

Our passion for creative and person-centred design is reflected in our unique approach to architecture and our belief in its ability to transform the way people live, work and interact – we call this 'creative reimagining'.

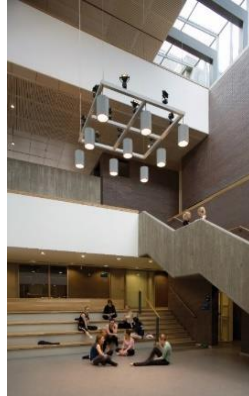


We have a special interest and expertise in **environmentally responsible** projects – by which we mean those that are low-carbon and energy-efficient but that also promote physical and visual connection to the outdoors, boosting daylight and access to green spaces.



By reimagining buildings and spaces in this way, our aim is to realise for their users the **transformative** potential of architecture, beyond the look and feel of the glossy photograph.





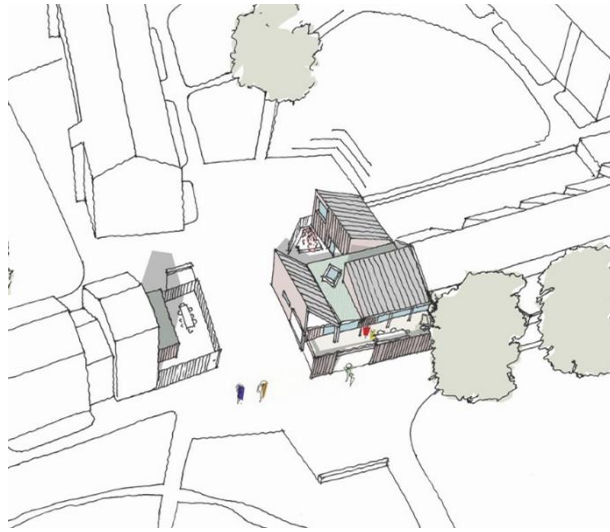
RIBA 

BREEAM[®]
OUTSTANDING

Experience

CDAL



































Dry & Warm

CDAL

Please Note: Approximate figures based on information supplied by: Rø Gårdsland, Kvarthalscenter, Arkitektfirma, Copenhagen

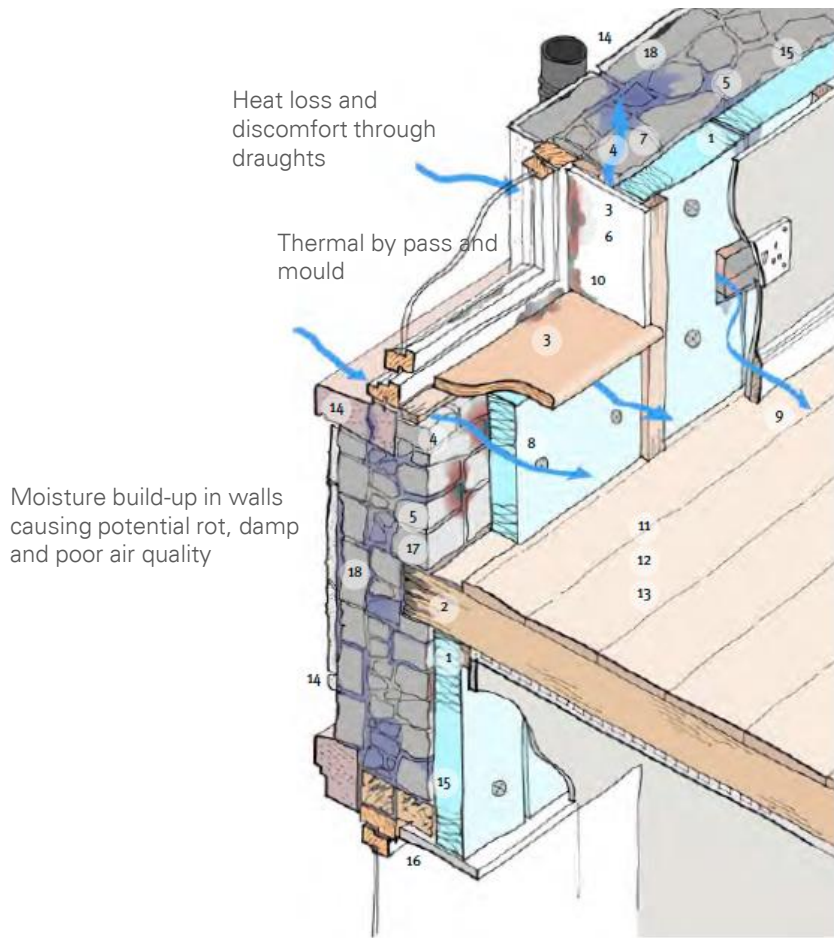
	1900 <i>Old City Area</i>	2000 <i>New City Area (Dense)</i>	2000 <i>New City Area (Low Density)</i>	2000 <i>New City Area II (Suburban Density)</i>
Average Size of Households	 4 Persons	 1.8 Persons	 2.0 Persons	 2.2 Persons
Average Size of Dwelling Area per Resident	 10m²	 60m²	 60m²	 60m²
Number of Residents per 100m² Built Space	 10 Residents	 1.7 Residents	 1.7 Residents	 1.7 Residents
Floor to Plot Ratio	 2.0	 1.8	 0.25	 0.1
Dwellings per Hectare	 475 Dwellings/ha	 166 Dwellings/ha	 21 Dwellings/ha	 8 Dwellings/ha
Number of Residents per Hectare	 2000 Residents/ha	 300 Residents/ha	 42 Residents/ha	 17 Residents/ha
Length of Roads & Paths per Hectare	 200m/ha	 230m/ha	 350-500m/ha	 460-700m/ha









