# GENERAL SPECIFICATION

**GENERAL**
Contractor to:
Comply with current British Standards and Codes of Practice where applicable and current Building Regulations. Where patent materials are incorporated in the works, they must be built-in strictly in accordance with the manufacturer's requirements and recommendations.

**HEALTH & SAFETY:**
Contractor to:
**COMPLIANCE WITH CDM 2015**
Consider construction methods to achieve acceptable Health & Safety plan to execute the proposed method of construction.
Ensure construction methods are chosen so to eliminate risks where possible, to any contractor working on the construction of this dwelling and associated works.
Ensure site is suitably secure with 2m high Heras fencing around extent of work to prevent unauthorised access.
Ensure all contractors are familiar with the safe use of tools and equipment during construction.
Provide safe storage for materials and welfare facilities for contractors.

**INSURANCES:**
Contractor to:
Provide adequate insurance cover for project, to include fire cover and third party liability, ensure policies held by contractors in respect of public liability and contract works policy are valid and will remain in force for the duration of the project.

**GENERAL NOTES:**
Contractor to:
Check site to ascertain site conditions, report any discrepancies or differing conditions to IRD Design Ltd for consideration.
Notify Building Control Inspector at commencement of construction and at various stages of the works as requested, ensure all works comply with the specification and are undertaken in a good workmanlike manner.
Ensure final proposition is made at completion and all issues satisfactorily addressed.
Pass Completion Certificates to client at formal completion.
The position of any services over the site to be located and identified by the relevant utility company.
Levels and position of drainage falls to be reported to IRD Design Ltd if different to proposed so as to ensure proposed design of drainage can be achieved with routes and defined falls in accordance with the attached underground drainage specification.

**GROUND WORKS:**
Contractor to:
Strip topsoil from site area and reduce levels to proposed preparation level and remove all excess soil from site.
Mark out proposed building on site and set levels to proposed construction levels in accordance with Design Drawings.

**FOUNDATIONS:**
Contractor to:
Excavate for new foundations to good bearing strata approx 900mm below surface (unless otherwise indicated by Structural Engineer), to allow for 450mm ground cover over foundations for frost protection.
Lay new concrete foundations strictly in accordance with Structural Engineers details and specification.

**GROUND FLOOR SLAB:** PVA Resin = 0.22 (U-value = 0.21W/m²K)
Contractor to:
Prepare floor as design detail, generally with layers of consolidated Type 1 GSB at least 150mm thick, blind with 25mm sand, lay over 1200 gauge Visqueen membrane lapped up at edges and over top of floor ring beam. Insulate underfloor with 50mm Kingspan K3 insulation Board with sealed around perimeter of floor in 25mm Kingspan K109 insulation board to eliminate cold bridging.
Cover with 150mm thick concrete slab with One Layer of 193 mesh reinforcement to top with 30mm minimum cover strictly in accordance with Structural Engineers specification and details and complete with power float finish.

**CONSERVATORY FLOOR SLAB:**
Contractor to:
Prepare floor as design detail, generally with layers of consolidated Type 1 GSB at least 150mm thick, blind with 25mm sand, lay over 1200 gauge Visqueen membrane lapped up at edges.
Cover with 150mm thick concrete slab strictly in accordance with Structural Engineers specification and details and complete with power float finish.

**PORTAL FRAME:**
Erect steel portal frame designed by Structural Engineer. See Engineers Drawings and specification.

**STEELWORK:**
All steelwork to be primed ready for paint finish by client.

**EXTERNAL WALLS:**
Contractor to:
Clad building in 100mm Kingspan KS1000 RW sheets fixed horizontally to steel cladding rails as specified by Structural Engineer.
Include for powder coated aluminium trims / flashings around doors and windows and at base of wall cladding.
Line walls internally to height of 2.4m above floor level with 12.5mm plasterboard fixed to sheeting rails with timber battens between to support board edges as required.

