



GROUND FLOOR PLAN
SCALE 1:100

BRICK AND BLOCKWORK:
The blockwork used shall have a minimum crushing strength of 100mm thick = 10N/mm², 140mm thick = 10N/mm² and 215mm thick = 10N/mm². All bricks, blocks used below dpc level shall be dense concrete brick/block having a minimum density of 1500 kg/m³. Mortar strength designation (M) as per in PD 6697:2010. Generally the centre to centre of expansion joints in concrete block walls to be 6.0m max. in concrete brick walls to be 7.5m max and in clay brick walls to be 9m max. The exact position of these joints are subject to the architects approval.

DPC:
DPC to be a minimum 150mm above ground level and installed in accordance with manufacturers details and installation instructions. Note - all timber that contacts with masonry to be wrapped with or protected by 1200 gauge polythene dpc.

GROUND FLOOR CONSTRUCTION: CONCRETE SLAB:
Epoxy resin floor finish tbc by client on solid floor min 200mm thk C35 concrete laid smooth with non-slip steel float finish and dust inhibitor. Floors to have A142 anti-cracking reinforcement 50mm from top surface. Alternatively polypropylene fibres used in accordance with manufacturer's recommendation may be used for anti crack reinforcement. Structural concrete slab to be steel float finished +/- 5mm over a 3.0m straight edge. Construction joints to be confirmed by engineer. Isolation joints should be formed between the floor slab and the walls using 20mm polyurethane insulation. All floors shall incorporate RIV gas seal black dpm on the sand blinding. Membrane to be lapped with DPC in accordance with manufacturers details. Type 1 hardcore base shall be laid minimum 150mm thick, compacted with vibrating or heavy roller and topped with fine sand blinding. Hardcore to be laid on firm undisturbed ground. Where undisturbed subgrade is more than 275mm below structural finished floor level, hardcore is to be built up in compacted 150mm layers.

EXTERNAL WALLS:
Cladding above dpc to be 80mm KS 1000 RW composite cladding colour Denim Blue RAL 5014 with sections of non fragile translucent panels, complete with all fixings, trims, flashings, proprietary cavity barriers at opening/door positions in accordance with manufacturers instructions. Cladding on galvanised cold-formed proprietary steel purlin system at max 1.5m c/c. Cladding fixed to rails and primary steel structure to cladding manufacturer's design.

ROOF:
80mm insulated composite cladding colour Grey White RAL 9002 with sections of non fragile translucent panels, complete with all fixings trims, flashings, proprietary cavity barriers at opening all in accordance with manufacturers instructions. Cladding on galvanised cold-formed proprietary steel purlin system at max 1.5m c/c with additional purlins at eaves and ridge locations. Access to roof to be on a very infrequent basis. Access to be provided by a mobile platform or zip-up scaffolding in accordance with the guidance in ISE publications. Precautions should be taken to limit the hazards presented by fragile roof surfaces. There should be a clear visible warning sign identifying any part of a roof that is not capable of bearing a concentrated load of 0.9 kN on a 130mm by 130mm square. The visible warning should indicate the relevant hazard sign from BS 5499:Part 5:2002. Rooftlights to be Kingspan DLTR 1.6 Clear with 75mm end laps and are designated class A4.

SERVICES THRO ROOF AND WALLS:
All vents, extracts & pipework taken thro roof and walls to have suitable flashings at junction.

EXTERNAL DRAINAGE:
All drains laid to sight & satisfaction of local authority inspector. All underground pipework to be surrounded in 5-10mm pea gravel or granular material. All 100mm upvc drains laid to min. 1.60 fall. Rodding eyes positioned at changes in direction. Drains to be laid min. 1.0m from building where possible and backfilled with granular material, drains less than 1.0m must be above foundation level. Walls to be lintoled where drains pass through. Manual entry into a drain or sewer should be kept to a minimum, remote equipment should be used where possible. Roddings eyes to terminate a finished ground level and be housed in a pre cast concrete chamber. All drainage in marley upvc or e/a. All drains to be surrounded in 5-10mm pea gravel. All drainage outside of building to be in 752-3: 1997 (amendment 2), in 752-4:1998 and in 1610: 1998.

