

ELECTRICAL SYMBOLS

LIGHTING SYMBOLS			SPECIAL SYSTEMS SYMBOLS			POWER SYMBOLS		
SYMBOL	DESCRIPTION	MH (UON)	SYMBOL	DESCRIPTION	MH (UON)	SYMBOL	DESCRIPTION	MH (UON)
	SINGLE POLE TOGGLE SWITCH	48" TOD		FIRE ALARM HORN TYPE SPEAKER	NOTE 5		COMBINATION SWITCH AND SIMPLEX RECEPTACLE	48" TOD
	SWITCH: SUB-LETTER INDICATES FIXTURES CONTROLLED (a)	48" TOD		FIRE ALARM FLASHING STROBE LIGHT - WALL MOUNTED	NOTE 5		COMBINATION SWITCH AND DUPLEX RECEPTACLE	48" TOD
	DOUBLE POLE TOGGLE SWITCH	48" TOD		FIRE ALARM HORN	NOTE 5		SIMPLEX RECEPTACLE	18" CTR
	THREE WAY TOGGLE SWITCH (SPOT)	48" TOD		COMBINATION FIRE ALARM HORN AND FLASHING STROBE LIGHT	NOTE 5		CIRCUIT CONCEALED IN WALLS OR CEILING SPACE: CONDUCTORS SHALL BE MINIMUM #12 AWG AND #12 AWG GROUND IN 3/4" CONDUIT (UON)	18" CTR
	FOUR WAY TOGGLE SWITCH (DPDT)	48" TOD		S - CEILING SPEAKER, F - FIRE ALARM SPEAKER			RACEWAY CONCEALED IN SLAB OR BELOW GRADE	18" CTR
	KEY OPERATED SWITCH	48" TOD		FIRE ALARM SPEAKER W/ STROBE			BRANCH CIRCUIT HOMERUN TO PANELBOARD: QUANTITY OF CIRCUITS INDICATED BY ARROWS	18" CTR
	THREE WAY DIMMER SWITCH: SUB-LETTER INDICATES FIXTURES CONTROLLED (a)	48" TOD		HORN TYPE SPEAKER			DUPLEX RECEPTACLE: CEILING MOUNTED	18" CTR
	MANUAL STARTER W/ OVERLOADS	48" TOD		MAGNETIC DOOR HOLDER			DUPLEX RECEPTACLE: PEDESTAL TYPE	18" CTR
	SWITCH W/ PILOT LIGHT	48" TOD		DIGITAL ALARM COMMUNICATOR TRANSMITTER			DUPLEX RECEPTACLE: MOUNTED ABOVE BACKSLASH OR COUNTER	18" CTR
	DIMMER SWITCH	48" TOD		FIRE ALARM ANNUNCIATOR PANEL			DUPLEX RECEPTACLE: GROUND FAULT INTERRUPTER TYPE	18" CTR
	4 BUTTON DIMMER SWITCH	48" TOD		FIRE ALARM CONTROL PANEL			DUPLEX RECEPTACLE: QFI MOUNTED ABOVE BACKSLASH OR COUNTER	18" CTR
	LOW VOLTAGE CONTROL SWITCH	48" TOD		RESCUE ASSISTANCE MASTER CONTROL PANEL	48" TOD		DUPLEX RECEPTACLE: MOUNTED HIGH	84" CTR
	MANUAL TIME SWITCH	48" TOD		RESCUE ASSISTANCE REMOTE STATION	48" TOD		DUPLEX RECEPTACLE: ISOLATED GROUND	18" CTR
	MOMENTARY CONTACT SWITCH	48" TOD		FIRE ALARM TRANSPONDER	48" TOD		DUPLEX RECEPTACLE: MULTI-OUTLET ASSEMBLY: DARK SQUARES INDICATE PREWIRED RECEPTACLE LOCATIONS	54" CTR
	SWITCH WITH WEATHERPROOF ENCLOSURE	48" TOD		DOOR SOLENOID, ELECTRIC STRIKE - LOCKING DEVICE CONNECTION POINT	48" TOD		DOUBLE DUPLEX RECEPTACLE	18" CTR
