INFORMATION

Note: This document contains addenda information that is supplemental to that found in the LEED Interpretations and Addenda database, found on http://www.usgbc.org.

Addendum Details:

Addenda Number	Post Date	Rating System	Category	Credit ID	Ref Guide	Issue Type	Page	Location	Supplemental Document
100000880	5/9/2011	Retail for New Construction and Major Renovations v2009	Energy and Atmosphere	EAc1: Optimize Energy Performance	Retail Supplement to Green Building Design and Construction, 2009 edition	Grammatical	RG sup pages: 68-69, RS: 32	Table 1	Yes
ISSUE: Replace table with below									

Supplemental Document:

Table 1. Commercial Kitchen Appliance Prescriptive Measures and Baseline for Energy Cost Budget

	abbreviations:			
	ES = EPA Energy Star			
	CEC = California Energy Commision			
	Pre-EEM Energy Usage for Energy Modeling Path			
appliance type	**fuel source**	**Pre-EEM efficiency**	**Pre-EEM idle rate**	**Pre-EEM water use**
commercial fryers	elec	75%	1050 W (1)	na
large vat fryers	elec	75%	1350 W	na
steam cooker - batch cooking	elec	26%	200 W/pan	30 gph per compartment
steam cooker - high production/cook to order	elec	26%	330 W/pan	40 gph per compartment
hot food holding cabinets (excluding drawer warmers and heated display)	elec	na	125w/ft^3	na
solid door reach-in refrigerators	elec	.1V + 2.04 kWh/day	na	na
solid door reach-in freezers	elec	0.4V + 1.38 kWh/day	na	na
solid door reach-in refrigerator / freezer	elec	0.32AV - 0.8165 kW/day	na	na
glass door reach-in refrigerators	elec	.12V + 3.34 kWh/day	na	na
ice cream freezer	elec	0.45V + 0.943 kW/day	na	na
undercounter dish machines - high temp	elec	na	0.9 kW	1.98 gpr
undercounter dish machines - low temp	elec	na	0.5 kW	1.95 gpr
door type dishmachine - high temp	elec	na	1.0 kW	1.44 gpr
door type dishmachine - low temp	elec	na	0.6 kW	1.85 gpr
single tank rack conveyor dishmachine - high temp	elec	na	2.0 kW	1.13 gpr
single tank rack conveyor dishmachine - low temp	elec	na	1.6 kW	1.23 gpr
multi-tank rack conveyor dishmachine - high temp	elec	na	2.6 kW	1.1 gpr
multi-tank rack conveyor dishmachine - low temp	elec	na	2.0 kW	0.99 gpr
ice machine (ice making head) IMH H < 450 lb/day	elec	10.26 – 0.0086H kWh/100 lb ice	na	< 030 gal/100 lb ice
ice machine (ice making head) IMH H > 450 lb/day	elec	6.89 - 0.0011H kWh/100 lb ice	na	< 030 gal/100 lb ice
ice machine RCU (w/o remote compressor) H < 1000 lb/day	elec	8.85 - .0038H kWh/100lb ice	na	< 030 gal/100 lb ice
ice machine RCU (w/o remote compressor) H > 1000 lb/day	elec	5.10 kWh/100lb ice	na	< 030 gal/100 lb ice
ice machine RCU (with remote compressor) H < 934 lb/day	elec	8.85 - 0.0038H kWh/100 lb ice	na	< 030 gal/100 lb ice
ice machine RCU (with remote compressor) H > 934 lb/day	elec	5.30 kWh/100 lb ice	na	< 030 gal/100 lb ice
ice machine self contained unit (SCU) H < 175 lb/day	elec	18.0 - 0.0469H kWh/100lb ice	na	< 040 gal/100 lb ice
ice machine self contained unit (SCU) H > 175 lb/day	elec	9.80 kWh/100lb ice	na	< 040 gal/100 lb ice
ice machine water cooled IMH H <500 lb/day	elec	7.80 – 0.0055H kWh/100 lb ice	(3)	< 030 gal/100 lb ice
ice machine water cooled IMH 500 lb/day < H > 1436	elec	5.58 – 0.0011H kWh/100lb ice	(3)	< 030 gal/100 lb ice
ice machine water cooled IMH H > 1436 lb/day	elec	4.0 kWh/100lb ice	(3)	< 030 gal/100 lb ice
ice machine water cooled SCU H < 200 lb/day	elec	11.4 – 0.0190H kWh/100lb ice	(4)	< 040 gal/100 lb ice
ice machine water cooled SCU H > 200 lb/day	elec	7.6 kWh/100lb ice	(4)	< 040 gal/100 lb ice
ice machine once through water cooled	BANNED	BANNED	BANNED	BANNED
griddles (based on 3' model)	elec	65%	420 w/ft^2	na
range	elec	70% burner efficiency		
convection ovens (full size)	elec	65%	2.0 kW	na
combination ovens	elec	44%	1.25 kW/pan	< 4.0 gph per pan
toaster	elec		1.8 kW (100% duty cycle @ 4 slices per min.) = 1 conveyor	
pre-rinse spray valves (MANDATORY)	na	na	na	1.6 gpm
kitchen exhaust hood	na	IMC minimum req	na	na
fryers	gas	35%	14000 Btu/h (1)	na
large vat fryers	gas	35%	20000 Btu/h	
steam cooker - batch cooking	gas	15%	1800 BTUh/pan	30 gph per compartment
steam cooker - high production/cook to order	gas	15%	3000 BTUh/pan	40 gph per compartment
griddles	gas	32%	3200 BTUh/ft^2	na
convection ovens (full size)	gas	30%	18000 BTU/h	na
combination ovens	gas	35%	4700 BTU/h/pan	40 gph
rack ovens - single	gas	30%	43000 BTU/h	na
rack ovens - double	gas	30%	65000 BTU/h	na
broiler (underfired)	gas	30%	20,000 BTU/h/ft^2 peak input	na
range	gas	35% burner efficiency		
conveyor oven (small = < 25 inch belt)	gas	20%	45,000 BTU/h	na
conveyor oven (large = > 25 inch belt)	gas	20%	70000 BTU/h	na
high efficiency hot water heater	gas	82%		na
instantaneous water heater		82%		
clothes washer	gas	1.72 MEF		8.0 WF
(1)	Based on 15 inch fryer			
(2)	AV=Adjusted Volume = (1.63 x freezer volume) + refirgerator volume			
(3)	Condenser water use = 200 - 0.022H gal/100lb ice			
(4)	Condenser water use = 191 - 0.0315H gal/100lb ice			

