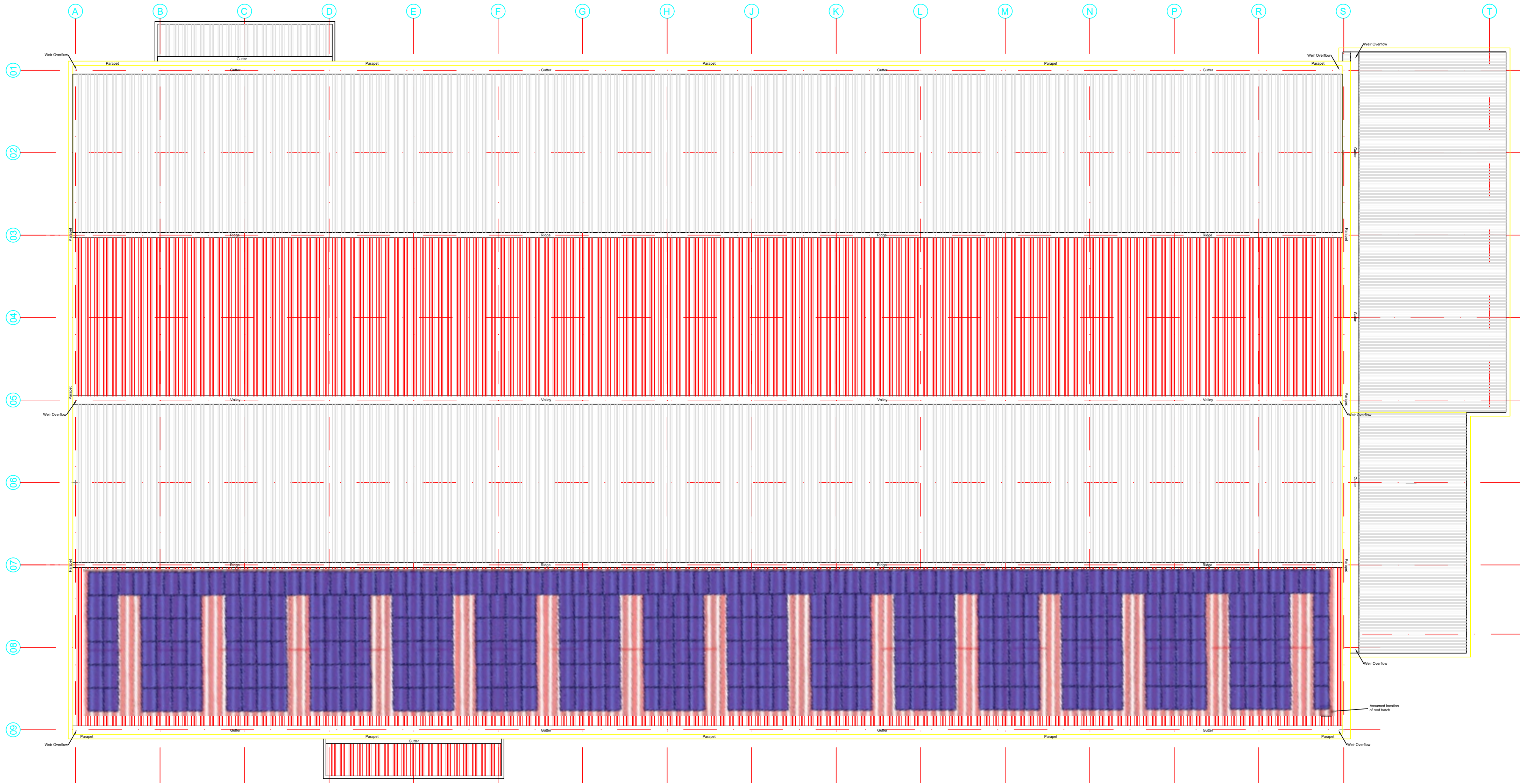




ROOF TO COMPLY WITH 2002 BUILDING REGULATIONS PART L

Warehouse roof to be constructed from plastisol galvanised steel sheeting 0.7mm thick colour goosewing grey, insulation & brilliant white faced profiled galvanised steel liner tray, 0.45mm thick. All exposed fixings to be self coloured to match surface colour. All cladding to be LPCB Approved. Parapet trim to be constructed from PVF2 polyester powder coated sheets (colour - TBC). Office Roof to be standing seam (colour - goosewing grey), min pitch 1.5 degrees.

Roof to include all necessary eaves, ridge, valley and cover flashings in matching finish. All necessary trims spacers, fixing screws washers and matching caps to be compatible with cladding materials and installed as recommended by cladding manufacturer. All necessary insulation is to be provided to achieve a minimum insulation value of 0.25W/m2/degrees C.

No operatives are to be allowed on the roof without attendance by, or prior knowledge of the relevant roofing sub-contractor. Tenants may will require access to carry out an independent thermographic survey prior to access/fitting out.

An air-tightness test is to be carried out by the Developer prior to the tenants obtaining early access, this test is to be carried out by specialist sub-contractor and must conform to all current legislative requirements and Building Regulations. The air test should, as a minimum, comply with BS EN 13829 : 2001 and be to a minimum requirement of 10m3/hr/m2 @ 50 Pa to comply with ADL2. A copy of the resultant report is to be provided to the tenants. Any defects, etc highlighted by the test are to be rectified by the Developer prior to Practical Completion. To aid the rectification of any defects when attending site to carry out the air-tightness test specialist sub-contractor are to bring with them all equipment to carry out a smoke test, this test if required can then be carried out on the same day as the air-tightness test and so cause minimum disruption to progress on site.

