BUILDING CONTROL ORDINANCE, 2013

BUILDING REGULATIONS, 2019

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STHELENA



BUILDING CONTROL ORDINANCE, 2013 BUILDING CONTROLREGULATIONS, 2019

In exercise of the powers conferred by section 2 of the Building Control Ordinance, 2013, the Governor in Council makes the following Regulations:

Citation and commencement

1. These Regulations may be cited as the Building Control Regulations, 2019, and come into force on

Interpretation

2. In these regulations—

"access and facilities for persons with disabilities" means-

- (a) people who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others; and
- (b) no person may be treated in a discriminatory manner in respect of access to any of the following places to which the general public have access, namely, shops, hotels, restaurants, eating-houses, licensed premises, places of entertainment or places of resort; but the proprietor of such a place has a duty to provide amenities and equipment facilitating the access of disabled persons only to the extent provided by a law;
- "Appeals Tribunal" means the Land Development Appeals Tribunal established under section 52 of the Land Planning and Development Control Ordinance 2013;
- **"applicant"** means the person giving notice of intention to carry out building work and making application for approval under regulation 4;
- "Authority" means the Land Development Control Authority established under section 3 of the Land Planning and Development Control Ordinance 2013;
- **"Building Inspector"** means any Building Inspector or Assistant Building Inspector as appointed by the Governor to administer these regulations under the Ordinance;
- "change of use" means there is a change in the purpose, for which a building or part of a building is used, being a change from any Use Class specified in Schedule 1 to the Land Planning and Development Control General Regulations 2013, to any other Use Class so specified or from a use not included in any Use Class to any use specified in a Use Class;
- "Chief Building Inspector" means the Chief Building Inspector as appointed by the Governor to administer these regulations under the Ordinance;
- "commercial premises" includes any building to which the public has access and all places of employment;

- "competent person" is someone who has sufficient certified training and experience or knowledge and other qualities that allow them to assist you properly in relation to the specific task;
- "development" has the meaning given to it by section 2(2)(a)(i) of the Land Planning and Development Control Ordinance 2013, and includes change of use;
- "dwelling" is a single dwelling, having any number of storeys;
- **"flat"** means a unit of residential accommodation, including holiday accommodation, that is separated horizontally from other accommodation or is separated from other uses within the same building;
- "habitable" means a safe living environment in compliance with these regulations;
- **"habitable room"** includes a living room, sitting room, dining room, bedroom, study and any other room which might reasonably be used as a bedroom; and any such room which is combined with a kitchen must, for the purposes of regulation B.5 in Schedule 3, be construed as a kitchen for the purposes of ventilation but as a habitable room for the purposes of providing natural daylight;

"the Ordinance" means the Building Control Ordinance 2013, except where otherwise stated.

Application

- **3.** (1) These regulations apply to—
- (a) all new applications made for construction, except as provided in regulation 14(a) (exemptions) and 14(b) (partial exemptions); and
- (b) all new applications made for change of use of buildings, except as provided in regulation 14(a) (exemptions) and 14(b) (partial exemptions).
- (2) All building work—
- (a) up to 3 storeys must comply with the methods and standards of construction of buildings and structures and systems associated with buildings, as set out in Schedule 3;
- (b) in respect of buildings or structures exceeding paragraph (a) must be designed and constructed in accordance with BS EN 1990:2002 Euro codes.

Requirement to give notice and make application

4. (1) *Notice:* A person who intends to carry out building work to which these Regulations are applicable, may not do so without first having submitted to the Chief Building Inspector or Building Inspector, in the form set out in Schedule 1, notice of such intention and application for approval of the plans.

(2) *Plans:* The notice and application referred to in sub-regulation (1), must be accompanied by plans, in duplicate, showing the full extent of the development intended to be carried out, together with such other details and written particulars necessary to demonstrate compliance with these regulations. Plans must be submitted at recognised scales and with sufficient detail to make clear the relevant elements of the development. Site plans must include an accurate representation of boundaries and adjoining structures and must include a north point. The Chief Building Inspector or Building Inspector may request additional plans and such other information as considered necessary to assess whether the development complies with these regulations and may not approve the application until such additional plans and other information have been received from the Applicant.

(3) *Registration of submitted application:* When the Chief Building Inspector or Building Inspector has received all such plans and other information as considered reasonably

necessary to assess the proposed building work against these Regulations, together with the fee referred to in regulation 5, the application must be registered and the Chief Building Inspector or Building Inspector must—

- (a) immediately inform the Applicant in writing that it has been registered; and
- (b) Consult the Chief Planning Officer, to ensure that the plans comply fully with any Development Permission granted or deemed to have been granted, in respect of the same development, under the Land Planning and Development Control Ordinance 2013.

(4) Approval or rejection: Plans that demonstrate compliance with these regulations must be approved by the Chief Building Inspector or Building Inspector and plans that show non-compliance with these regulations must, except as provided in sub-regulation (7), be rejected.

- (5) *Referral to Land Development Control Authority:* In any case where—
- (a) in consequence of proposed materials or forms of construction not envisaged in these regulations, it is not clear whether compliance will be achieved; or
- (b) in the opinion of the Chief Building Inspector it is appropriate to grant relaxation of any regulation, the Chief Building Inspector may refer the application to the Land Development Control Authority, together with recommendation's, and must immediately advise the applicant in writing of the referral to the Authority. The Authority, having considered the plans together with the recommendation of the Chief Building Inspector and such other technical advice as it considers necessary to reach a decision must, subject to sub-regulation (6), instruct the Chief Building Inspector or Building Inspector either to approve or to reject the plans.

(6) Completion in accordance with plans: The applicant must ensure that the development is carried out and completed in accordance with the approved plans or such revised plans as the Chief Building Inspector or Building Inspector may subsequently approve, provided all such plans also comply fully with any development permission granted or deemed to have been granted, in respect of the same development, under the Land Planning and Development Control Ordinance 2013. In the event that ground conditions become apparent in the course of the building Inspector may approve departures from the approved plans provided that the work still complies with these Regulations and any departures are approved in writing.

(7) Conditional Approval And Revised Plans: If in the opinion of the Chief Building Inspector, or Building Inspector, the failure of plans to show compliance with these regulations can be corrected by imposition of conditions or submission of revised plans, whilst still complying fully with any development permission granted or deemed to have been granted, in respect of the same development, under the Land Planning and Development Control Ordinance 2013, approval may be given subject to such conditions or in respect of revised plans and the development must be completed in accordance with the conditions and/or revised plans, as the case may be. If, in the opinion of the Chief Building Inspector or Building Inspector, further conditions are required throughout the development process to maintain compliance with these regulations, the Building Inspector must inform the applicant in writing of additional conditions imposed.

(8) *Notice of approval or rejection:* The Chief Building Inspector or Building Inspector must give notice in writing of the decision to approve or reject plans within 28 days from the date of registration of the application, or such longer period agreed in writing between

the applicant and the Chief Building Inspector or Building Inspector. Failure to give notice of the decision within this time will result in the plans being deemed rejected.

(9) *Stage inspection notices:* Concurrent with giving notice of approval of plans, the Chief Building Inspector or Building Inspector must issue to the applicant stage inspection notices for completion by the applicant at the stages of completion referred to in regulation 11.

(10) Certification of satisfactory completion: Upon final inspection by the Chief Building Inspector or Building Inspector following submission under regulation 11(2)(j) of the stage notice of completion, the Chief Building Inspector or Building Inspector must immediately, if satisfied that the development complies with these regulations and is fit for use, issue a certificate to that effect. Other than as provided in sub-regulation (11), the development may not be brought in to use unless such certificate has been issued.

(11) *Partial completion and use:* If, in the opinion of the Chief Building Inspector or Building Inspector, part of the development is fit for use without other parts, or elements of that part, having been completed it may, at reasonable discretion, inform the applicant in writing that the relevant part may be brought in to use subject to the remaining parts or elements being completed within an agreed time-frame specified in the partial completion letter. Sub-regulation (10) then applies to the remaining parts or elements until final inspection.

(12) As-built plans: to be submitted and approved in certain cases. In the case of buildings for any purpose to which the public may have access, in addition to the plans required to be submitted under sub-regulation (1), the Chief Building Inspector or Building Inspector may request upon practical completion of the development plans showing the development as completed. Such plans must be marked "as-built" and must be approved or rejected by the Chief Building Inspector or Building Inspector or Building Inspector in the like manner to the plans submitted under sub-regulation (1). In the event that as-built plans have been requested and not submitted, the premises may not be brought in to use until those plans have been submitted and approved. In the event that as-built plans are rejected, any element of the work not in compliance with these regulations must be brought in to compliance. Plans showing the revised work as-built must be submitted and the premises may not be brought in to use until those plans have been approved.

Fees

5. (1) The fees set out in Schedule 2are payable in respect of the matters set out therein.

(2) The application fee must be submitted with the notice and application referred to in regulation 4(1) and the application may not be registered until such fee has been paid.

Appeals

6. (1) A person aggrieved by a decision of the Chief Building Inspector or Building Inspector to reject the plans, or of deemed rejection, or to the attachment of any condition, or refusal to relax any regulation may, within 28 days of the date referred to in regulation 4(8), appeal to the Appeals Tribunal.

(2) A person aggrieved by a decision of the Chief Building Inspector to serve an enforcement notice under section 4 of the Ordinance, may within 14 days of the date of being served with the notice, appeal to the Appeals Tribunal.

(3) The Appeals Tribunal must, within 60 days of receipt of the appeal, give a decision whether the appeal is upheld or dismissed and in default of a decision within 60 days the appeal is deemed to be upheld.

(4) In determining any appeal submitted under the Ordinance and these Regulations, the Appeals Tribunal must proceed in the like manner to determine an appeal submitted under the Land Planning and Development Control Ordinance, 2013, so far as applicable to the substance of the appeal and otherwise as may be decided by the President of the Tribunal.

Deemed-to-satisfy provision

7. Where any provision in these Regulations, called a *deemed-to-satisfy provision*, states that the use of a particular material, method of construction or specification is deemed to satisfy the requirements of a regulation, that provision must not be construed so as to require any person necessarily to use such material, method of construction or specification.

Powers of entry

8. A Building Inspector may (at any reasonable time) enter on any land or in any building for the purpose of administering and enforcing these regulations, subject to sections 3(3), 3(4) and 3(5) of the Ordinance.

Testing of drainage installations

9. The Chief Building Inspector or Building Inspector may require tests to be conducted of any drainage system that may be necessary to establish compliance with Part H of Schedule 3.

Material sampling and testing and adequacy of materials and workmanship

10. (1) The Chief Building Inspector or Building Inspector may require such samples of material used, or proposed to be used in the work, and have them subjected to testing as necessary to establish that its properties and use will comply with these regulations.

(2) Materials used in the development must be fit for their purpose in the conditions in which they are to be used, adequately prepared, applied and fixed so as to perform the functions for which they were designed and made. In case of doubt, compliance with a current British Standard or British Standard Code of Practice prescribing the quality of materials or standards of workmanship applicable to the case, or any other internationally recognised standard are deemed to satisfy this requirement.

(3) Nothing in this regulation prohibits the use of locally sourced materials, including pozzolanic earths in concrete, mortars, renders and plasters, gypsum based materials, or components or coverings based on locally excavated or grown materials that are proved by experience or experiment to be fit for their purpose.

