3rd working draft on 30.8.94 BUILDING (ENERGY EFFICIENCY) REGULATION

(Made under section 38 of the Buildings Ordinance (Cap. 123))

1. Commencement

This Regulation shall come into operation on [

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2. Interpretation

In this Regulation, unless the context otherwise requires commercial buildings" includes offices, shops, department stores,
places of public entertainment, places of public assembly,
restaurants and any other buildings used for commercial
purposes, but does not include hotels, domestic premises,
industrial buildings, schools, carparks, places used for bulk
storage and utility buildings such as power stations and
sub-stations;

- "external wall" means an outer wall of a building and includes a wall adjoining a wall of another building but does not include a wall or part of a wall which is underground;
- "hotel" has the meaning assigned to it by section 2 of the Hotel and Guesthouse Accommodation Ordinance (Cap. 349);
- "overall thermal transfer value" means, as regards a building, the amount, expressed in watts per square metre (W/m^2) , of heat transferred through that building envelope and calculated having regard to the area of the building envelope, the material used in its construction, thermal properties of the material; orientation of the building, the area of the

openings in the building envelope and the shading effect of projections from the building envelope.

"refuge floor" means a protected floor that serves as a refuge for the occupants of the building to assemble in case of fire.

3. Application

- (1) This Regulation applies to buildings of a class or description specified in the <u>Schedule</u>.
- (2) Where different parts of a building are used for different purposes -
 - (a) this Regulation applies only to those parts which are used as a building described in the <u>Schedule</u> or any purpose ancillary to such use, other than use as a refuge floor, car park or for accommodating mechanical plants; and
 - (b) any reference to "building" is to be construed as a reference to those parts.

4. Energy efficiency

- (1) A building to which this Regulation applies shall be so designed and constructed as to achieve energy efficiency to the satisfaction of the Building Authority.
- (2) Without prejudice to the generality of <u>subsection (1)</u>, a building shall be regarded as being designed and constructed in compliance with that subsection if its external walls and roofs have a suitable overall thermal transfer value.

5. Information and calculation to be included in building plans

Any plan for building works submitted for the purposes of

Section 14 of the Ordinance shall include -

- (a) diagrams showing dimensions, colours, arrangements and other details of the building materials to be used for roofs and external walls of the building concerned;
- (b) for each floor, the following information regarding the windows, presented in a tabular form -
 - (i) the number of windows and the size of each window for each orientation;
 - (ii) the thickness of the glass to be used;
 - (iii) type of glass;
- . (c) for composite walls and roofs, particulars of the thermal transmittance value with calculations; and
 - (d) a statement with calculations of the overall thermal transfer value of the external walls and the roofs of the building.

6. Projections to be disregarded

Notwithstanding anything in regulations 20, 22 and 31 of the Building (Planning) Regulations (Cap. 123 sub. leg.), any projection from the external wall of a building, being a projection which -

- (a) the Building Authority is satisfied contributes to the achievement of the suitable overall thermal transfer value; and
- (b) does not project more than 1.5 m from the external wall,

is not to be taken into account in determining whether the building concerned complies with the requirements of those regulations.

SCHEDULE

[s. 3]

BUILDINGS TO WHICH THIS REGULATION APPLIES

- 1. Commercial buildings
- 2. Hotels

Secretary for Planning, Environment and Lands.

1994.

Explanatory Note

This Regulation imposes requirements relating to the energy efficiency of buildings. The Regulation applies to commercial buildings and hotels. The main requirement is that those buildings be constructed to a suitable overall thermal transfer value. The Regulation also requires that when plans are submitted to the Building Authority, certain information specified in the Regulation and relating to the energy efficiency of the building concerned, be included.