**INTERNAL PARTITIONS:**
Contractor to:
Construct all internal partitions in 90 x 38mm timber C16 studs at 600mm centres, cover with 1No layer of 12.5mm plasterboard complete with skim coat plaster finish.
All partitions between apartments to be insulated with 100mm Rockwool insulation to achieve minimum airborne sound insulation of 43dBRw and have a density of 10kg/m².
Toilet block partitions formed in 90 x 38mm timber C16 studs at 600mm centres, covered internally with 12.5mm plasterboard complete with a skim coat plaster finish. Partitions covered externally with timber weatherboarding painted with 2 coats of fire retardant varnish to provide 1 hour fire protection.

**WINDOWS & DOORS:**
Contractor to:
Install powder coated aluminium windows and external doors (Colour to be agreed)
Glazing to be designed to BS 6262: Part 4: 1994.
All windows to be double-glazed with Low E glass to give a U value of 1.4C W/m²K or better.
All doors and windows to be designed and manufactured to resist forced entry.
Toughened safety glass to all windows and doors in areas defined as critical areas, (within 800mm of floor level or 800mm of any door opening)
All fire doors to be fitted with a self closing device. Self closing devices to be overhead type (British 3misc 5&6 or other equal and approved)

All ventilators to be fitted with trickle ventilators to frame head with an opening area of 12000 mm² (average vent area of 8000mm²) (Trickle vents can be removed from any room / space that is fitted with full air conditioning / ventilation system).
All Windows to be fitted with integrated neoprene draft seals or brushes with extended bottom rail to extend best external finish as required.
All external doors to be fitted with recessed thermomagnet comprising of 3No hinges, 3 lever dead lock weather-bar to door threshh (front entrances as defined for disabled access to be fitted with wheelchair accessible weatherbar), draft proof shipping around opening
All windows to be openable with one hand (unless restrictors are fitted) with opening restricts situated no less than 2060mm from an internal corner and be 1.7mm max above floor level where unobstructed access is available.
All windows and thermet to be sealed at 0pt around reveal with flexible frame mastic
Restrictors to be fitted to all opening windows that open over any paths and or ramps to prevent collision with passing persons.
Accessible entrance door to have a clear opening width of 1200mm between the doors and should open in the direction of escape
The doors should incorporate door furniture which is capable of being operated by people of limited dexterity and should not require a force greater than 20N to open.
All glazing to critical areas (within 800mm of floor and 800mm of doors) must be laminated safety glass to BS 6262: Part 4 2003.
U-Value of external windows = 1.4W/m²K or better.
U-Value of external personal doors = 2.0W/m²K (for area weighted) or 3.3W/m²K (individually)
All doors to be fitted with suitable aluminium round bar lever handles.
Toilet doors fitted with aluminium lever latch bathroom handles and with emergency releasing mechanism to override lock.
Self closing devices to be overhead type (British 3misc 5&6 or other equal and approved)

**GLASS MANIFESTATION:**
Allow for permanent manifestation to all glazing at 2 height ranges, between 850 mm and 1.0m, and between 1.4 m and 1.6 m above floor level. Manifestation should be permanent, e.g. screen printed or opaque etching or a durable applied material which is not easily removed.

**MAIN ROOFWORKS:**
Contractor to:
Fix 100mm Kingspan KS1000 RW profiled roof sheets fixed to galvanised steel purlins and steel portal frame by Structural Engineer.

**TOILET ROOFWORKS:**
Form roof to toilets in 150 x 50mm timber ceiling joists at 1000mm centres, covered with 100mm Kingspan KS1000 cladding. Cover underside of joists with plasterboard and skim coat plaster finish. Include for additional dwangs as necessary to suit board edges.

