

4orm

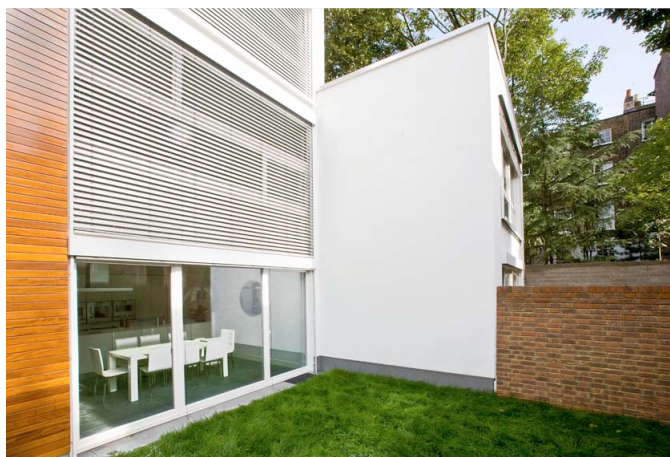
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london n1 1 dh
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Nash Terrace, Aubert Park Passivhaus development, London N5

due for completion_2010

Four stories were erected in five weeks using factory manufactured 'Dubel-Holz' solid timber structural panels for walls and floors. The building envelope utilizes triple glazing (U value 0.7 W/ m²K), high levels of insulation with 200mm recycled newsprint to walls (U value 0.15 W/ m²K) & PIR rigid urethane insulation to roofs (U value 0.17 W/ m²K). The air tightness tests ranged from 0.4 – 0.6 h⁻¹. Each house has rainwater harvesting feeding WCs and laundry, whole house ventilation with heat recovery and ground source heat pumps providing heating and DHW. The energy required for space heating is calculated to be 11 kWh/m²/yr and given the efficiency of the ground source heat pump this will result in energy costs of approximately £80 year – less than the cost of a cappuccino per week. The houses are designed with generously proportioned windows giving good quality natural lighting during daylight hours. LED low energy light fittings are used throughout. User operated retractable external venetian blinds on the south elevation reduce solar gain and with the ventilation system the frequency of summertime overheating (over 25 °C) is projected at less than 3% providing exceptional levels of comfort and climate change proofing.

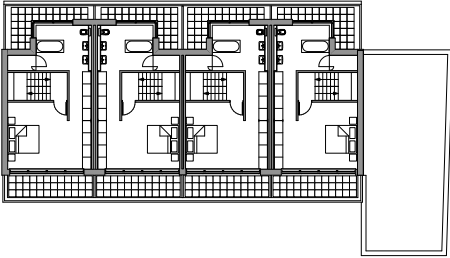
top_view along Aubert Park
left_rear garden elevation
right_ 3 proposed passivhaus to the
rear of Aubert Park



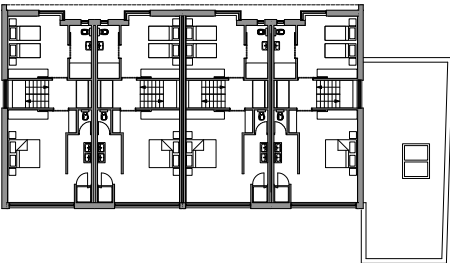
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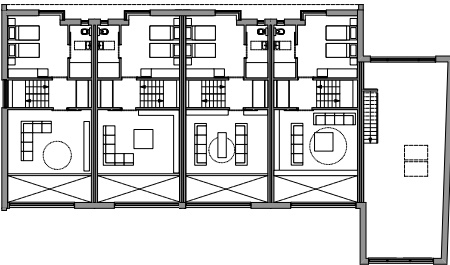
Nash Terrace, Aubert Park Passivhaus development, London N5 due for completion_2010



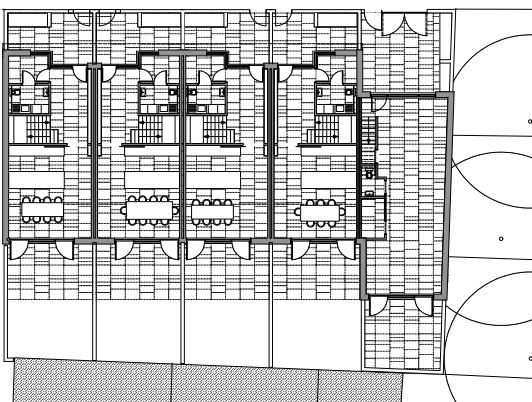
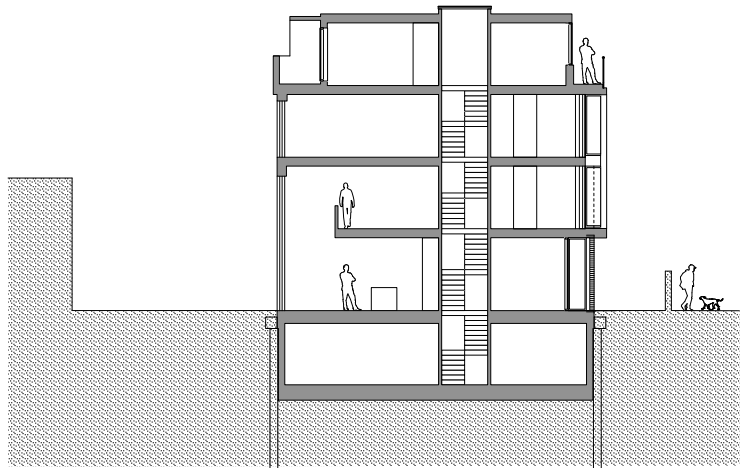
third



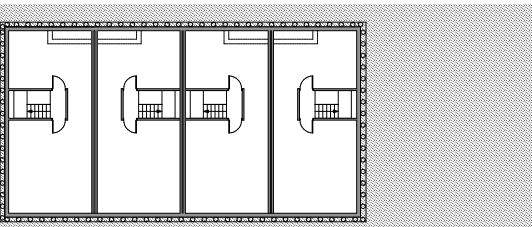
second



first



ground



basement



Selected component suppliers

Solid timber structure
MVHR unit Universum K100
Ground source heat pump & cone coils
Windows & external doors
LED lighting
Taps & showers

Kaufmann GmbH/ Matrix Bau Ltd
Bildingmaier Technologie GmbH
Simaka GmbH
Fenster-Striegel GmbH
Nimbus Group GmbH
Vola UK Ltd

0044 796 7804774
www.bidingmaier.de
www.simaka.de
www.fenster-striegel.de
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