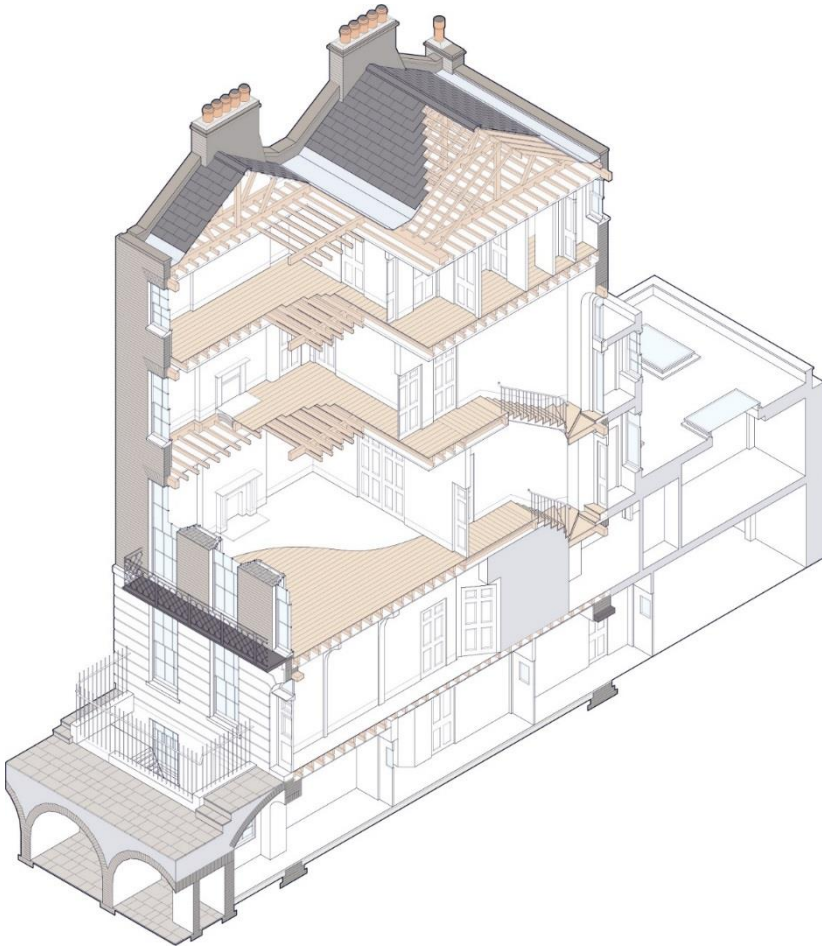


prewett
bizley
architects

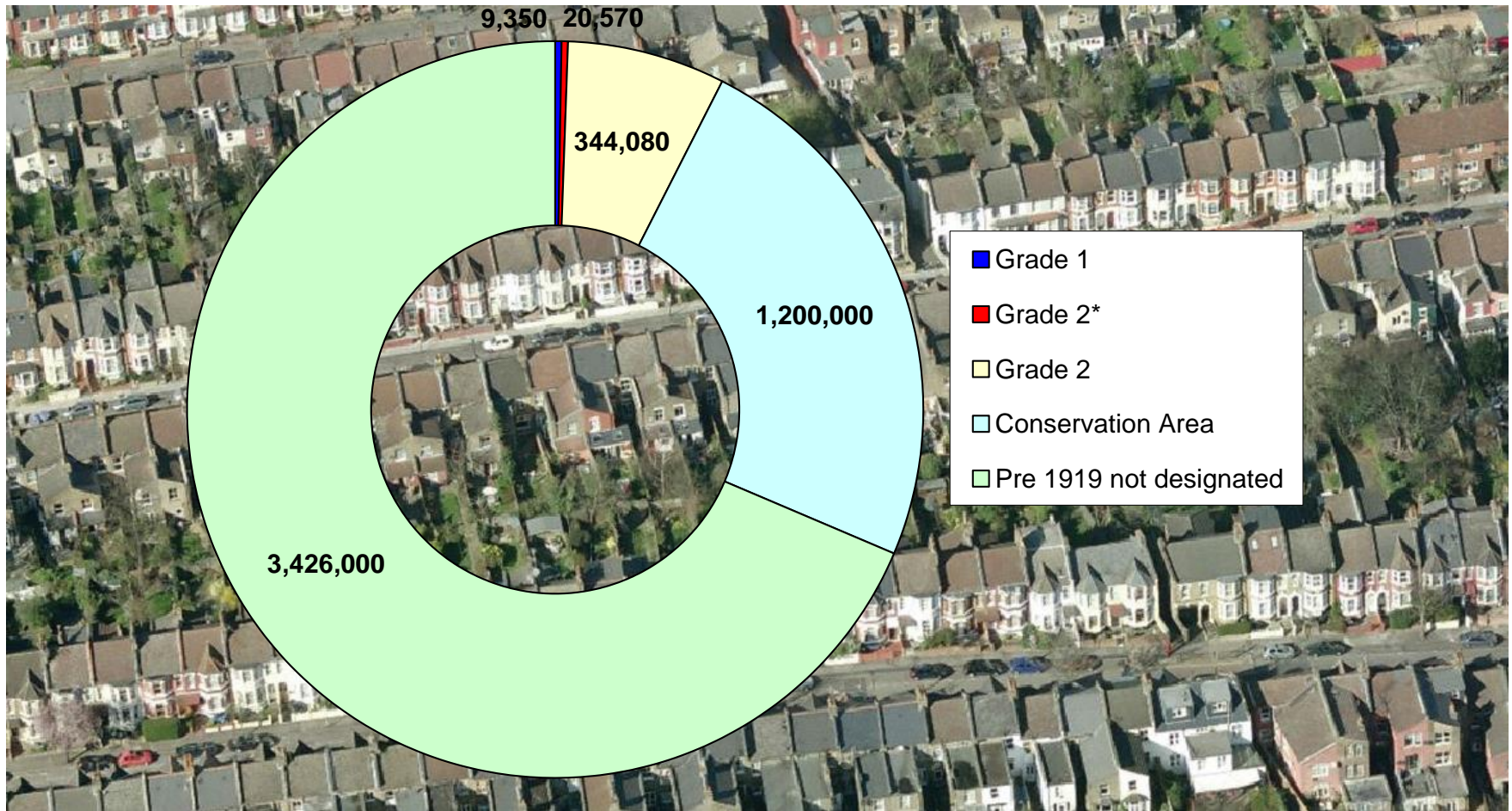


