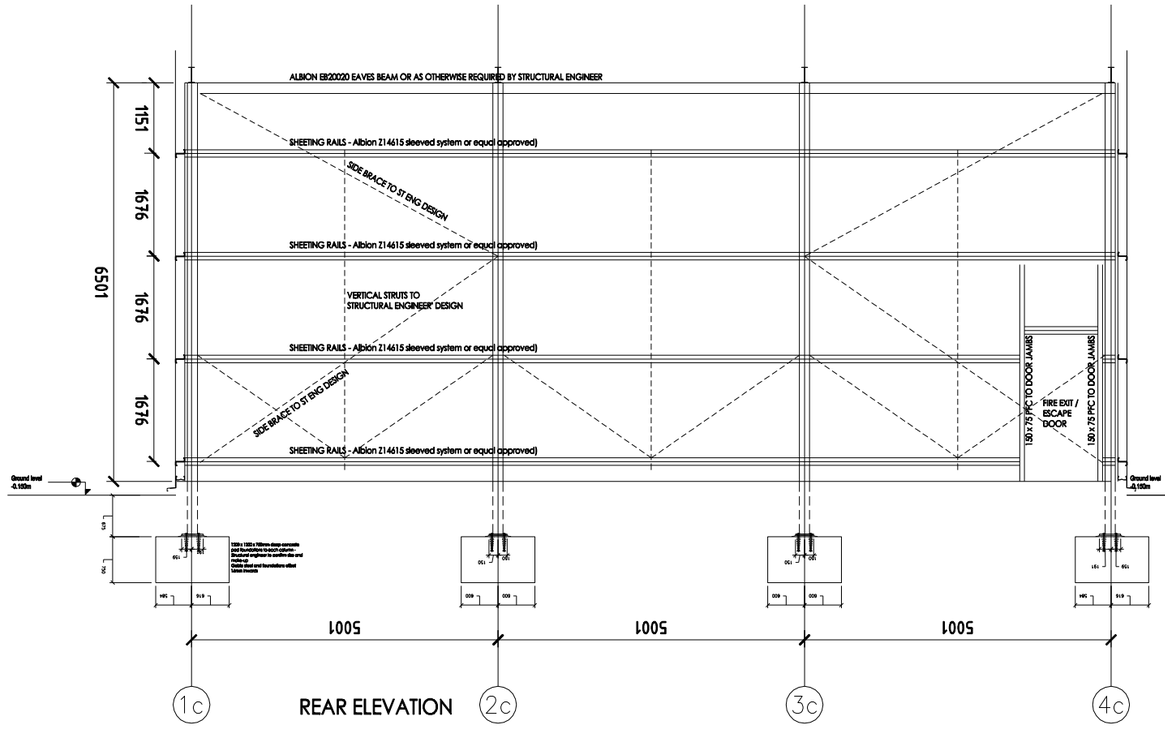
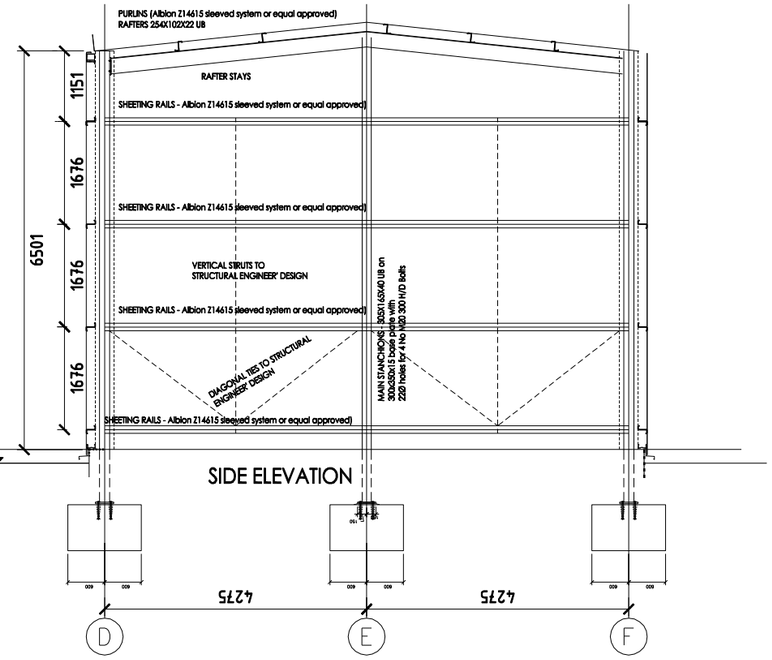


