

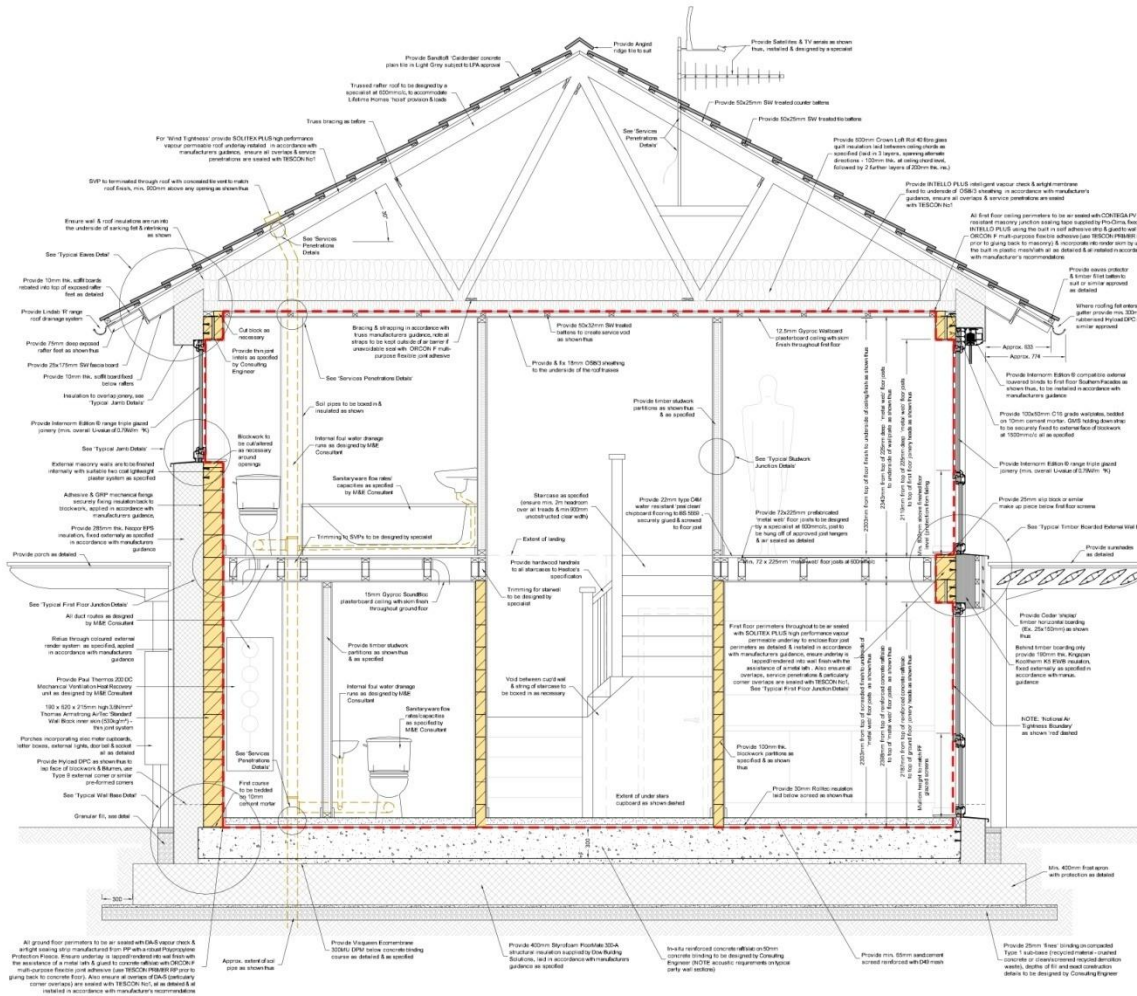
Insulation

Air Tightness

Windows and Doors

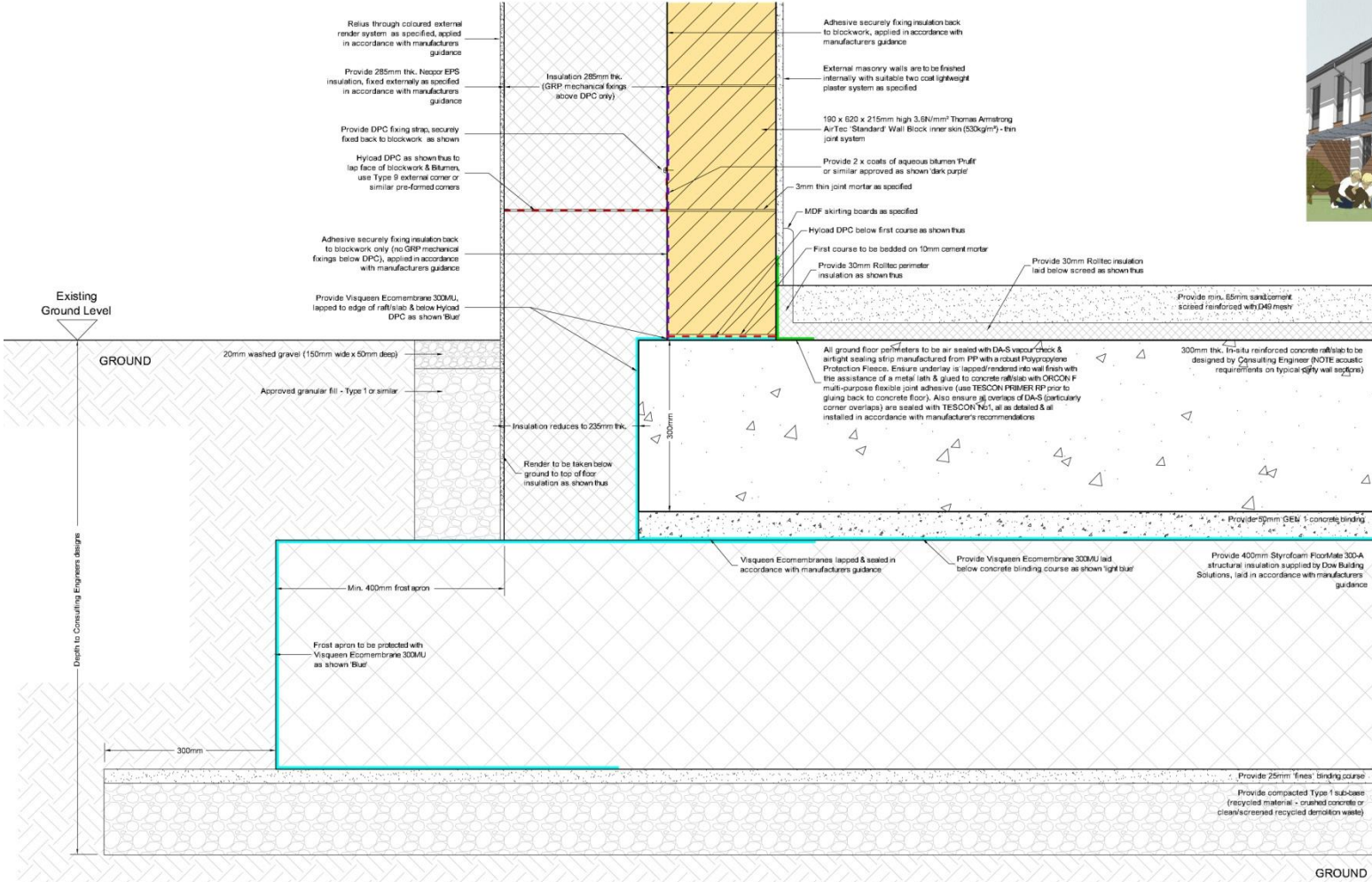
