

Building Lilac - Joe Atkinson



05/04/2012: Site cleared



Foundation trenches for blocks 2 & 6



23/05/2012: Strip foundations

Concrete poured into trench (block 4)

Block work sits on top of poured concrete strip (block 3)



10/07/2012 Foundation & sub-floor complete (for most blocks)

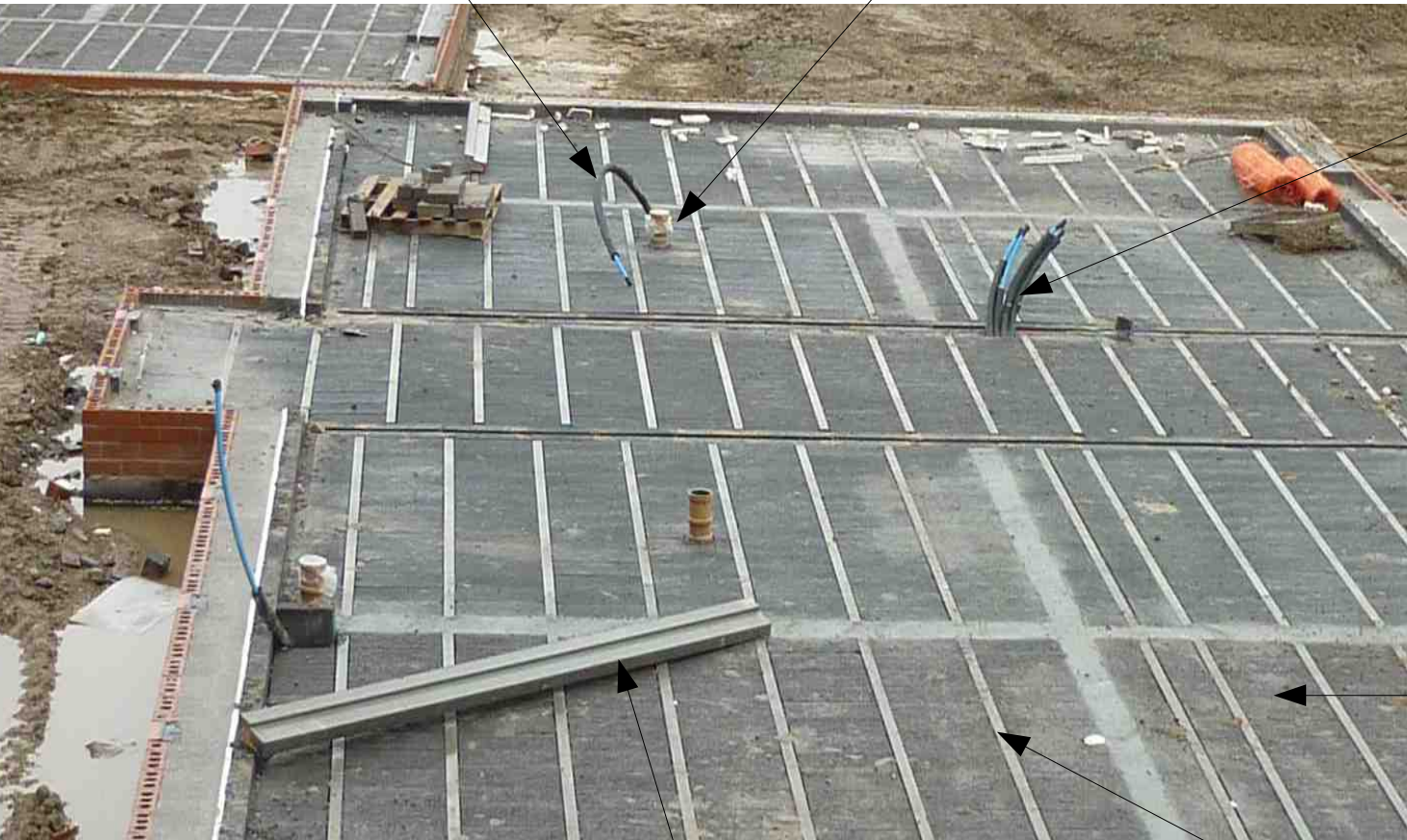


Water supply & sewerage brought through the floor

Ground floor flat water supply

Shared SVP (soil vent pipe)

Water supply to upper flats taken up through service riser in hallway



Concrete blocks sit between beams

“Beam & Block” floor

Reinforced concrete beams

Spare beam on it's side shows section/profile

Top of foundations

Block inner leaf

10mm polystyrene insulation

Poured concrete in cavity

Brick outer leaf



Ventilation under sub-floor



Duct carries air flow from vent (above ground) down to below beam & block sub floor

Vent at top of foundation

17/08/2012 walls



Prefabricated wall panels:
Glu-lam frame engineered in
Austria; assembled, filled with
straw bales & rendered in a “flying
factory” in Dewsbury





Subsequent courses of bales
“knitted together with sharpened
broom sticks

Fork-lift compresses penultimate course of bales to make room for final course.

When forks removed, lower courses spring back up; whole wall panel now under roughly equal compression





Bales straightened and trimmed



A rough coat of render is sprayed onto panel

Damp-proof membrane (DPM)
isolates walls from footings

Timber to form the sole plate



DPM & Sole plate in place



03/09/2012

Wall panel in position:
resting on sole plate (now hidden)
& DPM



06/09/2012

Foam junction between panels:

As timber panels move/shrink, foam will expand to maintain airtightness





Wall penetrations:
Diameter kept to a
minimum to
minimise heat loss

Boiler flue

Gas supply



Interior stud walls from FSC timber & OSB (Orientated Strand Board)

Ground floor: 100mm polystyrene insulation (not enough!), vapour barrier (clear plastic sheet) & concrete screed on top.



