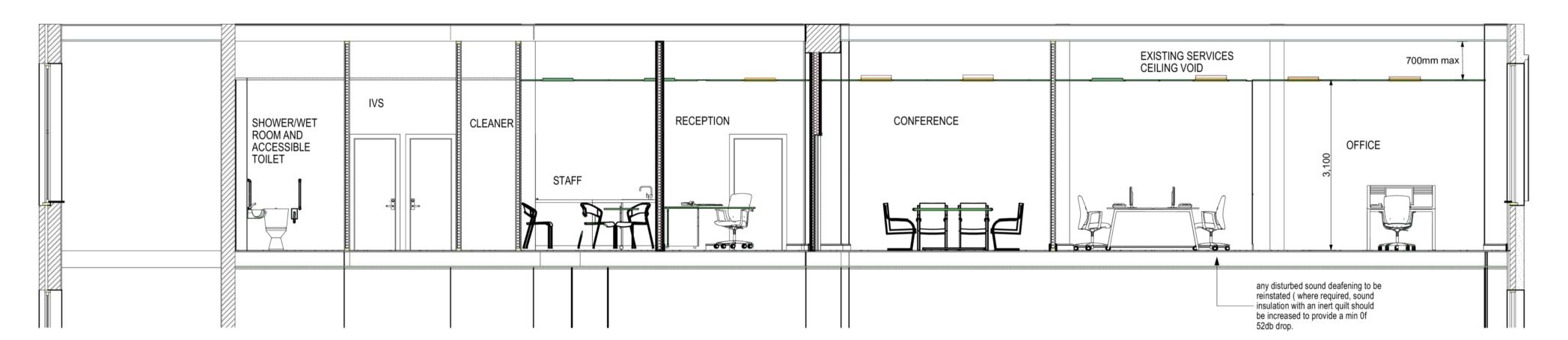
Building (Scotland) Act 2003





**CROSS SECTION** 

### EXISTING STRUCTURE:

The existing roof, walls and floor structures are unaffected by these proposals

INTERNAL NON-LOAD-BEARING WALLS (NEW WALLS):

Unless otherwise noted all new internal walls shall be constructed with galvanised 70mm jumbo stud with 1no. layer 12.5mm plasterboard each side at 400mm centres achiving a minimum short term fire resistence. The studs shall be filled with an inert sound insulation quilt having a density of 17kg/msg min. centres may 12.5mm thick plasterboard to both sides with joints taped and filled. Partitions around

having a density of 17kg/msq min. centres max,12.5mm thick plasterboard to both sides with joints taped and filled. Partitions around bathrooms and en-suite to be filled with 12.5mm moisture resistant plasterboard shall be fitted to all internal toilets side. Where partitions are designated one hour, 2no layer 12.5mm fire line plasterboard shall be fitted on each side, with staggered joints. All partitions to be ames taped and finished with 1mm board finish, painted 2no coats emulsion.

### CEILINGS

Ceilings throughout are existing:

New suspended plasterboard ceilings below existing ceilings in the tea area and toilets, shall be either suspended plasterboard min (Class-1) ceiling, or suspended ceilings in anadodised aluminium grid 600x600 tiles:

Verifying resistance of wall linings etc. in accordance with regulations 2.5.1 and 2.6.1 either class"0" or class 1, for medium fire

No ceiling void shall be more than 750 high.

Fire stopping at services penetration through fire walls/ barriers shall be via fire collars for pipes and fire dampers for ventilation ducting (refer to drg AD40 for specification)

## FIRE RESISTANCE OF MATERIALS:

INTERNAL WALLS

All internal walls have a non combustable plasterboard finish. (Class-1)

CORRIDORS:

All circulation spaces (Corridors) have a minimum widths throughout of 1200mm clear.

Where corridors serve disabled access turning circles shall be a minimum of 1600mm.

## Emergency (escape route) lighting:

Emergency (Escape) lighting is provided at final access exist doors, at intermediate escape doors as necessary . and at a distance between each emergency light not greater than 6 metres. All in accordance with BS5266 pt1. Emergency Lighting shall be hard wired in a fire protected circuit originating from incoming Distribution board, where possible; or in self contained emergency luminaires

All new doors from office into protected escape stair are medium term duration fire doors, with a minimum clear width between leaf open at 90 degrees and door check on opposite side of 1200mm.

Unless otherwise noted all new doors shall be 864x1981 min high to give a clear egress width of 800mm min.

