

Lancaster West Neighbourhood Team

Windows Pilot Report November 2020

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BARANDON WALK DROP-IN

We launched the pilot at Barandon Walk and gathered insight into what the residents considered most important when thinking about windows

BASELINE STUDIOS DROP-IN

We used the insight from residents to design the baseline studio windows drop-in, to explore different options



WINDOWS ONLINE SURVEY

In response to the COVID-19 outbreak, we made our questionnaire digital for residents to complete

BENEFITS OF TRIPLE-GLAZING?



Executive Summary

Introduction

We have carried out extensive resident engagement on Morland House, Talbot Grove and the Walkways regarding the refurbishment to ensure the programme is co-designed with residents. This report provides a summary of the engagement events carried out around windows, including an online survey, a co-design programme and an open house event, and the insights gained from these. We will continue to engage with residents throughout the process.

Online Survey

We asked residents from across the estate to complete an online survey for us to better understand their priorities for windows in upcoming refurbishments. We received 41 responses and gained valuable insights regarding residents' views on windows, including aspects such as material, design and maintenance. This feedback helps us shortlist windows to show to residents and continue the conversation.

Overall Importance:

87% of respondents said that they were likely to be willing to invest more money in their windows over their other refurbishment, with 36% saying they were very likely. This provides us with a clear insight into the importance of windows within the refurbishment programme.

Material and Look:

All respondents said that the material of the window is important to them, with 68% saying it is very important. The most preferred material is PVC (Plastic), chosen by 39% of respondents, closely followed by Aluminium (Metal) chosen by 36% of respondents. 17% chose wood. Just under two thirds of respondents said that the colour of the windows is very important to them and the most preferred colour is white, chosen by 70% of respondents.

Design:

All respondents said that the design of the window is important to them, with 84% of respondents saying that it is very important to them.¹ Specifically, residents told us that ease of use is important to them, with 85% of respondents saying it is very important. Residents also told us that when they think of the safety of the window, they consider a multitude of concerns. When given options of burglary, the children, your safety, the elderly, and pest control, 61% of respondents said they consider "all of the above" when thinking of the safety of the window. Burglary was the most common single safety concern, as a further 17% said they consider only burglary when thinking of the safety of the window.

¹ N.b. Only 39 respondents answered this question.

Maintenance:

60% of respondents said that being able to clean the outside of their window is very important to them. 34% said they would prefer the council to deliver a window cleaning service, with a further 46% saying they may prefer this.

Other Considerations:

We also included a free-text question at the end of the survey to ensure we allowed residents to tell us everything that they would like us to consider when shortlisting window options. 34 residents .

Triple glazing - worth the investment?

It was found that the benefits of triple glazing outweighed the costs pro rata, where new windows are required, in terms of the increase in energy efficiency for compared to the increased costs. It was found that this additional investment paid for itself within five – eight years in energy bills reduction when combined with a whole-house strategy, aside from the benefits in carbon reduction, reduction in noise, and improvement in comfort.

In the case of the low-energy house at Verity Close, it was found that the double glazing in situ was fitted so poorly in 2013, that even here the case for investment was overwhelming once it was clear that the glazing needed replacing (i.e. compared to replacing with double glazing).

Currently, LWNT does not have the funding to offer this across the estate, and therefore there is a risk of abortive costs (and double glazing is fitted(if additional funding is not secured.

LANCASTER WEST ESTATE WINDOWS PILOT

The windows pilot is a clear example of why co-designing with residents is so important.

Some of the blocks have had their windows replaced and so from the landlord's perspective, would normally not be considered in need of an upgrade.

Having liaised with residents on the refurbishment, it became clear that there are health & safety and functionality issues with windows across the estate, that would otherwise have remained unknown.

As a result, we now know that the need to replace the windows is greater than we initially anticipated.

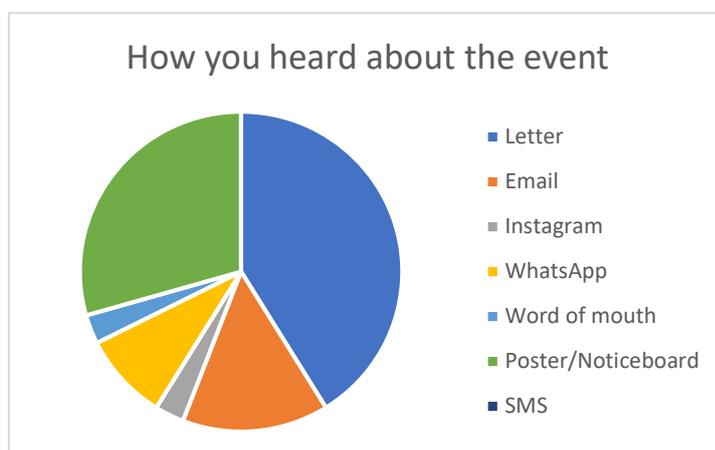
To fully understand what residents, need and want, we launched the Windows Pilot.

