Lancaster West Refurbishment

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

Camborne Mews

July 2023

LANCASTER WEST NEIGHBOURHOOD TEAM W11

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Introductions

Lancaster West Refurbishment Team

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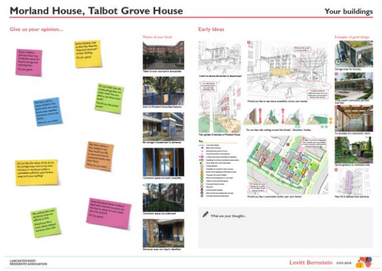
Timeline

Initial Ideas Day

WINTER 2017

Book of Ideas

SPRING 2018



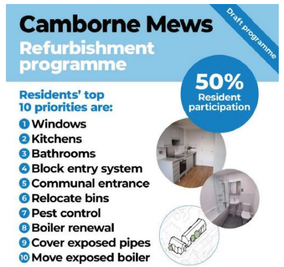
WINTER 2018

Block meetings 1:
Latymer Centre

Ideas Day 2+
Block meetings 2:
Methodist Church

WINTER 2019

Top 10 Priorities Workshop



Initial Design Ideas engagement

SUMMER 2021

SUMMER 2021

Door knocking

We are here!

Summer 2023

Emerging Preferences and Choices

WHAT'S NEXT?

Finalising Detailed Design engagement

Phase 1

Phase 2

Phase 3

Issues identified so far

What isn't working well?

You initially told us about those elements of your home that you're unhappy with and chose your top ten 10 priorities for the refurbishment of your home and block.

Here we are focussing on the external refurbishment of your block, and the external façade of the building.

These Issues identified by surveys so far:

- Thermal bridges - cold spots in the brick work due to poorly insulated walls;
- Poor roof condition;
- Poor ventilation in homes;
- Poorly insulated and draughty windows.

Residents' Top 10 priorities for Camborne Mews

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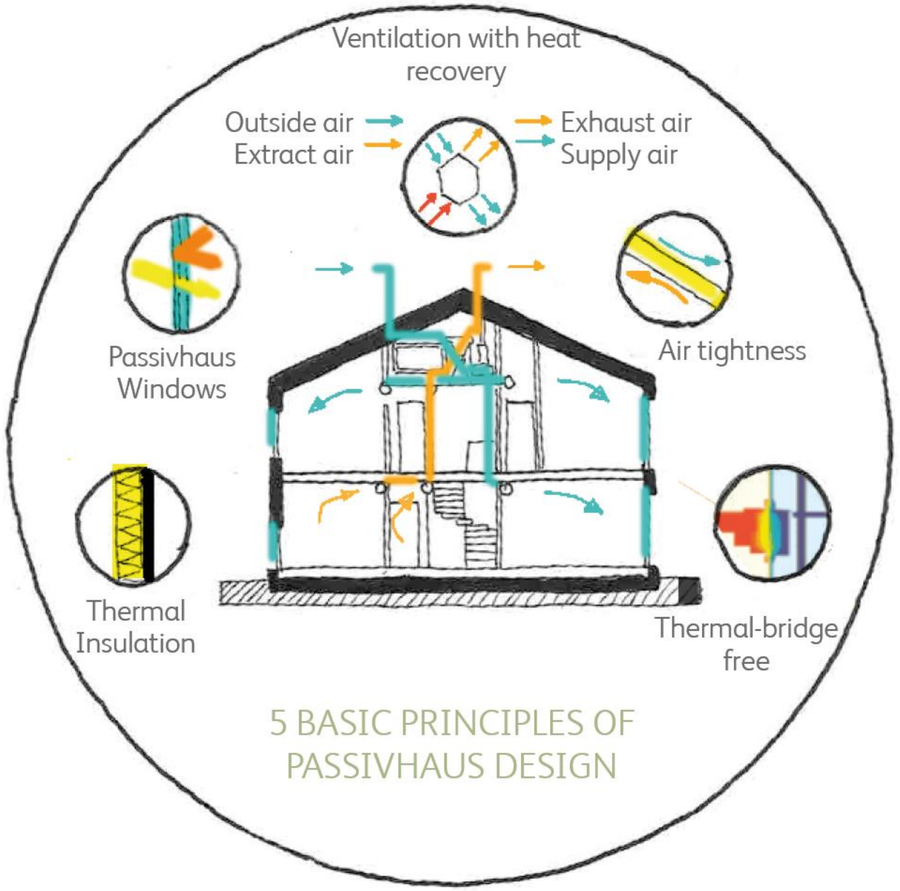
Refurbishment overview

Sustainable refurbishment
An innovative approach to refurbishing homes which will reduce energy requirements creating a healthier living environment. Generally, it can be delivered whilst residents remain in their homes.

Five aims of this refurbishment

1. High quality thermal insulation
2. Robust windows
3. Ventilation with heat recovery
4. Airtightness
5. Energy saving



Refurbishment overview

Components being refurbished

1. Walls, roof,
2. Windows
3. Ventilation system

PV panels can be added to roof.

Insulation to be added to outside of roof and new waterproofing.

Insulation to be added to outside of wall with a brick slip or render finish to make flats thermally efficient and reduce energy demand and cost.

High performance triple glazed windows to improve thermal efficiency.

Mechanical Ventilation with Heat Recovery to ensure homes are well ventilated.

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Phase 1 recap – Overview of the 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 Instagram and YouTube

Feedback and FAQs, drop-ins and phone calls

We are here

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 – door entry
- Outstanding & final decisions

Over 50% engagement for each lot

Phase 1 recap – Existing buildings

Double glazed sash windows that do not perform well

Poorly insulated cavity walls

Poorly Insulated roof

Phase 1 recap – Surveys done to date

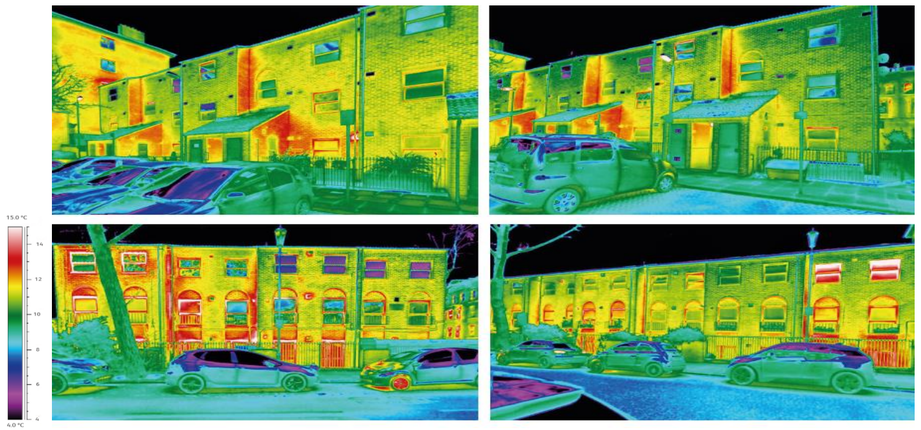
Measured Surveys

Measured surveys of the external facades and communal areas were done in 2021. We used this information to help us come up with the designs and proposals for the blocks.

3D Measure Survey of Camborne Mews

External Thermographic Images

A Thermal image report was carried out on Camborne Mews in March 2021. The images illustrate that there are several areas of heat loss evident across the facade of both buildings. The latest thermographic report states that, generally, the thermal performance of the blocks is quite poor.



Thermal Imagery of Camborne Mews showing heat loss through facade (red/orange area)

Thermal and Humidity Surveys

We undertook temperature and humidity monitoring in some of the occupied flats, This helps us to understand how comfortable your flats are to live in.

Thermal and humidity sensors

Phase 1 recap – Initial design ideas

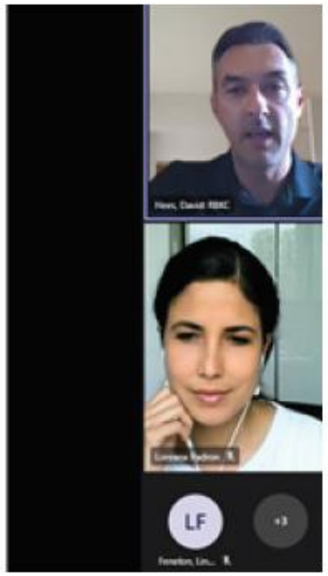
In February 2021 we showed key ideas and concepts presented to residents at the Initial Design Ideas Phase 1 webinar.

A survey was sent out on the initial ideas and proposals for your block, which **48%** of residents completed.

The Initial design ideas pop-up event took place in August followed by door knocking.

