10CFR 434 - Federal Commercial Building Energy Code - May 1998

Bakersfield, CA #19 IP

TABLE 301.1 EXTERIOR DESIGN CONDITIONS	
WINTER Design Dry Bulb: 30°F	HDD65: 2194
SUMMER Design Dry Bulb:101°F;Mean Coincident Wet Bulb:69°F	CDD65: 2294
Annual Operating Hours, 8AM - 4PM when 55°F<=T<=69°F: 848	

TABLE 402.3.1(A) MAX. THERMAL TRANSMITTANCE (U)	
Roof	0.061
Wall adjacent to unconditioned space	0.285
Floor over unconditioned space	0.133

TABLE 402.3.1(B) MAX. EXEMPT SKYLIGHT AREA AS % OF ROOF AREA

Visible Light Transmittance (VLT)	Light level Ft. Candles	Range of Lighting Power Densities <1.00	1.00 - 1.50	1.51 - 2.00	>2.00
0.75	30	2.2	2.8	3.4	4.0
	50	2.3	3.1	3.9	4.7
	70	2.9	4.1	5.3	6.5
0.50	30	3.3	4.2	5.1	6.0
	50	3.6	4.8	6.0	7.2
	70	4.2	6.0	7.8	9.6

TABLE 402.3.2 MINIMUM THERMAL RESISTANCE (R-VALUE)

Slab on grade: Unheated / Heated:	24 inches	36 inches	48 inches
Horizontal	R-0/R-2	R-0/R-2	R-0/R-2
Vertical	R-0/R-2	R-0/R-2	R-0/R-2
Wall below grade:	R-0		

TABLE 402.4.1.1 MAX. WALL THERMAL TRANSMITTANCE (Uow)

			Insulation Position	
ILD Range	WWR	HC Range	Interior/Integral	Exterior
All	0 to 100	0.0 - 4.9	0.178	0.178
0.00 to 1.50	18	5.0 - 9.9	0.225	0.285
		10.0 - 14.9	0.318	0.403
		15.0 +	0.399	0.432
	75	5.0 - 9.9	0.225	0.285
		10.0 - 14.9	0.320	0.406
		15.0 +	0.402	0.435
1.51 to 3.00	14	5.0 - 9.9	0.227	0.285
		10.0 - 14.9	0.328	0.413
		15.0 +	0.409	0.444
	75	5.0 - 9.9	0.228	0.285
		10.0 - 14.9	0.334	0.420
		15.0 +	0.416	0.451
3.01 to 3.50	12	5.0 - 9.9	0.226	0.285
		10.0 - 14.9	0.326	0.411
		15.0 +	0.407	0.443
	73	5.0 - 9.9	0.228	0.285
		10.0 - 14.9	0.333	0.420
		15.0 +	0.416	0.451

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TABLE 402.4.1.2 MAXIMUM WINDOW WALL RATIO (WWR)

Internal Load Density (ILD) Range	Projection Factor (PF) Range	Solar Heat Gain Coefficient (SHGC) Range	Fenestration U-Factor (Uof) Base Case 1.23 to 0.73	0.72 to 0.00	N/A	Perimeter Daylighting 1.23 to 0.73	0.72 to 0.00	VLT>=SC 0.72 to 0.00
0.00 - 1.50	0.00 - 0.25	0.87 - 0.63	18	19		20	20	21
		0.62 - 0.53	22	23		24	25	26
		0.52 - 0.44	26	27		29	30	30
		0.43 - 0.34	31	33		34	36	37
		0.33 - 0.23	41	44		44	48	49
		0.22 - 0.00	60	68		64	73	75
	0.26 - 0.50	0.87 - 0.63	26	27		28	30	30
		0.62 - 0.53	32	33		35	36	37
		0.52 - 0.44	37	40		41	43	44
		0.43 - 0.34	45	48		48	52	53
		0.33 - 0.00	57	64		62	69	71
	0.50 +	0.87 - 0.63	34	36		37	40	40
		0.62 - 0.53	42	45		45	49	50
		0.52 - 0.44	49	53		53	58	59
		0.43 - 0.00	58	64		62	70	71
1.51 - 3.00	0.00 - 0.25	0.87 - 0.63	14	14		19	20	21
		0.62 - 0.53	18	18		24	24	26
		0.52 - 0.44	21	21		28	29	31
		0.43 - 0.34	25	26		33	35	37
		0.33 - 0.23	33	34		43	46	49
		0.22 - 0.00	50	53		64	71	75
	0.26 - 0.50	0.87 - 0.63	20	21		28	28	30
		0.62 - 0.53	25	26		34	35	37
		0.52 - 0.44	30	31		40	42	44
		0.43 - 0.34	36	37		47	51	54
		0.33 - 0.00	47	50		61	68	71
	0.50 +	0.87 - 0.63	27	28		36	38	40
		0.62 - 0.53	33	34		44	47	50
		0.52 - 0.44	39	41		52	57	60
		0.43 - 0.00	47	50		62	68	72
3.01 - 3.50	0.00 - 0.25	0.87 - 0.63	12	12		18	18	20
		0.62 - 0.53	15	15		22	23	25
		0.52 - 0.44	18	18		26	27	29
		0.43 - 0.34	21	22		31	33	36
		0.33 - 0.23	28	29		41	44	47
		0.22 - 0.00	43	46		61	68	73
	0.26 - 0.50	0.87 - 0.63	17	18		26	27	29
		0.62 - 0.53	21	22		32	33	36
		0.52 - 0.44	25	26		37	39	43
		0.43 - 0.34	30	32		44	48	52
		0.33 - 0.00	40	42		58	64	69
	0.50 +	0.87 - 0.63	23	23		34	36	39
		0.62 - 0.53	28	29		42	44	48
		0.52 - 0.44	33	35		49	53	58
		0.43 - 0.00	40	42		58	65	69