Ventilation

Heating



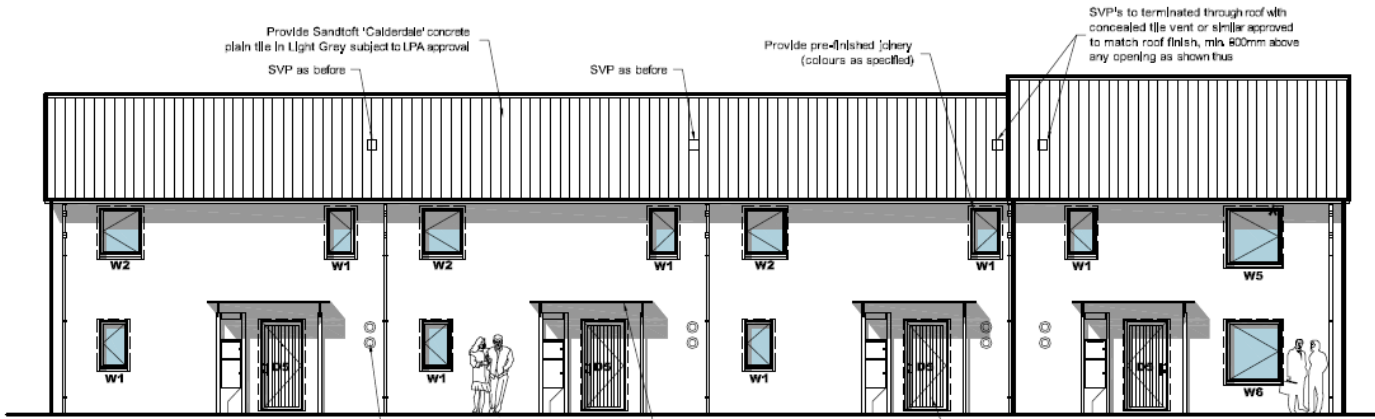
TYPICAL 3BED SECTION

