KEY TO ELECTRICAL SYMBOLS
MIN. 50% LIGHT FITTINGS IN NEW BUILDS TO BE LOW ENERGY RATED.
ELECTRICAL WORKS TO BE SIGNED OFF BY A SELECT OR NICEIC APPROVED CONTRACTOR.

Plain ceiling pendant client chosen fitting.
Mains acoustic rated downlighters (mf) = fire hoods also. (acoustic rated downlighters only if below a habitable room).
Heat resistant shrouds to be fitted where in contact with insulation.
Fluorescent fitting twin tube 1500mm with diffuser
Emergency light fitting maintained directional symbol (running man) on separate circuit with 24hr battery bak-up.
Wall mounted exterior light (switched/PIR/timeclock)
switch — 2-way switch — Hand Dryer wall mounted with fused switched spur at high level.
single/twin 13a switched sockets (client chosen finish for face plates).
fused socket, remote switch — fused dp switched spur
cooker control unit — telephone point — tv point

FIRE DETECTION (all interlinked with battery bak-up to BS 5839:Pt 6:2004).
Smoke Alarms in circulation spaces not more than 7m from the door to a kitchen or living room.
Not more than 3m from any Bedroom door and max 7.5m crs in larger circulation areas.
Position smoke alarms to ensure max 7.5m from any point in a living room to the detector and 5.3m for Heat Detectors in a Kitchen. Dims measured horizontally.
Ceiling mounted alarms min 300mm from any vertical wallface or light fittings. Smoke Alarms located 25-600mm below the ceiling and 25-150mm for Heat Alarms.
Min Grade D fire detection system to all dwellings comprising of at least 1 mains powered smoke and Heat Alarm with integral standby supply to BS 5839:Part 6:2004,

- CO — Carbon Monoxide Detector (link with all detection devices)
- ISA — Ionisation Smoke Alarm to BS EN 14604:2005 best used for Hallways and stairwells adjacent to bathrooms or shower rooms.
- MSA — Multi-Sensor Alarm to BS 5839: Part 6 : 2004.
- HA — Heat Alarm to BS 5446: Part 2 : 2003. Best used in Kitchens.
- OSA — Optical Smoke Alarm to BS EN 14604:2005. Best used in General layout.

- ext — ceiling mounted extract fan extracted thro roofspace via flexi-duct to slate/tile vent (max length of flexi-duct 1500mm).
- sp — Sprinkler Head location. System installation to LPC Rules for Automatic sprinkler systems 2009 incorporating BS EN 12845.
- Cam — CCTV camera internally/externally wired back to monitors to Bar.
- L — LED lighting
- Fire Alarm panel location (zoned) with diagram.
- Air — Air Con control unit — fire alarm sounder wall mounted with Strobe indicator to produce 65Db
- fire alarm break glass point 900-1100mm above FFL
- fire blanket wall mounted with access.

General Notes :
All Electrical installations to be to BS 7671 2011 (IEE Wiring Regulations) including all Amendments and carried out by a competent installer having current membership of an acredited registration scheme.
Fire alarm installations to be to BS 5839 L2 rated system.
Emergency lighting installations to be to BS 5266
General lighting installations to be to the CIBSE Code for Interior lighting
Wiring from new ELMCB protected consumer unit with concealed wiring arranged to latest amended edition of the IEE Regulations. All wiring vertical with no diagonal runs.

