



1 Site Location Plan
1 : 500

Outline Proposal

The client wants a multi-generational site to be developed. The site is to be environmentally responsible, cost effective, use renewable energy and be low maintenance. The site comprises of a 420 place Primary school, Nursery/Childcare facility, Café, 70 bed care home and a residential development with a mix of 2 and 3 bedrooms.

For the purpose of this project the carehome block has been chosen to be developed in more detail. The care home is a proposed five-storey building built with a recycled steel frame, reclaimed brick to ground floor, and non-combustible cladding to the upper floors. The site is in a flood zone therefore a recycled steel frame is preferred due to risk of flooding. Reclaimed bricks are proposed to reflect the industrial heritage of the area, especially as the site was once an iron foundry. Cladding is proposed as an alternative to timber because of the height of the building, fire guidelines and low maintenance.

An extensive green roof is proposed to increase the biodiversity of the area and to provide a local habitat for wildlife. Solar panels and rainwater harvesting are proposed to provide renewable energy, reducing the need for fossil fuels.

The site has a lot of green open areas creating enjoyable outdoor spaces to encourage people to spend more time outside. The area is shared between all the buildings in the proposal and the surrounding community making it inclusive. Trees within the proposed development help to take you away from the city into a more relaxing environment. Wildflowers will be planted as well as designated community garden areas for group activities.

The care home has been designed to be as open plan as possible with an atrium to connect to nature whilst staying in a safe environment.

Fire Strategy

Fire escapes are sited on every floor and areas compartmentalised.

Escape signage will be installed to suit the proposed layouts. Safety signage will be provided to all fixed and portable first aid fire-fighting equipment locations, manual call points and any other fire & life safety related equipment and devices.

Emergency lighting will be installed to suit the proposed layouts, designed and installed in accordance with both BS 5266-1 and BS EN 1838.

Assembly points are set away from the buildings. There is access for emergency services either side of the care home and on the opposite side of the site between the school and residential block. Additionally, fire hydrants are located within the centre of the site.

Documents referred to: AD Part B, BS9999, BS EN ISO 7010 and BS 5499-4

Inclusive Design and Access Strategy

This is a multigenerational site and needs to be accessible to all. The site is to be landscaped to provide accessible access to all buildings. The site needs to be clearly signposted and easy to navigate.

The site is currently a storing place for highways items by Leeds City Council. The site needs to be cleared before construction can commence. The area is in a level 2 flood zone.

Documents referred to: AD Part M, BS8300, Equality Act 2010, AD Part B, AD Part K, BS9999.

Additional support may be sought from healthcare professionals dealing with disabilities and health issues which may restrict mobility and inclusivity in the design process.

All the buildings will have lifts to gain access to all floors. All buildings will have accessible WC's. Visual contrasts will be developed between finishes of walls, floors, doors and furniture.

Sustainability

The client CITU prides itself on creating sustainable homes. All developments use 100% renewable energy as well as using materials sourced in the UK as much as is possible, reducing the carbon footprint. CITU is striving towards creating zero carbon cities.

Currently the site holds a lot of excavated ground fill. These bunds can be reused to help level the site.

Sustainable materials and renewable energy will be used on site as well as using rainwater harvesting systems and green roofs.

Documents referred to: AD L, AD F, Strategic environmental assessment and sustainability appraisal.



