

ELECTRICAL SYMBOL LEGEND

HT AFF	SYMBOL	DESCRIPTION	HT AFF	SYMBOL	DESCRIPTION	HT AFF	SYMBOL	DESCRIPTION	HT AFF	SYMBOL	DESCRIPTION
		LIGHTING			EQUIPMENT			COMMUNICATION			FIRE ALARM
AS NOTED		SURFACE INCANDESCENT LIGHT (TYPE DENOTED)	16"		MULTIOUTLET ASSEMBLY (TYPE DENOTED)	16"		TELEPHONE OUTLET (TYPE DENOTED)	92***		FIRE ALARM HORN
AS NOTED		SURFACE LIGHT (TYPE DENOTED)	16"		MULTIOUTLET ASSEMBLY (TYPE DENOTED)	47****		WALL TELEPHONE OUTLET (TYPE DENOTED)	92***		FIRE ALARM HORN WITH STROBE (CANDELAS)
AS NOTED		WALL MOUNTED FLOODLIGHT (TYPE DENOTED)	84"		CLOCK (TYPE DENOTED)	47****		COMMUNICATION OUTLET (TYPE DENOTED)	92***		FIRE ALARM STROBE (CANDELAS)
		RECESSED LIGHT (TYPE DENOTED)			POWER POLE (OPEN OFFICE STYLE)	47"		INTERCOM OUTLET LOCATION	72***		FIRE ALARM REMOTE ANNUNCIATOR
PER SCHED		POLE MOUNTED LIGHT (TYPE DENOTED)			UTILITY SERVICE POWER POLE (SITE)	16"		TELEVISION OUTLET	87****		SMOKE DETECTOR (TYPE DENOTED)
PER SCHED		POLE MOUNTED FLOODLIGHT (TYPE DENOTED)	AS NOTED		SPECIAL RECEPT. OR CONN. (SEE SCHEDULE)	16"		MULTIPLE SERVICE OUTLET (TYPE DENOTED)			HEAT DETECTOR (TYPE A TEMP DENOTED)
		SURFACE LIGHT (TYPE DENOTED)	AS NOTED		SPECIAL CONNECTION (SEE SCHEDULE)			OUTLET IN FLOOR (MICROPHONE SHOWN)			LINEAR HEAT DETECTOR
		SUSPENDED OR PENDANT LIGHT (TYPE DENOTED)			JUNCTION BOX	16"		MULTIPLE SERVICE FLOOR OUTLET (TYPE DENOTED)			DUCT SMOKE DETECTOR (TYPE DENOTED)
		RECESSED LIGHT (TYPE DENOTED)			PULL BOX	16"		DICTIONATION OUTLET LOCATION	47"		REMOTE TEST/STATUS STATION
		STRIP LIGHT (TYPE DENOTED)	78***		AUTOMATIC DOOR OPERATOR PUSHBUTTON	48****		WALL DICTIONATION OUTLET LOCATION			FLAME DETECTOR (TYPE DENOTED)
AS NOTED		TRACK AND TRACK LIGHT (TYPES DENOTED)	78***		CIRCUIT BREAKER PANEL	16"		EQUIPOTENTIAL GROUND OUTLET			GAS DETECTOR (TYPE DENOTED)
96"		EMERGENCY BATTERY LIGHT (TYPE DENOTED)	78***		POWER OR DISTRIBUTION PANEL	AS NOTED		X-RAY FILM VIEWER (SEE SPECIFICATIONS)	47****		F.A. PULLSTATION
		EMERGENCY LIGHT - SINGLE REMOTE HEAD	78***		SPECIAL CABINET (TYPE DENOTED)	84"		BELL			F.A. ZONE ADDRESSABLE MODULE
		EMERGENCY LIGHT - DOUBLE REMOTE HEAD			TRANSFORMER (TYPE DENOTED)	84"		BUZZER			F.A. INDIVIDUAL ADDRESSABLE MODULE
		EMERGENCY LIGHT - TRIPLE REMOTE HEAD			MOTOR (SEE SCHEDULE)			CHIME			F.A. DOOR HOLDER
12"		EXIT SIGN (TYPE DENOTED)	47****		SECURITY			DOOR SIGNAL - APT. UNIT			F.A. DOOR CLOSER
AS NOTED		LIGHT FIXTURE ON (EM) LIFE SAFETY BRANCH	84"		END OF LINE RESISTOR	67"		SPEAKER (WALL OR CEILING MT.)			FIRE ALARM SHUT DOWN RELAY
AS NOTED		LIGHT FIXTURE ON (EM) CRITICAL BRANCH	84"		ELECTRIC STRIKE	84"		HORN TYPE SPEAKER			SPRINKLER FLOW SWITCH
		LIGHTING CONTROL			MAGNETIC LOCK			SURFACE MT SPEAKER SUSPENDED FROM CEILING			SPRINKLER VALVE TAMPER SWITCH
47"		SINGLE POLE SW.			COMBINATION LOCK	47"		VOLUME CONTROL			SPRINKLER LEVEL SWITCH