This report will present what residents raised in the Barandon Walk Drop-In and in the series of Baseline Windows Drop-ins and will feed into the detailed design of the refurbishment.

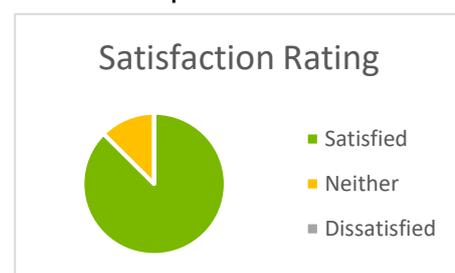
BARANDON WALK DROP-IN

We invited residents from the walkways of both sides of the estate, to launch the windows pilot, in Barandon Walk where we demonstrated a range of windows options.

The event was well attended with a total of 61 residents visiting the property.



Of residents who participated in the satisfaction survey, 85.5% of residents said they were satisfied with the drop-in.



We launched the pilot knowing that residents felt strongly about windows and decided to approach the drop-in with a broad view to help us capture everything residents were saying.

We did have some prior insight that Colour, Style, Materials, Security, Ease of use and Ease of cleaning were important factors for residents and we used those points along with three window styles that we used to help stimulate the conversation.

Top Hung, Tile outwards

CONSIDERATION	COMMENTS FOR...	COMMENTS AGAINST...
COLOUR		
STYLE	Good	Window is no good 2
MATERIAL	Ok with aluminium	Material is not strong 1
ROBUSTNESS		Restrictor is not robust 3 Doesn't look robust 2
SECURITY		Not safe 3 Opens too far 1 Unsafe for children 2 Not secure 1 Let's squirrels and pigeons in 1 Restrictors too easy to remove, so unsafe 4
EASE OF USE	Easy to use 2 Open restrictor one by one is ok 1	Restrictor on both sides is too difficult 3 Bad for arthritis 1
EASE OF CLEANING	Happy with cleaning 1	Cannot clean it 4

Tilt & Turn

CONSIDERATION	COMMENTS FOR...		COMMENTS AGAINST...		OTHER COMMENTS
COLOUR	Colour is okay	1	Don't like colour	2	<u>Dressing the Window</u> What about my blinds? We can overcome by changing low hung ceiling Can't fit curtains. X2 Tinted from outside for privacy Put Venetian blinds There are curtains that can work <u>Safety</u> Cable wire or chains need when windows are open, an adult it becomes my responsibility. X2
			Prefer white frame	1	
			Brighten feel	1	
STYLE	Like the look of it	1	Windows open into the	1	
	Nice windows	1	room	1	
	Opens wide	1	Takes up furniture space	1	
	Nice classic and simple	1	All look like a cheap design	1	
			Looks miserable and depressing	1	
MATERIAL	Chrome handles are nice	1	Don't like the feel	1	
ROBUSTNESS			Flimsy Hinges	1	
SECURITY	Safe	2	Needs Restrictors	5	
	Child friendly	1	Security concerns	1	
	Most secure against vermin	1	Safety is debateable	1	
EASE OF USE	Easy to use	2	Not easy to open	1	
			Arthritis gives problems	1	
EASE OF CLEANING	Good for cleaning	2			
	Easy to clean	6			

Fully Reversible

Consideration	Comments for...		Comments against...		Other comments
Colour	I like the colour	2	White frame please	1	
Style	Double glazed	1	Needs handle or hook	1	
	Beautiful design	4	Don't like the look or feel	2	Rain issue!
	Like the levels of opening	1	Too high	1	
	Opens out so easier to dress	1			Does not compromise the curtains
	I choose this one	1			The choice is nonsense and confusing
	Opens wide	1			
	Loved it	1			Good for hot weather
Material					
Robustness	Looks durable	1	Looks flimsy	6	Would we get a guaranteed, lifetime cleaning contract?
Security	Looks secure	5	Too dangerous	1	
	Like the restriction lock	1	Doesn't feel safe	3	
			Needs additional child safety	1	K&C will not pay for cleaning
Ease of use	Easy to use	2	Too much work	2	Safety for children – see Allom House
	Easy to open	1	Complicated to use	3	
			Not good for elderly or less abled bodies	1	Calling for repairs would be a nightmare
Ease of cleaning	Good for cleaning	9			
	Like the idea of being able to clean	1			