Stage notices to be given

11. (1) The applicant must ensure that any person who carries out building work to which these regulations apply, gives notice to the Chief Building Inspector or Building Inspector by returning the stage notices at the following stages and may not proceed beyond that stage or cover up work until it has been inspected and approved by a Building Inspector or 48 hours from the date of receipt by the Building Inspector, of the stage notice, excluding weekends and public holidays, whichever is sooner. In the event that the work is inspected and approved, no further work may be done or covered up until it has been corrected and approved, in default of which the Chief Building Inspector may serve an enforcement notice under section 4 of the Ordinance.

- (2) The Stages are:
- (a) Site Preparation: boundary pegs installed, vegetation and vegetable top soil stripped, extent of proposed site excavations and access marked out.
- (b) Site Excavation: Once the site has been excavated to the approved plans.
- (c) Building Set Out: foundation trenches excavated and foundation reinforcement in place.
- (*d*) *Slab Preparation:* Foundation concrete laid, hard-core, blinding and under-floor damp-proof membrane in place but concrete slab not poured.
- *(e)* Damp Proof Course (DPC): Floor slab poured and damp proof courses under walls in place.
- (f) Lintels: Shutter boards and reinforcement in place for in-situ concrete lintels and beams but concrete not poured.
- (g) *Roof:* Walls built, roof structure in place, fixed and covered but roof structure not concealed.
- (*h*) *Drains laid*: Ready for testing but not backfilled, inspection chambers and any septic tank constructed but not covered nor backfilled.
- (*i*) Soak away: Excavated but not backfilled.
- (j) Completion of work.

(3) Any element which has been structurally designed with accompanying calculations are subject to additional stage inspections, such additional inspections to be listed on the notice under regulation 4(9) of approval of the plans.

(4) In the case of buildings to which the public may have access, the Chief Building Inspector may require additional stage inspections, such additional inspections to be listed on the notice under regulation 4(9) of approval of the plans.

(5) Failure to give notice of any stage inspection will render the person liable for exposing or opening up the work and carrying out any remedial works required at their own expense in order that compliance can be ascertained.

Certificate of occupancy

12. (1) Any habitable developments to which these regulations apply require a certificate of occupancy before the development is brought into use.

- (2) The minimum requirements are—
- (a) electrical certification from the relevant utilities service provider;
- (*b*) potable water services;
- (c) cooking & utensil washing facilities;
- (d) sufficient sanitary convenience facilities;
- (*e*) all floors sealed;
- (f) minimum one coat of paint/cladding on internal walls;
- (g) all exterior walls weatherproofed;
- (h) roof completed.

Dangerous structures emergency measures

13. (1) If it appears to the Chief Building Inspector at any time that a structure is in a dangerous condition, emergency measures may be taken to remove the danger.

(2) Before exercising the power set out in sub-regulation (1), the Chief Building Inspector must make such attempts as reasonably possible to notify the owner of the proposed measures and may accept a proposal from the owner to undertake to remove the danger in a defined timescale.

(3) Where the Chief Building Inspector finds it necessary to arrange for the carrying out of emergency work, the owner of the structure is liable for the full cost of such work.

Exemption of certain types of buildings

- **14.** (1) The following types of building are Exempt from these Regulations:
- (a) a temporary building that is not intended to remain for more than 6 months and does not so remain for more than 6 months;
- (b) a building which is an animal shelter or agricultural storage building, greenhouse or polytunnel and used solely for that purpose;
- (c) a building which is not normally entered except for the purpose of maintenance of that building or of equipment associated with it;
- (d) a detached single storey building with a floor area not exceeding 28m² with no sleeping accommodation, provided it is sited at least 2m from any other building or the boundary of its curtilage;
- (e) a single storey extension with a floor area not exceeding 28m² of the nature of a porch, verandah, covered way or car port, provided that it is sufficiently open not to restrict day lighting or natural ventilation to habitable rooms nor obstruct a fire exit and provided it is sited at least 2m from the boundary of the curtilage of the building to which it is attached.
- (2) The following partial exemptions apply in respect of historic buildings:
- (a) except in respect of structural stability and fire safety, historic buildings are exempt from these regulations for—
 - (i) changes of use; and
 - (ii) extensions, to such extent that exemption is reasonably necessary to retain their architectural and historic value or their contribution to the character of a Historic Conservation Area;
- (b) for the purposes of this regulation, historic buildings are Listed Buildings and associated structures and vernacular buildings of traditional form and construction that are relevant for the purposes of sections 39 to 41 of the Land Planning and Development Control Ordinance, 2013.

Application to work done by or on behalf of the Crown

15. These regulations apply to development by, or on behalf of, St Helena Government except development for the purpose of alleviating an imminent or existing public emergency. Any such development must be brought in to compliance with these regulations as soon as practicable after the end of such public emergency or the development removed and the land (and any building affected by the development) reinstated to its previous condition.

Amendment of legislation

16. Paragraph 1 of Schedule 2 to the Land Planning and Development Control (Forms and Fees) Regulations, 2013, is amended by deleting sub-paragraph 3.

SCHEDULE 1—FORM A ST HELENA

BUILDING CONTROL ORDINANCE 2013

NOTICE OF INTENTION TO CARRY OUT BUILDING WORKS AND APPLICATION FOR

APPROVAL OF PLANS UNDER THE BUILDING REGULATIONS 2019

Please complete using block capitals and black ink. Two copies are required of this form and all plans and drawings.

o				
Reference Number:				
Communal Connection Septic Tank & Soakaway				
Other:				
Width				
Width				
Width				
-				

is the	ere a drinking water supply at the site?	a <u>.</u>	Yes No
lf no	please state the proposed arrangement		
Plea	se State the materials and finishes used fo	r:	
Exte	rnal Works		Roof Covering
Nor plea	n-compliance : if there is any element of th ase state it and explain the reason.	e Building Re	gulations with which you consider that you can not comply
Plans	s sufficient to demonstrate compliance wi	th the Buildin	g Regulations, to include 2 copies of the following:
	Site Plan (at a scale of 1:200 or large	<u>:r)</u>	
	Location Plan		
	Site Plan		
	Building Plans (at scale 1:100 or larg	<u>ger)</u>	
	Floor Plan		Floor Joist Plan
	Foundation Plan		Roof Plan
0	All Elevations		Cross-Section
	Drainage Details		Fire Plan
	Construction Details		
	Structural Calculations with Reinforcement Layout		
Note with	e: One copy of each approved drawing will them and the Building Regulations Appro	be returned to val.	to you and the building works are to be done in accordanc
A)	This Notice is given in relation to the Bui Control Ordinance 2013 and is accompa	lding work as nied by the ap	described , is submitted in accordance with the Building propriate fee.
В)	I enclose (Building Regulation Fee)		
	SHG receipt No Or BOSH receipt No		In the sum of £

SCHEDULE 2 FEES

1. Subject to paragraphs 2, 3 and 4, the fees payable under these regulations are as follows:

New Floor Area Created	Fee		
New Dwellings			
Up to 90m ²	£125.00		
90m² up to 120m²	£185.00		
120m ² up to 200m ²	£300.00		
Exceeding 200m ²	£300.00 plus £50.00 for every		
	45m² over 200m²		
Domestic extensi and an	ions, domestic alterations cillary buildings		
Up to 12m ²	£75.00		
12m ² up to 30m ²	£120.00		
30m ² up to 90m ²	£160.00		
Exceeding 90m ² £21			
Non-dome	estic Developments		
Up to 90m ²	£125.00		
90m² up to 120m²	£185.00		
120m ² up to 250m ²	£300.00		
250m ² up to 500m ²	£600.00		
Exceeding 500m ²	£600.00 plus £50.00 for every		
	100m² over 500m²		
	Appeals		
Up to 120m ²	£180.00 (refundable if appeal		
	tribunal allows the appeal)		
	Twice the application fee but		
Exceeding 120m ²	limited to £1200.00		
	(non-refundable)		
New Roof Structure	£65.00		
Application for Exemption	£10.00		

- 2. If the development application includes more than one dwelling of identical design, the building regulations fee payable in respect of the second dwelling must be reduced by one-third and on the third and subsequent identical dwellings by one half.
- 3. The fees in the table in paragraph 1 must be reduced by 50 per cent in the case of an application for development by—
 - (*a*) a charitable organization registered under the Charities Ordinance, 2005, for any charitable purpose carried on by such organization as referred to in such Ordinance; or
 - (*b*) a community association registered under the Community Centre's Ordinance, Cap. 162, for purposes of providing any community facilities.

- 4. No fees are payable in respect of development undertaken solely to facilitate easier access by disabled persons to any buildings or land, or to the use of such buildings or land.
- 5. Any fee paid by a person in respect of the lodging of a notice of appeal, must be refunded if the appeal is upheld or the original decision against which the appeal was noted is varied on appeal.

SCHEDULE 3

TECHNICAL REGULATIONS

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 - B.2. Drainage Of Subsoil And Re-Routing Watercourses
 - B.3. Resistance To Moisture For Floors, Walls And Roofs
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PART C: Fire Safety

- C.1. Means Of Warning And Escape (Dwellings)
- C.2. Fire Spread (Structure)(Dwellings)
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- C.7. Means Of Warning & Escape (Commercial & Places Of Employment)
- C.8. Fire Spread (Structure)(Commercial & Places Of Employment)
- C.9. Fire Spread (Surfaces)(Commercial & Places Of Employment)
- C.10. Fire Fighting Equipment (Commercial & Places Of Employment)
- C.11. Fire Safety: Others
- PART D: Staircases, Ramps and Protection From Falling
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- **PART F:** Access And Facilities For Persons With Disabilities
- PART G: Resistance To The Passage Of Sound
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PART A: STRUCTURAL STABILITY

A.1. STRUCTURAL DESIGN

Structural design and loading shall be in accordance with BS EN 1990:2002 Eurocodes or as per *deemed-to-satisfy provisions* contained within this document:

- (1) BS EN 1990:2002 Eurocodes 1 General Basis of Design;
- (2) BS EN 1990:2002 Eurocodes 2 Concrete;
- (3) BS EN 1990:2002 Eurocodes 3 Steel;
- (4) BS EN 1990:2002 Eurocodes 4 Composite Steel and Concrete;
- (5) BS EN 1990:2002 Eurocodes 5 Timber;
- (6) BS EN 1990:2002 Eurocodes 6 Masonry; and
- (7) BS EN 1990:2002 Eurocodes 7 Geotechnical Work and Foundations.

A.2. FOUNDATIONS

- (1) The foundations of a building shall safely sustain and transmit to the ground the combined dead load, imposed load and wind load of the structure without permitting deflection or deformation of any part of the building, or such movement of the ground as will impair the stability of any other building.
- (2) Foundations shall extend down to a depth that will safeguard the structure from landslip on sloping sites and shall accommodate swelling or shrinkage of the ground, in so far as the risk can be reasonably foreseen, sufficient to ensure stability of the building.
- (3) Foundations shall be designed to suit building design and site conditions. Structural calculations shall be provided in support of raft or piled foundation designs and in any

case where ground conditions are such that, in the opinion of the Chief Building Inspector or Building Inspector, calculations are necessary including as to reinforcement.

