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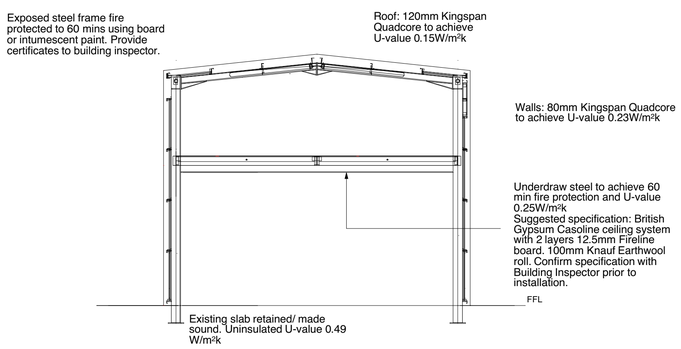
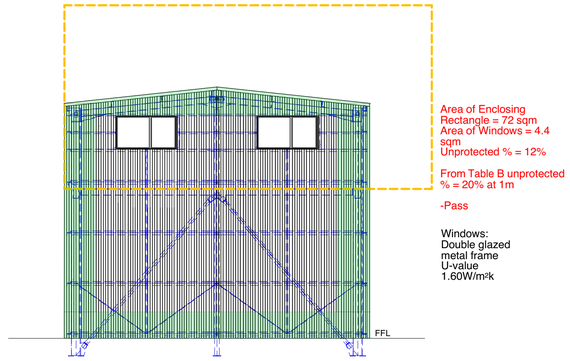
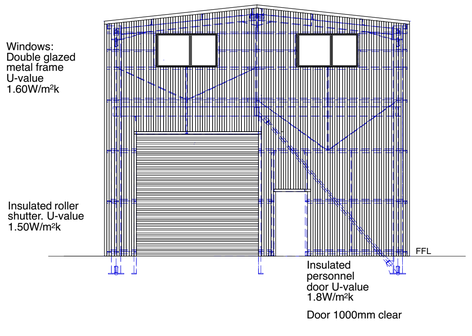


