

COMcheck Software Version 4.1.1.0
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: RD Brewster
Project Type: New Construction

Construction Site: Danbury Rd, Brewster, NY
Owner/Agent: Designer/Contractor:

Additional Efficiency Package(s)

Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft²)	C Allowed Watts /ft²	D Allowed Watts (B X C)
1-Retail Sales Area	51144	1.10	56258
Total Allowed Watts =			56258

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Retail Sales Area				
LED 1: A: HIBAY: Other:	1	146	178	25988
LED 2: B: HIBAY135: Other:	1	87	135	11745
LED 4: D: PENDANT: Other:	1	32	90	2880
LED 5: F: 204: Other:	1	17	40	680
LED 6: G: PENDANT: Other:	1	4	65	260
LED 7: H: STRIP: Other:	1	2	46	92
LED 8: J: VAPORTIGHT: Other:	1	2	45	90
LED 9: Z: VAPORTIGHT: Other:	1	12	22	264
LED 10: K: STRIP: Other:	1	6	33	198
Total Proposed Watts =			42154	

Interior Lighting PASSES: Design 25% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

DEBBIE NEWMAN - ENGINEER
Name - Title: Signature: Date: 09-10-20

COMcheck Software Version 4.1.1.0
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: RD Brewster
Project Type: New Construction
Exterior Lighting Zone: 2 (Neighborhood business district)

Construction Site: Danbury Rd, Brewster, NY
Owner/Agent: Designer/Contractor:

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Parking area	10000 R2	0.04	Yes	400
Driveway	60000 R2	0.04	Yes	2400
Loading dock	9000 R2	0.35	Yes	3150
Entry canopy	7800 R2	0.25	Yes	1950
Guarded facility, entrance/inspection area	200 R2	0.5	No	100
Total Tradable Watts (a) =			7600	
Total Allowed Watts =			8000	
Total Allowed Supplemental Watts (b) =			400	

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Parking area (10000 R2): Tradable Wattage				
LED 1: SA: POLE: Other:	1	6	120	720
LED 3: SB: POLE: Other:	1	9	60	540
Driveway (60000 R2): Tradable Wattage				
LED 3: SB: POLE: Other:	1	18	60	1080
LED 4: SA: POLE: Other:	1	1	120	120
Loading dock (9000 R2): Tradable Wattage				
LED 5: SD: WALLPACK: Other:	1	5	100	500
Entry canopy (7800 R2): Tradable Wattage				
LED 6: SC: Other:	1	13	50	650
Guarded facility, entrance/inspection area (200 R2): Non-tradable Wattage				
LED 7: SD: WALLPACK: Other:	1	2	100	200
Total Tradable Proposed Watts =			3610	

Exterior Lighting PASSES: Design 58% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

