

Version 1.0 - 1999

**STANDARD CHECKLIST FOR
SUBMISSION OF BUILDING PLANS**

**Building and Construction Authority
Building Plan Department**

Contents

Introduction

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This Standard Checklist is issued by the Commissioner of Building Control (CBC) and shall come into effect on 1st Apr 1999.

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The purpose of this Standard Checklist is -

- (a) to alert qualified persons on the general requirements that should be taken into consideration in respect of the building works;
- (b) to assist qualified persons in the preparation and submission of building plans to the Building Plan Department (BPD); and
- (c) to assist qualified persons when seeking waiver or modification of any of the requirements or building regulations which could not be complied with.

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This Standard Checklist contains a list of requirements written in a concise form to guide qualified persons. It is by no means an exhaustive list of requirements of the Building Control Regulations (Cap 29, Rg 5) which must be complied with when making a building plan submission. Further, the items in this Standard Checklist may be amended or revoked when new written laws come into force. Qualified persons are therefore advised to read and familiarise themselves with the provisions of the following legislation and Codes which affect the building works:

- (a) The Building Control Act (Chapter 29);
- (b) The Building Control Regulations (Cap. 29, Rg 5);
- (c) The Building Control (Temporary Buildings) Regulations (Cap. 29, Rg 9);
- (d) The Building Control (Exempt Building Works) Order (Cap. 29, O 1);
- (e) Code on Barrier-Free Accessibility in Buildings, 1995;
- (f) Handbook on Energy Conservation in Buildings and Building Services.

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Other Codes of Practice relevant to the building works are cited in the Building Control Regulations and qualified persons should refer to these Codes, where necessary.

5

Before submitting the building plans to BPD for approval, qualified persons are advised to check their building plans and submissions to ensure that the applicable standard requirements listed below are complied with:

Standard Requirements

1 Technical departments:

1.1

Clearances for building plan approval must be obtained from the following technical departments where relevant:

- (a) **Fire Safety Bureau** (FSB), Singapore Civil Defence Force;
- (b) **Central Building Plans Unit** (CBPU), Pollution Control Department in respect of sewerage matters, drainage matters, environmental health matters and pollution control measures;
- (c) **Land Transport Authority** (Roads & Transport);
- (d) **Land Transport Authority** (Development Control & Route Protection);
- (e) **Land Transport Authority** (Vehicle Parking);
- (f) **National Parks Board** (Planning & Design Development Division);
- (g) **Urban Redevelopment Authority** (Chief Planner) ;
- (h) **Ministry of Education**, School Planning, Development & Supplies Branch; and
- (i) **Preservation of Monuments Board**;

1.2

Qualified persons are advised to refer to the Guidelines on BP Consultation with Technical Departments (PC.01Version 1.0-1999) for further assistance.

2 General requirements:

2.1

The building plans must be prepared and signed by an appropriate qualified person determined in accordance with the First Schedule of the Building Control Regulations.

2.2

Every sheet of plans must be signed by the qualified person and bear a standard certification.

2.3

The plans must be folded as shown in the Second Schedule of the Building Control Regulations.

2.4

Every sheet of plans must have an outline rectangular space measuring 200 mm x 100 mm at the top right hand corner for official stamps.

2.5

The project title must reflect accurately the nature of the submission and should contain the information required under regulation 6(1)(c).

2.6

Where trade names are specified, they must be accompanied by the generic names or a full description of the building materials or components given.

2.7

Plans must be printed in a clear and intelligible manner and must be on a suitable light background as required under regulation 6(3).

2.8

For plans of alterations or additions to an existing building, the plans must bear a certification -

- (a) from a professional engineer (civil/structural) under regulation 5(1)(a) if the qualified person who prepares the building plans reasonably suspects that the proposed building works may affect the structural stability or integrity of the existing building (if the plans are prepared and signed by a professional engineer, he may sign the certification); and
- (b) from a professional engineer (mechanical) or a professional engineer (electrical with registration number up to 1311) under regulation 5(1)(b) in respect of the existing air-conditioning and mechanical ventilation system.

2.9

The building plans must be fully annotated and suitable notations and symbols acceptable to the Building Authority are to be used to show or distinguish the differences in materials.