- (4) The following are *Deemed-to-Satisfy provisions* for **Simple Strip Foundations**:
 - a) Provide a concrete strip foundation composed of one part cement to three parts stone dust or washed sand to three parts coarse aggregate by volume, with an approximate water to cement ratio of 0.5. The thickness to be a minimum of 225mm and its width dependent upon the loadbearing characteristic of the soil and in any event not less than as shown in Table 1. There is to be no made ground or wide variation in the type of subsoil. Any step in the foundation must extend a lap equal to the thickness of the concrete or 300mm whichever is the greater and the maximum height of step must not exceed the thickness of concrete.

(5) The following are *Deemed-to-Satisfy provisions* for **Simple Trench-fill Foundations**:

a) Provide a fully filled trench of concrete composed of one part cement to three parts stone dust or washed sand to four parts coarse aggregate by volume, with an approximate water to cement ratio of 0.5. The trench to be excavated down to firm ground and in any event not less than 600mm, its sides accurately cut vertical and its width not less than 150mm projection each side of the wall for single storey or 225mm in the case of two storey buildings and three storey buildings.

TABLE 1						
WIDTH OF STRIP FOUNDATIONS						
Type of Soil in Base		Minimum Projection each Side				
of Trench	Test Excavation Feasible Using	of t	he Wall (P)		
(Determined By		Single	Two	Three		
Building Inspector)		Storey	Storey	Storey		
Rock	Requires at least a pneumatic or other					
(Assumed BP of	mechanically operated pick for	150mm	225mm	225mm		
minimum 2000kn/m)	excavation.					
Gravel or hard clay	Boquiros Hand nick or other mechanically					
(Assumed BP of	exercises hand pick of other mechanically	150mm	225mm	325mm		
minimum 600kn/m)	operated space for excavation.					
Firm Clay	Can be easily moulded by substantial					
(Assumed BP of	pressure with the fingers and can be	150mm	275mm	N/A		
minimum 150kn/m)	excavated with a spade.					
Clay soft or loose						
(Assumed BP of	Can be excavated with spade.	250mm	N/A	N/A		
minimum 75kn/m)						

Diagram A(1) & A(2) Foundation Details



A.3. SUBSTRUCTURE AND RETAINING WALLS

- (1) The substructure of any structure shall be constructed to transmit the load of the superstructure safely to the foundations. Designs for abnormal structures or abnormal ground conditions, including sites with a gradient steeper than 1 in 4 (14°), are to be supported by detail drawings showing construction methods and calculations.
- (2) The following are *Deemed-to-Satisfy provisions* for Normal Substructure Walls:
 - a) Provide a wall of solid or fully filled hollow concrete blocks, achieving a compressive strength not less than 7.0 N/mm² laid horizontally in cement mortar 1:3 the wall to have a thickness not less than the thickness of the wall it supports.
- (3) The following are *Deemed-to-Satisfy provisions* for **Propped Retaining Walls Up To 2.5 High And Tied By Reinforcing Bars To Upper And Lower Floor Slabs**:
 - a) For buildings founded on Rock, Gravel Hard clay and firm clay as in Table 1 above, provide 16mm starter bars for the wall cast into the foundation and linked into the foundation reinforcement. Provide a wall of hollow concrete blocks 225 thick of compressive strength not less than 7.0 N/mm² in 1:3 cement mortar, in courses laid horizontally with joints staggered in alternate courses and containing 16mm vertical reinforcing bars in every block, linked to the starter bars, extending the full height of the wall and cast minimum 480mm horizontally into the upper slab, the blocks to be fully filled with concrete as work proceeds, the wall protected with a continuous damp proof membrane and drainage as in *Deemed to Satisfy* to Regulation B.3.(4).

A.4. WALLS ABOVE GROUND

- (1) Walls constructed above ground level shall sustain vertical loading, horizontal wind loading and roof uplift. Masonry walls shall be bonded or securely tied to other elements of a structure in order that they act structurally together.
- (2) The following are *Deemed-to-Satisfy provisions* for **Concrete Blockwork Walls Above** Ground Level:
 - a) Provide concrete blockwork wall to a thickness shown in Table 2 dependent upon the height and length of the wall and with support from return walls, piers or chimneys at each end;
 - **b)** The compressive strength of blocks to be not less than 7.0N/mm² laid in 1:3 cement mortar;
 - c) The maximum depth of any chase to be formed in the wall is one sixth the wall thickness for horizontal chases and one third the wall thickness for vertical chases, save that no chases shall be formed in separating wall in flats; and
 - **d)** At the discretion of the Chief Building Inspector or Building Inspector following site excavation stage inspection, ground conditions are such that it necessary to include movement joints for the full height and thickness of external walls (including through any external render), with slip ties in alternate course to maintain lateral stability, at maximum 6m centres. Movement joints to be filled with compressible material and sealed externally with polysulphide mastic, the applicant will be informed in writing.

Table 2					
Wall Thickness	Length of wall whe piers or chimney				
(WT)	Ground Floor and First Floor Wall Max Span of Multi Storey Buildings	Single Storey Wall Max Span	Max Height		
115	5m	5m	3m		
150	5m	7m	5m		
225	5m	12m	9m		
G.F 225 F.F 115	5m 5m	n/a	6m		
G.F 225 F.F 225	5m 12m	n/a	9m		

A.5. SUPPORT OVER OPENINGS

- (1) Any opening in a structural wall shall have a beam or lintel provided to safely support the structure above the opening at a minimum height of 2100mm.
- (2) The following (Tables 3 & 4) are *Deemed-to-Satisfy* Sizes For Lintels In Reinforced Concrete, composed of one part cement to three parts stone dust or washed sand to three parts coarse aggregate by volume, with an approximate water to cement ratio of 0.5.

Concrete cover to the bar reinforcement shall be 40mm and not less than 40mm to the ends. Bar shall have a minimum bearing of 100mm and total lintel bearing shall be minimum of 150mm on both ends of the opening. Bar overlaps shall be at least 30 times their diameter.

Combined Dead and Imposed load shall not exceed 70Kn/m.

Table 3					
Opening Width	Lintel Section Size	Compression Bar Reinforcement (High Yield)	Shear Reinforcement (Links)	Tension Bar Reinforcement (High Yield)	
Up to 0.75m	115mm wide x 150mm deep	N/A	N/A	1No. 10mm	
Up to 1.4m	115mm wide x 225mm deep	N/A	N/A	1No. 12mm	
Up to 2.0m	115mm wide x 225mm deep	N/A	N/A	1No. 20mm	
Up to 3.0m	115mm wide x 225mm deep	2No. 8mm	6mm @ 125mm c/c	1No. 20mm	
Up to 0.75m	150mm wide x 150mm deep	N/A	N/A	1No. 12mm	
Up to 1.4m	150mm wide x 225mm deep	N/A	N/A	1No. 16mm	
Up to 2.0m	150mm wide x 225mm deep	2No. 8mm	6mm @ 125mm c/c	2No. 12mm	
Up to 3.0m	150mm wide x 225mm deep	2No. 8mm	6mm @ 125mm c/c	2No. 20mm	
Up to 0.75m	225mm wide x 225mm deep	N/A	N/A	1No. 16mm	
Up to 1.4m	225mm wide x 225mm deep	N/A	N/A	2No. 12mm	
Up to 2.0m	225mm wide x 225mm deep	2No. 8mm	6mm @ 125mm c/c	2No. 12mm	
Up to 3.0m	225mm wide x 225mm deep	2No. 8mm	6mm @ 125mm c/c	2No. 20mm	

Table 4 In-Situ Reinforced Concrete Lintels (Supporting one additional storey)					
Opening Width	Lintel Section Size	Compression Bar Reinforcement (High Yield)	Shear Reinforcement (Links)	Tension Bar Reinforcement (High Yield)	
Up to 0.75m	150mm wide x 150mm deep	2No. 12mm	8mm @ 125mm c/c	2No. 12mm	
Up to 1.4m	150mm wide x 225mm deep	2No. 16mm	8mm @ 125mm c/c	2No. 16mm	
Up to 2.0m	150mm wide x 225mm deep	2No. 20mm	8mm @ 125mm c/c	2No. 20mm	
Up to 0.75m	225mm wide x 225mm deep	2No. 12mm	8mm @ 125mm c/c	2No. 12mm	
Up to 1.4m	225mm wide x 225mm deep	2No. 16mm	8mm @ 125mm c/c	2No. 16mm	
Up to 2.0m	225mm wide x 225mm deep	2No. 20mm	8mm @ 125mm c/c	2No. 20mm	

A.6. TIMBER AS A STRUCTURAL MEMBER

- (1) Timbers used as structural members shall be of sufficient strength to safely support the loads to be carried and shall be resistant to fungal and insect attack. All cut ends shall be re-treated on site before building in and any timbers reduced in thickness after chemical treatment must be re-treated before building in.
- (2) Floor and roof members shall be securely fixed to walls in both their direction of span and at right angles to the span in order to provide lateral restraint to external walls. Wall plates must be fixed to walls sufficient to resist wind uplift.
- (3) Ground floors and roof structures shall be cross ventilated in accordance with Regulation B5, for which *deemed-to-satisfy provisions* are given under that regulation.
- (4) The following spans, sizing and spacing shown in Tables 5 to 8 inclusive are *deemed-to-satisfy provisions* for timbers with a stress grade of C24 or equivalent.
- (5) The following diagrams A(5) & A(6) are *deemed-to-satisfy provisions* for the design of roof trusses.

Diagram A(3) Timber Floor Joist Details



Diagram A(4) Timber Floor Joist Notching Details



TABLE 5 - FLOOR JOISTS IN DOMESTIC DWELLINGS				
Spacing of Joists (mm)	400	450	600	
Size of Joists (mm)	Maximu	m Permitted Span of Jo	oists (m)	
38 x 150	N/A	3.10	2.70	
38 x 225	N/A	4.60	4.00	
50 x 100	2.20	2.09	1.82	
50 x 125	2.83	2.72	2.47	
50 x 150	3.40	3.27	2.97	
50 x 175	3.91	3.77	3.43	
50 x 200	4.47	4.31	3.92	
50 x 225	5.06	4.83	4.42	
75 x 125	3.22	3.10	2.83	
75 x 150	3.86	3.72	3.39	
75 x 175	4.45	4.29	3.91	
75 x 200	4.97	4.83	4.47	
75 x 225	5.42	5.27	4.93	

TABLE 6 - FLOOR JOISTS IN NON-DOMESTIC DWELLINGS				
Spacing of Joists (mm)	400	450	600	
Size of Joists (mm)	Maximum Permitted Span of Joists (m)			
50 x 100	1.84	1.75	1.54	
50 x 125	2.43	2.33	2.06	
50 x 150	2.93	2.81	2.55	
50 x 175	3.38	3.25	2.94	
50 x 200	3.86	3.72	3.37	
50 x 225	4.35	4.18	3.80	
75 x 125	2.75	2.68	2.43	
75 x 150	3.34	3.22	2.93	
75 x 175	3.86	3.71	3.38	
75 x 200	4.41	4.25	3.86	
75 x 225	4.88	4.74	4.35	

TABLE 7 RAFTERS SUPPORTING SLATE OR TILES					
Spacing of Rafters 400 450 600 (mm)					
Size in (mm)	nm) Maximum Permitted Span of Rafters (m)				
50 x 75	2.73	2.18	1.89		
50 x 100	3.06	2.89	2.51		
50 x 125	3.80	3.59	3.13		
50 x 150	4.53	4.29	3.14		

TABLE 8 PURLINS AT 1.2M CENTRES SUPPORTING PROFILED STEEL ROOF SHEETS			
Size in mm Maximum span of purlin m			
50 x 75	1.98		
50 x 100	3.04		
50 x 114	3.43		
50 x 125	3.82		
50 x 150	4.50		
50 x 175	5.00		
50 x 200	5.45		





PART B: RESISTANCE TO MOISTURE, CONTAMINANTS AND INSECTS AND ADEQUACY OF VENTILATION AND DAYLIGHT

B.1. CLEARANCE OF TOP-SOIL AND SITE CONTAMINATION

(1) Unless the building is to be supported entirely clear of the ground, the area to be covered by a structure shall have all vegetable matter removed by stripping all topsoil. If the site contains hazardous or offensive substances, including materials containing asbestos or oil contamination, these shall be registered in accordance with the Environmental Protection Ordinance 2016 and removed and disposed of in accordance with the terms prescribed in that registration.