DEBBIE NEWMAN - ENGINEER
Name - Title: Signature: Date: 09-10-20

LIGHTING FIXTURE SCHEDULE

TYPE DESCRIPTION

A	DRY SALES. LED HIGH BAY LINEAR LIGHT FIXTURE WITH FROSTED ACRYLIC LENS. 120/277 UNIVERSAL VOLT 0-10V DIMMING DRIVER. 5000K. MOUNT ABOVE BOTTOM CHORD OF JOIST. PROVIDE WITH AIRCRAFT CABLE MOUNTING AND WIRE GUARD.
B	LAMPS: LED, 178 WATTS MANUFACTURER: MAXLITE BLUE2-178DUF 50
C	COOLER. LED HIGH BAY PENDANT LINEAR LIGHT FIXTURE WITH FROSTED ACRYLIC LENS. 120/277 UNIVERSAL VOLT 0-10V DIMMING DRIVER. 4000K.
D	LAMPS: LED, 135 WATTS MANUFACTURER: MAXLITE BLUE2-135DUF 40 MAXLITE BLUE2-SMK1 (MOUNTING BRACKET)
E	FREEZER. LED HIGH BAY PENDANT LIGHT FIXTURE WITH FROSTED ACRYLIC LENS. 120/277 UNIVERSAL VOLT 0-10V DIMMING DRIVER. 4000K.
F	LAMPS: LED, 90 WATTS MANUFACTURER: MAXLITE HP-90UF-40 MAXLITE HP-WMBKT (MOUNTING BRACKET)
G	OFFICES, BATHROOMS, ETC. RECESSED, GRID, 2'X4' LED LENSED LIGHT FIXTURE. 120-277 UNIVERSAL VOLTAGE DRIVER. 3500K.
H	LAMPS: LED, 46 WATTS MANUFACTURER: LS-4846U-40
I	SEAFOOD. SURFACE OR PENDANT HUNG LED 8' STRIP LIGHT FIXTURE. 120/277 UNIVERSAL VOLTAGE DRIVER. CHAIN HUNG. WIRE GUARD.
J	LAMPS: LED, 65 WATTS MANUFACTURER: LS2-9650U-40
K	MAIN ELECTRICAL ROOM. SURFACE OR PENDANT HUNG LED 4' STRIP LIGHT FIXTURE. 120/277 UNIVERSAL VOLTAGE DRIVER. PROVIDE ALL MOUNTING ACCESSORIES, COORDINATE WITH CEILING TYPE.
L	LAMPS: LED, 45.2 WATTS MANUFACTURER: MAXLITE LSV 4U4540
M	MANAGERS STATION. SURFACE OR PENDANT HUNG LED 4' STRIP LIGHT FIXTURE. 120/277 UNIVERSAL VOLTAGE DRIVER. PROVIDE ALL MOUNTING ACCESSORIES, COORDINATE WITH CEILING TYPE.
N	LAMPS: LED, 33 WATTS MANUFACTURER: MAXLITE LS-4835U-40
O	WALL MOUNTED FULL CUT-OFF EXTERIOR LED LIGHT FIXTURE. MOUNT ABOVE EGRESS DOOR. 120/277 UNIVERSAL VOLTAGE DRIVER. WET LABEL UL-LISTED. FINISH PER ARCHITECT. PHOTOCELL.
P	LAMPS: LED, 15 WATTS MANUFACTURER: MAXLITE HP-ADS15U-40B
Q	SURFACE MOUNTED LINEAR LED LIGHT FIXTURE FOR LIGHT BOX. 120 VOLT DRIVER. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION. PROVIDE PLUGGORD POWER FEET, BAR-BAR & FLEXIBLE CONNECTORS. MOUNTING BRACKETS.
R	LAMPS: LED, 12.2 WATTS MANUFACTURER: MAXLITE LB3635
S	UNIVERSAL MOUNT LED EXIT SIGN. RED LETTERS. 120/277 VOLTAGE. SINGLE OR DOUBLE FACE, DIRECTIONAL ARROWS AS SHOWN ON PLANS.
T	LAMPS: LED MANUFACTURER: BEST LIGHTING EZRXTEU-2 R-W
U	UNIVERSAL MOUNT LED EXIT SIGN. RED LETTERS. 120/277 VOLTAGE. SINGLE FACE, DIRECTIONAL ARROWS AS SHOWN ON PLANS. WET LOCATION LISTED.
V	LAMPS: LED MANUFACTURER: BEST LIGHTING WLEZXTU-1 R-G-W
W	UNIVERSAL MOUNT LED EXIT SIGN. RED LETTERS. 120/277 VOLTAGE. DOUBLE FACE, DIRECTIONAL ARROWS AS SHOWN ON PLANS. WET LOCATION LISTED.
X	LAMPS: LED MANUFACTURER: BEST LIGHTING WLEZXTU-2 R-G-W
Y	FIRE PUMP ROOM SURFACE MOUNT BATTERY BACK-UP EGRESS LIGHT FIXTURE. 120/277 VOLTAGE. LEAD CALCIUM BATTERY, 90 MINUTE OPERATION. WET LOCATION LISTED.
Z	LAMPS: INCLUDED MANUFACTURER: BEST LIGHTING LEDTFX-2
AA	CEILING MOUNT VAPOR PROOF GLOBE LIGHT FIXTURE. 120/277 VOLTAGE. MOUNTED TO ROOF STRUCTURE ABOVE COOLER/FREEZER. LOCATE LIGHT SWITCH IN RECEIVING OFFICE.
AB	LAMPS: LED, 22 WATTS MANUFACTURER: CREE C-VI-LGPD-12L-40K-GR SITE LIGHTING FIXTURE SCHEDULE
AC	POLE MOUNTED FULL CUT-OFF SINGLE LED LUMINAIRE. TYPE III DISTRIBUTION. 120/277 UNIVERSAL VOLTAGE. 22 FOOT 4" SQUARE STRAIGHT STEEL POLE MOUNTED ON 3 FOOT CONCRETE BASE. CAPABLE OF WITHSTANDING 100 MPH. PROVIDE WITH HANDHOLE. 4000K. BRONZE. STRAIGHT ARM MOUNT. MOTION SENSOR. PROVIDE (2) TWO FSR-100 REMOTE HANDHELD CONFIGURATION TOOL, HANDOVER TO OWNER AT JOBS END.
AD	LAMPS: LED 60 WATTS MANUFACTURER: MAXLITE AR60UT3-40BA-MSP-FSP-211(SENSOR)-FSP-L7 (SENSOR LENS)
AE	CANOPY MOUNTED LED CANOPY LUMINAIRE. FLAT LENS. OORDINATE FINISH PER ARCHITECT. 120/277 UNIVERSAL VOLTAGE. WHITE COLOR PER ARCHITECT. MOTION SENSOR.
AF	LAMPS: LED 50 WATTS MANUFACTURER: PRODIGY PL-CPPG-40W-40K-UVN-WH-MO-AAN
AG	WALL MOUNTED FULL CUT-OFF LED LUMINAIRE. TYPE IV DISTRIBUTION. 120/277 UNIVERSAL VOLTAGE. COORDINATE COLOR WITH ARCHITECT. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN. PROVIDE MOTION SENSOR. MOUNT 22.5' AFG.
AH	LAMPS: LED 40 WATTS MANUFACTURER: MAXLITE WPCL-40-U-14-CS-B-M5

