Lancaster West Refurbishment

Emerging **preferences** and **choices**

Penoyre & Prasad

LANCASTER WEST NEIGHBOURHOOD TEAM W11

Camelford Court, Camelford Walk, Clarendon Walk and Talbot Walk

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P&P Architects Team

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Introductions

Lancaster West Neighbourhood Team

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Neighbourhood Director

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Head of Refurbishment Design & Delivery

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Net Zero Project Manager

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Co-design timeline

Resident engagement and Book of Ideas defining brief

Winter 2018/19

Autumn 2017

Spring 2019

Winter 2020

Top 10 Priorities

Autumn 2020

Block representatives meeting introduction

Resident Co-Design Phase 2 testing design proposals

Winter 2021

Resident Co-Design Phase 1 initial design proposals

Spring 2021

Autumn 2021

Future Neighbourhood Community Day

We are here!

Spring 2022

Emerging Preferences and Choices Events

WHAT'S NEXT?

Finalising detailed design

PHASE 1

PHASE 2

PHASE 3

Overview of co-design process

1st Phase: Initial Design Ideas

- Key Products:
  - Presentation slide deck
  - Webinar video
  - Summary feasibility report – posted and online
  - Full report (online only)
  - In person drop-ins/pop ups
  - Video content for IG, IGTV and YouTube

Feedback and FAQs, drop-ins and phone calls

2nd Phase: Emerging preferences and choices

- Key Products:
  - Summary of feedback so far (you said, we did plus FAQ)
  - Models, pilots and building elements
  - Any assumptions or conclusions drawn for discussion/agreement
  - Updated slides based on latest surveys and preferences with technical information
  - Create resident awareness of phase & explain importance of choices

Drop-ins and follow-up phone calls

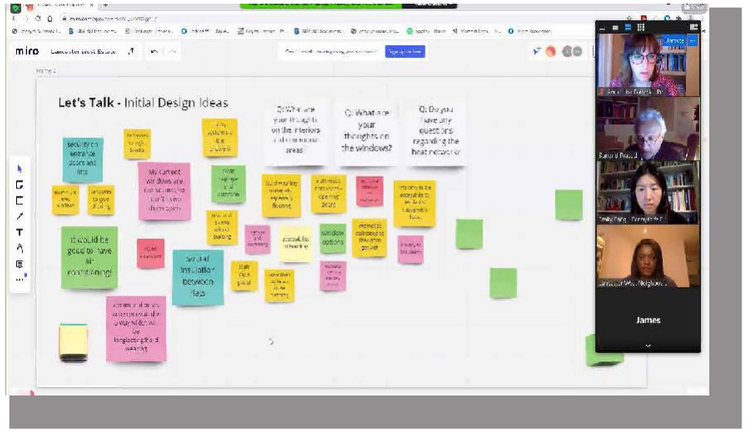
3rd Phase: Finalising detailed designs

- Key Products:
  - Final design for sign off
  - Models and building elements
  - Aesthetic choices still to be made?
  - Building elements yet to be finalised – lifts, door entry
  - Outstanding & final decisions

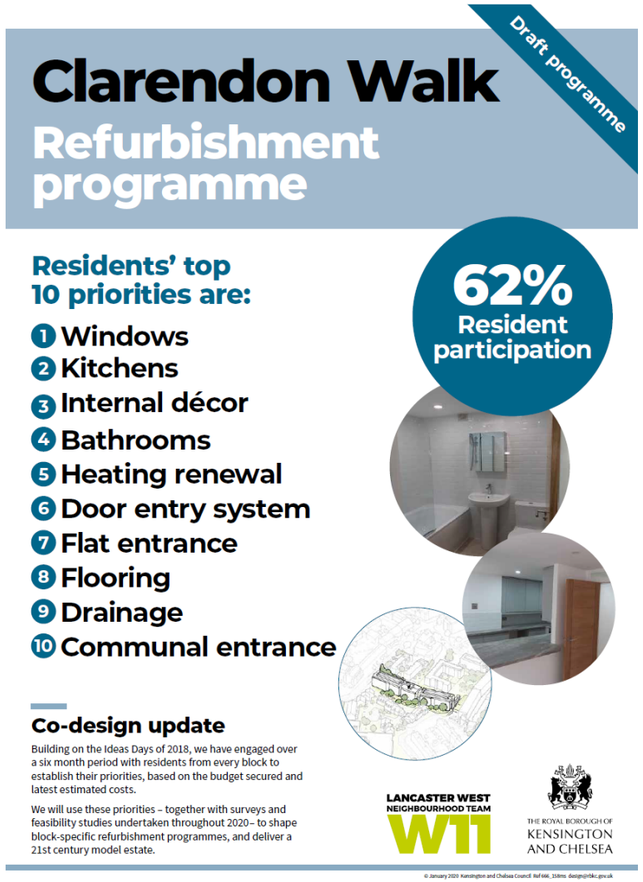
Target: Over 50% engagement for each lot

What we have been doing...

- Reviewed your feedback and explored the proposals further
- Undertook more surveys and analysed findings



Your top ten priorities



Your top ten priorities

Draft programme

Camelford Court
Refurbishment programme

Residents' top 10 priorities are:

1. Windows
2. Bathrooms
3. Soundproofing
4. Kitchens
5. Drainage
6. Water pressure
7. Internal décor
8. Resurface courtyard, slope and stairs
9. Front doors and bins
10. Communal lights and electrics

61% Resident participation

Co-design update

Building on the Ideas Days of 2018, we have engaged over a six month period with residents from every block to establish their priorities, based on the budget secured and latest estimated costs.

We will use these priorities – together with surveys and feasibility studies undertaken throughout 2020– to shape block-specific refurbishment programmes, and deliver a 21st century model estate.

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THE ROYAL BOROUGH OF KENSINGTON AND CHELSEA

Draft programme

Talbot Walk
Refurbishment programme

Residents' top 10 priorities are:

1. Kitchens
2. Windows
3. Lifts
4. Bathrooms
5. Door entry system
6. Boiler renewal
7. Interior décor
8. Additional brick skin
9. Communal entrance
10. Make garden accessible

86% Resident participation

Co-design update

Building on the Ideas Days of 2018, we have engaged over a six month period with residents from every block to establish their priorities, based on the budget secured and latest estimated costs.

We will use these priorities – together with surveys and feasibility studies undertaken throughout 2020– to shape block-specific refurbishment programmes, and deliver a 21st century model estate.

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THE ROYAL BOROUGH OF KENSINGTON AND CHELSEA

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Recap: Refurbishment Workstreams

TOWARDS A NET ZERO CARBON ESTATE

INTERIORS

Bathrooms

Kitchens

Radiators

COMMUNAL AREAS

Stairs & lifts

Corridors

Entrances

Decks

LANDSCAPE

Opportunity: Creating cohesion | Tying the estate together.

BUILDING ELEMENTS

Windows

Roof

Communal External doors

Floor

Walls

Shading

Ventilation systems

ENERGY

District heating

Solar Panels

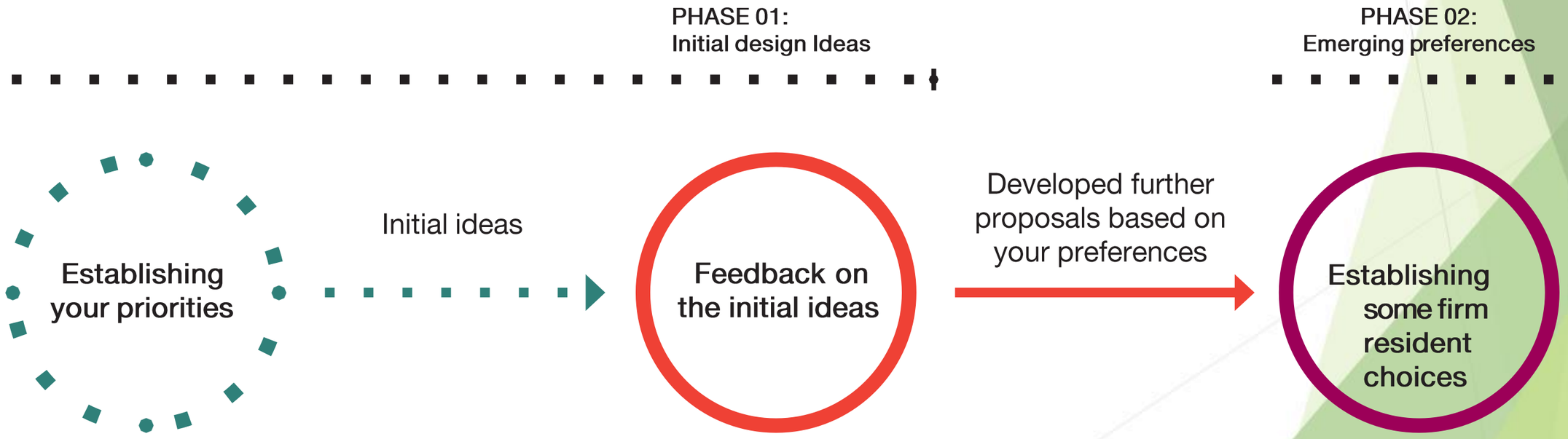
Heating systems by others. Coordination required. Solar Panels as part of Net Zero Carbon Strategy.

OTHER WORKS

e.g. video entry system / drainage /water pressure. Coordination required with Energy Strategy.

Key points of Phase 2...

- Present further ideas & proposals following your feedback
- Highlight the pros & cons of the different measures
- Refine which measures are essential



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Initial design ideas

Resident feedback

You said

The design proposals taken forward are based on feedback from residents who told us what ideas they want to take forward for the refurbishment of their homes.

Proposals

Insulate homes from the outside, replace windows, internalise the corridors and walkways, improve ventilation in order to improve thermal performance and comfort, replace or upgrade the balconies, maximise provision of solar panels where possible.

Components being refurbished

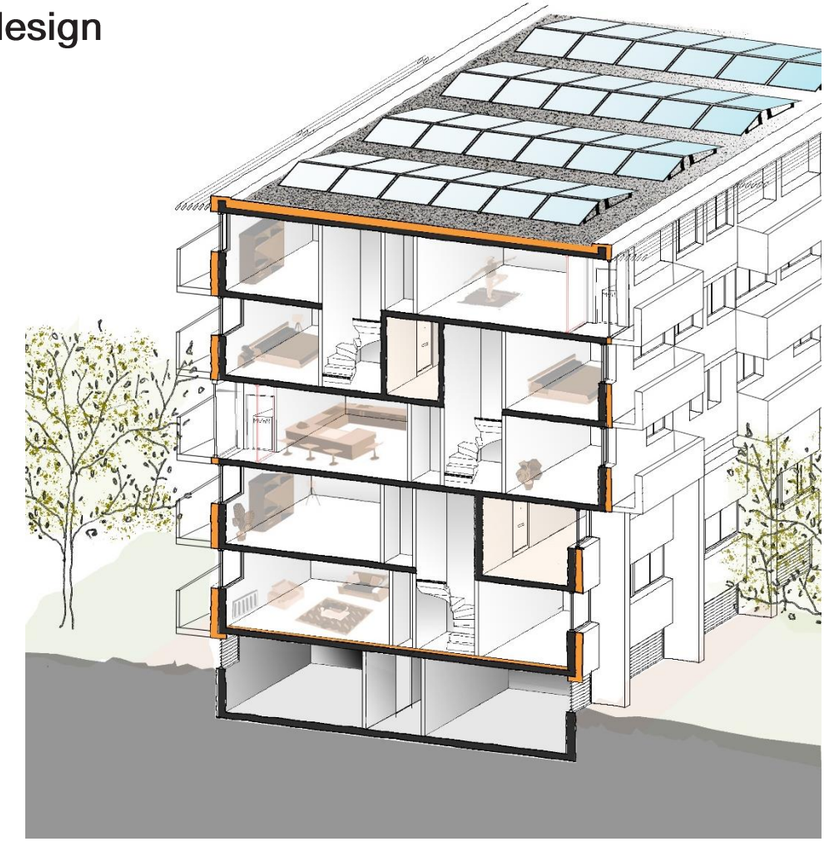
1. Windows
2. Walls, floor and roof
3. Ventilation system
4. Balconies & terraces

Proposed design measures

Mechanical Ventilation with Heat Recovery

To ensure homes are well ventilated but don't lose excessive heat

New thermally broken bolt-on balconies (or we can insulate your existing recessed balconies)



Solar panels on the roof

To provide 'clean' energy for your homes

Solar shading over some windows to avoid over-heating

External wall insulation with new brick finish

High performance triple glazed windows

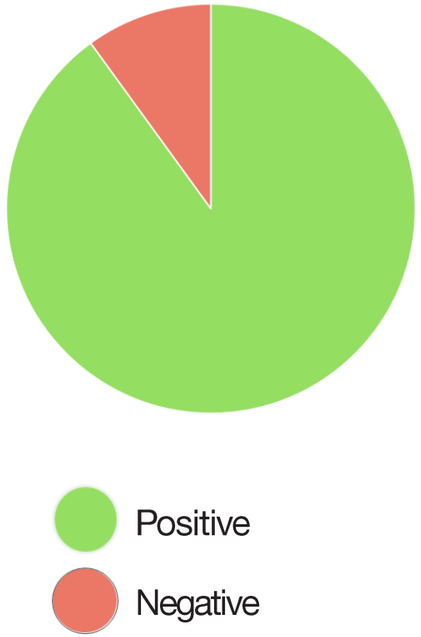
Internalised deck walkways and corridors

Insulation of the ground floor slab

All work together to make your building more thermally efficient and reducing energy demand

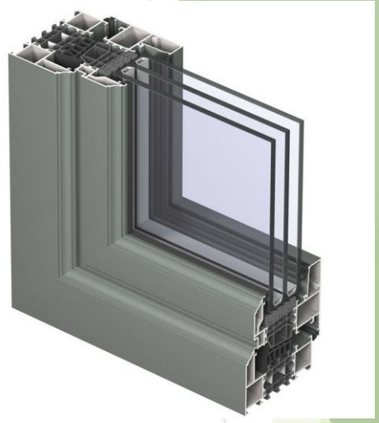
Windows: What you said...

Proportion of respondents positive about triple glazing



90%

mainly positive about triple glazing



72%

positive about aluminium windows

71%

satisfied with whatever type of glazing is most efficient

30% residents engaged so far
(21/68)

Of the flats at Camelford Court, Camelford Walk, Clarendon Walk & Talbot Walk, 73 completed the survey. 75% of these were council tenants and 14% were resident leaseholders

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Windows: your priorities...

Casement Inward opening

- ✓ Security
- ✗ Child friendly
- ✓ Robustness
- ✓ Maintenance
- ✓ Ease of cleaning
- ✗ Outward opening
- ✓ Thermal performance

Casement Outward opening

- ✓ Security
- ✓ Child friendly
- ✓ Robustness
- ✗ Maintenance
- ✗ Ease of cleaning
- ✓ Outward opening
- ✓ Thermal performance

Reversible

- ✓ Security
- ✓ Child friendly
- ✓ Robustness
- ✓ Maintenance
- ✓ Ease of cleaning
- ✓ Outward opening
- ✓ Thermal performance

Tilt & turn

- ✓ Security
- ✓ Child friendly
- ✓ Robustness
- ✓ Maintenance
- ✓ Ease of cleaning
- ✗ Outward opening
- ✓ Thermal performance

Windows: Systems comparison

Technical Requirements:

- Triple glazed
- Max U-value: 0.80 w/m2K
- Standard G-value 0.50
- Security: Secured by design
- Design life: 60 Years

	Ideal Combi Futura + i	**Ideal Combi** Futura +
Opening type	Inward Tilt & turn	Reversible Opening
Internal finish	Aluminium	Timber
U-value	0.74 W/m²K	0.74 W/m²K
Security	SBD certified	SBD certified
G-value	0.52	0.52
Frame thickness	53mm	53mm
Cleaning	From inside	From inside

U-Value = is the rate of transfer of heat through a structure, the lower the slower (and so better)

G-Value = Indication of how much solar glare passes through the glass, the lower the less, but also the darker.

