

















VA SYMBOL:	LIST DESCRIPTION:
	<p>CARD ACCESS READER; LETTER INDICATES AS FOLLOWS: M= MOUNT C=CEILING D=DESK F=FLUSH H=HIDDEN M=MULLION P=PEDESTAL R=RACK S=SURFACE W=WALL T=TECHNOLOGY/TYPE B=BARCODE F=ELEVATOR FLOOR CALL H=ELEVATOR HALL CALL M=MAG STRIP P=PROXIMITY S=SMART CARD T=TOKEN SK=SMART CARD/KEYPAD K=KEYPAD BIO=BIOMETRIC FINGER PRINT</p>
	<p>MOTION DETECTOR; LETTER INDICATES AS FOLLOWS: M= MOUNT C=CEILING D=DESK F=FLUSH H=HIDDEN M=MULLION P=PEDESTAL R=RACK S=SURFACE W=WALL E=EXISTING T=TECHNOLOGY/TYPE D=DUAL TECHNOLOGY IR=INFRARED M=MICROWAVE U=ULTRASONIC X=REQUEST-FOR-EXIT E=EXISTING</p>
	<p>PUSH BUTTON; LETTER INDICATES AS FOLLOWS: M= MOUNT C=CEILING D=DESK F=FLUSH H=HIDDEN M=MULLION P=PEDESTAL R=RACK S=SURFACE W=WALL T=TECHNOLOGY/TYPE B=BELL PUSH D=DURESS P=PANIC R=DOOR RELEASE X=REQUEST-FOR-EXIT A=ASSIST</p>
	<p>SECURITY ACCESS, VIDEO CAMERA WITH LENS M = MOTION DETECTOR PZ = MOTION DETECTOR WITH PAN AND ZOOM PTZ = MOTION DETECTOR WITH PAN, TILT, AND ZOOM</p>
	DOOR ACCESS CONTROL CONNECTIONS
	DOOR CONTACT, IF DOUBLE DOORS, TWO CONTACTS ARE PRESENT
	DOOR CONTACT WITH AUXILIARY DEVICE
	DOOR CONTACT
	<p>T=TYPE 2 = AUDIBLE ANNUNCIATOR 3 = DOUBLE DOORS WITH AUDIBLE ANNUNCIATOR 4 = AUTOMATIC DOOR WITH AUDIBLE ANNUNCIATOR 5 = ROOF HATCH WITH AUDIBLE ANNUNCIATOR 6 = OVERHEAD DOOR WITH AUDIBLE ANNUNCIATOR 7 = READER WITH AUDIBLE ANNUNCIATOR 8 = AUDIBLE ANNUNCIATOR WITH KEYSWITCH BYPASS</p>
	<p>AUDIO DEVICE; LETTER INDICATES AS FOLLOWS: M= MOUNT C=CEILING D=DESK F=FLUSH H=HIDDEN M=MULLION P=PEDESTAL R=RACK S=SURFACE W=WALL T=TECHNOLOGY/TYPE B=BELL C=CHIME H=HORN K=KLAXON L=LISTEN-IN M=MICROPHONES-SOUNDER S=SPEAKER Z=BUZZER</p>
	<p>ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS: M= MOUNT C=CEILING D=DESK F=FLUSH H=HIDDEN M=MULLION P=PEDESTAL R=RACK S=SURFACE W=WALL T=TECHNOLOGY/TYPE D=DEADBOLT H=HYBRID L=LATCH SETM=MAGNETIC S=STRIKE</p>
	<p>KEYPAD DEVICE; LETTER INDICATES AS FOLLOWS: M= MOUNT C=CEILING D=DESK F=FLUSH H=HIDDEN M=MULLION P=PEDESTAL R=RACK S=SURFACE W=WALL</p>
	OUTLET, COMBINATION TELEPHONE/DATA COMMUNICATION
	OUTLET TELEPHONE; LETTER INDICATES AS FOLLOWS: J = JACK TYPE W = WALL TYPE
	OUTLET DATA ONLY
	<p>OUTLET, TELEVISION BLANK = 4 11/16" [119mm] MASTER ANTENNA OUTLET BOX W/BLANK COVER, MTD. 18" [457mm] AFF UNLESS OTHERWISE NOTED. C = CAMERA (CCTV SYSTEM), MTD 18" [457mm] AFF M = MONITOR (CCTV SYSTEM). A = ANTENNA</p>