General Windows Feedback

General Style Insights

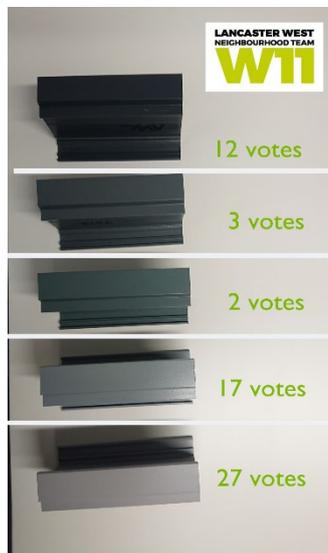
Seeing that the aim of this pilot is to understand what residents think of when they discuss windows, all comments, irrespective of whether they were positive, neutral or negative, were tallied up to identify what residents raised more frequently.

Consideration	Comment	Occurrence
	Colour Mentions	17
	Style How it opens	15
	The look	6
The Frame	Narrower frame	2
	Too thick	1
Material	High importance	1
	Mentions	6
Security	Burglary	4
	Pests	2
	General	5
Safety	Children	10
	Elderly	3
	Less abled	4
	General	11
Robustness	Hinges	3
	Restrictor	9
	General	11
	Ease of Use	26
	Ease of Cleaning	23

Colour insights

Colour preferences

Provided Colour Options



Residents Colour Options

Other Colours	
White	15
Grey	7
Silver	1
Gold	1
Brown	2
Neutral Colours	2
Bright Colours	2

We provided a colour board for residents to choose which grey they preferred for the aluminium frames that were displayed in the flat

Not everyone was fond of the grey, 6 residents expressed a clear dislike for the grey and many more expressed alternative preferred colours

Comments relating to the colour of the window

‘Grey is most neutral’

‘Match the colour of windows with the brick – new and classic’

‘The colour of the windows can impact your options for colour scheme in your house’

‘I like colours that blend gold’

‘I like colours that work with nature’

How important is the colour of the windows to residents?

Only 1 person was recorded to have put colour as of highest importance for them, but the number of discussions about colour, the level of participation on the colour board and the fact that residents expanded the colour options themselves, demonstrates that it is indeed an important factor for residents.

Other Insights

Consideration	Comment	Occurrence
Residents also expressed the importance of being able to dress the window but there were also many solutions proposed to overcome the challenge with putting up blinds and curtains over these windows.	High importance	6
	Can't hang curtain or blind	4
	There are solutions for dressing the window	3
	Tinted windows from outside, light tint	2
Residents with balconies were keen to find out what their options for the balconies are.	Love the balcony sliding door	2
	Is there a plan for the wasted outdoor space?	1
	Is it possible to have balcony door to one side rather than centre of the living room?	2
	Bi-fold door plan for middle flats	1
	Are balcony doors part of the balcony refurbishment or windows?	1
	What are the plans for the balconies?	1
	How do I get involved in the balconies pilot?	1
Residents were keen to be shown more options for windows and even made suggestions.	See Allom House on Clarendon Road	2

‘East V West’

There are three walkways on the East side of the estate, Talbot Walk, Camelford Walk and Clarendon Walk and three walkways on the West side, Barandon Walk, Testerton Walk and Hurstway Walk.

All walkways have very large windows, so we invited them all to the drop-in, and together they provided an interesting picture of considerations and preferences across the board.

A key difference between the walkways of the east and the, compared to the walkways on the west

Overall, similar insights and questions came from the all walkways except for one observation.

The windows on the Walkways of the east, need a better windows design whereas for the walkways of the west, there is a strong sense that residents are satisfied with sliding windows although, the existing ones need to be upgraded to reduce condensation and improve energy ratings.

Residents from the east side, were more interested in exploring options to replace their existing windows because to put it in the words of a resident, ‘our windows are so bad, anything is an improvement’.