Phase 1 key proposals:

- Insulation strategy options
- Window options
- Improved ventilation and upgrades to heating
- Solar photovoltaic panels
- Communal areas upgrade
- Refuse storage improvements



Phase 1 recap – Windows

Following the residents' feedback on the measures proposed during the Initial Design Ideas phase, the designs have been further developed throughout the Emerging Preferences and Choices phase.

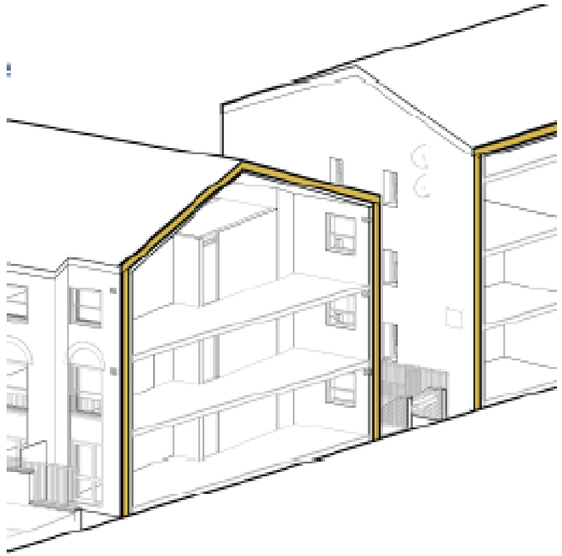
New triple-glazed windows

100% of residents who provided feedback felt mainly positive about the prospect of triple glazed windows.

100% of residents said yes to triple glazed windows

Phase 1 recap – Feedback

Following the residents' feedback on the measures proposed during the Initial Design Ideas phase, the designs have been further developed throughout the Emerging Preferences and Choices phase.



81% of residents were mainly positive about external wall insulation

Wall and Roof Insulation

External Insulation was overall more positively received than internal insulation, with 81% of respondents largely positive

Phase 1 recap – Feedback

Following the residents' feedback on the measures proposed during the Initial Design Ideas phase, the designs have been further developed throughout the Emerging Preferences and Choices phase.

45% of residents were mainly positive about MVHR

Mechanical Ventilation Heat Recovery (MVHR)

Overall, **45% of respondents were generally positive at the prospect of a MVHR system.**

The MVHR is installed as part of the internal refurbishment works.

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Current designs and proposals – Phase 2

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All window options considered

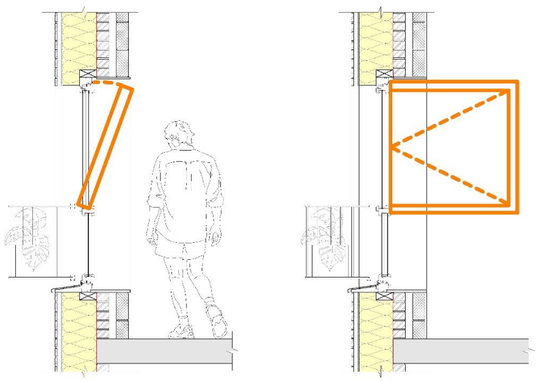
Opening Type	Manufacturer (Model)	Reference Image	Style	Frame Material			Frame Width	Opening Direction		Window Cleaning	U_w (W/m^2K)	G-value	Acoustics DB/rw	PAS24	Passivhaus Certified
				Aluminium	Timber	Composite*		In	Out						
Tilt and Turn	Green Building Store (Mock Sash Ultra)		Modern		✓		118mm/ 99mm**	✓		Inside	0.75	0.54	35	✓	✓
	Green Building Store (Mock Sash Performance)		Modern		✓		115mm/ 92mm**	✓		Inside	0.85	0.52	32	✓	✗
	Idealcombi (Futura+i)		Modern	✓			53mm	✓		Inside	0.74	0.53	41	✓	✗
Top Hung (Top Pane Only)	Idealcombi (Futura+)		Modern			✓	53mm	✓		Inside	0.74	0.53	42	✓	✗
Top Hung Reversible (Top Pane Only)	Idealcombi (Futura+)		Modern			✓	53mm	✓	✓	Inside/ Outside	0.74	0.53	42	✓	✗

* Aluminium exterior and timber interior
**When two values are displayed for frame width, the first value corresponds to the top frame and the second to the bottom frame
***Ironmongery compliant, glazing compliant if opting for laminate glass to the outer pane
****This u-value is not compliant with the minimum u-values required

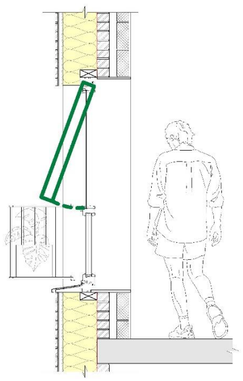
Window choices - opening mechanism

- 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
- The windows are available in different opening mechanisms, including tilt & turn, top hung and swing opening, keeping the existing modern appearance.
- Window frames are available in timber, aluminum or composite (timber+ aluminum) material.

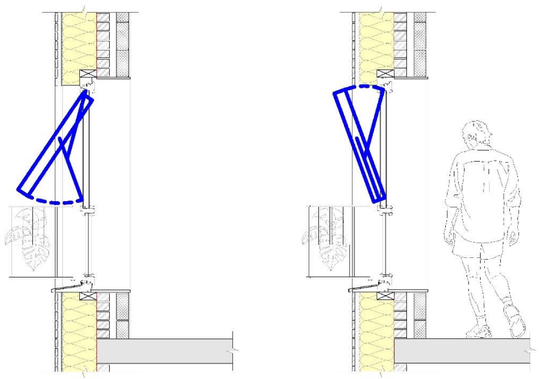
TILT AND TURN OPENING



TOP HUNG WINDOW



TOP HUNG REVERSIBLE



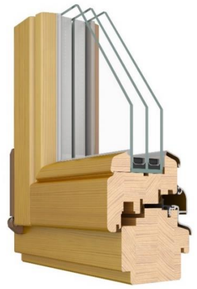
Window opening types

Window choices - frame

Timber

Pros
- Traditional appearance.
- Long lifespan, over 60yrs+
- Low thermal conductivity, a good insulating material.
- Eco-friendly when using FSC certified timber.

Cons
- Requires regular maintenance regime of cleaning and redecoration to prevent rot, mould, fungal attack etc.
- More susceptible to weather and climate
- Can shrink, swell, twist, crack over time - can be avoided by use of properly seasoned and/or engineered timber

Inside  Outside

Aluminium

Pros
- Extremely durable, light material and strong.
- Slimline frame.
- Low maintenance, resistant to corrosion and decay.
- Provides a modern aesthetic, available in a wide range of colours, sizes and styles.

Cons
- Relatively poor thermal insulator (does not hold heat well) - improved by incorporating thermal break material, weatherstripping
- More prone to surface condensation
- Can feel cold to touch

Outside  Inside

Composite (timber+ aluminium)

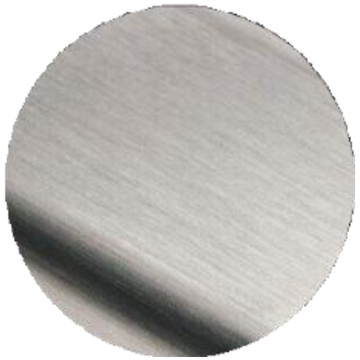
Pros
- Combination of engineered timber internally and aluminium externally produce a very strong, light, durable and weather resistant window
- Durable exterior finish available in a wide range of colours
- Low maintenance
- Internal timber warmer to touch and less prone to condensation

Cons
- Can be relatively expensive
- Can have thicker sightlines, giving smaller glass area

Outside  Inside

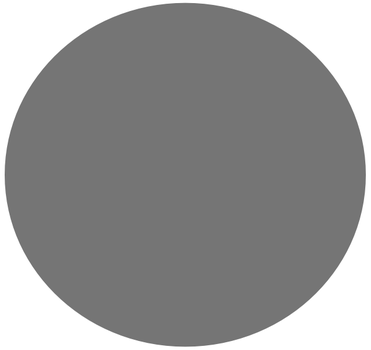
Window choices - frame colours

Internal and external choices

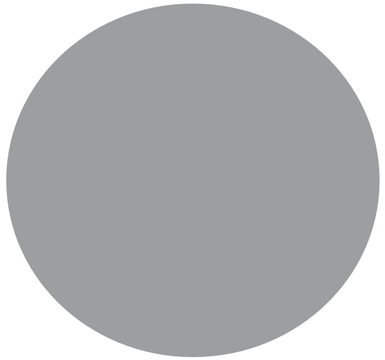


Anodised aluminium (External frame only)

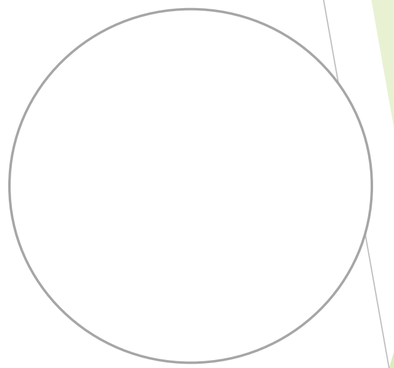
Anthracite grey (RAL 7016)



Basalt grey (RAL 7012)



Signal grey (RAL 7004)



Pure White (RAL 9010)

Residents have a choice for both internal and external window frame colours, This is explained in your Emerging preferences and choices survey. When giving us your feedback you can refer to the circles above, which show your colour options.