Proposed axonometric view from North West



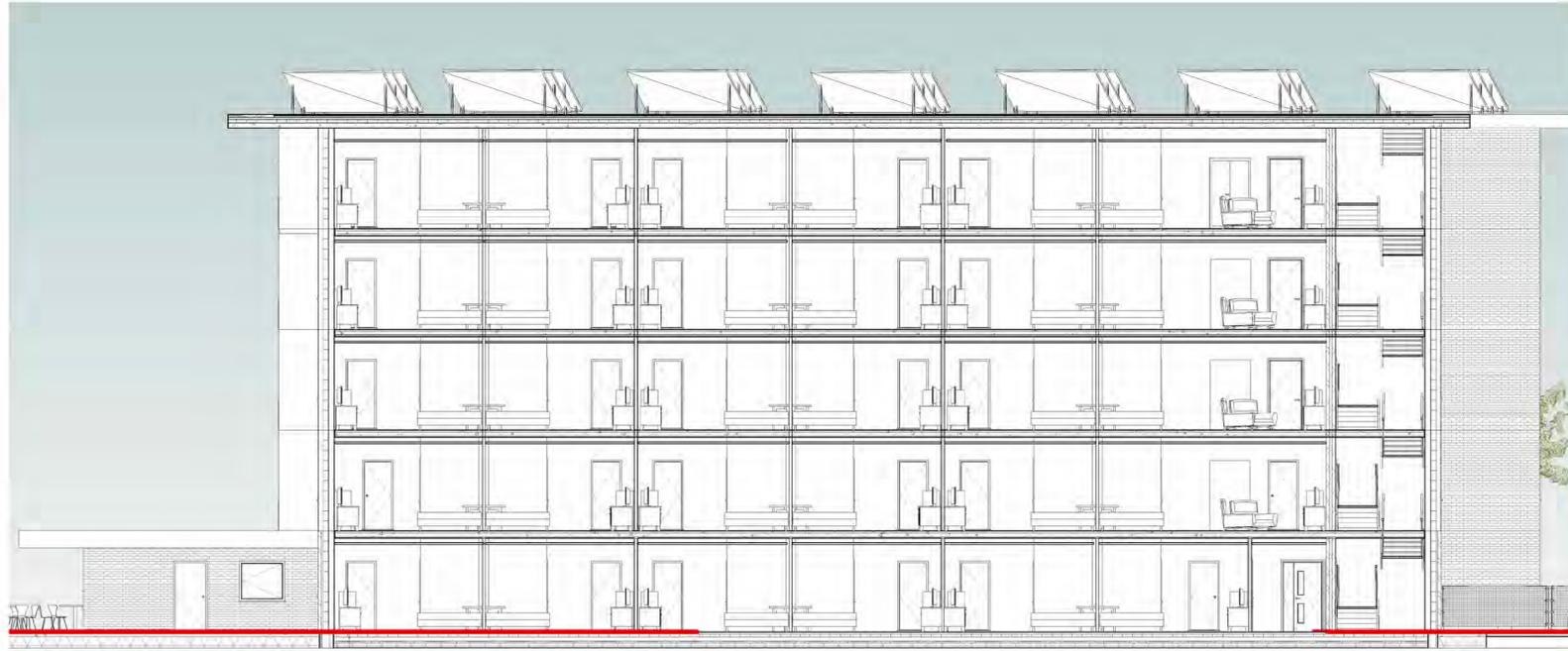
Proposed axonometric view from South West



