

THE STORY OF

RETROFIT STREET

STARRING:



JAS



SAMAH



MELISSA



LEE





This zine is for you to understand what we've been doing on Andover Road for the past two years, meet the residents involved in the project and learn how we're working together to co-design solutions to make their homes warmer, greener and healthier places to live. This is known as 'retrofit'. It's all about making changes to improve our homes, streets and neighbourhoods so they are better for people and planet.

This project is a collaboration between 6 households on Andover Road, WeCanMake, Knowle West Media Centre, and the University of Bath.



WeCanMake is a neighbourhood test-space and community land trust in Bristol that imagines new ways to make homes that build social infrastructure, community wealth, and a just transition.



Knowle West Media Centre is a hub for social action, creativity and everyday innovation. We bring people together to make positive change feel possible in their own lives and communities. Shaping fairer futures with arts, tech and care.

If you have any queries, you can contact WeCanMake at +44 7516 034068



MEET JAS:
 Andover Road resident, 3rd-generation
 Knowle-Wester, Community Champion

How did I get involved with retrofit? I think I was just over at Springfield...



Hi Jas!

We're working on a new project that could be piloted on your street.

MEET MELISSA:
 Director of
 WeCanMake



We're talking to lots of local residents to see if they're interested in getting involved with their neighbours on the street for a project about 'retrofit'.



'Retrofit?' I don't know what that is.

What would it mean to be part of the project?



Why don't you come to Retrofit Reimagined to learn more?



RETROFIT REIMAGINED FESTIVAL at the Factory and KWMC, Oct 2023

Retrofit Street and WeCanMake are part of Retrofit Reimagined, a wider network of places trying to do retrofit in different ways. Retrofit Reimagined Festival brought together people from different communities to learn, share and build a network.





It was amazing – so much happening, so many workshops and conversations.



Yet I still didn't really get the language.



I told the network organisers:

I don't really understand it, and I don't think people in my community necessarily would.



As soon as I said it, there was no more technical language used. They were really clear in what they were saying.

How can we reimagine our relationship with land, material and people?



I was then drawn to the project because I thought 'Oh actually, you've listened. And now we can be involved.' They took away the whole 'them and us' just by using accessible language.



We're just using materials and techniques that our ancestors used to use, and building stuff in the way they used to do.



We don't need to have all this technical language to understand it.

building with clay and straw on Springfield



mixing clay plaster

I'm mixed race and always think: what would have been used in South Africa where my ancestors are from?

But it doesn't matter where you come from.

That's one thing we've all done in our ancestry – building with natural materials.

Still, it wasn't an overnight thing. The more I was being listened to, the more I was interested in working with the retrofit team.



It can sometimes be difficult for people to get involved with things happening in their community. Some may feel it's not for them. So the question is, how do we encourage people to get involved?

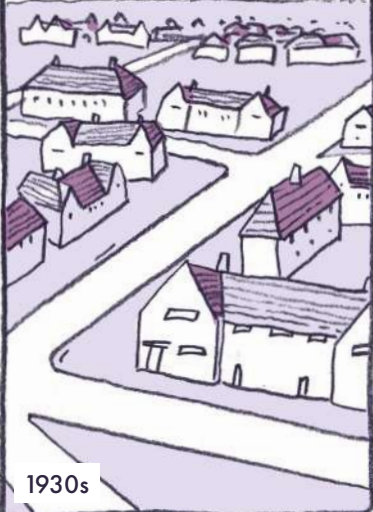


This area has a history of people and services coming into the community and dictating what should be done.



PRE-1930s

When you think about the people who came to live here initially, they were moved from slums across Bristol.