47"		2 POLE SINGLE THROW SW.			DOOR AND WINDOW CONTACTS	16"		MICROPHONE OUTLET			SPRINKLER PRESSURE SWITCH
47"		3-WAY SW.			BALANCED MAGNETIC SWITCH	16"		PROJECTOR CONTROL OUTLET			SPRINKLER TEMPERATURE SWITCH
47"		4-WAY SW.	47****		CARD READER			ANTENNA	18"		VOICE EVAC MICROPHONE OUTLET
47"		KEYED SW.	47****		KEYPAD			WEATHERHEAD			KEY REPOSITORY (KNOCK BOX)
47"		SW. W/PILOT	47"		INTERCOM - AUDIO/VISUAL	48****		WALL INTERCOM OUTLET LOCATION	AS NOTED		SCRAMBLE STROBE STACK LIGHT
47"		SEPARATE PILOT LIGHT	47"		ACCESS CONTROL ENCLOSURE			MUSHROOM SWITCH	47****		ABORT SWITCH
47"		DIMMER SWITCH			IDENTIFICATION BADGING STATION			MOTOR CONTROL			RECEPTACLES
47"		OCCUPANCY SENSOR SWITCH			GLASS BREAK DETECTOR			DAMPER MOTOR	16"		SINGLE RECEPT.
47"		MOMENTARY CONTACT SWITCH			DURESS PUSHBUTTON - UNDER COUNTER	47"		MANUAL MTR. STR. (W/OVERLOADS)	16"		DUPLEX RECEPT.
47"		TIMER SWITCH			DURESS PUSHBUTTON - RECESSED	72***		MAG. MOTOR STARTER OR CONTACTOR	16"		SPLIT DUPLEX RECEPT.
47"		TIME DELAY SWITCH			DURESS ALERT STROBE LIGHT - 3 LAMP ZONE	72***		COMB. MOTOR STARTER (NON-FUSED)	16"		ISOLATED GROUND RECEPT (DUPLEX SHOWN)
47"		FAN SPEED CONTROL	AS NOTED		CCTV CAMERA IN RECESSED DOME	72***		COMB. MOTOR STARTER (FUSED)	16"		RECEPT ON EMERGENCY CKT (DUPLEX SHOWN)
47"		MOTOR HORSEPOWER RATED SWITCH			CCTV CAMERA - DETENTION GRADE	72***		SAFETY DISC. SW. (NON-FUSED)	16"		FOURPLEX RECEPT.
47"		PUSH BUTTON	144"		MOTION DETECTOR (TYPE DENOTED)	72***		SAFETY DISC. SW. (FUSED)	16"		FOURPLEX RECEPTACLE ON EMERGENCY CIRCUIT
47"		KEYED SW. W/PILOT	72***		INTRUSION DETECTION SYSTEM ZONE PANEL	72***		RELAY	16"		240 VOLT RECEPT.
47"		START/STOP PUSH BUTTON STATION	72***		INTRUSION DETECTION SYSTEM CONTROL PANEL	72***		ENCLOSED CIRCUIT BREAKER	16"		FLOOR RECEPT. (DUPLEX SHOWN)
AS NOTED		PHOTOCELL	72***		INDEPENDENT	16"		MASS SPECTROMETER OUTLET	6'*****		DUPLEX RECEPT MTD ABOVE COUNTER
		GENERAL ELECTRICAL			ELECTRICAL HEATER			PRESSURE SWITCH			DUPLEX RECEPT MT IN MILLWORK
		LIGHT SYMBOL INDICATES EXISTING	PER SCHED		BASEBOARD HEATER (TYPE DENOTED)	72***		FLOAT SWITCH	36"		DUPLEX RECEPT C/W WET LOCATION COVERPLATE
		DASHED SYMBOL INDICATES REMOVED	PER SCHED		WALL HEATER (TYPE DENOTED)	47"		MANUAL MOTOR STARTER	36"		DUPLEX RECEPT C/W INTEGRAL GFI
		KEY NOTE (SEE SCHEDULE)	PER SCHED		HAND OR HAIR DRYER (TYPE DENOTED)	47"		TIME CONTROL SWITCH (TIME SWITCH)			DUPLEX RECEPT NEMA 5-20R CONFIG
		DEMOLITION NOTE (SEE SCHEDULE)	PER SCHED		UNIT HEATER (TYPE DENOTED)	47"		HUMIDISTAT			WIRING
		REVISION TAG	PER SCHED		SOLENOID VALVE	47"		THERMOSTAT - LOW VOLTAGE			UNDERFLOOR RACEWAY SYSTEM
					ELECTRIC/PNEUMATIC SWITCH			THERMOSTAT - LINE VOLTAGE			CABLE TRAY (TYPE DENOTED)
					PNEUMATIC/ELECTRIC SWITCH						CONDUIT SLEEVE (SIZE DENOTED)
					LIMIT SWITCH						