REAR ELEVATION



SIDE ELEVATION

FOUNDATIONS
1200 X 1200 X 750mm deep mass concrete pad foundations to each stanchion - all to Structural Engineer' specification and design
Gable steel and foundations offset 16mm inwards

STRUCTURE
Gable Stanchions:
254 x 146 x 31 UB set on base plate 300 x 350 x 15 with 2329 holes with 4 No M20x300 HYD bolts
Main (Intermediate) Stanchions:
305 x 165 x 40 UB set on base plate 300 x 300 x 15 with 2329 holes with 4 No M20x300 HYD bolts
Structure to incorporate Rafter stays and ridge gusset plates as indicated

FLOOR CONSTRUCTION
175mm min thick concrete slab with 1 layer A193 reinforcement laid on
100mm oversite Insulation - Kingspan thermaltoar TP70 or equal approved on
1200 gauge oversite DPM on
50mm min sand blinding on
150mm minimum hardcore
Slab to thicken to 450mm minimum beneath perimeter wall
Dimensions to be confirmed by Structural engineer and to provide a minimum U-Value of 0.25W/msq. K

ROOF CLADDING
100mm Kingspan K51000RW to provide a minimum U-Value of 0.25W/sq.m K
Cladding laid on purlins (Albion Z14615 sleeved rail system or equal approved)

WALL CLADDING
800mm Kingspan K51000RW to provide a minimum U-Value of 0.35W/sq.m. K
Cladding fixed to (Albion Z14615 sleeved sheeting rail system or equal approved)

WINDOWS/ DOORS
UPVc thermally broken double glazed with 16mm minimum air gap (Low E, En = 0.2) to provide a minimum U-Value of 2.2 W/sq.m. K
Glazed and part glazed doors to be fitted with laminate toughened glass to comply with BS 6206 / 1981
Main entrance doorway to incorporate level threshold

SERVICE DOORS
3.6m high X 3.6m wide Sectional Insulated doors to provide a minimum U-Value of 1.5 W/sq.m. K

FLASHINGS / SEALS
All flashings to be as per Kingspan standard detail sheets
All seals to be as per Kingspan standard detail sheets and in compliance with current Building Regulations

STORM WATER DRAINAGE
0.7mm thick PM Gutter double sided plastisol coated as Kingspan standard details with all necessary support brackets to discharge via 4 No 100mm Ø aluminium downpipes to trapped gulleys to connect to 150mm Ø PVC drains laid to minimum falls 1 in 60 to existing (site) surface water drainage system
Pipes to be surrounded in pea gravel or weak mix concrete where subjected to vehicular traffic

FOUL DRAINAGE
100mm Ø UPVc foul drains laid to minimum falls 1 in 40 to connect into existing (site) foul drainage
Pre-cast concrete inspection chambers with heavy duty galvanised steel double seal covers with strong mortar benching, slow bends
SVP as noted 100mm Ø UPVc with bird proof vent at top terminating minimum 750mm above eaves line
Waste(s) to handbasin(s) to be 38mm with 75mm Ø bottle traps via back inlet gulleys
Waste(s) to sinks(s) to be 40mm with 75mm Ø bottle traps via back inlet gulleys
Wastes to WCs to be 100mm Ø - All in UPVc

DISABLED ACCESS WC
To comply with Diagram 18 Section M1 / M3 of current building Regulationsinlet gulleys

INTERNAL WALLS
100mm thick medium density block walls finished fairfaced to receive decoration by others

PERIMETER WALLS
2250mm high x 100mm thick medium density block walls finished fairfaced to receive decoration by others with 20mm thick natural finish hemiculux board countersunk and predrilled and pluggged and screwed to top of block wall to seal cavity - Junction with cladding sealed using two part poly sulphide mastic
Blockwork built off DPC on RC slab and lapped over over-site DPM
Blockwork tied back to structural steel using ANCON PPB S/S sliding anchors complete with de-bonding sleeves 125mm long drilled to columns using 6mm Ø sold tapping screws or similar approved all at 750mm centres vertically

WATER HEATING
Each hand basin to have individual instantaneous electric hot water supply

VENTILATION TO WC
To have mechanical extract fans providing minimum 6l/s per WC per hour electrically linked to light switch with 20 minute over-run