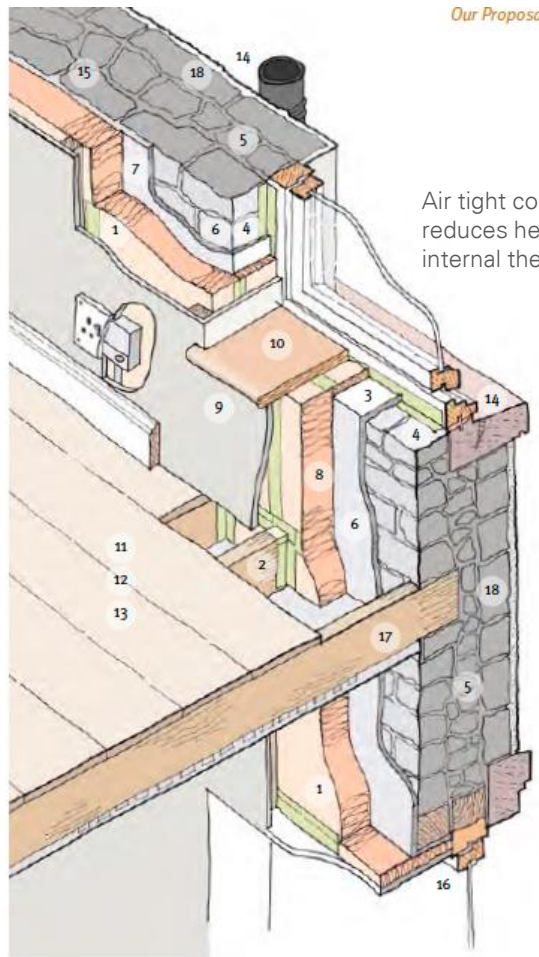


Heat loss and discomfort through draughts

Thermal by pass and mould

Moisture build-up in walls causing potential rot, damp and poor air quality

Common issues with conventional internal insulation



Our Proposal:

Air tight construction reduces heat loss and internal thermal comfort

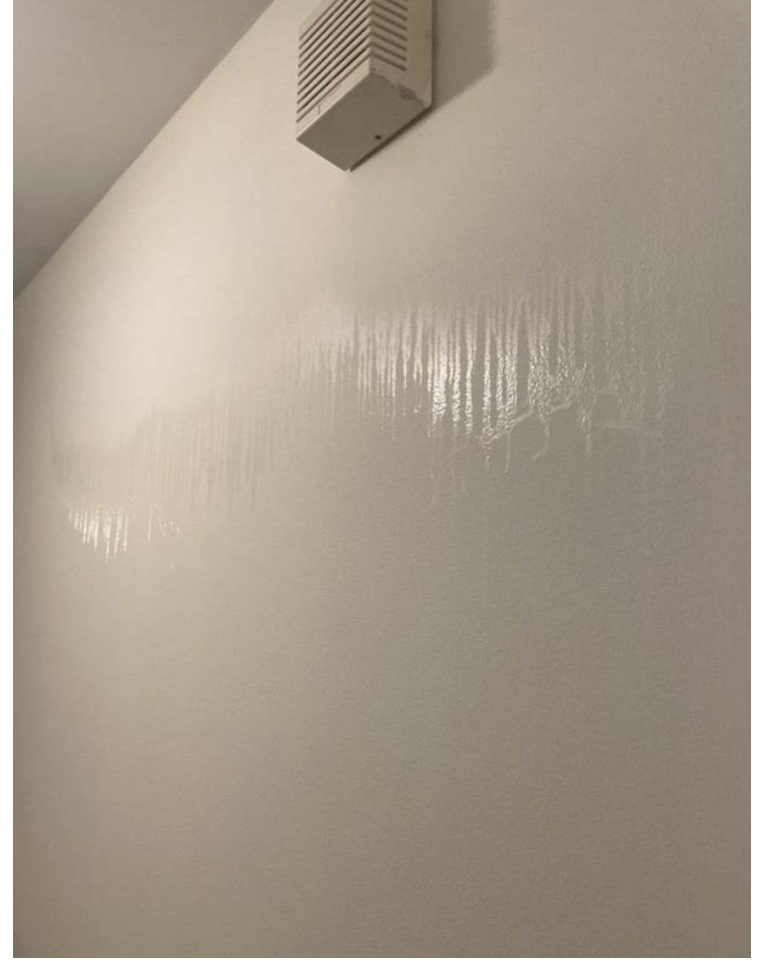
'Vapour open' construction improves comfort and condition of wall

