

Ministerial Regulation on Prescribing Type or Size of Building and Standard, Criteria and Procedure in Designing Building for Energy Conservation B.E. 2563

Unofficial Translation

Volume137 Part 94A

Government Gazette

12 November B.E 2563



Ministerial Regulation

Prescribing Type or Size of Building and Standards, Criteria and Procedure in Designing Building for Energy Conservation B.E. 2563

By virtue of provision in Section 6 paragraph two and Section 19 of the Energy Conservation Promotion Act B.E. 2535 amended by the Energy Conservation Promotion Act (No. 2) B.E. 2550. The Minister of Energy, by advice of the National Energy Policy Committee, issues Ministerial Regulation as follow:

Clause 1: This Ministerial Regulation shall be enforced when one hundred twenty days have elapsed from the date of its publication in the Government Gazette onward.

Clause 2: The Ministerial Regulation on Prescribing Type or Size of Building and Standard, Criteria and Procedure in Designing Building for Energy Conservation B.E. 2563 shall be repealed

Clause 3: in this Ministerial Regulation

“Audit” means the energy audit for designing building for energy conservation

“Reference Building” means building plan for construction or modification which has the same space, usage, direction, and area of each envelope as the building designed and its envelope system, lighting system and air-conditioning system have to be calculated according to standard.

Section 1:

Type and Size of Building for Energy Conservation

Clause 4: Construction of following buildings, if a total area is from 2,000 square meters and more, must be designed for energy conservation according to standard, criteria and procedure mentioned in this Ministerial Regulation.



- (1) Theatrical building according to the law concerning building control
- (2) Hotel building according to the law concerning hotel
- (3) Entertainment service building according to the law concerning place for entertainment service
- (4) Hospital or clinic according to the law concerning Medical center or hospital
- (5) Educational place according to the law concerning national education
- (6) Office
- (7) Building of department store or trade center
- (8) Condominium according to the law concerning condominium
- (9) Building for congregation according to the law concerning building control

Clause 5: Modification of the building mentioned in Clause 4, if a total area is from 2,000 square meters and more, must be designed for energy conservation according to standard, criteria and procedure mentioned in this Ministerial Regulation.

Section 2

Standard, Criteria and Procedure for Designing Building for Energy Conservation

Clause 6: Following building envelope system must follow the standard prescribed in announcement by the Minister:

- (1) External wall and roof of building which has air conditioning in each type of building.
- (2) Other types of building envelope system.

For building, which has use of several manners, each part of area must use specification of building envelope system according to manner of use of each part of that area.

Clause 7: Lighting system must follow these standards

(1) Lighting performance of electrical equipment for lighting inside of the building must not exceed standard value for each specific building type which is prescribed in announcement by the Minister.

(2) Luminance of the use of lighting electricity inside of building, excluding car parking space, for each type of work must have sufficient level and must comply with the law concerning building control or specific law concerning such case.

For building which has use of several manners, maximum lighting performance of each area must not exceed standard value for each type of work.

Clause 8: Each type and size of air conditioning system installed in the building must have minimum performance, seasonal energy efficiency ratio or ratio of electrical power per ton of refrigeration complying with standard prescribed in announcement by the Minister.

Clause 9: Hot water producing equipment installed in the building must have minimum coefficient of performance and minimum efficiency according to standard prescribed in announcement by the Minister.

Clause 10: Calculation of designing building for energy conservation shall follow criteria and methodology prescribed in announcement by the Minister.

Clause 11: Designing building for energy conservation must audit the plan of construction or modification which the standard value of each system should not exceed the value prescribed in announcement (Clause 6, 7 or 8) by the Minister.

Inspection report shall present the calculation prescribed in announcement (Clause 10) by the Minister or the methodology according standard prescribed by the Engineering Institute of Thailand under H.M. the King's Patronage or by the Association of Siamese Architects under Royal Patronage or according standard certified by the Building Control Committee.

Clause 12: If results of the inspection are different from standard prescribed in Clause 6, 7, or 8, a total energy consumption of the building must be less than the Reference Building.

Clause 13: For the building which uses renewable energy, its energy consumption can be subtracted by a use of renewable energy. Criteria and methodology shall follow Clause 10 prescribed in announcement by the Minister.

Clause 14: Inspection shall be conducted by person who has engineering license for professional practice or architect license for professional practice and pass the training certified by the Department of Alternative Energy and Energy Efficiency.

Clause 15 Certification of inspection report: The building owner must develop inspection report for plan of construction or modification prescribed in announcement by the Minister, and arrange to have inspector who has qualification in according to Clause 14 for requesting the permission on instruction or modification according to the Building Control Act.

When construction or modification is completed, the building owner must submit a certification on energy conservation according to the Building Control Act.

Transitory Provision

Clause 16: In an initial phase this Ministerial Regulation shall not enforce the construction or modification of building which is prescribed in Clause 4 and has a total area not excess 10,000 square meters. The initial phase will be end by

- (1) One year for the building which has a total area from 5,000 square meters to 10,000 square meters.
- (2) Two years for the building which has a total area from 2,000 square meters to 5,000 square meters.

Clause 17: Plan of building, for which a request for permission for construction or modification according to the Building Control Act or the specific law concerning such case, or for approval of environmental impact analysis or environmental impact assessment according to the Enhancement and Conservation of National Environment Quality Act before the date of enforcement of this Ministerial Regulation, shall be exempted from complying with this Ministerial Regulation.

This is given on 30 October B.E. 2563

Supattanapong Punmeechow
Minister of Energy

Remark: Reasons for promulgation of this Ministerial Regulation is: whereas type or size of building and standard, criteria and procedure of designing building for energy conservation was prescribed in the Ministerial Regulation B.E. 2552, they do not suit current situation. Therefore it is necessary to revise the standard, criteria and procedure to suit a change of technology, and the energy audit for designing building for energy conservation suit a permission of construction or modification according to the Building Control Act. This Ministerial Regulation needs to be issued.