TYPE DESCRIPTION

SA	POLE MOUNTED FULL CUT-OFF 180 DEGREE DOUBLE LED LUMINAIRE. TYPE III DISTRIBUTION. 120/277 UNIVERSAL VOLTAGE. 22 FOOT 4" SQUARE STRAIGHT STEEL POLE MOUNTED ON 3 FOOT CONCRETE BASE. CAPABLE OF WITHSTANDING 100 MPH. PROVIDE WITH HANDHOLE. 4000K. BRONZE. STRAIGHT ARM MOUNT. MOTION SENSOR. PROVIDE (2) TWO FSR-100 REMOTE HANDHELD CONFIGURATION TOOL, HANDOVER TO OWNER AT JOBS END.
SB	POLE MOUNTED FULL CUT-OFF SINGLE LED LUMINAIRE. TYPE III DISTRIBUTION. 120/277 UNIVERSAL VOLTAGE. 22 FOOT 4" SQUARE STRAIGHT STEEL POLE MOUNTED ON 3 FOOT CONCRETE BASE. CAPABLE OF WITHSTANDING 100 MPH. PROVIDE WITH HANDHOLE. 4000K. BRONZE. STRAIGHT ARM MOUNT. MOTION SENSOR. PROVIDE (2) TWO FSR-100 REMOTE HANDHELD CONFIGURATION TOOL, HANDOVER TO OWNER AT JOBS END.
SC	CANOPY MOUNTED LED CANOPY LUMINAIRE. FLAT LENS. OORDINATE FINISH PER ARCHITECT. 120/277 UNIVERSAL VOLTAGE. WHITE COLOR PER ARCHITECT. MOTION SENSOR.
SD	WALL MOUNTED FULL CUT-OFF LED LUMINAIRE. TYPE IV DISTRIBUTION. 120/277 UNIVERSAL VOLTAGE. COORDINATE COLOR WITH ARCHITECT. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN. PROVIDE MOTION SENSOR. MOUNT 22.5' AFG.
SE	LAMPS: LED 40 WATTS MANUFACTURER: MAXLITE WPCL-40-U-14-CS-B-M5

COORDINATE CONTACTOR CONTROL SETTINGS WITH EMS SYSTEM. WHERE REQUIRED PROVIDE PHOTOCELLS, CONTROL WIRING, ETC. FOR A COMPLETE OPERATING SYSTEM. PROVIDE MANUAL OVERRIDE SWITCHES IN FRONT END MANAGERS OFFICE AND RECEIVING MANAGERS OFFICE. COORDINATE WITH EMS REPRESENTATIVE. REFER TO CONTROL/CONTACTOR NOTE #1.

