

# Energy conservation-Lighting and power checklist

**Regulation For the Installation of Electrical Wiring ,Electrical Equipment And Air Conditioning Equipment -December 2010 Edition**

PROJECT NAME :		Date	Rev			
LOCATION/AREA :						
PIN NUMBER :						
CONSULTANT NAME :		BP Number				
CONSULTANT CONTACT PHONE /EMAIL:						
CLIENT NAME :						
BUILDING TYPE :						
Load Details	Lighting Load =		AC Load=		Other Load=Specify	
	Small Power load=		Water Heater=		Cooker=	
Total Demand load of the Installation						
Total Floor area of the Installation in m <sup>2</sup>						

The following information is required to check the building permit application for compliance of energy conservation measures for the lighting , power, Building Envelope & HVAC of the installations mentioned in the Regulations for the installation of electrical wiring ,Electrical equipment and Air conditioning Equipment.

Section Ref	Item	Applicability			Information Required (For Bulk Customers only)	Attached Drawing Reference Number	Remarks by KAHRAMAA Engineer
		Yes	No	N A			
<b>Lighting -Section 7 Final Sub Circuits</b>							
709.7	Whether energy efficient lamps are proposed for the project				Provide layout drawing with description of Luminaire		
709.7	Whether electronic ballast are used in fluorescent Luminaire circuits.				Provide layout drawing with description of Luminaire		
<b>Lighting and power controls-Section7 Final Sub Circuits</b>							
709.7	Whether lighting control is proposed as applicable				Provide control diagrams.		
709.7	Whether timer control is proposed for AC				Provide Equipment schedule with type ,capacity , efficiency& control details.		
709.7	Whether timer and photocell lighting control is provided for external lighting				Provide system control diagrams.		
<b>Electric Motors and power factor -Section 8 &amp;9</b>							
803.2	Whether High efficient motors are proposed for the project				Provide Equipment schedule with type ,capacity , efficiency& control details.		
901	Whether the overall system power factor of the installation will be minimum 0.9 lag				Provide details of power factor correction equipment		
	Any non conventional energy sources are used for the project.				System Description and Detailed schematic diagram		

# HVAC

Installed Capacity of A/C equipment(TR)					Electrical Demand load		
Total Air Conditioned Floor Area in m <sup>2</sup>					Demand load of Unitary exhaust fans(not part of A/C system) in kW		
Section Ref	Item	Applicability			Information Required (For Bulk Customers only)	Attached Drawing Reference Number	Remarks by KAHRAMAA Engineer
		Yes	No	N A			
<b>THERMAL INSULATION OF BUILDING (SECTION 12)</b>							
12.2	Wall & Roof U value	█	█	█	Provide Wall & roof U value calculation sheet(Appendix : 4)		
12.3	Window Requirements	█	█	█	Provide Window Schedule(Appendix : 4).		
<b>HEATING ,VENTILATION AND AIR CONDITIONING (SECTION 13)</b>							
13.2	Min .Equipment Efficiency	█	█	█	Provide Equipment Schedule with type, capacity & efficiency.(Appendix :5)		
13.4.1	Cooling Equipment Control	█	█	█	Provide System Control Diagrams(For Bulk Customer only).		
13.5	Energy Recovery Ventilation	█	█	█	Provide Energy Recovery Ventilation System Schedule with Efficiency Details(For Bulk Customer only).		
13.6	Load Calculation	█	█	█	Provide Cooling Load Summary Sheet.		
	Special Energy Conservation Measure Considered in the Building:	█	█	█	Provide details		
<b>Consultant/Authorized Signatory signature and stamp</b>							
Notes							
1	The Lighting &HVAC checklist shall be attached along with the application for BP approval for all projects						
2	For Non Bulk Customer Provide description of Luminaire with type of lamp used against items 1&2 of 709.7						
3	The Consultant/Contractor shall consider the actual load of the equipment for Air conditioner, Water heater, cooker and lighting equipment ,and the same load shall be followed in construction stage as well. The actual load should reflect in all load schedules.						
4	The Checklists , Calculations and relevant drawings are to be detached By Installation engineer BP Number entered and forwarded to conservation department CN						