We asked all attendees to tell us their preferred window style. Whilst there was still a high level of interest in new styles of windows from the west, most attendees at the drop-in were from the west and the sliding doors got the highest number of votes.

This was particularly interesting because we were not capturing feedback on the sliding windows so did not divert attention to it. This was insight that was truly resident led.

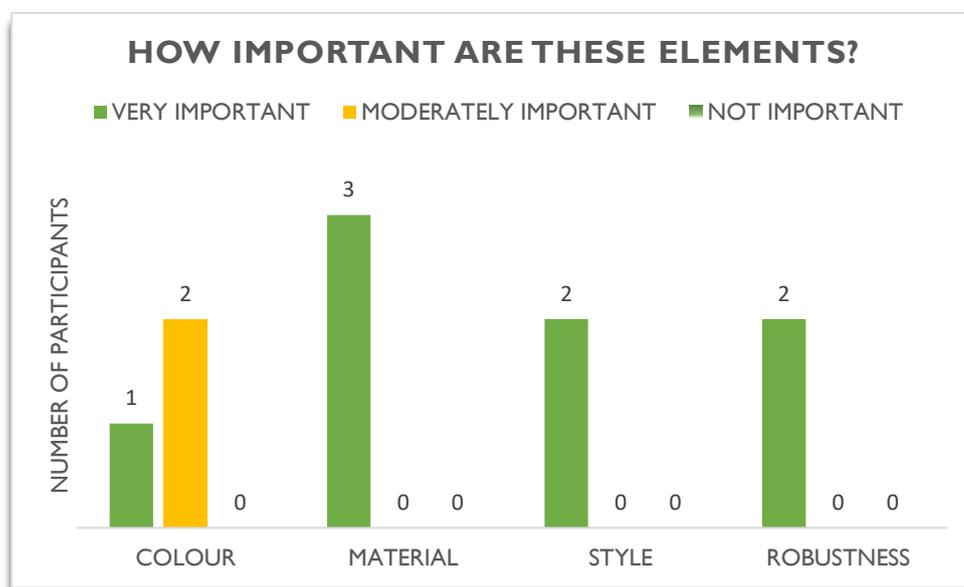
BASELINE STUDIOS WINDOWS DROP-IN

Drop In sessions

We'd held 2 drop-in sessions by the time Lockdown had begun and we'd had a total of three residents participate.

We demonstrated the windows and discussed windows with residents, after which we gave residents a questionnaire to fill in.

The importance of colour, material, style and robustness:



Safety is naturally an essential consideration and unsurprisingly high on residents' priorities when discussing windows, but what we learnt from the Barandon Walk Drop-In, was that when talking about safety, there were many considerations within that.

We intended to identify what residents held as their top safety concerns with regards to their windows.

With only one of the three participants, the following is in no way representative of what residents think but what the resident said was included, nonetheless.

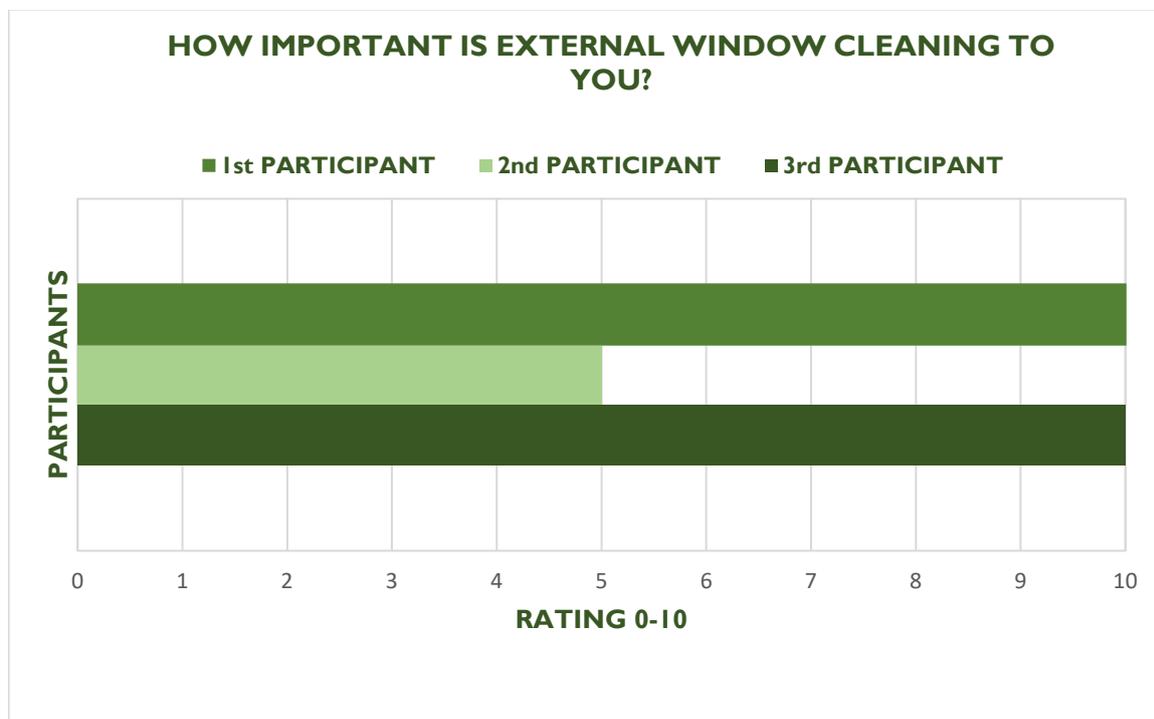
What comes to mind when thinking about window safety?