B.2. DRAINAGE OF SUBSOIL AND RE-ROUTING WATERCOURSES

- (1) Where the dampness of a site so requires, a system of land drains shall be installed to protect the structure from damage and to maintain stability of the site.
- (2) Where, in the course of excavation, an existing drain is severed or a watercourse discovered, steps shall be taken by the applicant to ensure the continuance of the drain or natural drainage, away from the structure and its foundations.

B.3. RESISTANCE TO MOISTURE OF FLOORS, WALLS AND ROOFS

The floors, walls and roofs of any structure shall be resistant to the passage of moisture sufficient to ensure that the structure is:

- i) Internally free from damp; and
- ii) Not at risk of deterioration through dampness.

This may be achieved by the following *Deemed-to-Satisfy* methods for conventional construction or by alternative means that are proven by relevant experience or independent professional certification to be not less effective.

The following are *Deemed-to-Satisfy provisions* in respect of:

(1) Moisture Resistance Of Ground Supported Concrete Floors Laid Next To The Ground:

- a) Provide a concrete floor at least 100mm thick laid on a damp proof membrane of minimum 1000 gauge P.V.C, lapped 300mm at joints, laid on blinded compacted hard-core.
- b) Mix shall be composed of one part cement to three parts stone dust or washed sand to three parts coarse aggregate by volume, with an approximate water to cement ratio of 0.5.
- c) The finished floor level to be minimum 150mm above any adjacent external ground.
- d) Any building which has any adjacent cut-face within 1.8m of the building requires a concrete pavement,
- e) the pavement to be not less than 50mm thick, 900mm wide and laid with a slope away from the building at not less than 1 in 20 or 3°.

(2) Moisture Resistance Of Suspended Timber Floors:

Provide a timber or composite floor with the underside of its supporting beams or joists at least 450mm clear of the ground, open for cross-ventilation on at least two opposing sides and with:

- a) An appropriate moisture resistant sealer on the underside of the floor structure; and
- b) A damp proof and termite resistant material between the timber, at its point of support, and any material which can carry moisture from the ground.

(3) Moisture Resistance Of External Walls:

- a) **Buildings in the following Registration Districts:** Jamestown, Half Tree Hollow and Rupert's Valley (see Diagram B(1)):
 - i) Provide a solid concrete blockwork wall not less than 105mm thick with a compressive strength of not less than 3.5 N/mm².
 - ii) Insert a horizontal damp proof course at floor level through the full thickness of the wall and projecting minimum 9mm externally, lapped 300mm at joints.
 - iii) Render the blocks externally with 12mm sand cement render or limebased render from damp proof course up to eaves level.
 - iv) Below the damp proof course paint any exposed edge of floor slab and the blockwork with bituminous paint down to ground level.

The applicant may, at their own discretion and risk, apply a material to form a key and render the bituminous paint provided such render does not bridge the damp proof course.

- b) **Buildings In Locations Other Than As Described In Paragraph (a) Above**(see Diagram B(1):
 - Provide a solid concrete block wall not less than 150mm thick with a compressive strength of not less than 3.5 N/mm².
 - ii) Insert a horizontal damp proof course at floor level through the full thickness of the wall and projecting minimum 9mm externally, lapped 300mm at joints.
 - iii) Render the blocks externally with 12mm sand cement render or lime-based render from damp proof course up to eaves level.
 - iv) Below the damp proof course paint any exposed edge of floor slab and the blockwork with bituminous paint down to ground level.

The applicant may, at their own discretion and risk, apply a material to form a key and render the bituminous paint provided such render does not bridge the damp proof course.

c) Provide A Cavity Wall Comprising Of:

- i) A solid concrete block wall or aerated concrete block wall with damp proof course all as in paragraph (3)a)ii) above; and
- ii) An additional leaf, with a cavity not less than 50mm wide with wall ties at 450 centres; and
- iii) A continuous stepped tray at window cills, at lintels; and
- The cavity should be taken down at least 225mm below the damp proof course or a damp proof tray should be provided, to discharge water in the cavity towards the outside leaf; or
- d) Provide a continuous proprietary external cladding to the whole area of the wall, with appropriate flashings and details all in accordance with the manufacturer's recommendations, to avoid ingress of rainwater to the blockwork; or
- e) Insulate and render the wall with a proprietary external insulation and render system applied and detailed in accordance with the manufacturer's recommendations, or
- f) Any wall other than described above shall have a minimum u-value of 3.64W/m²K unless manufacturer's specifications are provided stating that it has been designed as an external wall.

Diagram B(1) Moisture Resistance Of External Walls



Diagram B(2) Cavity Carried Down & Damp Proof Cavity Tray



- (4) Moisture Resistance Of Internal Walls that are in contact with the ground (for example retaining walls in split level buildings):
 - a) Provide a continuous damp proof membrane, in sheet form or bituminous paint, on the ground side of the wall with sufficient clear drainage to avoid build-up of water pressure and with sufficient protection to avoid the membrane being pierced by fill material.

(5) Moisture Resistance Of Roofs:

- a) Provide a pre-coated and galvanised profiled metal sheet material, with appropriate flashings and fittings, fixed all in accordance with the manufacturer's recommendations for the characteristics of the roof and degree of exposure of the site; or
- b) Provide a breathable sarking membrane and battens, for slates or tiles supported, laid and fixed in accordance with the British Standard applicable to the type of slate or tile and with appropriate flashings at all abutments.

(6) Gutters And Downpipes:

a) Provide gutters and downpipes and matching fittings installed and fixed in accordance with the manufacturer's recommendations sufficient to discharge all water from roofs clear of the building.

B.4. RESISTANCE TO INSECT DAMAGE OF FLOORS, WALLS AND ROOFS

- (1) The floors, walls and roofs of any structure shall be resistant to attack by termites and other wood boring insects. This may be achieved by an appropriate combination of:
 - a) Chemical treatment of the ground prior to commencement of building work; and
 - **b)** Appropriate detailing of the junction of any solid ground floor slab and walls; and
 - c) Incorporation of appropriate details in any wall or post attaching a suspended floor to the ground.

B.5. ROOM SIZES, DAYLIGHTING AND VENTILATION IN DWELLINGS

- (1) In any dwelling or flat:
 - a) At least one bedroom shall have a floor area of not less than 11m²;and
 - **b)** Every living room shall have a floor area of not less than 11m²; and
 - c) Any room combined with a kitchen shall have a floor area of not less than 11m².

Each such room shall have a minimum width of 2.4m and a minimum ceiling height of 2.4m measured to half the internal pitch where there is no horizontal ceiling.

(2) There shall be adequate natural daylight and means of ventilation provided to dilute pollutants and to avoid condensation, at a sufficient rate for the health and comfort of people in the building. The means of ventilation may be natural or mechanical or a combination. Nothing in this regulation shall preclude the use of a whole-house passive-stack ventilation system.

- a) *Deemed-to-satisfy provisions* for Natural Daylight And Ventilation Of Habitable Rooms - Provide:
 - A window to the external air having a glazed area not less than one eighth of the floor area of the room, at least half of which is open able with the top of that half not less than 1.8m above floor level;

Note: a habitable room which is combined with a kitchen shall, for the purposes of this regulation, be construed as a kitchen (as sub-regulation B6 (5)) below) for the purposes of ventilation but as a habitable room for the purposes of providing natural daylight.

- **b)** *Deemed-to-Satisfy provisions* for **Ventilation Of Bathrooms, Toilets And Domestic Kitchens** – Provide:
 - A window to the external air having a glazed area not less than one tenth of the floor area of the room, at least half of which is open able with the top of that half not less than 1.8m above floor level;
 - ii) Where gas facilities are used, a permanently open ventilation grille to the external air measuring at least 0.050m² (225 x 225mm) not more than 300mm below ceiling level with an insect screen fitted shall be incorporated. Alternatively, but not in kitchens containing a cooking or heat producing appliance that takes combustion air from the room, provide mechanical ventilation extracting at the rate of not less than three air changes of the room per hour and permanently open incoming air at the same rate.
- c) There shall be adequate means of ventilation in roof spaces, under timber floors and in otherwise unventilated voids to avoid deterioration of the building.
- d) *Deemed-to-Satisfy provision* for **Ventilation Of Roof Spaces**:
 - Provide natural cross ventilation in any roof space in the form of air bricks or grilles measuring at least 0.10m² (450mm x 225mm), sufficient to provide insect and bird proof ventilation.
- e) Deemed-to-Satisfy provision for Ventilation Under Timber Ground Floors:
 - Provide natural cross ventilation in the form of air bricks or openings measuring at least 0.10m² (450mm x 225mm), sufficient to provide insect and rodent proof ventilation in at least two opposing walls.

PART C: FIRE SAFETY

C.1. MEANS OF WARNING AND ESCAPE (DWELLINGS)

- (1) Any dwelling shall include at least one smoke alarm or heat-rise alarm in each storey, of a type specified by the Chief Fire Officer, located such that it will provide optimum protection to that storey in relation to likely sources of fire, sited not more than 150mm below the relevant ceiling level and not less than 225mm from any wall or beam. Where there are two or more alarms of any type in the dwelling they shall be interlinked so that activation of any one will activate all others.
- (2) Any habitable room in a dwelling of not more than two storeys, including any basement storey, shall have not less than:
 - a) An external doorway at least 800mm wide, or a doorway or opening at least 800mm wide giving access to a hallway with an external doorway; or
 - b) A doorway leading to a landing and staircase giving access to such a hallway; or
 - c) A doorway leading to a landing and staircase giving access to a room (not including a kitchen) where the point of entry to that room is not more than 3m from an external doorway; or
 - **d)** Window with an open-able area not less than 500mm by 750mm the bottom of which is not more than 1100mm above the floor of that room. Provided that:
 - Where a kitchen area is not separated from a hallway, staircase or landing by a door, an additional interlinked heat-rise alarm shall be fitted in the kitchen; and
 - ii) The hallway, staircase and landing shall be not less than 800mm wide at their narrowest point; and
 - Any external doorway as so described shall give access directly to the open air except that a porch of floor area not more than 3m² with its own external doorway may be disregarded
- (3) Any habitable room in a dwelling of three or more storeys shall have not less than:
 - a) An external doorway at least 800mm wide, or a doorway at least 800mm wide giving access to a fire protected hallway or landing with an external doorway; or
 - **b)** A doorway leading to a fire protected landing and staircase giving access to an external doorway or to such a landing or hallway. Provided that:
 - i) "fire protected" for the purposes of this regulation shall mean that the structure of the floors, walls and ceilings, the staircase itself and all doors opening to them shall be fire resistant for not less than 30 minutes, and the surface linings of walls and ceilings shall not ignite, give off heat or produce toxic fumes within 30 minutes of exposure to fire; and
 - ii) Doors in this context shall include their frames and all door furniture and they shall be fitted with smoke seals; and

- iii) The hallway, staircase and landing shall be not less than 800mm wide at their narrowest point; and
- iv) Any external doorway as so described shall give access directly to the open air except that a porch of floor area not more than 3m² with its own external doorway may be disregarded.