**JOINERY FINISHES:**
Contractor to:
Hang doors on satin aluminium butt-hinges, to lever handles and required latch sets, to 45 x 14mm dressed timber hardwood stops to doors. Door type and style to be agreed with client. Hang internal doors in dressed hardwood frames and satin aluminium handles all to match existing doors in house or as agreed. Fix primed 150mm moulded hardwood skirtings and primed 75mm moulded hardwood facings to all areas of work throughout building. Fix 18mm hardwood window cills with double bullnose edge to all windows. All new internal doors to have a clear opening width of 850mm unless otherwise indicated.

**AIR INFILTRATION:**
Contractor to:
The building MUST be constructed using good building practice and all voids and junctions to be sealed / filled with an appropriate mastic sealant or expanding foam to ensure that the leakage of air into and from the building is minimised.
Key areas for contractor to pay particular attention are:-
- Seal junctions with floor/wall skirting behind coverings with flexible mastic sealant.
- Mastic sealant at all door and window frames.
- Seal all penetrations through the building envelope with flexible mastic sealant.
- Ensure that all joints in external walls have a full bed of mortar.
- Threshold to be bedded on flexible mastic sealant.
- Tape repair to any penetrations through the polythene vapour barriers (if any).
- Ensure continuity of insulation envelope.
- Any voids to be filled with expanding foam or Rockwool insulation batts.
- All insulation to be tightly fitted and quilt insulation must be stapled in place where fitted vertically to prevent slump.

Subject to BSEU calculations and Air Test must be carried out on the building to ensure air infiltration rates deliver both the stated design level and the minimum levels of ventilation required. Test to be carried out in accordance with BS EN 13829:2001 by an accredited member of a professional organisation.

**VENTILATION:**
Provide mechanical ventilation system to Main Hall, Kitchen, Toilets and Office designed by specialist contractor to achieve the required levels of ventilation as follows:- 6 Air changes/hour
All units controlled with wall mounted programmer to ensure optimum efficiency of system. Any ductwork where combined for fans should be designed to prevent cross contamination.
Toilet fans fitted with occupancy sensors
All windows to be fitted with vent strips providing trickle ventilation of 8000mm².
Trickle vents to toilets and Office to be via 225 x 150mm vent grille set in wall above individual access doors

**PLUMBING:**
Contractor to:
Fix internal stop valve with combined drain point at point of entry into building, route cold mains supply to all fixtures as required, provide isolation valves for maintenance.
Connect hot water supplies to all fixtures as required.
All pipes to be clipped at intervals and secured to prevent vibration noise.
Above ground drainage to be in 110mm uPVC fitted with rodding access points at base of SVPs.
Route SVPs through structure as shown, Connect WCs with pan connectors, terminate SVPs through roof using Deckflex flashing to suit roof sheets.
100mm Wastes to WC.
Sink to be 50mm Diameter Waste Pipes
Washbasins 40mm Diameter Waste Pipes
Sink serving commercial kitchen should be fitted with suitable separator system for the removal / separation of oils, fats, greases or waste substances. Separator should be constructed and installed in accordance with BS EN 1825-2: 2002 for fat or grease.
All drainage and waste pipework below floor level to be 100mm uPVC pipes and fittings.
All fixtures to be fitted with 75mm anti-syphon deep seal traps, all waste pipes to be fitted in manufacturer's instruction, fixed with fall to outlet position.
Stub stacks to be fitted with suitably sized air admittance valve (AAV) fitted above the highest fixed level of any appliance on the waste pipework it serves. Stack to have handhole access for maintenance purposes.

**SANITARYWARE:**
Provision of sanitary facilities based on 10 members of staff require 1 WC and 1 WHB.
New WC to have a dual flush cistern with an average flush of 4.86litre or single flush with max. flush of 4.86litre.
New taps to the WHB to have a maximum flow rate of 6 l/min.

**HOT WATER SYSTEM:**
Contractor to:
Provide hot water to the sinks and kitchen areas via mains fed/or instantaneous water heaters as indicated on drawing. Certificate of installation and commissioning to be provided to the client and LA upon completion.