EMS LIGHTING CONTROL SCHEDULE
(RESTAURANT DEPOT TO VERIFY CONTROL SCHEDULE)

RELAY	TYPE	CONTROLLED CIRCUITS	TYPE	COIL POWER	LOCATION	REMARKS
A1	GE CR460	LP2-3,7,9	1-4P	RP2-41	SALES 100%	NOTE 4,5
A2	GE CR460	ELSB-3,7,9	1-6P	RP2-41	SALES 50%	NOTE 3,5
B1	GE CR460	LP2-1,5	1-2P	RP2-41	GENERAL SALES/CHECKOUT DAYLIGHT ZONE 100%	NOTE 4,7
B2	GE CR460	ELSB-1,5	1-2P	RP2-41	GENERAL SALES/CHECKOUT DAYLIGHT ZONE 50%	NOTE 3,7
C1	GE CR460	LP1-1,3,5	1-4P	RP1-39	COOLER/FREEZER 100%	NOTE 4,5
C2	GE CR460	ELSA-1,3,5	1-4P	RP1-41	COOLER/FREEZER 50%	NOTE 3,5
D1	GE CR460	LP1-9	1-2P	RP1-39	GENERAL RECEIVING 100%	NOTE 4,5
D2	GE CR460	ELSA-9	1-2P	RP1-41	GENERAL RECEIVING 50%	NOTE 3,5
E	GE CR160	PANEL 'RL'	1-2P	RP1-39	FREEZER DOOR LIGHTING	NOTE 4
F1	GE CR460	LP1-7	1-2P	RP1-39	PERISHABLE RECEIVING 100%	NOTE 4,5
F2	GE CR460	ELSA-7	1-2P	RP1-41	PERISHABLE RECEIVING 50%	NOTE 3,5
G1	GE CR460	RP2-45	1-2P	RP2-36	EXTERIOR BUILDING MTD SIGN	NOTE 4,5
G2	GE CR460	RP2-55,57	1-2P	RP2-36	EXTERIOR BUILDING MTD SIGN	NOTE 4,5
H	GE CR460	LP1-2	1-2P	RP1-39	EXTERIOR WALLPAK LIGHTS	NOTE 4,6
I	GE CR460	ELSA-11	1-2P	RP1-41	MAN DOOR LIGHTING	NOTE 3,6
J	GE CR460	ELSB-2	1-2P	RP2-36	MAN DOOR LIGHTING	NOTE 3,6
K	GE CR460	RP2-47,49,61	1-4P	RP2-41	LTS SMALLWARE	NOTE 3,5
L1	GE CR460	LP2-6	1-2P	RP2-36	CANOPY LTS 100%	NOTE 4,6
L2	GE CR460	ELSB-4	1-2P	RP2-36	CANOPY LTS 50%	NOTE 3,6
M1	GE CR460	LP1-6	1-2P	RP1-39	SEAFOOD LTS 100%	NOTE 3,5
M2	GE CR460	ELSA-8	1-2P	RP1-39	SEAFOOD LTS 50%	NOTE 3,5
N1	GE CR460	RP1-2	1-2P	RP1-39	EXTERIOR SIGN	NOTE 4,5
N2	GE CR460	LP1-11	1-2P	RP1-39	EXTERIOR MONUMENT SIGN	NOTE 4,5
O1	GE CR460	LP1-8,10	1-2P	RP1-39	POLE MOUNTED SITE LIGHTS	NOTE 4,6
O2	GE CR460	LP2-2,4	1-2P	RP2-36	POLE MOUNTED SITE LIGHTS	NOTE 4,6