- **Child Safety**
- **Ease of use**

Cleaning the windows

With only three residents participating these outcomes cannot be used as representing the residents.

However, the points below arose out of the conversations that took place when discussing window cleaning.



Would you prefer that RBKC deliver and external window cleaning service?

The two for whom external window cleaning was important had opposing opinions as to whether RBKC should provide the external window leaning service.

“Yes - depending on the window”

There was a discussion on how much the cleaning service would cost against investing more into a window style that allows residents to clean them the windows for themselves

“No, they don’t do a good job’

Concerns about the quality of work done by the contractor themselves.

Other considerations that emerged included:

- Whether a more complex design will increase the maintenance of the window.
- Would residents need to call repairs more often? The concern being that there is no guarantee that RBKC will maintain the improved repairs service.

Ease of use

2 of the three participants commented and both rated the need for a window that is easy to use 10 out of 10.

Additional comments



**“Cleaning and Colour
are important –
something that is easy to
keep clean”**

**“Colour and material
that stays looking
new”**

Feedback from Prioritisation Workshops, Spring 2020

We held an all-day event consisting of three workshops for the walkways of the East side to tell us their priorities for the refurbishment. Since it was held at Baseline Studios, we took the opportunity to demonstrate the windows.

What emerged from the event is presented below:

<h1>What do you think of these windows?</h1>	
Colour, material & style Aluminium More options – Sliding Windows please Not white Matt grey please Prefer Fully Reversible to Tilt & Turn for the curtains I like Fully Reversible x8 Tilt & Turn will not work with curtains I like Top Hung, Tilt Outwards x1	Safety & security UV factor UV film needed for all windows x2 Top Hung, Tilt Outwards is the safest
Ease of cleaning Fully reversible is the easiest to clean Cleaning by the council is not good – they just spray water	Ease of use

Morland House

Morland House Open House Report

The Morland House Open House was another opportunity for residents to view, experience and give feedback on the quality of refurbishment and repair we are implementing across the Lancaster West Estate.

27 Morland House is a studio flat on the first floor of a 1930s period build with 'architecturally interesting' features. This was the fifth property to be shown as part of our series of Lancaster West open house events. All residents of Morland House and Talbot Grove House were invited to view as this flat shows the same 1930s architectural type, it allowed residents to see and try out how a replica powder coated aluminium window functions.

This studio flat in Morland House is the first to have replica, heritage, sash windows fitted. There was a lot of qualitative data shared at the open house event, and this has led to more research into other models of heritage windows to share for further resident engagement. We will hold future opportunities for residents to take part in choosing these. The feedback board below was displayed at the open house event to allow visitors to comment under the five categories.