1930s

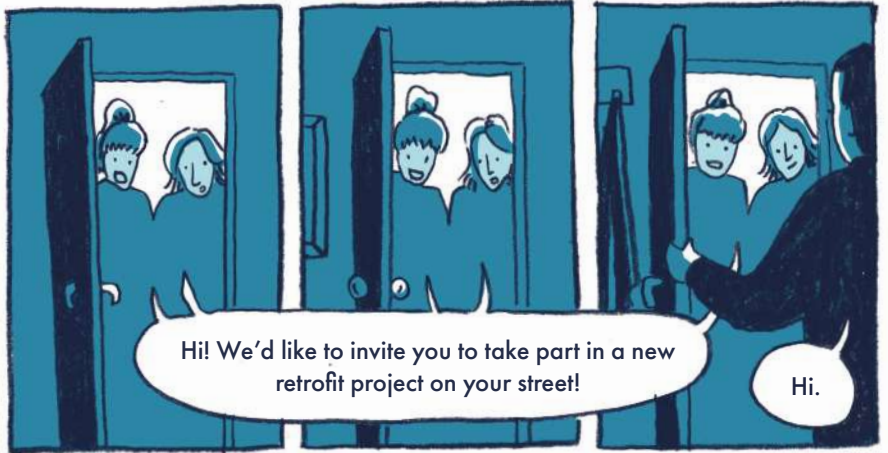
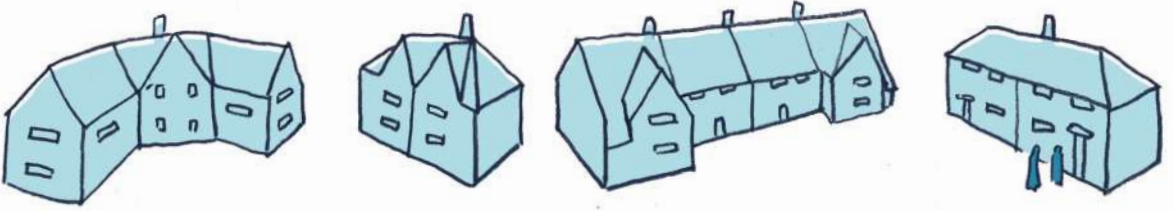
Instead, we need the community to lead the approaches to what happens here.



PRESENT DAY

The neighbourhood was built as a council estate in the 1930s after the Great War, conceived as 'Homes Fit for Heroes' and the future of how we should all live together. The homes have had nearly 100 years of neglect since, but through imagination, adaptation, repair, and improvement, places like this neighbourhood could be the future of housing again. That's what retrofit is trying to do.

There are 20 different house types across the whole estate, and Andover Road has a number of these, meaning a unique opportunity to explore how to retrofit different homes. Through doorknocking, we got a sense that there was fertile ground for the project here, with lots of residents excited to explore options and to connect with other neighbours.



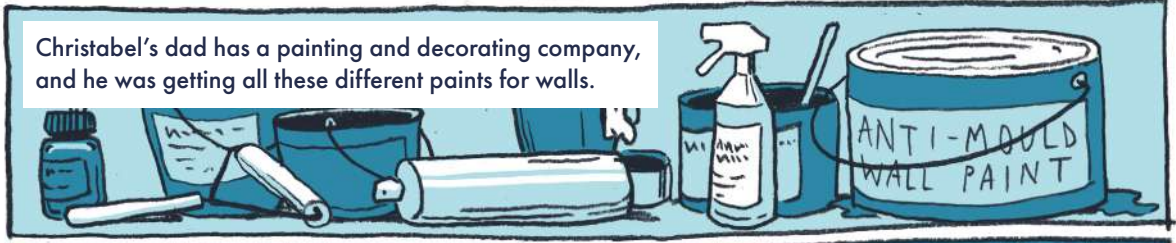
MEET LEE:
Andover Road resident for 25 years, runs a construction company, part of the Neighbourhood Trade Crew





We saw the research going into it and thought that this could be the best way of solving it. Our eaves upstairs, the bathroom, the ceilings were completely black with mould at one stage.

LEE'S WIFE
CHRISTABEL



Christabel's dad has a painting and decorating company, and he was getting all these different paints for walls.



We tried everything over the years and some of them held the mould back for 6 months or so but then it all just kept coming through.

We tried basically everything.



I get pains in my chest and I still think deep down, is it our fault? Because if you would have seen our bedroom, I used to wake up in the morning and there was big black dots everywhere... That's how bad it was.