Overall better insulation and 'cosy-ness'

Good practice internal insulation



Lime plaster with no water proof paint:
vapour open and air tight



Plastic membranes below plasterboard + water
resistant paints inhibit the movement of water
vapour

The Largest Passive House housing scheme in the UK

100 New homes

Fuel bills around £150/ year

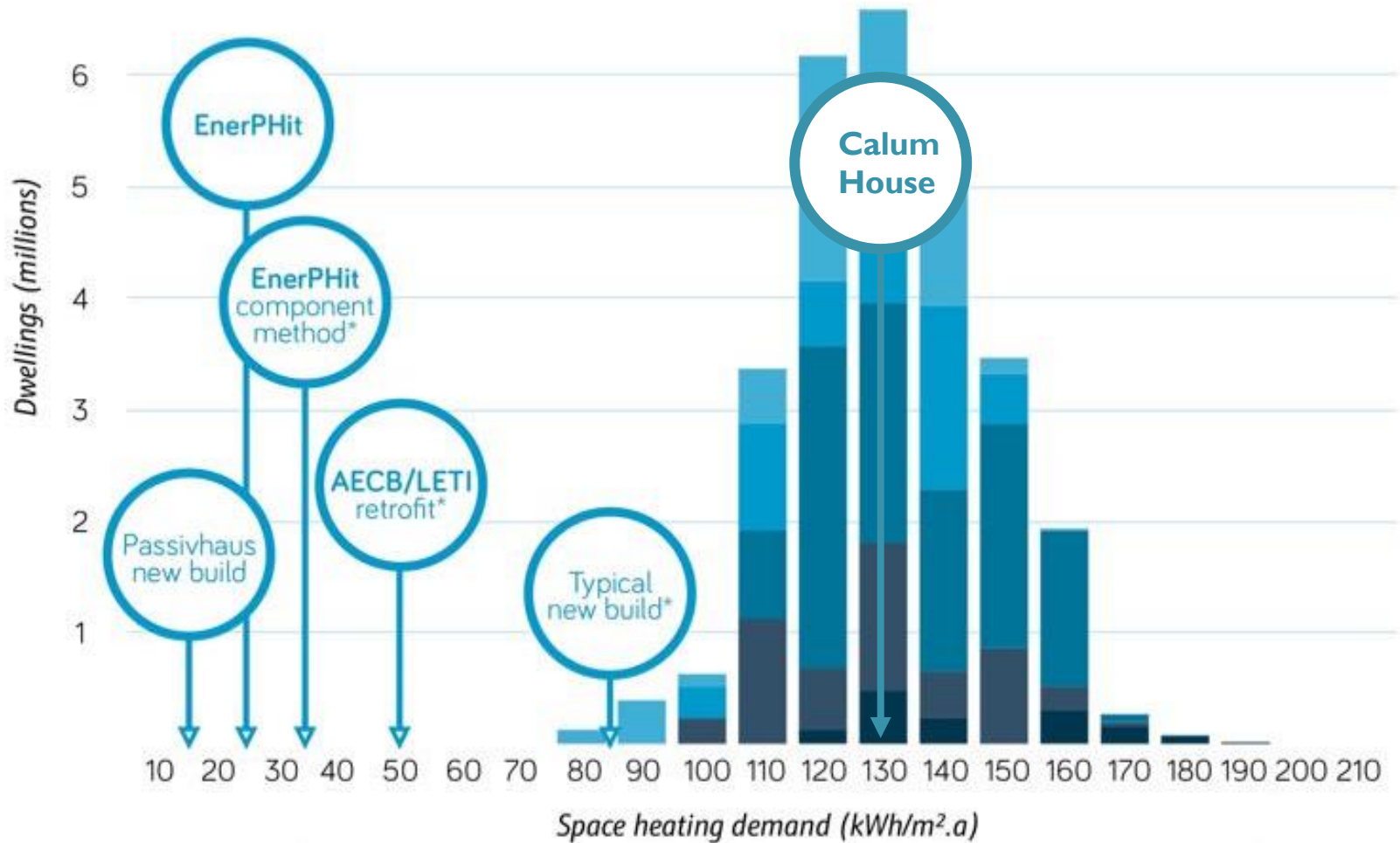
15KWh/m2yr @ 20 degrees C

Also well designed and 100% affordable homes!