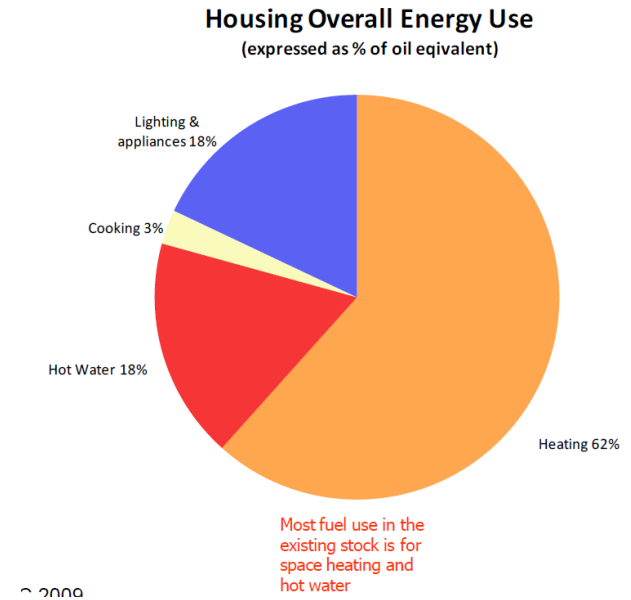
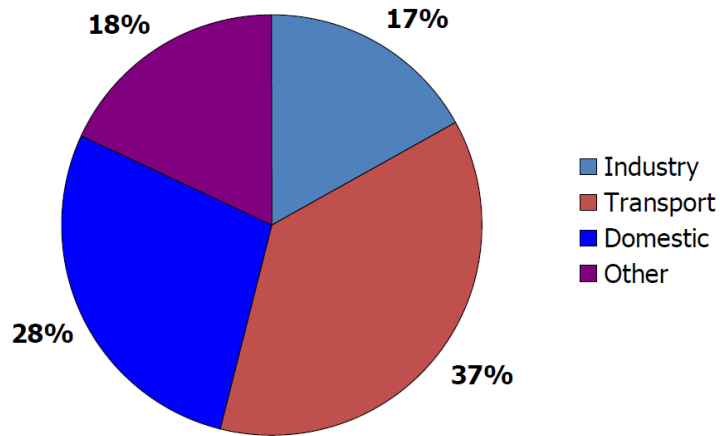
Retrofit – how far to go?