Christabel used to clean it every 3 weeks, she used to burn her hands with bleach.



With mould, the blame is often put on individuals' lifestyles, and that to fix it you've got to stop drying your washing indoors, or do your heating differently.



We're trying to show that's not the case, and to build collective knowhow and agency to tackle the problem.

Come along to our retrofit event!

RETROFIT STREET WARM UP, Jas's Front Garden, Nov 2023

Andover Road residents were invited to a welcome evening, where a thermal imaging camera was just the starting point for conversations about retrofit. What we really wanted to hear from residents was where the damp spots are in their homes, which rooms feel colder than others, and which are too hot in summer. That way, we can find solutions that work for each household.



We did more doorknocking to get neighbours involved:





MEET SAMAH:
Andover Road resident, just moved to the neighbourhood

I heard about the retrofit project the first week I moved in. At the beginning I don't understand it. But slowly, slowly, I understood and I said, 'Oh, brilliant, maybe my house can be better'. Through it, I met Jas and other neighbours.

We moved in, and I found the house is very cold, it needs more insulation.



I have three boys and this room is very small. No place to play, no place for a dining table.



Also the front door. The front door is very drafty.

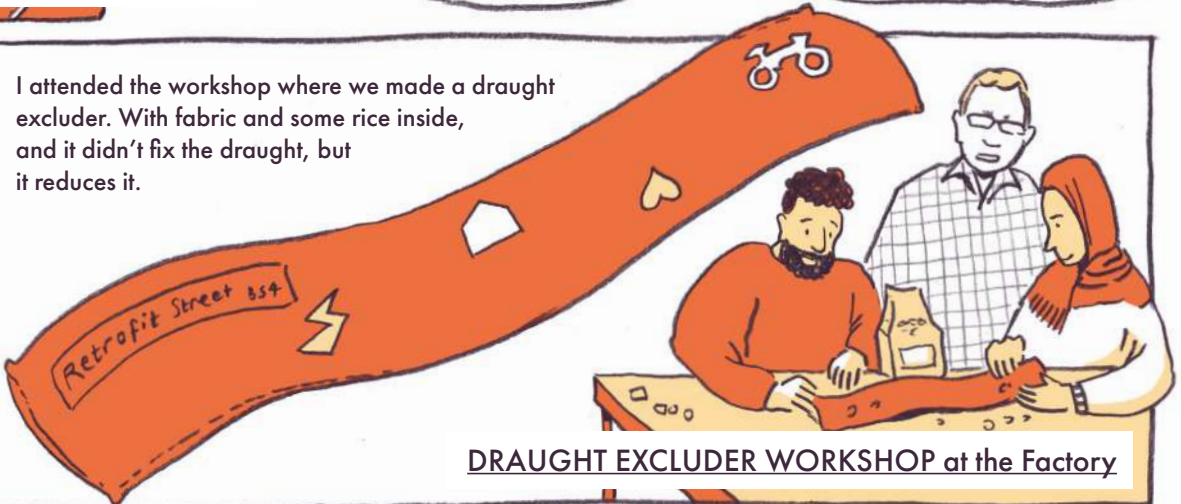


If we put the heater on for 6 hours, and then turn it off, after half an hour, it's cold again.

It cost money, every time, gas gas, top up, top up, to make the house warm.

So I got interested in retrofit, and I find out more when I attended these workshops.

I attended the workshop where we made a draught excluder. With fabric and some rice inside, and it didn't fix the draught, but it reduces it.



DRAGHT EXCLUDER WORKSHOP at the Factory

CO-CREATION WEEK

A week of retrofit events, April 2024

Kids Play Street

With a car-free afternoon, the Play Street* event was a way of showing how the street could be used differently, thinking about ideas for creating space for nature or socialising, and things like tree planting, or bin and bike stores. We created an imagination space to think about retrofit not just in terms of individual homes, but as the whole street and neighbourhood. Residents came together to share a cuppa and a chat, and kids who didn't know each other raced up and down the street without the worry of cars.