TECHNOLOGY ABBREVIATIONS

A/E	ARCHITECT/ENGINEER	G OR GND	GROUND OR GENERATOR
ACC	ACCESSIBLE	GEN	GENERATOR
ADDL	ADDITIONAL	GTB	GROUND TERMINAL BOX
ADJ	ADJACENT, ADJOINING		
AFC	ABOVE FINISHED COUNTER, AUTOMATIC FREQUENCY CONTROL, OR AVAILABLE FAULT CURRENT	HT	HEIGHT
		HZ	HERTZ
AFF	ABOVE FINISHED FLOOR	IMC	INTERMEDIATE METAL CONDUIT
AFG	ABOVE FINISHED GRADE	IR	INFRARED
AHJ	AUTHORITY HAVING JURISDICTION		
ALT	ALTERNATE	J-BOX	JUNCTION BOX
AMB OR A	AMBIENT		
ARCH	ARCHITECT	LED	LIGHT EMITTING DIODE
AUTO	AUTOMATIC	LF	LINEAR FEET (FOOT)
AV	AUDIO VISUAL	LP	LIGHT POLE
		LT	LIGHT
BAT	BATTERY	LTG	LIGHTING
BC	BARE COPPER	LTNG	LIGHTNING
BD	BOARD	LV	LOW VOLTAGE
BFF	BELOW FINISH FLOOR		
BIL	BASIC INSULATION LEVEL	MATV	MASTER ANTENNA TELEVISION
BLDG	BUILDING		SYSTEM
BRKR	BREAKER	MAX	MAXIMUM
BY P	BY PASS	MC	METAL-CLAD
		MECH	MECHANICAL
C	CONDUIT	MH	MANHOLE
CAB	CABINET	MIN	MINIMUM
CALC	CALCULATE	MT	MOUNT
CAP	CAPACITY	MTD	MOUNTED
CAT	CATALOG	MTG	MOUNTING
CATV	COMMUNITY ANTENNA TELEVISION		
CCR	CONTROL CONTACTOR	NA	NOT APPLICABLE
CD	CLOSED CIRCUIT TELEVISION	NEC	NATIONAL ELECTRICAL CODE
CCTV	CONSTRUCTION DOCUMENTS	NEMA	NATIONAL ELECTRICAL
CF	CONTRACTOR FURNISHED		MANUFACTURERS ASSOCIATION
CF/Ci	CONTRACTOR	NEUT OR	NNEUTRAL
	FURNISHED/CONTRACTOR INSTALLED	NFPA	NATIONAL FIRE PROTECTION
CF/OI	CONTRACTOR FURNISHED/OWNER		ASSOCIATION
	INSTALLED	NIC	NOT IN CONTRACT
CFE	CONTRACTOR FURNISHED EQUIPMENT	NO	NORMALLY OPEN
CKT	CIRCUIT	NS	NO SCALE
CLG	CEILING	NTS	NOT TO SCALE
CMU	CONCRETE MASONRY UNIT		
COAX	COAX CABLE	OC	ON CENTER
COMM	COMMUNICATION	OD	OUTSIDE DIAMETER
COMP	COMPARTMENT		
CONC	CONCRETE	P	POLE
CONT	CONTINUE	PA	PUBLIC ADDRESS
CONTR	CONTRACTOR	PB	PANELBOARD, PULL BOX, OR
COORD	COORDINATE		PUSHBUTTON
CPT	CONTROL POWER TRANSFORMER	PBPU	PREFABRICATED BEDSIDE PATIENT
CRI	COLOR RENDERING INDEX		UNIT
CTV	CABLE TELEVISION	PED	PEDESTAL
CU	COPPER	PEND	PENDANT
CU FT	CUBIC FEET	PNL	PANEL
CUR	CURRENT	PVC	POLYVINYL CHLORIDE (PLASTIC)
		PWR	POWER
DB	DECIBEL OR DIRECT BURIAL		
DC	DIRECT CURRENT	RCP	REFLECTED CEILING PLAN
DEG C	DEGREES CELSIUS	REC	RECESSED
DEG F	DEGREES FAHRENHEIT	RECPT	RECEPTACLE
DEM	DEMOLITION	RGS	RIGID GALVANIZED STEEL
DIAG	DIAGRAM	RM	ROOM
DISC	DISCONNECT	REQD	REQUIRED
DISTR	DISTRIBUTION		
DISTR PNL	DISTRIBUTION PANEL	SATV	SATELLITE ACCESS TELEVISION
DN	DOWN	SF	SQUARE FOOT (FEET)
DPDT	DOUBLE POLE, DOUBLE THROW	SHT	SHEET
DPST	DOUBLE POLE, SINGLE THROW	SI	INTERNATIONAL SYSTEM OF UNITS
DRSW	DOOR SWITCH	SPEC	SPECIFICATION
DWG	DRAWING	SPST	SINGLE POLE, SINGLE THROW
		SURF	SURFACE
EC	EMPTY CONDUIT	SW	SWITCH
EG	EQUIPMENT GROUND		
EL	ELEVATION	TC	TIME CLOCK
ELEC	ELECTRIC OR ELECTRICAL	TEL	TELEPHONE
ELEV	ELEVATOR	TP	TWISTED PAIR
EMCP	EMERGENCY MONITORING CONTROL	TPS	TWISTED PAIR SHIELDED
	PANEL	TTB	TELEPHONE TERMINAL BOARD
EMER	EMERGENCY	TV	TELEVISION
EMI	ELECTROMAGNETIC INTERFERENCE	TYP	TYPICAL
EMT	ELECTRICAL METALLIC TUBING		
ENCL	ENCLOSURE	UFD	UNDERFLOOR DUCT
EPO	EMERGENCY POWER OFF	UGND	UNDERGROUND
EPRF	EXPLOSION PROOF	UL	UNDERWRITERS LABORATORY
ESMT	EASEMENT	UON	UNLESS OTHERWISE NOTED
EWC	ELECTRIC WATER COOLER	UPS	UNINTERRUPTIBLE POWER SUPPLY
EWH	ELECTRIC WATER HEATER	UTIL	UTILITY
EXIST	EXISTING		
		W	WATT
FC	FOOTCANDLE	WP	WEATHERPROOF
FIXT	FIXTURE		
FLEX	FLEXIBLE METALLIC CONDUIT	XFER	TRANSFER
FOUTT	TELEPHONE FLOOR OUTLET	XFMR	TRANSFORMER
FT	FEET OR FOOT		

