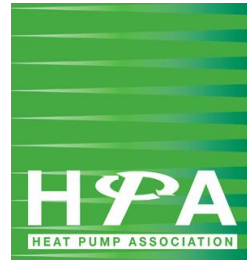


# Nearer to Zero: Central London

8<sup>th</sup> July 2014



City of Westminster



# Nick Rogers

UK Design Director

## 73 Great Peter Street



- 24 high quality 1, 2, 3 & 4 bedroom private apartments and duplexes.
- Code for Sustainable Homes Level 4+ (Westminster requirement beyond London Plan)
- BREEM 'Excellent' for the commercial space.
- Electric car charging points provided
- Provision of high levels of cycle parking
- Scheme designed to Lifetime Homes, and Secured by Design Standards



- RC frame, PC panes with brick slips and a framed inner leaf give external wall u-value of  $0.15\text{w/m}^2\text{k}$
- Sedum roof
- CHP provides metered heat to apartments and electricity to common areas and grid.
- Additionally, roof mounted photovoltaic panels help achieve 20% carbon reduction in line with local policies.
- CHP has been designed so that the proposed development at Chadwick St can be connected at a later date and potentially for a further residentially led scheme at Ashley House, 2 Monck Street. Connecting further developments will allow the CHP to operate more efficiently.

*“... but there’s nothing particularly special about the scheme...”*

TW project manager

## Great Peter Street

- Bespoke
- Project specific design team
- Project specific suppliers and subcontractors
- High costs and high values

## The majority of our homes

- Standardisation and repetition
- Details: TW specific; could be industry accredited...
- Subcontractors and suppliers
  - Work on spec and details
  - On site training; successful with air tightness
- Constrained values and costs; both viability and affordability an issue

## Fabric energy efficiency

- Confident of achieving this for both standard homes and bespoke
- Still have concerns on air quality and condensation with lower air permeability on a larger number of homes
- Confident of industry's ability to resolve DVaB issues:
  - More accurate prediction from calculation software
  - Standard/accredited details
  - Better contractor training
  - Focussed inspection and testing
  - But there is still the possibility of further complication...

## On site compliance

- We can demonstrate that this works on sites like Great Peter St and our Cranbrook development in Devon.
- Still have concerns on viability and practicality on “bread and butter sites”. CHP not suitable, left with PV as only option. Can we mitigate enough carbon?



## Allowable solutions???

- Exploring all the options of in-house and partnered solutions and engaging in the debate...
- But won't it just end up being a tax on development set at a politically acceptable level?

Access

Security

Water

Energy

Space

We're looking for certainty, simplicity and affordability!