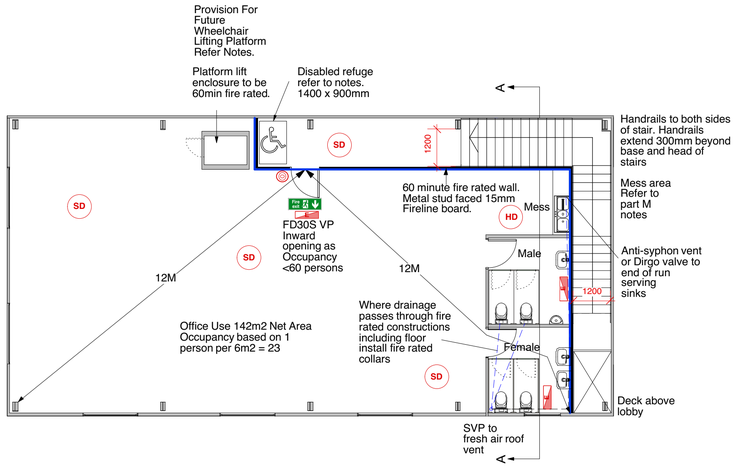
Section A-A



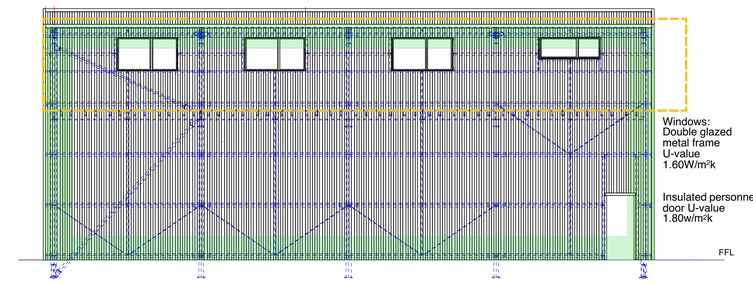
Elevation A



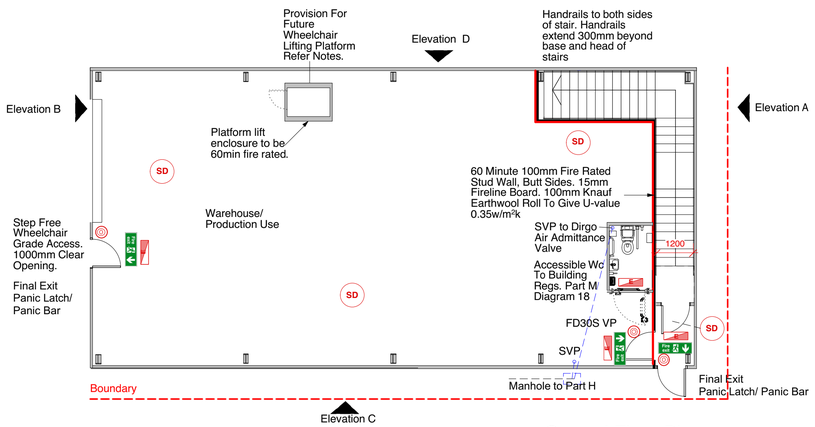
Elevation B



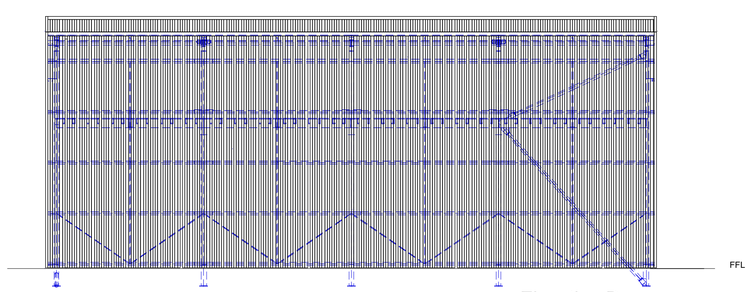
Open Plan Office
1st Floor



Elevation C



Ground Floor Plan



Elevation D

BUILDING REG NOTES

Part A: Structure:

Refer Structural Engineer detail.

Part B: Fire Safety:

Fire Protection: Steel frame fire protected to 60 minutes fire protection using either board or intumescent paint. Provide certification to Building Inspector to confirm fire protection standards achieved.

Compartmentation: 60 minute fire protection between ground and first floor and around staircase as noted on drawing.

Fire doors: FD30S doors complete with vision panel, Part M compliant.

Travel distance: Refer drawing.

Fire detection: Fire alarm installation to BS 5839, indicative layout shown on drawing. Test Certificates covering design and installation to be provided to the Building Inspector.

Emergency lighting: Emergency lighting to all areas in accordance with BS 5266. Directional exit signs as indicated on drawings. Test Certificate to be provided to Building Inspector.

Exit signage: All to BS 5499: Running man symbol.

Final exit doors: Final exit doors fitted with release locking mechanisms, latch or panic bar as noted on drawing and not to be locked at any time when the premises are occupied.

Disabled user refuge facility: Refer plans. Install disabled refuge emergency call system with emergency voice communications system to outside of building or centralised control centre.

Boundary conditions: 2 No. elevations are close to the boundary and external cladding shall be boundary condition cladding on fire protected steel frame. Kingspan Quadcore to achieve U-value as below. Provide certification to Building Inspector to confirm boundary condition cladding has been used.

Note: This must be specifically requested from Kingspan at the time of placement of order.

Boundary condition calculation using BRE External Fire Spread as follows:

Elevation A

Enclosing rectangle as marked on drawing = 6 x 12m, 72m2
Unprotected area of window = 4.4m2

Unprotected percentage = 6%

From Table B unprotected percentage at 1m to boundary = 20% therefore windows are permitted.

Elevation C

Enclosing rectangle as marked on drawing = 3 x 21m
Unprotected area of window = 8m2
Unprotected percentage = 13%

From Table A unprotected percentage at 1m to boundary = 20% therefore windows are permitted.

Part C: Site Preparation and Resistance to Contaminants

Site investigation: Copy of Site investigation to be provided direct by Client to Building Inspector.

Existing slab is re-used.

Part D: Toxic Substances: Not applicable.

Part E: Resistance to the Passage of Sound: Not applicable

Part F: Ventilation

Ventilation rates: The office area shall have a minimum ventilation of 10 l/s per person with extract ventilators located as high as practical and less than 400mm below the ceiling.

W.C.s: mechanical ventilation to 30 l/s.

Kitchen/mess area: mechanical ventilation to 15 l/s.

The contractor shall supply detailed calculations from an M&E specialist contractor to confirm that the ventilation requirements of Part F are complied with.

Natural airflow rate testing shall be undertaken and evidence provided to the Building Inspector.

Part H: Drainage and Waste Disposal

Refer submitted drawing for below ground drainage layout and specification.

Above ground drainage PVCu.

Appliances shall be drainaed / trapped as follows:

Appliance	Diameter of Trap / Pipe	Depth of Seal
Wash basin	32mm	75mm
Bath	40mm	50mm
W.C.s	100mm	50mm
All other appliances	40mm	75mm

1 no. SVP shall ventilate to fresh air.