C.2. FIRE SPREAD (STRUCTURE) (DWELLINGS)

- (1) Every external wall of a dwelling and every element of structure unless it supports only a roof that:
 - a) Does not form part of an escape route; and
 - **b)** Is not below any part of the dwelling that contains a window.

Shall be so constructed or protected that it has at least 30 minutes fire resistance.

- (2) In the case of an external wall that is within 2 metres of the boundary of the curtilage of the dwelling, or any wall directly separating the dwelling from another dwelling or a building for any other use, it shall have at least 60 minutes fire resistance.
- (3) Any wall that separates a dwelling from an attached garage or car port shall have at least 30 minutes fire resistance, including any doorway formed in that wall and the door shall be fitted with a self-closer. The floor of the garage or car port shall either be not less than 100mm below the floor in that doorway or shall slope away from it at least 100mm in the length of the garage or car port.
- (4) Any roof of a dwelling or of any attached garage or car port shall be covered in noncombustible material or shall be protected on the underside to achieve resistance to fire from any other building or external source for at least 30 minutes.
- (5) Any concealed void except roof spaces within a dwelling shall be fire stopped at every junction with an element of structure or at any junction with a ceiling or wall and in any event at intervals of not more 5m, sufficient in each case to stop the spread of fire within the void by at least 30 minutes.

C.3. REQUIREMENTS FOR FIRE SAFETY OF FLATS:

- (1) All requirements of Regulation C1Means of Warning and Escape (Dwellings) above shall apply within any individual flat. In addition, any hallway, landing or staircase giving access to two or more flats or one or more flats in a building also used for any other purpose, shall be formed within a fire protected area that has:
 - a) Fire protection of at least 30 minutes from any flat or any other part of the building, including self-closing fire doors giving access from a flat to the protected area, or 60 minutes in the case of a building of three or more storeys; and
 - **b)** Except in the case of a single flat, a mains-operated fire alarm system designed and installed in accordance with British Standard BS 5839-1:2002; and
 - c) A minimum width at any point of 900mm or, in the case of a hallway, landing or staircase serving four or more flats 1100mm; and
 - **d)** At least one permanent opening, or a door opening outwards and able to be opened from inside at all times without the use of a key, leading directly to the open air; and
 - e) Where the protected area includes a staircase, permanent ventilation at the highest point of not less than 0.5m².

C.4. FIRE SPREAD (STRUCTURE) (FLATS)

(1) All requirements of Regulation C2 Fire Spread (Structure) (Dwellings) above shall apply throughout. In addition, any floor of a flat except a ground floor (but not excluding a suspended timber ground floor) shall be constructed such that it is fire resistant for not less than 60 minutes.

C.5. FIRE SPREAD (SURFACES) (FLATS)

- (1) The surface/lining/finish of any internal wall finish, external wall finish (including external cladding) or ceiling exposed in a flat shall comply with the test criteria for surface spread of flame in British Standard BS 476-7:1997:
 - a) Class 1 for circulation spaces (hallways, landings, lobbies and staircases) and rooms with a floor area over 4m² provided:
 - i) such rooms do not form part of an escape route from any other room; and
 - ii) not more than half the ceiling area is not worse than Class 1.
 - **b)** not worse than Class 3 for rooms with a floor area of up to 4m².

C.6. FIRE FIGHTING EQUIPMENT (FLATS)

(1) Fire extinguishers shall be provided in each flat and all communal areas, as specified by the Chief Fire Officer, before the flats are brought into use.

C.7. MEANS OF WARNING AND ESCAPE (COMMERCIAL PREMISES AND PLACES OF EMPLOYMENT)

- (1) In single storey premises up to 200m² there shall be fire exits to the open air, or a place of safety, to which the travel distance from any point is a maximum of 18m, or 45m if:
 - a) There is more than one exit and the angle between exits from any point is not less than 45°; and
 - **b)** The maximum distance to any one exit is not more than 18m.
- (2) In single storey premises of more than 200m²; or any premises that are divided into separate compartments for separate uses; and any premises of more than one storey, there shall be fire exits from each compartment and each storey as in sub-regulation (1) and a mains operated fire alarm system designed and installed in accordance with British Standard BS 5839-1:2002 throughout all compartments and storeys of the premises.
- (3) For the purposes of sub-regulation (2) a staircase within a shop that is not enclosed within a protected area may be regarded as a fire exit for the purposes of travel distance in that sub-regulation provided there is an alternative staircase from the relevant storey that is so enclosed. In this regulation:
 - a) A fire exit is a door not less than 800mm wide, opening outwards and able to be opened from inside at all times without the use of a key, and
 - b) A place of safety means a fire protected area with at least 60 minutes fire protection and a means of access from it to a fire exit to the open air. The fire resisting area, including all parts leading to the open air, shall have a minimum width of 900mm for premises up to 200m², 1100mm for premises of 200m² to 400m² and at least 1200mm, or as otherwise specified by the Chief Fire Officer, for premises of over 400m² or more than three storeys.
- (4) A mezzanine floor within the ground storey of commercial premises will not require separate means of escape provided:
 - a) The mezzanine area is not more than two thirds of the area of the ground floor; and
 - **b)** It has staircases at opposite ends that reach the ground floor each within 6m of a fire exit to a place of safety.

C.8. FIRE SPREAD (STRUCTURE) (COMMERCIAL PREMISES AND PLACES OF EMPLOYMENT)

- (1) Every external wall and every element of structure unless it supports only a roof that:
 - a) Does not form part of an escape route; and
 - **b)** Is not below any other part of the premises that contains a window, shall be so constructed or protected that it has at least 30 minutes fire resistance.
- (2) In the case of an external wall that is within 2 metres of the boundary of the premises, or any wall directly separating the premises from another building, the wall shall have at least 60minutes fire resistance.
- (3) Any internal wall that forms a wall separating compartments or a place of safety in the premises shall have at least 60 minutes fire resistance and shall extend to the full height of the relevant storey including on the topmost floor to the underside of the roof.
- (4) Any roof of the premises shall be covered in non-combustible material except in respect of translucent roof-lights which may in total not exceed 10% of the roof area.
- (5) Any concealed void within the premises shall be fire stopped at every junction with an element of structure or at any junction with a ceiling or wall and in any event at intervals of not more 5m, sufficient in each case to stop the spread of fire within the void by at least 30 minutes.
- (6) Where roof space is formed between any ceiling and roof covering, such space shall be divided by means of non-combustible fire stops with at least 30 minutes fire resistance into areas not more than 250m² and the distance between such stops shall be not more than 20m.
- (7) Any floor within the premises except a ground floor (but not excepting a suspended timber ground floor) shall be constructed such that it is fire resistant for not less than 60 minutes.
- (8) In premises of more than 400m² or of more than 3 storeys, the requirements of subregulations 3 and 6 shall be 90 minutes unless an automatic sprinkler system meeting the recommendations of British Standard BS 5306, Part 2: 1990 is installed throughout the premises.

C.9. FIRE SPREAD (SURFACES) (COMMERCIAL PREMISES AND PLACES OF EMPLOYMENT)

(1) The surface/lining/finish of any wall or ceiling exposed in commercial premises and places of employment shall comply throughout with Class 1 of the Test Criteria for Surface Spread of Flame in British Standard BS 476-7:1997 except in respect of translucent rooflights and light fittings, which shall achieve not worse than class 3 and in total may not exceed 20% of the relevant area of roof or ceiling.

C.10. FIRE FIGHTING EQUIPMENT (COMMERCIAL PREMISES AND PLACES OF EMPLOYMENT)

(1) Fire detection, control and fire fighting equipment and emergency lighting shall be provided in commercial premises and places of employment, as specified by the Chief Fire Officer, before the premises are brought into use or before any change of use is made of the premises.

C.11. FIRE SAFETY FOR HOTELS, LODGING HOUSES, NURSING AND CARE HOMES, HOSPITALS AND SCHOOLS

- (1) In any establishment providing sleeping accommodation and related services and facilities for tourists or providing residential, medical or nursing care or is an educational establishment:
 - a) The higher of the standards of each of the requirements, respectively, of: Part C(ii) (fire safety of flats) and Part C(iii) (fire safety of commercial premises and places of employment) shall apply to the premises in respect of:
 - i) Means of warning and escape;
 - ii) Fire spread(structure);
 - iii) Fire spread (surfaces); and
 - iv) Fire fighting equipment, as set out in Regulations C5 to C9.

PART D: STAIRCASES, RAMPS AND PROTECTION FROM FALLING

Stairs and ramps shall be constructed to ensure the safety to users of a building moving between different levels exceeding 600mm. Stairs, ramps, the edges of floors and balconies and any roof to which people have access, shall be guarded to protect users from the risk of falling.

D.1. PRIVATE STAIRCASES

- (1) A private staircase is a staircase within, or intended to be used by a single dwelling;
 - a) The rise and going of each step shall be identical in every step and the treads shall be horizontal.
 - **b)** In any tapered tread the minimum going shall be 50mm and the going measured at the mid-point of the nosing of the tread, shall be equal to the going in the remainder of the staircase.
 - c) There shall be a notional landing at the top and bottom of every staircase:
 - i) The notional landing at the top of the staircase and any intermediate landing shall be unobstructed.
 - ii) The notional landing at the bottom of a staircase may be encroached by the swing of a door provided it is at least 400mm from the lowest riser.
 - d) If the staircase has open risers, the treads shall overlap each other by not less than 16mm and the open risers shall be constructed such that a 100mm sphere cannot pass through them.
 - e) At any point where there is a drop of 600mm or more, the staircase and any intermediate landings shall be guarded with handrails either side of the stairs at the height specified in Table 9.
 - f) All private staircases shall be constructed in compliance with Table 9.

D.2. COMMON STAIRCASES

- (1) A common staircase is a staircase serving more than one dwelling or any other purpose;
 - a) The rise and going of each step shall be identical in every step and the treads shall be horizontal; and
 - **b)** In any tapered tread the minimum going shall be 50mm and the going measured at the mid-point of the nosing of the tread, shall be equal to the going in the remainder of the staircase.
 - c) There shall be a notional landing at the top and bottom of every common staircase.
 - i) The notional landing at the top and bottom of a common staircase and any intermediate landing shall be unobstructed including by the swing of a door.
 - d) If the staircase has open risers, the treads shall overlap each other by not less than 16mm and the open risers shall be constructed such that a 100mm sphere cannot pass through them.

