

**The Royal Decree on Designated Building
B.E. 2538 (1995)**

BHUMIBOL ADULYADEJ, REX.,

Given on the 17th day of July B.E. 2538 (1995);
Being the 50th Year of the Present Reign.

His Majesty King Bhumibol Adulyadej has been graciously pleased to proclaim that:

Whereas it deems appropriate to specify the designated building for the purpose of energy conservation,

His Majesty the King, by virtue of Section 178 of the Constitution of the Kingdom of Thailand and its amendments (No. 5) B.E. 2538 (1995) and Section 18 paragraph one of the Energy Conservation Promotion Act B.E. 2535 (1992), is graciously pleased to enact this Royal Decree as follows:

Section 1 This Royal Decree shall be called the "Royal Decree on Designated Building, B.E. 2538 (1995)".

Section 2 This Royal Decree shall come into force after the elapse of a period of 120 days from the date following its publication in the Government Gazette.

Section 3 The following buildings that utilize energy shall be recognized as designated building. This shall not include buildings used for Royal villa or palace, foreign embassy or counselor, office of international organization or office of an organization founded by the agreement between Royal Thai Government and foreign government, ancient place, temples or building for religious use which has specific law governs and control its construction.

(1) Single building or many building using the same address number which is approved from a distributor to use electricity meter or to install one or many transformers with a total installed capacity of no less than 1,000 kilowatts or 1,175 kilovolts-ampere (KVA).

(2) Single building or many building using the same address number which use electricity from the system of heat distributor from steam distributor or other non-renewable energy from distributor or oneself, either one source or in combination, since the 1st day of January to the 31st day of December of the previous year in the overall amount equivalent to electrical energy of not less than 20 millions mega Jules.

Section 4 The amount of utilized energy under section 3(2) shall be calculated in mega Jules unit according to the following criteria.

(1) For electricity, the amount of utilized electricity shall be calculated in kilowatt-hour unit and then multiplied by 3.60.

(2) For heat obtained from steam, the amount of heat from the steam shall be calculated in equivalent to electrical energy using the following equation.

$$E_s = (h_s - h_w) \times S \times e_{ff}$$

Where E_s means the amount of heat from steam as equivalent to electrical energy, mega Jules per year
 h_s means Enthalpy of utilized steam(from general steam table), mega Jules per ton

h_w means	Enthalpy of water at temperature of 27 °C and one atmospheric pressure, the value of 113 mega Jules per ton shall be used herein
S means	amount of utilized steam, ton per year (measured from steam meter of the building)
$e_{ff.}$ means	efficiency in conversion of heat energy into equivalent electrical energy, the value of 0.45 shall be used herein

(3) For other non-renewable energy, the amount of heat obtained from such non-renewable energy shall be calculated in equivalent to electrical energy using the following equation.

$$E_f = F \times HHV \times e_{ff.}$$

Where E_f means	the amount of heat obtained from non-renewable energy as equivalent to electrical energy, mega Jules per year
F means	amount of utilized non-renewable energy, unit mass or unit volume per year
HHV means	higher heating value of utilized non-renewable energy, mega Jules per unit mass or unit volume
$e_{ff.}$ means	efficiency in conversion of heat energy into equivalent electrical energy, the value of 0.45 shall be used herein

In case there is no high heating value available from distributor, the average heating value prescribed by Department of Energy Development and Promotion shall be used.

Section 5 The Minister of Science, Technology and Environment shall take charge of and control the execution of this Royal Decree.

Countersigned by:
Mr.Chuan Leekpai
The Prime Minister

(Published in the Government Gazette, Vol. 112, Part 33a, dated 14th August B.E. 2538 (1995))

Remark :- The reason for the promulgation of this Royal Decree is that, whereas it deems appropriate to specify the building that is approved from distributor to use electricity meter, to install one or more transformer with total installed capacity of no less than 1,000 KW or 1,175 KVA, or to use electricity from the system of heat supplier, steam supplier or other non-renewable energy from supplier or oneself, either one or in combination in the previous year in the quantity equivalent to electrical energy of not less than 20 million mega Jules as designated building, and whereas section 18 paragraph one of the Energy Conservation Promotion Act B.E. 2535 (1992) stipulates that designated of any building as a designated building, by types, quantities of energy use and methods of energy utilization in such building, shall be enacted by the issue of the Royal Decree, the enactment of this Royal Decree is therefore necessary.