External Wall Insulation

Having received your feedback from Phase 1, we understand the majority of you do not wish to have internal wall insulation installed in your home. Instead, using non-combustible (A1/A2 rated) insulation, we would cover the block with a finishing layer (brick slips or render). This system provides high levels of insulation. External Wall Insulation (EWI) can be fixed from the outside, with minimal disruption and no internal area losses.

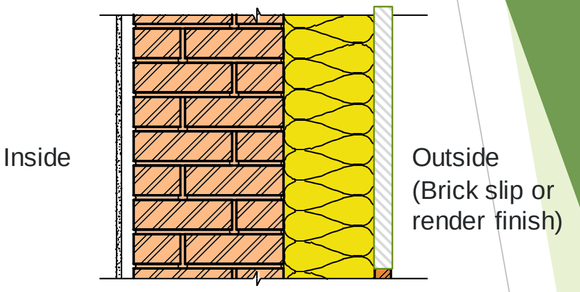
Pros

- Improved thermal comfort
- No impact on recent internal kitchen and bathrooms works
- Little internal disruption (only to finish the windows installation),
- No internal area loss
- Opportunity to co-design new facades

Cons

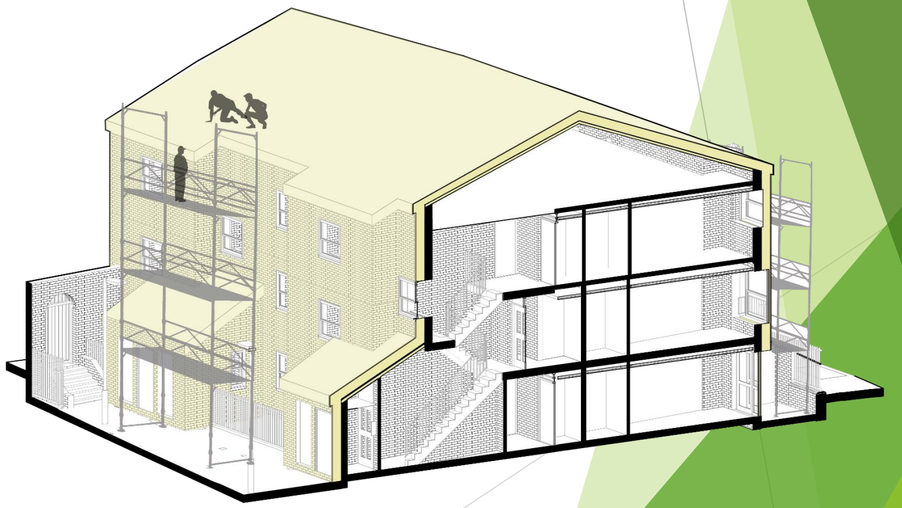
- All facade attachments (downpipes, gutters, etc) will need relocating

Adding external wall insulation to the outside of a building



Section showing External wall insulation (EWI)

Example of an external wall insulation system using brick slips



3D section view of EWI insulation

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External wall insulation (EWI) finish options: Brick slips


OPTION 1


OPTION 2A


OPTION 2B


OPTION 2C


OPTION 3

Pros

- Eco-friendly: made from minerals and naturally abundant clay, bricks are a sustainable building material with a long life 50yrs +
- Versatile, available in a vast variety of colours, textures, and finishes.
- Opportunity to enhance the traditional look or create a modern appearance
- High-impact, durable and water resistance
- Low maintenance

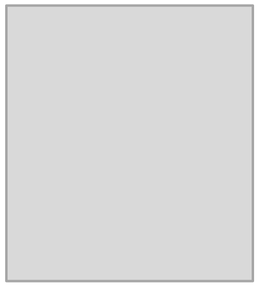
Cons

- Due to the build-up thickness in a brick slip system, there is less opportunity to provide as much insulation as a rendered system
- Over time, brick slips require re-pointing with new mortar

EWI – Finish options: Render

OPTION 4A

OPTION 4B



OPTION 4C

Pros

- Versatile, available in a wide range of colours, textures, and finishes
- Opportunity to enhance and change the appearance of the building
- When painted in a light colour, render systems improve the thermal protection of the building by better heat reflection
- Protects property against wind and rain. It is the first line of defence against water ingress and penetrating damp issues

Cons

- High maintenance, needs to be re-painted every 10-15 years.
- Appearance is more vulnerable to weathering, which over time causes fading and stains
- Planning permission required as render is a material change to the façade

EWI – Finish options

Brick matching at Camborne Mews

Contrast of brick finish in different colours

Contrast of brick and render finishes

Design option1 – Brick similar to existing look

Option 01: Use of a multi red brick finish similar to existing with zones of contrasting brick slip to highlight façade features

Design option 2 – Brick modern appearance

Option 02: Combinations of 2 brick finishes highlighting the different setbacks along the façade.

Design option 3 – Brick and render finish

Option 03: Combinations of brick and render finishes highlighting the different setbacks along the façade.

EWI – Finish options: Brick

DESIGN OPTION 1
SIMILAR TO EXISTING

This design option looks at using brick slips over the EWI system to match the existing building colour. A contrasting brick slip will be used to emphasise façade details

Pros
- Eco-Friendly, a sustainable building material with a long life 50yrs +
- Versatile
- Low maintenance
- Water resistance

Cons
- Over time, brick slips require re-pointing with new mortar.

MULTI RED

EVEN RED

WHITE

EWI – Finish options: Brick

DESIGN OPTION 2
BRICK MODERN APPEARANCE

This design option looks at using 2 new brick slips colours over the EWI system to emphasise and breakup the different setbacks along the façade.

Pros
- Eco-Friendly, a sustainable building material with a long life 50yrs +
- Versatile
- Low maintenance
- Water resistance

Cons
- Over time, brick slips require re-pointing with new mortar.

MULTI COLD | MULTI WARM | EVEN TONE

GRAY

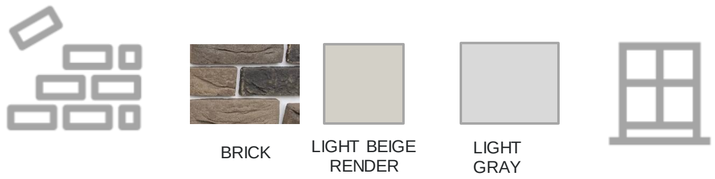
EWI – Finish options: Render

DESIGN OPTION 3
BRICK AND RENDER FINISH

Design proposal exploring contrasting brick and render options for Camborne Mews

Pros
- Versatile, available in a wide range of colours, textures, and finishes.
- Opportunity to change the appearance of the building

Cons
- High maintenance
- Vulnerable to weathering, over time causes fading and stains.