TYPICAL 3BED SECTIONS SCALE 1:20

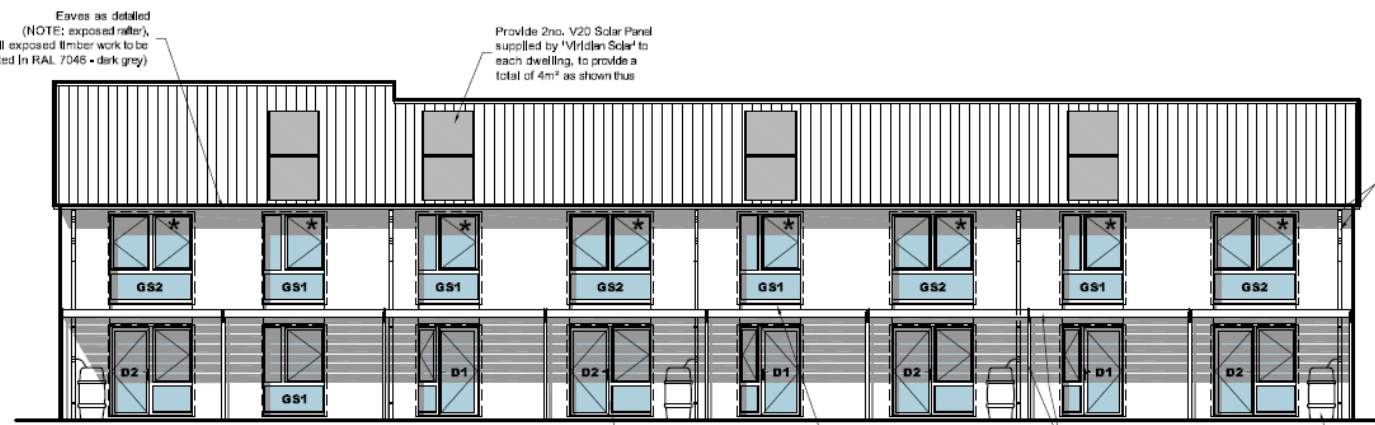


floor

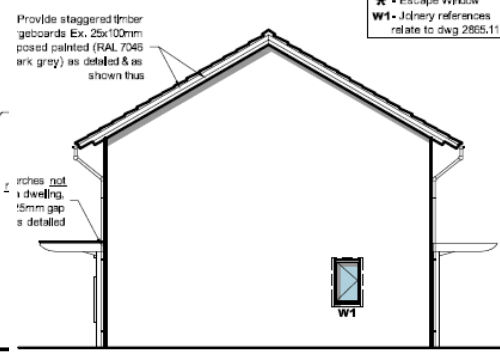