GENERAL TELECOMMUNICATIONS NOTES:

1. "1/TN301" INDICATES DETAIL NUMBER / SHEET NUMBER.
2. "(SEC/1)" INDICATES MATERIAL LIST ITEM IN HEX SYMBOL.
3. " " INDICATES KEYED NOTE USED TO DESCRIBE ADDITIONAL INFORMATION OF WORK REQUIRED, SPECIFIC TO THE SHEET AND/OR DETAIL IT IS SHOWN WITH.

4. ABBREVIATION KEY:

T.C.	TELECOMMUNICATIONS CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
AFF	ABOVE FINISH FLOOR
C	CONDUIT
TYP	TYPICAL
+#"	MOUNTING HEIGHT FROM FINISHED FLOOR TO CENTERLINE
O&T	OFFICE OF INFORMATION AND TECHNOLOGY
FMS	FACILITIES MANAGEMENT SERVICE

5. MOUNTING SUBSCRIPT KEY:

1. TELECOMMUNICATION OUTLETS
A MOUNT ABOVE COUNTER (+6" TO CENTERLINE ABOVE COUNTER OR BACKSPLASH)

2. A SLASH IS USED BETWEEN TWO SUBSCRIPTS ie: A/H

3. REFER TO MATERIAL LIST AND SPECIFICATIONS FOR FULL DESCRIPTIONS AND MANUFACTURERS OF ALL DEVICES.

6. LINE TYPE KEY:

_____	NEW WORK BY THIS CONTRACTOR (DARK SOLID LINE)
— — — — —	NEW WORK UNDERFLOOR OR UNDERGROUND BY THIS CONTRACTOR (DARK LONG DASHED LINE)
_____	NEW WORK BY OTHERS AND/OR EXISTING TO REMAIN (LIGHT SOLID LINE)
-----	EXISTING TO BE REMOVED BY THIS CONTRACTOR (DARK SHORT DASHED LINE)