*We organised a Temporary Play Street Order with Bristol City Council, via Playing Out



Residents Co-design Workshop

For our first workshop with residents, we built a model street where everyone individually looked at their homes and thought about how they could adapt them using natural materials like hemp and cork. We joined the homes together to form a street and asked 'what can we do collectively?'

We also used 'jargon busting' musical instruments – when a word was said that you didn't understand, you made a sound and someone would explain it!



I think my favourite part of the process so far was the change when things started happening!

People becoming engaged and wanting to be part of conversations at the Factory and street events.



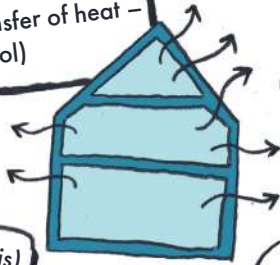
Sharing Event & Retrofit Street celebration at Springfield Allotments

Later that week on the first sunny evening of spring, Retrofit Street residents showcased their work from the co-design workshops to the wider community to celebrate what they'd created together. We planted sunflowers, shared food, and heard stories about the past, present and future of the neighbourhood.

MONITORING of homes, Jan 2024 - Jan 2025

Sensors were installed in homes by researchers from the University of Bath, monitoring different things. Having all of this knowledge of how your home works is crucially important to doing retrofit, so you can pick materials and interventions that best match your home.

Thermal performance (how effectively a building retains or resists the transfer of heat – how easy it is to heat or keep cool)



Moisture content (how damp it is)



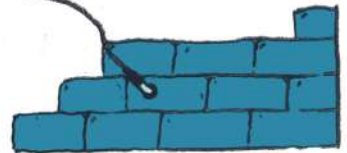
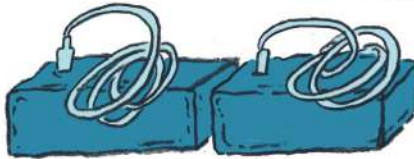
CO2 levels (to see how well ventilated it is – a well-ventilated home can help to prevent headaches and improve focus)



Think of your home like a living organism. It responds to how you heat it, how you insulate it, and how you live in it. There's no one-solution-fits-all for retrofit.



EMMA: researcher from the University of Bath



The first 10 years in our house, we never had no problems of mould. Then we had the insulation put into the wall cavity, and that's when the non-stop problems with mould started...



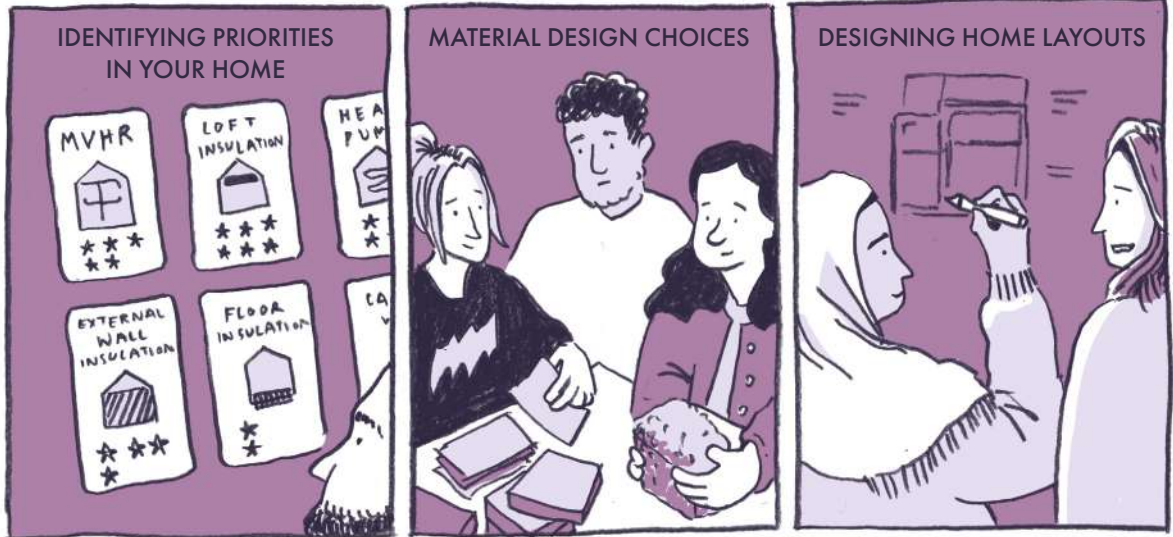
With the thermal imaging sensing, we could see certain spots which were letting out more heat, making you think 'Has the cavity insulation gone everywhere? Was it done proper?'