**HEATING:**
Install Nerves electric convector heaters around main hall and toilet area as indicated on drawing sized by specialist contractor to ensure capable of maintaining a temperature of 21°C in at least 1 experienced cold 19°C assessment when the external temperature is -1°C. The radiators must be fitted with full extra control and 7 day programmer to ensure optimum efficiency.
Any service paperwork to be completed in accordance with BS 8422: 2001 and all points suitably tested.
All works to be carried out by suitably qualified contractor and certificate of installation and commissioning together with all operating manuals are to be provided to the client upon completion to ensure optimum energy efficiency of the systems.
SBEM Calculation to be provided confirming compliance with Technical Standards.

**SOLAR PV**
Install 22.2kw solar PV array to South facing roof by specialist installer and connect up as necessary.

**SMOKE DETECTION:**
Contractor to:
Fit mains operated interlinked proprietary smoke/heat detectors to BS 5446-1, hard wired to new/existing electrical installation installed in accordance with BS 7671 and BS 5839-6, located to provide safe escape for maintenance and testing. System to be extended from existing system.
Locations of detectors as follows:-

| | | |
|---|---|---|
| • Kitchen | - | Heat Detector |
| • Office | - | Smoke Detector |
| • Main Hall | - | Alto Smoke Detectors |
| • Beer Store | - | Smoke Detector |
| • Circulation Space | - | Smoke Detector |
| • Male WC | - | Smoke Detector |
| • Female WC | - | Smoke Detector |

**LIGHTING AND ELECTRICAL WORK:**
Contractor to:
100% of all fittings must be energy efficient.
Socket outlets and switch points to be 450mm and 1200mm above floor level respectively.
Provide internally lit signs to all doors/fittings recessed into floor level ceiling voids.
All new electrical work is to be designed, installed, inspected and tested in accordance with BS 7671:2008. The works are to be undertaken by an installer registered under a suitable electrical self-certification scheme, or alternatively by a suitably qualified person, with a certificate of compliance produced by that person to Building Control on completion of the works.
All external lighting to have automatic PIR switching to switch off during daylight hours.
Electrical installation to be fully certified and tested at first fix and completion stage.
Electrical installation to be carried out in compliance with current Building Regulations and to BS 6701: 2008.
All lighting systems to be reasonably energy efficient to achieve an a building average of not less than 40-lumens/circuit watt. Contractor to provide lighting designers compliance in accordance with this requirement.
All lighting systems to be reasonably energy efficient to achieve an initial lamp plus ballast efficacy of not less than 50-lumens/circuit watt. Contractor to provide lighting designers compliance in accordance with this requirement.
Installation only to be undertaken by persons competent to execute this type of work whilst retaining the required qualifications.
Artificial lighting and display lighting to be in accordance with 'Non Domestic Services Guide for Scotland'.

**TELEPHONE:**
Contractor to:
Consult with British Telecom as to the location and route of underground telephone services, excavate service trench from proposed finished ground level to a minimum depth of 300mm or to a maximum depth of 450mm then
BT underground wire box to point of entry of property, lay bed of sand to bottom of trench, lay 50mm Diameter BT supplied ducting with drawstring to enable telephone cable to be drawn through the entire duct.

**LEVEL ACCESS:**
Contractor to:
Level access must be provided to all entry / exit doors into the building by adjusting ground levels to provide a gradient of 1:20 maximum.
Landings at main entrance doors to be a minimum of 1800 x 1800mm clear of any door swing.
Landing rear exit door should be a minimum of 1200 x 1200mm clear of any door swing.
Level access thresholds to be provided.

**EXTERNAL WORK / LANDSCAPING:**
CAR PARK
Repair / reinstate existing concrete car park upon completion to match existing.
Upon completion of work, contractor to ensure all finishes correspond with surrounding areas and adjoining properties.