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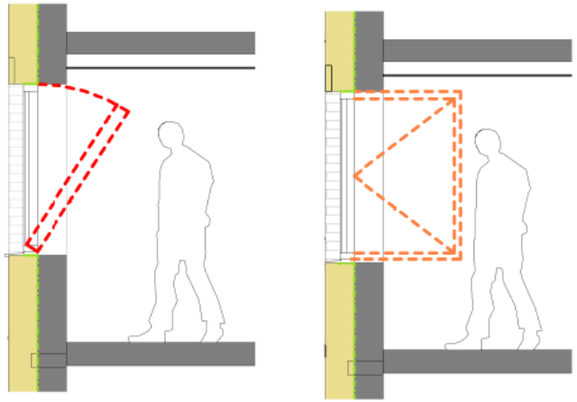
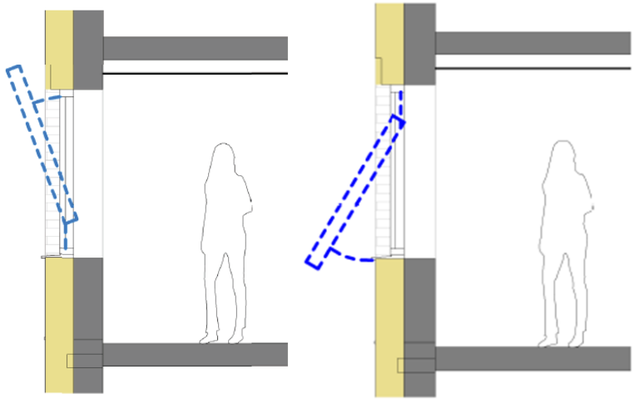
Window – Opening mechanism

- Triple-glazed windows are substantially better in terms of thermal comfort, energy savings, sound-proofing, and reducing energy bills.
- Installing new windows will affect the appearance of the homes but can still be kept relatively similar to the existing appearance if preferred.
- They are available in numerous opening mechanisms, Tilt & Turn, top hung and swing opening in traditional or a more modern appearance.
- Frames available in timber, aluminum and composite (timber+ aluminium material).

Tilt and turn opening (inward)



Reversible opening (outward)



Window opening types options for all levels

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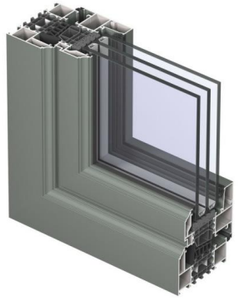
Windows: Material preference Aluminium – tilt & turn (tilt position)



Aluminium

✗ **Reversible**
(Outward opening)

☑ **Tilt & turn**
(Inward opening)

- Anodised finish
- Painted finish
- Maintenance guarantee

Please note: Door options are still being explored. Ceiling lines may be required to be set back for inward opening windows.

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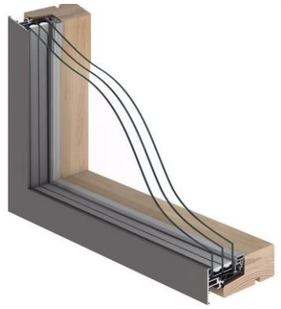
Windows: Material preference Timber/aluminium – reversible



Timber / aluminium

- ☑ **Reversible** (Outward opening)
- ☑ **Tilt & turn** (Inward opening)

- **Natural timber finish**
- White Painted finish
- Maintenance guarantee
- Sustainable material

Please note: Door options are still being explored

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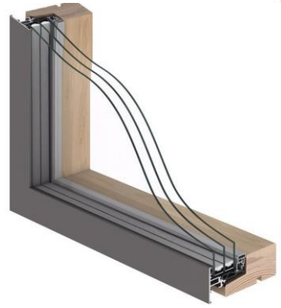
Windows: Material preference Timber/aluminium – reversible



Timber / aluminium

- ☑ **Reversible** (Outward opening)
- ☑ **Tilt & turn** (Inward opening)

- Natural timber finish
- **White painted finish**
- Maintenance guarantee
- Sustainable material

Please note: Door options are still being explored

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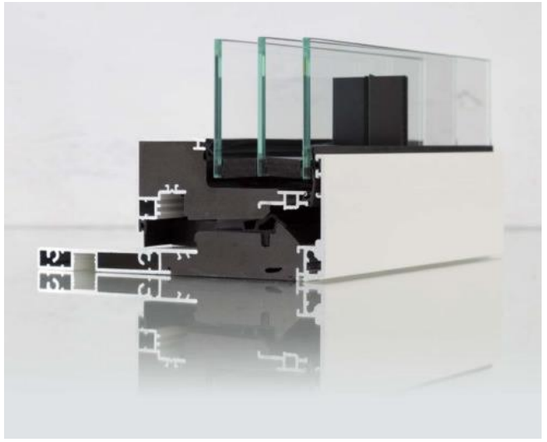
Window options



Window frame colour options
Aluminium Frame

Windows are available in a variety of external and internal colours.

Internal colour options

Basalt grey (RAL 7012)

Anthracite grey (RAL 7016)

Light grey (RAL 7035)

Silver grey (RAL 7001)

Signal grey (RAL 7004)

White

Other

Which window colours do you prefer?

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Window options

Window frame colour options
Composite Timber / Aluminium Frame

Windows are available in a variety of external and internal colours.

Internal colour options

Basalt grey (RAL 7012)

Anthracite grey (RAL 7016)

Light grey (RAL 7035)

Wood finish

Silver grey (RAL 7001)

Signal grey (RAL 7004)

White

Other

Which window colours do you prefer?

Insulation proposal: The options

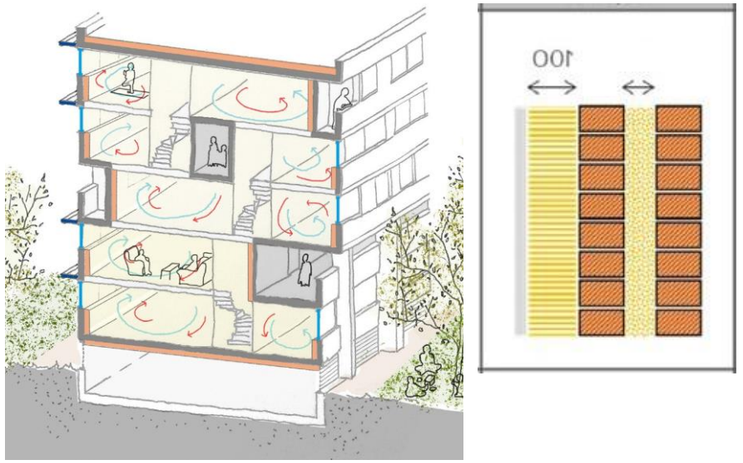
What we showed you previously

- Internal Wall Insulation
- External Wall Insulation

What we learned

- There is already cavity wall insulation

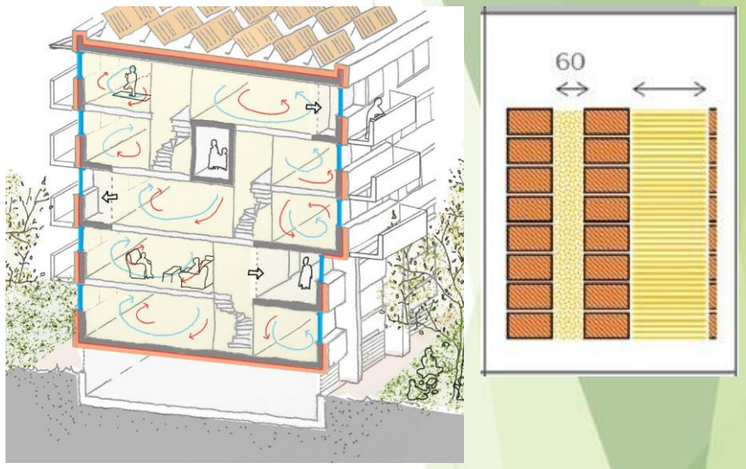
Cavity insulation + Internal Wall **Insulation**



Key considerations

- Loss of internal floor space
- Longer disruption of works in home
- Some improvement to thermal performance, but not maximised

Cavity insulation + External Wall Insulation



Key Considerations

- No loss of internal floor space
- Disruption of works in home kept minimal (making good)
- Maximised improvement to thermal performance
- Scaffolding will be required

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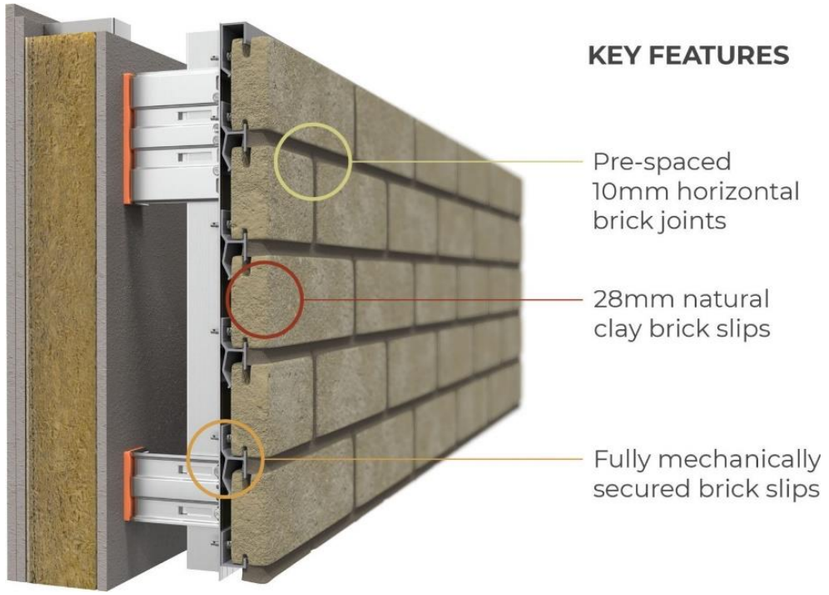
Insulation proposal: What you said...

- We will move forward with detailed design of external insulation for your blocks.



- An insulated brick faced system or render will be added to the outer walls of your buildings

71%

mainly positive about External Wall Insulation

30% residents engaged so far
(21/68)

Of the flats at Camelford Court, Camelford Walk, Clarendon Walk & Talbot Walk, 73 completed the survey. 75% of these were council tenants and 14% were resident leaseholders

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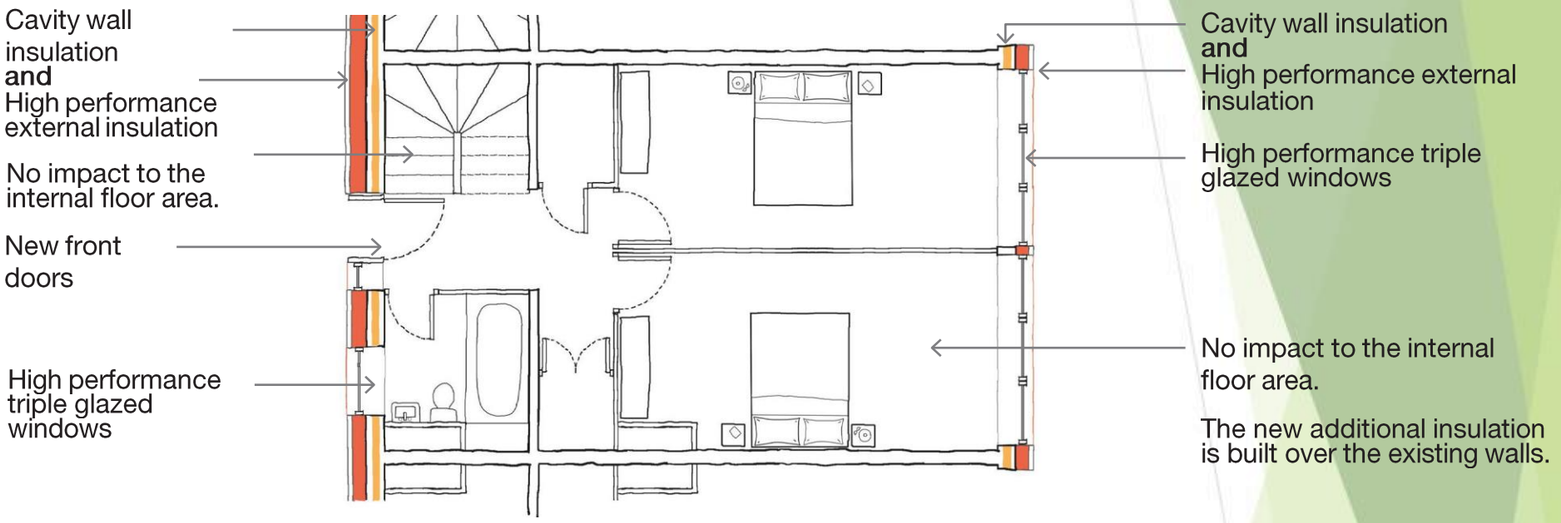
External Wall Insulation: Recap

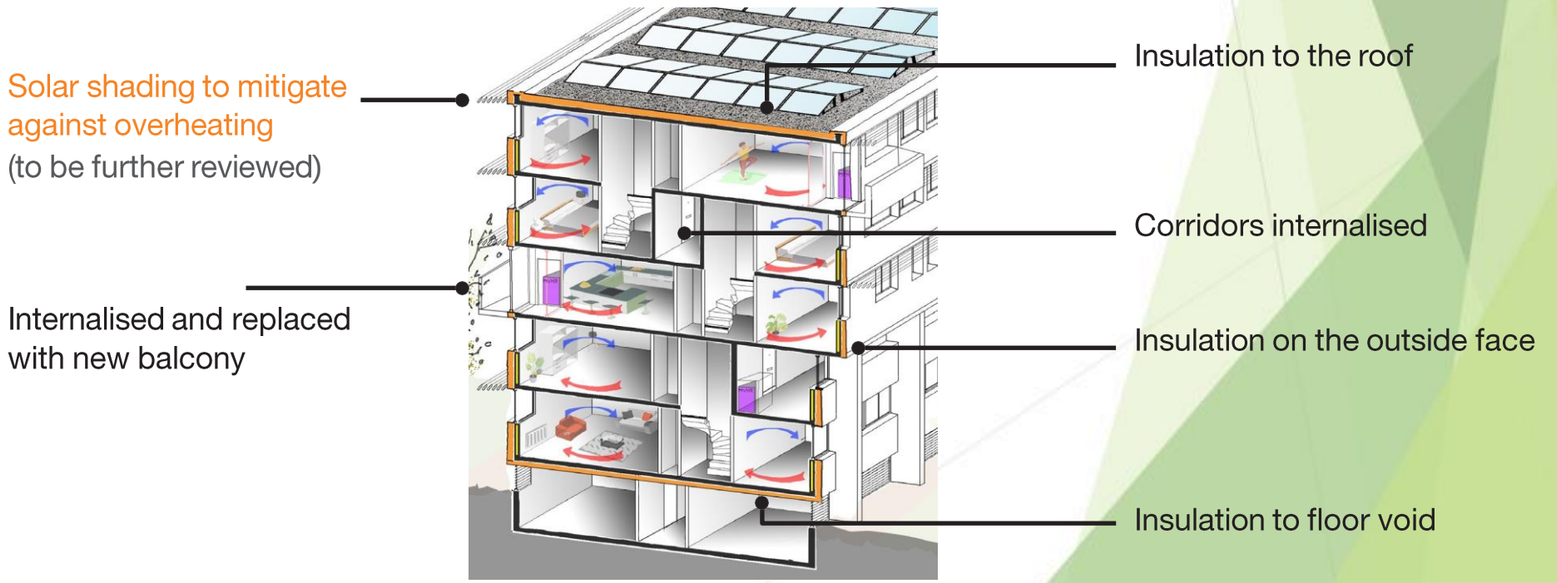
The proposal

- The insulation is on the outside face of the building
- This works by creating a simpler envelope to maximise the thermal performance.