2.10

For amendment plans or plans of alterations and additions which are not coloured, the proposed repairs, alterations or additions must be clearly demarcated, delineated or marked to distinguish them from the existing works.

2.11

Any building works which are to be deleted, removed or demolished must be shown in dotted lines on the plans and presented in such a manner which can be easily identified or distinguished.

2.12

The scale of plans must be clearly indicated and must comply with regulation 7.

2.13

The building plans must be prepared in accordance with regulation 8.

2.14

The building is to be designed to facilitate access to and use of that building and its facilities by disabled persons as required under regulation 36. The provisions shall be in accordance with the current Code on Barrier-Free Accessibility in Buildings, 1995:

2.14.1

General Requirements:

- (a) Space allowances must be in accordance with clause 3.1;
- (b) Floor surfaces must be in accordance with clause 3.2;
- (c) Approaches must be in accordance with clause 3.3;
- (d) Accessible routes, corridors or paths must be in accordance with clause 3.4;
- (e) Doors must be in accordance with clause 3.5;
- (f) Handrails/grab bars must be in accordance with clause 3.6;
- (g) Kerb ramp at walkways and pedestrian crossings must be in accordance with clause 3.7;
- (h) Slope ramp must be in accordance with clause 3.8;
- (i) Controls and operating mechanisms must be in accordance with clause 3.10; and
- (j) Seating spaces must be in accordance with clause 3.11.

2.14.2

Sanitary provisions should be in accordance with Chapter 4 of the Code (clauses 4.1 to 4.11).

2.14.3

Lifts should be provided in accordance with Chapter 5 of the Code (clauses 5.1 to 5.8).

2.14.4

Car parks should be provided in accordance with Chapter 9 of the Code (clauses 9.1 to 9.8).

2.14.5

International symbol of access for the disabled person must be in accordance with Chapter 10 of the Code (clauses 10.1 to 10.5).

2.15

The building plans must generally be in accordance with the relevant plans approved by the competent authority under the Planning Act in respect of -

- (a) siting or position of the building;
- (b) the boundary clearances or setbacks required;
- (c) the site and dimensions of the open yard or open space to be provided for and around any building;
- (d) the provision of footways or pedestrian walkways (whether open or covered and their reserves);
- (e) the height of the building, particularly if there is height control; and
- (f) the elevations if the building involves the Architectural Design Panel.

2.16

The height of room, height of ceiling and headroom must be in accordance with the Table to regulation 38.

3 Staircases:

3.1

No projections, other than handrails, are permitted in any staircase within 2000 mm from the staircase level.

3.2

No column, pier or pillar should project into any staircase enclosure which will reduce the width of the staircase or landing at any point.

3.3

Any railing, parapet or balustrade must be designed to withstand the appropriate horizontal or lateral load in accordance with Table 4 of the Fourth Schedule of the Building Control Regulations.

3.4

The size of openings or voids in railings, parapets or balustrades must comply with regulation 45.

3.5

Handrails must be provided to all staircases in accordance with regulation 46.

3.6

The minimum width of all staircases must be 900 mm

3.7

The clear headroom of every staircase must comply with regulation 48.

3.8

Staircase landings must comply with the provisions of regulation 49.

3.9

The sizes of treads and risers must be in accordance with regulation 50.

3.10

The building must be protected by lightning protection system in accordance with CP 33:1985 and, on completion of the installation, a certificate of supervision must be submitted by an appropriate professional engineer.

3.11

For semi-detached, terraced or linked houses, the party wall must be extended or carried above the roof covering of the pitched roof so that each house will have a separate roof independent of the adjoining house.

4 Lifts:

4.1

Buildings 5 storeys or more must be provided with lifts in accordance with regulation 53 and, on completion of the installation, a certificate of supervision from an appropriate professional engineer must be submitted.

5 Lighting and ventilation:

5.1

The location of openings for natural lighting and ventilation must comply with regulation 57.

5.2

The percentage of lighting and ventilation requirements must comply with regulation 58.

5.3

The dimensions of courtyards (for buildings more than 10 storeys), where provided, must not be less than 6.0 m x 6.0 m.

