

LIGHTING CONTROLS DEVICE SCHEDULE		
TYPE	DESCRIPTION	COMMENTS
\$ \$' \$" \$"	LINE VOLTAGE SWITCH.	'3' INDICATES THREE WAY SWITCHING. '4' INDICATES FOUR WAY SWITCHING. 'K' INDICATES SWITCH SHALL BE KEYED SWITCH.
\$"	LINE VOLTAGE MOMENTARY CONTACT SWITCH.	
\$"	LINE VOLTAGE DIMMER SWITCH	DIMMER FOR USE IN DWELLING UNIT. COORDINATE DIMMING TYPE WITH FINAL FIXTURE AND LAMP SELECTION TO ENSURE COMPATIBILITY.
\$"	LINE VOLTAGE DIMMER WITH 3-WAY SWITCH.	3-WAY DIMMER FOR USE IN DWELLING UNIT. COORDINATE DIMMING TYPE WITH FINAL FIXTURE AND LAMP SELECTION TO ENSURE COMPATIBILITY.
\$"	MULTI-SPEED FAN CONTROLLER WITH LINE VOLTAGE SWITCH.	
\$"	LINE VOLTAGE TIMER SWITCH WITH DIGITAL TIMER.	RATED FOR 120/277VAC. PROVIDE WITH AUDIBLE & VISUAL ALERTS. USER PROGRAMMABLE FOR 5MIN-12HR TIME-OUT SETTINGS.
\$"	LINE VOLTAGE WALL MOUNT DUAL TECHNOLOGY OCCUPANCY SENSOR	SENSOR SHALL BE SET TO VACANCY MODE
\$"	LINE VOLTAGE WALL MOUNT DUAL TECHNOLOGY OCCUPANCY SENSOR WITH DUAL RELAYS.	SENSOR SHALL BE SET TO VACANCY MODE. ONE RELAY SHALL SERVE 120 VOLT LIGHTING IN AREA INDICATED, AND ONE RELAY SHALL SERVE 277 VOLT LIGHTING.
\$"	LOW VOLTAGE OC SENSOR SWITCH WITH 0-10V DIMMER	SENSOR SHALL BE SET TO VACANCY MODE
\$" \$"	LOW VOLTAGE MANUAL CONTROL.	CONNECT TO POWER PACK OR ROOM CONTROLLER IF OCCUPANCY SENSORS ARE INDICATED ON PLAN. PROVIDE MULTI-BUTTON SWITCH AS REQUIRED PER SWITCH LEGS SHOWN ON PLANS. 'K' INDICATES SWITCH SHALL BE KEYED SWITCH.
\$" \$"	LOW VOLTAGE MANUAL CONTROL.	CONNECT TO RELAY PANEL OR TIME CLOCK FOR TIME OF DAY OVERRIDE AS NOTED ON PLANS. PROVIDE MULTI-BUTTON SWITCH AS NOTED ON PLANS. 'K' INDICATES SWITCH SHALL BE KEYED SWITCH.
\$"	LOW VOLTAGE SWITCH WITH 0-10V DIMMER	PROVIDE MULTI-BUTTON SWITCH AS REQUIRED PER SWITCH LEGS SHOWN ON PLANS. PROVIDE POWER PACKS OR ROOM CONTROLLERS AS REQUIRED.
DC1	CEILING MOUNTED DUAL TECH OCCUPANCY SENSOR.	SET TO VACANCY MODE. PROVIDE POWER PACKS AS NEEDED.
DC2	CEILING MOUNTED DUAL TECH OCCUPANCY SENSOR.	SET TO OCCUPANCY MODE. PROVIDE POWER PACKS AS REQUIRED.
DC3	CEILING MOUNTED ULTRASONIC OR MICROPHONIC OCCUPANCY SENSOR.	SET TO OCCUPANCY MODE. PROVIDE POWER PACKS AS REQUIRED.
DC4	CORNER MOUNTED DUAL TECH OCCUPANCY SENSOR.	SET TO VACANCY MODE. PROVIDE POWER PACKS AS REQUIRED.
DC5	WET LOCATION PIR OCCUPANCY SENSOR.	CONNECT GARAGE OCCUPANCY SENSORS TO RELAY PANEL SERVING AREA. PROVIDE POWER PACKS FOR CONTROL WHERE NOT LOCATED IN THE GARAGE.
DC6	CEILING MOUNTED DUAL TECH OCCUPANCY SENSOR FOR HIGH BAY APPLICATION.	SET TO VACANCY MODE. PROVIDE POWER PACKS AS REQUIRED.
PC	DIGITAL PHOTOSENSOR	CONNECT TO ROOM CONTROLLER OR RELAY PANEL AS NOTED ON PLANS.
DS	DAYLIGHT HARVESTING SENSOR	CONNECT TO ROOM CONTROLLER OR INDIVIDUAL LIGHT FIXTURE FOR DAYLIGHT HARVESTING DIMMING CONTROL.