ALL DISTANCES ARE TO CENTER OF DEVICE OR EQUIPMENT UNLESS OTHERWISE NOTED. DEVICES INDICATED AT 47" MAY NOT BE INSTALLED WITH ANY OPERABLE PART HIGHER THAN 47". DEVICES MAY BE INSTALLED IN CONCRETE MASONRY UNITS WITH THE TOP OF THE DEVICE AT 47".
* DISTANCE ABOVE TOP OF DOOR FRAME ** DISTANCE TO TOP OF EQUIPMENT OR DEVICE *** DISTANCE TO HIGHEST OPERABLE PART OF EQUIPMENT **** DISTANCE BELOW CEILING ***** DISTANCE ABOVE COUNTER

ELECTRICAL SYMBOL NOTES

THE LIGHTING FIXTURE TYPE IS INDICATED BY UPPER CASE LETTERS AND NUMBERS. THE CIRCUIT DESIGNATION IS INDICATED BY LETTERS AND NUMBERS SEPARATED BY DASH. THE SWITCH DESIGNATION IS INDICATED BY A LOWER CASE LETTER.

EXAMPLE 1: LIGHTING FIXTURE TYPE "FL01" IS CONNECTED TO PANEL A, CIRCUIT 12 AND CONTROLLED BY SWITCH "D".

EXAMPLE 2: LIGHTING FIXTURE TYPE "FL01" IS CONNECTED TO PANEL A, CIRCUIT 12 AND CONTROLLED BY SWITCH "D".