ACCESS TO MANUAL CONTROLS AND ELECTRICAL FIXTURES:
An openable window or rooflight that provides natural ventilation to meet the current standard should have controls for opening positioned at least 350mm from any internal corner projecting wall or similar obstruction and at a height of:
not more then 1700mm above ffl where access to controls is unobstructed, or:
not more then 1500mm above ffl where access to controls is limited by a fixed obstruction of not more then 900mm high which projects not more than 600mm in front of the position of the controls. Where the obstruction is greater a remote means of opening should be provided, or:
not more than 1200mm above ffl in an unobstructed location within an enhanced apartment or within accessible sanitary accommodation not provided with mechanical ventilation.
Outlets and controls of electrical/fixtures and systems should be positioned at least 350mm from any internal corner, projecting wall or similar obstruction and, unless the need for a higher location can be demonstrated, not more than 1200mm above ffl. This would include fixtures such as sockets, switches, fire alarm call points and timer controls or programmers. Within this height range:
light switches should be positioned at a height of between 900 and 1100mm above ffl.
Standard switched or unswitched socket outlets and outlets for other services such as phone, tv should be positioned at least 400mm above ffl. Above an obstruction such as a worktop, fixtures should be positioned 150mm above the projecting surface.
Where socket outlets are concealed such as to the rear of white goods in a kitchen a separate switching should be provided in an accessible position to allow appliances to be isolated.
TMV`s FITTED TO HOT WATER OUTLETS LIMITING TEMP TO MAX 48°C to BS EN 1111:1999 or BS EN 1287:1999 fitted as close to the point of delivery that is practically possible.

The contractor is responsible for checking dimensions and any discrepancies must be reported to the Architect before proceeding with work on site.
All suppliers, sub-contractors, door/window/fitment manufacturers to check and agree dimensions on site with main contractor before manufacture or installation.
Any discrepancies/changes to be agreed in writing with the Architect before work proceeds.
All drains must be laid and connections made to the satisfaction of the local authority.
The electrical installation must be carried out in accordance with the current amendment of Regulations of the I.E.E and the relevant British Standard.
A diagram layout is to be fixed at the main switchboard.
All external & structural joinery, carpentry, and structural timber to be vacuum treated against rot and insect attack, in accordance with relevant British Standard.
All materials shall be used in a accordance with the manufacturer's written instructions relating to site storage/installation/erection/application.
All goods not otherwise specified shall be installed/erected/applied to the appropriate British Standard where such exist.
All work to be carried out in accordance with the relevant British Standard Code of Practice.
No high alumina cement to be used in structural elements.
No wood wool slabs to be used in permanent formwork to concrete or reinforced concrete or any structural element.
No calcium chloride to be used in admixtures for use in reinforced concrete.
No asbestos products to be used.
No aggregates for use in reinforced concrete to be used which do not comply with British Standard specification 822:1983 nor aggregates for use in concrete which do not comply with the provisions of British Standard Specification 8110:1985.
No urea formaldehyde to be used.
No other substances to be used which are not in accordance with British Standards, Codes of Practice, Good Building Practice or the Hygiene requirements of the Food Industry, current at the time of the specification, or with good building parctice.
All working procedures to be carried out diligently and in accordance with good working Practice and in accordance with
C.D.M. Regulations and Health & Safety at work regulations and guidelines.
Demolition work will be carried out by a Specialist Demolition Contractor. Unless otherwise agreed or specified.
Assurances will be sought, prior to commencement of works that all necessary insurances are in place.
Any asbestos of other hazardous materials will be taken down and removed from the site by Specialist Contractors and by methods required by the Health and Safety Executive and to the satisfaction of all interested parties.
Fires for the disposal of consumable materials will not be permitted on the site.
All Practical methods of controlling the extent of site noise will be employed and works will be limited to normal working hours. Special note to be taken of any relevant Planning Consents.
Dust etc. will be controlled as far as is practicable by damping down rubble etc. during loading and removing off site.
All heating, hot and cold pipes used for the supply of water must be insulated against heat loss to Section 6 of the Standards to BS 5422: 2009.
All rainwater conductors connected to single pipe drainage installations must be trapped prior to connection to combined drain.
Smoke/Heat detectors to be installed in compliance with the relevant British Standard. All hallway smoke detectors to be within 3000mm Radius of all habitable rooms.

WINDOWS AND DOORS:
Designed to meet Section 2 of Secured by Design ACPO 2009.

PARTITIONS non-load bearing

38x75mm treated s/w studs @ max 600mm crs throughout with matching top and bottom rails and x1 row centre dwangs to take 12.5mm gyproc wallboard each side for plaster skim-coat finish. Skirtings to match the existing. 80mm fibreglass insulation laid between studs where indicated. Moisture resistant plasterboard to be used in all wet areas.