**CLEANING:**
Upon completion of all works on site, the contractor must remove all excess material off site at his expense and repair any damages caused to surrounding areas of property to the complete satisfaction of the client.
All properties must be fully cleansed and hoovered to remove all dust and debris. All woodwork and glazing must be fully washed down and polished accordingly.

**DECORATION: (to be agreed by client)**
Allow for preparation of either wallpaper or 2 coats of emulsion to walls (locations / colours to be decided by client)
Allow for preparation, priming, undercoat and gloss finish to all finished woodwork (doorframes, skirtings, facings, sill boards.

**FINAL INSPECTION:**
Following completion of all works described above, IRD Design Ltd will inspect the works and highlight any snagging items requiring attention. Following satisfactory completion of the outstanding snagging items, IRD Design Ltd will sign off the works as Practically Complete and issue the relevant paperwork to the Local Authority and client accordingly.

**COMMISSIONING BUILDING SERVICES:**
A building services installation in a building should be inspected and commissioned in accordance with manufacturers' instructions to ensure optimum energy efficiency. The building and services should have facilities such as test points, inspection hatches and measuring devices to enable inspection, testing and commissioning to be carried out. The commissioning report should include meters and the metering system as a separate item.
One way that can be considered as following the guidance would be to use the CIBSE Commissioning Codes (http://www.cibse.org/) and BSRIA Commissioning Guides (http://www.bsria.co.uk/)

**WRITTEN INFORMATION:**
Upon completion of all works contractor to forward all documentation relating to installation and maintenance of fixed plant and machinery and system / equipment within building to the end user to ensure the efficient use of the building systems.
Following completion an Energy Performance Certificate (EPC) must be displayed within the building located in a prominent location that is easily accessible, not obscured and protected from weather.
As the buildings drainage system is discharging into a private wastewater septic tank a label should be provided within the building in a prominent location alerting the occupiers of such arrangement. The label should provide the occupier with details of all necessary maintenance requirements in order to comply with any discharge consent issued by SEPA.

**SUSTAINABILITY:**
Following completion of the SBEM calculation, confirmation of the buildings sustainability level to be displayed in a prominent location prior to occupation.

**DOOR LOCKS GENERALLY:**
In general, all doors fitted with locking devices to be capable of being opened without the need for keys, codes or cards on escape routes, from the side approached by escapers making an escape. The operation of these locks should be readily apparent, without the use of a key or access control tokens and without having to manipulate more than one mechanism.

**FIRE SAFETY:**
Final user of each unit to provide a Fire Safety Design Summary at completion of the works.

**FIRE ALARM:**
An automatic Fire Alarm System to BS5839 : Part 1 : 2002 Category L1 system to be designed and installed by specialist.

**FIRE WARNING SYSTEM:**
Fire warning system to comply with BS5839: Part 1:2002

**FIRE RISK ASSESSMENT:**
A full fire risk assessment must be carried out by the owners/tenants/employers of each building prior to occupation.

**EXIT DOORS:**
All final exit doors used for means of escape purposes to be fitted with push bar opening devices or other equal and approved method of opening the door without the need for keys, codes or cards.
All exit doors and escape routes to be clearly identified by pictogram signage in accordance with BS 5499 : Part 1.

**FIRE DOOR HARDWARE:**
All fire doors must be fitted with the appropriate steel hardware applicable to the level of rating required.

**FIRE FIGHTING EQUIPMENT:**
Firefighting equipment complying with European Norm BSEN3 and / or BS/1944/BSEN1869 should be provided in the locations indicated on the drawings. All equipment must be clearly identified by signage conforming to BS 5499 : Part 1 or the Health and Safety (Safety Sins and Signals) Regulations. Equipment must be maintained by a competent person in accordance with BS5306 : Part 3.