Key points:

- Less impact to your internal space, but may have longer need for **scaffold**
- Opportunity to maximise the thermal insulation to achieve the **highest thermal standards**
- Must come with a new **MVHR** system to maintain well-being.



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EWI: Balconies

Whilst there is an emerging majority support for EWI (External Wall Insulation), we are keen residents understand how the strategy might impact their balcony spaces and walkways.

For balconies there are two types to consider:

Clarendon Walk

- Terrace balcony (no roof cover)
- Recessed balcony (with roof cover)

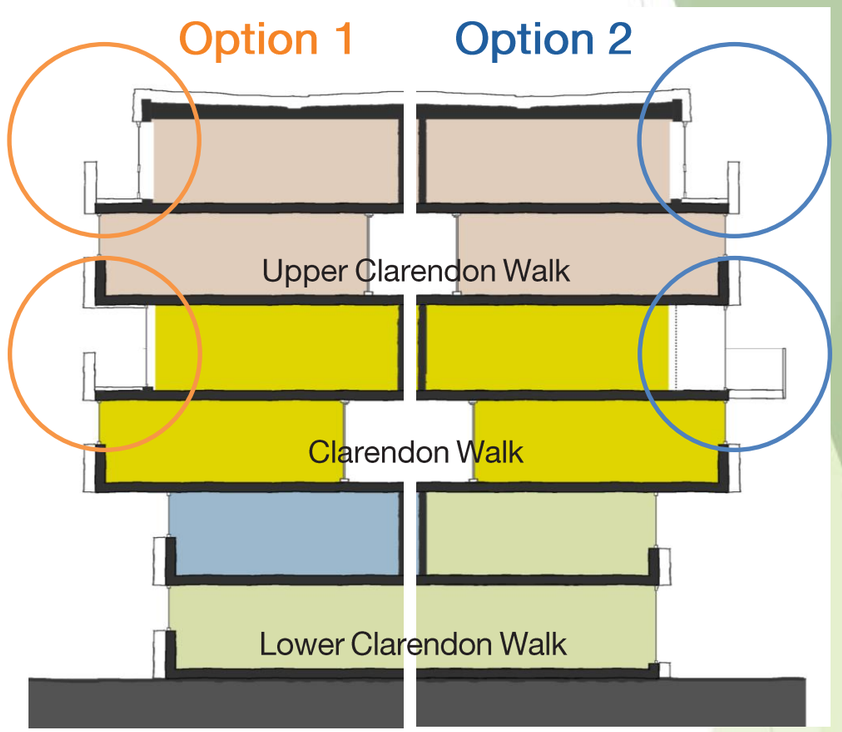
Camelford Court

- Terrace balcony (no roof cover)

The adjacent diagram shows the options:

Remodelled terrace balcony

Remodelled recessed balcony



Remodelled terrace balcony

New Bolt-on balcony

Clarendon Walk

Camelford Court

Camelford Walk / Talbot Walk

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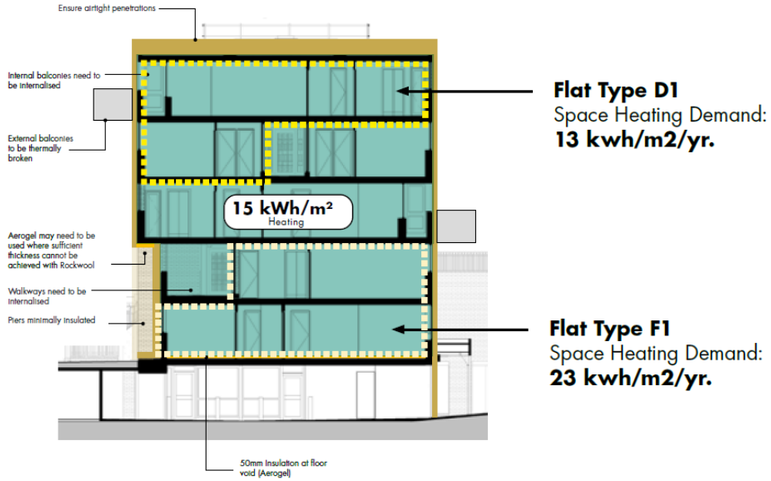
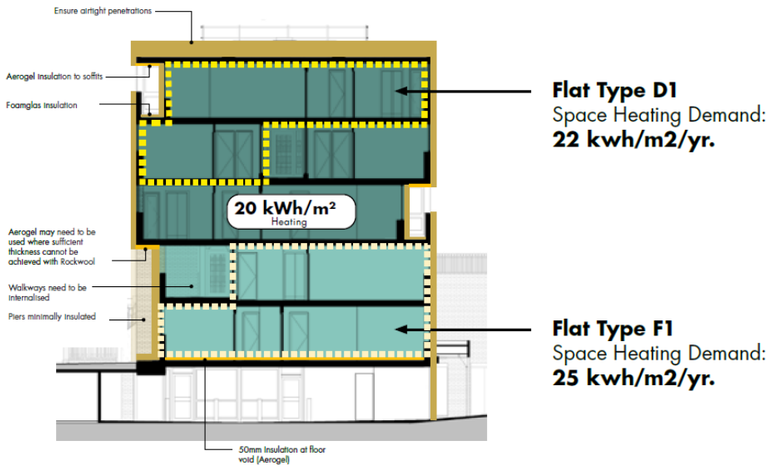
EWI: Balcony Choices & Heat Demand

Option 1: Bolt-on Balcony



▲ (A) Bolt-On balcony / Enclosed walkway

Option 2: Recessed Balcony



▲ (B) Recessed balcony / Enclosed walkway

Estimated Current Block Average Space Heating Demands:**

- **Camelford Walk = 100 kWh/m2.yr**
- **Talbot Walk = 120 kWh/m2.yr**
- **Clarendon Walk = 97 kWh/m2.yr**

*** Based on a number of assumptions due to limited existing building data. Likely to perform worse than assumed.*

Both options include:

- Enclosed corridors
- **Enclosed walkways option**
- Ground slab floor insulation
- New roof Insulation
- New EWI system

** Figures shown are **block averages**, the individual space heating demand will vary slightly between units.*

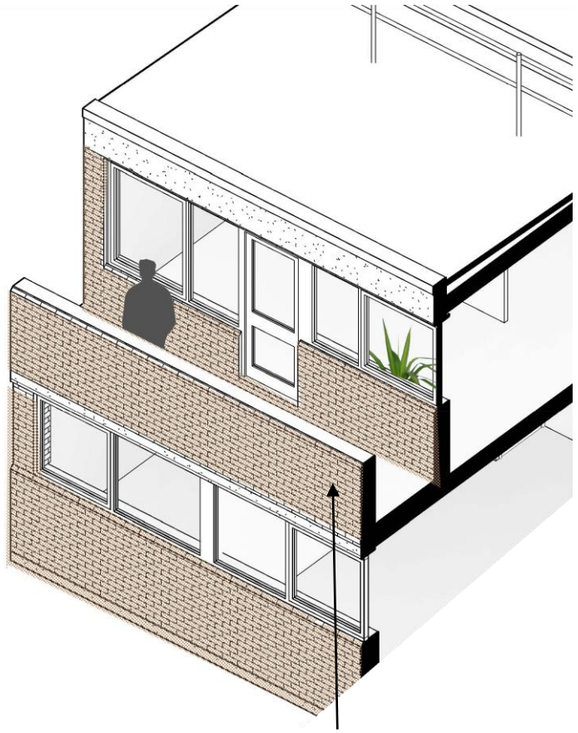
EWI: Terraces

Key points

- Existing terraces will be retained.
- The terrace floor would be insulated and raised
- The doors would open outwards (where space allows)
- The existing balustrade and inside walls would be demolished and the living room extended.

Top floors of the blocks below only:

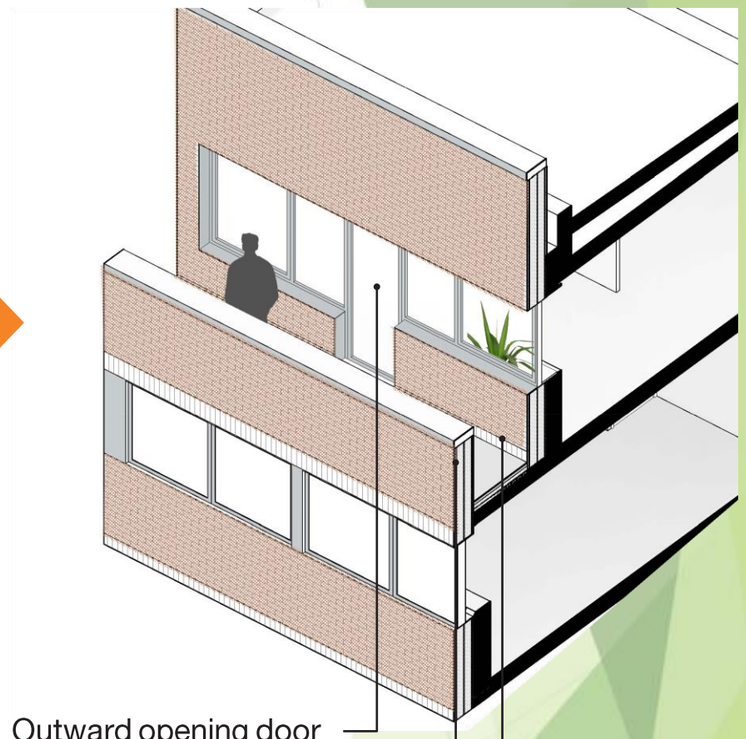
- Clarendon Walk
- Camelford Court



Existing balustrade to be demolished where possible

Raised balcony level to match existing step

Deeper threshold with new wall build-up



Outward opening door

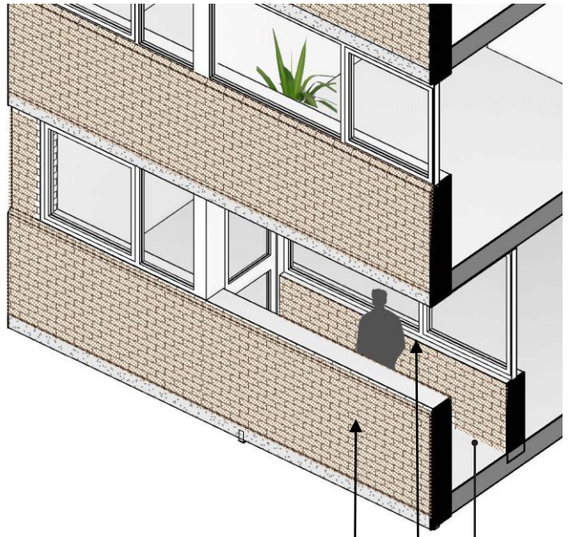
New external wall to form new balustrade to maximise terrace floor area

Raised to door threshold

EWI: Balconies - Option 1 (Recessed)

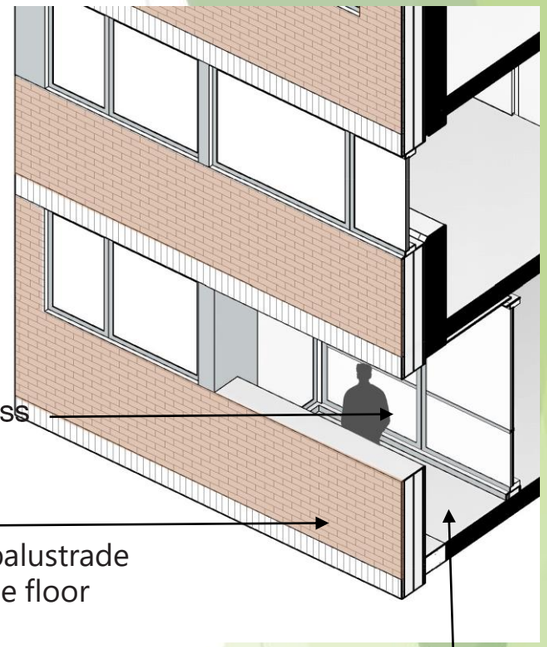
Key points

- The existing recessed balcony space is retained and re-defined to achieve the same floor area.
- The existing access will be re-orientated to lead directly from the main living space
- New sliding doors proposed
- The existing balustrade and inside walls will be demolished.
- Access to homes will be required, to make good the inside spaces.



Existing balustrade / wall / glazing to be demolished

Existing balcony



Reorientated access with sliding doors

New external wall to form new balustrade to maximise terrace floor area

New decking, Same sized balcony space

Remodelled recessed balcony with new insulated decking and soffit and new re-orientated sliding doors

Applies to these blocks: Clarendon Walk, Camelford Walk, Talbot Walk

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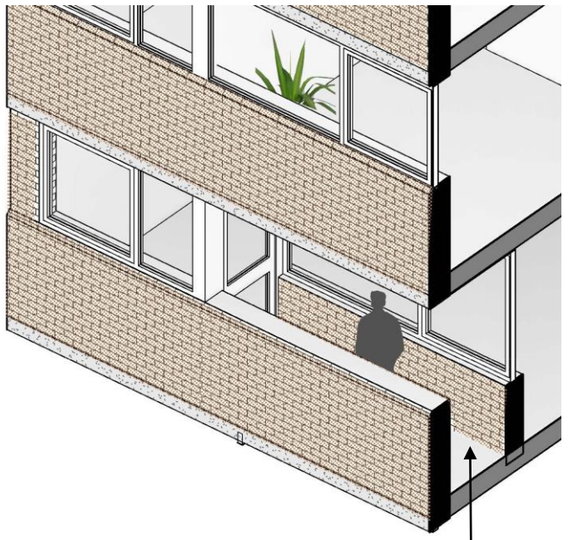
EWI: Balconies - Option 2 (Bolt-On)

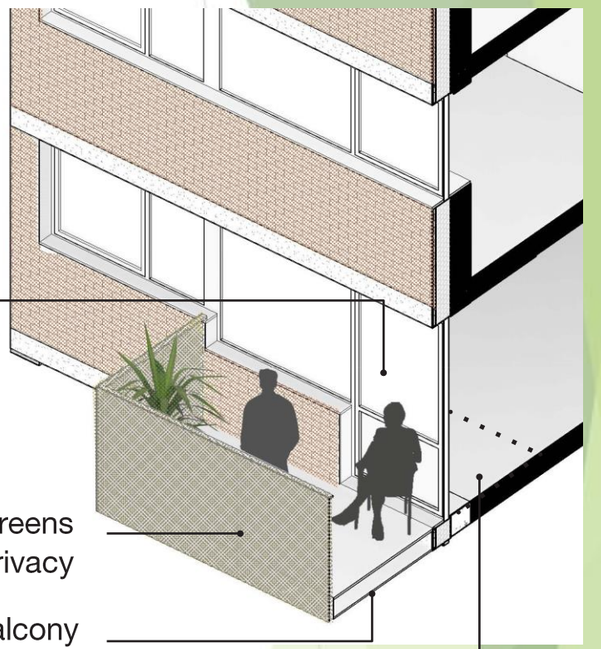
Applies to these blocks: Clarendon Walk, Camelford Walk, Talbot Walk

Key points

- The existing recessed balcony space will be internalised, gaining more floorspace
- They'll be new larger bolt-on balconies, with outward opening doors.
- Balustrades have perforated metal screens maintain privacy whilst allowing light through.
- The existing balustrade and inside walls will be demolished and local opening up works through the wall may be required.
- Access to homes will be required, to make good the inside spaces.