80%

CO2 reduction by 2050

UK housing stock relatively old





Retrofit – why?

Heating demand kWhr/m2year



Range of heating demand.



170

1820's Bloomsbury



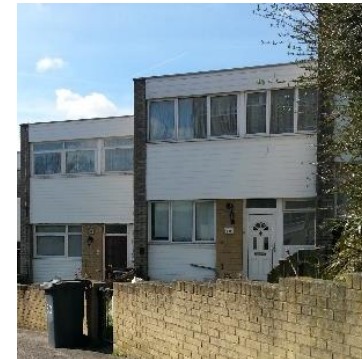
220

1830's Hackney



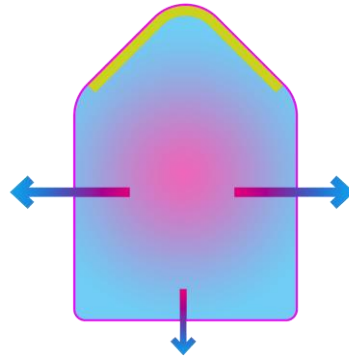
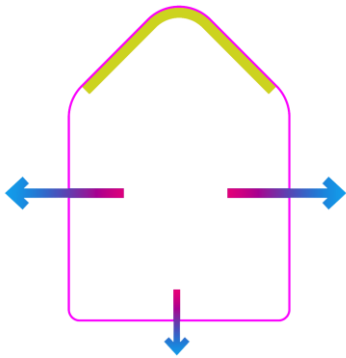
240

1860's Kentish Town



160

1960's Sydenham



Lite:

Capital cost:

£

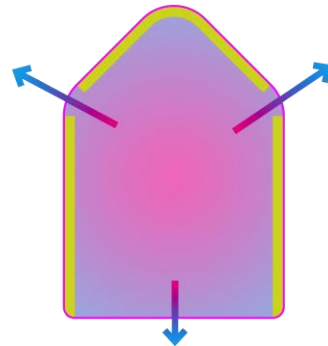
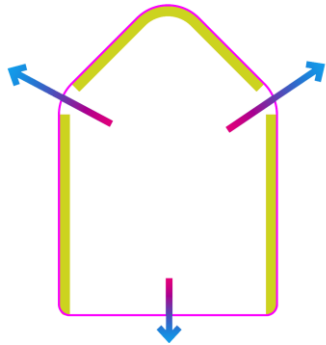
Running costs:

£££££

Comfort:

low

15,000 kWh



Medium:

Capital cost:

££

Running costs:

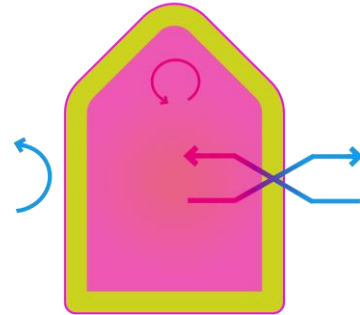
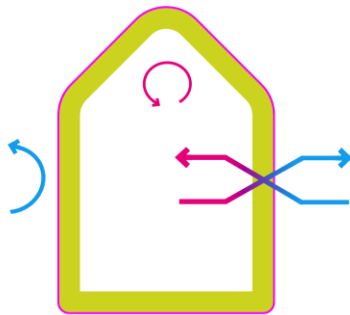
£££££

Comfort:

medium

7,000 kWh ?

Potential for defects!!!