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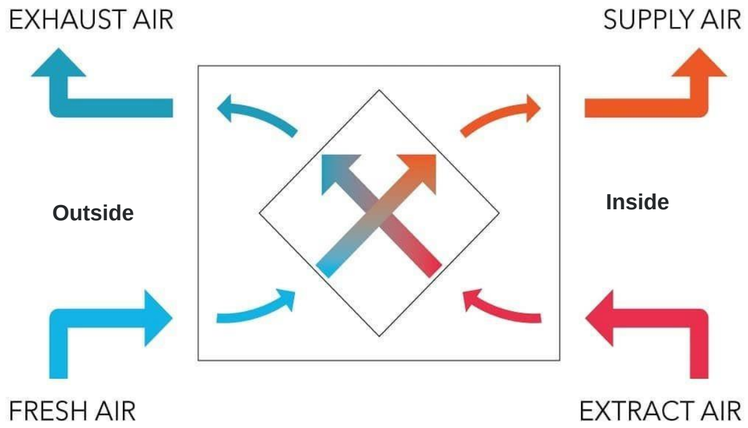
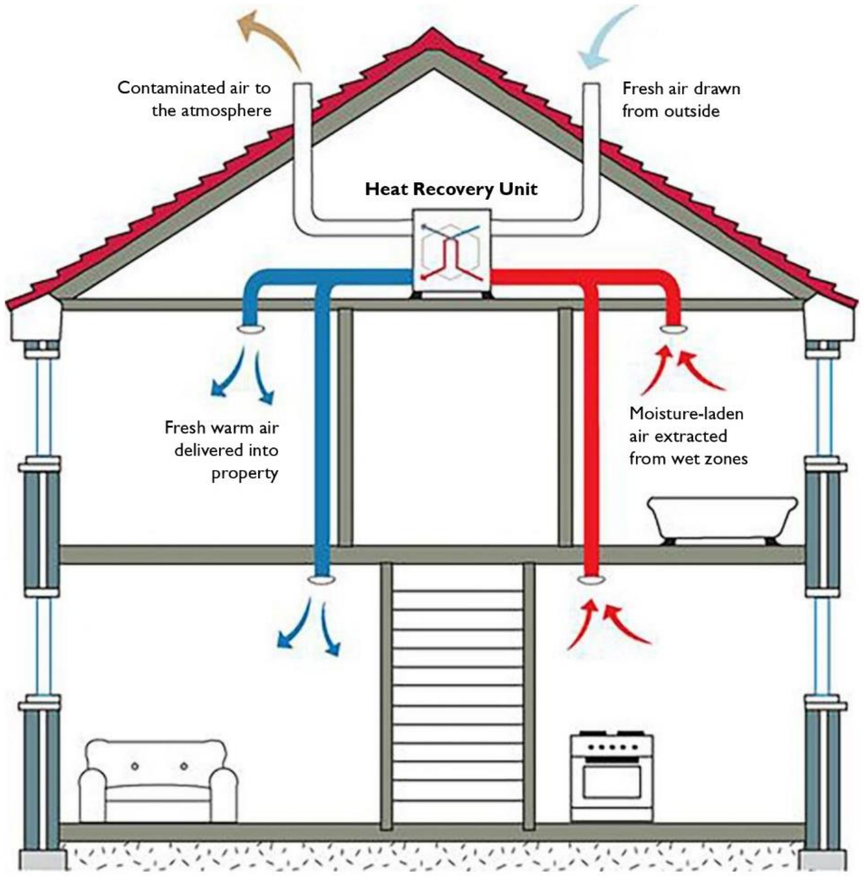
Mechanical Ventilation with Heat Recovery system

Mechanical Ventilation with Heat Recovery (MVHR) is a system that brings in fresh air and pre-warms this with the heat from outgoing air. This fresh, warmed air is then distributed to living areas, while stale air is extracted from kitchen and bathrooms.

This unit will need to be fitted into all flats to improve the ventilation and heating, including ductwork and acoustic attenuators to all bedrooms, living rooms, kitchens and bathrooms. As these units recover the heat from the internal air, they reduce the need for heating. In summer time there is an automatic by-pass mode where heat is not recovered by the unit, and you still receive fresh filtered air from the outside.



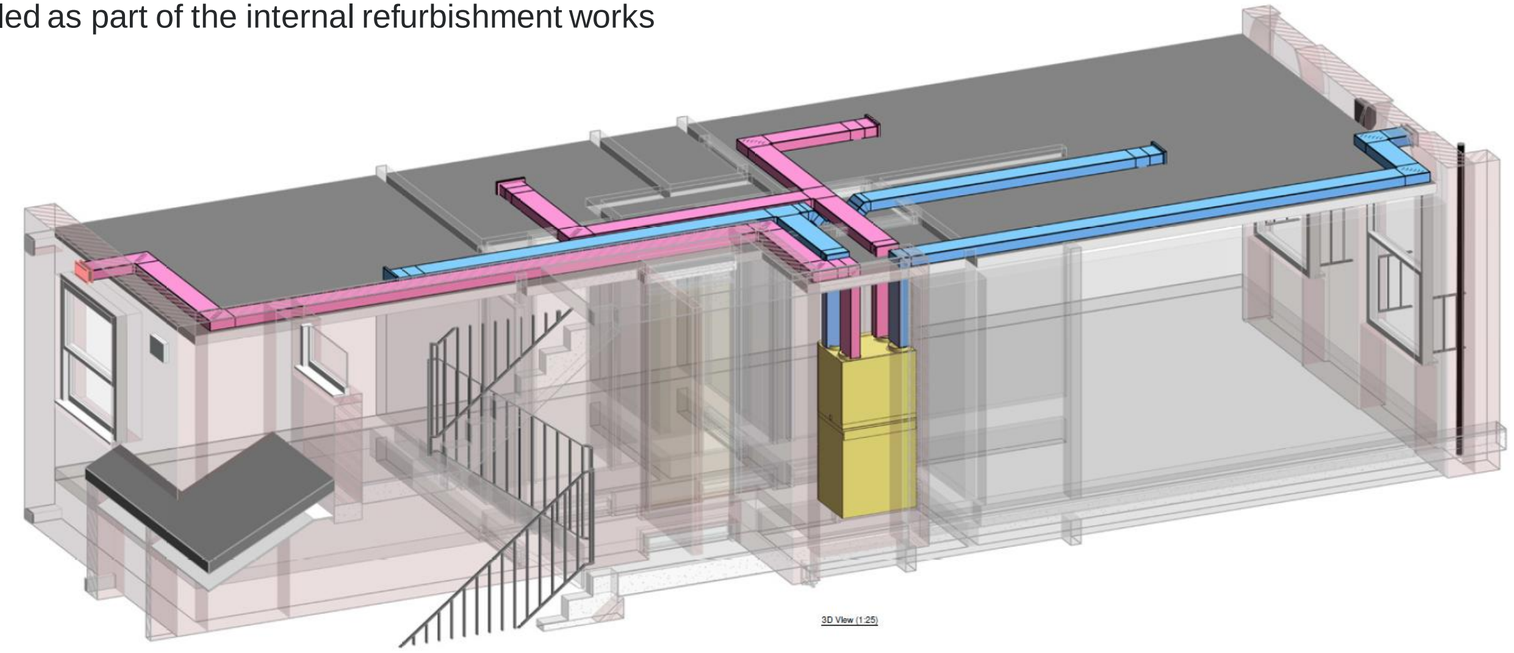


Section showing MVHR System

Mechanical Ventilation with Heat Recovery system

The design team will identify the best possible locations to install this ventilation unit inside each flat. They can be mounted at ceiling height or in a cupboard depending on the flat type and available space.

The MVHR is installed as part of the internal refurbishment works



Typical Floor Plan MVHR Layout (TACE) and 3D view

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Ventilation – MVHR

Mechanical ventilation heat recovery

Brink ventilation unit

As part of the refurbishment, we will be putting one of these MVHR systems into your home. The type of unit chosen will be based on your homes' space and specifications.

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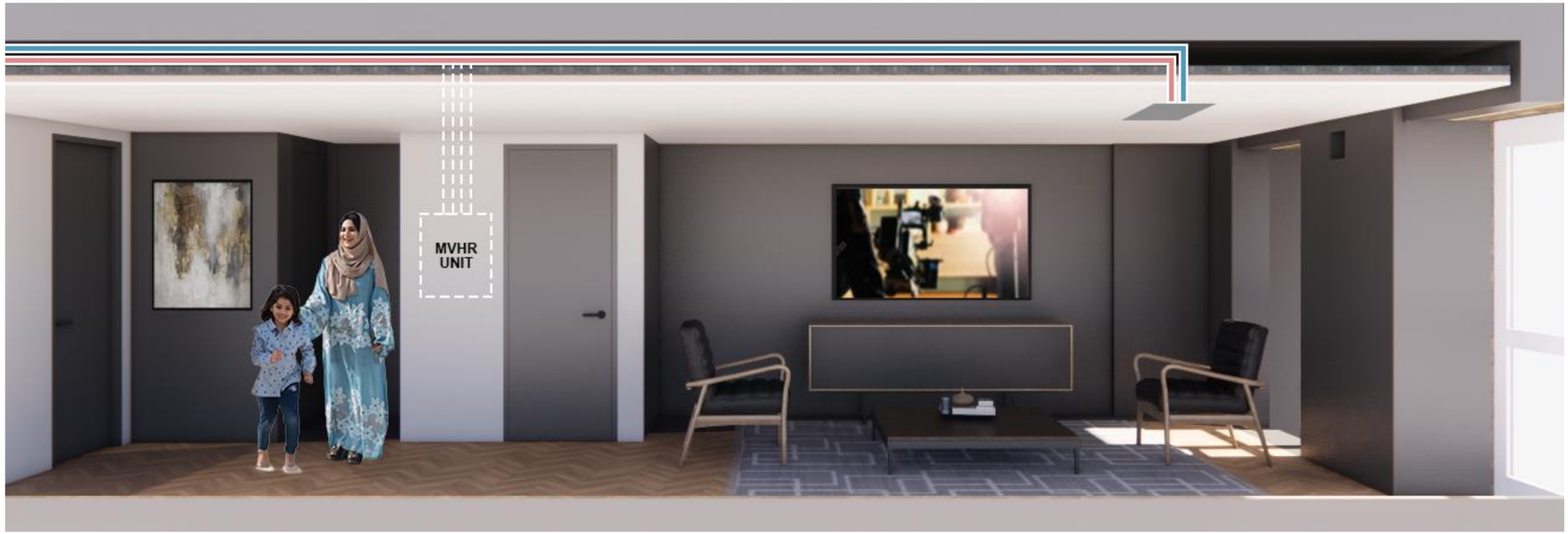
Ventilation – MVHR