Existing balcony will be internalised

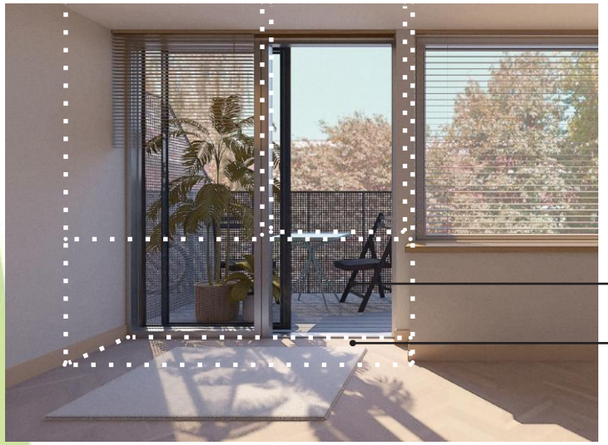


Outward opening door

Perforated screens to maintain privacy

New larger balcony

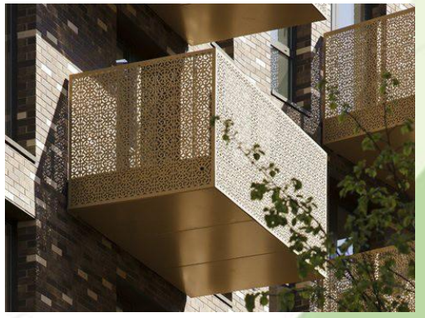
Gained internal floor space



New external bolt-on balcony

Existing balcony will be internalised

Threshold may not be flushed
Subject to further detailed design.



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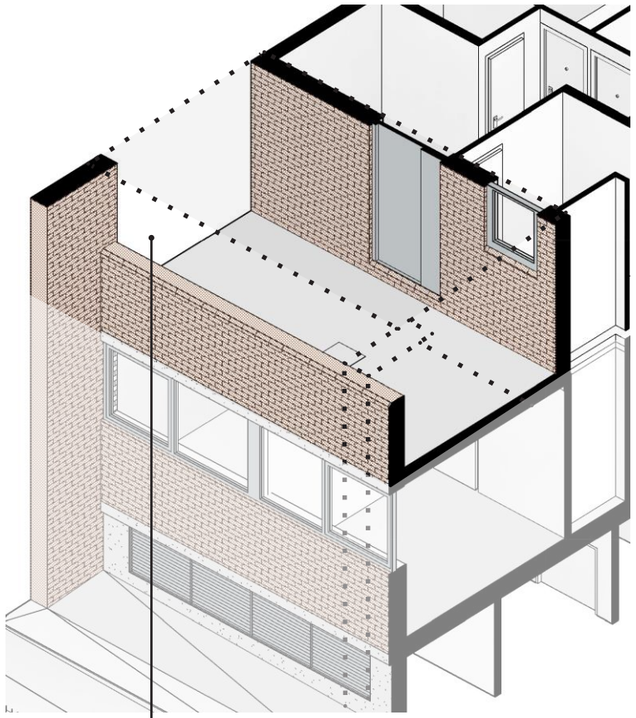
EWI: Communal Walkways

Key points

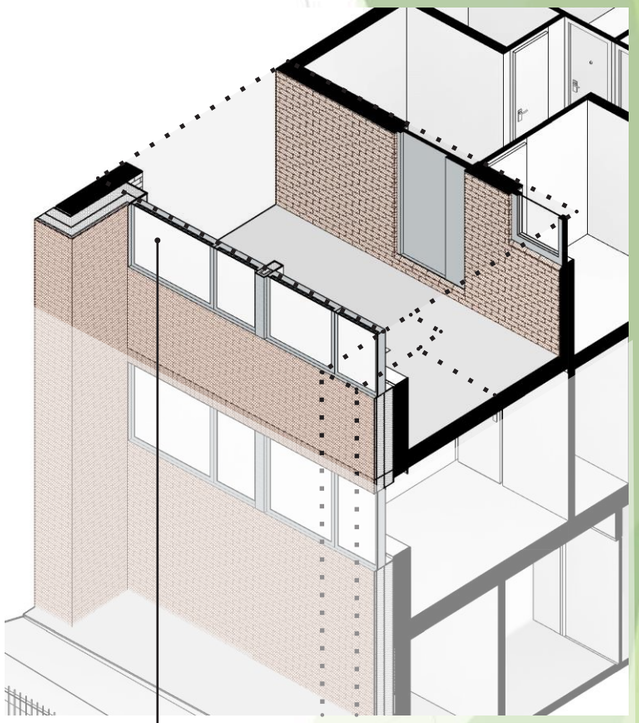
- The existing open-air walkways could be internalised and heated, which will help to improve the thermal performance to your home.
- This would be achieved by installing glazing across the spaces between the piers.

Option 1: Open Walkways



Currently there is an open space opposite every front door on lower Camelford and lower Talbot Walk.
This can be retained but your homes will be less well insulated.

Option 2: Enclosed Walkways



One option is to fully enclose the lower corridor of Camelford and Talbot Walk, with glazing.
The outdoor space will be removed but the thermal performance of your home will be maximised.

EWI: Communal walkways

To help you decide:

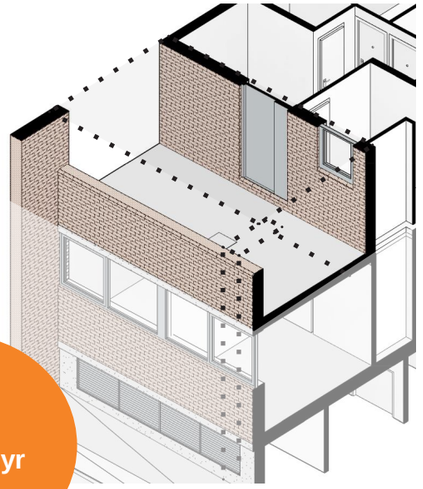
- Achieving a maximum Space Heating demand of **50kWh/m2.yr** is considered a Best Practice Retrofit

- The completed retrofit may not always meet the modelled target at Design Stage for a number of reasons - This is known as the **'Performance Gap'** and can occur to all retrofits

- To give us the best chance of meeting a Best Practice Retrofit, a lower maximum target is designed to – for Lot 2, the maximum recommended target is **40kWh/m2.yr.** This is so we have a good buffer to address issues along the way.

- The modelled space heating demand for homes coming off the walkways where the walkways remain as open space, is **38kWh/m2.yr**

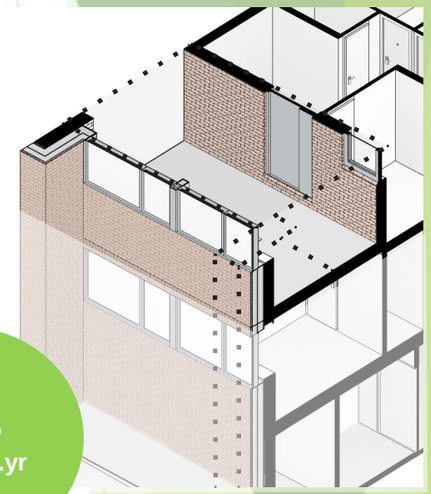
Option 1: Open Walkways



38 kWh/m2.yr

** Modelled Space Heating Demand*

Option 2: Enclosed Walkways



23 - 25 kWh/m2.yr

** Modelled Space Heating Demand*

Improvements to your home will be maximised and will have more buffer to achieve Best Practice Retrofit targets for both options.

The lower the space heating demand, the less energy needed to heat your homes.

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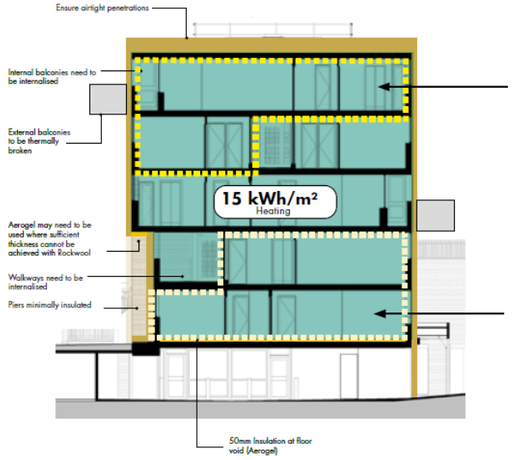
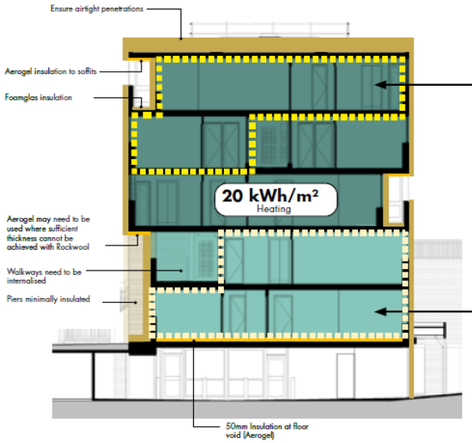
Summary of options



Flat Type D1
Space Heating Demand:
13 kwh/m2/yr.

Flat Type F1
Space Heating Demand:
23 kwh/m2/yr.

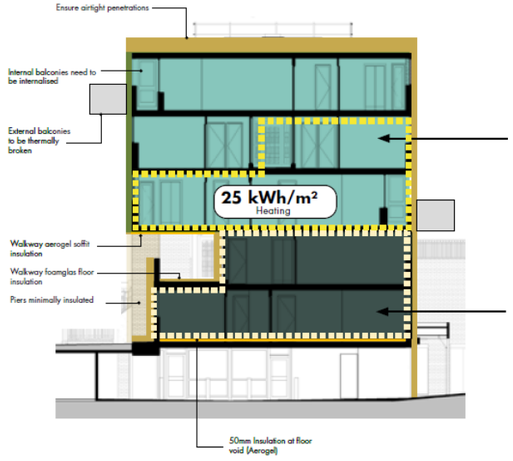
▲ (A) Bolt-On balcony / Enclosed walkway



Flat Type D1
Space Heating Demand:
22 kwh/m2/yr.

Flat Type F1
Space Heating Demand:
25 kwh/m2/yr.

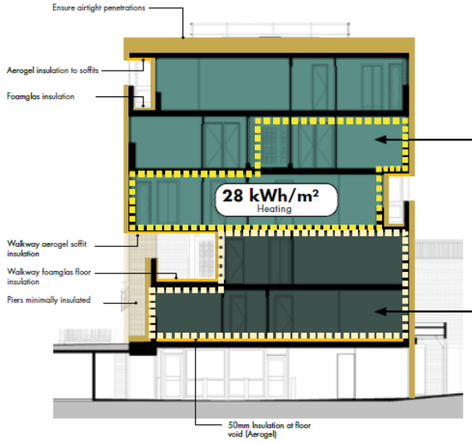
▲ (B) Recessed balcony / Enclosed walkway



Flat Type D1
Space Heating Demand:
24 kwh/m2/yr.

Flat Type F1
Space Heating Demand:
38 kwh/m2/yr.

▲ (C) Bolt-On balcony / Un-enclosed walkway



Flat Type D1
Space Heating Demand:
24 kwh/m2/yr.

Flat Type F1
Space Heating Demand:
38 kwh/m2/yr.

▲ (D) Recessed balcony / Un-enclosed walkway

Most similar to current

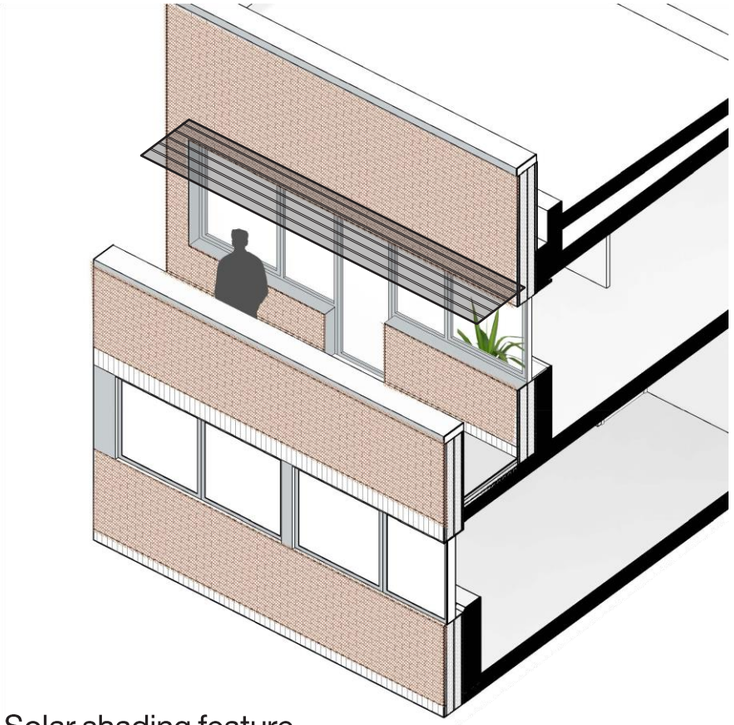
EWI: Solar Shading

Key points

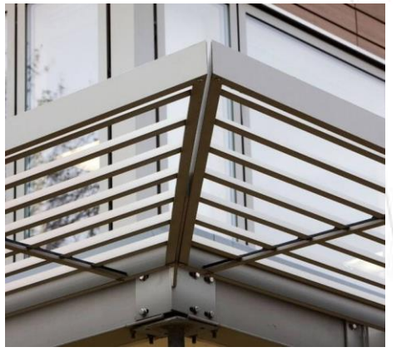
- An overheating analysis across all the blocks has been undertaken
- For the majority of homes, extra warmth on hot days can be addressed by fully openable windows.
- For homes on Upper Clarendon Walk, additional solar shading of approx. 70cm deep will be required to the south facing terraces in order to limit overheating.
- The design will be developed further at the next stage. Your first thoughts will be welcomed.

Key areas

- Upper Clarendon Walk (south side)



Solar shading feature
Design to be developed



External Wall Insulation: Materials

What you said...

- Robustness
- Durability
- A1/A2 rated, non-combustible materials
- Opportunity for colour / pattern
- Maintaining the existing character

Can we have a genuine brick slip cladding, as opposed to a render, artificial bricks, metal/wood cladding? Render needs costly painting and deteriorate over time, bricks do not!

The brick tile examples shown are pretty, they also need to be durable.

Can we have a new brick skin over the building. It would help to refresh the appearance of the building

Brick

- Robust
- Durable
- A1/A2 Rated
- Opportunity for colour / pattern
- Maintains the existing character

Render

- A1/A2 Rated
- Opportunity for colour / pattern

However...

- Not as durable
- A different character

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External Wall Insulation: Systems

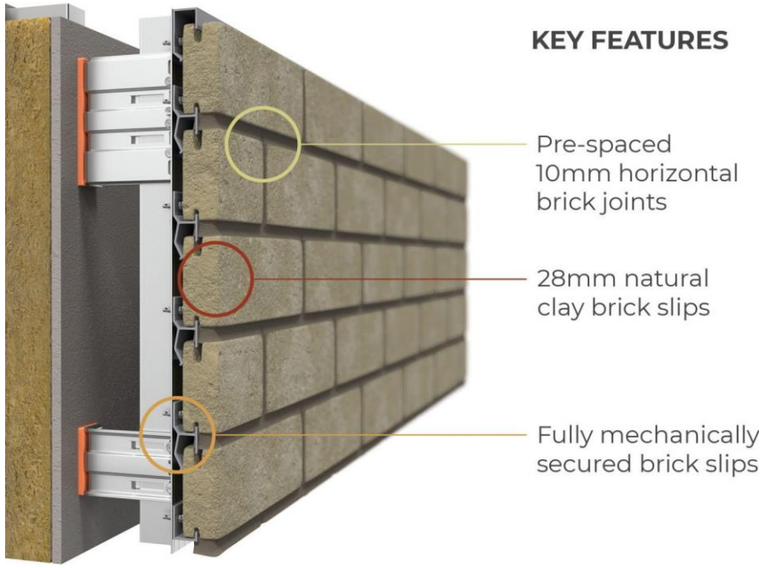
We're currently reviewing a number of systems.
All will be A1/A2 rated with non-combustible insulation.