	OCCUPANCY SENSOR (CEILING & WALL MOUNTED)	48" TOD		FIRE ALARM PULL STATION	48" TOD		2 CELL MULTI-OUTLET ASSEMBLY: WITH RECEPTACLES LOCATED WHERE INDICATED	18" CTR
	VACUUM SENSOR	48" TOD		HEAT DETECTOR: E - ELEVATOR CONTROLS	48" TOD		SIMPLEX RECEPTACLE: CART RECHARGE	36" CTR
	TIME CLOCK	48" TOD		SMOKE DETECTOR (PHOTOELECTRIC): AB - AUDIBLE BASE, E - ELEVATOR CONTROLS	48" TOD		DUPLEX RECEPTACLE: CART RECHARGE	36" CTR
	RELAY	48" TOD		SMOKE DETECTOR (IONIZATION)	48" TOD		DUPLEX RECEPTACLE: PAY PHONE	54" CTR
	LIGHTING CONTACTOR	48" TOD		FIRE ALARM DUCT DETECTOR WITH RELAY	48" TOD		SPECIAL RECEPTACLE: NEMA 6-20R (20A, 2P, 3W, 208V)	18" CTR
	PHOTOCELL OR PUSHPLATE SWITCH	48" TOD		CARBON MONOXIDE DETECTOR	48" TOD		SPECIAL RECEPTACLE: NEMA 6-30R (30A, 2P, 3W, 208V)	18" CTR
	EMERGENCY SHUNT RELAY, UL 924 LISTED (CEILING MOUNTED)	48" TOD		FIRE ALARM SYSTEM ADDRESSABLE RELAY - CONTROL	48" TOD		SPECIAL RECEPTACLE: NEMA 14-20R (20A, 3P, 4W, 208/120V)	18" CTR
	LIGHTING FIXTURE: RECESSED, SURFACE, OR PENDANT MOUNTED - TYPE AS SPECIFIED	48" TOD		FIRE ALARM SYSTEM ADDRESSABLE RELAY - MONITOR	48" TOD		SPECIAL RECEPTACLE: NEMA 15-30R (30A, 3P, 4W, 208V)	18" CTR
	LIGHTING FIXTURE: 2 BALLAST	48" TOD		FIRE ALARM SYSTEM REMOTE ALARM LIGHT	48" TOD		SPECIAL RECEPTACLE: FLOOR MOUNTED, NEMA 6-20R	18" CTR
	LIGHTING FIXTURE: INDUSTRIAL	48" TOD		FLOW SWITCH CONNECTION	48" TOD		SPECIAL RECEPTACLE: FLOOR MOUNTED, NEMA 6-20R	18" CTR
	LIGHTING FIXTURE: WALL MOUNTED - TYPE AS SPECIFIED	48" TOD		TAMPERS SWITCH CONNECTION	48" TOD		SPECIAL RECEPTACLE: PEDESTAL TYPE, NEMA 6-20R	18" CTR
	LIGHTING FIXTURE: RECESSED, SURFACE, OR PENDANT MOUNTED	48" TOD		FIRE ALARM LINEAR BEAM SMOKE DETECTOR: TRANSMITTER (LBT) AND RECEIVER (LBR)	48" TOD		TELEVISION RECEPTACLE	72" CTR
	LIGHTING FIXTURE: WALL MOUNTED - TYPE AS SPECIFIED	48" TOD		FIRE FIGHTER'S TELEPHONE JACK	48" TOD		TELEVISION RECEPTACLE	18" BFC
	WALL WASHER	48" TOD		MONITOR SYSTEM JUNCTION BOX	36" CTR		CLOCK HANGER OUTLET	84" CTR
	ADJUSTABLE WALL WASHER	48" TOD		AMPLIFIER	48" TOD		PROGRAM CLOCK OUTLET: SINGLE FACE, DOUBLE FACE	84" CTR