Mechanical ventilation heat recovery



Visualisation showing MVHR inside storage and ductwork in ceiling void

Unit mounted in storage space

New roof insulation

Insulation to be installed on roof to address the following:

- Poor waterproofing of the existing roof
- Draughty dormers
- High levels of heat loss
- Coldness during the winter

Insulation between and above existing ceiling joints

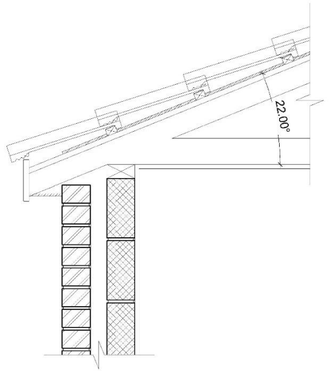
Pros

- Reduce heat loss through roof

Cons

- Planning permission required
- Roof structure investigation required
- Hard to ensure airtightness continuity with walls which may result in thermal bridges and condensation risk

Existent roof space



Existent roof

Insulation over existing roof

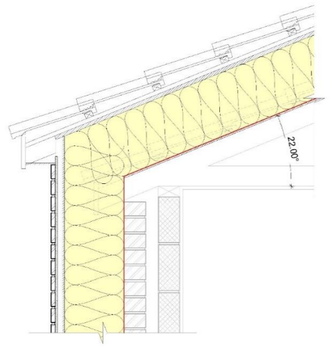
Pros

- Improved thermal comfort, reduce heat loss through roof
- No internal disruption

Cons

- Planning permission required
- Roof structure investigation required
- All façade attachments (downpipes, gutters, etc) will need relocating

Insulation added over rafters

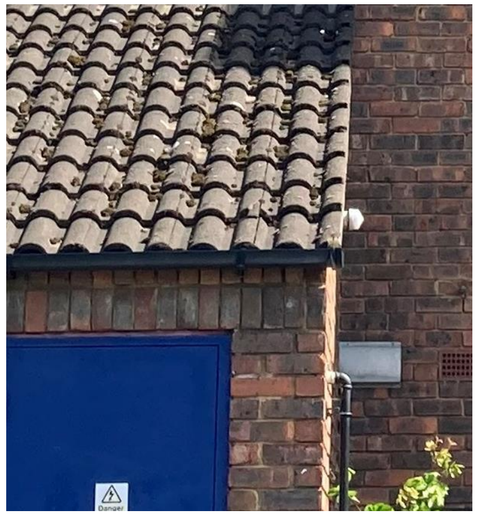


Insulation added over existing roof structure as part of the EWI system

Roof upgrade: Roof finishes

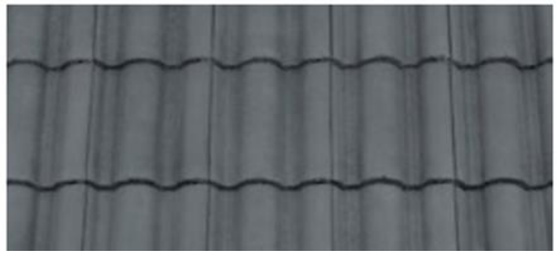
Roof tile options can match the existing roof colours or bring a new tone to the design.

Existing roof tiles



Proposed new roof tiles

Brown slate tiles



Grey slate tiles

Red and brown mix slate tiles

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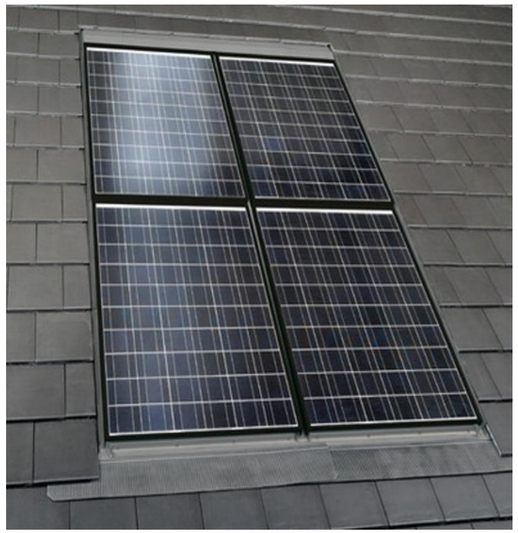
Roof upgrade Solar PV Panels

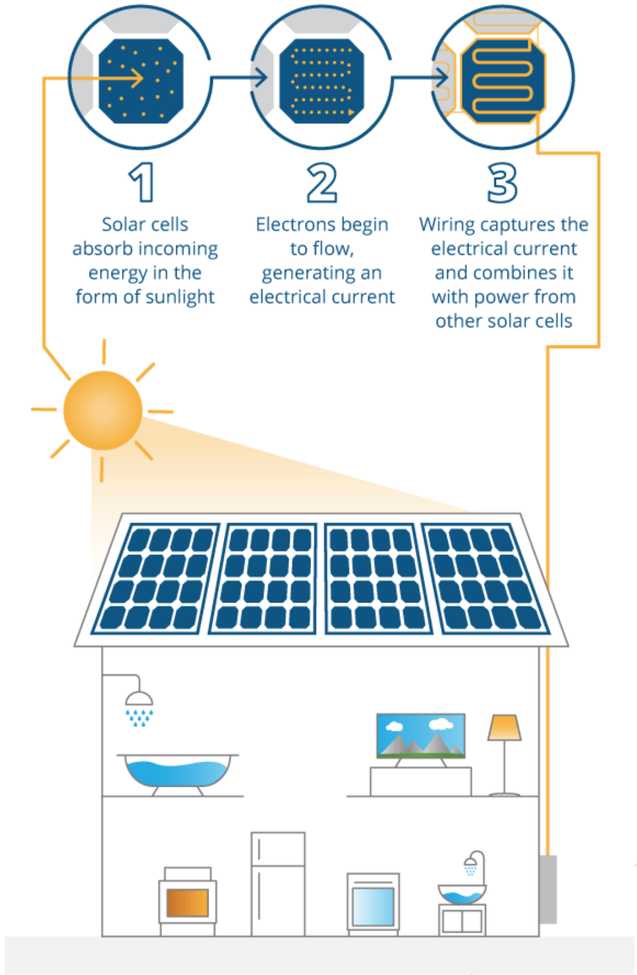
Photovoltaic Panels, also known as solar panels or PV panels, collect energy from the sun and turn it into electrical energy that will feed into the renewable heat network

The solar panels supply the building with clean electricity, reducing the amount of electricity needed from the grid and reducing energy your overall. This option will be further explored and co-designed with residents.



