

Energy and Water Conservation Design Requirements for SRM Projects

Table 1. Examples of design illumination levels for selected Army buildings and spaces (IESNA 9th Edition Handbook, 200, Illuminating Engineering Society of North America.).

Building Type	Space Type	Maintained Average Illuminance at working level (lux)	Measurement (working) Height (1 meter = 3.3 feet)
Barracks/Dormitories	Bedrooms	300	at 0 m
	Laundry rooms	300	at 1 m
Educational Buildings	Play room, nursery, classroom	400	at 0 m
	Lecture hall	400	at 0.8 m
	Computer practice rooms (menu driven)	30	at 0.8 m
Office buildings	Single offices	400	at 0.8 m
	Open plan offices	400	at 0.8 m
	Conference rooms	300	at 0.8 m
Educational buildings	Classrooms	300	at 0.8 m
	Classrooms for adult education	400	at 0.8 m
	Lecture hall	400	at 0.8 m
Hospitals	General ward lighting	300	at 0.8 m
	Simple examination	500	at 0.8 m
	Examination and treatment	1000	at 0.8 m
Hotels and restaurants	Self-service restaurant, dining room	100	at 0.8 m
	Kitchen	500	at 0.8 m
	Buffet	100	at 0.8 m
Sport facilities	Sports halls	300	at 0 m
Wholesale and retail sales	Sales area	500	at 0.8 m
	Till area	500	at 0.8 m
Circulation areas	Corridor	50	at 0 m
	Stairs	50	at 0 m
	Restrooms	300	at 0 m
	Cloakrooms, washrooms, bathrooms, toilets	300	at 0.8 m
Industrial	Metal working / welding	300	at 1 m
	Simple Assembly	300	at 1 m
	Difficult Assembly	1000	at 1 m
	Exacting Assembly	3,000–10,000	-
Central Plant	Boiler house	50	at 0 m
	Machine Halls	300	-
	Side rooms, e.g. pump rooms, condenser rooms etc.	300	-
	Control rooms	500	-
Vehicle Construction/Maintenance	Body work and assembly	500	at 1 m
	Painting, spraying, polishing	1000	-
	Painting, touch-up, inspection	3,000–10,000	-
Wood working and processing	Saw frame	300	at 1 m
	Work at joiner's bench, assembly	300	-
	Polishing, painting, fancy joinery	1000	-
	Work on wood working machines e.g. turning, fluting, dressing, rebating, grooving, cutting, sawing, sinking	500	-