EXIT LIGHTS. STEM INDICATES WALL MOUNTING. NO STEM INDICATES CEILING MOUNTING. SHADED AREA INDICATES ILLUMINATED FACES. ARROW INDICATES DIRECTIONAL ARROW ON ILLUMINATED FACES. THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER. EXAMPLE: THE WALL MOUNTED EXIT LIGHT TYPE "E" WITH SINGLE FACE AND DIRECTIONAL ARROW IS CONNECTED TO CIRCUIT 14 FROM PANEL A.

DEVICES. THE CIRCUIT DESIGNATION IS INDICATED BY A LOWER CASE LETTER. EXAMPLE: RECEPTACLE IS CONNECTED TO PANEL A, CIRCUIT 18.

THE CONTROL DEVICE DESIGNATION IS INDICATED BY A LOWER CASE LETTER. EXAMPLE: SINGLE POLE SWITCH "Q" TO CONTROL LIGHTING FIXTURES INDICATED BY "Q".

MOTOR CONNECTIONS. THE MOTOR IS INDICATED BY A NUMBER WITHIN OR CHARACTERS ADJACENT TO THE MOTOR SYMBOL. SEE THE MOTOR AND EQUIPMENT SCHEDULE FOR THE MOTOR DESCRIPTION AND ELECTRICAL REQUIREMENTS. THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER(S) ADJACENT TO THE SYMBOL. EXAMPLE: MOTOR SF-1, 3 PHASE CONNECTION TO PANEL A, CIRCUITS 2, 4, 6.

ELECTRIC HEATER CONNECTIONS. THE HEATER TYPE IS INDICATED BY A NUMBER FOLLOWING THE UPPER CASE LETTER "H". SEE THE HEATER SCHEDULE FOR ELECTRICAL REQUIREMENTS. THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER(S) ADJACENT TO THE HEATER. EXAMPLE: ELECTRIC BASEBOARD HEATER TYPE "H10" CONNECTED TO PANEL A, CIRCUITS 1, 9.

TRANSFORMERS. THE TRANSFORMER TYPE IS INDICATED BY A NUMBER FOLLOWING THE UPPER CASE LETTER "T". SEE THE TRANSFORMER SCHEDULE OR THE SINGLE LINE DIAGRAM FOR THE TRANSFORMER DESCRIPTION AND REQUIREMENTS. EXAMPLE: TRANSFORMER TYPE "T1".

PANELBOARDS. PANELBOARD DOORS MAY BE SHOWN TO INDICATE OPENING SIDE OF RECESSED PANELBOARDS. SEE PANELBOARD IDENTIFICATION FOR DESIGNATION CODES.

KEYNOTE. SEE THE KEYED NOTES ON THAT SHEET FOR THE NOTE NUMBER INDICATED.

SPECIFIC CODE NOTES

- FIRE PROTECTION REQUIREMENTS**
- PENETRATIONS IN WALLS REQUIRING PROTECTED OPENINGS MUST BE FIRE STOPPED WITH AN APPROVED MATERIAL.
 - CONDUITS MAY PENETRATE WALLS OR PARTITIONS, PROVIDED THEY ARE FIRE STOPPED.
 - OPENINGS FOR STEEL ELECTRICAL BOXES NOT EXCEEDING 16 SQUARE INCHES ARE PERMITTED PROVIDED OPENINGS DO NOT AGGREGATE MORE THAN 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL OR PARTITION.
 - OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITIONS MUST BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
 - LIGHT FIXTURES AND OTHER APPARATUS INSTALLED IN AN ACOUSTICAL CEILING GRID SHALL BE INDEPENDENTLY SUPPORTED.
 - RECESSED LIGHTING FIXTURES INSTALLED IN FIRE RATED CEILING ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE ULC FIRE RESISTANCE DIRECTORY, AND SHALL INCLUDE A FIRE RATED ENCLOSURE INSTALLED OVER THE FIXTURE THAT MEETS THE REQUIREMENTS OF THE ULC FIRE RESISTANCE DIRECTORY.

ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (SP, 3P, 4P, ETC.)	DCP	DOMESTIC WATER CIRCULATING PUMP	HTG	HEATING	MW	COORDINATED IN MILLWORK	STA	STATION
A	AMPERE	DEPT	DEPARTMENT	HTR	HEATER	NCA	NORMALLY CLOSED	SURF	SERVICE MOUNTED
AC	ABOVE COUNTER OR AIR CONDITIONER	DET	DETAIL	HV	HIGH VOLTAGE	NCC	NATIONAL ELECTRICAL CODE	SWB	SWITCHBOARD
ACLG	ABOVE CEILING	DISC	DISCONNECT	HWC	HUMIDIFYING, VENTILATING AND AIR CONDITIONING	NEM	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION	SYM	SYMMETRICAL
ADD	AUTOMATIC DOOR OPENER	DIST	DISTRIBUTION	HWP	HYDROIC WATER PUMP	NS	NON-FUSED SAFETY	SYST	SYSTEM
AMP	AMP FRAME	DN	DOWN	IC	INTERRUPTING CAPACITY	NFS	NON-FUSED SAFETY	TEL	TELEPHONE
APP	ABOVE FINISHED FLOOR	DPR	DAMPEN	IG	ISOLATED GROUND	NO	NORMALLY OPEN	TELO	TELEPHONE DATA TERMINAL
APR	ARC FAULT CIRCUIT INTERRUPTER	DR	DEDICATED CIRCUIT RECEPTACLE	IS	INTERMEDIATE METAL CONDUIT	NC	NIGHT LIGHT	TERB	TERMINAL
AHU	AIR HANDLING UNIT	DS	DOUBLE THROW	INC	INCANDESCENT	NL	NIGHT LIGHT	TR	TAMPER RESISTANT THERMIST
AL	ALUMINUM	DW	DISHWASHER	INT	INTERCOM	NLO	NORMALLY OPEN	TSTAT	THERMOSTAT
ALT	ALTERNATE	DWG	DRAWING	IPC	INTELLIGENT PARKING LOT CONTROLLER	NPF	NORMAL POWER FACTOR	TTC	TELEPHONE TERMINAL
AMP	AMPERE	EC	ELECTRICAL SUBCONTRACTOR	IR	INFRARED	OH	OVERHEAD	TV	TELEVISION
AMPL	AMPLIFIER	ELEC	ELECTRIC	IV	INTERLOCK WITH	OL	OVERLOADS	TVTC	TELEVISION TERMINAL
ANUN	ANNUNCIATOR	ELEV	ELEVATOR	JBOX	JUNCTION BOX	PA	PUBLIC ADDRESS	TYP	TYPICAL
APPROX	APPROXIMATELY	EMT	ELECTRICAL METALLIC TUBING	KV	KILOVOLT	PB	PULL BOX OR PUSHBUTTON	UC	UNDER COUNTER
AQ-STAT	AQUASTAT	EMS	ENERGY MANAGEMENT SYSTEM	KVA	KILOVOLT-AMPERE	PE	PNEUMATIC ELECTRIC	UE	UNDERGROUND ELECTRICAL
ARCH	ARCHITECT, ARCHITECTURAL	EMT	ELECTRICAL METALLIC TUBING	KVAR	KILOVOLT-AMPERE REACTIVE	PED	PEDESTAL	UG	UNDERGROUND
AS	AMP SWITCH	EP	ELECTRIC PNEUMATIC EQUIPMENT	KWH	KILOWATT HOUR	PF	POWER FACTOR	UH	UNIT HEATER
AT	AMP TRIP	EQU	ELECTRIC WATER COOLER	KW	KILOWATT	PH	PHASE	UT	UNDERGROUND TELEPHONE
ATS	AUTOMATIC TRANSFER SWITCH	EX	EXISTING	KWH	KILOWATT HOUR	PI	POST INDICATING VALVE	UTL	UTILITY
