST to South Seeds' initial visit, Rashia and her daughter Zeenat did not hug the radiator during our chat, but sat comfortably on sofas in a warm room. They both looked happy and relaxed. The change was striking.

Rashia describes the transformation of her home since the installation of polycarbonate secondary glazing as a 'big change'. As their tenement is in a conservation area it would have been illegal to fit PVC double glazing, so polycarbonate secondary glazing was installed internally over the wooden window frames. From the exterior, however, the windows look just the same.

'Our home is warm,' she said, adding that there is 'no wind, no noise,' from the windows. When we pointed out it had been -2°



**'We don't rush to bring out heaters now when guest arrive'**

C a few nights earlier, they were surprised, too snug to notice. Her son, Azeem, says he isn't cold at night any more and sometimes has to stick his feet out of bed to cool down. 'I'm really happy with that,' he grins.

Even though the heating is off at night, the warmth is no longer rushing out the gaps round the window, so the house stays warm. Where

previously Rashia had the heating turned up to its maximum, it is now running at about two-thirds capacity.

'We don't rush to bring heaters out when guests arrive either,' laughs Zeenat. And their electricity bills are lower.

Now the windows are sorted – including the three-inch gap where TV cables entered the house – Rashia's been able to fit curtains in all the rooms, making the place feel even more comfortable.

The glazing installation was easy; three people did the job in one day, and Rashia is very happy with their workmanship.

Azeem demonstrates how to remove the polycarbonate sheet using a special sucker, and the other two direct proceedings as he replaces it.

Their traditional sash windows are quite tall. Some are covered with one single sheet of polycarbonate. Rashia had also asked for one window in every room to be openable. This meant using two sheets. In this case, the secondary glazing was more obvious, but in general it was all but invisible.

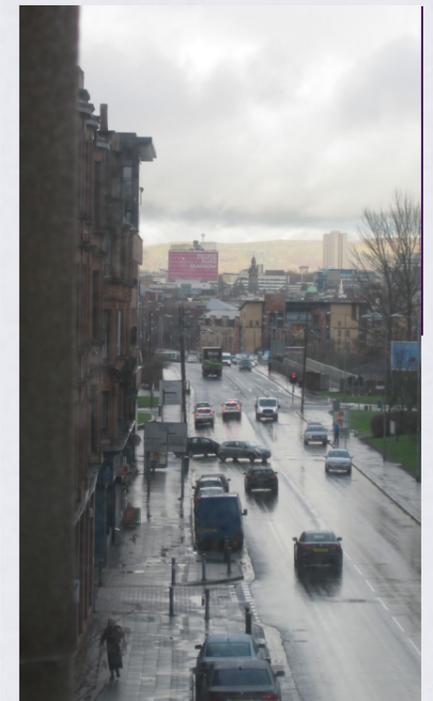
Overall they are all delighted with the service and the result, and have accepted help from South Seeds to draughtproof their front door, saying they would definitely recommend South Seeds and polycarbonate secondary glazing to others.



**Rashia**



**Sylvia**



## Couple gain confidence for retirement after making savings

SYLVIA and her husband George live in a second-floor tenement flat. She has been there for 36 years; it's where she brought up her children. Sylvia has three grandchildren who she looks after twice a week – two boys and a girl, aged nine, six and two. She also works at a bookmaker's in Shawlands.

Sylvia's windows were 22 years old and single glazed. They were promised double glazing as part of a refurbishment programme for the block but

the money ran out. The large windows did not have the required safety glass, and the frames were wooden 'tilt type' – common in Govanhill and needing regular maintenance. Draughts came in round the frames, the locks didn't work and when it rained puddles appeared in the kitchen.

The flat looks on to busy Cathcart Road. It wasn't rush hour when we visited, but the traffic noise was constant.

Having done all they could to make their flat energy efficient, bar replacing the windows, Sylvia contacted South Seeds to see if there were grants to have double glazing put in. Unfortunately, there is usually no funding for

such improvements, but she was eligible for free windows as part of our pilot project.

'I was ecstatic,' says Sylvia. 'I kept pinching myself to see if it was real. It's proper double glazing, with special glass that reflects the heat back into the room.'

'We're worried about bills once we retire because we'll be here all day, but this will be a great help. The almost complete silence is the best thing – what a difference. We're all sleeping better and the grandchildren are happy, safe and cosy.'

The flat now retains heat, meaning Sylvia has been able to turn down the boiler, which she used to keep at its maximum for the warmth to be noticeable, adding 'and there are no more draughts or water coming in round the frames'.

**'The flat stays warm even with the boiler turned down'**

# New scheme offers loans to fit double glazing

LOANS of up to £4,500 to fit double or secondary glazing this winter are among energy-saving funds available from Home Energy Scotland.

And for a limited period, the HEEPS (home energy efficiency programmes

Scotland) scheme comes with a 25% cashback offer on the loan amount, so applicants only have to pay back 75%.

The scheme, aimed at owner



Want to upgrade your windows? There is funding help available

occupiers and registered landlords, offers grants for improvements including windows, solid wall insulation and/or a new boiler.

Repayment periods vary based on the amount borrowed, with higher-value loans repayable over 10 years.

Applicants will need an energy performance certificate (EPC) which includes recommendations for improvements before they apply.

For more information visit [www.energysavingtrust.org.uk/scotland/home-energy-scotland](http://www.energysavingtrust.org.uk/scotland/home-energy-scotland) or call Home Energy Scotland on 0808 808 2282.

## ... or how about fitting thermal curtains?

THERMAL curtains are an ideal way of stopping warmth escaping from large tenement windows. Once thermal curtains are installed your flat will hold the warmth inside for longer, which means you should be able to turn down your heating or have it on for less time. This will save you money.

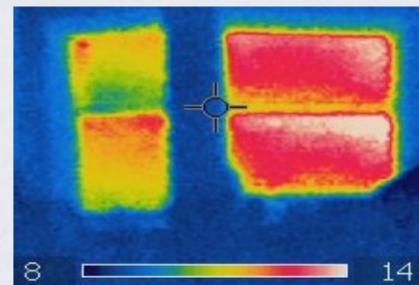
Thermal lining is a rubberised fabric that is very good at keeping heat in a room. It can be sewn or hung on to the back of your existing curtains, and usually comes in either a white or cream colour, and is sold in haberdashery shops, as well as online.

The material usually comes in strips 54 inches (about 130cm) wide. These strips are sold by



lengths of one metre, at around £4 per metre.

To find out how much it would cost to line your curtains, you will need to measure them. This might involve using a step ladder and measuring tape. Thermal curtains are not suitable for bathrooms and kitchens. They work best when



A thermal image of tenement bay windows (pictured left). The left-hand window is fitted with a thermal curtain, so less heat is being lost

used in conjunction with other draughtproofing and energy-saving measures, and it's worth taking into account any draughts due to the condition of the windows and the position of the curtain rail.

South Seeds has a free information sheet on thermal curtains available from our office.

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For more information about what we do, or if you have any questions,

please telephone South Seeds on 0141 636 3959, email [info@southseeds.org](mailto:info@southseeds.org), visit [www.southseeds.org](http://www.southseeds.org), or check us out on [Facebook.com/SouthSeeds](https://www.facebook.com/SouthSeeds) or [@SouthSeeds](https://twitter.com/SouthSeeds) on Twitter.

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