- e) At any point where there is a drop of 450mm or more, the staircase and any intermediate landings shall be guarded with handrails either side of the stairs at the height specified in Table 9.
- **f)** A 'corduroy' hazard warning surface shall be provided at the top and bottom landings of a series of flights to give advance warning of a change in level in accordance with Diagram

Table 9 Staircases				
Stairs	Private	Common		
Rise (Maximum)	220mm	190mm		
Going (Minimum)	220mm	240mm		
Twice rise plus going	550mm -	550mm -		
	700mm	700mm		
Maximum Pitch (Nosing to Nosing)	42 degrees	38 degrees		
Minimum Number of Steps	2	2		
Maximum Number of Steps in a single straight flight	16	16		
Landings going	equal to width	equal to width		
Width of Stairs (Minimum)	800mm	900mm		
Minimum Head Height (Measured vertically of the pitch line)	2m	2m		
Handrail Height	840mm -	840mm -		
	900mm	900mm		

g) All common staircases shall be constructed in compliance with Table 9

D.3. RAMPS

Private Ramps

- (1) No ramp shall be steeper than 1 in 10 or 6° ; and
- (2) A continuous slope in one direction spanning not more than 10m; and
- (3) Have a minimum width of 900mm between walls, up-stands or kerbs; and
- (4) The surface of a ramp, the notional landings and any intermediate landing shall be of a reasonably non-slip material, even when wet; and
- (5) The headroom over a ramp, the notional landings and any intermediate landing shall be not less than 2m measured vertically off the surface over the full length and width.
- (6) Landings shall:
 - a) At the foot and head of a ramp, provide landings which are a minimum of 1200mm long and are clear of any door swings or other obstructions; and
 - **b)** Ensure that any intermediate landing are a minimum of 1200mm long and are clear of any door swings or other obstructions; and

- c) Make all landings level or with a maximum gradient of 1 in 60 along their length; and
- d) Changes of direction shall be not less than 45°.
- (7) The edges of any Ramp shall:
 - a) Be guarded with a handrail at a height between 900mm and 1000mm above the slope of the ramp, constructed such that a 100mm sphere cannot pass through it and in a form that a child cannot readily climb.

Common Ramps

- (1) No ramp shall be steeper than 1 in 10or 6° ; and
- (2) A continuous slope in one direction spanning not more than 10m; and
- (3) Have a minimum width of 1500mm between walls, up-stands or kerbs; and
- (4) The surface of a ramp, the notional landings and any intermediate landing shall be of a reasonably non-slip material, even when wet; and
- (5) The headroom over a ramp, the notional landings and any intermediate landing shall be not less than 2m measured vertically off the surface over the full length and width.
- (6) Landings shall:
 - a) At the foot and head of a ramp, provide landings which are a minimum of 1200mm long and are clear of any door swings or other obstructions; and
 - **b)** Ensure that any intermediate landing are a minimum of 1500mm long and are clear of any door swings or other obstructions; or
 - c) If either a wheel-chair user cannot see from one end of the ramp to the other or the ramp has three flights or more then provide intermediate landing a minimum of 1800mm wide and a minimum of 1800mm long as passing places; and
 - **d)** Make all landings level or with a maximum gradient of 1 in 60 along their length; and
 - e) Changes of direction shall be not less than 90°.
- (7) The edges of any Ramp shall:
 - a) Be guarded with a handrail at a height between 900mm and 1000mm above the slope of the ramp, constructed such that a 100mm sphere cannot pass through it and in a form that a child cannot readily climb; and
 - **b)** Have a handrail at the same height on the opposite side for the full length of the ramp and any intermediate landing.

D.4. GUARDING OF BALCONIES, LANDINGS AND FLAT ROOFS

- (1) Where there is a drop of 600mm or more, the edge of any balcony, any landing except an intermediate landing to which regulation D2(1)(e) applies, and any flat roof to which there is access other than only for maintenance, shall be guarded with a handrail or parapet at a height not less than 1100mm externally and 900mm internally constructed:
 - a) Such that a 100mm sphere cannot pass through it; and
 - **b)** In a form that a child cannot readily climb; and
 - c) Sufficiently robust to resist a horizontal force of 0.75 KN for each metre of length at a height of 1100mm and a maximum deflection span of 10mm.

Diagram D(1) Tapered Tread Details (Private & Common)



Diagram D(2) Landings Next to Doors (Private)



Diagram D(3) Rise and Going Details (Private & Common)



Note: Two examples of tread profiles have been shown together for illustrative purposes only

Diagram D(4) Minimum Headroom (Private & Common)



Diagram D(5) Key dimensions and use of hazard warning surface (Common)



PART E: GLASS SAFETY

E.1. GLAZING-MATERIALS AND PROTECTION

- (1) Glazing in critical locations is any location where:
 - a) Glass is used in a door; or
 - **b)** Is within normal reach from a doorway; or
 - c) Glass is used in or is within normal reach from a staircase or ramp, including in a window, or
 - d) Forms part of guarding of a staircase, ramp, landing, balcony or flat roof; or
 - e) Glass is used in a screen or window at a height of 800mm or less from floor level;
 - f) See Diagram E(1) Below

The glass in critical locations shall be laminated or annealed (toughened) safety glass.

- (2) The thickness of glass required shall comply with Table 10 below.
- (3) Where the public may have access into or within a building, clear glazing in doors and side-screens in doorways shall be made apparent by:
 - a) Permanent patterns; or
 - **b)** Lines on the glass not less than 50mm in height at 1.5m above floor level orby equivalent patterns; or
 - c) Rails or grilles sufficient to ensure that a normally sighted person will be aware of the glass.

Diagram E(1) Critical glazing locations

Table 10							
	Maximum Pane Area (m²)						
Type of Glass	Nominal Glass Thickness						
	3mm	4mm	5mm	6mm	8mm	10mm	12mm
Monolithic Annealed Glass	0.75	1.5	2.1	3.2	4.6	6.0	6.0
Patterned Annealed and Wired Glass	N/A	0.75	1.2	1.9	2.6	3.4	N/A
Laminated Annealed Safety Glass	N/A	N/A	N/A	2.9	4.3	5.7	5.7
Toughened Safety Glass	N/A	1.9	3.0	4.5	8.0	8.0	8.0

PART F: ACCESS AND FACILITIES FOR PERSONS WITH DISABILITIES

F.1. ACCESS AND FACILITIES FOR PERSONS WITH DISABILITIES:

(Excepting buildings covered under 14.2)

- (1) Reasonable provision shall be made in all new, substantially altered or extended buildings to which the public has access or is a place of employment so that:
 - a) Persons with disabilities can reach and use the principal entrances which will have level entry (step-free) access; and
 - b) Corridors shall have a minimum width of 1200mm; and
 - c) Door Handles are placed between 800mm & 1100mm; and
 - **d)** Elements of the building shall not constitute a hazard for persons with disabilities, including impaired sight; and
 - e) Persons with disabilities can use the building's facilities including by provision of a passenger lift or stair lift where necessary and shall conform to the requirements of the Lift Regulations 1997, SI 1997/831 (Note: These regulations may be met by compliance with, among other things, the relevant British Standards, EN 81 series of standards, in particular BS EN 81-70:2003 Safety rules for the construction and installation of lifts; and
 - f) At least one toilet designed for unisex, wheelchair use is available and accessible; and
 - **g)** There is suitable accommodation for persons with disabilities in audience or spectator seating; and
 - **h)** There are suitable aids to communicate for persons with an impairment of sight or hearing in auditoria, meeting rooms and reception areas. *Deemed-to-satisfy provisions* are:
 - i) The provision of a screen providing information in both an audible and visual format simultaneously.
 - i) There is suitable internal fixtures and fittings designed by a competent person to cater for persons with disabilities; and

- (2) In the case of alterations to a building that is not a dwelling or a flat and it is impracticable to make adjustments to the level of the existing principal entrance, or any other appropriate existing entrance to permit access for wheelchair users:
 - a) The remaining requirements of this regulation shall still apply; and
 - **b)** Portable ramps shall be provided for use at the entrance in compliance Part D.3.
- (3) Where any building is to be altered or extended, there shall be no obligation to carry out work within the existing building, solely to make it more accessible and usable by persons with disabilities, but:
 - a) Any alteration or extension shall not make the existing building less so; and
 - **b)** Any extension shall be at least as accessible and usable by persons with disabilities as the building being extended.

PART G: RESISTANCE TO THE PASSAGE OF SOUND

G.1. SOUND RESISTANCE OF WALLS AND FLOORS OF DWELLINGS, FLATS AND HOTELS OR SIMILAR ESTABLISHMENTS PROVIDING SLEEPING ACCOMMODATION:

(1) A wall which separates a dwelling or flat from another dwelling or flat, or a wall which separates a flat from any communal area in the same building, or which separates bedrooms in hotels or similar establishments from each other or any other use within the same building, shall have sufficient resistance to the passage of airborne sound such that normal speech or the sound from a radio or television at normal levels shall not be audible through the wall.

Deemed to satisfy provisions for the construction of walls separating dwellings or flats are:

- a) solid blockwork walls not less than 150mm thick or hollow blockwork walls not less than 225mm thick in either case of 7.3N/mm² blocks with all joints fully filled and plastered on both sides; or
- b) studwork walls not less than 200mm internal thickness with separate, alternately staggered 100mm x 50mm studs and noggins each supporting one face of the wall (not connected except by the head and sole plates), and mineral wool quilt at least 50mm thick fitted vertically within the full width and height of the wall. One face of the wall finished with 12.5mm plasterboard and the other finished with double 12.5mm plasterboard, all plasterboard joints and both faces of the wall fully plaster skimmed(see diagram G(1)).
- (2) A floor which separates a flat from another flat or which separates bedrooms in hotels or similar establishments from each other or any other use within the same building shall have reasonable resistance to airborne sound, equal to the requirement in sub-Regulation G1 (1), and also resistance to impact sound such that normal footsteps from persons wearing shoes shall not be audible through the floor. This may be achieved

through the form and details of construction, including isolation of structural members, or sound-insulated coverings and ceilings, or a combination.

Deemed-to-satisfy provisions for the construction of floors separating flats are:

- a) solid reinforced concrete floors not less than 150mm thick with a soft covering (e.g. carpet or cushioned vinyl) with a separately supported mineral wool quilt 100mm thick and single 12.5mm plasterboard ceiling beneath with joints fully skimmed (see Diagram G(2)), or
- b) timber floors comprising T&G Timber or Chipboard floor boards with glued joints, laid as a floating floor on two layers of 9mm plasterboard on a resilient layer of 25mm mineral wool or continuous resilient rubber pads on top of each joist, on joists not less than 200mm x 50mm with a separately supported mineral wool quilt 100mm thick and double 12.5mm plasterboard ceiling beneath with joints staggered and fully skimmed (see Diagram G(3)).

Note: in each case the structural floor (slab or joists) must be sufficient for its structural purpose but not less in thickness, for sound resistance, than as stated.

(3) Sound resistance of any floor or wall not constructed as specified in the *Deemed to satisfy provisions* above shall have a minimum sound resistance of 45dB

Diagram G(1) Minimum sound resistance requirement for wall separating individual dwelling or flat areas.

Diagram G(2) Minimum sound resistance requirement for solid reinforced concrete floors.