FSTC = Food Service Technology Center
CEE = Consortium for Energy Efficiency

Levels for Prescriptive Path					CAIOU = California Investor Owned Utilities (CPUC approved CA incentive program)
LEED efficiency	**LEED idle rate**	**LEED water use**	**Prescriptive criteria based on:**	**Energy Star Category**	
80%	1000 W (1)	na	CEE, ES, CAIOU	yes	x
80%	1250 W	na	CAIOU	pending	x
50%	135 W/pan	10 gph per compartment	ES		x
50%	275 W/pan	15 gph per compartment	ES - modified		
	20 w/ft^3	na	CEE Tier II, CAIOU	yes	x
0.06V + 1.22 kWh/day	na	na	CEE Tier II, CAIOU	yes	x
0.28V + 0.97 kWh/day	na	na	CEE Tier II, CAIOU	yes	x
0.27AV - 0.71 kWh/day (2)	na	na	ES	yes	x
0.086V +2.39 kWh/day	na	na	CEE Tier II, CAIOU	pending	x
0.39V + 0.82 kWh/day	na	na	ES	yes	x
na	0.9 kW	1 gpr	ES	yes	x
na	0.5 kW	1.7 gpr	ES	yes	x
na	1.0 kW	0.95 gpr	ES	yes	x
na	0.6 kW	1.18 gpr	ES	yes	x
na	2.0 kW	0.7 gpr	ES	yes	x
na	1.6 kW	0.79 gpr	ES	yes	x
na	2.6 kW	0.54 gpr	ES	yes	x
na	2.0 kW	0.54 gpr	ES	yes	x
9.23 - 0.0077H kWh/100 lb ice	na	< 25 gal/100 lb ice	CEE Tier II, ES	yes	x
6.20 - 0.0010H kWh/100 lb ice	na	25 gal/100 lb ice	CEE Tier II, ES	yes	x
8.05 - 0.0035H kWh/100lb ice	na	< 25 gal/100 lb ice	CEE Tier II, ES	yes	x
4.64 kWh/100lb ice	na	< 25 gal/100 lb ice	CEE Tier II, ES	yes	x
8.05 - 0.0035H kWh/100 lb ice	na	< 25 gal/100 lb ice	CEE Tier II, ES	yes	x
4.82 kWh/100 lb ice	na	< 25 gal/100 lb ice	CEE Tier II, ES	yes	x
16.7 - 0.0436H kWh/100lb ice	na	< 35 gal/100 lb ice	CEE Tier II, ES	yes	x
9.11 kWh/100lb ice	na	< 35 gal/100 lb ice	CEE Tier II, ES	yes	x
7.02 - 0.005H kWh/100 lb ice	na	< 25 gal/100 lb ice	CEE Tier II		x
5.13 - 0.001H kWh/100lb ice	na	< 25 gal/100 lb ice	CEE Tier II		x
3.7 kWh/100lb ice	na	< 25 gal/100 lb ice	CEE Tier II		x
10.6 - 0.177H kWh/100lb ice	na	< 35 gal/100 lb ice	CEE Tier II		x
7.07 kWh/100lb ice	na	< 35 gal/100 lb ice	CEE Tier II		x
BANNED	BANNED	BANNED			BANNED
70%	350 w/ft^2	na	CAIOU	pending	x
80% burner efficiency					
70%	1.5 kW	na	CAIOU	pending	x
60%	0.80 kW/pan	< 15 gph per pan	CAIOU	pending	x
	3.6 kW (8% duty cycle) = 2 pop-ups				
na	na	< 1.2 gpm per pan	epact 2005	na	MANDATORY
35% reduction in design (full speed) ventilation rate (cfm) plus demand controlled ventilation	na	na	FSTC recommendation	no	x
50%	9000 BTU/h (1)	na	CEE, ES	yes	x
50%	12000 Btu/h		CAIOU	pending	x
38%	2100 BTU/h/pan	10 gph per compartment	CEE, ES, CAIOU	yes	x
38%	4300 BTU/h/pan	15 gph per compartment	ES - modified		
38%	3000 BTU/h/ft^2	na	CAIOU	pending	x
43%	13000 Btu/h	na	FSTC recommendation based on anticipated ES level	pending	x
40%	2850 BTU/h/pan	≤ 15 gph per pan	CAIOU	pending	x
50%	29000 BTU/h	na	CAIOU	pending	x
50%	35000 BTU/h	na	CAIOU	pending	x
35%	12500 BTU/h/ft^2 peak input	na	FSTC recommendation	no	x
40% burner efficiency			FSTC recommendation		x
42%	30000 BTU/h	na	FSTC recommendation	pending	x
42%	57000 BTU/h	na	FSTC recommendation	pending	
90%		na			x
90%					
2.00 MEF		6.0 WF	CAIOU	na	x