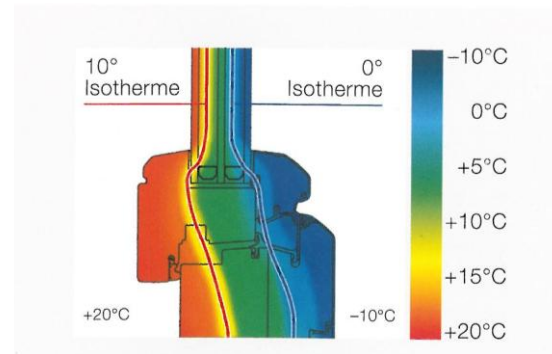
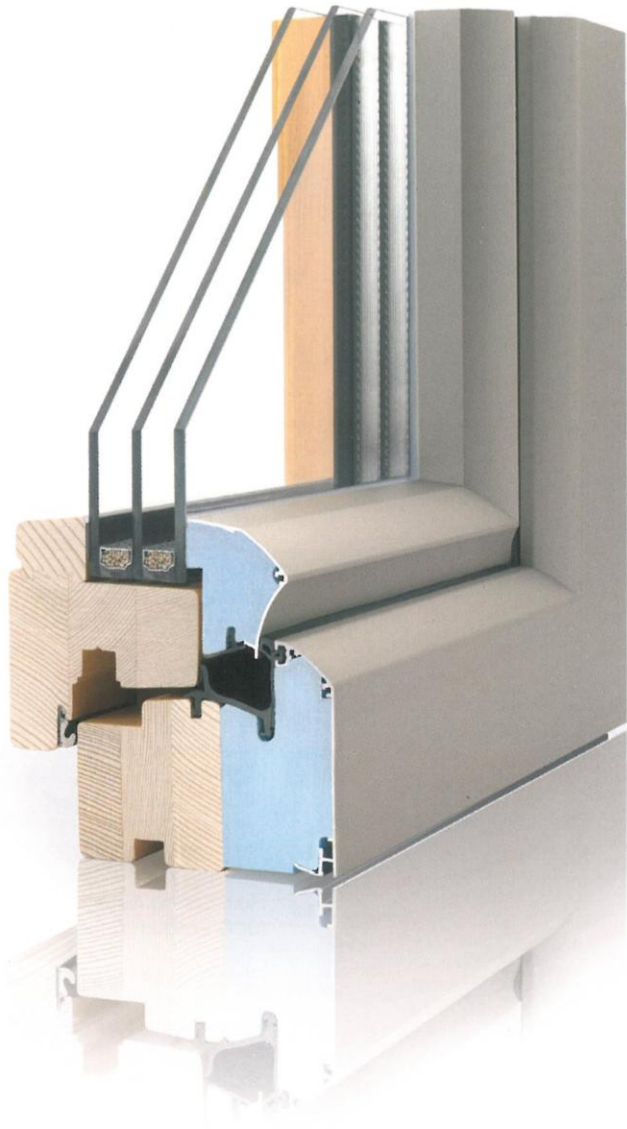
NORTHERN