- NOTES:
- WATTSTOPPER IS THE BASIS OF DESIGN.
 - THE LIGHTING CONTROLS SCHEDULED ARE THE BASIS OF DESIGN. IT IS NOT INTENDED TO LIMIT COMPETITION FROM EQUAL MANUFACTURERS. ALL BIDDERS SHALL SUBMIT THEIR PROPOSED LIGHTING CONTROLS IN SUBMITTAL FORM A MINIMUM OF 10 BUSINESS DAYS PRIOR TO BID DATE FOR REVIEW. APPROVED LIGHTING CONTROL SYSTEMS WILL BE ISSUED IN AN ADDENDUM.
 - BASIS OF DESIGN SHALL BE A HARD-WIRED TYPE SYSTEM, UNLESS NOTED OTHERWISE.

2018 IECC											
STANDARD SEQUENCE OF OPERATIONS											
ROOM TYPE	OCCUPANCY SENSOR										
		AUTO ON 1	MANUAL ON (VACANCY)	AUTO OFF (MIN MAX)	PARTIAL OFF AT NORMAL HOURS 2	AUTO OFF AFTER HOURS (MIN MAX)	TIME OFF	ASTRONOMIC 3	AUTO STEP CONTROL 4	AUTO CONTINUOUS DIM WITH OFF 4, 5	MANUAL ON/OFF
SEQUENCE OF OPERATION											
Spaces (≤ 300 sq ft)	50%	20 min									
Enclosed Offices	50%	20 min									
Open Plan Office Areas ≤600SqFt zones	50%	20 min									
Conference/Meeting Room	50%	20 min									
Copy/Print Room	50%	20 min									
Electrical/Mech/Equip Room		20 min									
Janitor Closet		20 min									
Restroom	100%	20 min									
Lunch/Break Rooms/Lounges	50%	20 min									
Corridor	100%	20 min									
Storage Room	50%	20 min									
Multipurpose Rooms	50%	20 min									

● = Designation for code compliant default control design for spaces without daylighting control

D = Where daylighting control is required, "D" designation indicates controls required in the space for code compliance design

CK = Captive Key Switch system for use in Hotel/Motel and Guest Suites

1 Lighting may be Manual On or Auto Partial On to <50%. Full Auto On to 100% is only permitted in Public Corridors, Stairways, Primary Entrances, Lobbies, Restrooms and where Manual On endangers safety or security. 2 Partial Auto Off must reduce lighting by >50% during normal operating hours in warehouse aisles and warehouse open areas. Each aisle must be independently controlled. Full Auto Off would comply with Partial Auto Off. 3 Exterior / Parking / Site lighting must Auto Off during daylight hours, reduce by at least 30% between the hours of midnight and 6AM or from one hour after business close until 6AM before business opening. 4 Automatic daylight control required where ≥150W of lighting is in the daylight or sidelight daylight area. Continuous dimming with Off is used and assumes 0-10V dimming fixtures in daylight and non-daylight area unless known otherwise. 5 Code requires automatic continuous dimming with full Off capability in daylighting areas of offices, classrooms, labs and library reading rooms. 6 Manual bi-level lighting reduction control must allow ≥50% of the general lighting to be manually turned off by a control device located in the space. 7 Display, Accent and Task lighting must be independently controlled from other lighting in the space. It is required to Auto Off with occupancy sensors or time switch control, but is exempt from automatic daylighting control.