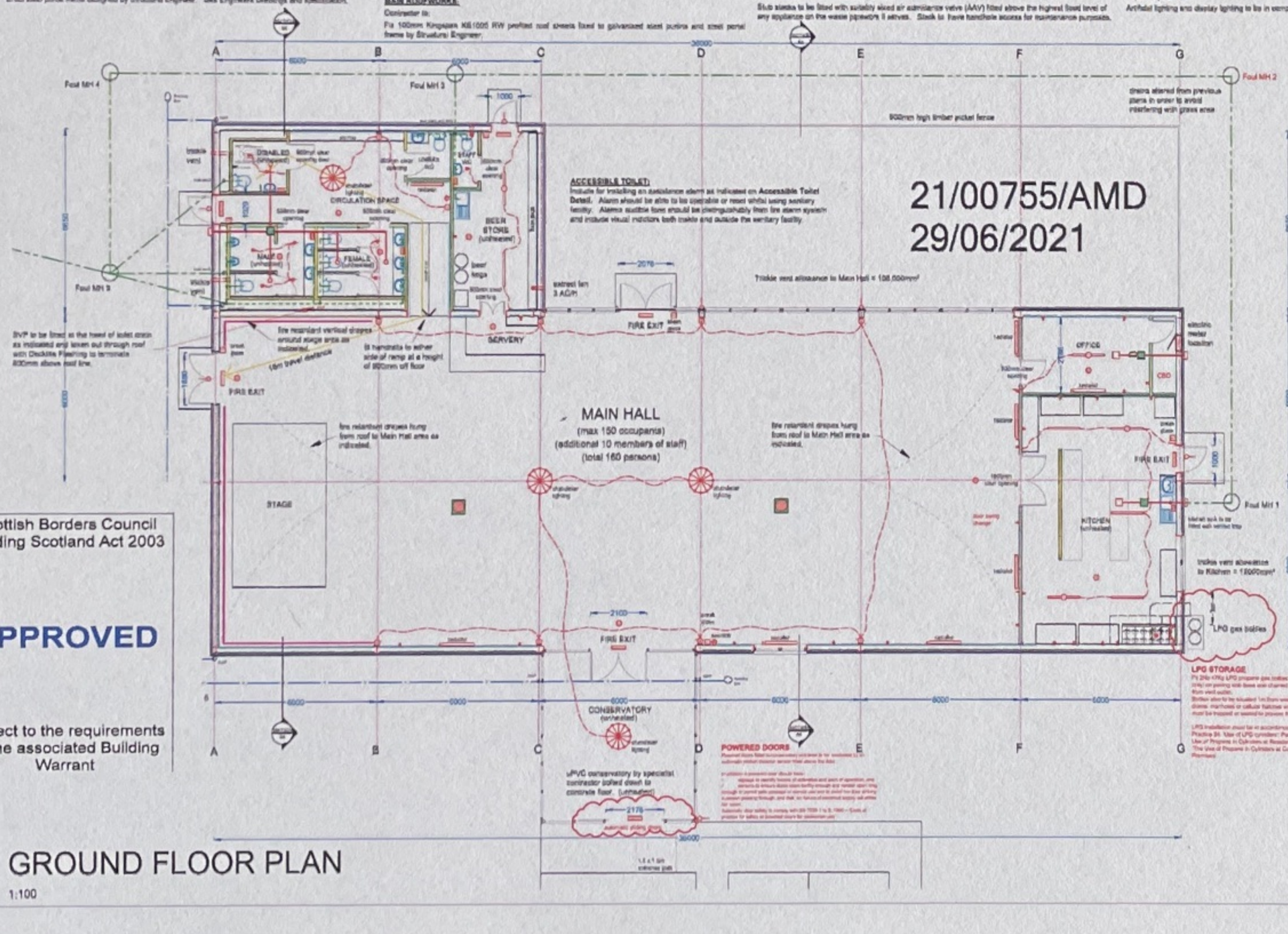
**FIRE SAFETY KEY**
- Illuminated fire exit sign installed above door
- Illuminated directional fire exit sign
- Break glass unit point
- Fire alarm sounder linked to break glass unit point

**INTERNAL TIMBER PARTITIONS**
- 1No layer of 12.5mm gypsum based board of minimum mass per unit area of 10 kg/m².
- Timber studs (90 x 38mm) at maximum 600 mm centres.
- Absorbent layer of mineral wool (100mm Rockwool Flexi and minimum density 10 kg/m³) that may be wire reinforced and suspended in the cavity.
- All joints sealed.