RAINFALL SYSTEMS:
All surface water drainage to be tested in accordance with BS EN 1610: 1998 and constructed and installed in accordance with the recommendations described in BS EN 12056-3: 2000, & securely fixed in accordance with manufacturers details. Factory made gutter with 100mm black pvc drops tied back to columns. (Positions as indicated on plans) Gutters & Downpipes should be constructed and installed in accordance with the recommendations described in BS EN 12056-3: 2000, & securely fixed in accordance with manufacturers details. Rainwater downpipes complete with access via rodding points on ground level.

ELECTRICAL:
Electrical layouts subject to clients approval. Installation must be designed, constructed, installed by an IEE registered engineer and tested such that it is in accordance with the recommendations of BS 7671: 2008, as amended. The lighting design should be completed in accordance with the advice and guidance given in the Society of Light and Lighting (CIBSE) Code for Lighting 2009. Lighting suspended from ceiling to 7000mm high above floor, light switching to be within 14.00m of fitting.

Outlets and controls of electrical fixtures and systems to be positioned at least 350 mm from any internal corner, projecting wall or similar obstruction and fitted between 1.1-2m above finished floor level. This to include sockets, switches, fire alarm call points and timer controls or programmers.

• light switches should be surface mounted, positioned at a height of between 1m and 1.1m above floor level.

• socket outlets and outlets for other services to be positioned outwith compartment wall, at least 400mm above floor level. Above an obstruction, such as a worktop, fixtures to be at least 150mm above the projecting surface.

ESCAPE LIGHTING:
Escape route lighting to be designed by specialist with layouts forwarded to architect and Building Control for approval. Note where escape route lighting utilises the artificial lighting within the building then those lights should be supplied by a fire protected circuit. A protected circuit is a circuit originating at the main incoming switch or distribution board, the conductors of which are protected against fire.

Artificial lighting supplied by a protected circuit need not be provided if a system of emergency lighting is installed. Emergency lighting should be in accordance with BS 5266: Part 1:2005 as read in association with BS 5266: Part 7: 1999 (BS EN 1838: 1999).

FIRE ALARM NOTES:
Fire Alarm system to be designed based on a simultaneous evacuation of the building. System to be Category LI and is to incorporate manual Call points throughout. Refer to Hawthorne Boyle drawing 5827 (68001 for detailed design in accordance with BS 5839-1:2017). The system is to be installed by specialist.

FIRE AND RESCUE SERVICE ACCESS:
Building perimeter is under 150m. Emergency vehicle access is provided to 3 elevations including the elevation with the principle entrance. In order to allow unobstructed access to a building for fire and rescue service personnel a paved (or equivalent) footpath at least 900mm wide should be provided to the principal entrance, or entrances, of a building. A pressurised piped network of water is provided around the dry dock at pier level which several connection points and it is anticipated that the fire service personnel will connect directly into this supply.

DOORS:
External doors to be secure by design powder coated grey Aluminium doors. Final exits to be fitted with panic pads to the inside of the door leaf, provided with 1200x1200mm level platt with threshold that does not form a trip hazard and provides ease of access to wheelchair users. All escape doors to be provided with emergency lighting internally and externally above opening. All internal doors to be of timber construction and have 825mm min clear opening width. All glazing below 800mm to be toughened glass. Doors should be tested and certified for security purposes by a notified body as meeting a recognised standard for security such as BS PAS 24: 2007 for doorsets. To ensure a robust installation, fixing of a doorset should be in accordance with the recommendations given in section 8 of BS 8213-4: 2007; or manufacturer's written instructions where these meet or exceed the recommendation within this British Standard. All new external doors should be provided with draught stripping. All external doors to open in the direction of escape.