Brick tile system

- Mechanically fixed
- Off-site opportunities
- Robust material
- Extruded brick

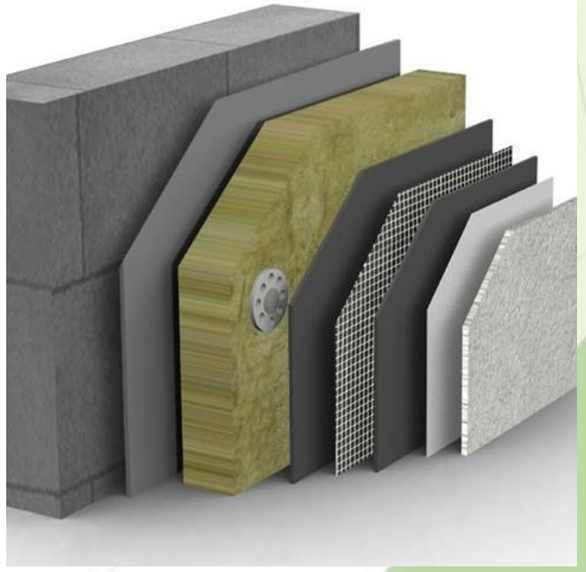
Brick slip system

- Mechanically fixed
- off-site Opportunities
- Robust material
- Cut brick



Render build-up

- An **insulated render** system
- Adhesive fixed



External Wall Insulation: Brick

Key pros

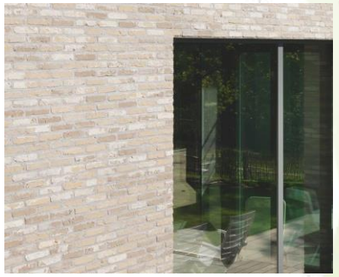
- In keeping with character
- More textural and subtle variation
- Robust and durable

Key cons

- More expensive than render



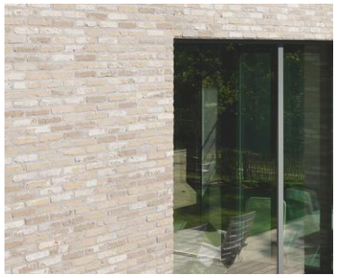





A lighter red brick...

Or closer to the original

External Wall Insulation: Brick



A buff brick

A grey brick

External Wall Insulation: Render

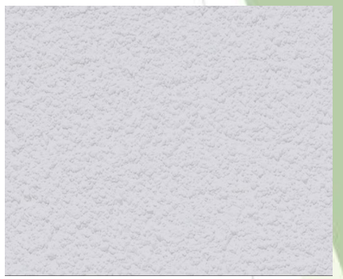
Key pros

- Lower initial cost
- A lighter weight system

Key cons

- Requires more maintenance
- Less durable

An ‘off-white’ render







**Subject to review and planning discussions!*

Insulation strategy: Next steps

We are keen to be able to develop the proposals in more detail and work towards a planning submission.

The external wall options have been explained here a bit more, specifically covering features that may affect residents personally.

If anyone has any further questions, please do contact LWNT or come along to the webinar and/or drop-in to speak to us directly.

We are keen you have all the information you need to make an informed decision.

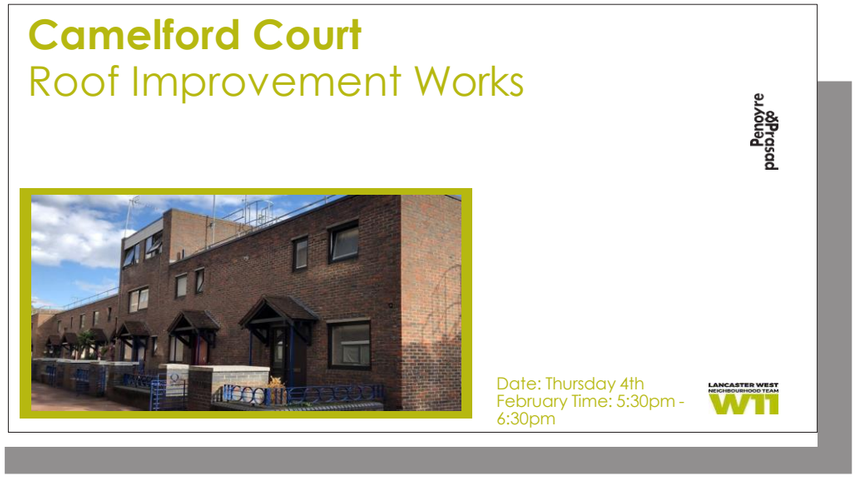
You can also visit the Refurbishment Showroom at Unit 29 Baseline studios, where we have some samples to help you make a decision.

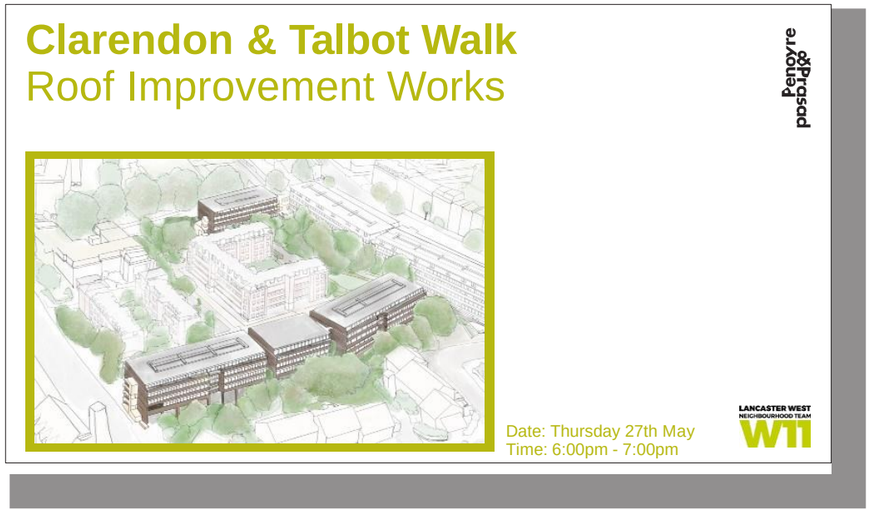
Having understood the external wall insulation options better...

Let us know what you think of the systems, materials and opportunities proposed through the survey included with this booklet.

Would you prefer a bolt-on balcony or to keep it as is?

Roofs: The story so far...





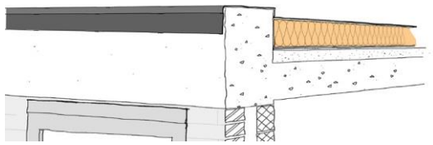
Different streams of work...

Camelford Court
Phase 1 completed March 2022

Talbot Walk & Clarendon Walk
Starting on site March 2022

Camelford Walk
Detailed roof works to be decided with residents

Roofs: Why upgrade...?



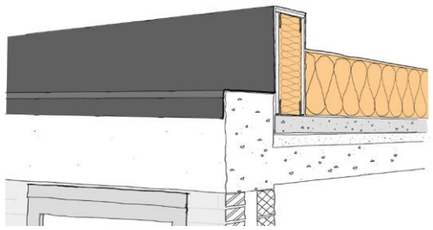
Existing roof
(Typical build-up)

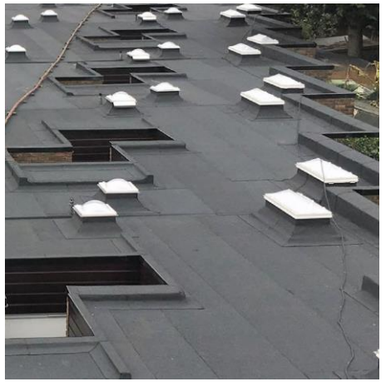
- **What are the issues?**
  - The roofs have a poor energy performance
  - There is currently not enough insulation in the roof to meet current and future thermal performance standards.

Survey results:
Having completed a roof survey for each block, defects such as blocked pipework and damaged services have been identified that should be addressed.

Roofs: What the options were...

Options for: Camelford Court, Clarendon Walk & Talbot Walk

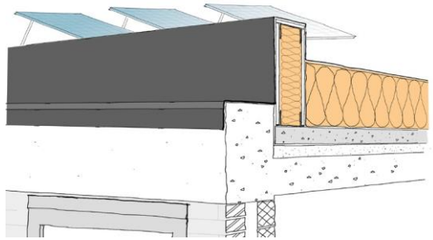




Warm roof
(Basic upgrade)

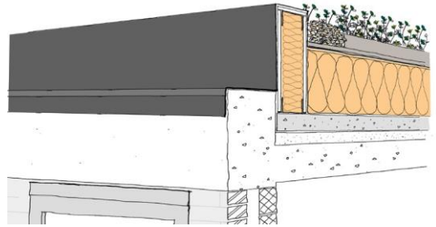
- Reduce heating demand
- Mineral wool insulation will be A1 fire rated.

+



Solar panels

- Solar panels generate clean energy which can contribute towards lowering your energy bills.



Green roof

- Green roofs can increase biodiversity and help to keep your buildings cooler.

A bit of both

- Due to loading constraints, we can locate green roof next to solar panels, but not underneath. (This option will also be subject to additional surveys)

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Roofs: What Camelford Court residents said...

Preferences

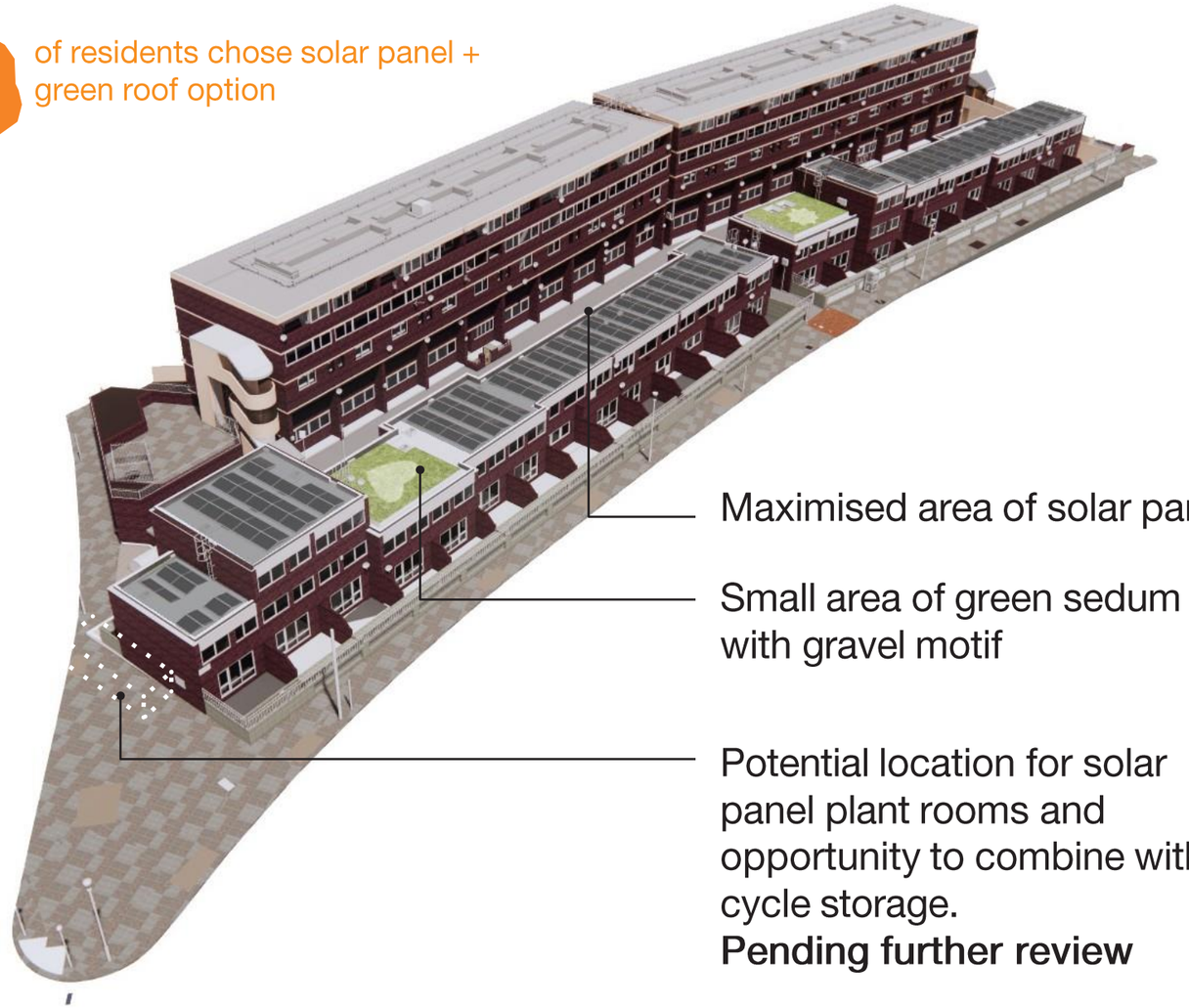
- Through our co-design sessions residents said they would prefer to maximise solar panels and have less green roof; and the heart motif was the preferred design.

68% of residents chose solar panel + green roof option

Next steps...

- Planning for the installation of the solar panels (phase 2)
- Integrating the solar panel plant rooms with the landscape and access proposals

Emerging preferences and choices - Clarendon Walk, Talbot Walk, Camelford Court, Camelford Walk



Maximised area of solar panels

Small area of green sedum roof with gravel motif

Potential location for solar panel plant rooms and opportunity to combine with cycle storage.
Pending further review

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Roofs: What Clarendon Walk & Talbot Walk residents said

Preferences

- The emerging preference is for a maximised solar panel solution.
- There was some preference for a green roof but it was a lower priority.

Next steps...

- Upgrade the existing roof to a warm roof
- Proposals for a maximised solar panel option to be integrated as part of the main refurbishment works. (This will be at approximately 60% coverage)

83% of residents chose solar panels

Clarendon Walk

Talbot Walk

Preferred option:
Maximised solar panels

Moving away from green roofs:

- Structural surveys have shown that the existing roof slab is not strong enough to support the weight of both a new green roof and solar panels and to do so would require further investigations and structural strengthening works.
- As residents have indicated a green roof is a lower priority than solar panels, a maximised solar panel option will bring best value for residents in terms of benefits and minimised disruption.