TYPE	MANUFACTURE	MODEL	MOUNTING	VOLTAGE	WATTAGE	DESCRIPTION
A1	DAYRITE	2FGXG4SL35S-4-RS-UNV-DIM	RECESSED	277 V	31 VA	2x4" RECESSED - 4300 LUMEN.
A1E	DAYRITE	2FGXG4SL35S-4-RS-UNV-DIM	RECESSED	277 V	31 VA	2x4" RECESSED - 4300 LUMEN.
A2	DAYRITE	2FGXG4SL35S-4-RS-UNV-DIM	RECESSED	277 V	27 VA	2x4" RECESSED - 3800 LUMEN.
C1-1	GAMMALUX	GP02-SL359E2Z-UNIV-ZTV10-611*2 11*98*2-REC+RECWIAGMR3-ASLMD -W5G	RECESSED	277 V	116 VA	PERIMETER COVE SYSTEM WITH TELESCOPING ENDS, RE- PLAN FOR PATTERN.
C1-2	GAMMALUX	GP02-SL359E2Z-UNIV-ZTV10-611*2 11*98*2-REC+RECWIAGMR3-ASLMD -W5G	RECESSED	277 V	52 VA	PERIMETER COVE SYSTEM WITH TELESCOPING ENDS, RE- PLAN FOR PATTERN.
C1-3	GAMMALUX	GP02-SL359E2Z-UNIV-ZTV10-611*2 11*98*2-REC+RECWIAGMR3-ASLMD -W5G	RECESSED	277 V	12 VA	PERIMETER COVE SYSTEM WITH TELESCOPING ENDS, RE- PLAN FOR PATTERN.
C1-4	GAMMALUX	GP02-SL359E2Z-UNIV-ZTV10-611*2 11*98*2-REC+RECWIAGMR3-ASLMD -W5G	RECESSED	277 V	36 VA	PERIMETER COVE SYSTEM WITH TELESCOPING ENDS, RE- PLAN FOR PATTERN.
C1-5	GAMMALUX	GP02-SL359E2Z-UNIV-ZTV10-611*2 11*98*2-REC+RECWIAGMR3-ASLMD -W5G	RECESSED	277 V	81 VA	PERIMETER COVE SYSTEM WITH TELESCOPING ENDS, RE- PLAN FOR PATTERN.
D1	TECH LIGHTING	EN3R-LH83AAIENR3FPB-SW	RECESSED	277 V	18 VA	DOWNLIGHT - INSTALL PROVIDED 60" OPTIC.
D1E	TECH LIGHTING	EN3R-LH83AAIENR3FPB-SW	RECESSED	277 V	18 VA	DOWNLIGHT - INSTALL PROVIDED 60" OPTIC.
L1	LEDALITE	3001L035220S10BDE1-X-NL-W	RECESSED	277 V	33 VA	LINEAR RECESSED - 6" LENGTH.
P1	IMPACTI	P4913-35-LO-MW-WHP-FCFT-BL	SURFACE	277 V	31 VA	SUSPENDED PENDANT, COORDINATE MOUNTING HEIGHT WITH DESIGNER.
P1E	IMPACTI	P4913-35-LO-MW-WHP-FCFT-BL	SURFACE	277 V	31 VA	SUSPENDED PENDANT, COORDINATE MOUNTING HEIGHT WITH DESIGNER.
REL	RELOCATED FIXTURE	EXISTING FIXTURE SHALL BE RELOCATED.	RECESSED	277 V	64 VA	EXISTING FIXTURE TO BE RELOCATED. COORDINATE WITH ARCHITECT DEMOLITION PLANS FOR EXISTING FIXTURE LOCATION.
T1	LITELINE	L-FLX15-36-60-T-WH-N-A-T	RECESSED	120 V	15 VA	TRACK HEAD - WIDE FLOOD, TRACK LIGHT TOLER 8012NWH+6048N+7586 SUSPENDED. PROVIDE CURRENT LIMITING DEVICE FOR EACH TRACK.
T2	LITELINE	L-FLX15-36-40-T-WH	RECESSED	120 V	15 VA	TRACK HEAD - NARROW FLOOD, TRACK LIGHT TOLER 8012NWH+6048N+7586 SUSPENDED. PROVIDE CURRENT LIMITING DEVICE FOR EACH TRACK.
W1	TECH LIGHTING	EN3R-LH83AAIENR3FPB-WW	RECESSED	277 V	18 VA	WALL WASHER, SAVE INCLUDED 65" FOR OWNER'S EVALUATION.
W2	TECH LIGHTING	EN3R-LH83AAIENR3FPB-WW	RECESSED	277 V	18 VA	WALL WASHER, SAVE INCLUDED 65" FOR OWNER'S EVALUATION.
X1	EMERG-LITE	RLX-1-NRM-UAC	SURFACE	277 V	1 VA	LED EXIT SIGN - SINGLE SIDED
X2	EMERG-LITE	RLX-2-NRM-UAC	SURFACE	277 V	1 VA	LED EXIT SIGN-DOUBLE SIDED