	LIGHTING FIXTURE ON EMERGENCY OR NIGHT LIGHT CIRCUIT (NL)	48" TOD		KEYPAD	48" TOD		EMERGENCY POWER OFF SWITCH	48" TOD
	EMERGENCY BATTERY PACK: W/ NUMBER OF HEADS INDICATED	48" TOD		CARD READER	48" TOD		JUNCTION BOX	48" TOD
	EMERGENCY BATTERY PACK: W/ REMOTE HEADS	48" TOD		DOOR ALARM CONTACT	48" TOD		JUNCTION BOX - WALL MOUNTED	18" TOD
	REMOTE EMERGENCY HEAD	48" TOD		ROUGH-IN JUNCTION BOX FOR CCTV CAMERA	48" TOD		EQUIPMENT CONNECTION AS NOTED	48" TOD
	EMERGENCY BATTERY PACK: SEMI RECESSED, CEILING MOUNT	48" TOD		PUSH BUTTON PLATE	48" TOD		EQUIPMENT CONNECTION AS NOTED - WALL MOUNTED	48" TOD
	EXIT SIGN: CEILING OR PENDANT MOUNTED (SHADED PORTION INDICATES FACE)	48" TOD		TELEVISION ANTENNA OUTLET	18" CTR		HEATER CONNECTION - NUMBER INDICATES KILOWATTS (KW)	48" TOD
	EXIT SIGN: WALL MOUNTED - END, BACK	48" TOD		CABLE TV OUTLET	18" CTR		HEATER - CEILING MOUNTED	48" TOD
	EXIT SIGN: W/ DIRECTIONAL ARROWS	48" TOD		TELEVISION SYSTEM SPLITTER - 2 WAY, 4 WAY	18" CTR		CLOSE CIRCUIT BREAKER	48" TOD
	POLE MOUNTED LIGHTING FIXTURE: SINGLE HEAD, DOUBLE HEAD	48" TOD		A/V CREDENZA LOCATION	48" TOD		NON-FUSED DISCONNECT SWITCH: 30A (UON)	48" TOD
	POLE MOUNTED LIGHTING FIXTURE: SINGLE, POLE TOP	48" TOD		A/V INPUT PLATE	48" TOD		FUSED DISCONNECT SWITCH: FUSE SIZE AS INDICATED (40A)	48" TOD
	LIGHTING POLE (SPORTS)	48" TOD		A/V IN-WALL RACK	48" TOD		MAGNETIC MOTOR STARTER	48" TOD
				A/V MONITOR TV	48" TOD		COMBINATION MAGNETIC MOTOR STARTER: ABBREVIATION INDICATES TYPE - FVNR, FVR, RVAT, 2S1W, 2S2W, SST	48" TOD
				A/V SCREEN CONTROL PANEL	48" TOD		VARIABLE FREQUENCY CONTROLLER W/ FUSED DISCONNECT SWITCH	48" TOD
				A/V SCHEDULE PANEL	48" TOD		VARIABLE FREQUENCY DRIVE W/ DISCONNECT SWITCH	48" TOD
				A/V SIGNAGE TV	48" TOD		MOTOR: NUMERALS (IF SHOWN) INDICATE HP	48" TOD
				A/V TOUCH PANEL	48" TOD		GENERATOR: NUMERALS (IF SHOWN) INDICATE KW	48" TOD
				DATA/TELEPHONE OUTLET: CEILING MOUNTED	18" CTR		MANUAL MOTOR STARTER W/ THERMAL OVERLOADS	48" TOD
				TELEPHONE OUTLET	18" CTR		MOTOR SWITCH	48" TOD
				DATA OUTLET	18" CTR		MECHANICAL EQUIPMENT CONNECTION - WITH MOTOR	48" TOD
				TELEPHONE OUTLET, WALL MOUNTED	54" CTR		MECHANICAL EQUIPMENT CONNECTION - NO MOTOR	48" TOD