Deep:

Capital cost:

££££

Running costs:

£

Comfort:

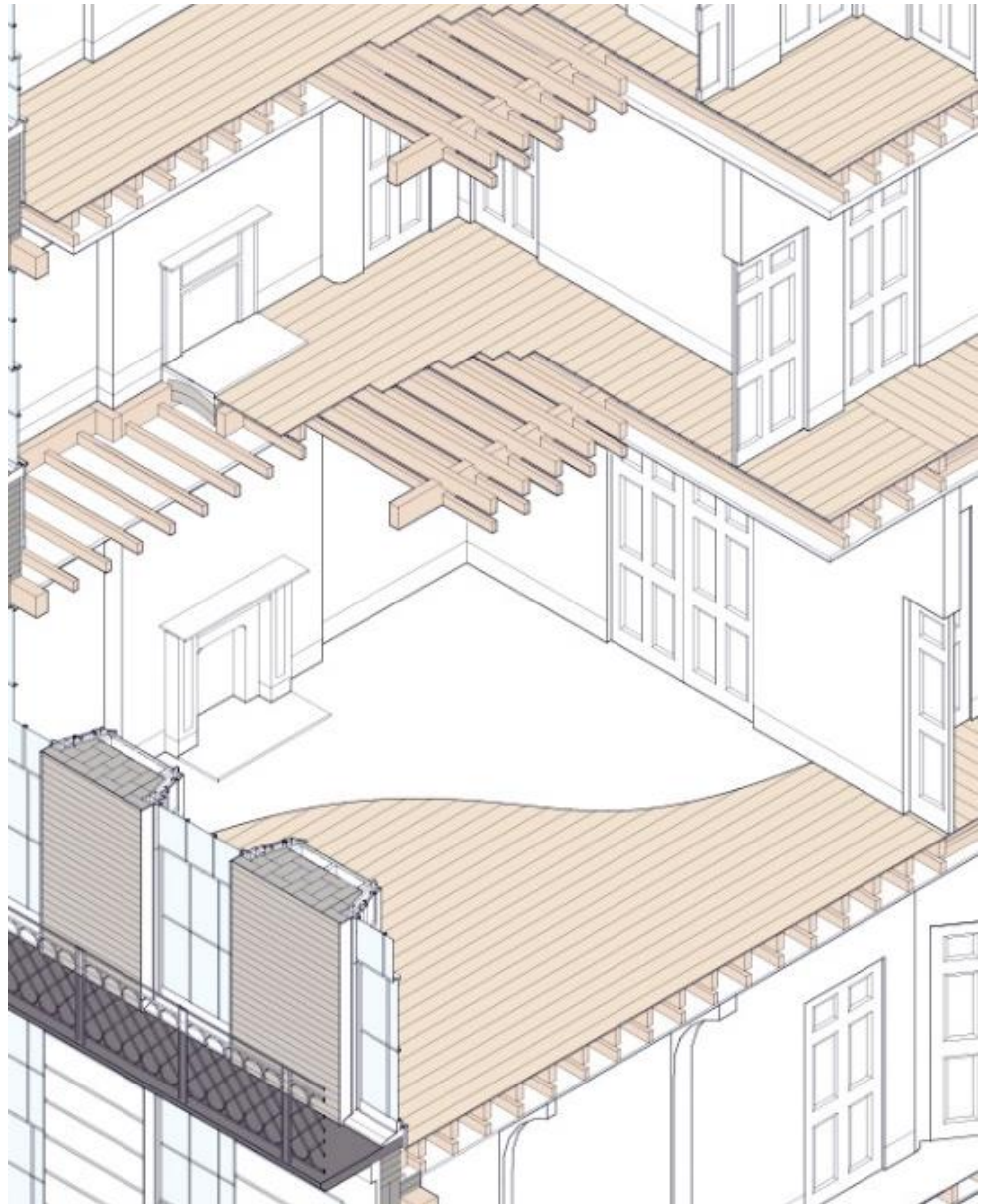
high

2,000kWh

No Defects. Excellent IAQ



Understand



Get back to the bones



Identify defects



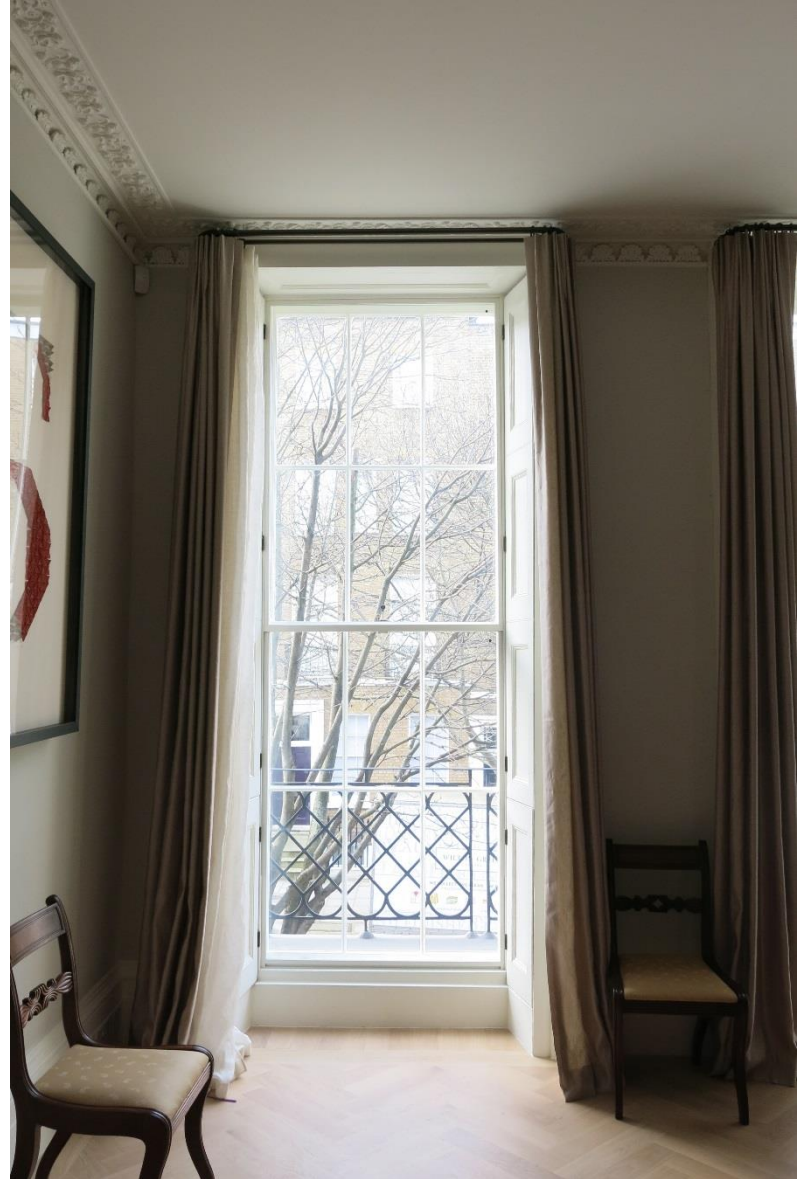
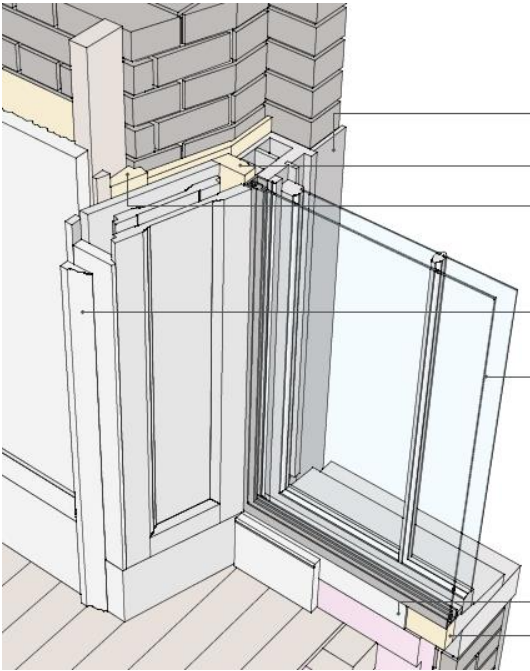
Remediate



Insulate



Sensitivity



Intervention



Range of heating demand.



1820's Bloomsbury - Listed

170
25



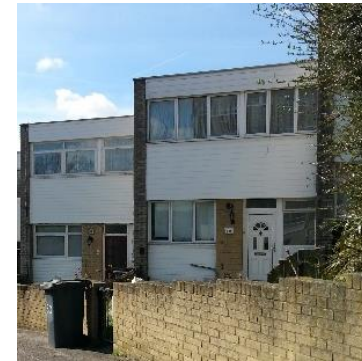
1830's Hackney – Conservation area

220
27



1860's Kentish Town – Conservation area

240
44



1960's Sydenham

160
18