View of communal landscaping

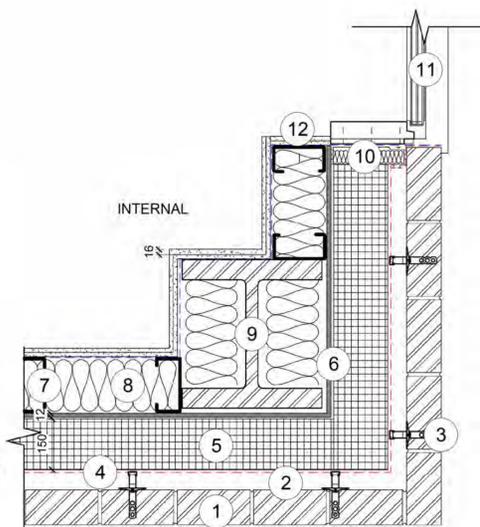


View of external cafe and care home



1 Proposed Section AA - Dependent 2
1 : 100

- 1 Brick:
215 x 103 x 65 mm Potsdam Blue Brick (Class B), Blue-grey softly shaded
Water absorption <= 6% m/md.
In accordance with Approved Doc A.
- 2 Air gap 50mm
- 3 Wall ties:
150mm Ancon SD25 Stainless Steel Wall ties SD25/150
fixed to 300 x 25 x 14mm Ancon 25/14 Stainless Steel Channel at 600ctrs with
180mm HTSS-180-2PT-W stainless steel fixing screws. Vertical tie spacing at 300ctrs.
Compliant with BSEN 845-1.
- 4 Breather Membrane
100m x 1.4m Roll Tyvek Housewrap Breather Wall Membrane from DuPont.
Fix at 500mm ctrs with Tyvek® Acrylic Tape (2060B).
- 5 Rigid Insulation:
150 x 2400 x 1200 Xtratherm PIR Rigid Insulation Board
Thermal Conductivity: 0.022W/mK
R-Value: 6.82m2K/W
Surface Spread of Flame: Class 1
Water vapour resistivity: 100MN.s/g.m
Compliant with Approved Doc L
- 6 Cement Particle Board:
12 x 1200 x 2400mm Cempanel Cembrit Cement particle board fixed to C Studs with
39mm Knauf Aquapanel Maxi Screws SN39.
R-Value: 0.1m2K/W
Fire Rating (Reaction to Fire): B(Class 0)
Fire Protection (Resistance to Fire): 60minutes
Sound performance: 31dB
Cempanel provides a certified fire resistance: it is classified as Class O material passing
the 1 hour and 2 hours fire rating test according to BS 476 Part 6, 7 and 22.
- 7 C Studs:
150mm SFS Stud 6000mm x 2mm @ 400 ctrs finished with 2 layers of 12.5mm
plasterboard and skim. Painted with 2 layers of emulsion paint RAL 9016.
BS 5950-5
- 8 Insulation:
150mm x 370mm Sheeps Wool Insulation CosyWool by Thermafleece fitted snugly
between C studs
Thermal Conductivity: 0.039 W/mK.
Compliant with Approved Doc E, achieves airborne sound reduction of Rw = 40dB.
- 9 Steel Column:
356 x 406 x 467 Universal recycled steel column to engineers specification
Compliant with approved Doc A. Steel work to be coated with intumescent paint in
accordance with NBS-M61
- 10 Cavity Closer:
90-100mm Timloc BBA Insulated Cavity Closer.
Compliant with Building Regulations Part C, Part L, and Part B



Red broken line denotes Breather membrane
Blue broken line denotes VCL

Plan Level 0 Callout 1

- 11 External Door:
1010 x 2110mm Aluminium External Visofold 1000 Door and surround
in graphite grey with level threshold. Triple glazed.
U Value of 1.5W/m2K
Compliant with Approved Doc L.
- 12 Vapour Control Layer:
Tyvek® AirGuard Reflective Breather Membrane 1500mm x 50000mm.
Vapour control layers should be fixed at 250mm centres to the top and
bottom of the frame, at laps and around openings. Lap around DPC. VCL
membranes should achieve a minimum of combustibility class B-s3, d0 in
accordance with Approved Doc B Vol 2.