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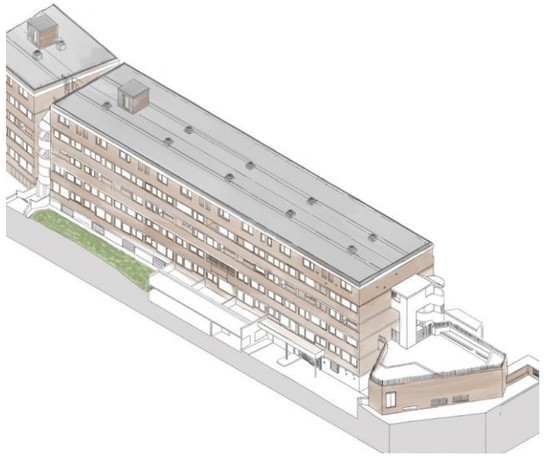
Roofs: Initial preferences of Camelford Walk residents

Preferences

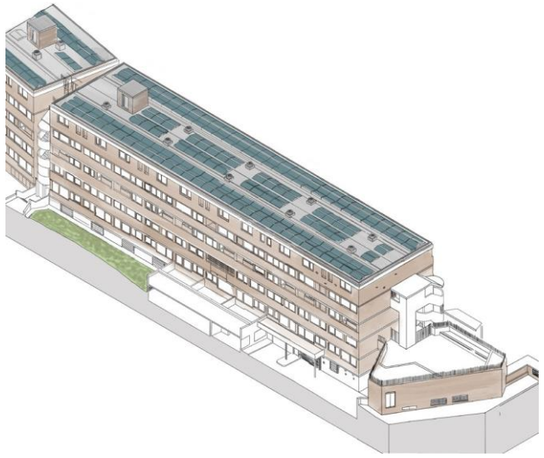
- Based on conversations from the previous pop-up, there was emerging preference for a maximised solar panel solution
- But also some interest in green roofs

Next steps...

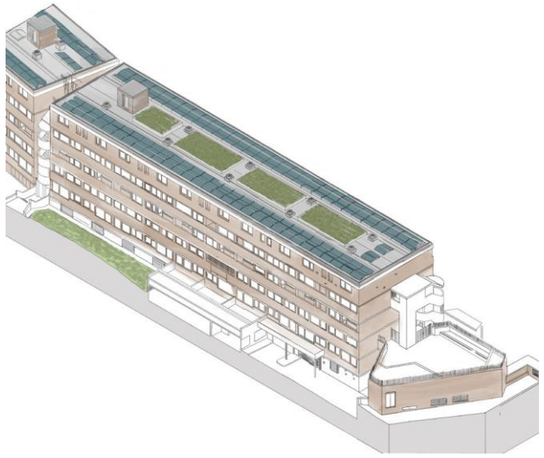
- Confirm preference from the 3 Options presented
- Undertake further structural surveys if green roof is a priority



Opt A:
Warm roof only



Opt B:
Solar panels only



Opt C:
Mix of green roof & solar panels*

**This will be dependent on structural surveys*

Roofs: Concrete survey – findings

Talbot Walk, Clarendon Walk, Camelford Walk

- For all of the above blocks, it has been found that the roof slabs are able to support the warm roof upgrade and up to 60% coverage of solar panels, without any additional strengthening works required.

- If proposals require more solar panels and/or a green roof, we will need to undertake further surveys to establish the extent of the strengthening works needed.

- These surveys will be from the top side of the roof slab, but is expected to be quite disruptive. (Noise and vibrations)

Roofs: MVHR: Essential works

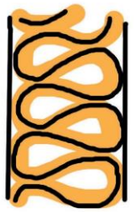
Why do we need it?

- To ensure your well-being is optimised
- Brings in fresh air that is temperature controlled to mitigate heat loss

The opportunities

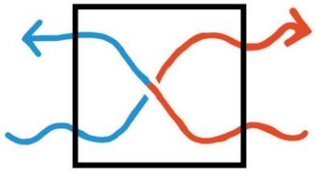
- The incoming air is filtered and has been proven to help reduce allergens
- Lots of systems to choose from and these are currently being explored further to see which can best address your concerns
- There might also be a system that can help to support cooling

Key PassivHaus/EnerPHit Principles



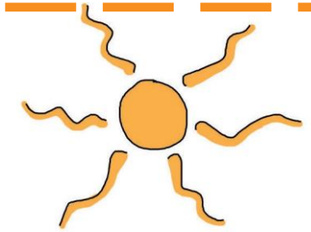
High levels of Insulation

Increasing the thermal performance of this building is key to making sure the building is warm in winter and cool in summer.



Ventilation and heat recovery

The ventilation system provides continuous clean fresh air. It also controls the temperature.
This is done by heating the incoming air with heat lost from the warm air leaving the building.
This is 'Mechanical Ventilation and Heat Recovery'. (MVHR)



Using free heat from the sun

Heat from the sun is used to warm the building. This is held in the building by the thick insulation.
In summer, shading is used to reduce the amount of heat absorbed.
The use of solar panels generates electricity to power the ventilation system.

Airtight envelope

An airtight envelope is like zipping up your coat! Stopping any cold air getting in and any heat getting out.

Triple glazed windows

Windows are important to keep your flat warm. Triple glazed windows are extra efficient and loose minimal heat. Avoiding 'cold patches' by the windows.

Initial design ideas: resident feedback

Ventilation*

*MVHR is Mechanical Ventilation (with) Heat Recovery

57%

Generally positive at the idea of having MVHR* installed

30% residents engaged so far
(21/68)

Of the flats at Camelford Court, Camelford Walk, Clarendon Walk & Talbot Walk, 73 completed the Survey. 75% of these were council tenants and 14% were resident leaseholders

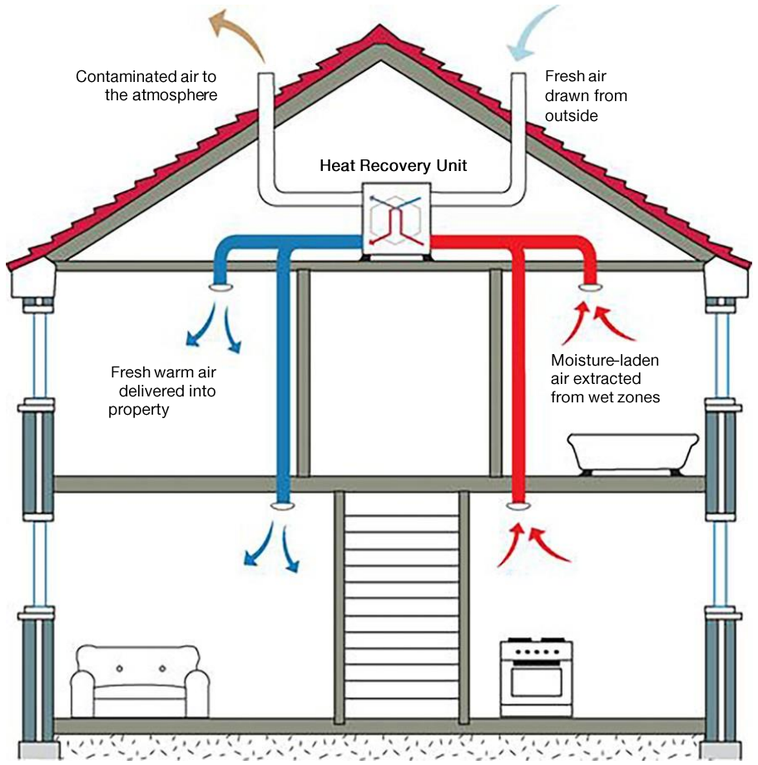
MVHR: Overview

What is MVHR?

- Mechanical Ventilation with Heat Recovery (MVHR) systems, are used to remove stale air and bring in fresh air which can also heat or cool the home.

How does it work?

- Fresh air is fed into the system via an external wall vent.
- Heat is transferred from the extract air to the incoming fresh air (no air mixing involved)
- This temperature controlled fresh air is then distributed to the various rooms across your home



Key benefits

- Filters out majority of pollutants such as odours, smoke, allergens
- Helps to avoid humidity problems and protect the building structure
- Helps to prevent mould growth
- Provides a more uniform distribution of fresh air
- Balanced ventilation / optimum humidity

What it looks like...

MVHR: System options

MVHR options overview

- The adjacent slide shows the MVHR options being reviewed by the Mechanical & Electrical Consultants with LWNT.

- The current preferred option is highlighted and is being trialled across the estate in Pilots.
- It will be available for review in 25 Upper Camelford Walk soon.

							
Manufacturer	Nuaire	Nuaire	Vent Axia	Vent Axia	Zehnder	Zehnder	Zehnder or Brink
Model	MRXBOXAB-ECO2	MRXBOXAB-LP2	Sentinel Kinetic BH	Sentinel Kinetic H	ComfoAir 155 WM	Comfoair Q350	Comfoair 160 Renovent Sky
Dimensions	607 W x 356 D x 507 H	900 L x200 D x700 W	550 W x 285 D x 640 H	895 W x 849 D x 200 H	546 W x 298 D x 644 H	725 W x 570 D x 850 H	670 W X 268 D X 864 L
Passivhaus Certified						✓	✓
Wall Mounted	✓		✓		✓	✓	✓
Ceiling Mounted		✓		✓			✓
Sound Power	24 dBA @ 3m	23 dBA @ 3m	30.8 dBA @ 3m	29.7 dBA @ 3m	27.4 dBA @ 3m	19 dBA @ 3m	22.8 dBA @ 3m
Thermal Efficiency	89%	79%	91%	82%	91%	96%	95%

MVHR: Comparison

Zehnder Comfoair Q350

What we will install:

Zehnder Comfoair Q350

Key Features

- Standard or preheater models available
- Suitable for house sizes up to 200m²
- **Provides up to 90% heat recovery efficiency (reducing heating costs)**
- **2 x G4 filters and F7**
- **Passive House certified**
- Counter flow heat exchanger
- **A+ energy efficiency**
- Left or right-hand configuration via the unit's software
- **Noise reduction**

Technical Features

- **Thermal efficiency @ 96%**
- Features EC motors
- Airflow rate @ 100Pa - 350 m³h/r
- Maximum airflow rate – 350 m³h/r
- 4 Variable speed flow rate set points
- **100% full summer bypass**
- **Sound level @3m – 19 dB(A)**
- Dimensions W x H x D - 725mm x 850mm x 570mm
- Weight - 50kg
- Duct diameter internal - 160mm
- Duct diameter - 190mm
- **Controllability:** This unit can be controlled via ComfoSense LCD Controller, ComfoConnect LAN application interface or ComfoConnect KNX Building management interface
- Installation: Suitable for vertical wall mounting or floor stand with the ability to allow left or right-hand configuration through the unit's software
- Construction: This unit is constructed of powder coated sheet steel and is fully insulated using high quality EPP to maintain excellent thermal features

Various control options – Easy operation

- **The display** is the simplest controller – it is always available and is integrated directly into the ventilation unit.
- **ComfoControl app** - Whether you're on the move or on the sofa, control your ComfoAir Q conveniently via your smartphone or tablet. Just download the free ComfoControl app from the App Store.
- **Remote control** - The control panel ComfoSense C allows to control the ventilation unit ComfoAir Q via wireless communication.

Brink Flair 325

What we will install:

Brink Flair 325

Key Features

- Adjustable air flow rates via control panel
- Filter change indication
- Frost protection
- Summer by pass
- **Provides up to 91% heat recovery efficiency (reducing heating costs)**
- **2 x G4 filters and F7**
- Low energy consumption
- High efficiency
- **Passive House certified**
- **A+ energy efficiency**
- Left or right-hand configuration via the unit's software
- For humidifying, purifying, heating and cooling

Technical Features

- **Thermal efficiency @ 95%**
- Airflow rate range 69 m3/h - 251 m3/h
- 4 Variable speed flow rate set points
- **100% full summer bypass**
- Sound level 33dBA
- Dimensions W x H x D - 750 x 650 x 560
- Weight – 37kg
- Duct diameter - 160mm
- Installation and maintenance: The convenient **installation wizard** makes installation quicker. This tool guides you step-by-step through the installation process and makes it impossible to overlook anything. The appliance itself also offers you **smart help** by the maintenance wizard when maintaining and replacing filters.

Various Control options – Easy operation

- **Easy display control panel** – includes smart help for maintenance
- **Modbus** - Ensures an easy link with building management systems
- **Brink Home** - Online control through an App or our web portal
- **Internet** - Extensive options for the Internet of Things

Passive House is an internationally recognised standard for high quality, low energy buildings.

cool, temperate climate
phB
CERTIFIED COMPONENT
Passive House Institute

LANCASTER WEST NEIGHBOURHOOD TEAM W11

MVHR: Pilot

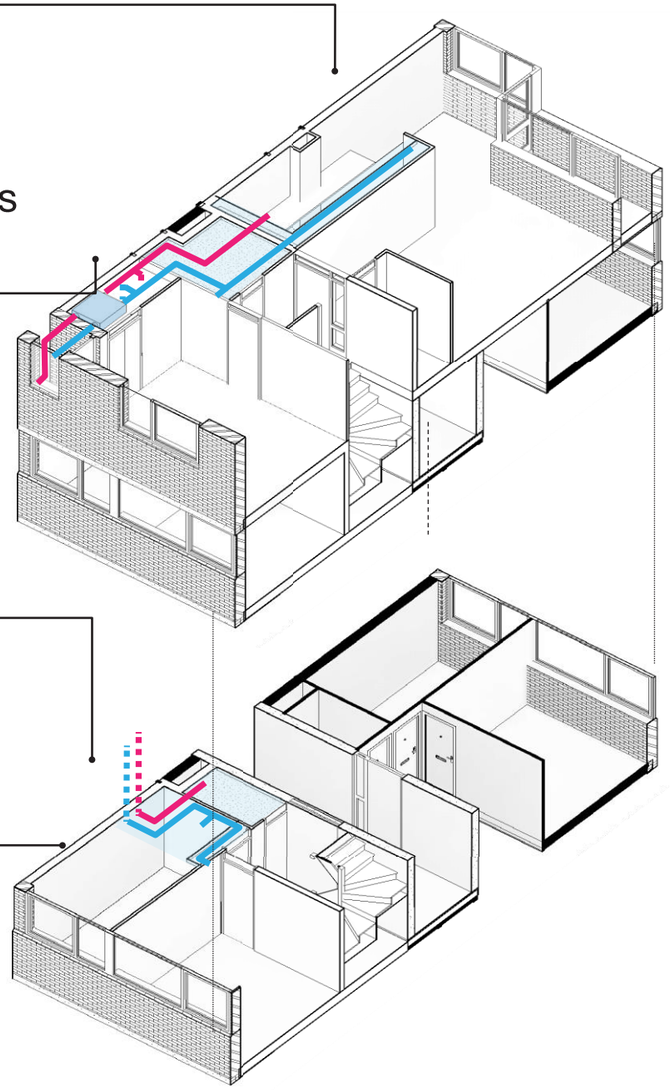
Ductwork to be hidden above kitchen cabinets

Ductwork to be insulated to minimise noise as well as heat loss

To be located in existing storage used for cylinders where possible.

Changes between floors to be within store areas

Ceiling drops will be localised to bathrooms and kitchens but where needed elsewhere, will be localised to doorways or to the side as a bulkhead.



Minimising impact

- Wherever possible, we will do our best to minimise impact to your storage space and ceiling height.
- We are currently working on a pilot flat to trial out some of the measures for you to see. This will be in 25 Upper Camelford Walk.