- NOTES:
- ALL CONTACTORS SHALL BE WIRED BACK TO ENERGY MANAGEMENT SYSTEM FOR CONTROL. CONTROLS CONTRACTOR SHALL PROVIDE ALL BELDEN WIRE AS REQUIRED BETWEEN RELAYS, OUTPUT BOARDS, CONTACTORS, ETC. COORDINATE WITH CONTROLS CONTRACTOR. REFER TO LIGHTING CONTROL DIAGRAM ON EMS DRAWINGS FOR NO/NC SETTINGS, IF REQUIRED.
 - QUANTITY SIZE AND NUMBER OF POLES FOR EACH CONTACTOR SHALL MATCH BREAKER SIZES OF PANEL SCHEDULES. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH REFRIGERATION EQUIPMENT SUPPLIER.
 - GENERATOR FED EMERGENCY EGRESS LIGHTING BRANCH CIRCUITS SHALL ENERGIZE UPON LOSS OF NORMAL AC POWER AND BYPASS LOCAL CONTROLS AND BRING LIGHT FIXTURES TO FULL BRIGHTNESS. NORMALLY CLOSED ELECTRICALLY HELD LIGHTING CONTACTOR. CONTACTOR SHALL CLOSE UPON LOSS OF NORMAL POWER. EMERGENCY LIGHTING SHALL FAIL TO THE "ON" POSITION IN THE EVENT OF POWER LOSS.
 - CONTACTOR SHALL BE MECHANICALLY HELD ELECTRICALLY OPERATED.
 - CONTACTOR SHALL BE ON/OFF VIA ENERGY MANAGEMENT SYSTEM TIME CLOCK WITH INDEPENDENT SETTINGS. COORDINATE TIME SETTINGS WITH RD.
 - CONTACTOR SHALL BE ON/OFF VIA ENERGY MANAGEMENT SYSTEM PHOTOCCELL FOR DUSK TO DAWN OPERATION.
 - CONTACTOR SHALL BE ON/OFF VIA ENERGY MANAGEMENT SYSTEM DAYLIGHT CONTROLS.

MECHANICAL CONTACTOR SCHEDULE

RELAY	TYPE	CONTROLLED CIRCUITS	TYPE	COIL POWER	LOCATION	REMARKS
AA1	GENERAL PURPOSE 120 VOLT CONTACTOR	RP1-13	1-1P	RP1-37	SLAB VENT FAN SVF-A	
AA2	GENERAL PURPOSE 120 VOLT CONTACTOR	RP1-15	1-1P	RP1-37	SLAB VENT FAN SVF-B	
AA3	GENERAL PURPOSE 120 VOLT CONTACTOR	RP1-17	1-1P	RP1-37	SLAB VENT FAN SVF-C	

NOTES:

- ALL CONTACTORS SHALL BE WIRED BACK TO ENERGY MANAGEMENT SYSTEM FOR CONTROL. CONTROLS CONTRACTOR SHALL PROVIDE ALL BELDEN WIRE AS REQUIRED BETWEEN RELAYS, OUTPUT BOARDS, CONTACTORS, ETC. COORDINATE WITH CONTROLS CONTRACTOR.
- QUANTITY SIZE AND NUMBER OF POLES FOR EACH CONTACTOR SHALL MATCH BREAKER SIZES OF PANEL SCHEDULES. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH REFRIGERATION EQUIPMENT SUPPLIER.