				TELEPHONE OUTLET, EMERGENCY	54" TOD		CONTROL PANEL: TYPE AS INDICATED	48" TOD
				DATA/TELEPHONE OUTLET: UNSHADED AREA - DATA, SHADED AREA - VOICE NUMERALS INDICATE QUANTITY OF WIRED JACKS	18" CTR		MOMENTARY CONTACT START-STOP PUSHBUTTON STATION	48" TOD
				TELEPHONE OUTLET, FLOOR MOUNTED	48" TOD		MAINTAINED CONTACT START-STOP PUSHBUTTON STATION	48" TOD
				DATA/TELEPHONE OUTLET: FLOOR MOUNTED: UNSHADED AREA - DATA, SHADED AREA - VOICE NUMERALS INDICATE QUANTITY OF WIRED JACKS	18" CTR		MAINTAINED CONTACT EMERGENCY STOP PUSHBUTTON STATION	48" TOD
				COMBINATION POWER & TELEPHONE OUTLET, FLOOR MOUNTED	48" TOD		BRANCH PANELBOARD	90" TOD
				COMBINATION POWER & DATA OUTLET, FLOOR MOUNTED	48" TOD		DISTRIBUTION PANELBOARD	90" TOD
				COMBINATION POWER & DATA/TELEPHONE OUTLET, FLOOR MOUNTED	48" TOD		TRANSFORMER, CONCRETE PAD MOUNTED	48" TOD
				WIRELESS ACCESS POINT	48" TOD			

ELECTRICAL ABBREVIATIONS

NOTE: THIS IS A STANDARD ABBREVIATION LIST. SOME ABBREVIATIONS MAY NOT APPEAR ON THE ACCOMPANYING DRAWINGS.

SYMBOL	DESCRIPTION	MH (UON)	SYMBOL	DESCRIPTION	MH (UON)
2S1W	2 SPEED SINGLE WINDING		LA	LIGHTNING ARRESTOR	
2S2W	2 SPEED DOUBLE WINDING		LC	LIGHTING CONTACTOR	
A	AMP		LP	LIGHTING PANEL	
AC	AIR CONDITIONING		LRA	LOCKED ROTOR AMPERES	
AC	ALTERNATING CURRENT		LTG	LIGHTNING	
AFCI	ARC FAULT CIRCUIT INTERRUPTER		LTNG	LIGHTNING	
AFF	ABOVE FINISHED FLOOR				
AFG	ABOVE FINISH GRADE				
AHU	AIR HANDLING UNIT		MTV	MASTER ANTENNA TELEVISION	
AIC	AMPS INTERRUPTING CAPACITY		MCB	MAIN CIRCUIT BREAKER	
ALT	ALTERNATE		MCC	MOTOR CONTROL CENTER	
ANN	ANNUNCIATOR		MEL	METAL HALIDE	
APPROX	APPROXIMATELY		MH	MANHOLE, MOUNTING HEIGHT	
ARCH	ARCHITECT		MLO	MAIN LUGS ONLY	
ATC	AUTOMATIC TEMPERATURE CONTROL		MSF	MOTOR STARTER PANEL	
ATS	AUTOMATIC TRANSFER SWITCH		MTD	MOUNTED	
AV	AUDIOVISUAL		MV	MERCURY VAPOR	
AWG	AMERICAN WIRE GAUGE		NC	NORMALLY CLOSED	
BAS	BUILDING AUTOMATION SYSTEM		NEC	NATIONAL ELECTRIC CODE	
BFC	BELOW FINISHED CEILING		NFSS	NON-FUSED SAFETY SWITCH	
BFG	BELOW FINISHED GRADE		NO	NUMBER, NORMALLY OPEN	
BLOG	BUILDING		OC	ON CENTER	
BOD	BOTTOM OF DEVICE		OCFI	OWNER FURNISHED CONTRACTOR INSTALLED	
C	CONDUIT		OFDI	OWNER FURNISHED EQUIPMENT INSTALLED	