Diagram G(3) Minimum sound resistance requirement for timber floors

PART H: RAINWATER, FOUL AND WASTE WATER DRAINAGE AND DISPOSAL

H.1. RAINWATER DRAINAGE, STORAGE AND DISPOSAL

- (1) Any building shall be designed and equipped such that rainwater is discharged clear of the roofs and walls sufficient to avoid dampness in the building. Gutters and rainwater pipes shall be adequately sized, fixed and jointed and shall have sufficient outlets to accommodate the maximum likely flow.
- (2) Deemed to satisfy provisions for the sizes of rainwater gutters and pipes for a roof pitch of 30° or less and likely to avoid overtopping in a heavy rain event more than once in twelve months are:
 - a) A single roof slope of area measured horizontally up to 37m² may be served by a 100mm half round rainwater gutter and a single 63mm diameter downpipe sited centrally or 29m² if sited at one end.
 - b) A single roof slope of area measured horizontally up to 75m² may be served by a 120mm "deep flow" gutter and a single 75mm diameter downpipe sited centrally or 55m² if sited at one end.
 - c) A single roof slope of area exceeding 75m² may be served by a number of downpipes as so specified by the Building Inspector.

- (3) Except as provided in Regulation H1 (6), rainwater from roofs or any other surface shall not be discharged to any system of foul drainage, including the soak-away of a septic tank.
- (4) Roof water from any building of ground floor area up to 100m² shall be discharged to not less than one storage tank of capacity at least 450 litres with a stopcock on the bottom (to enable re-use) and tank overflow directed to a landscaped area or to a storm drain connected to a public storm sewer or to a watercourse or to a soak away but not to any part of a foul drainage system. Roof water from buildings of ground floor area greater than 100m² or made to exceed that floor area by extension, shall be discharged to one storage tank of capacity at least 450 litres for every 100m² or part thereof, with a separate downpipe to each tank.
- (5) Rainwater drainage systems shall be designed and laid as described in regulation H2(5) for foul and waste water drainage systems except:
 - a) The minimum gradient may be between 1 in 20 and 1 in 30 for 110mm pipe diameter and between 1 in 30 and 1 in 40 for 150mm pipe diameter; and
 - **b)** There is no requirement to ventilate the system.
- (6) On sites within Jamestown Conservation Area (only) where there is no reasonably practicable alternative, rainwater from any surface may be discharged to the foul sewerage system upon written approval from the utilities service provider.

H.2. FOUL AND WASTE WATER DRAINAGE AND DISPOSAL

- (1) Unless authorised in writing by the utilities service provider, no building shall be erected over a public sewer or within 1.5m of a public sewer.
- (2) Every dwelling and any other building in which sanitary appliances are installed, shall be provided with a foul and waste water drainage system, designed, laid and of such size and gradient that it is self-cleaning.
- (3) Foul Water (black water) and Waste Water (grey water) shall be discharged to a public foul sewer where it is available. Where connection to a public foul sewer is not reasonably practicable, connection may be made to:
 - a) A private sewer where available; or
 - **b)** A septic tank and soak-away system; or
 - c) Private treatment system.

(4) All Underground Foul and Waste Water Drains shall:

a) Be made of durable materials, adequately supported and protected from imposed loads throughout its length; and

- b) Be not less than 110mm internal diameter; and
- c) Be laid in a straight line between points of change in direction or gradient; and
- d) Be laid at a gradient sufficient to prevent accumulation of solid matter, which shall be between 1 in 40 and 1 in 60 for 110mm pipe diameter and between 1in 60 and 1 in 80 for 150mm pipe diameter; and
- e) Be tested for water tightness after laying, jointing and backfilling sufficient to hold a pressure of a 110mm water gauge for five minutes and subsequently a head loss of not more than 25mm at 100mm water gauge in seven minutes, in default of which the drains shall not be brought into use.

(5) All Above Ground Foul and Waste Water Drains shall:

- a) Be made of durable materials, adequately supported and protected from imposed loads throughout its length; and
- **b)** Be laid in a straight line between points of change in direction or gradient; and
- c) Be visible for inspection.
- (6) Where any pipe joins another pipe it shall do so obliquely in the direction of flow in that other pipe and at invert level.

(7) Where any Foul or Wastewater Drain is laid Under a Building it shall:

- a) Be laid in a straight line; or
- **b)** Be laid in a series of straight lines with double-sealed airtight inspection chambers at junctions; and
- c) Have at least 100mm of granular or other suitable flexible filling should be provided around the pipe; and
- d) Be isolated from the effects of settlement of any element of the building.

(8) Inspection Chambers shall:

- a) Be provided at every change of direction; or
- **b)** Where another pipe joins the drain; and
- c) In any event sufficiently frequently that no part of any drain is more than
 25m from an inspection chamber; and
- d) Be of such size and depth as to permit ready access to the pipe for inspection and cleaning; and

- e) Be in the form of a manhole fitted with suitable access where the depth exceeds 1.2m; and
- f) Be fitted with a frame and lid sufficiently robust to carry traffic likely to cross it; and
- g) Contain open channel with smooth benching or be pre-formed to the same effect.
- (9) Every Foul or Waste Water Drain, including any branch of length 6m or more, shall be vented at its head sufficient to avoid risk that any trap may be drawn. Where the vent is in the form of an open vent pipe it shall extend not less than 900mm above the top of any eaves of the building or any openable window or roof light that is within 3m of the pipe and shall terminate with a bird-proof and rodent-proof cage.
- (10) Every gully that is connected to a foul or waste water drain shall include a water trap at least 65mm deep. Any sink or other appliance serving a commercial catering kitchen of any description, shall discharge through a gully that includes a grease trap able to be opened and readily cleaned.
- (11) Any waste appliance connected to a foul or waste water drain or discharging to a gully on a foul drainage system shall do so through a water trap in the waste pipe not less than 50mm deep.

Note: A shower or washbasin may discharge through a 32mm diameter P.V.C pipe and a domestic sink or a bath may discharge through a 38mm diameter P.V.C pipe.

H.3. SEPTIC TANKS, SOAKAWAY AND SECONDARY TREATMENT SYSTEMS

- (1) Where connection to a public foul sewer is not reasonably practicable, a foul and waste water drainage system may include a septic tank, provided:
 - a) Utilities service provided have first confirmed in writing that the site is not within a catchment area for drinking water; and
 - **b)** The effluent will not contaminate a water course; and

c) The design of the soakaway and satisfactory percolation test results in accordance with your Decision Notice, to ensure that effluent from a septic tank can be satisfactorily discharged to the available land through a soak away system.

Diagram H(1) Typical Drainage Field

Diagram H(2) Typical Drainage Field Cross-Section

- (2) Any Septic Tank shall be underground on its completion and shall:
 - a) Be of adequate capacity for its purpose; and
 - **b)** Be constructed such that there is no leakage of contents, nor ingress of subsoil water; and
 - c) Be adequately ventilated with the vent at least 7m from any habitable part of a building, adequately secured on all sides and shall terminate with a birdproof and rodent-proof cage ; and
 - d) Be designed and constructed with access for sampling and inspection of the contents and to permit emptying and cleaning; and
 - e) have the inlet and outlet designed and constructed to avoid disturbance of the surface scum or settled contents by incorporating at least two chambers operating in sequence; and
 - f) Be sited within 30m of a vehicular access with a clear route in the open air for an emptying hose; and
 - **g)** Have a reinforced concrete roof at least 150mm thick and including robust airtight access covers.
 - h) Deemed-to-Satisfy provisions for a Septic Tank to serve a single dwelling are:
 - A prefabricated tank certified and installed in accordance with the manufacturers recommendations and complying with British Standard BS EN 12566-1:2010 or SANS 52566-1,
 - ii) with volume not less than that shown in Table 10 in relation to the number of bedrooms in the dwelling; or
 - iii) A Septic Tank of at least the same internal volume built of blockwork generally in accordance with diagram H(3).

Table 11 Septic Tank Specifications						
Capacity (I) Width (m) Depth (m) Length (m) Volume (m ³)						
2 bedroom	2700	1.2	1.5	1.5	2.7	
3 bedroom	3060	1.2	1.5	1.7	3.06	
4 bedroom	3420	1.2	1.5	1.9	3.42	
5 bedroom	3780	1.2	1.5	2.1	3.78	
6 bedroom	4140	1.2	1.5	2.3	4.14	
Note: All Dimensions are internal, and below invert level.						

Diagram H(3) Double Chamber Septic Tank

PART I: SANITATION AND HOT WATER SAFETY

- **I.1.** In any building that is or contains a dwelling or a flat, there shall be:
 - (1) Adequate numbers of the appropriate type and size in any building to which these regulations apply.
 - (2) In any dwelling and in any flat, there shall be:
 - a) At least one water closet with a wash basin with water supply suitable for hand washing shall be provided in rooms containing sanitary conveniences; and
 - **b)** A sanitary convenience must be provided with ancillary washing facilities, an intervening lobby must separate both from any habitable room unless used solely for sleeping purposes; and
 - c) A bathroom with a fixed bath or shower and a washbasin with a potable cold water supply; and
 - **d)** A separate kitchen sink suitable for the washing of utensils with a potable cold water supply.
- I.2. In any building that is a place of employment or to which the public has access, the following provisions in Tables 12 18 dependent upon the number and sex of people likely to occupy the building may be made for water closets, wash hand basins and urinals. In addition there shall

be a minimum of one baby changing facility in both male and female toilets installed in accordance with the manufacturer's specifications.

Table 12 Restaurants, cafes, canteens, and catering premises (non-liquor licensed						
premises						
Appliances	For Male Customers For		For W	For Women Customers		
WC	1 per 100 up to 400 males plus 1		2 per 50 up to 200 females			
	for every ad	ditional 250 (or part	plus 1	for every additional		
	of 250) male	es.	100(or	part of 100) females		
Urinal	1 per 50 ma	les	N/A			
Wash basin	1 per WC an of 5) urinals	d plus 1 per 5 (or part	1 per V	1 per WC		
Cleaner's sink	Adequate pr	ovision should be made	e for cle	aning facilities		
	including at	least one cleaner's sink	•			
Note 1: In the a	bsence of mo	re reliable information	you sho	uld assume that 50%		
of the customer	s will be male	and 50% female.				
Note 2: For the	provision of to	pilets for staff, see Table	e 4.			
Nate313 orBina	high meet for	ibubnenentebannments	or Tablic	क्रे.(non-liquor licensed p	remises)	
Appliances		Males		Females		
WC		In single-screen cinem	nas,	In single-screen cinemas,		
		theatres, concert halls and		theatres, concert halls and		
similar premises witho		out	ut similar premises without			
		licensed bars:		licensed bars:		
		1 for up to 250 males	plus 1	2 for up to 40 females		
		for every additional 5	00 (or	3 for 41 to 70 females		
		part of 500) males.		4 for 71 to 100 females		
				Plus 1 for every additional 40		
l luinel				(or part of 40) females		
Urinai		In single-screen cinem	las,	N/A		
		similar promises with	s and			
		liconsod bars:	Jui			
	licensed bars:					
		2 for up to 100 males plus 1				
		for every additional 80 (or				
		part of 80) males.				
Wash basins		1 per WC plus 1 per 5 (or		1, plus 1 per 2(or part of 2)		
		part of 5) urinals.		WCs.		
Note 1 : In the absence of more reliable information you should assume that 50% of the						

audience

Will be male and 50% female.