ACCESSIBLE CAR PARKING AND ACCESSIBLE ROUTES:
Accessible parking to be constructed where shown on a road surface that is level (with a gradient of not more than 1 in 50), and not more than 45m from a common entrance. Spaces to be clearly marked with the international symbol of access, and provided access to an accessible route. Accessible route provided to the principal entrance from the accessible car parking spaces. An accessible route should be level with a gradient of not more than 1 in 50, or gently sloping, which is a gradient of more than 1 in 50 and not more than 1 in 20, or ramped, with a gradient of more than 1 in 20 and not more than 1 in 12. The cross-fall on any part of an accessible route should not exceed 1 in 40. Gently sloping gradients should be provided with level rest points of not less than 1.5m in length, at intervals dependent on the gradient of the sloping surface. This should follow the same relationship given for ramp flights, e.g. up to 20m apart for a slope of 1 in 30, 30m for a slope of 1 in 40 and so on. Where a rise of more than 300mm occurs a stepped means of access should be provided. The surface of an accessible route should be firm, uniform and of a material and finish that will permit ease in manoeuvring. It should provide a degree of traction that will minimise the possibility of slipping taking into account both anticipated use and environmental conditions. The surface of an accessible route, whether composed of modular paving units, formless materials such as tarmac, or another durable material, should have a profile that will not offer a trip hazard or result in standing water. It should be installed in accordance with a code of practice relevant to the material, where such exists. Surface elements such as drainage gratings and manhole covers should be of a type that will not create a trip or entrapment hazard. The length of an accessible route to an accessible entrance of a building should be limited to 45m. Any part of an accessible route to a building from accessible parking space should have a minimum surface width of 1.8m.

[Symbol]	Remote switch engraved with appliance name and an LED	[Symbol]	Ceiling mounted switch with pull cord and LED.
[Symbol]	2 Way Switch point	[Symbol]	Switch point
[Symbol]	Unswitched socket outlet at low level	[Symbol]	Double switched 13amp socket outlet
[Symbol]	13amp switched socket outlet	[Symbol]	Fused switch socket
[Symbol]	45amp Cooker Switch.	[Symbol]	Pendant light fitting.
[Symbol]	Wall Light Fitting	[Symbol]	Recessed downlighter
[Symbol]	Downlighter	[Symbol]	External light fitting
[Symbol]	Dusk to dawn light	[Symbol]	Moisture Resistant light fitting.
[Symbol]	Fluorescent light fitting	[Symbol]	Telephone point
[Symbol]	Television Point	[Symbol]	Shaver Point
[Symbol]	Cat 5/6 data point	[Symbol]	Floor Box
[Symbol]	Door Bell	[Symbol]	Radiator
[Symbol]	Electric Radiator 2kW	[Symbol]	Towel heater
[Symbol]	Central heating programmer / time clock	[Symbol]	Consumer Unit / distribution board
[Symbol]	Gas meter	[Symbol]	Electric meter
[Symbol]	Soffit vent.	[Symbol]	Electric shower unit
[Symbol]	Fresh air intake.	[Symbol]	Wall / ceiling mounted extract fan.
[Symbol]	Control Panel	[Symbol]	Earthing Point
[Symbol]	Wireless Point	[Symbol]	Intruder alarm panel
[Symbol]	Door contact	[Symbol]	Photocell
[Symbol]	Dual tec detector	[Symbol]	Keypad
		[Symbol]	Gas Point

NOTE:
Drawings to be read and fully understood before work commences. Figured dimensions to take preference over scaled dimensions. All dimensions and spot levels to be checked on site by Contractor prior to construction. Existing drainage and services positions to be checked on site by Contractor prior to work commencing. Any discrepancies to be reported back to this office. All dimensions given in millimetres unless noted. Only drawings stamped 'APPROVED' or 'CONSTRUCTION ISSUE' to be used for building purposes.

rev	date	description	by	chkd	
Client:		Dales Marine Services Ltd			
Project:		Extension to Engineering Building, Garvel Dry Dock, Greenock.			
Drawing Title:		Proposed Ground Floor Layout, Section & Elevations			
Stage:	PLANNING		Date:	DEC 2021	
Project No:	4830	Drawing No:	PL/03	Revision:	A1
Scale:	1:100	Drawn:	jpr	Checked:	

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Ramp gradient shown 1in12. Gradient requirements to be agreed with client.

Note: Fire alarm and detection system to be designed and installed by specialist