CND	CABLE TELEVISION		OH	OVERHEAD	
CATV	CIRCUIT BREAKER				
CB	CIRCUIT BREAKER				
CCTV	CLOSED CIRCUIT TELEVISION				
CKT, CCT	CIRCUIT		P	POLE	
CL	CURRENT LIMITING		PS	PUSHBUTTON	
CLQ	CEILING		PF	POWER FACTOR	
CONN	CONNECT		PFCC	POWER FACTOR CORRECTION	
CPT	CONTROL POWER TRANSFORMER		PL	POTENTIAL TRANSFORMER	
CT	CURRENT TRANSFORMER		PLC	PROGRAMMABLE LOGIC CONTROLLER	
CTR	CENTER		PLM	PANEL	
CU, CO	COPPER		PN	PUMP	
CX	CONNECT TO EXISTING		PP	PAIR	
DC	DIRECT CURRENT		PR	PRINTER	
DISC	DISCONNECT		PT	POTENTIAL TRANSFORMER	
DN	DOWN		PVC	POLYVINYL CHLORIDE	
DPT	DISTRIBUTION PANEL		PH	PHASE	
DRP	DRIP TRAY		QTY	QUANTITY	
DPST	DOUBLE POLE SINGLE THROW		RCS	REMOTE CONTROL SWITCH	
DPST	DOUBLE POLE SINGLE THROW		REC	RECEPTACLE	
DRIP	DRIP TRAY		RECP	RECEPTACLE	
DRIP	DRIP TRAY		REQD	REQUIRED	
DRIP	DRIP TRAY		RFI	RADIO FREQUENCY INTERFERENCE	
DRIP	DRIP TRAY		RGS	RIGID GALVANIZED STEEL	
DRIP	DRIP TRAY		RIL	RUNNING LOAD AMPERES	
DRIP	DRIP TRAY		RM	ROOM	
DRIP	DRIP TRAY		RVAT	REDUCED VOLTAGE AUTO TRANSFORMER	
DRIP	DRIP TRAY		EX	EXISTING	
DRIP	DRIP TRAY		SC	SURGE CAPACITOR	
DRIP	DRIP TRAY		SEC	SECONDARY	
DRIP	DRIP TRAY		SN, SN	SOLID NEUTRAL	
DRIP	DRIP TRAY		SP	SURGE PROTECTION	
DRIP	DRIP TRAY		SPD	SURGE PROTECTION DEVICE	
DRIP	DRIP TRAY		SPT	SINGLE POLE DOUBLE THROW	
DRIP	DRIP TRAY		SS	SAFETY SWITCH	
DRIP	DRIP TRAY		SST	SOLID STATE	
DRIP	DRIP TRAY		ST	SINGLE THROW	
DRIP	DRIP TRAY		SW	SWITCH	
DRIP	DRIP TRAY		SWBD	SWITCHBOARD	
DRIP	DRIP TRAY		TBR	TO BE REMOVED	
DRIP	DRIP TRAY		TC	TIME CLOCK	
DRIP	DRIP TRAY		TEL, TELE	TELEPHONE	
DRIP	DRIP TRAY		TH	TUNGSTEN HALOGEN	
DRIP	DRIP TRAY		TOC	TOP OF CABINET	
DRIP	DRIP TRAY		TOO	TOP OF DEVICE	
DRIP	DRIP TRAY		TRNS	TRANSFORMER	
DRIP	DRIP TRAY		XFMR	TRANSFORMER	
DRIP	DRIP TRAY		TWB	TELEPHONE TERMINAL BOARD	
DRIP	DRIP TRAY		TW	TWISTED	
DRIP	DRIP TRAY		TYP	TYPICAL	
DRIP	DRIP TRAY		UCB	UNIT CIRCUIT BREAKER	
DRIP	DRIP TRAY		UG	UNDERGROUND	
DRIP	DRIP TRAY		UH	UNIT HEATER	
DRIP	DRIP TRAY		UON	UNLESS OTHERWISE NOTED	
DRIP	DRIP TRAY		UV	UNIT VENTILATOR	
DRIP	DRIP TRAY		V	VOLTS	
DRIP	DRIP TRAY		VFC	VARIABLE FREQUENCY CONTROLLER	
DRIP	DRIP TRAY		VFD	VARIABLE FREQUENCY DRIVE	
DRIP	DRIP TRAY		W	WATTS, WIRE	