

**TABLE 11A**  
LIGHTING HEAT GAINS  
(Btuh)

LOCATION AND TYPE OF LIGHTING	LIGHTING LOAD
<b>LIGHTING ENTIRELY IN CONDITIONED SPACE</b> Incandescent Lights Fluorescent Lights	3.4 x Installed Watts 4.1 x Installed Watts
<b>LIGHTING RECESSED INTO A DEAD AIR CEILING SPACE</b> Incandescent Lights Fluorescent Lights	3.4 x Installed Watts 4.1 x Installed Watts
<b>LIGHTING RECESSED INTO A RETURN AIR CEILING SPACE</b> Incandescent Lights Load to conditioned space Load to plenum space Fluorescent Lights Load to conditioned space Load to plenum space	0.60 x 3.4 x Installed Watts 0.40 x 3.4 x Installed Watts  0.60 x 4.1 x Installed Watts 0.40 x 4.1 x Installed Watts

**TABLE 12**  
HEAT GAIN FROM APPLIANCES  
(Btuh)<sup>1</sup>

TYPE OF APPLIANCE	ELECTRIC				GAS				STEAM			
	Without Hood			Hood <sup>2</sup>	Without Hood			Hood <sup>2</sup>	Without Hood			Hood <sup>2</sup>
	Sensible	Latent	Total	All Sensible	Sensible	Latent	Total	All Sensible	Sensible	Latent	Total	All Sensible
Broiler-Griddle 31 in. x 20 in. x 18 in.					11,700	6,300	18,000	3,600				
Coffee brewer/warmer												
per burner	770	230	1,000	340	1,750	750	2,506	500				
per warmer	230	70	300	90								
Coffee urn:												
3 gallon	2,550	850	3,400	1,000	3,500	1,500	5,000	1,000	2,180	1,120	3,300	1,000
5 gallon	3,850	1,250	5,100	1,600	5,250	2,250	7,500	1,500	3,300	1,700	5,000	1,600
8 gallon (twin)	5,200	1,600	6,800	2,100	7,000	3,000	10,000	2,000	4,350	2,250	6,600	2,100
Roaster	1,700	1,100	2,800	900								
Deep fat fryer:												
15# fat	2,800	6,600	9,400	3,000	7,500	7,500	15,000	3,000				
21# fat	4,100	9,600	13,700	4,300								
Dry food warmer per sq ft top	320	80	400	130	560	140	700	140				
Griddle, frying per sq ft top	3,000	1,600	4,600	1,500	4,900	2,600	7,500	1,500				
Griddle - Grille	6,600	3,600	10,200	3,200								
Hot plate (two heating units)	5,300	3,600	8,900	2,800								
Short order stove (open grates) per burner					3,200	1,800	5,000	1,000				
Steam table per sq ft top					750	500	1,250	250	500	325	825	260
Toaster:												
Continuous												
360 slices per hour	1,960	1,740	3,700	1,200	3,600	2,400	6,000	1,200				
720 slices per hour	2,700	2,400	5,100	1,600	6,000	4,000	10,000	2,000				
Pop-up (4 slice)	2,230	1,970	4,200	1,300								
Waffle iron 18 in. x 20 in. x 13 in. (2 grids)	1,680	1,120	2,800	900								
Hair dryer:												
Blower type	2,300	400	2,700									
Helmet type	1,870	330	2,200									
Lab burners:												
Bunsen					1,680	420	2,100					
Fishtail					2,800	700	3,500					
Meeker					3,360	840	4,200					
Neon sign per foot of tube	60		60									
Sterilizer	625	1,200	1,850									
Refrigerator or Freezer	625	--	625									
Vending machines:												
Hot drink	700	500	1,200									
Cold drink	625	--	625									
Typewriter	350	--	350									
Small copier	4,500	--	4,500									
Large copier	9,000	--	9,000									
Personal computer & printer	1,300	--	1,300									
Computer terminal	500	--	500									

**NOTES:**

(1) Average operation for one hour. (Btuh)

(2) Does not include the latent and sensible heat loads imposed by the outdoor makeup air exhausted through the hood. Includes only the sensible heat load resulting from direct radiation from the appliance.