WINDOWS		We are interested to hear what you think about the new windows fitted in this property		
Look?	Feel?	Safety?	Sturdy?	Ease of use?
<p>Good</p> <ul style="list-style-type: none"> -Prefer white x2 -Good <p>Not good</p> <ul style="list-style-type: none"> -Prefer off white/cream x9 -Look slightly cheap - x4 Looks cheap, prefer original sash window -Plastic strips make the window look cheap 	<p>Good</p> <ul style="list-style-type: none"> -Windows are great -Feels ok -I like it <p>-Like the concept of keeping sash style</p> <p>Not good</p> <ul style="list-style-type: none"> -Hate the windows -Windows do not fit the period of the building -Windows too modern 	<p>Good</p> <ul style="list-style-type: none"> -Yes -Looks very safe <p>Not good</p> <ul style="list-style-type: none"> -Needs a window restrictor for floor level and balcony level -Windows are hazardous when open inwards -Windows look bad, already looking broken 	<p>Good</p> <ul style="list-style-type: none"> -Seems sturdy -Yes -Yes <p>Not good</p> <ul style="list-style-type: none"> -The plastic is falling off. -The window-catch for the locking -mechanism is upside down. -Windows are now bent. -Badly made. -Dangerous. 	<p>Good</p> <ul style="list-style-type: none"> -Like the way it opens -Good <p>Not good</p> <ul style="list-style-type: none"> -Too heavy to lift from cleaning position -These are over designed -Too big and awkward to pull in to clean, pointless function.

<p>-This is a fine building new Georgian -windows must be timber</p> <p>-Fake, plastic, glazing bars! Not in keeping with the building</p> <p>-Prefer original wooden sash</p> <p>-Original wooden windows please</p> <p>-Don't like the black bit inside the panes</p> <p>-Our building is listed, it doesn't fit character of the house</p>	<p>-I prefer old sash windows in keeping with style of the block</p> <p>-Metal conducts cold</p> <p>-Windows are cheap (I am a builder, I know)</p> <p>-Not sure plastic surround will keep appearance, may go yellow over time</p> <p>-They feel tacky and plasticky</p> <p>-Low tech is better, less risk of breaking.</p>	<p>-These windows are not strong, old style 30+ years old compared to Europe standards</p>	<p>-Window fell out towards me on its own.</p> <p>-Windows are very poor.</p> <p>-This type of windows will always have long-term problems with the spring. They are hard to replace when they 'go'. With wooden windows, anyone can repair.</p>	<p>-We need self-cleaning windows like Edwards woods estate.</p> <p>-When rains hit the hollow windowsill, it will make a lot of noise</p>
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Windows Thermal imaging:

Thermal imaging can be used to measure the temperature within and outside the windows and can also detect heat loss. This can help when measuring how different window types can support fuel efficiency. This in turn leads to a reduction in heating bills, service charges and the impact on our planet by helping us get a step closer to net zero on carbon emissions. We will use thermal imaging to measure the effectiveness of new windows in all blocks that we refurbish.

Blue and purple colours represent colder temperatures and red and orange through shows heat, yellow can show high heat loss.

Before

Thermal images of original wooden sash windows

After

Thermal images after double glazed windows are fitted in January 2020



Exterior thermal image.

Original single glazed hallway window

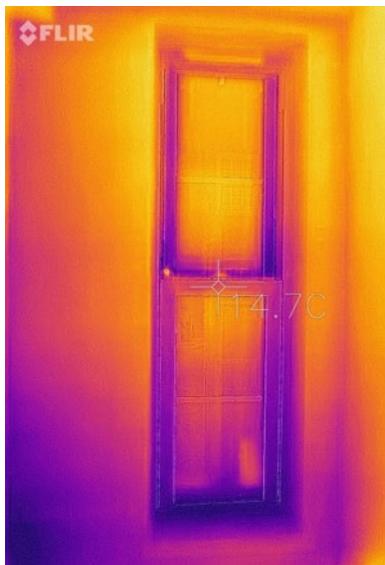
The yellow colours are showing excessive heat loss



Exterior thermal image

New double-glazed window

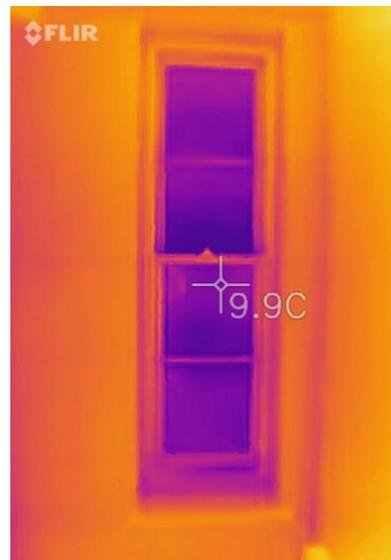
The blue and purple colours show less heat loss



Interior thermal image.

