The SuperHomes Network & Rating Scheme

Retrofit presentation to Toronto city community groups – 19.10.21

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SUPERHOMES HISTORY

• Started in 2007
• A SuperHome was retrofitted to reduce CO$_2$ emissions by at least 60%.
• 222 homes reached SuperHome status
• Accessible to the public to learn and be inspired by their peers
• Largely dormant for the last couple of years
OUR AMBITION

Our ambition is to:

• Encourage net zero retrofits
• Share best practice through SuperHomes Network membership
• Evidence the link between property value and retrofit
• Work with social landlords on financing retrofit
• Reach one million SuperHomes by 2030
SUPERHOMES RATING SCHEME

- **ZERO EMISSIONS**
  - <0.0tCO₂/yr
  - 30-50kWh/m²/yr
- **ENERGY AND EMISSIONS**
  - <0.3tCO₂/yr
  - <50kWh/m²/yr
  - <0.5tCO₂/yr
  - <60kWh/m²/yr
  - <1.0tCO₂/yr
  - <90kWh/m²/yr
- **SUPERHOME RATING LEVEL**
  - 5★
  - 4★
  - 3★
  - 2★
  - 1★
- **HEALTH AND COMFORT**
  - ACOUSTICS
  - DAYLIGHT
  - AIR QUALITY
  - MOISTURE CONTROL
  - THERMAL COMFORT
  - USER FRIENDLY CONTROLS
- **INTERNAL ENVIRONMENT**

**PIONEER SUPERHOME**

+ Affordability check on modelled annual running costs
Customer journey stage 1
Design phase – Predicted SuperHome Rating

STAGE 1 (optional)
Customer registers as a member of the SuperHomes network

Customer appoints a SuperHomes Assessor who produces a Whole House Retrofit Plan

SuperHomes Assessor performs predicted SuperHomes rating assessment

SuperHomes confirm predicted SuperHomes rating to customer

Retrofit work is designed, procured and completed

INDEPENDENT ROUTE
Customer sources Retrofit Coordinator to produce Whole House Retrofit Plan independently

SuperHomes Assessor appointed to perform predicted SuperHomes rating assessment

ONTOSTAGE TWO
Customer journey stage 2
Evaluation phase – Verified SuperHome rating

STAGE 2
Customers joining at stage 2 become a member of the SuperHomes network

Monitoring package selected by customer and kit installed

Monitoring commences to collect performance data for 12 month period

SuperHomes status achieved

NEF issues SuperHomes certificate confirming the star rating level achieved

NEF's SuperHomes team performs verified SuperHomes rating assessment

Monitoring data evaluated and sent to SuperHomes. Customer completes post-retrofit evaluation survey
• Paul’s house retrofitted in 2009
• Part of SuperHomes network
• Cost: £30,000 for energy efficiency related works.
• Year 1 & 2 feedback on my home:
  - Over 500 visitors, many taking action!
  - Total emissions = 545kg year 1, 270kg yr 2.
  - Running costs = £319 year 1, £274 yr 2.
  - ASHP £230 year 1, £190 yr 2.
  - Credit with FIT income +£511 year 1, + £658 yr 2. 😊
  - Water consumption 68 l/p/d.
Pilot ‘Whole House Retrofit Service’

• Partnership between NEF and two community based climate organisations in Winchester (WinACC) and Petersfield (PeCAN).

Aims:
• Build knowledge, capacity and a local supply chain to create a new service that supports owner occupiers to transform the energy performance of their homes.

Objective:
• Implement a successful project creating ongoing demand for the service leading to creation of a self funded legacy service (and replication of model) which other communities can join.
Headline approaches and outputs

- 300 x ‘Whole House Retrofit Plans’ delivered by Retrofit Coordinators (in accordance with PAS2035 framework) with subsidies.
- 300 x ‘SuperHomes Rating Scheme’ (SRS) assessments using NEF’s new retrofit assessment methodology scheme providing a benchmark of retrofit achievement/evaluated success.
- 50 x SuperHome show homes:
  - Video fly throughs, open days
  - Pre & Post retrofit property valuations
  - Monitoring package to verify performance over 12 months (and actual SRS rating)
- Further min 50 homes commenced installation of actual retrofit measures
- Exploiting retrofit trigger points with Estate Agents and Local Authority Planning depts.
- 10 x newly qualified Retrofit Coordinators (PAS 2035) from local area.
- 20 x newly accredited Trustmark (PAS 2030) contractors / MCS installers in local area.
THANK YOU

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