University Rating System (HURS)

University : Siam University
Country : Thailand
Web Address : http://sustainability.siam.edu

SI 2.4 Advanced Energy Management Systems

[2.4.9] Smart Building implementation

***Min. at least five requirements for each building**

No.	Name	Place	automation		safety				energy		water		Indoor environment				lighting				Building Area (m^2)
			B1	B2	S1	S2	S3	S4	E1	E2	A1	A2	I1	I2	I3	I4	L1	L2	L3	L4	
1	The Golden Jubilee Building	Bangkok, Thailand	x	x		x	x	x	x	x	x	x	x	x			x	x		x	47,804
2	The Royal Majesty Jubilee Building	Bangkok, Thailand	x	x		x			x	x			x				x				14,440
3	Education Building	Bangkok, Thailand				x	x			x	x						x				~~15,124.4~~
4	The Engineering Operations	Bangkok, Thailand	x			x			x	x			x				x			x	5,112.175
5	The 30th Anniversary Building	Bangkok, Thailand	x		x								x				x				~~2,875~~
6	Dr. Narong Mongkhonvanit Memorial Building	Bangkok, Thailand			x								x				x				~~3,120~~
7	Siam University Sports Complex and Auditorium	Bangkok, Thailand				x			x				x				x				~~3,730~~
8	Administration Building	Bangkok, Thailand			x								x				x				~~288~~
	Total																				**67,356.175**

Description:

According to the year 2022, our smart buildings can be calculated around 63.38% of the total area. In the year 2023, we have increased the smart building implementation to 75.36% of total all floors building area in our campus. We have applied the implementation program for new smart buildings consisting of The Golden Jubilee Building, The Engineering Operations and Siam University Sports Complex and Auditorium in order to accommodate all energy efficient appliances usage. Some automatic switch on and off circuit devices including solar roofs have already been installed in these buildings.

Total building area: 89,373.575 m^2
Total smart building area: 67,356.175 m^2

*** *Smart building implementation*:**

$$\frac{\boldsymbol{total\ smart\ building\ area}}{\boldsymbol{total\ building\ area}} \times \mathbf{100}\%$$

$$\frac{67{,}356.175}{89{,}373.575} \times \mathbf{100} = \mathbf{75.36}\ \%$$