With original single glazed window in hallway

Yellow and orange colours on the pane show heat loss



Interior thermal image

New double-glazed window in hallway

Dark blue shows a dramatic decrease in heat loss

Triple glazing - worth the investment?

After much consideration, we decided to pilot triple-glazed windows in our low-energy pilot home in Verity Close

The original double glazed windows did not maintain the heat well and gaps could be seen between the opening part and the frame (clearly heat being lost). Will changing the windows make a significant change?

We decided to pilot triple glazing, **which delivered an additional 40% improvement in energy efficiency for a 12.5% increase in the cost.**

New, well-sealed, triple glazed windows will contribute to resident comfort, as there won't be cold draughts around windows, or a feeling of coolth near windows. Spending money on new windows was felt to be better value than the addition of PVs on the roof. While PVs are obviously a benefit, these could be added later if budget allowed.

It was found that the benefits of triple glazing outweighed the costs pro rata, where new windows are required, in terms of the increase in energy efficiency for compared to the increased costs. It was found that this additional investment paid for itself within five – eight years in energy bills reduction when combined with a whole-house strategy, aside from the benefits in carbon reduction, reduction in noise, and improvement in comfort.

In the case of the low-energy house at Verity Close, it was found that the double glazing in situ was fitted so poorly in 2013, that even here the case for investment was overwhelming once it was clear that the glazing needed replacing (i.e. compared to replacing with double glazing).

The big difference in energy performance, when you replace double glazing with triple glazing, is down to the extra layer of insulating air, or in most cases gas. Energy performance of a window is highly dependent on the sash and frame surrounding the glass. Triple glazed windows require the same amount of work as double glazed windows. The additional weight of triple glazed windows does not normally require additional structural support, however there may be additional installation costs due to the additional weight of the triple glazed units

Currently, LWNT does not have the funding to offer this across the estate, and therefore there is a risk of abortive costs (and double glazing is fitted, requiring triple glazing down stream to meet carbon neutrality targets) if additional funding is not secured now.



Benefits of triple glazing compared to loft insulation

Measure	Image	Reason	Proposal	Spatial Implications
Insulate Roof Add insulation between & over rafters		Heat is lost through roof Assumed current U-value = 3 W/m ² K	Mineral wool insulation between & below existing rafters	No implications for existing useable space. Roof pitch & height to be kept as existing, in line with adjoining roof. Possibly future additional room / rooms
New windows Replace all windows with airtight triple glazed windows		Heat is lost through existing windows, both through uninsulated frames, glazing and at gaps in window / wall junctions and at poorly sealed opening window panes	New triple glazed windows, sealed to new airtightness layer on external wall	None Avoidance of cold draughts near windows means that residents can enjoy full space within house

Pros	Cons / Risks	Savings						
<ul style="list-style-type: none"> - Reduce heat loss through roof - Opportunity to include carefully installed airtightness layer - Opportunity to ensure any new solar panels are adequately supported 	<ul style="list-style-type: none"> - Would require work to lean-to roof as well as main roof - Ensure new build up is appropriately ventilated - Keep in line with adjoining roof. What is maximum thickness of insulation between rafters? - Loss of heat room if under-rafter installation used 	<table border="1"> <tr> <td>Specific energy demand reduction (kWh/m²/year)</td> <td>96</td> </tr> <tr> <td>Total energy demand reduction - (kWh/year)</td> <td>8448</td> </tr> <tr> <td>Annual cost saving</td> <td>£451</td> </tr> </table>	Specific energy demand reduction (kWh/m ² /year)	96	Total energy demand reduction - (kWh/year)	8448	Annual cost saving	£451
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<ul style="list-style-type: none"> - Reduce heat loss through windows - No draughts near windows - more comfortable - Quieter internal environment 	<ul style="list-style-type: none"> - Time to procure correctly sized windows - Existing windows only 7 years old - Need to re-do plastering around windows (likely needed for other reasons anyway) - Reveals must be insulated to mitigate thermal bridges 	<table border="1"> <tr> <td>Specific energy demand reduction (kWh/m²/year)</td> <td>15</td> </tr> <tr> <td>Total energy demand reduction - (kWh/year)</td> <td>1320</td> </tr> <tr> <td>Annual cost saving</td> <td>£70</td> </tr> </table>	Specific energy demand reduction (kWh/m ² /year)	15	Total energy demand reduction - (kWh/year)	1320	Annual cost saving	£70
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