12/10/2012 Roof cassette
being craned into position



Ducting for MVHR
(Mechanical
Ventilation with
Heat
Recovery)

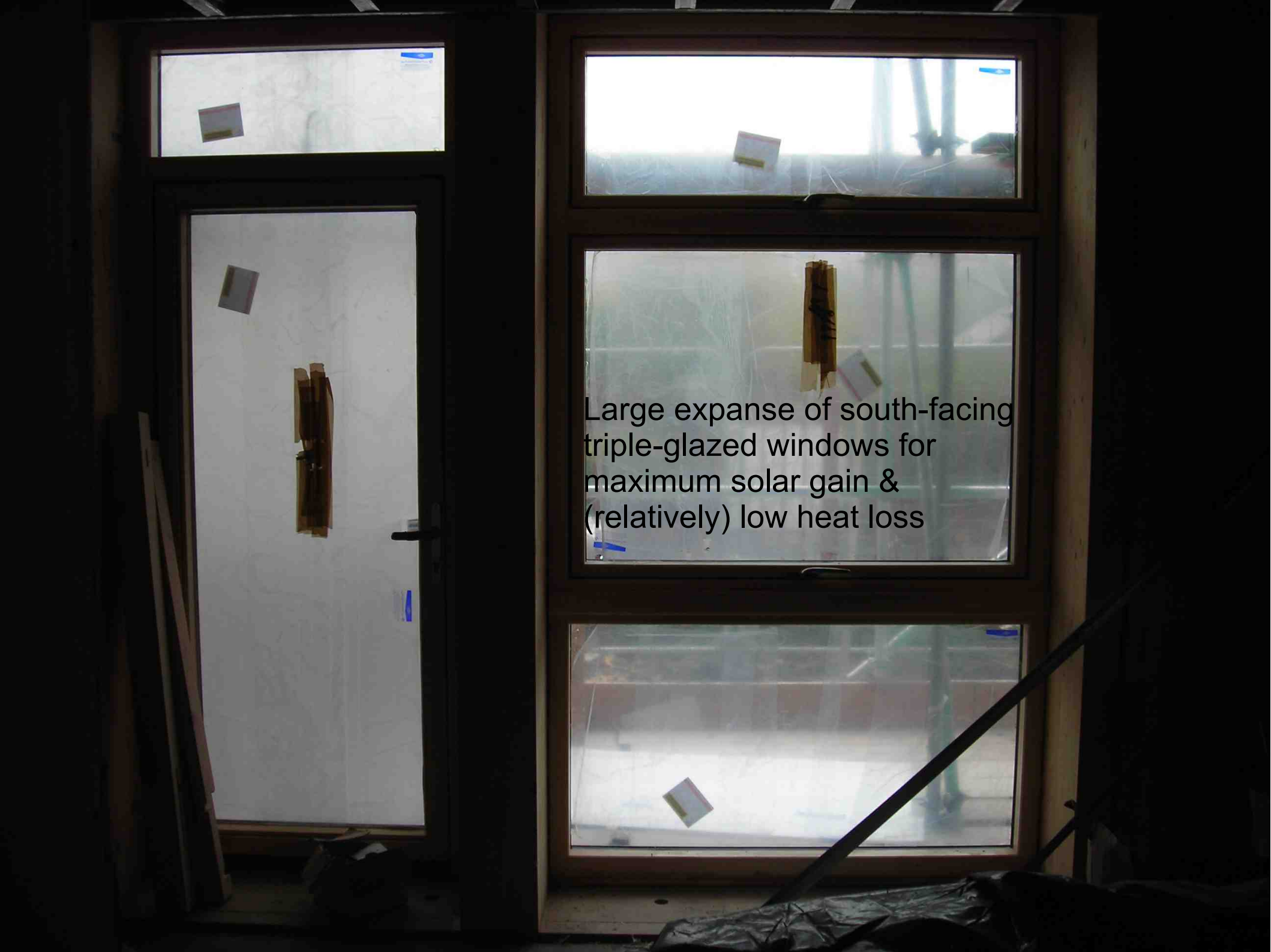
Water for bathrooms &
radiators in PVC pipes
in ceiling void

Mineral wool insulation
in ceilings



Ducting above
MVHR unit
(incorrectly installed)

Gaps in insulation =
heat loss



Large expanse of south-facing triple-glazed windows for maximum solar gain & (relatively) low heat loss

SAINT-GOBAIN
GLASS

SGG PLANITHERM[®] FAMILY



Advanced performance low-E glass



For optimum performance, glaze

The SGG PLANITHERM FAMILY is a range of advanced glass units which can reduce heating bills and help me

ARGONGOLD[®]

ARGONGOLD INSIDE



B.S. EN1279

CUSTOMER NAME Lindum 027917

CUSTOMER ORDER No. 027917

OUR ORDER No. 7190 ITEM 5

ITEM QUANTITY 1 OF 2

TYPE TRIPLE UNIT

CAVITY 101200 TKTK

GLASS SUBSTANCE 6mm Lam+4mm SCoat Tuf
+4mm SCoat Tuf

SIZE 820 x 816

FULLY WELDED - AUTOMATICALLY ARGON GAS FILLED - HIGHER PERFORMANCE -
LONGER LIFE - INSULATED GLASS UNITS

REMOVE LABELS FROM GLASS AFTER INSTALLATION

12/12/2012 Vent Axia Kinetic MVHR/Cooker hood Unit



Solar thermal
(hot water)
system





Standard gas condensing boilers:

Sole water & space heating
strategy in flats

Supplements solar thermal in
houses

Solar P.V. (Photovoltaic)