ROOFLIGHTS (warehouse only)

Min 10% translucent area of the total roof evenly distributed via linear strip design (with the exception of the entrance lobby.) Roof lights to terminated 1m from the roof edge. Linear strips are to contain a solid sheet to the first purlin and be stitched on the outside with visible red fixings, min double skin, factory assembled, MAN-SAFE translucent GRP to BS 4154. All as manufactured by Brett Martin Roofing Products Ltd. and must be suitable to retain a falling person, depending on the profile and purlin centres. Any other supplier proposed must be agreed with developer, and must provide documentary evidence that the roof assembly achieves Class B Non Fragility.

The rooflights are to acheive a U value of 2.2 W/msq/C

Outer sheet is to be safe for foot traffic with a safety margin of 1:5. It is to be as strong, rigid and durable as adjacent roof sheet so that safety is not dependant of the number and condition of fixings. It shall have high performance UV protected surface to resist both UV and chemical attack and must be guaranteed to prevent significant discolouration or structural deterioration for a min of 12 years.

The inner liner is to be 1.84kg/sq. metres standard SAA Class 1 fire rated translucent GRP sheet.

PENETRATION THROUGH ROOF/FLASHINGS.

The following is to be included for accommodating mechanical heating system.

The roofing contractor to fit roof cowls, pitch correction bends and flue terminals during a visit within the tenants fitting out period. The return visit by the roofing contractor is to be included.

Supply and fix structural framing, kerb upstands and socker sheets to form openings for roof mounted fans, unit heater flues and vent flues. Upstands Min. 150mm high.

Note: These will be over and above the provision for all necessary holes and flashings to accommodate the office area ventilation, retail area openings etc. undertaken by the developer.

GUTTERS/ RAINWATER GOODS

Pre-insulated galv. M.S gutters thickness to comply with BS 1091:1963 (1980) with joggle joints lapped sealed and bolted joints, with washers and sealing washers on both sides of the gutter. Gutters are to be concealed at the eaves and are to be TCN 440 coated and should be suitably supported to allow foot traffic for maintenance.

Suitable insulation is to be provided around gutters at eaves and valley location with profiled liner tray to match roof lining sheet, where inside the building.

Where roofing system is aluminium, gutters to be aluminium, or protected to prevent electrolytic action.

The specialist system designer / installer must take account of gutter size, outlets and pipework both above and below ground when designing the installation

Outlets to have box or sump receivers and spigots to receive a Caradon Terrain soil grade PVC rainwater pipe. All rainwater outlets to have a balloon with a clip arrangemnet to prevent them being dislodged.

All RWP to run internally and be grey in colour and 150mm dia in section. Pipes to be connected directly to the separate below ground surface water drainage system, with rodding access points to be provided at the base of each rainwater pipe.

A sufficient number of wier overflows to the tenants approval (limited to main system), should incorporated into the design to ensure that no excess water surge runs back into the building. All must include suitable leaf guards.

A traditional gravity drainage solution will be used for low level canopies.

ACCESS HATCH

A hinged, lockable roof access hatch to be provide over main office to be Profile RH series hatch Sl 916 x 916, galvanized steel, fixed in strict accordance with manufactures recommendations. All upstand flashings by roof contractors.

LIGHTNING PROTECTION.

The building shall include a complete lightning protection system supplied, installed, tested and commissioned in accordance with BS 6651 and latest amendments.

The system shall make full use of structural steelwork, avoiding as far as possible any exposed air termination's etc. Exposed downloads will not be acceptable at all and the position of any finials or similar must be approved by the developer.

Earth electrodes complying with BS 2874 shall be provided as recommended in BS 6651. At each electrode position a concrete inspection allow access to each connection.

On completion the system shall be tested as recommended in BS 6651 and three copies of the Test and Inspected Certificates and three copies of the cover shall be provided to shall be included within the manuals.

The installer shall be a member company of the Federation of Steeplejacks record drawing(s) and Lighting Conduction Engineers.

GENERALLY

All roofing materials, roof lights etc. are to be fixed strictly in accordance with the manufacturer's instructions using fixing materials, lap and fixing centres specified by the manufacturer to achieve the warranty required.

All rooflights, rainwater outlets are indicative only. Refer to specialist drawings for details.

The system should not use any combustible components.

All components to be recyclable or disposable in an environmentally safe manner at the end of the life of the building.

Where possible certification or proof will be required to prove the system has been tested to establish the resistance to wind suction loads.

The roof and wall system must be (min) Grade B constructions in accordance with LPCB test standard LPS 1191. and any firewalls must be Materials Standard ACR (M) 001:2000 Test grade A in accordance with LP1181

When fully installed all liner panels, rooflights and external roof sheet assemblies are to be non-fragile in accordance with HSE for Fragility of roofing assemblies

LPCB Certificate for roofing system.

Provide stainless steel mansafe fall arrest system to provide safe working conditions on and access to the whole roofstructure; all in accordance with manufacturers design/details and BS en352-1:1992.

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REVISIONS		
A	Revised to tender. Location of gutters, ridges, valleys and parapets indicated and notes updated.	30.04.07 LAB
B	Canopy and notes amended and roof hatch indicated.	11.07.07 LAB
PROJECT Proposed Industrial Unit Unit 1 Royal London Park Flanders Road Hedge End Southampton		
CONTRACT		
CLIENT Royal London Mutual Insurance Society Ltd		
TITLE Roof Plan		
JOB NO 9192	DRAWING NO 312	REVISION B
DATE Jan 2007	SCALE 1:200 @ A1	DRAWN Darren Till
CAD FILE REFERENCE J:\9001-10000\9192\Tender		
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ARCHITECTS		