SUPERHOMES RATING SCHEME
TECHNICAL SUMMARY OF REQUIREMENTS

ENERGY AND EMISSIONS

AIM: Deliver retrofits which balance fabric efficiency, low carbon services, and affordable running costs

Criteria

Space heating demand (kWh/m$_2$/yr)
- fabric efficiency of the building

Performance benchmarks

<90kWh/m$_2$/yr*
<90kWh/m$_2$/yr
<60kWh/m$_2$/yr
<50kWh/m$_2$/yr
30 - 50kWh/m$_2$/yr

*Gas transition SuperHome permitted to 2030

Carbon emissions (tCO$_2$/yr)
- regulated emissions as per SAP**

<2.0tCO$_2$/yr
<1.0tCO$_2$/yr
<0.5tCO$_2$/yr
<0.3tCO$_2$/yr
<0.0tCO$_2$/yr

Running costs
- EPC rating used as a benchmark for running costs

- Customer alerted if running costs post-retrofit are predicted to increase
- Min EPC rating 'C' - affordability check in line with the Government Fuel Poverty Strategy targets (optional)

Energy and emissions key points
- All metrics calculated by SAP 10 reflect updated carbon/fuel emission factors and energy suppliers costs

- More detailed modeling in PHPP software or similar may be required for projects targeting space heating demand <50kWh/m2/yr

HEALTH, COMFORT AND WELLBEING

AIM: Deliver retrofits that achieve a comfortable indoor living environment, benefiting occupant health and wellbeing

Criteria

Thermal Comfort

Performance benchmarks

21°C living rooms, 18°C other rooms
(Maintained 9/24hrs and min 16°C)
Overheating not exceeding >26°C for more than 1% of annual hours in bedrooms 10pm-7am

Moisture Comfort

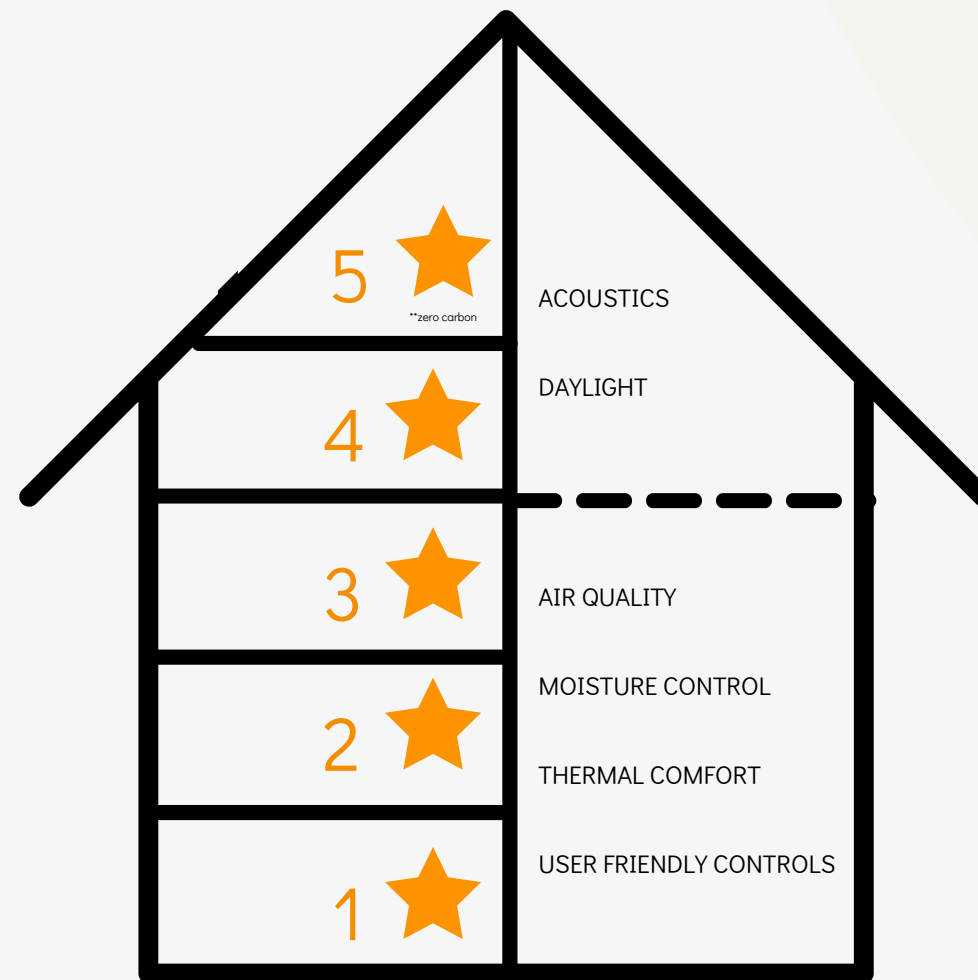Relative Humidity 40-60%
≥ 0.5 ACH or 8 litres/sec/person
(≤ 7 days pa at >65% RH)
(≤ 1 day pa at >75%)

Indoor air quality CO$_2$ levels

<1000ppm CO$_2$
(<1500ppm CO$_2$ time limited periods)

(VOC's and selected pollutants - optional)

Project-specific targets

User friendly controls

Design statement

Daylight
(compulsory at 4 ★ and 5 ★)

2% daylight factor for habitable rooms

Acoustics
(optional at all levels)

'Design led' project specific targets

5 ★ **zero carbon — ACOUSTICS
4 ★ — DAYLIGHT
3 ★ — AIR QUALITY
2 ★ — MOISTURE CONTROL / THERMAL COMFORT
1 ★ — USER FRIENDLY CONTROLS

SuperHomes