With retrofit, we're having the insulation put on the outside, so you know you're covering the whole surface.

CO-DESIGN WORKSHOPS WITH RESIDENTS, May - Nov 2024

Residents are experts in how their homes feel and function as places to live, and retrofit engineers and architects are experts on the technical details. So when it comes to collaboratively designing retrofit interventions, it was important to bring them together to share their expertise and co-create solutions.



Through understanding these homes in depth via monitoring and co-designing with residents, we have co-created this neighbourhood Retrofit Recipe*. It covers the main themes of work that could be done to retrofit homes and streets in this neighbourhood. What works here won't be the same for a Victorian terrace or a new build, but this recipe is designed for local people – and there are 5,000 homes built in a similar way across this neighbourhood! Like any good recipe, we're looking forward to seeing folks trying it for themselves and then developing it over time with more evidence.

OUR NEIGHBOURHOOD RECIPE



NATURAL/BIO-MATERIAL FABRIC IMPROVEMENTS
Retrofit homes using bio-based, recycled and reused materials such as timber and hemp to reduce energy demand – rather than to extractive oil-based products.

FRESH AIR, HEALTHY VENTILATION
Whole house ventilation systems to tackle mould and damp issues related to high humidity levels, and improve indoor air quality around the home.

SHARED RENEWABLE ENERGY SYSTEMS
A shared energy system (ie. solar, heat pumps) spreads costs, boosts efficiency, fosters local collaboration and resilience, and strengthens the neighbourhood's role in the energy transition.

ROOM TO GROW
Spatial improvements (rear extensions, front porches and reconfiguring internal layouts) to create space for growing families – for example transforming a 3-bed 1-bath into a 4-bed, 2-bath home.

GREEN INFRASTRUCTURE
Street trees, planting, shared bin and bike stores, communal tools and play equipment creates green and social infrastructure at the garden, street, and neighbourhood level.

* More details about the Retrofit Recipe in Zine #4, coming soon!

We've created an imagination space, and there were lots of ideas as part of it – we're showing what could be possible.

What we're doing on the street is just the beginning - there's so much more that could be done here, and we're showing a pathway towards doing more things like energy retrofit and spatial retrofit*.



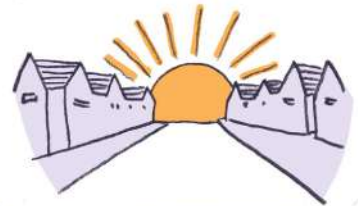
*Through technical monitoring we found really high CO2 levels in some of the homes due to overcrowding. There are simple changes that can be made to reduce this – like adding additional storage to create more space – as well as bigger spatial changes, like adding a porch or small extension.



Some ideas ended up not happening in this phase, and we're so used to being told 'That ain't gonna happen. No, you can't have nothing'.



But there were massive positives in it, because we were able to think outside the box and imagine what could be achieved.



What's important is the learning, and seeing how we can shape what is available.

When you're doing something innovative like this, and being genuinely people- and place-led, it's a massive challenge to business as usual. You're working against the system, and it can be hard to comprehend how things could be so different from the status quo.



This is a genuine experiment, and people were up for doing it. They trusted us and they trusted each other. Even though it's been a bit of a rollercoaster, people have stuck with it.