**SOUTHERN
PLOTS 7-10 ELEVATIONS**



★ - Escape Window
W1 - Joinery references relate to dwg 2865.11

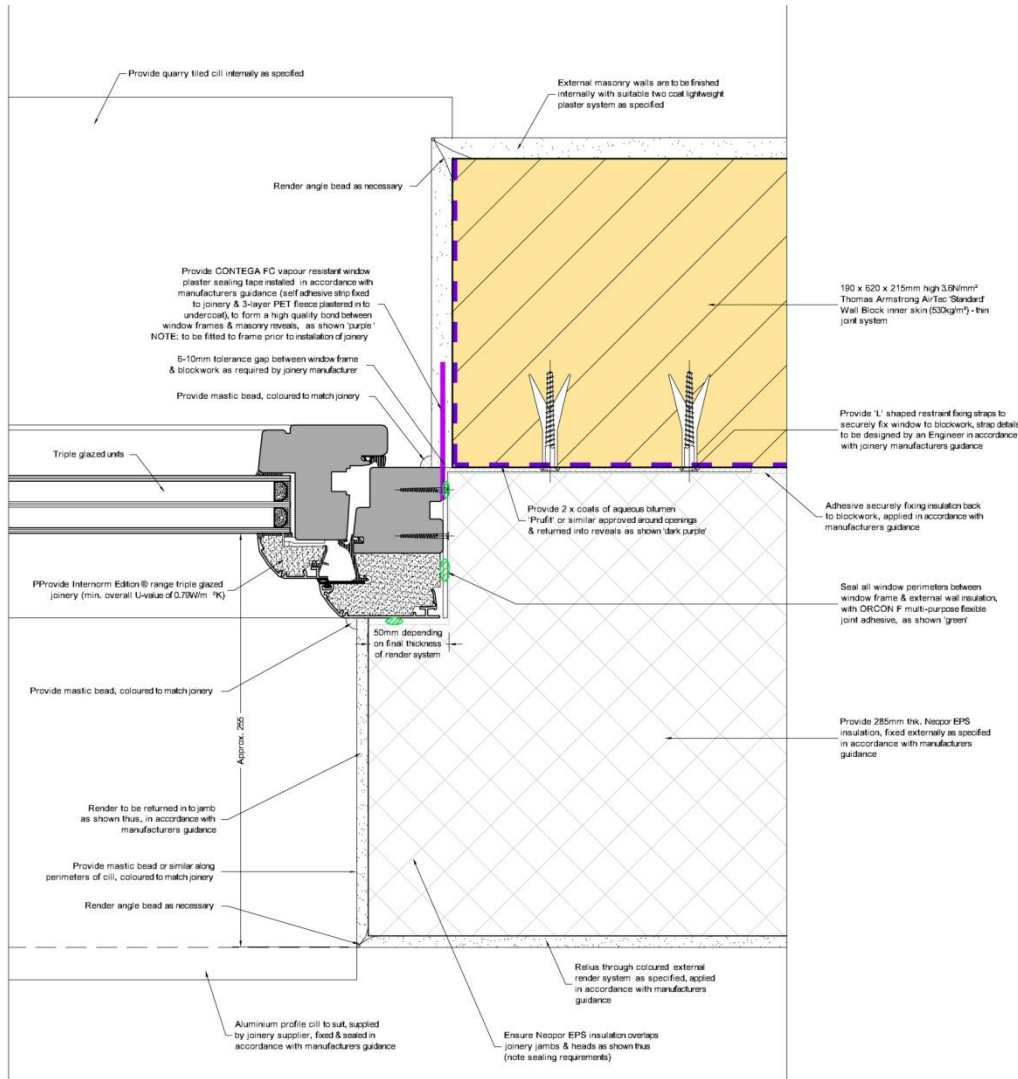


first lift



WHITLEY

wall jamb



JAMB

brise soleil



ventilation

NOVUS 300
UNIVERSAL MECHANICAL VENTILATION
HEAT RECOVERY (MVHR) UNIT
• MADE IN GERMANY •

WITH HUMIDITY
RECOVERY



PASSIVE
HOUSE
certified
COMPONENT
Dr. Wolfgang Faust



Heat recovery:
Heat recovery rate
(effective) 95% / 96.6%^{1,2}
Electric efficiency 0.23 Wh/m³ / 0.24 Wh/m³

¹ results may vary according to the test methods and air volume flow used
² corresponds to at present best values world-wide



LED control unit
Listed in PEHA switch range



colored TFT touchscreen panel

Now for the science bit...

Walls	0.0879 W/m ² /k	0.35 W/m ² /k
Floor	0.07 W/m ² /k	0.25 W/m ² /k
Roof	0.0782 W/m ² /k	0.25 W/m ² /k
Windows	0.79 W/m ² /k	2.2 W/m ² /k

MVHR – 92% efficiency

0.6 Air changes per hour [n50] (approx equal to 0.5 m³/h/m²)

Heating strategy:

Small individual gas boiler and solar thermal to provide heating coil in air inlet and rad/towel rail in bathroom

Large thermal store to avoid cycling and provide DHW



Understand how it works

insulation and air tightness
occupancy and solar gains

Manage the temperature

Use of the windows/shading for heating and cooling
Conserve the heat
Heating added only when required

Maintain the ventilation

Keep the filters clean

And you should have a constantly warm home, with warm surfaces full of clean fresh air for very low running costs.

questions?



WHITLEY



view across public open space

300