All doors serving accessible toilet shall have a opening leaf of 924mm giving a 900mm clear egress width.

All new external entrance/exit doors to be 924 x1981mm min high which will give a minimum egress clear width of 850mm.

### All doors designated as emergency final exist doors shall be clearly signed

Internal fire doors shall be fitted with intumescing strips and smoke seals on four sides and be fitted with an overhead door closer.

All emergency doors serve less than 60No occupants and hence it is not necessary to open in direction of travel.

The doors to the team prep areas shall be a short term duration and be fitted with over head closers.

## Internal doors:

All internal doors (except toilet cubicle doors) shall have clear vision panels (doors leading to IVS shall have an obscure visual panel) bottom of visual panel to be 600 mm above floor level, be max 150mm from opening edge, and not less than 200mm in width. All circulation doors to have a min of 300 clear space at leading edge.

### Doors and windows:

The new external access doors shall have a low threshold not greater than 15mm.

The new access door into the office shall have a maximum "U" value of 1.4 w/mswk-1

EMERGENCY ESCAPE PROFILE:

OFFICE ( Medium evacuation)

MAXIMUM 18M IN ONE DIRECTION
MAXIMUM 45 METRES IN TWO DIRECTIONS

All glazing shall be to BS 6262. Any glazing below 850mm above floor or ground level, shall be to a minimum class B to BS6262 (eg,doors with visable panels, glass doors doors, glazed office partitions)

In order to mitigate potential risk of collision Manifestation shall be fixed to all Glazing screens at a height between 850mm and 1.0m, and between 1.4m and 1.6m above floor level.

## isting Electric heating:

Existing office heating is provided by a 12Kw air-coditioning unit. The system shall be tested and commissioned for adequate opration and maintenance. if it is to be reused

Electric Hot Water System Throughout the building (where and if applicable and depending on existing Electric Load) Electric Cobination Boilers boilers where used to be IMQ tested

Equipment combinated beliefs belief with Equipment and the Education of th

IEC 60335-1:2010 with EN 60335-2-21:2003 + A1:2005 +A2:2008 - EN 60335-1:2012 - EN 62233:2008

Alternatively hot water may be provided by an directed unvented system. Locally hot water can be provided by 15L capacity unvented undersink Hetrae Sadia.

# PLUMBING GENERAL:

ALL supply cold and water pipes within solum and out with the insulated building envelope shall be insulated.

All new radiators shall be fitted with thermostatic valves, and return check valves

## Building Ventilation (general):

The system is to comply with 3.14.3 by the use of individual extract and supply fans, opening windows and trickle ventilation.

All external rooms have opening windows in excess of 1/30th of the floor area

Toilets to be served wit In-line Extract fans with an extraction rate of 60 L/sec. giving 5 air changes per hour. to all toilet areas

Extract fans to be connected and operated with light switch, and be fitted with an isolator switch operated by the residents.

## GENERAL NOTE:

The proposed alarm system shall be a L2. It will inlcude for void detection above ceiling level where the ceiling void above the suspended ceiling, is more than 800mm

Electrical Installation

# General design in accordance with BS 7671 2008, and amendment 1. 2011 17th EDITION of the IEE Electrical Regulations

17th EDITION of the IEE Electrical Regulations

Outlets and controls of electrical fixtures and systems should be positioned at least 350 mm from any internal corner, projecting wall or similar obstruction and, unless the need for a higher location can be demonstrated, not more than 1.2 m above floor level. This would include fixtures such as sockets, switches fire alarm call points and timer controls or programmers. Within this height range:

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 mm and 1.1 m above floor level.

standard switched or unswitched socket outlets and outlets for other services such as telephone or television should be positioned at least 400mm above floor level. Above an obstruction, such as a worktop, fixtures should be at least 150 mm above the projecting surface.
 75% minim of all new lighting to have low energy fittings: meaning light fittings shall provide minimum of 45 lumens for watt consumed

# The smoke detector / alarm system to be in accordance with BS 5446-1, to be kite marked certified and is to be mains powered with a battery backup. The smoke detector / alarm positions are shown on the (5) series plan layouts showing all services.

There are "no" load bearing walls effected by the proposals.

The existing fire plane existencial Octobally service I Octobally

The existing fire alarm system is L2: it shall remain L2 where modified die to new rooms layout

The proposed shutter does not serve any fire purposes, it is there solely for security. It is non combustible and made of

galvanised steel.