PARTITIONS load bearing

45x95mm treated s/w studs @ max 400mm crs throughout with matching top and bottom rails and x1 row centre dwangs to take 9.5mm ply bracing sheeting to one side only to take 12.5mm gyproc wallboard each side for plaster skim-coat finish. Skirtings to match the existing. 100mm fibreglass insulation laid between studs where shown. Moisture resistant plasterboard to be used in all wet areas.

PARTITIONS (Medium Term Fire Duration)

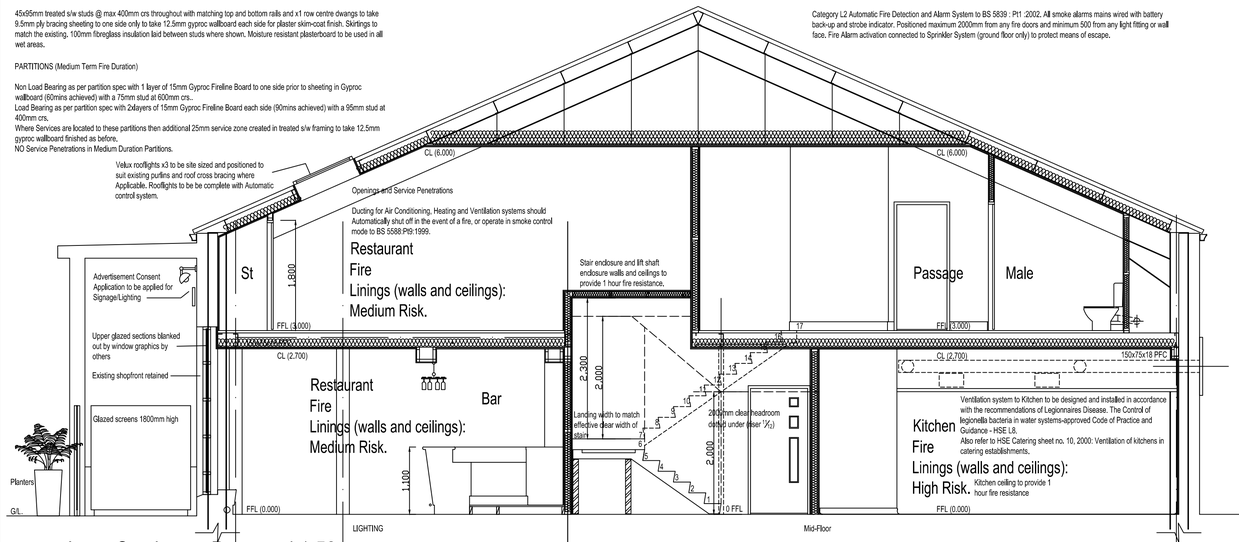
Non Load Bearing as per partition spec with 1 layer of 15mm Gyproc Fireline Board to one side prior to sheeting in Gyproc wallboard (60mins achieved) with a 75mm stud at 600mm crs..
Load Bearing as per partition spec with 2xlayers of 15mm Gyproc Fireline Board each side (90mins achieved) with a 95mm stud at 400mm crs.
Where Services are located to these partitions then additional 25mm service zone created in treated s/w framing to take 12.5mm gyproc wallboard finished as before.
NO Service Penetrations in Medium Duration Partitions.

Automatic Fire Detection and Alarm system to BS 5839:Pt1:2002 Category L1.

FIRE extinguishers :
- Water (not suitable for oils, electrical, flammable liquids and gases).
- Carbon Dioxide (not suitable for oils, electrical, flammable liquids and gases).
- Dry Powder (not suitable for cooking oils and fats).

SMOKE DETECTORS/HEAT DETECTORS

Category L2 Automatic Fire Detection and Alarm System to BS 5839 : Pt1 :2002. All smoke alarms mains wired with battery back-up and strobe indicator. Positioned maximum 2000mm from any fire doors and minimum 500 from any light fitting or wall face. Fire Alarm activation connected to Sprinkler System (ground floor only) to protect means of escape.