**MECHANICAL VENTILATION KEY**
- LMD fan
- Roof fan
- MEV fan
- Silencer
- Extract ducting
- Extract air valve
- Egg crate grille
- Extract grille

Any ductwork where combines for fans should be designed to prevent cross contamination.
**ZONES:**

| | |
|---|---|
| Main Hall | 10 Air Changes/hour |
| Toilets | 3 Air changes per hour |
| Kitchen | 6 Air Changes/hour |
| Office | 6 Air Changes/hour |
| Disabled Toilet | 3 Air Changes/hour |
| Beer Store | 3 Air Changes/hour |

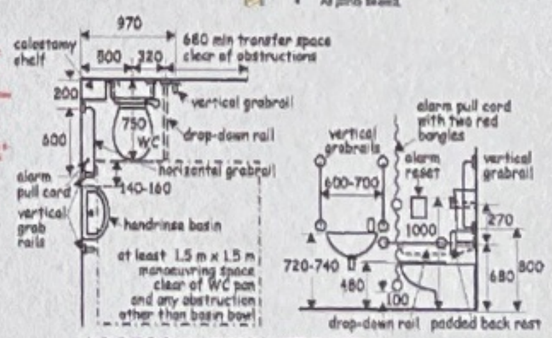



Scottish Borders Council
Building Scotland Act 2003

**APPROVED**

subject to the requirements of the associated Building Warrant

## GROUND FLOOR PLAN
1:100




ACCESSIBLE TOILET DETAIL
N.T.S

IRD DESIGN Ltd
Chartered Building Engineers
Architectural Consultants

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## ELECTRICAL KEY

| | |
|---|---|
| | Light switch |
| | Two way light switch |
| | Intermediate light switch |
| | Extract fan ( 300mm for Ensuites and towels) Fan size as stated on drawing |
| | Two gang 13 amp power socket |
| | Pendant light fitting complete of long lasting energy efficient lamps (3 offset pins) NO BAYONET FITTINGS. |
| | LED Recessed light fitting with [ hour rated fire hood |
| | LED Recessed light fitting with [ hour rated fire hood (emergency type wired to a fire protected circuit) |
| | Fluorescent light fitting |
| | Fluorescent light fitting (emergency type wired to a fire protected circuit) |
| | LED Wall light fitting (emergency type wired to a fire protected circuit) |
| | External light fitting with Passive Infra Red sensor |
| | Heatrae Sadia instantaneous water heater |
| | Electric meters |
| | Mains operated interlinked smoke detector with battery backup |
| | carbon monoxide detector |
| | Mains operated interlinked heat detector with battery backup |

cabe chartered building engineer
cabe chartered associations of building engineers

This is to certify that this drawing is a true copy of the original drawings referred to on the application.
Signed
Dated

| No. | Description | Date |
|---|---|---|
| A | Building Regs Comments (27/01/20) | 17 FEB 2020 |
| C | Amendments to Warrant (24/02/21) | 17 MAY 2021 |
| D | BCO Comments addressed | 23 June 2021 |

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Client: JAMES NEIL AND SON

Project: PROPOSED ERECTION OF WEDDING VENUE

Address: RUNNINGBURN FARM
STITCHILL
KELSO

Drawing Title: AMENDMENT TO WARRANT
FLOOR PLAN AND SPEC AS PROPOSED

Date: DEC 2019

Drawn by: IRD

Project number: 19/355

Scale: 1:100

A1 001D Rev