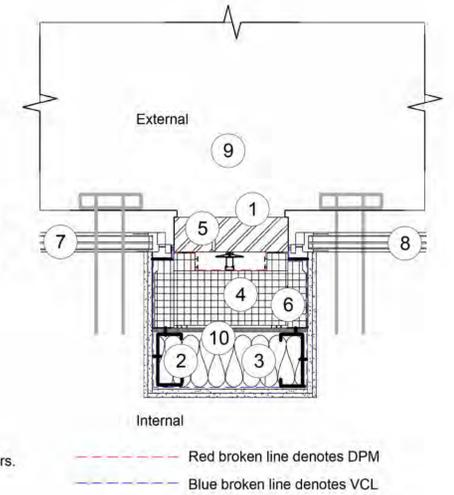
2 Ground Floor Plan Detail 1
1 : 10

- 1 Brick:
215 x 103 x 65 mm Potsdam Blue Brick, Blue-grey softly shaded.
Brick width of 338mm including 3 x 10mm mortar gaps.
Mortar mix 1:6 cement:sand above DPC.
Water absorption <= 6% m/md.
In compliance with Approved Doc ...
- 2 C Studs:
150mm SFS Stud 6000mm x 2mm @ 400 ctrs finished
with 2 layers of 12.5mm plasterboard and skim.
Painted with 2 layers of emulsion paint RAL 9016.
BS 5950-5
- 3 Insulation:
150mm x 370mm Sheeps Wool Insulation CosyWool by Thermafleece fitted snugly
between C studs
Thermal Conductivity: 0.039 W/mK.
Compliant with Approved Doc E, achieves airborne sound reduction of Rw = 40dB.
- 4 Rigid Insulation:
150 x 2400 x 1200 Xtratherm PIR Rigid Insulation Board
Thermal Conductivity: 0.022W/mK
R-Value: 6.82m2K/W
Surface Spread of Flame: Class 1
Water vapour resistivity: 100MN.s/g.m
In compliance with Approved Doc L
- 5 Wall ties:
150mm Acon SD25 Stainless Steel Wall ties SD25/150
fixed to 300 x 25 x 14mm Ancon 25/14 Stainless Steel Channel at 600ctrs with
180mm HTSS-180-2PT-W stainless steel fixing screws. Vertical tie spacing at 300ctrs.
Compliant with....
- 6 Cavity Closer:
90-100mm Timloc BBA Insulated Cavity Closer.
Compliant with Building Regulations Part C, Part L, and Part B
- 7 Windows:
910mm x 1210mm Top Hung Alitherm 600 Window in Graphite Grey,
Triple Glazed.
Compliant with.....
- 8 Patio Door:
1810mm x 2110mm Visoglide Plus Sliding Patio with triple glazing
in graphite grey.
U Value of 1.6W/m2K
Compliant with Approved Doc L.
- 9 Balcony Screen, floor and fittings:
BalcaSmart™ Aluminium cantilever steel bolt-on balcony fitted with 20mm low
profile anti slip decking board in RAL 7016.
Installed as per manufacturers details.
Compliant with BS 7976-2:2002, Approved Doc B2. Schedule 1 B4

4 Ground Floor Plan Detail 2
1 : 10

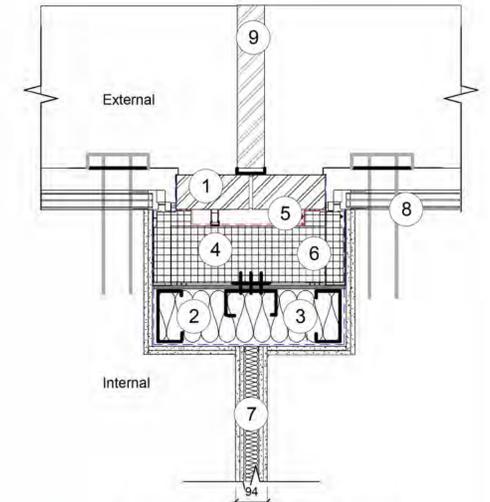
- 1 Brick:
215 x 103 x 65 mm Potsdam Blue Brick, Blue-grey softly shaded
Water absorption <= 6% m/md.
In compliance with Approved Doc ...
- 2 C Studs:
150mm SFS Stud 6000mm x 2mm @ 400 ctrs finished
with 2 layers of 12.5mm plasterboard and skim.
Painted with 2 layers of emulsion paint RAL 9016.
BS 5950-5
- 3 Insulation:
150mm x 370mm Sheeps Wool Insulation CosyWool by Thermafleece fitted snugly
between C studs
Thermal Conductivity: 0.039 W/mK.
Compliant with Approved Doc E, achieves airborne sound reduction of Rw = 40dB.
- 4 Rigid Insulation:
150 x 2400 x 1200 Xtratherm PIR Rigid Insulation Board
Thermal Conductivity: 0.022W/mK
R-Value: 6.82m2K/W
Surface Spread of Flame: Class 1
Water vapour resistivity: 100MN.s/g.m
In compliance with Approved Doc L
- 5 Wall ties:
150mm Acon SD25 Stainless Steel Wall ties SD25/150
fixed to 300 x 25 x 14mm Ancon 25/14 Stainless Steel Channel at 600ctrs with
180mm HTSS-180-2PT-W stainless steel fixing screws. Vertical tie spacing at 300ctrs.
Compliant with....
- 6 Cavity Closer:
90-100mm Timloc BBA Insulated Cavity Closer.
Compliant with Building Regulations Part C, Part L, and Part B
- 7 Internal Light Steel Wall:
70mm x 3600mm x 1.2mm SFS Stud fixed to 74mm SFS Base Track 3000mm x 70mm
x 2mm with 19mm SFS Pan Head Tek Screw. Filled with 70mm x 370mm Thermafleece
NatraHemp Insulation Slabs fitted snugly between C studs.
Thermal Conductivity: 0.040 W/mK.
Compliant with Approved Doc E, achieves airborne sound reduction of Rw = 40dB.
- 8 Windows:
910mm x 1210mm Top Hung Alitherm 600 Window in Graphite Grey,
Triple Glazed.
Compliant with Approved Doc L2 and K.
- 9 Balcony Screen, floor and fittings:
BalcaSmart™ Aluminium cantilever steel bolt-on balcony fitted with 20mm low
profile anti slip decking board in RAL 7016.
Installed as per manufacturers details.
Compliant with BS 7976-2:2002, Approved Doc B2. Schedule 1 B4