5.4

The sizes of air-wells (for buildings up to 10 storeys), where provided, must comply with regulation 59.

5.5

For non-residential buildings where air-conditioning or mechanical ventilation is provided in lieu of natural ventilation, the notation "A/C" or "M/V" shall be imprinted on the plan for every area affected.

6 Energy conservation requirements:

6.1

For air-conditioned buildings, the OTTV for the building envelope must not exceed 45 w/m². OTTV calculations and plans must be submitted before BP approval.

6.2

For office buildings, hotels or shopping complexes or a combination of such uses, data logging facilities for the collection of data for energy auditing and suitable means for the monitoring of energy consumption must be provided in accordance with regulation 73.

6.3

Where the roof of an air-conditioned building is provided with skylights or any other material, translucent or otherwise, which allows the passage of light through, the OTTV for the gross area of the roof must not exceed 45 w/m². OTTV calculations and plans must be submitted before BP approval

6.4

The average U-value for the gross area of the roof of an air-conditioned building must not exceed the limit as prescribed in the Table to regulation 69(b)(ii) for the corresponding average weight group. U-value calculations together with sectional details of each type of roof construction must be submitted on separate sheets of paper

6.5

The U-value of the roof of a non-air-conditioned building must not exceed the limit as prescribed in the Table to regulation 74 for the corresponding weight group. U-value calculations together with sectional details for each type of roof construction must be submitted on separate sheets of paper.

6.6

All shops or units in an air-conditioned complex or building must be designed to face the interior of the complex or building. Where this is not possible or feasible, the provisions of regulation 70(2) must be complied with.

6.7

For a hotel development, an automatic control device, acceptable to the Building Authority, must be installed for the purpose of automatically switching off the lighting and reducing the air-conditioning supply when a guestroom is not occupied.

7 General construction requirements:

7.1

Aprons not less than 600 mm in width are to be provided around the building with rainwater channels located below the projecting eaves

7.2

Eaves gutters and rainwater down-pipes must be provided in lieu of aprons and rainwater channels.

7.3

In terraced developments the footways or pedestrian walkways provided must comply with regulation 77.

7.4

The gradient of driveways and vehicular ramps must not be steeper than 1:8.3 except that in any factory or warehouse development, the gradient should not be steeper than 1:12.

7.5

The gradient of any pedestrian ramp must not be steeper than 1:10.

8 Protective railings:

8.1

Protective railings or parapets not less than 900 mm in height must be provided in accordance with regulation 79. Such railings or parapets must be designed to withstand the appropriate horizontal load in accordance with Table 4 of the Fourth Schedule of the Building Control Regulations.

8.2

The height of window sill or any openable window, ventilation or other openings must be at least 900 mm in height otherwise protective barriers or other railings acceptable to the Building Authority must be provided or installed to make up the height of the sill or wall to 900 mm.

8.3

Suitable markings or signs must be provided on full height glass walls or unframed glass doors as required under regulation 81.

8.4

Protective railings or barriers of a suitable design and not less than 900mm in height are to be provided to all full height glass wall overlooking a sunken area, void, airwell, courtyard or external open space with a drop of more than 1000 mm. Such railings or barrier must be designed to withstand the appropriate horizontal load in accordance with Table 4 of the Fourth Schedule of the Building Control Regulations.

8.5

Where full height glass walls are used in lieu of protective railings/barriers, then such glass walls shall be designed to withstand a horizontal load in accordance with Table 4 of the Fourth Schedule of the Building Control Regulations.

9 Other requirements:

9.1

A letter indicating receipt and retention of Singapore Cable Vision's Certificate certifying its cable readiness in accordance with CP 39:1994 must be submitted to BPD before the issuance of the certificate of statutory completion (CSC) in accordance with Singapore Broadcasting Authority's directive on the installation of Master Antennae Television (MATV) systems for new condominiums, apartment developments, cluster housing developments or strata bungalow developments.

9.2

Fume system for the removal of petrol fumes must be provided in accordance with regulation 63A for all basement car parks which are naturally ventilated.

9.3

OTTV calculations must be submitted for any flatted factory (regardless of whether it is air-conditioned or not) and for any air-conditioned detached building under conservation.