NOTES:

1. LIGHTING FIXTURE CATALOG NUMBERS AND DESCRIPTIONS ARE SCHEDULED FOR ESTABLISHING QUALITY, APPEARANCE AND PERFORMANCE OF THE FIXTURES AS REQUIRED BY THE DESIGN. EXACT CATALOG NUMBERS DESCRIBING MOUNTING CONDITIONS, FINISHES AND REQUIREMENTS RELATED TO TRIMS AND LENS FOR ALL FIXTURES SHALL BE CONFIRMED (BY THE CONTRACTOR) WITH THE ROOM FINISH SCHEDULE AND REFLECTED CEILING PLANS, INCLUDING GRID TYPES, ON THE ARCHITECTURAL DRAWINGS PRIOR TO BIDDING. FIXTURES SHALL BE SUBMITTED ACCORDING TO THE CONDITIONS INDICATED ON THE ARCHITECTURAL PLANS. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

Panelboard LN4												10000 A AIC Rating	
												New X Existing	
												MOUNTING STYLE	
												SURFACE	
120/208 Wye Volt, 3 Phase, 4 Wire												Mains Type:	
1 Section												150 A MCB	
Type 1 -Nema Rating												225 A BUS (Copper)	
												LUGS: --	
												--	
NOTE	LOAD (VA)	TYPE	DESCRIPTION	WIRE	CB	CKT	CB	WIRE	DESCRIPTION	TYPE	LOAD (VA)	NOTE	
1	720 VA	R	EXISTING LOAD	12	20 A	1	2	20 A	12	EXISTING LOAD	R	720 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	3	4	20 A	12	EXISTING LOAD	R	720 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	5	6	20 A	12	BREAK ROOM 818	K	1000 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	7	8	20 A	12	BREAK ROOM 818	K	1000 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	9	10	20 A	12	BREAK ROOM 818	K	1000 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	11	12	20 A	12	BREAK ROOM 818	K	1200 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	13	14	20 A	12	BREAK ROOM 818	K	1000 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	15	16	20 A	12	OFFICE 842,843	R	1080 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	17	18	20 A	12	CONFERENCE 837	R	900 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	19	20	20 A	12	FACILITIES 828	R	360 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	21	22	20 A	12	EXISTING LOAD	R	720 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	23	24	20 A	12	CHECK PRINT 1021	M	1500 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	25	26	20 A	12	CONFERENCE 821	R	1440 VA	
2	1440 VA	R	821 RECEIPTS	12	20 A	27	28	20 A	12	BREAK ROOM 818	K	1200 VA	
2	900 VA	R	STORAGE-CORRIDOR	12	20 A	29	30	20 A	12	EXISTING LOAD	R	720 VA	
2	1080 VA	R	CVB 838,839	12	20 A	31	32	20 A	12	CONFERENCE 837 RECEIPTS	R	720 VA	