HEATING
Gas or oil fired hot air heating system installed by specialist contractor with certification to comply with requirements of current A doc Part J and Part M

SMOKE DETECTION / FIRE ALARMS
Smoke detection, position of automatic fire deatection and alarm systems to comply with BS 5839-1 2013

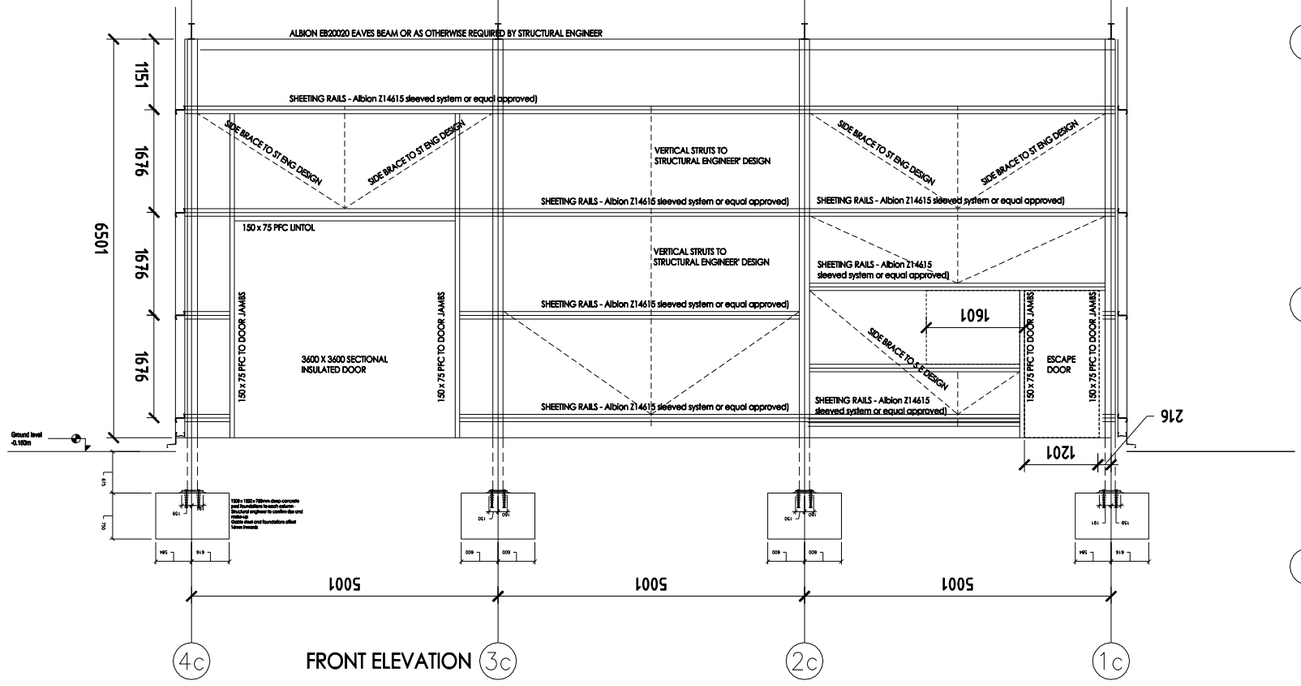
DISABLED ACCESS
Internal doors 826mm wide door sets (1000mm wide to disabled access WC) to comply with Current A Doc Part M

FIRE RATING
Internal doors to be ½ hour fire rated doors complete with smoke seals, self closers and vision panels to comply with Current A Doc Part B