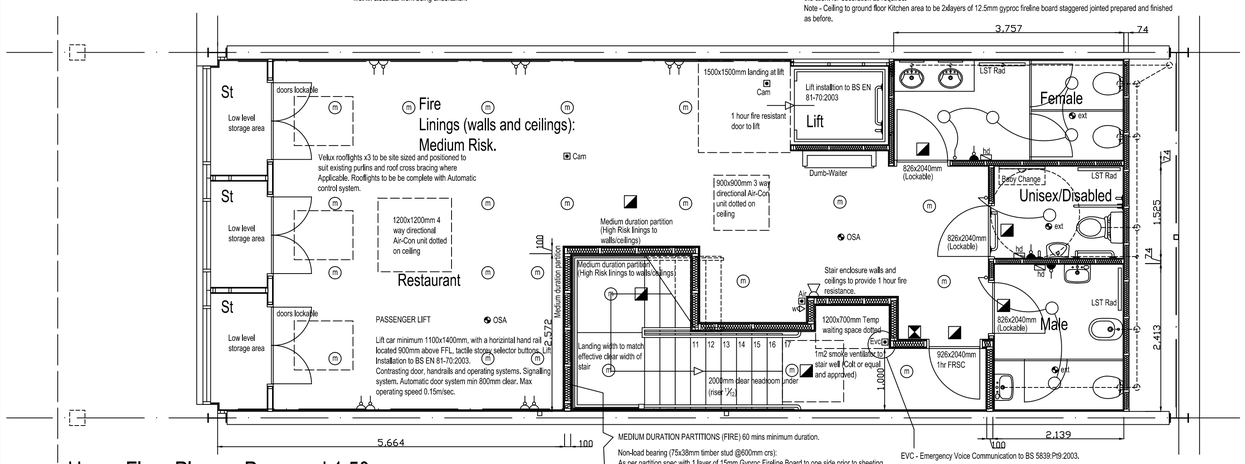
Long Section as Proposed 1:50

LIGHTING

Contractor Designed Lighting System installed to the manufacturer's instructions and recommendations. 75% of all new lighting to be of low energy type.
All recessed downlighters to have insulation adjacent kept clear of each fitting by a minimum of 150mm all round or be fitted with fire hoods.
Engineer specified Metsec flooring system as detailed by the Engineer. Nominal 150mm rockwool insulation laid between floor sections throughout if required by the client.
All external light fittings to be operated and switched by either PIR, timeclock or daylight sensor installed as per the manufacturers instructions and recommendations. Client to advise on locations of any external security flood lighting where required prior to the first fix electrical work being undertaken.

Mid-Floor

22mm Vr313 chipboard flooring (moisture resistant) laid with all joints glued and flooring screw fixed at max 300mm crs throughout.
Note - In areas where non-slip flooring to be used then substitute chipboard for external grade ply and screw fix as before. See spec for skirtings.
Engineer specified Metsec flooring system as detailed by the Engineer. Nominal 150mm rockwool insulation laid between floor sections throughout if required by the client.
2x12.5mm gyproc fireline board (staggered joints) fixed to u/s of joists ames taped and filled or plaster skim-coated as instructed by the client for decoration as required.
Note - Ceiling to ground floor Kitchen area to be 2xlayers of 12.5mm gyproc fireline board staggered jointed prepared and finished as before.



Upper Floor Plan as Proposed 1:50

Automatic Fire Detection and Alarm system to BS 5839:Pt1:2002 Category L1.