3 Ground Floor Plan Detail 3
1 : 10



Plan Level 0 Callout 2

- 10 Cement Particle Board:
12 x 1200 x 2400mm Cempanel Cembrit Cement particle board fixed
to C Studs with 39mm Knauf Aquapanel Maxi Screws SN39.
R-Value: 0.1m2K/W
Fire Rating (Reaction to Fire): B(Class 0)
Fire Protection (Resistance to Fire): 60minutes
Sound performance: 31dB
Cempanel provides a certified fire resistance: it is classified as Class
O material passing the 1 hour and 2 hours fire rating test according
to BS 476 Part 6, 7 and 22.



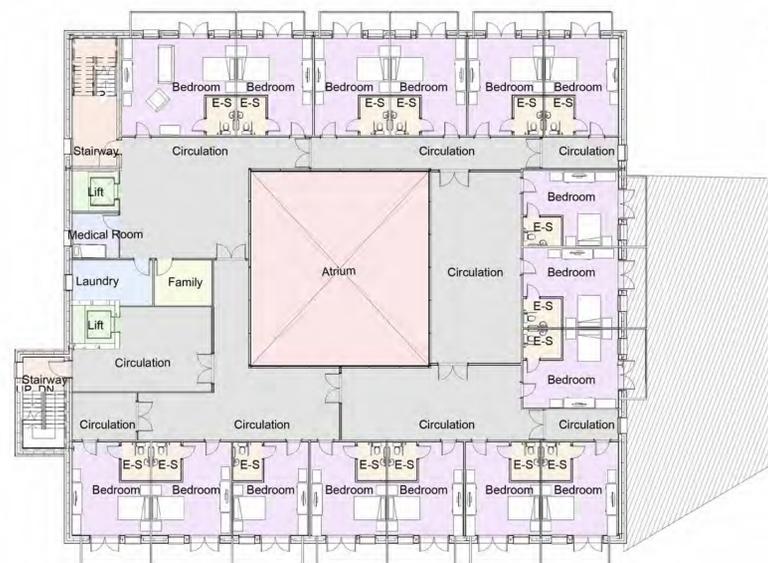
Red broken line denotes Breather Membrane
Blue broken line denotes VCL

Plan Level 0 callout 3

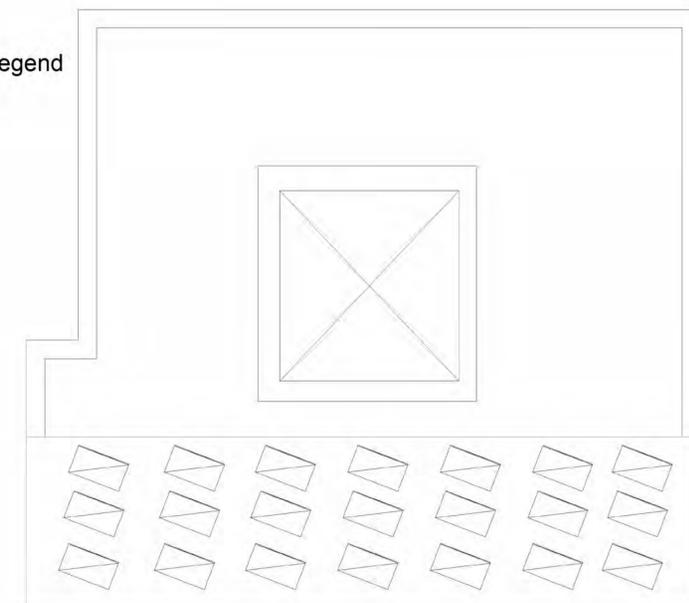
- 10 Cement Particle Board:
12 x 1200 x 2400mm Cempanel Cembrit Cement particle board fixed to C
Studs with 39mm Knauf Aquapanel Maxi Screws SN39.
R-Value: 0.1m2K/W
Fire Rating (Reaction to Fire): B(Class 0)
Fire Protection (Resistance to Fire): 60minutes
Sound performance: 31dB
Cempanel provides a certified fire resistance: it is classified as Class O
material passing the 1 hour and 2 hours fire rating test according to BS 476
Part 6, 7 and 22.