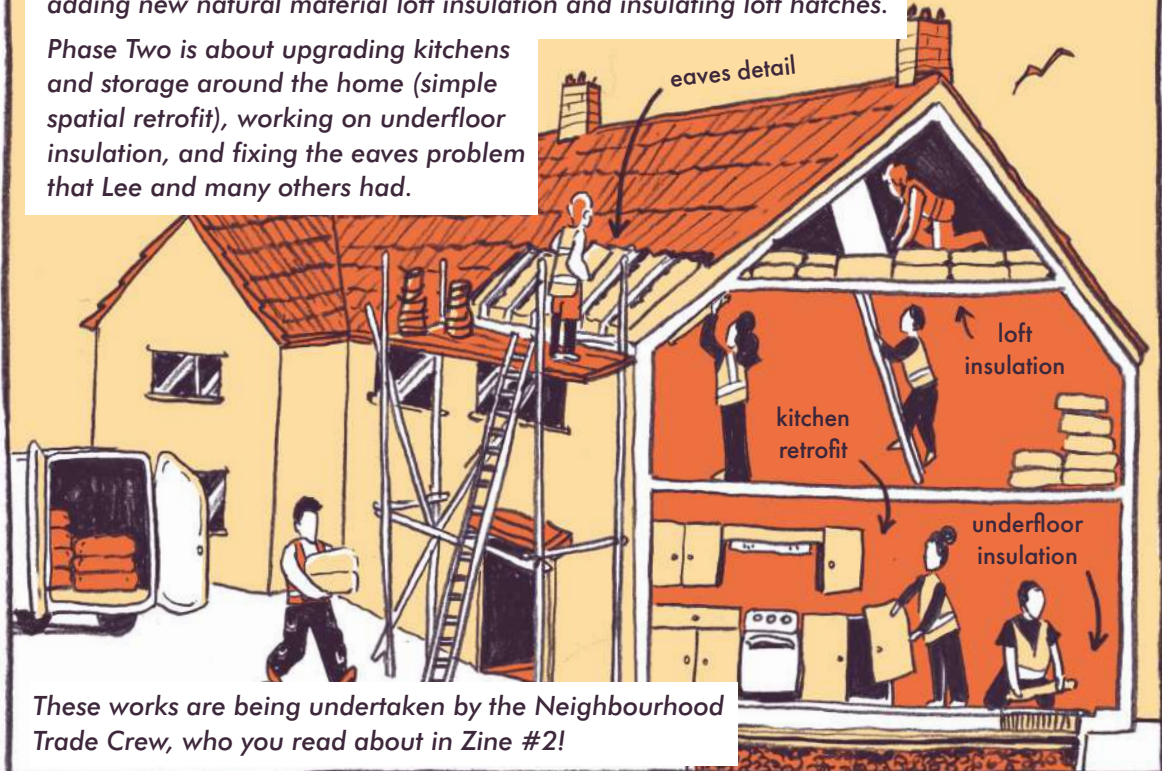


And the next step is actually starting the work!

RETROFIT WORKS BEGIN on 5 homes on Andover Road, Nov 2025

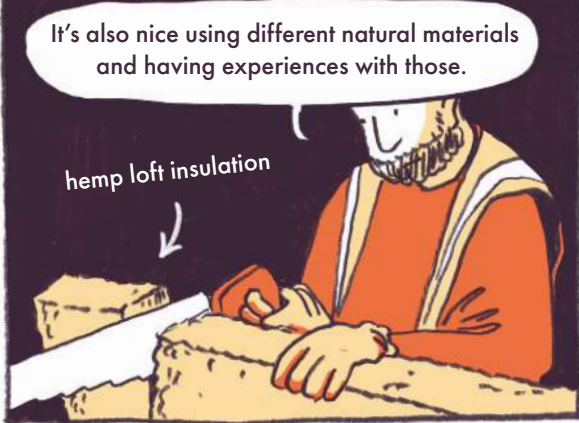
Phase One includes removing old patchy insulation made of unnatural materials and adding new natural material loft insulation and insulating loft hatches.

Phase Two is about upgrading kitchens and storage around the home (simple spatial retrofit), working on underfloor insulation, and fixing the eaves problem that Lee and many others had.



These works are being undertaken by the Neighbourhood Trade Crew, who you read about in Zine #2!