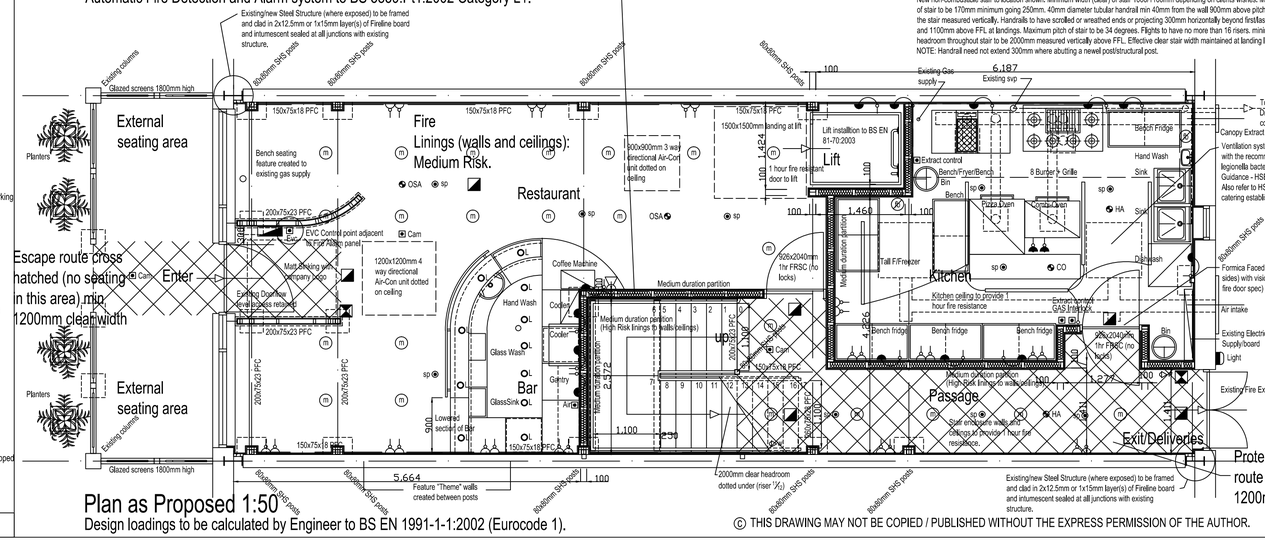
MEDIUM DURATION PARTITIONS (FIRE) 60 mins minimum duration.

Non-load bearing (75x38mm timber stud @600mm crs):
As per partition spec with 1 layer of 15mm Gyproc Fireline Board to one side prior to sheeting.
Load bearing: (95x38mm timber studs @400mm crs): 90mins achieved.
2xlayers of 15mm gyproc fireline board each side staggered joints for finishes (see spec).

EVC - Emergency Voice Communication to BS 5839:Pt9:2003.

STAIR (No open risers to stair. Contrasting nosings and profiled risers).

New non-combustible stair to location shown. Minimum width (clear) of stair 1000/1100mm depending on clients wishes. Max rise of stair to be 170mm minimum going 250mm. 40mm diameter tubular handrail min 40mm from the wall 900mm above pitch line of the stair measured vertically. Handrails to have scrolled or wreathed ends or projecting 300mm horizontally beyond first/last risers and 1100mm above FFL at landings. Maximum pitch of stair to be 34 degrees. Flights to have no more than 16 risers. minimum headroom throughout stair to be 2000mm measured vertically above FFL. Effective clear stair width maintained at landing level.
NOTE: Handrail need not extend 300mm where abutting a newel post/structural post.



Plan as Proposed 1:50

Design loadings to be calculated by Engineer to BS EN 1991-1-1:2002 (Eurocode 1).