TELECOMMUNICATIONS INSTALLATION NOTES:

3. THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE U.F.A.S. (UNIFORM FEDERAL ACCESSIBILITY STANDARDS) AND N.E.C. (NATIONAL ELECTRICAL CODE).
2. CONCEAL ALL CONDUIT IN WALLS, PARTITIONS, ABOVE CEILING, AND IN FLOOR SLAB, ETC. UNLESS OTHERWISE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS. CONDUIT IN MECHANICAL ROOMS, AND STORAGE ROOMS WITHOUT CEILINGS MAY BE EXPOSED ON BUILDING STRUCTURE.
3. BOXES LOCATED ON OPPOSITE SIDES OF NON-RATED WALLS SHALL BE OFFSET A MINIMUM OF 6" HORIZONTALLY. BOXES ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE OFFSET A MINIMUM OF 24" HORIZONTALLY. "THRU-THE-WALL" BOXES SHALL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
4. FLUSH MOUNT ALL TELECOMMUNICATION OUTLETS AT +18" FROM FLOOR (CENTERLINE DIMENSION), EXCEPT WHERE OTHERWISE NOTED. OUTLETS MAY BE SURFACE MOUNTED WHEN CONDUIT IS SPECIFIED EXPOSED.
5. CONTRACTOR SHALL VERIFY ALL FURNITURE, MODULAR FURNITURE AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL PLANS, ELEVATIONS AND REVIEWED SHOP DRAWINGS. PRIOR TO MAKING THE ACTUAL TELECOMMUNICATIONS INSTALLATION THIS CONTRACTOR SHALL ADJUST OUTLETS OR CONNECTION LOCATIONS TO ACCOMMODATE FURNITURE AND/OR EQUIPMENT.
6. TELECOMMUNICATIONS EQUIPMENT SHALL BE MOUNTED TO ALLOW ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL MOUNTING OF TELECOMMUNICATION DEVICES ON EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR SHALL BE APPROVED IN ADVANCE BY THE OTHER CONTRACTOR.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
8. ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS, REFER TO 27 05 03 AND 28 05 03.
9. CONTRACTOR SHALL REMOVE AND REINSTALL ALL CEILING TILES AS REQUIRED FOR THE EXECUTION OF TELECOMMUNICATIONS WORK THAT IS OUTSIDE THE CONTRACT LIMITS OF CONSTRUCTION. CONTRACTOR SHALL REPLACE CEILING TILES WITH IDENTICAL MATERIAL WHERE DAMAGED BY THIS CONTRACTOR.
10. ALL UNDERGROUND CONDUIT SHALL BE ROUTED AROUND BIO-RETENTION AREAS AND AREAS DESIGNATED FOR TREES.
11. IN TELECOM ROOMS, ALL BACKBOARDS SHALL BE 3/4" PLYWOOD AND SHALL BE FIRE RETARDANT TREATED.
12. ALL WALLS IN TELECOM ROOMS SHALL BE 2-HOUR FIRE RATED.
13. ALL TELECOM INSTALLATIONS [HEAD ENDS], MUST MEET THE OSHA STANDARD FOR EQUIPMENT SPACING OF 3 FEET TOTAL RADIUS PER EACH HEAD END INSTALLED.
14. JACKET FOR ALL SECURITY NETWORK CABLES SHALL BE BLACK.
15. CONTRACTOR SHALL INSTALL HATCHES WHERE REQUIRED, FOR CABLE INSTALLATION IN HARD CEILINGS.
16. CONTRACTOR SHALL COMPLY WITH OWNER DOCUMENT IRM-70 FOR TELECOMMUNICATIONS STANDARDS AND SHALL FURNISH AND INSTALL PATCH PANELS WHERE REQUIRED FOR CONNECTION OF DEVICES TO OWNER VOICE AND DATA NETWORK.

[illegible]