Example PV panels

50 Verity Close



Photovoltaic panels diagram

July 2023

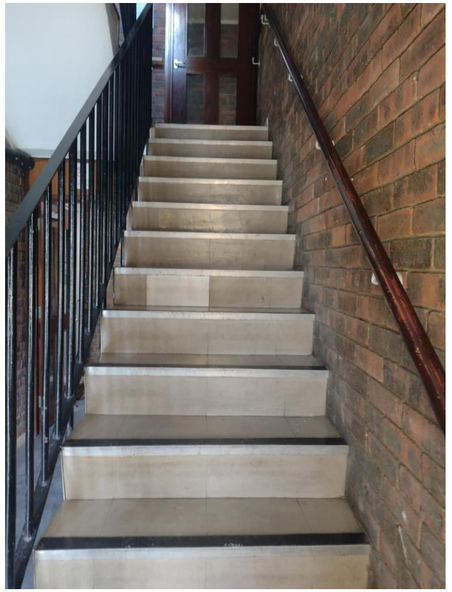
LANCASTER WEST NEIGHBOURHOOD TEAM W11

Communal areas

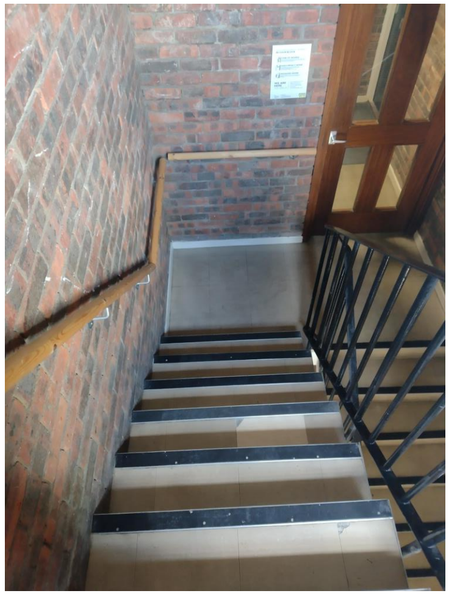
Existing communal areas below will be upgraded with repair and repainting as needed:

- Stairs and railings
- Floor finish
- Ceilings

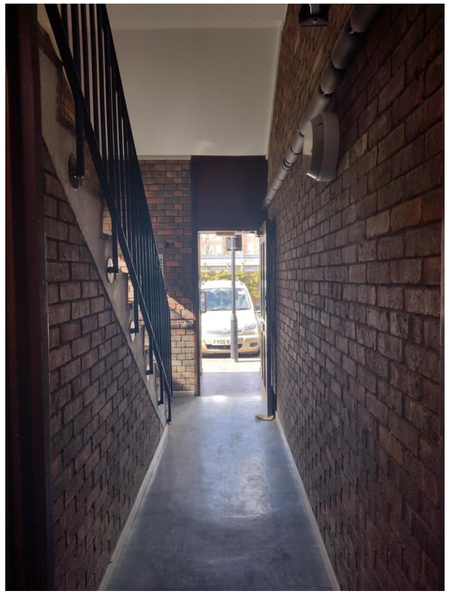
Railings



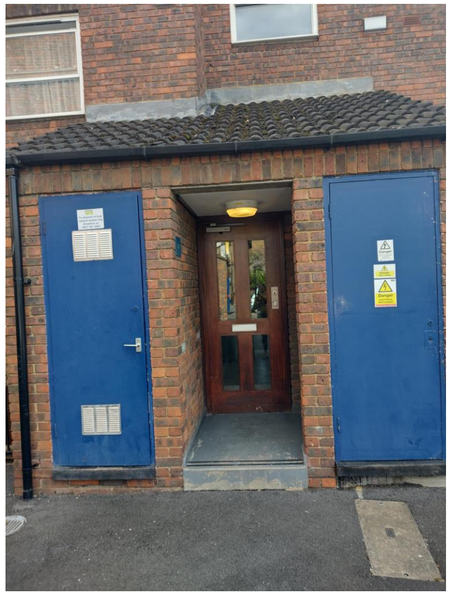
Stairwell



Communal corridor



Block entrance



Waste management

We are looking to enhance our approach to food waste and recycling on the estate. The refurbishment presents an opportunity for us to improve waste management, increase recycling and perhaps introduce food waste composting for your block.

On the next page you will find some new ideas and proposals we would like you to consider.

Improve waste management

Increase recycling

Introduce food composting

LANCASTER WEST NEIGHBOURHOOD TEAM W11

Waste management proposals for your block

New **integrated bin stores** adjacent to upgraded and improved entrances

Pros
- Improves fire safety in buildings
- Improves separation of refuse types
- Removes maintenance costs
- Larger bin liners accommodated
- Vermin and Fly-tipping issues are resolved

Cons
- Increased travel distances

New custom-built, dedicated **courtyard bin enclosures**

Pros
- Improves fire safety in buildings
- Improves separation of refuse types
- Larger bin liners accommodated

Cons
- Increased travel distances
- Street bins can encourage fly-tipping

Maximising fire safety

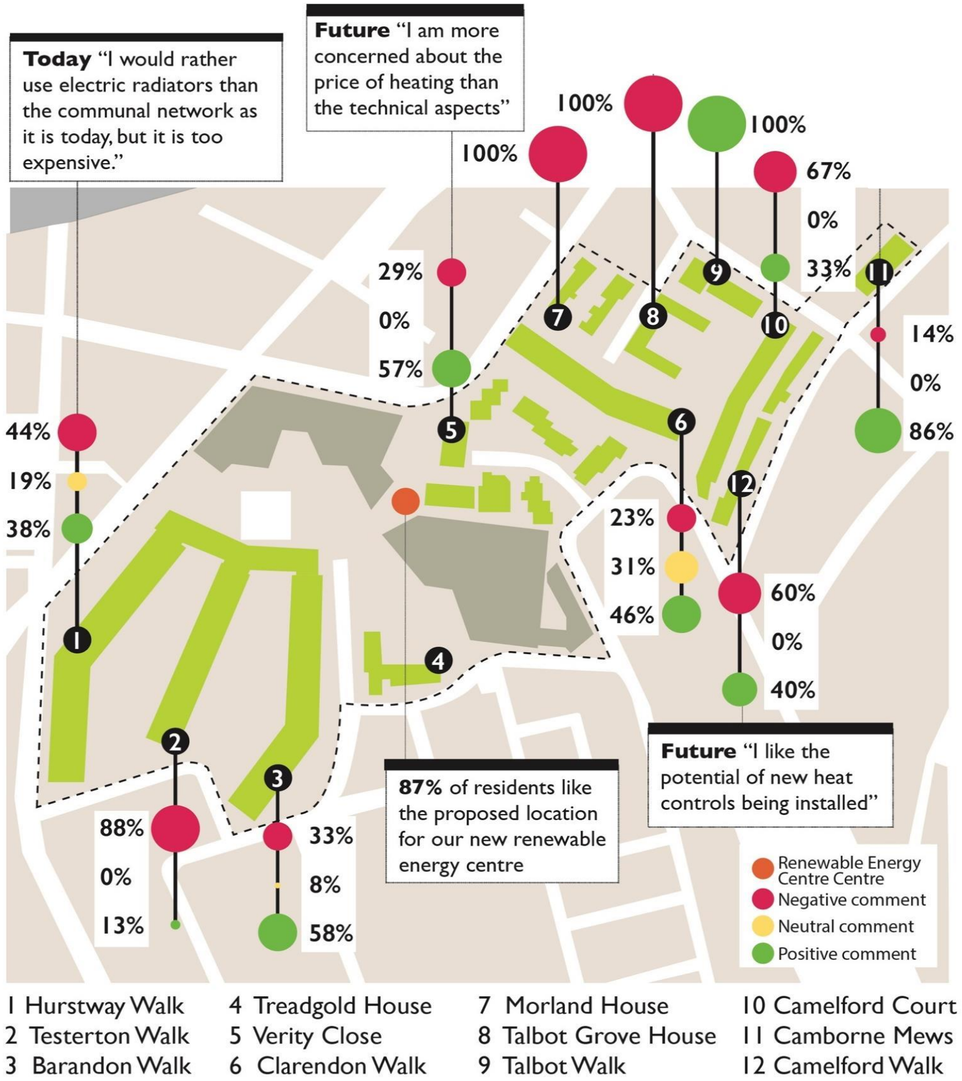
- Our fire safety consultant continues to ensure all fire standards are met.
- The proposed fire safety provisions will exceed those recommended for compliance with the Building Regulations
- Construction materials introduced to the building will meet high fire safety standards (Class A2 or better)
- Specific Fire Risk Assessments have been undertaken to advise the designs e.g. on the roof proposals
- Automatic fire detection will be provided in the common areas to activate ventilation and inform building management
- Side/top panels around the existing front doors will be replaced with new fire rated wall systems
- Replacement of flat entrance and internal doors to FD30 in all habitable rooms, which has been completed by RBKC
- Further recommendations to improve fire safety within individual flats will be covered by the internal refurbishment works