Stacks not venting to fresh air shall terminate with a Dirgo Air Admittance Valve above the overflow height of the appliance served.

Branch connections to stacks shall be to avoid cross flow.

Part K1: Stairs and Ramps

Construction:

The staircase to the first floor shall be of steel construction with handrail to both sides:

Width: 1200mm clear
Rise: Not greater than 170mm
Going: 250mm minimum
Nosing: 15mm minimum

The stair shall be as drawn.

Part L2 A/B: Conservation of Fuel and Power

Refer attached SBEM and SBEM analysis data setting out performance requirements for fabric and Building services.

SBEM Analysis Data

The following data has been used in the SBEM calculation to produce the BRUKL for the above premises. Any alteration to the specified installations should be checked against SBEM.

Assumed air leakage rate : **10.0 m3/h/m2**

Fabric	**U-values**	
External Walls 1-	80mm Kingspan Quadcore	0.23 W/m2K
Roof -	120mm Kingspan Quadcore	0.15 W/m2K
Rooflights -	N/A	
Roller Shutters -	Insulated access door	1.50 Wm2K
Personnel Doors -	Insulated personnel door	1.80 W/m2K
Glazing -	Double-glazed metal framed	1.60 W/m2K
Internal stud partitions-	Where abutting unheated area	0.35 W/m2K
Ground Floor -	Uninsulated U-value	0.49 W/m2K
Upper floor -	Insulation to suit	0.25 W/m2K

Thermal Bridges (from Kingspan data):-

Roof-wall	0.222 W/mK
Wall-ground floor	0.275 W/mK
Wall/wall (corner)	0.019 W/mK
Wall/floor (not ground floor)	N/A
Window / door head	0.614 W/mK
Window cill	0.613 W/mK
Window door jamb	0.613 W/mK

Part L Cont..

Building Services

HVAC Systems - Assumed default electric heating to WCs. A/C to Office with minimum COP/EER of 4.5/3.5 (controls as NDBSC Guide).

DHW - Instantaneous electric water heaters only – no storage losses.

Lighting- Assumed all LED fittings, luminous efficacy of lamps not less than 100 lumens per circuit watt, Light Output Ratio of fittings assumed 100%. Occupancy sensing Auto-on/off switching to Office and WCs. Parasitic power for all occupancy sensing controls shall be limited to 0.3 W/m2.

Extract ventilation - Mechanical extract to WCs and Office. SFP not more than 0.3 W/l/s.

Part M: Access and Use

Disabled grade parking is created close to the entrance with a dropped kerb to allow step free access to the entrance door.

The primary entrance door shall have a clear opening 1000mm with wheelchair grade threshold.

The internal stair shall have a rise not greater than 170mm and a going 250mm minimum with a clearance between the walls of 1200mm. There shall be a handrail to both sides of the stair to extend 300mm beyond the start and finish of the steps. Nosings shall be clearly visually distinguished.

The structure shall be designed to allow the future installation of a wheelchair lifting platform to provide access between the ground and first floor without the need for major structural alteration should such be required by the occupants of the property at a future date.

A disabled refuge 1400 x 900mm shall be provided as shown on the drawing, refer notes under Part B.

A fully accessible W.C. 1.5 x 2.2m shall be provided at the ground floor level designed to comply with Building Regulations Part M Diagram 18.

The mess area shall incorporate a lowered area or separated table to allow full use by a wheelchair user.

In order to assist visually impaired the following items shall be in contrasting colours with an LRV between the two surfaces greater than 30 points. This shall apply to the contrast as follows:

- Walls from floors.
- Door frames and furniture from doors.
- Nosing to stairs.
- Grab rails in accessible W.C.s.

Switches outlets controls will be located between 400mm and 1200mm above floor level.

KEY

- Quadcore boundary condition cladding applied to the elevations
- 60 minute fire rated wall
- 60 minute insulated wall, fire rated. U value 0.35w/m²k
- E — 3-hour non-maintained lighting
- Directional fire exit sign to BS5499
- Break glass point
- HD — Heat Detector
- SD — Smoke Detector
- Enclosing rectangle for fire spread calculation

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Do not scale this drawing.
Check all dimensions and detail on site before proceeding.
Report any discrepancies before proceeding.

scale bar @ A1

0 2 4 6 8 10 M

scale 1:100

client :
DUNCAN FORREST

job title :
RSE PROPERTIES LIMITED
UNIT 2
KINGFISHER BUSINESS PARK

dwg. title :
PROPOSED BUILDING

CRAIG FOSTER ARCHITECTS

date :
03.09.2019

scale
1:100@A1

dwg no. **19157(6)001** rev **(C)**

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