Goldsmith Street, Norwich



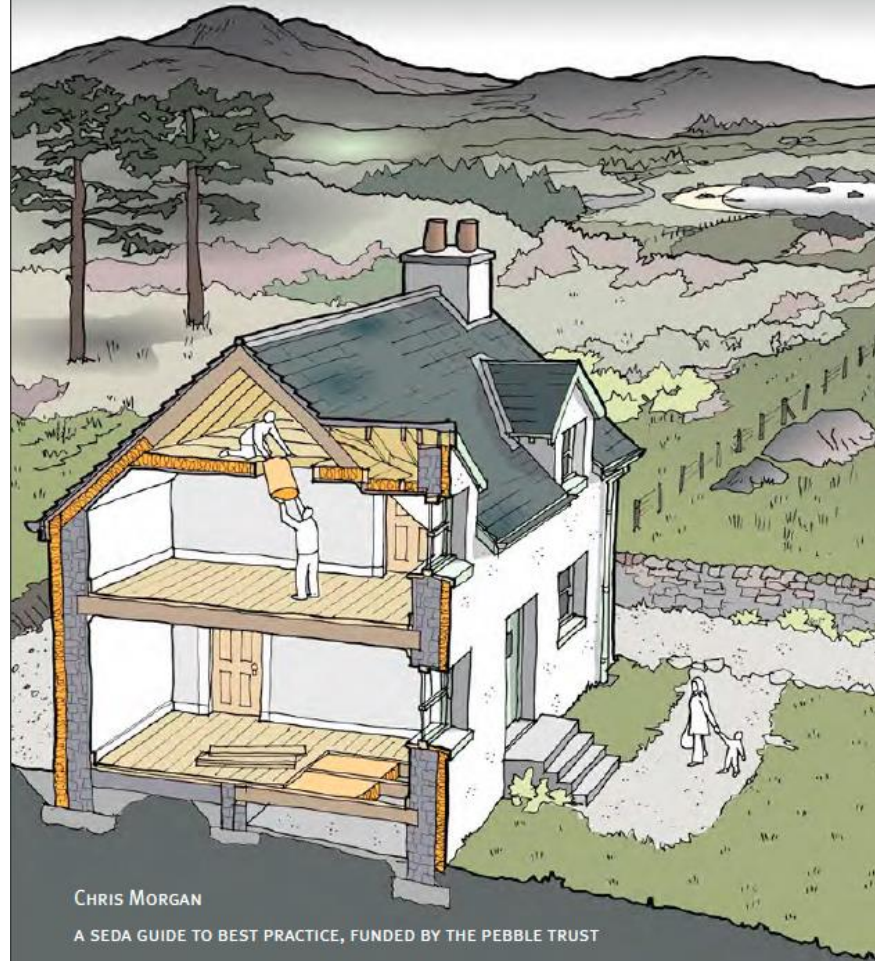


57 Spottiswoode Road, Marchmont, Ground Floor Flat, 115sqm
 Average heating bill over last 3 years = 15 000 Kwhr / 115 sqm =
130kwh/a (5 x EnerPHit, 9 x Passive House)



SUSTAINABLE RENOVATION

IMPROVING HOMES FOR ENERGY, HEALTH AND ENVIRONMENT



CHRIS MORGAN

A SEDA GUIDE TO BEST PRACTICE, FUNDED BY THE PEBBLE TRUST



HISTORIC
ENVIRONMENT
SCOTLAND



TAKE AWAYS

- Don't panic: Better to do a little well, than a lot which expends carbon and causes damage.
- Always fabric first
- A phased plan: Prioritise improvements and consider in context of the likely benefits
- Think wholistically and tackle improvements while making other changes or repairs and consider existing lifespan of finishes, fittings of boilers.
- Airtight - ventilate right
- Vapour open construction – just like out historic fabric – but less leaky
- Turning your thermostat down 1 degree can equate to a 10% decrease in consumption
- Advocate for change in VAT to incentivise work to existing building rather than new build.
- We need good affordable housing as a priority