Heating and hot water

LANCASTER WEST NEIGHBOURHOOD TEAM W11

Finding an estate-wide heating and hot water solution

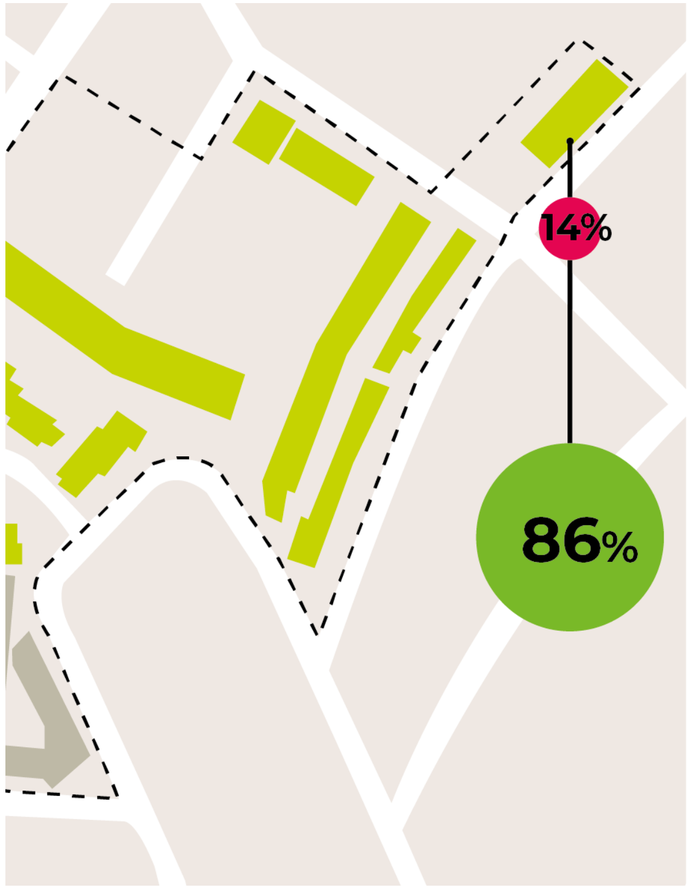
- To address existing heating problems on the communal heat networks, and replace the temporary boiler
- To say ‘goodbye to gas’ and become a carbon neutral Estate.
- We need to replace our gas boilers, because the UK Government has a plan to phase them out by 2035.
- Deliver safe, reliable heating suitable 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

What do you think of your heating today?



22% of Camborne Mews residents participated

Camborne Mews comments on heating:

100% heat their home to comfort level, 40% higher than LWE average

86% like their heating today
"It works well, is easy to use and is reliable."

75% find their home warm enough in winter

75% find their home cool enough in summer

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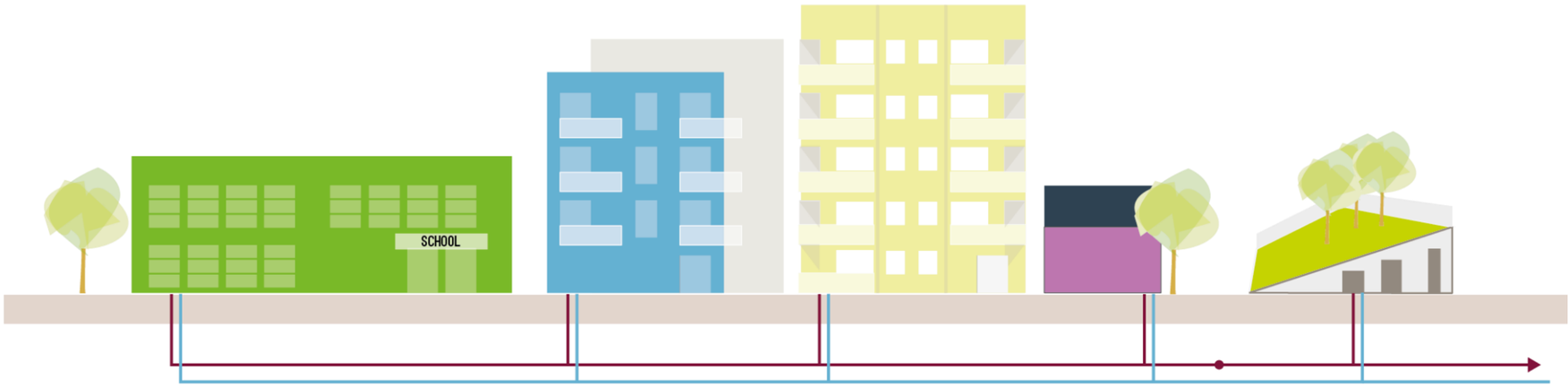
What is a renewable heat network?

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



A heat network can replace all gas boilers. It will work with ‘wet radiators’, like those in homes across Lancaster West today.

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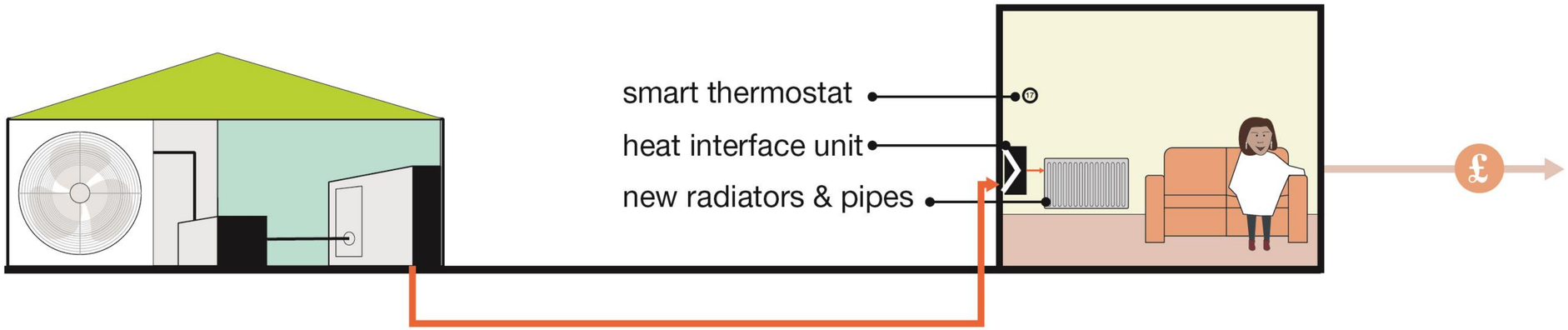
How does it work?



Local Energy Centre

1

Uses green electricity and air source heat pump to supply heat.

Heat Delivery

2

Hot water is delivered through underground pipes, to each block.

3

Heat and hot water used in your home is measured.

Billing

4

You will receive a bill from the Council, for the heat and hot water you use.

LANCASTER WEST NEIGHBOURHOOD TEAM W11

What will be installed

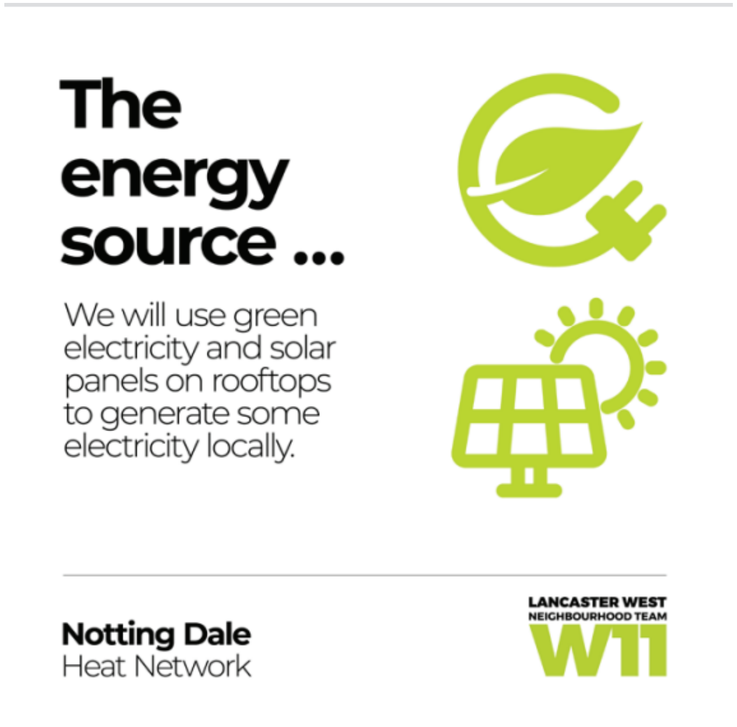
Heat meter
Measures the heat and hot water use in your home.

