

TABLE 22A—AVERAGE LIGHTING LOAD DENSITIES FOR ROUGH ESTIMATING

	IES Recommended		VA/Sq Ft	
	Footcandles	Floor.	Metal Halide	Sodium Vapor
<b>Office</b>				
Designing, detailed drafting .....	200	10	8	6
Auditing, accounting, rough layout .....	150	7.5	6	4.5
Regular office work, active filing .....	100	5	4	3
Conferring, interviewing, washrooms .....	30	1.5	—	—
Corridors, elevators, stairways .....	20	1	—	—
<b>Factories</b>				
General Fabrication and assembly, automatic machining, medium inspection .....	150	7.5	6	5
Rough bench and machine work; shearing, foundry work, rough inspection .....	70	3.5	3	2.5
Washrooms .....	30	1.5	—	—
Finishing and inspecting, engraving, alterations and repairs (tailoring), textile (sewing, grading dark goods), shoe manufacturing, extra fine bench work, toolmaking .....	1000	50	40	35
Proofreading, typesetting, machining, sewing (light goods), fine hand-painting .....	300	15	12.5	10
Storage .....	30	1.5	1.2	1

TABLE 22B—ESTIMATED DIVERSIFIED LOAD DENSITIES IN VARIOUS INDUSTRIES

Manufacturing	VA Sq Ft
Chemical .....	10-15
Electronics, industrial .....	6-10
Foundry (excluding large electric furnaces) .....	11-15
Glass .....	1.5-8.5
Heavy machinery .....	7-13
Light machinery .....	11-15
Metal fabricating and assembly .....	3-8
Small device, industrial .....	4.5-10
Textile .....	12

This table represents demand (not connected load) for both power and lighting.

TABLE 23—ESTIMATED POWER CONSUMPTION FOR VARIOUS INDUSTRIES

Unit Products	kWh	Unit	Bulk Products	kWh	Unit
Butter .....	136	1000 lb	Aluminum .....	9.0	1 lb
Carpets and Rugs .....	1480	1000 sq yd	Electric Steel .....	0.330	1 lb
Cement .....	22	Barrel	Gasoline .....	0.0015	1 lb
Coal Preparation .....	2-5	Ton	Phosphoric Acid (Electric-furnace) .....	1.80	1 lb
Frozen Food .....	144	1000 lb	Sodium .....	4.70	1 lb
<b>Glass Manufacturing</b>			<b>Steel Processing</b>		
Container .....	80-140	Ton	<b>Motor Drive Requirement</b>		
Fiber .....	500	Ton	Blast furnaces .....	10 (pig iron produced)	Ton
Plate .....	600-1100	Ton	Open-hearth .....	8 (of steel ingots)	Ton
Pressed or blown .....	120-200	Ton	Blooming or Slabbing Mill ..	20-25	Ton
Window .....	75-120	Ton	Hot-strip Mill .....	80-90	Ton
<b>Paper</b>			Cold-strip Mill .....	80-100	Ton
Pulp grinding .....	1850	Ton	Billet Mill .....	20-30	of product Ton
Newsprint machine .....	400	Ton	Structural and Rail Mills ..	30-60	Ton
Boxboard from waste paper ..	300	Ton	Continuous Pickling .....	6-7	Ton
Kraft paper .....	1000-1100	Ton	<b>Thermal Requirement</b>		
Kraft board .....	600-700	Ton	Drawing (600 F) .....	57-100	Ton
Book and bond paper .....	1000	Ton	Galvanizing (850 F) .....	91-133	Ton
Refinery .....	3	Barrel	Annealing (1500 F) .....	182-286	Ton
Rubber and Plastics .....	2400	Ton	Enameling Cast Iron (1350 F) .....	182-333	Ton
Sewage* .....	.11	1000 persons (per hr)	Carburizing (1650 F) .....	333-500	Ton
Municipal Water Pumping* .....	.36	1000 persons (per hr)	Melting .....	450-600	Ton

\*Maximum demand.