1 Proposed Ground Floor Plan
1 : 200



2 Proposed First Floor Plan
1 : 200



6 Proposed Roof Plan
1 : 200



4 Proposed North Elevation
1 : 200



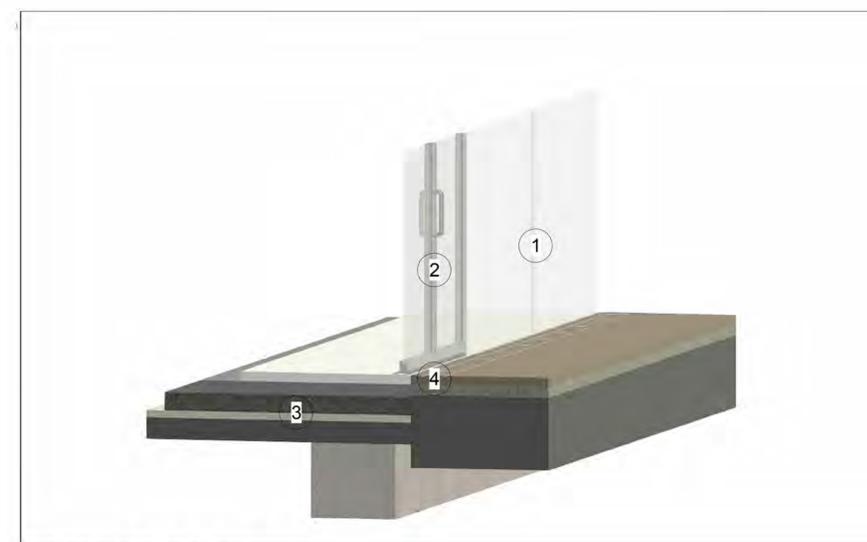
3 Proposed East Elevation
1 : 200



5 Proposed South Elevation
1 : 200



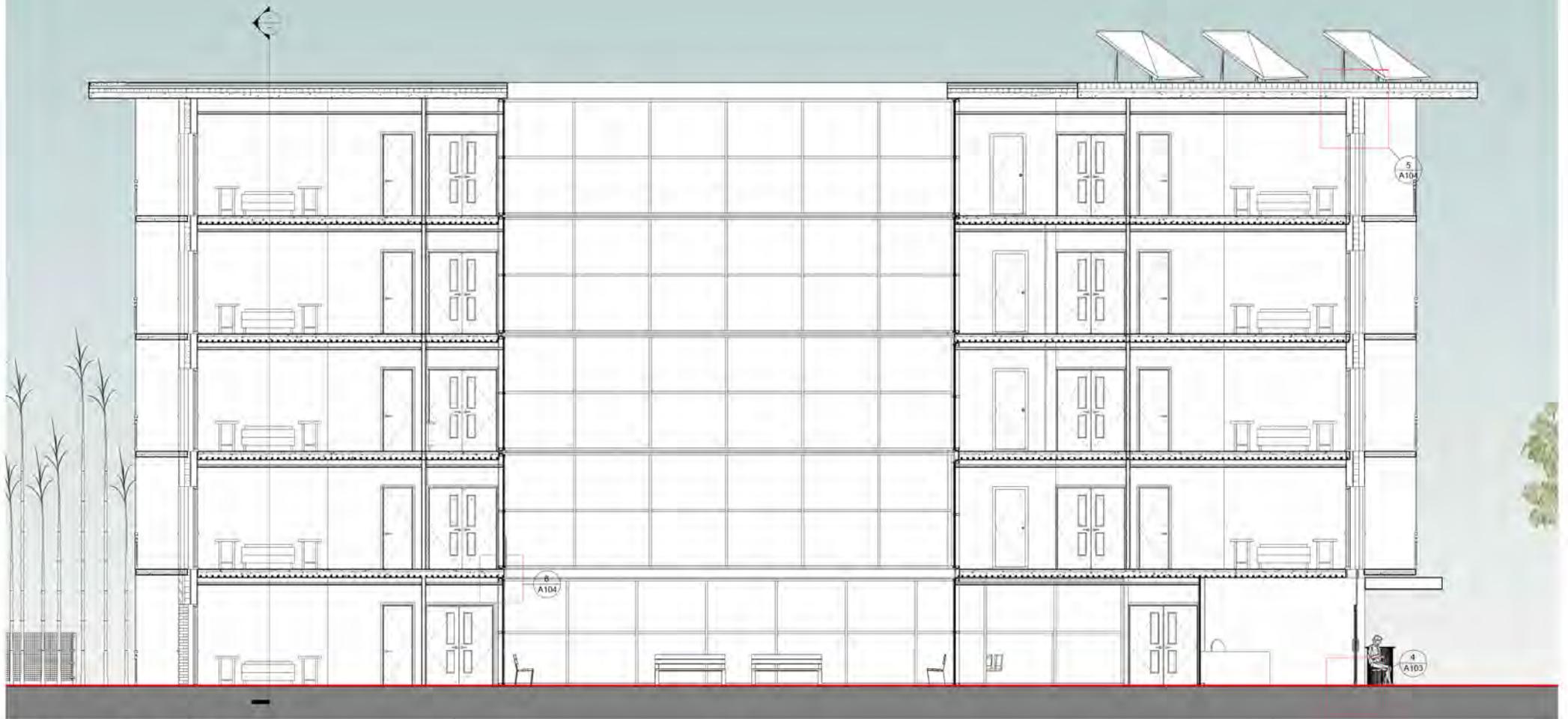
7 Proposed West Elevation
1 : 200



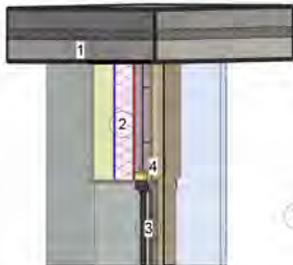
8 Callout 4 3D Detail

- 1 Aluminium Curtain Wall Mullion:
Fitted with triple glazing and in accordance with manufacturers guidance,
Complies with EN 1364-3 fire standard and Approved Doc B Vol 2.
Thermal capacity of min 0.61 W/m2k.
- 2 Aluminium External door:
Kawneer AA®190 TB Commercial Door. Compliant with Document M, L
and K. BS EN 14351. U Values of 1.7 W/m2K
- 3 Ground floor construction:
65mm cement screed
Vapour Control Layer:
Tyvek® AirGuard Reflective Breather Membrane 1500mm x
5000mm. Compliant with Approved Doc B Vol 2.
100mm rigid Xtratherm XT/UF insulation (U-value 0.15 W/(m 2/K)
EN ISO:6946.
125mm concrete base
- 4 Galvanised steel grating and ductile piped to
soakaway.

- Sheetseal 226 Damp Proof Membrane
BS8102:2009
- 50mm sandblinding and 150 clean hardcore as per
AD C 4.7(a).
- Ground ring beam with reinforcement designed
by engineer