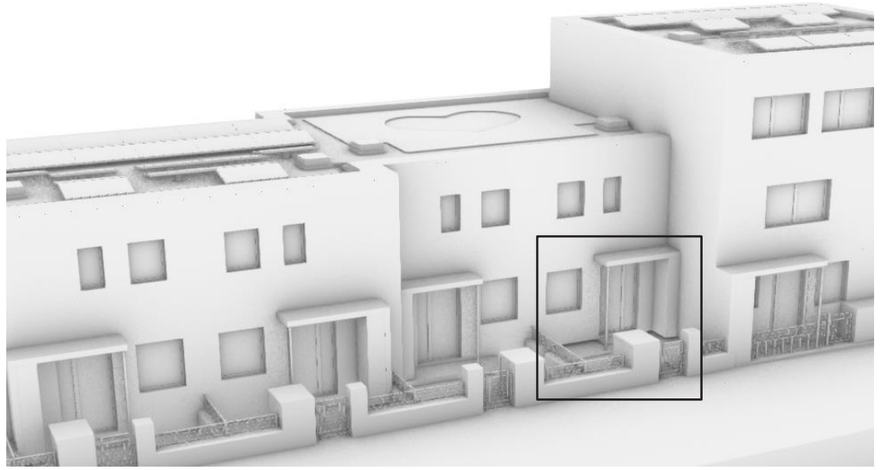
A bulkhead is a section of ceiling that has been dropped and boxed-in or enclosed

MVHR: Camelford Court

Entrance porch

- As part of the EWI approach, there will be an opportunity to design a new entrance porch to each home on Camelford Court
- This could include space to allow for an external (insulated) storage for the MVHR system, saving space inside the home.*
- The design is yet to be developed as we review the MVHR layouts.
- It would be good to get your thoughts on this proposal and any suggestions you might have as part of the design of the porch.

* Some large homes may still require to have the MVHR located inside due to lack of space by the main entrance.



Working proposal - New entrance shelters with MVHR storage.

Working proposal - indicative materials

Door and glazing indicative only and pending further review

MVHR store with louvred panel

Steel post support corner to keep side open for light and visibility

Precedent examples - Potential palette of aluminium, timber

The Corridors & Walkways

Part of the thermal strategy is to internalise the corridors and walkways.

Why enclose these areas?

- It eliminates the needs for further insulation on the corridor/walkway walls
- By doing so, it offers an opportunity for improvements to lighting and finishes

The key changes

- Windows facing onto the corridors and walkways (and central staircores e.g. in Clarendon Walk) will need to be fixed and fire rated.
- Spaces along the corridor will need to be kept clear and well managed. *(This should also be the case for existing corridors)*

Existing external walkways
- Talbot Walk
- Camelford Walk

Existing bathroom windows will need to be replaced with fixed fire rated windows

Opportunity to remove step

Lower walkways would be fully enclosed with glazing, with loss of outdoor space

The Corridors & Walkways: Next steps

The proposals of the corridor and walkway finishes will be developed and finalised in Phase 3 co-design.

The pilot flat (25 Upper Camelford Walk) will trial out the step removal and the new door surround for residents to review.

In the meantime, please let us know if you have any questions or concerns with the internalising and loss of outdoor space of the lower corridor and walkways. for Camelford Walk and Talbot Walk. You can either use the survey enclosed or contact David Hees of the LWNT refurb team via the general LWNT number and email, which you'll find at the end of this booklet.

The proposals are not yet finalised, please help us understand whether you would like the following enclosed:

Leave the corridors and walkways open or completely enclose them?

Waste, lifts & entrances: Overview

Refuse & Recycling Store

Lift

Refuse & Recycling bins per patio

Overview

- New lifts are proposed to each block (Talbot Walk, Clarendon Walk, Camelford Walk)
- **Refuse chutes** will need to be removed (to make space for the lifts)
- New refuse stores (with recycling bins) will be provided next to the entrances, where possible, for easy access.
- Existing arrangements are retained on Camelford Court.

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Waste, lifts & entrances: The proposal

(the journey to and from your homes)

Brighter corridors & step-free thresholds

Existing stairs retained (with some remodelling)

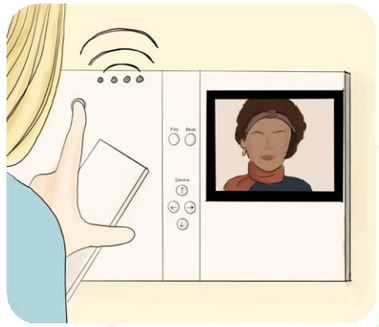
Generous lift access to ground level

Covered connection from the entrance to the refuse store

A sheltered entrance and wayfinding signage

A holistic access sequence

- A new entrance that brings the stairs, the lift and refuse store together
- Fob controlled and with video entry
- Recycling and waste together in one space
- Opportunity to create a full step-free access sequence from door-to-door



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Lifts: Starting with your priority...

The Challenges

- Maintaining a secondary means of escape during construction
- Limited space to accommodate everything
- Limited structural capacity

The Opportunities

- To create a holistic and secure entrance sequence
- To simplify and improve access to waste and recycling
- To create better wayfinding
- To weather proof the stairs

The Compromise...

- We have to **remove the refuse chutes**

Working proposal

Lifts & stairwells: 2 possibilities

The new lifts and stairs can be approached in two ways - enclosed or unenclosed.

In both we will retain and work with the existing stairs.

From previous co-design sessions, we understood weatherproofing of the stairs would be preferred.

There are pros and cons to both. It would be good to understand your priorities and concerns with each.

Working proposal

Enclosed stair

- Unheated but fully sheltered
- **Less natural daylight**
- **A new look**
- More construction, higher cost

Alternative working proposal

Un-enclosed stair

- Open aired but partially sheltered
- **Natural daylight**
- **Original look of existing stairs** maintained
- Slightly less construction, slightly less cost

Lifts & entrances: landscape

As part of the new lift proposals, the ground floor and surrounding landscape will need to be remodelled to bring access direct to street level.

This will include the removal of the existing ramps.

The ramps

- Partial removal of Clarendon Walk ramp is proposed.
- Full removal of Camelford Walk ramp is proposed.

Camelford Court / Camelford Walk proposed ramp removal

Waste & Recycling: What you said...

83%

of respondents were positive about having recycling areas in the block

43%

of respondents were open to replacing the existing bin chutes with lifts

22%

of respondents wished to keep the existing bin chutes

The proposals provide new secure bin stores with recycling and general waste facilities

The proposals require the chutes to be removed to provide enough space for new lifts...

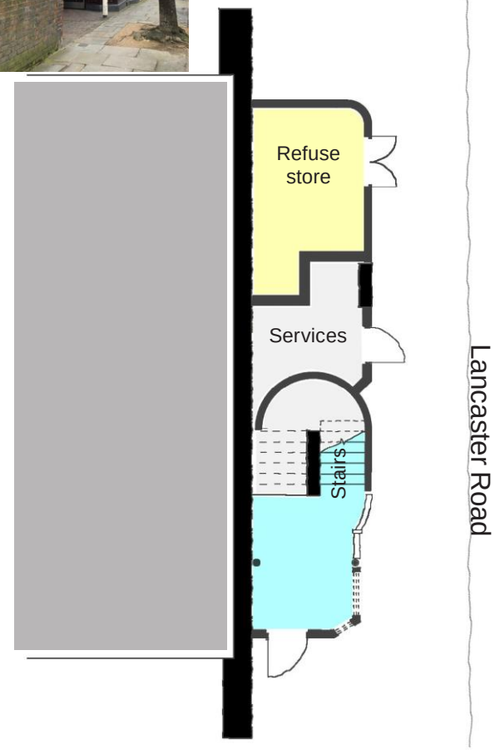
Waste & Recycling: An alternative to chutes

The refuse chutes are proposed to be removed for a number of reasons:

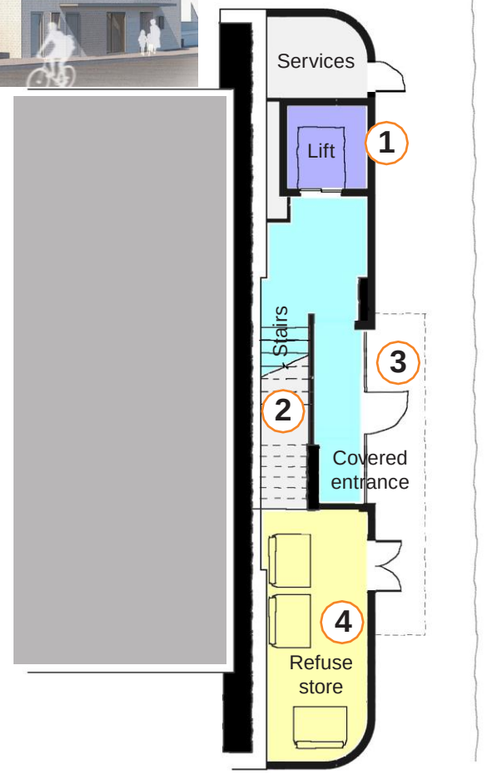
- To make space for a lift
- They are prone to overfilling
- Feedback is that they can be noisy
- They can be a potential fire risk unless upgraded

The proposal is to have new lifts and stairs:

- Lifts provide step-free access to ground level
- Alternatively, stairs would be weather- proofed
- Access from the entrance to the refuse store will be protected from the rain and be well lit and visible.



Example plan of an existing entrance arrangement



Example plan of the proposed entrance arrangement

1. New Lift Access
2. Weather proofed stairs
3. Covered access between entrance and refuse store
4. A new larger refuse store with recycling and general waste.

   It is important this is kept separate to prevent breach of security into your block and maintain fire safety to your escape route.

Waste, lifts & entrances: next steps

We are keen to be able to develop the proposals in more detail and work towards a planning submission.

Having understood the proposals better...

Are you willing to lose the refuse chutes to have new lifts?

The proposals are not yet finalised, please help us understand what your priorities are:

Do you have any concerns with the new refuse strategy?

Would you like to see the stairs weather-proofed or completely enclosed?

Maximising fire safety

- Our independent fire consultant Trigon continues to ensure all fire standards are met.
- The proposed fire safety provisions will exceed those recommended for compliance with the building regulations.
- Construction materials introduced to the building will meet high fire safety standards (Class A1 or A2 where possible)
- Specific fire risk assessments have been undertaken to advise the designs e.g. on the roof proposals

1. At least one lift will be a fire evacuation lift to each block to support vulnerable residents
2. New dry risers will be installed to all the existing stairs to support the fire-fighting team
3. All internalised communal spaces will be supported by automatic opening vents
4. Side/top panels around the existing front doors will be replaced with new fire rated wall systems.
5. Replacement of flat entrance and internal doors to FD30 in all habitable rooms
6. Further recommendations to improve fire safety within individual flats will be covered by the internal refurbishment works.

TRIGON
FIRE SAFETY ENGINEERING

Example retrofits: Ernely Close, Manchester

completed retrofit

Ernely Close, Longsight, Manchester

- Two mid-rise, multi-storey blocks
- Social housing
- 32 maisonettes (2-storey dwellings)

Fabric first approach with:

- External wall insulation
- Triple glazed windows
- New roof and floor insulation
- MVHR

Retrofitted to EnerPHit standards.

Priority: To address fuel poverty, improve thermal comfort and well-being for residents.

2-storey flats with piers and set- backs

New triple glazed balconies, new external wall insulation, Rockpanel and Gebrick cladding.

Eastland Homes

Home survey requests

We are currently looking for more volunteers to have surveys carried out in their homes. Surveys are a very important tool for us to understand your homes and ensure that our design meets your needs. The surveys required include:

- **Damp**

  To locate any damp and mould issues and identify the source of the problem

- **Internal dimensions**

  To measure the inside of your home to provide accurate information for the design team

- **Condition survey**

  To assess your home and its current condition; based on occupancy, size, and physical condition.

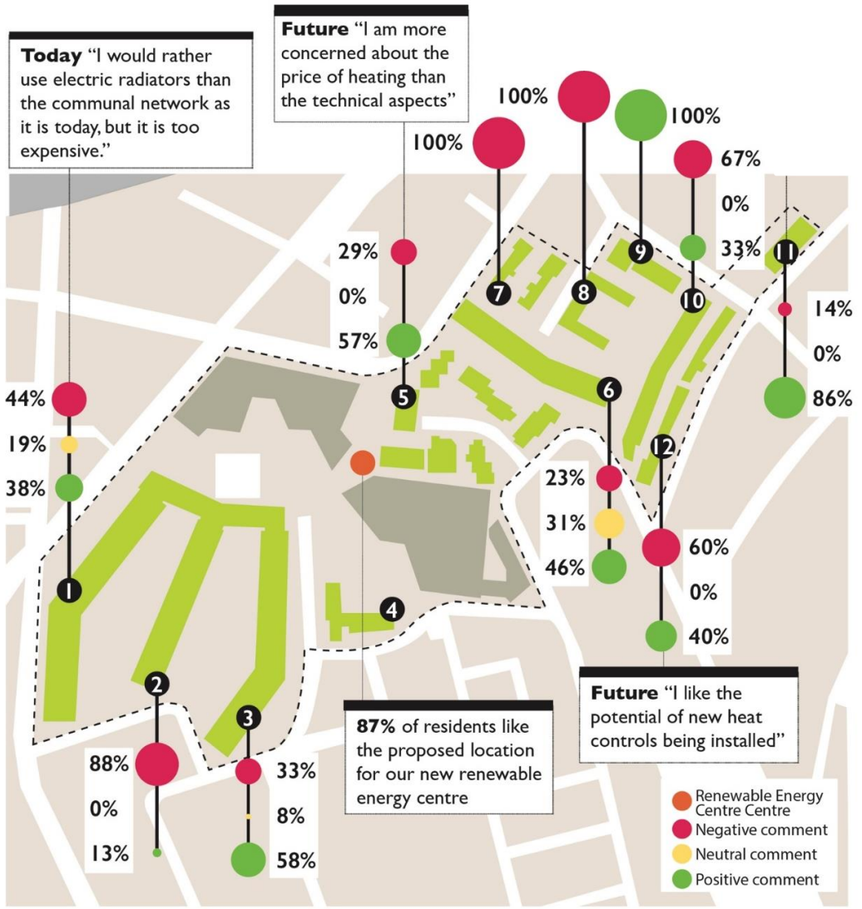
Are you able to volunteer for any surveys?

LANCASTER WEST
NEIGHBOURHOOD TEAM
W11

Notting Dale Heat Network
Lancaster West Estate
Camelford Court
Camelford Walk
Clarendon Walk
Talbot Walk

LANCASTER WEST NEIGHBOURHOOD TEAM W11

Finding an estate-wide heating and hot water solution



Benefits of an estate-wide solution

- Address all existing heating problems, replace temporary boiler and failing pipework to blocks
- Move away from gas, to become a carbon neutral estate
- Deliver safe, reliable heating suitable for energy efficient homes

The traffic light map (left) shows what residents think of their heating today. The full Resident Summary report is available online.

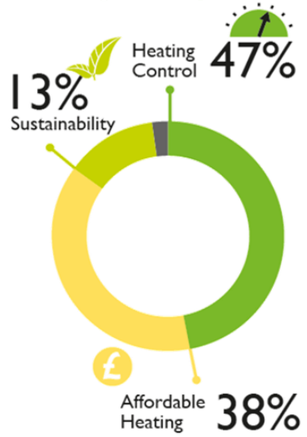
LANCASTER WEST NEIGHBOURHOOD TEAM W11

Co-designing future heating with residents

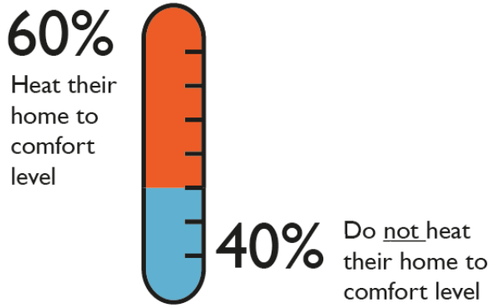
Heating survey → Refurb pop-ups → Refurb webinars → Resident focus groups → **Emerging preferences & choices**

Resident heating survey responses

Thinking about heating, what is your priority?



Do you heat your home to a comfortable level?



Responses to your initial design ideas…

Affordable heating
To ensure affordable heating, we are developing a Resident Price Promise.

Use of solar panels
Rooftop solar panels could contribute electricity to heating on the estate.

Heating controls
We are doing pilots for different types of heat controls.