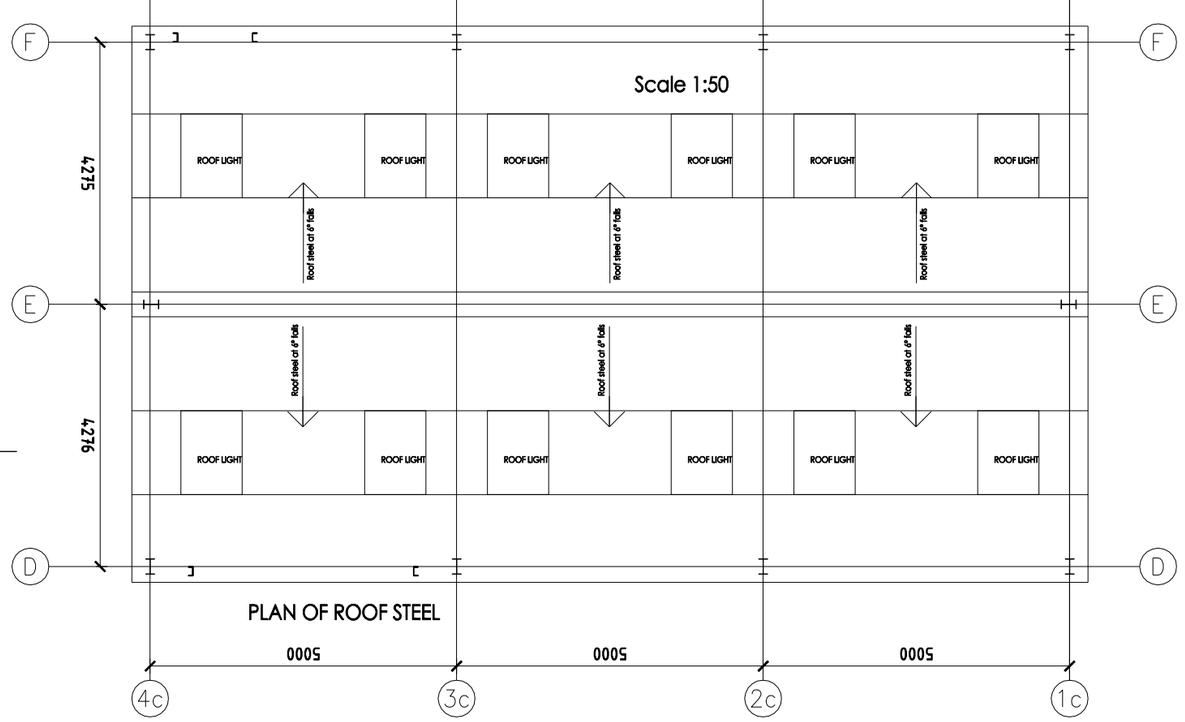
FIRE EXITS
Fire exits to exterior grade doors and frames fitted with panic latches over-riding any locking devices
Fire exit signs to comply with BS 5499-4 2000 (Health and Safety signs and Signals)

EMERGENCY LIGHTING
Positions of emergency lighting to comply with BS 5266.1 2011

STRUCTURAL DETAILS AND CALCULATIONS
For details and calculations refer to design sheets 1-31 Ref Windmill Estate, Barry



FRONT ELEVATION



PLAN OF ROOF STEEL

This drawing to be read in conjunction with all specifications and all other consultants design information. Any contradictions between this drawing and any other design information to be advised to the contract adminstrator and author immediately

The contractor to site measure, check and verify all information issued, and confirm the correctness of the contents prior to the commencement on site.

The contractor to comply with all current statutory legislation, Building Regulations, British Standards, and good building practice.

Do not scale from this drawing.

Mitigation Measures as recommended by Sanderson Associates (Consulting engineers) Ltd's report dated13 November 2014
Any proposed development that has the potential to change the flood mechanisms on a site is to be designed such that there is no increased flood risk to the site itself, or sites upstream and downstream of the development.
Any critical plant or water sensitive stored goods within the site should be raised to a minimum of 600mm above the finished floor level of the proposed units where practicable to do so.
The floor slab of the unit and internal walls up to 600mm above slab level should be sealed with a treatment that will prevent the leaching of flood waters. This will assist in the cleaning of the units should a flood event occur.
Drains within the limits of the site should be regularly inspected and cleared wherever necessary to reduce the risk of blockages and subsequent flooding.
A flood evacuation plan should be provided for the site staff. The flood evacuation plan should include the following information for the current occupiers and must be passed onto any subsequent occupiers to ensure continuity as far as is practicably possible:
- How to register for 'Flood Warnings Direct', a free NRW service which provides flood warnings to each registered member by selected media such as telephone, email, text message which is tailored to each registered members requirements.
- What the different flood codes mean for the property when issued by the NRW (Natural Resources Wales) and what actions to take.
- Confirmation on what the sources of flood risk are to the property
- Confirmation of escape routes from the site should evacuation be attempted
- Advice on what to include in the flood kit
- Useful contact numbers if required.

Client:	Windmill Property Development
	Units 11 and 12
Title:	UNIT 12 - PROPOSED STRUCTURE
Scale:	1 : 50 @ A1
Date:	April 2014
Drawing No:	A 012 Revision: A