AUTO	AUTOMATIC	EXP	EXPLOSION PROOF	LCH	LOCATE OR LOCATION	PNL	PANEL	UV	UNIT VENTILATOR OR ULTRAVIOLET
AUX	AUXILIARY	FA	FIRE ALARM	LT	LIGHT	PP	POWER POLE	V	VOLT
AVG	AUDIO VISUAL	FABP	FIRE ALARM BOOSTER POWER SUPPLY PANEL	LTS	LIGHTING	PR	PARAFINITE	VA	VOLT AMPERES
BATT	BATTERY	FAN	FAN COIL UNIT	LV	LOW VOLTAGE	PRY	PRIMARY	VDT	VIDEO DISPLAY TERMINAL
BD	BOARD	FACP	FIRE ALARM CONTROL PANEL	MAX	MAXIMUM	PRJ	PROJECTION	V	VOLT
BLDG	BUILDING	FJ	FAN COIL UNIT	MAGS	MAGNETIC STARTER	PRT	POTENTIAL TRANSFORMER	VERT	VERTICAL
BMS	BUILDING MANAGEMENT SYSTEM	FIXT	FIXTURE	MIC	MONETARY CONTACT	PVC	POLYVINYL CHLORIDE (CONDUIT)	VFD	VARIABLE FREQUENCY DRIVE
BK	BREAKFAST OUTLET	FLR	FLOOR	MCC	MECHANICAL SUBCONTRACTOR	PWR	POWER	VOL	VOLUME
C	CONDUIT	FR	REFRIGERATOR	MC	MICROWAVE	QUAN	QUANTITY	W	WATT
CAB	CABINET	FUSE	FUSE	MCB	MINI CIRCUIT BREAKER	RCP	RECEPTACLE	W	WITH
CAT	CATALOG	FUS	FUSED SAFETY DISCONNECT SWITCH	MCC	MOTOR CONTROL CENTER	RECD	REQUIRED	WG	WIRE GUARD
CCTV	CABLE TELEVISION	FZ	FREEZER	MDC	MAN DISTRIBUTION CENTER	REQ	REQUIRED	WH	WATER HEATER
CB	CIRCUIT BREAKER	GA	GAUGE	MDF	MECHANICAL DISTRIBUTION FRAME	RIB	RIGID METAL CONDUIT	WO	WITHOUT
CCV	CLOSED CIRCUIT TELEVISION	GAL	GALLON	MEC	MECHANICAL SUBCONTRACTOR	RMC	RIGID METAL CONDUIT	WO	WITHOUT
CKT	CIRCUIT	GALV	GALVANIZED	MFR	MANUFACTURER	RTU	ROOF TOP UNIT	WOV	WALL OPEN
CO	COORDINATE	GEN	GENERATOR	MFS	MAIN FUSED DISCONNECT SWITCH	SC	SURFACE CONDUIT	WS	WETHERPROOF WASH
COB	COMBINATION	GFI	GROUND FAULT CIRCUIT INTERRUPTER	MH	MANHOLE	SC	SURFACE CONDUIT	WS	WETHERPROOF WASH
COMPR	COMPRESSOR	GEN	GENERATOR	MIC	MICROPHONE	SEC	SECONDARY	YMR	TRANSFORMER
CONN	CONNECTION	GFP	GROUND FAULT PROTECTOR	MNI	MINIMUM	SEP	SUITE ENTRY PHONE PANEL	XFR	TRANSFER
CONST	CONSTRUCTION	GND	GROUND	MISC	MISCELLANEOUS	SHT	SHEET		
CONT	CONTINUATION OR CONTINUOUS	GND	GROUND	MMS	MANUAL MOTOR STARTER	SIM	SIMILAR		
CONTR	CONTRACTOR	GRS	GALVANIZED RIGID STEEL (CONDUIT)	MNA	MANUAL MOTOR STARTER ASSEMBLY	SN	SOLID NEUTRAL		
CONV	CONVECTOR	GYP							