The trade crew is made up of local tradespeople, people who are underrepresented in construction, and Andover Road residents like Lee and Christabel.



Being on the trade crew doing the retrofit, I've learned about air tightness, achieving different barriers at certain levels.

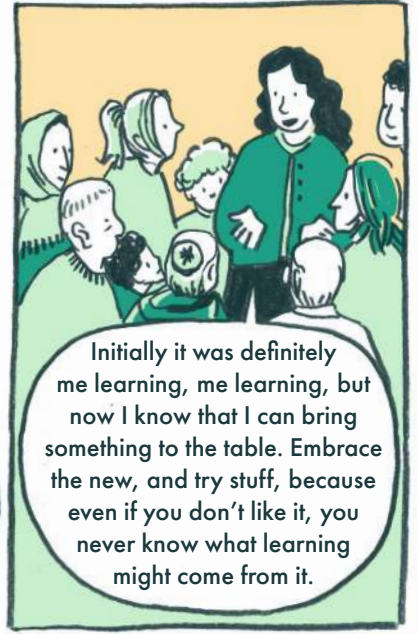
breathable membrane over loft insulation

As builders, we'd usually just put the bottom membrane in, and that would probably be it - having the University working alongside saying to do it in different ways is interesting.



The project is about putting the power and tools into people's hands to shape their own homes and neighbourhoods. Alongside the Neighbourhood Trade Crew, residents are learning how to do basic DIY on their own homes.





Once people have that trust and understanding, it's very much like there's this sense of ownership. We've learnt different things, we've done different workshops and there is this feeling that, "I can do that too."

When you give people an inch, they tend to go a mile with it. Once we have the confidence, it's very much that we can make our homes warm, healthy and fuel efficient.



Retrofit Street and WeCanMake are part of

Retrofit Reimagined

a wider ecosystem of places trying to do retrofit in different ways:



It's important being part of a national ecosystem of different communities, feeling the energy and the solidarity from that – you know you're not alone.

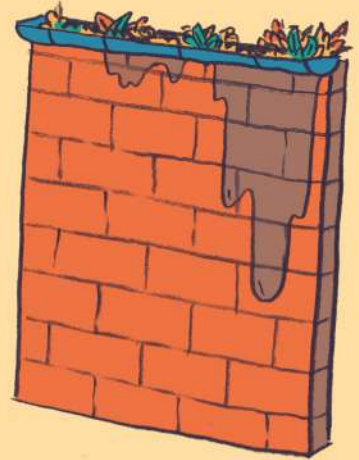
Knowing that other places are with you and fighting for you, that's really powerful.

DIY TIPS #3

CLEAN YOUR GUTTERS

When's the last time you had your gutters cleaned? If your gutters are leaky, they could be making your walls wet. And a wet wall is a cold wall! Wet walls can cause significant energy loss, by allowing heat to escape around 30% faster than a dry wall, affecting your heating bills.

Hire a gutter-clearing service, or you can do it yourself with a long ladder and someone to hold it.



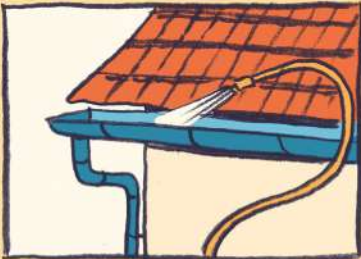
Make sure someone is footing the ladder for your safety.



Use some sort of scoop to remove leaves and dirt from your gutters.



Put all the gunk in a bucket or on a tarp (trying not to drop it on your ladder-footer's head!).



After scooping, use water to rinse the gutters and downpipes. This also helps you find any leaks.



If you notice sagging guttering, it can be fixed with a gutter hanger



You're done!



Gutters should be cleaned once or twice a year, especially if you live in a particularly leafy area.



Scan here to find out more

Join us at an upcoming event and find out how you can do work on your own home!

Zine by Mereida Fajardo

mereida.co.uk [instagram.com/m.ereida](https://www.instagram.com/m.ereida)



wecanmake.notion.site/retrofit-street