Resident involvement
Future field visits and workshops are planned for the heat network. Two resident board members will also help manage the local energy centre.

LANCASTER WEST NEIGHBOURHOOD TEAM W11

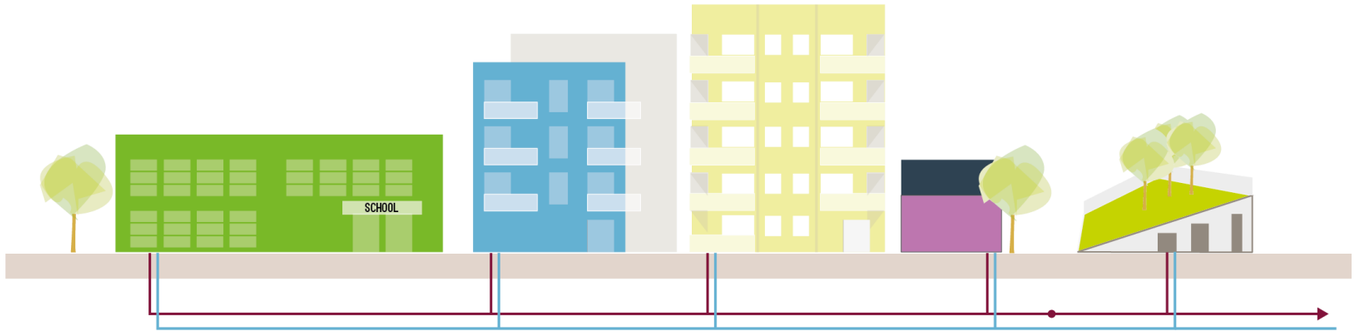
What do you think of your heating today?

Residents currently experience overheating, and lack temperature controls

	Camelford Court	Camelford Walk	Clarendon Walk	Talbot Walk
Comfort level Do you heat your home to a comfort level?	No - 50%	No – 50%	No – 35%	Yes – 100%
Warmth in Winter Is your home warm enough?	Always - 100%	Always - 100%	Never – 33% Always – 66%	'Ok' – 100%
Cool in Summer Is your home cool enough?	Never - 75%	Never - 66% Some residents experience the opposite	Never - 75%	Never - 100%
Block participation	15%	6%	27%	11%

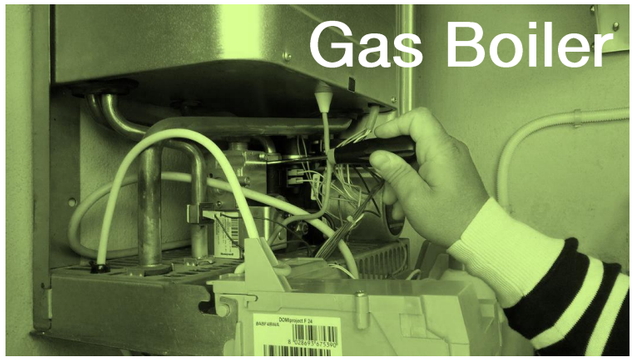
What is a renewable heat network?

Heat is produced by renewable technology at a local energy centre. Heat is then delivered through underground pipes to individual buildings and homes.



Replacing gas boilers
The UK Government has a plan to phase out individual and communal gas boilers by 2035.

A heat network can replace gas boilers and will work with ‘wet radiators’, like those in homes across the estate today.



Lancaster West Estate relies on gas heating today

Renewable heating – What options were considered?

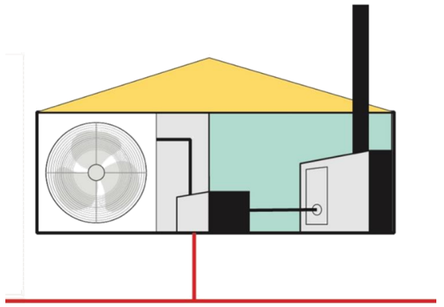
	Option 1 Electric radiators	Option 2 Individual air source heat pump	Option 3 Renewable Heat Network	
Energy efficiency	✓	✓✓	✓✓✓	How much heat do you get from the energy put in!
Durability & reliability	✓✓✓	✓✓	✓✓✓	How long the installations will last
Cost to install	£	£££	££	Cost to install heating systems in homes
Cost of heat	£££	££	£	All heating types use electricity, some use less electricity and so are cheaper than others

Option 3 - A renewable Heat Network was selected

How does it work?

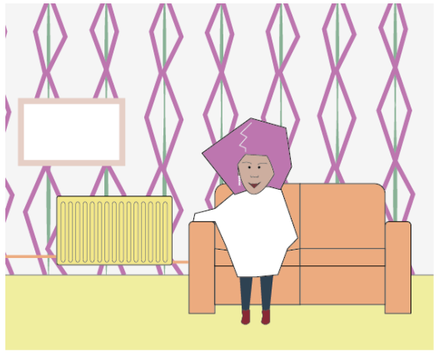
Local Energy Centre

Based at LWE, the energy centre will supply renewable heat using a large air source heat pump. The pump requires electricity to produce heat. 5-10% of the electricity could be supplied by rooftop solar panels from across the Estate.



Heat delivery

Hot water is delivered through underground pipes, to each block, and each home. A heat interface unit transfers heat to your radiators and can supply instant hot water to taps.

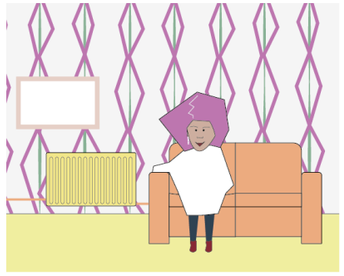


Billing

You will pay for the heat and hot water you use. The amount of heat used will be individually measured in each home.

How will the heat network be installed?

The heat network will be installed in roads, blocks, and individual homes on the estate.



Roads

- Underground pipes will be installed underneath roads.
- This may cause some disruption to cars.
- The old heating system should be unaffected

Blocks

- Pipes will be installed in communal, or external areas of your block.
- These works will take place alongside the main refurbishment works in your block.
- The old heating system should be unaffected.

Your home

- The heating system in your home will be replaced as part of the refurbishment works. This will include radiator replacement.
- There may be a short period when you have no heating or hot water.

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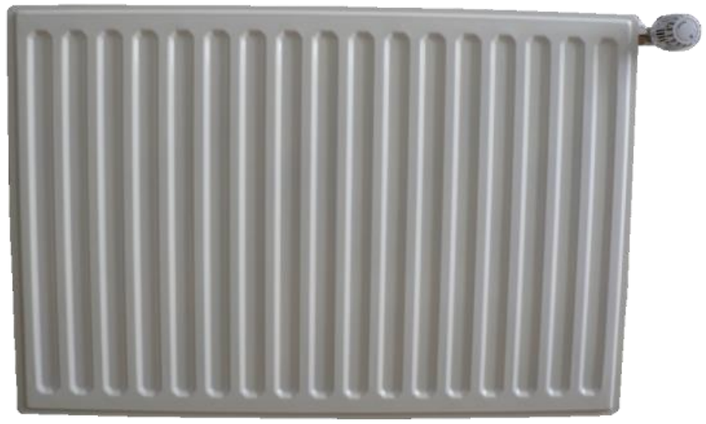
What will be installed in your home?

New plumbing + heat controls

Heat Interface Unit

Will replace your existing boiler completely.



New radiators + pipes

Existing radiators will be replaced with a similar type.

Thermostats

Controls for heating

Heat meter

Measures heat use

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How will your heating change...

Today	Future renewable Heat Network
Radiators supply space heating	**New radiators** will be installed
Hot water delivered direct to taps	Hot **water pressure will improve**
Some heat controls available, but no heat delivered in 'summer'	**Smart heat controls** will be available in every room, all year round
Pay a fixed amount to the Council for heating (based on number of bedrooms)	**Pay for heat used** in your home to the Council

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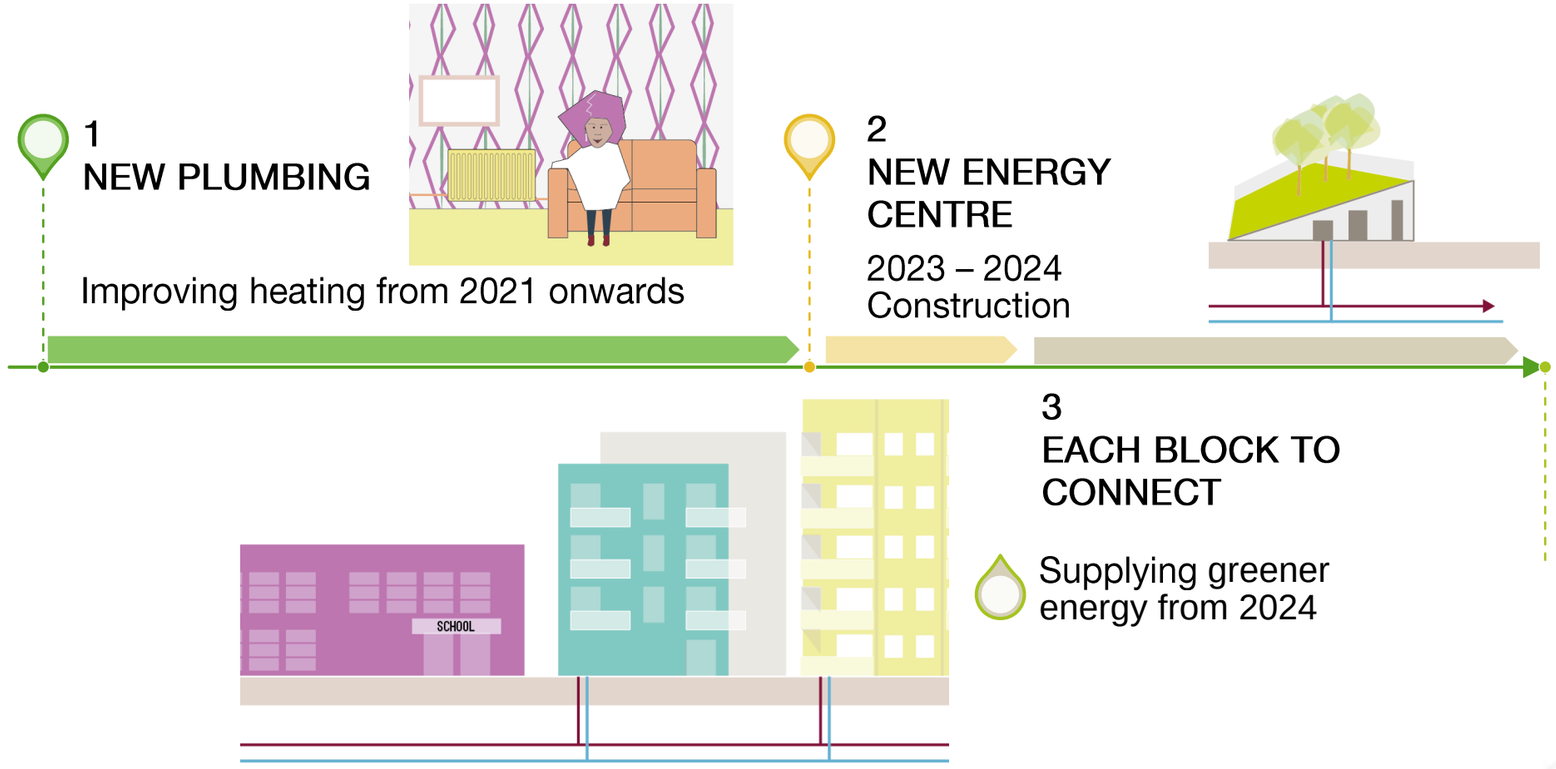
When will renewable heat be available?

The heat network will be delivered alongside the refurbishment works, to minimise disruption.



Earliest connections available from 2024

What does a heat network mean for you?

- **New heat controls in your flat**
  Individual smart heat controls will be available in each flat, throughout the year

- **End to overheating**
  Replacing the pipework in your home and communal areas will prevent heat loss and overheating

- **Improved reliability**
  The renewable heat network will have a back-up boiler and heat store. Outages will be prevented by replacing pipes between each block and the energy centre also.

- **New metering & billing**
  To meet UK legislation, heating will be pay-for-use. Further engagement on pricing is planned.

- **Electric cooker offer**
  Residents with a gas cooker, will be offered an electric alternative. This will support the ambition to make the estate carbon-neutral.

Next steps

Resident Co-Design

- Refurbishment & Heat Network Co-Design
- Local Energy Centre Co-Design
- Resident Field Trips
- Trial heat meter installation

Refurbishment Co-Design

- Spring 2022
- Phase 3 engagement – Date TBC

Heat Network Champions

- Join now to attend future field visits and workshops on the heat network
- Contact janet.hall@rbkc.gov.uk

Next steps – emerging preferences and choices

Time to choose.

Paper survey

- All residents will receive a copy of the survey in the post. You can return your completed survey to Unit 22, Baseline or place in the dedicated silver survey box.

Online survey

https://www.surveymonkey.co.uk/r/YourRefurbYourChoiceBooklet

- All residents signed up to the e-newsletter will receive a link to the online survey. You can also access the online survey by scanning the QR codes shared on social media and on the booklets, posters and letters.

SCAN ME

Text or WhatsApp us

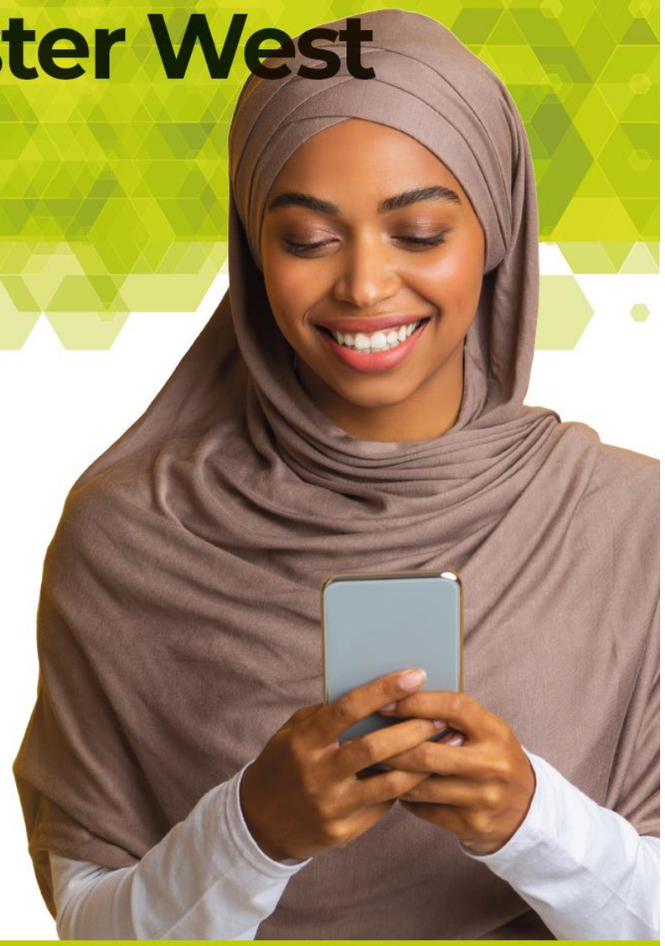
- Text or WhatsApp us on **07814 608999** and we will send you a link to the online survey and offer guidance and support where needed.

Unit 29 drop-in

- Unit 29, Baseline to talk to a member of our team about your choices. Open Monday-Friday between 10am-4pm, or come a long to one of our evening drop-ins between 4-6pm on Monday ??, Wednesday ?? March,

Don't miss out on your chance you have your say. All surveys must be completed by Friday ?? March?

Subscribe to our resident enewsletter Lancaster West News



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