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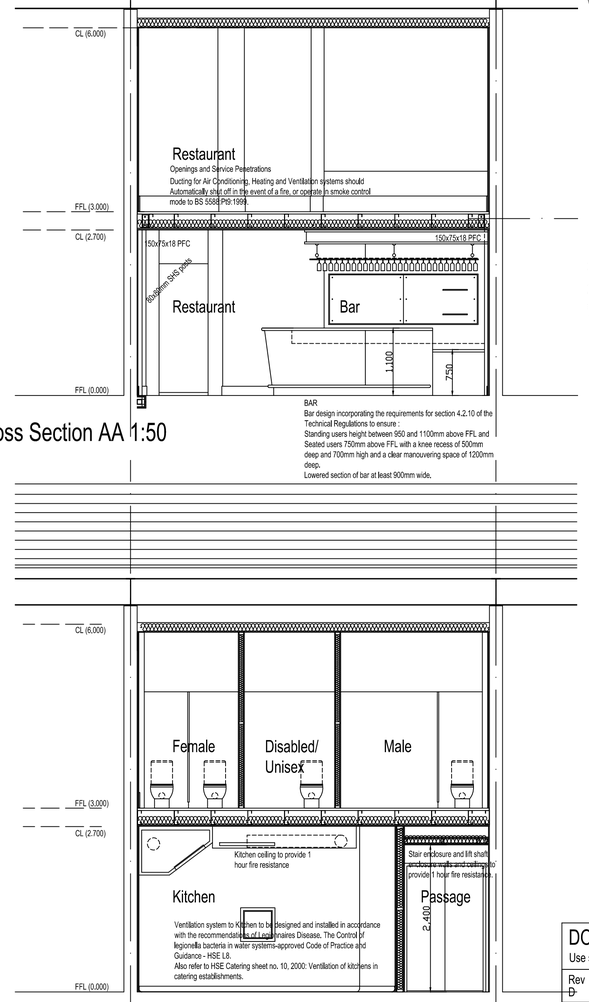
PERFORMANCE : WRITTEN INFORMATION TO BE PROVIDED FOR THE TENANT/OCCUPIER ON THE OPERATION/MAINTENANCE OF THE HEATING AND HOT WATER SYSTEMS TO ENCOURAGE OPTIMUM ENERGY EFFICIENCY.
DRAINAGE (existing)
Existing drainage system to be surveyed and dye test carried out prior to the works commencing to establish type, route and direction of falls etc.... Divert existing drainage if affected by the works to ensure no building over existing system.
Upon completion of drainage works a further dye test to be carried out to ensure correct connections/flows have been achieved to prevent cross contamination/pollution caused by wrong or poor connections made.

hda



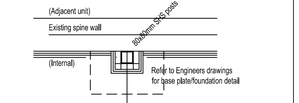
Cross Section AA 1:50

BAR
Bar design incorporating the requirements for section 4.2.10 of the Technical Regulations to ensure :
Standing users height between 950 and 1100mm above FFL and Seated users 750mm above FFL with a knee recess of 500mm deep and 700mm high and a clear manouvering space of 1200mm deep.
Lowered section of bar at least 900mm wide.

Cross Section BB 1:50

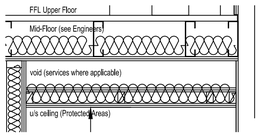
SUSTAINABILITY
Sustainability Label (SL) to be wall mounted in full view to include the level achieved indelibly marked Sections 1-6 of the current Technical Standards achieved therefore Bronze level achieved.
No requirement to meet any higher levels (Silver or Gold).

Energy Performance Certification (EPC)
EPC to be displayed upon completion of the works to include:
Postal address, ref number, date of assesment and certification, building type, calculation tool used, the conditione floor area, primary energy indicator, current and potential building rating on a scale of A-G where A is excellent and G is very poor, the current CO2 emissions expressed as kg of C02 per m2 of floor area, energy use expressed in kWh/m2 of floor area, actual energy performance rating, a statement indicating that the recommendations contained in the report are on file, stating improvements, sources of further advice, heating and electrical sources, type of ventilation system and details of who carried out the assesment and their approved org ref no.



Post plan detail at wall 1:20

Existing/new Steel Structure (where exposed) to be framed and clad in 2x12.5mm or 1x15mm layer(s) of Fireline board and intumescent sealed at all junctions with existing structure.



Typical Fire Ceiling 1:20

Fire Ceilings over Lift Shaft and Escape routes (Protected Zones) to be framed and clad in 2x12.5mm or 1x15mm layer(s) of Fireline board both sides and intumescent sealed at all junctions with existing/proposed structure.