1 Proposed Section BB
1:50

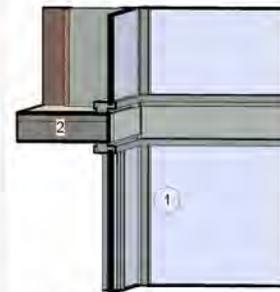


2 Callout 5 3D Detail

- 1 Flat Roof:**
SikaBilt® PRO SA-940 G 4 mm elastomeric and plastomeric bituminous hybrid roof membrane, self-adhesive with a mineral granule finish. 6m x 1m compliant with EN 13707 - Reinforced bitumen sheets for roof waterproofing.
- TR26 Flat Roof Insulation Board by Kingspan Thermafoam 2400mm x 1500mm x 1200mm
Thermal conductivity 0.022 W/mK
- Vapour Control Layer:
Tyvek® AirGuard Reflective Breather Membrane 1500mm x 50000mm. Compliant with Approved Doc B Vol 2
- 150mm concrete deck with an 83mm screed layer and min 2% fall. Approved Doc A.
- Finished with 2 layers of gypsum wall board, staggered at joints and skim.
- 2 External Wall**
SFS
150mm SFS C Studs 6000mm x 2mm @ 400 ctrs designed as per BS EN 1993-1-1. All tracks should be fixed to the floor and ceiling in the middle of the profile at 600mm centres with suitable fixings and finished with 2 staggered layers of 12.5mm gyproc wallboard and skim fixed each side with proprietary fixings as per Approved Doc E. Painted with 2 layers of emulsion paint RAL 9016. BS 5050-5.

- External Cladding:
COULONE (flex) cladding boards conform to the requirements of EN 12467:2012, 12mm x 3100 x 1250mm, thermal conductivity 0.40/W/mK fixed to SFS frame with SFS TUF-S anker.
- Air gap 50mm
- Breather Membrane:
100m x 1.4m Roll Tyvek Housewrap Breathable Wall Membrane from DuPont. Fix at 500mm ctrs with Tyvek® Acrylic Tape (20808).
- Rigid Insulation:
150 x 2400 x 1200 Xtratherm PIR Rigid Insulation Board
Thermal Conductivity 0.022W/mK
R-Value 6.82m2K/W
Surface Spread of Flame: Class 1
Water vapour resistivity: 100MN s/g.m
Compliant with Approved Doc L
- Cement Particle Board:
12 x 1200 x 2400mm Companel Cembral Cement particle board fixed to C-Studs with 39mm Knauf Aquapanel Max Screws SN39
R-Value: 0.1m2K/W Fire Rating (Reaction to Fire): B(Class 0) Fire Protection (Resistance to Fire): 60minutes
Sound performance: 31dB
Companel provides a certified fire resistance: it is classified as Class 0 (no lateral passing) the 1 hour and 2 hours fire rating test according to BS 476 Part 6, 7 and 22.

- Insulation:
150mm x 370mm Sheeps Wool Insulation CosyWool by Thermocease fitted snugly between C studs. Thermal Conductivity: 0.039 W/mK. Compliant with Approved Doc E, achieves airborne sound reduction of Rw = 40dB
- Vapour Control Layer:
Tyvek® AirGuard Reflective Breather Membrane 1500mm x 50000mm. Vapour control layers should be fixed at 250mm centres to the top and bottom of the frame, at laps and around openings. Lap around DPC. VCL membranes should achieve a minimum of combustibility class B-s3, d0 in accordance with Approved Doc B Vol 2
- Balcony Screen, floor and fittings:
BaicaSmart™ Aluminium cantilever steel bolt on balcony with Privacy Screen. Installed as per manufacturers details. Compliant with BS 7976-2:2002, Approved Doc B2, Schedule 1 B4.
- 3 Windows:**
910mm x 1210mm Top Hung Altherm 600 Window in Graphite Grey, Triple Glazed. U Value of 1.3W/m2K. Compliant with Approved Doc L.
- 4 Cavity Closer:**
90-100mm Tintec BBA Insulated Cavity Closer. Compliant with Building Regulations Part C, Part L, and Part B.



3 Callout 6 3D Detail

- 1 Aluminium Curtain Wall Mullion:**
Fitted with triple glazing and in accordance with manufacturers guidance. Complies with EN 1364-3 fire standard and Approved Doc B Vol 2 and L. Thermal capacity of min 0.61 Wm2K.
- 2 Intermediate Floor:**
Hollowcore Floor. 150mm x 1200mm slabs with tie void between the hollowcore unit and the steel beam filled with C25/30 grade concrete. Complies with all relevant standards and manufactured in accordance with BS EN ISO 9001 and BS EN ISO 14000.

4 A103

5 A104

B A104