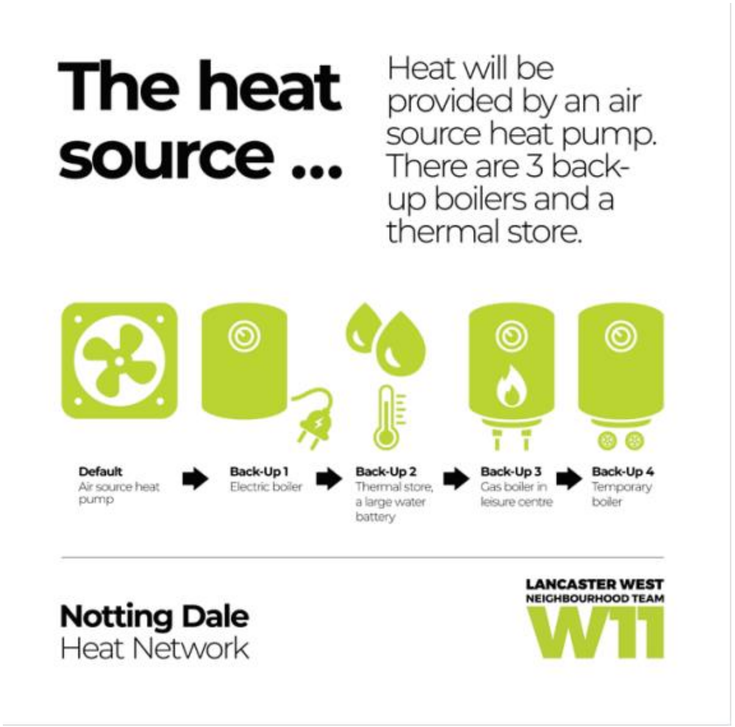
Heat Interface Unit
Will replace your existing boiler completely.

New Radiators + Pipes
Existing radiators will be replaced with a similar type.

Thermostat
Controls for heating.

How resilient is a heat network?





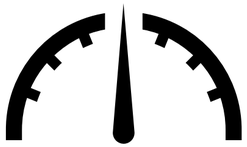
The heat network has been designed to have lots of back-up heat supply (see diagram). Air source heat pumps are designed to operate efficiently even when temperatures outside reach –4 degrees Celsius.

How will your heating change?

Current heating system	New heating system
Natural gas: Today your home is heated by burning natural gas. Gas is a fossil fuel. It releases carbon dioxide into the air, causing pollution and global warming.	**Renewable:** A communal air source heat pump will supply heat. It draws in heat from air. The heat pump is powered by green electricity.
Boiler: A gas combi-boiler provides heating and hot water in your home.	**Heat interface unit:** A heat interface unit will replace the boiler. It is a similar size and provides similar heat controls.
Thermostat: Most homes in Camborne have a thermostat to set and control temperature.	**Smart thermostat:** Can be used to set and control temperature in your home. Timings can be programmed in advance.
Radiators: Standard 'wet' radiators are installed.	**Radiators:** New 'wet' radiators will be installed.
Gas supplier: a company and contract that you chose.	**Heat supplier**: the Council will become your heat and hot water supplier

How will bills work?

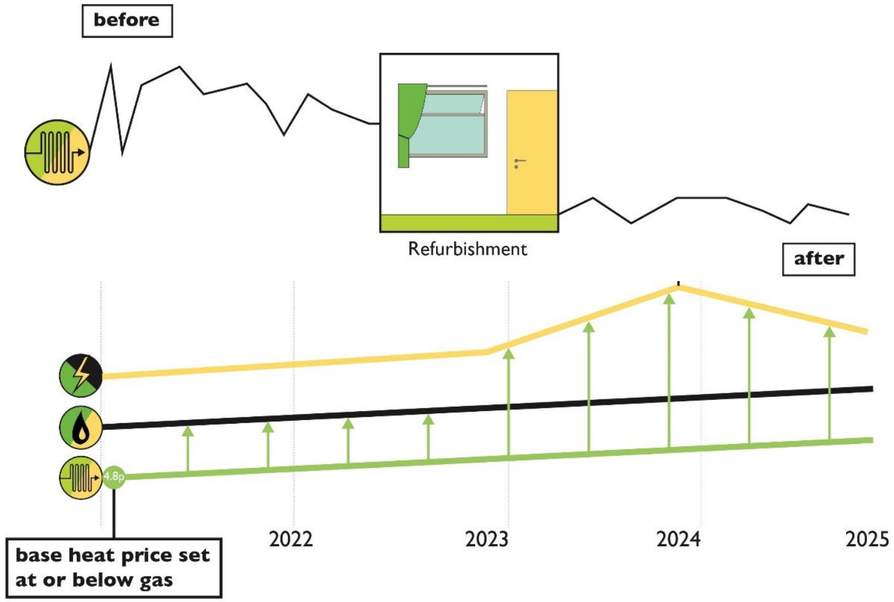
The renewable heating bill will look similar to an electricity or gas bill. Residents will pay for the heat used in their own home only. Leaseholders and tenants will be billed as follows:

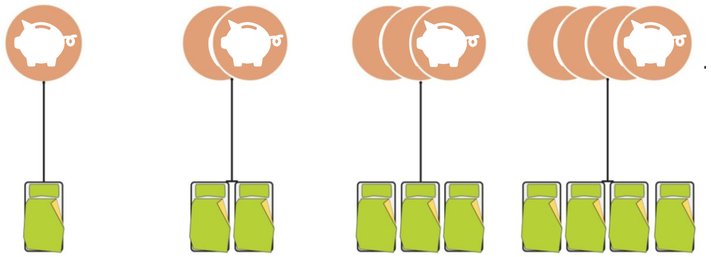


	Standing Charge	Usage Charge
What it is	A separate daily charge to cover costs of supplying heat to you	A charge for the amount of heat used in your home. (Pence per kWh)
Who pays it	Leaseholders (Tenants, this is included within existing rent charges)	All residents

Resident price promise

The Resident Price Promise has been developed with residents to support residents when changing over to renewable heating. **The renewable heat price (perkWh) will be no more than gas, until 2030.**





Price Promise 1
The Refurbishment Programme helps Lancaster West residents reduce their heat usage by 25%.

Price Promise 2
Up to 2030 residents will pay no more than the price of gas, per unit of energy use.

Price Promise 3
The standing charge is based on property size. Leaseholders pay this only.

LANCASTER WEST NEIGHBOURHOOD TEAM W11

Emerging preferences and choices

When your new heating system is installed you will receive new heat control options via a control panel, mobile phone and radiators.

Question 1

How would you prefer to **control** your heating? By using a control panel, mobile phone, or each radiator?

When the heating system is up and running in your home, you will no longer pay for heating via your rent bill or leasehold service charge, or gas supplier. We will set up a new payment system with you. What would you prefer?

£

Question 2

How would you prefer to **pay** for your heating from your phone, by top-up meter, or standing order, or other?

50

LANCASTER WEST NEIGHBOURHOOD TEAM W11

When will renewable heat be available?

The heat network will be delivered alongside the refurbishment works, to minimise disruption. We have already started to remove gas cookers across the Estate.

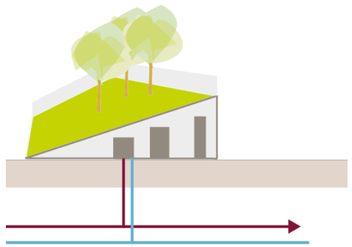
1
Goodbye gas launch

Removing gas appliances, installing smart thermostats, join our energy monitoring group

Goodbye gas

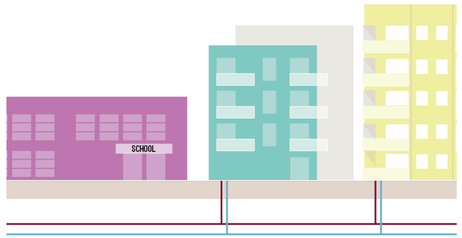
2
New energy centre

2023 – 2024 construction



3
Each block connects

2025-2026 Connect each block



LANCASTER WEST
NEIGHBOURHOOD TEAM
W11

Goodbye gas, today's resident offer

Get a smart thermostat **installed today…**

Replace your gas cooker **with an electric cooker for free**

Speak to our resident energy advisor

Join our energy monitoring **group**
Gain insight into how much energy you use, and help us design our energy and heating support services.

Contact the Lancaster West office now to access these services: lancasterwestoffice@rbkc.gov.uk or 0800 389 2005

Complete survey – time to choose!

Paper survey

- All residents will receive a copy of the refurbishment survey in the post. You can return your completed survey to Baseline reception or post in the dedicated silver survey box, which is beside the noticeboard of your block.

Online survey

- 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.

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.

Don’t miss out on your chance you have your say. The deadline to return completed surveys is midnight Sunday 30 July.

Resident enewsletter

Please specify which block you live in when subscribing, to allow us to send you block specific news

@Lancasterwestneighbourhoodteam