SKIRTINGS / FACINGS

Hardwood skirtings and facings throughout size and type to be selected for decorative stain or paint finish as required by the Contractor.
Note - Where cove skirting detail then facings to be cut short with no skirting/skirting blocks to ensure flooring returns to door stop to ensure seal.

EXTERNAL WALLS (U Value to achieve 0.27 W/m²K)

Existing masonry cavity wall construction of 19mm render system on 102.5mm block brick external skin. Cavity (thickness unknown). 100mm dense common block inner skin throughout building envelope (see sections and elevations).
Existing inner skin to have all finishes where applicable removed and block cleaned off and prepared to take finishes as required.
External walls (2 number) to have Kingspan or equal and approved Thermawall insulation board on dabs applied (thickness required to achieve u value as stated).
Ames tape and fill or plaster skim-coat as clients requirements and prepare to take one coat sealer and minimum two coats matt emulsion.
Client to advise on any specialist wall coverings required to areas prior to decoration.
See spec for skirtings where applicable.

CEILINGS (Normal to mid-floors)

2x12.5mm Fireline board secured to u/s of Engineer designed floor ames taped and filled of plaster skim-coated to take decoration to the clients requirements.
Ceiling to Kitchen area to have 2xlayers of 12.5mm gyproc fireline board secured to underside and prepared to take decoration as above.
Client to advise on requirements for any cornicing required in areas.
Note - Mid-floor insulated for sound purposes only. Nominal 150mm rockwool where applicable to be laid between joists prior to upper floor coverings being laid.

DOORS (1 hour FRSC) Clear opening widths to comply with section 4.2.5 of the Technical Regulations (see below).
New doors where indicated to be 926x2040mm 1 hour fire resistant self-closing fire door complete with smoke seals and intumescent strips.
If Client requests glazing to door then glazing to be Georgian Wired polished plate with glazing beads bedded in intumescent sealant and screw fixed. Height of glazing on any pass doors to give a visibility zone of between 500mm to at least 1500mm above FFL. A solid panel may interrupt this between 800 and 1150mm above FFL.

DOORS (General) Clear opening widths to comply with section 4.2.5 of the Technical Regulations (see below).

All new doors (sized as shown) to be solid core flush faced pre-finished doors complete with frames and ironmongery.
Doors to have 250mm high mild steel kick plates both sides face fixed.
Main access door complete with Disabled Access Automatic Push Pad entry system. Where automatic push pad or controlled entry system to be used it should be positioned between 900 and 1200mm above FFL.
Rear Fire Exit door to be alarmed with Audible sensor to Bar area.
Doors should be capable of opening with a force not more than 30N (for the first 30° of opening) and 22.5N (for remainder of the swing). Closing devices (where applicable) should close the door from any opening angle.

DOORS (Clear widths) Minimum 300mm clear to leading edge of door to any wall face throughout.
800mm clear at 1500mm corridor width. 825mm clear at 1200mm corridor width. 850mm clear at 900mm corridor width.
825mm clear at a 1200mm corridor can reduce to 800mm clear if met head on.
Corridor widths generally should not be less than 1200mm.

DO NOT SCALE
Use specified dimensions. If in doubt please ASK.

Rev	Date	Revision
~~D~~	Oct 2014	Layout revised for SAC Bctrl.

This is a true copy of the Drawing referred to in the Application :
Dated .....
Signed .....
on behalf of Hiltech Design architectural services.

☐ Preliminary ☐ Design Approval ☐ Planning
■ Tech Standards ☐ Tender ■ Construction

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Client
Mr and Mrs A Fairbairn
Ae fond kiss, Ayr Road Irvine.

Project
Proposed Bar and Restaurant
Greenan Retail Units, Dunure Road, Doonfoot, Ayr.

Drawing
As Proposed 1 of 2
(SEE ENGINEERS DRWG`S 1548.HDA-001/2)

Drwg No.
136-03 (D)

Drwn by	Scale(s)	Date
R Hill	1:20 1:50	October 2014.