2	1080 VA	R	814 RECEIPTS	12	20 A	33	34	20 A	12	WORKSTATIONS	R	1440 VA	
2	1080 VA	R	806/807 RECEIPTS	12	20 A	35	36	20 A	12	WORKSTATIONS	R	1440 VA	
2	1000 VA	K	BREAK ROOM 818	12	20 A	37	38						
2	1080 VA	R	IT 831,832	12	20 A	39	40	30 A	10	EXISTING SPD	SP	0 VA	
2	840 VA	R	817 RECEIPTS	12	20 A	41	42						
1	720 VA	R	EXISTING LOAD	12	20 A	43	44	15 A	12	EF-1	F	528 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	45	46	20 A	12	TRACK LIGHTING	L	135 VA	
1	720 VA	R	EXISTING LOAD	12	20 A	47	48	20 A	12	TRACK LIGHTING	L	225 VA	
2	1000 VA	K	BREAK ROOM 818	12	20 A	49	50	20 A	12	WORKSTATIONS	R	1440 VA	
2	1620 VA	R	WORKSTATIONS	12	20 A	51	52	20 A	12	BREAK ROOM 818	K	1000 VA	
2	720 VA	R	810 RECEIPTS	12	20 A	53	54	20 A	12	Spare	--	0 VA	
2	1080 VA	R	IT 829,830	12	20 A	55	56	20 A	12	Spare	--	0 VA	
2	1080 VA	R	IT 833,834	12	20 A	57	58	20 A	12	Spare	--	0 VA	
2	1080 VA	R	IT 835,836	12	20 A	59	60	20 A	12	Spare	--	0 VA	
2	1080 VA	R	808/809 RECEIPTS	12	20 A	61	62	20 A	12	Spare	--	0 VA	
2	1080 VA	R	815/816 RECEIPTS	12	20 A	63	64	20 A	12	Spare	--	0 VA	
2	840 VA	R	819,825,826 RECEIPTS	12	20 A	65	66	20 A	12	Spare	--	0 VA	
2	1440 VA	R	WORKSTATIONS	12	20 A	67	68	20 A	12	Spare	--	0 VA	
2	1080 VA	R	CVB 840,841	12	20 A	69	70	20 A	12	Spare	--	0 VA	
2	720 VA	R	WORKSTATIONS	12	20 A	71	72	20 A	12	Spare	--	0 VA	
2	1500 VA	M	COPIER	12	20 A	73	74	20 A	12	Spare	--	0 VA	
2	720 VA	R	WORKSTATIONS	12	20 A	75	76	20 A	12	Spare	--	0 VA	
2	1080 VA	R	WORKSTATIONS	12	20 A	77	78	20 A	12	Spare	--	0 VA	
2	360 VA	R	FACILITIES 826	12	20 A	79	80	20 A	12	Spare	--	0 VA	
2	1440 VA	R	WORKSTATIONS	12	20 A	81	82	20 A	12	Spare	--	0 VA	
2	720 VA	R	WORKSTATIONS	12	20 A	83	84	20 A	12	Spare	--	0 VA	
NEC REF: Load Type Conn. Fct. Diversity													
220.44	(R)Receptacle	46260 VA	60.81%	28130 VA	210.20A	(L)Lighting	360 VA	125.00%	450 VA				
220.56	(K)Kitchen	9400 VA	65.00%	6110 VA		(EJ)Ext. Ltg.							
220.60	(C)Cooling			0 VA	620.14	(E)Elevators							
220.61	(H)Heating			0 VA		(WH)Wat. Htr.							
220.60	(F)Fans	528 VA	100.00%	528 VA	220.5	(MTJ)Lv. Motor							
	(M)MISC.	3000 VA	100.00%	3000 VA		(SP)Sub Pnl.	0 VA	Not Computed	0 VA				
					630.11B	(W)Welders							
Total Connected Load: 59548 VA VA = 165 A													
Total Load (Diversified): 38218 VA VA = 106 A												Location of Panel: Space 831-62	