- ALL ROOF PENETRATIONS SHALL BE AS AUTHORIZED BY BUILDING OWNER AND IN ACCORDANCE WITH BUILDING OWNER REQUIREMENTS. MAINTAIN ROOF WATERRIGHT INTEGRITY.
- STUB UP 3/4" EMT CONDUIT 6" ABOVE ACCESSIBLE CEILING IN NEAREST WALL AT EACH TELEPHONE OUTLET AND DATA OUTLET. PROVIDE PULL STRING IN EMPTY CONDUIT.
- FASTEN ALL RECESSED LIGHTING FIXTURES TO STRUCTURE OR GRID PER N.E.C. 410-36. EMERGENCY LIGHTING SHALL BE ATTACHED DIRECTLY TO STRUCTURE BY AT LEAST TWO (2) LISTED HANGER WIRES.
- RECESSED INCANDESCENT FIXTURES SHALL BE INSTALLED IN COMPLIANCE WITH N.E.C. 410-36(A) AND 410-115(C).
- ALL PENETRATIONS THRU RATED WALLS, FLOORS AND CEILINGS SHALL BE FIRE STOPPED PER N.E.C. 300-21.
- PROVIDE ALL GROUNDING AS REQUIRED BY N.E.C.
- DEVICE MOUNTING HEIGHTS ARE TO BE MEASURED TO THE DEVICE CENTERLINE UNLESS NOTED OTHERWISE.
- ALL SWITCHES FOR FANS, LIGHTS, ETC. WHICH ARE SHOWN TO BE MOUNTED IN THE SAME GENERAL AREA SHALL SHARE A MULTI-GANG COVER PLATE AS REQUIRED.
- ALL CONDUIT SHALL BE 1/2" EMT WITH 2#12AWG CONDUCTORS AND 1#12AWG INSULATED EQUIPMENT GROUND CONDUCTOR UNLESS OTHERWISE NOTED.
- PROVIDE AN UPDATED, PRINTED PANEL SCHEDULE FOR ALL PANELS WITHIN SCOPE OF WORK.
- PROVIDE #12AWG CND. FOR ALL MECHANICAL EQUIPMENT UNLESS SHOWN OTHERWISE. ALL EQUIPMENT SHALL BE GROUNDIED AT THE PANEL WHICH FEEDS THE EQUIPMENT.
- COORDINATE RECEPTACLE NEMA TYPE AND VOLTAGE WITH COPIERS AND EQUIPMENT.
- ALL CABLE USED IN PLENUM SHALL BE PLENUM-RATED.
- PROVIDE A SEPARATE GREEN, INSULATED, #12AWG EQUIPMENT GROUNDING CONDUCTOR ROUTED WITH THE BRANCH CIRCUIT HOMERUN CONDUCTORS.
- PROVIDE AN OUTLET BOX WITH A 3/4" CONDUIT STUBBED UP ABOVE ACCESSIBLE CEILING FOR ALL NEW DATA AND TELEPHONE OUTLETS. PROVIDE PULL STRING AND BUSHING AT THE TERMINATION ABOVE ACCESSIBLE CEILING.
- ARMORED CABLE MAY BE USED IN WALLS AND MILLWORK ONLY AND MUST BE MC TYPE (WITH GROUND). ALL CONDUIT TO AND ABOVE THE PLENUM SHALL BE EMT.
- COORDINATE ALL FLOOR CORES WITH ARCHITECT.
- CONTRACTOR SHALL CLEAN SITE AT END OF PROJECT. ALL DUST, DEBRIS, OILS, SPRAYS, FINGERPRINTS, AND LABELS SHALL BE REMOVED FROM ALL EXPOSED FINISHED SURFACES. ELECTRICAL AND TELEPHONE ROOMS SHALL BE PUT BACK AS FOUND; FLOORS ARE TO BE SWEEPED, MOPPED, AND REPAINTED.
- DUPLEX RECEPTACLES SHALL BE PLASTIC, TWO-POLE, THREE WIRE, SELF-GROUNDING, SIDE-WIRED, 125 VOLTS AND 20A RATED, AND MATCH EXISTING IF POSSIBLE.
- PROVIDE NEUTRAL CONDUCTOR TO EACH WALL-MOUNTED LIGHT SWITCH LOCATION. IF NEUTRAL IS UNUSED, CAP AND COIL CONDUCTOR IN BOX. NEUTRAL SHALL BE INSULATED WITH WHITE (120V) OR GRAY (277V) INSULATION.