Note 2: For the provision of toilets for staff, see Table 4.

Table 14 – Public Houses and Licensed Bars				
Appliances	For male customers	For female customers		
WC	1 for up to 150 males plus 1	1 for up to 12 females plus 1 to		
	for every additional 150 (or	13 to 30 females plus 1 for		
	part of 150) males.	every additional 25 (or part of		
		25) females.		
Urinal	2 for up to 75 males plus 1	N/A		
	for every additional 75(or			
	part of 75) males.			
Wash basins	1 per WC and in addition 1 1 per 2 WCs			
	per 5 (or part of 5) urinals.			
Cleaners sink	Adequate provision should be made for cleaning facilities			
	including at least one cleaners sink.			
Note 1: For premises which are used for public entertainment or similar, the occupancy for				
the Licensed areas will be the maximum licensed number (this will be shown on any licence).				

Table 15 – Places of work					
Sanitary appliances for any group of staff					
Number of persons at work	Number of WCs	Number of Wash Basins			
1 to 5	1	1			
6 to 25	2	2			
26 to 50	3	3			
51 to 75	4	4			
76 to 100	5	5			
Above 100 One additional WC and washing station for every 25 (or part of					
	25) persons.				
Alternative scale of pr	ovision of sanitary appliances	for use by male staff only			
Number of males at work	Number of WCs	Number of urinals			
1 to 15	1	1			
16 to 30	2	1			
31 to 45	2	2			
46 to 60	3	2			
61 to 75	3	3			
76 to 90	4	3			
90 to 100	4	4			
Above 100	One additional WC for every 50 (or part of 50) males plus at least one additional urinal for every one extra WC.				

Table 16– Hotels					
Type of accommodation	Appliances/Facilities	Number required	Remarks		
Hotel with en-suite accommodation	En-Suite	1 per residential guest bedroom	Containing: bath/shower, WC and wash basin		
	Staff bathroom	1 per 9 residential staff	Containing: bath/shower, WC and wash basin		
	Bucket/cleaners sink	1 per 30 bedrooms	At least 1 on every floor		
Hotels and guest	WC	1 per 9 guests			
Houses	Wash Basin	1 per bedroom			
Without en-suite Accommodation	Bathroom	1 per 9 guests	Containing: bath/shower, wash basin and additional WC		

Table 17– Residential Homes and Nursing Homes for Elderly People					
Type of	Appliances	Number	Remarks		
accommodation		recommended			
Residents	WC	1 per 4 persons	An adequate wash		
			basin is also required		
	Bath	1 per 10 persons			
	Wash basin	1 to each bedsitting			
		room			
Staff	WC	At least 1 for staff	See Table 4 for		
			places of work		
	Wash Basin	1	In WC compartment		
Visitors	WC	1			
	Wash basin	1	In WC compartment		
Kitchen	Sink	As appropriate			
Cleaners Room	Cleaners sink	N/A	In each cleaner's		
			room		
Other	Bed pan	As appropriate			
	cleaning/disposal				
	Wash basin	1	In each medical room		

Table 18- Outdoor music and similar events					
For events with a gate opening time of 6 For events with a gate opening time of less					
hours or more		than 6 hours			
Male	Female	Male	Female		
1 WC per 500 males,	1 WC per 100	1 WC per 600 males,	1 WC per 120		
Plus 1 urinal per 150	females	Plus 1 urinal per 175	females		
males		males			
1 wash basin per 5(or	part of 5) WCs plus 1	1 wash basin per 5(or	part of 5) WCs		
per 5 (or part of 5) urinals					
Note 1 : For the provisions of toilets for staff, see Table 4					

In all cases at least one of the male and female WCs and washbasins shall be designed for use by persons with disabilities, or a separate disabled toilet shall be provided for male and female use complete with washbasin. In either case the layout, dimensions, grab rails etc. shall be in accordance with the provisions of Diagram I(1), I(2) & I(3)

- I.3. In any building that is a place of employment or the public has access to which includes a changing room or washing facilities such as a bathroom with a fixed bath or shower shall be designed for use by persons with disabilities in accordance with Diagrams I(4), I(5), I(6), I(7) & I(8).
- I.4.
- (1) In any building in which hot water is stored in an unvented vessel, effective provision shall be made to ensure that the water is not capable of being heated to a temperature of 100°C or above.
- (2) The design of any hot water system shall be such that the temperatures of the hot water at the point of delivery to washbasins, baths, showers and bidets shall generally not exceed 44°C

Diagram I(1) Unisex wheelchair-accessible toilet with corner WC.

(excluding any projecting heat emitters)

Note Layout for right-hand transfer to WC

Diagram I(2) Heights and arrangement of fittings in a unisex wheelchair-accessible toilet.

*Height subject to manufacturing tolerance of WC pan

- HD: Possible position for automatic hand dryer (see also Diagram 20)
- SD: Soap dispenser PT: Paper towel dispenser
- PT: Paper towel dispenser AR: Alarm reset button
- TP: Toilet paper dispenser

Height of drop-down rails to be the same as the other horizontal grab rails

Diagram I(3) Height of various fittings in toilet accommodation.

Height of independent washbasin and location of associated fittings, for wheelchair users and standing people

A. For people standing B. For use from WC Mirror located away from washbasin suitable for seated and standing people (mirror and associated fittings used within a WC compartment or serving a range of compartments) Diagram I(4) Self-contained changing room for individual use.

Diagram I(5) Self-contained Shower room for individual use.

Diagram I(6) Self-contained shower room incorporating a corner WC for individual use.

Note Layout shown for right-hand transfer to shower seat and WC

Diagram I(7) Self-contained bathroom incorporating a corner WC for individual use.

Layout shown for right-hand transfer to bath and WC

Diagram I(8) Grab rails and fittings associated with a bath.

PART J: HEAT PRODUCING APPLIANCES AND GAS STORAGE

J.1. SAFETY

(1) Any heat producing appliance shall, when installed in a building, operate without danger of igniting the building or producing gases which could be harmful to health.

J.2. AIR SUPPLY TO APPLIANCES

(1) Any heat-producing appliance other than an electrical appliance shall be so installed that it is provided with an adequate supply of air for combustion and for efficient working of the flue pipe or chimney.

- a) Unless the appliance is room-sealed, the room in which it is contained shall be provided with at least one permanently open air entry of adequate size directly from the open air; or
- **b)** If the room also contains an air extractor fan, the permanently open air entry shall be sufficient to supply the appliance whether or not the extractor fan is in operation; and
- c) Where gas cooking facilities are used no permanently open air entry or window shall be located adjacent to it.

J.3. FLUE PIPES AND CHIMNEYS

- (1) Any combustion appliance shall be:
 - a) Connected to either a flue pipe or chimney; or
 - **b)** If the appliance is room-sealed, to a balanced or low level flue and in either case it shall discharge to the open air.
- (2) Every flue pipe or flue within a chimney shall be provided with means of inspection and cleaning. Every opening for such purpose shall be in the form of a rigid, non-combustible gas-tight cover. No opening shall be made in a flue pipe unless a proprietary unit is provided for inspection and cleaning or as a draught stabiliser or draught director.
- (3) A flue pipe and any flue in a chimney shall;
 - a) Not serve more than one appliance; and
 - **b)** Not open into more than one room; and
 - c) In the case of flue blocks, it shall be vertical or no part shall be at an angle less than 60° to the horizontal.
- (4) *Deemed to satisfy provisions* for compliance with sub-regulations (1) and (2) for domestic installations of up to 50 kW rated output and including open fires of any output.
 - a) A flue pipe constructed of cast iron or stainless steel with a diameter not less than that of the appliance outlet, or not less than 225mm x 225mm in the case of an open fire, with a removable cover to a sweeping access point.
 - **b)** Combustible material not to be closer than 200mm from the flue pipe or 75mm from a chimney that contains a flue with the flue surrounded by at least 100mm thick blockwork.
 - c) The outlet of any flue or flue pipe to be higher than any opening in the building and not less than 900mm above the pitch line of the roof.
 - d) A permanently open supply of air to the room containing the appliance or open fire from external ventilation equivalent to 8000mm² (275mm x 275mm) in the case of dwellings and flats and sufficient to meet the appliance manufacturer's recommendations in other buildings.

J.4. GAS STORAGE

- (1) Any premises in which LPG is sold, a secure facility shall be provided in accordance with requirements of the Chief Fire Officer.
- (2) In any hotel, lodging house, nursing or care home, hospital or school or any place of employment where LPG is stored in cylinders of capacity greater than 14Kg or premises where LPG cylinders are filled, all gas cylinders shall be contained within a separate structure designed, constructed and ventilated in accordance with requirements of the Chief Fire Officer.
- (3) In the case of any building containing sleeping accommodation, including any new dwelling or an extension to a dwelling, in which LPG is to be used, the cylinder(s) shall (see diagram J(1)):
 - a) Be fitted with a pressure relief valve; and
 - **b)** Be stored outside the building; and
 - c) Be at least 1m horizontally and 300mm vertically from any window, door and vent; and
 - **d)** Be at least 2m from any untrapped drainage gully, or a boundary of the site unless and intervening wall not less than 250mm high is provided; and
 - e) Secured to the building with a chain or similar fixing.

Diagram J(1) Location of LPG cylinder(s)

PART K: ELECTRICAL SAFETY

- K.1. Provisions are as follows:
 - (1) Every electrical installation in any new, altered or extended building shall be designed and installed in accordance with the current edition of the BS7671 Requirement for Electrical Installations (IET Wiring Regulations).
 - (2) Before any electrical installation or alteration to an existing electrical installation is brought into use it shall be tested by a person qualified and authorised by the utilities service provider, to test and certify the work in accordance with the test procedures and standards recommended in the current edition of the BS7671 IET Wiring Regulations, and so certified by the utilities service provider.
 - (3) An Electrical Installation Certificate "original" will be issued to the owner to confirm that the electrical work which it relates has been inspected and tested in accordance with the BS7671 IET Wiring Regulations. This certificate should be retained in a safe place and be shown to any person inspecting or undertaking further work on the electrical installation in the future.
 - (4) Any excavation associated with any new, altered or extended building shall not be within three metres of a low-voltage (less than 1000v a.c) electricity conductor pole or a pole stay-anchor, or five metres in the case of a high-voltage (exceeding 1000v a.c) electricity conductor pole or stay-anchor.
 - (5) No part of any new, altered or extended building shall be under any overhead electricity line or electricity cable.
 - (6) Switches and sockets, serving habitable rooms throughout the dwelling shall be between 450mm and 1200mm above floor level.
 - (7) It is recommended that consumer units shall be mounted so that switches are between 1350mm and 1450mm above floor level and mounted in a location which is easily accessed by the user but avoids impact.
 - (8) All wiring to consumer units, meters and ancillary equipment shall be concealed by a noncombustible material.

Made by the Governor in Council this day of 2019.

Anthea Moyce Clerk of Councils

EXPLANATORY NOTE (*This note is not part of the Regulations*)

The purpose of these Regulations is to introduce the methods and standards of construction of buildings and structures and systems associated with buildings. The Regulations also requires notice of intention with respect to building work and application for approval of building plans. The Regulations also prescribes the fees to be paid and forms to be used and makes provision for appeals against decisions of the Chief Building Inspector or Building Inspector.