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	ON CENTER MTG. HT.
	CONCEALED CONDUIT IN CEILING OR WALL	
	CONCEALED CONDUIT IN FLOOR OR UNDERGROUND	
	EXPOSED CONDUIT	
	CIRCUIT HOMERUN TO PANEL; EACH ARROWHEAD = 1 CIRCUIT	
	NO. OF CONDUCTORS IN CONDUIT; EACH CROSSHATCH = 1 WIRE	
	CONDUIT STUBBED UP OR TURNED DOWN	
	SURFACE MOUNTED RACEWAY	
	MULTI OUTLET SURFACE MOUNTED RACEWAY	18"
	PLYWOOD BACKBOARD	18"
	WALL MOUNTED SINGLE RECEPTACLE OUTLET	18"
	WALL MOUNTED DUPLEX RECEPTACLE OUTLET	18"
	WALL MOUNTED DUPLEX RECEPTACLE OUTLET WITH AN ISOLATED GROUND	18"
	WALL MOUNTED G.F.C.I. DUPLEX WEATHERPROOF RECEPTACLE OUTLET	18"
	WALL MOUNTED G.F.C.I. DUPLEX RECEPTACLE OUTLET	6"AC
	WALL MOUNTED ABOVE COUNTER G.F.C.I. DUPLEX RECEPTACLE OUTLET	18"
	WALL MOUNTED TELEPHONE OUTLET	18"
	WALL MOUNTED DATA OUTLET	18"
	WALL MOUNTED COMBINATION DATA/TELEPHONE OUTLET	18"
	WALL MOUNTED SPECIAL RECEPTACLE OUTLET	18"
	JUNCTION BOX - SIZE AND MOUNTING AS REQUIRED	
	277/480 VOLT PANELBOARD	
	120/208 VOLT PANELBOARD	
	WALL MOUNTED S.P.S.T. TOGGLE SWITCH	48"
	WALL MOUNTED 3-WAY TOGGLE SWITCH	48"
	WALL MOUNTED 4-WAY TOGGLE SWITCH	48"
	WALL MOUNTED DIMMER SWITCH	48"
	WALL MOUNTED 3-WAY DIMMER SWITCH	48"
	WALL MOUNTED PIR VACANCY SENSORS, DUAL RELAY, WATTSTOPPER CS-350 MANUAL ON	48"
	WALL MOUNTED PIR VACANCY SENSORS, WATTSTOPPER CS-50 OR EQUAL MANUAL ON	48"
	WALL MOUNTED ASTRONOMIC TIME SWITCH, WATTSTOPPER RT-200	48"
	WALL MOUNTED LOW VOLTAGE MOMENTARY SWITCH, WATTSTOPPER DCC2	AS REQ'D.
	MOTOR RATED TOGGLE SWITCH	
	COMBINATION MOTOR STARTER/DISCONNECT SWITCH	
	DISCONNECT SWITCH (FRAME/POLES/FUSE-IF REQUIRED)	
	MOTOR - NUMBER INDICATES HORSEPOWER (F=FRACTIONAL)	
	WALL MOUNTED LIGHT FIXTURE	
	CEILING MOUNTED LIGHT FIXTURE	
	CEILING MOUNTED WALL WALL LIGHT FIXTURE	
	FLUORESCENT LIGHT FIXTURE	
	EXIT SIGN - CEILING,WALL MT.	
	EMERGENCY BATTERY PACK LIGHT FIXTURE.	
	LIGHT FIXTURE ON EMERGENCY GENERATOR	
	FLUSH FLOOR 3-GANG BOX WITH TWO (2) DUPLEX RECEPTACLES AND COMMUNICATION JACKS. COORDINATE COMMUNICATION REQUIREMENTS WITH TENANT. PROVIDE FLANGE, COVERPLATE. STUB-UP 1" C. WITH PULLSTRING IN NEAREST FULL HEIGHT WALL FOR COMMUNICATIONS. (WALKER 88053 SERIES OR EQUAL).	
	FLUSH FLOOR 2-GANG BOX WITH TWO (2) DUPLEX RECEPTACLES AND COMMUNICATION JACKS. COORDINATE COMMUNICATION REQUIREMENTS WITH TENANT. PROVIDE FLANGE, COVERPLATE. STUB-UP 1" C. WITH PULLSTRING IN NEAREST FULL HEIGHT WALL FOR COMMUNICATIONS. (WALKER 88052 SERIES OR EQUAL).	
	CARD READER. PROVIDE 3/4" STUBBED UP 6" ABOVE ACCESSIBLE CEILING.	48"
	CEILING MOUNTED DUAL TECHNOLOGY 360° MOTION SENSOR (WATT-STOPPER DT-300 WITH BZ-150 POWERPACK PER 3 SENSORS)	
	CEILING MOUNTED ULTRASONIC MOTION SENSOR. PROVIDE WITH ISOLATED RELAY (WATT-STOPPER UT-300 WITH BZ-150 POWERPACK, U.N.O.)	
	JBOX FOR HAND DRYER ELECTRICAL CONNECTION, COORDINATE WITH EQUIPMENT.	42"
	POWER POLE	
	ABOVE FINISHED FLOOR/ABOVE FINISHED GRADE	
	EMPTY CONDUIT WITH PULLWIRE	
	BELOW CEILING	
	ABOVE COUNTER	