

**Refer to ELAC & South Gate Educational Center- Campus Standards Matrix**

**Note:** Campus preferences are indicated first followed by additional manufacturers which are being considered by the College and/or the District).

This Campus Standard Matrix is to be used as a guide. In case there is a valid need to deviate from these Standards, a request will need to be submitted in writing and a formal written approval will be required by the Campus Maintenance & Operations (M&O) and/or IT Department.

This is a living document and is updated regularly; therefore, one should check with the M&O Department for the most updated version before proceeding with usage of this document.

These design Standards are not to be deviated from and for the purpose of Value Engineering unless formally approved by M&O or IT.

	STANDARD	CAMPUS ALTERNATIVES
1	<b>DIV. 07: THERMAL &amp; MOISTURE PROTECTION</b>	
2	<b>ROOFING</b>	
3	<b>GENERAL</b>	Modified Bitumen 30-yr Warranty, 4- ply. Build-up roof multi-ply Garland, Tremco or Johns Manville Corporation,
4	<b>FIREPROOFING</b>	
5	<b>GENERAL</b>	Monokote, KAFCO, PDI
6	<b>DIV. 08: OPENINGS</b>	
7	<b>DOORS &amp; FRAMES</b>	Metal doors and frames required
8	<b>HARDWARE</b>	
9	<b>KEYS</b>	BEST SFIC Cores 1CK7B21-626, BEST 1AK1B21 NiAg Key Blanks
10	<b>CYLINDERS</b>	BEST 1E72, 1E74 (sole-source allowed) <b>NOTE:</b> If Lockdown type hardware, then use Schlage "F" on the inside.
11	<b>LEVER LOCKSETS</b>	SCHLAGE "ND" RHODES, L9000-06-626 finish is satin chrome (ND Cylindrical "L: lock-mortise)
12	<b>CABINET LOCKSETS</b>	OLYMPUS <b>NOTE:</b> Required at all cabinet door & drawers
13	<b>HINGES</b>	HAGER, IVES, MARKAR 300 SERIES, CONTINUOUS SS
14	<b>EXIT DEVICES</b>	VON DUPRIN-98 SERIES, CD, XP @ EXTERIOR AX ( ADA Panic Device series)
15	<b>KEY REMOVABLE MULLION POST for double door exit device opening</b>	(NON FIRE) VON DUPRIN KR4954, (FIRE RATED) VON DUPRIN KR9954
16	<b>CLOSER</b>	LCN-4040 EDA or HEDA, XP, Swing to Wall
17	<b>ADA COMPLIANT PEDESTRIAN SWING DOOR OPERATOR</b>	Record 8100 series automatic door opener, surface mount installed application, for doors weighing less than 350 LBS.
18	<b>CARD READER</b>	HID-ICLASS SE 13.56 MGHZ, R40 Typ. For iClass card (sole-source). Requires ICLASS Standard Capability, 920NTNTEK00000 (typical model) Able to work with the Lenel System <b>NOTE:</b> Required at all building entries, classroom doors (if more than one door, then one required), all building utility rooms (electrical, mechanical, BDF/IDF, Janitorial closets), staff restrooms, staff/faculty offices.
19	<b>ELECTRIC STRIKES: RIM EXIT DEVICES</b>	HES -9500 FRAME MOUNTED, HES-9600 MULLION MOUNTED

20	<b>ELECTRIC CYLINDRICAL LOCKS</b>	HES 8300 ,field modification, <b>NOTE:</b> NO cutting Fire Door frame shall be PERMITTED
21	<b>ELECTRIC STRIKES : MORTISE LOCKS</b>	HES 1006, field modification, <b>NOTE:</b> NO cutting Fire Door frame shall be PERMITTED
22	<b>KEY SYSTEMS</b>	BEST KABA PEAKS 7-PIN
23	<b>DIV. 09: FINISHES</b>	
24	<b>FLOOR/ WALL FINISHES</b>	
25	<b>CARPET</b>	Tandus 36X36 (District contract in effect)
26	<b>RESILIENT FLOORING</b>	FORBO, Estri, <i>Armstrong, Mannington, Parterre, International</i>
27	<b>CARPET MODULES</b>	Tandus 36X36 (District contract in effect)
28	<b>RESILIENT TILES/SHEET FLOORING</b>	FORBO, Estri, <i>Armstrong, Mannington, Parterre, International</i>
29	<b>HARD SURFACE (GYMNASIUM)</b>	MONDO, <i>Aacer, Noble House, Teraflex,</i>
30	<b>WALL BASE</b>	Roppe, <i>Burke</i>
31	<b>RAISED FLOORING SYSTEMS</b>	Tate, <i>Interface AR, Maxcess, Smith</i>
32	<b>PORCELAIN TILE-CERAMIC</b>	Specific to design standard
33	<b>WALL COVERINGS</b>	Ultra Hide, <i>Vista Paint, Benjamin Moore</i>
34	<b>PAINT</b>	Vista, Dulux, ICI, <i>Dunn Edwards, Frazee, Sherwin Williams</i>
35	<b>COATINGS</b>	Dulux, ICI, <i>Master Coating, Technologies, Scuffmaster</i>
36	<b>CEILING SYSTEMS</b>	
37	<b>ACOUSTICAL TILE</b>	Armstrong, <i>USG, Statfor, Acousticolor 2X4</i> preferred <b>NOTE:</b> Required 2x4 tiles
38	<b>GRID SYSTEM</b>	Armstrong, <i>USG, Stratford, AcoustiColor 2X4</i> preferred
39	<b>DIV. 10: SPECIALTIES</b>	
40	<b>SOAP &amp; PAPER TOWEL DISPENSERS</b>	CLEA, <i>BRADLEY, BOBRICK</i>
41	<b>HAND DRYER</b>	BOBRICK, Trim Line-Surface-Mounted ADA dryer B-7120 (22-ga mild steel zinc plated w/ high-gloss white epoxy paint finish), Xlerator (ADA compliant), Saniflow (ADA compliant)
42	<b>BATHROOM PARTITIONS</b>	BOBRICK, Bradley, Trespa, Santana, Flush metal, Accurate <b>NOTE:</b> Required Water & Fire Resistant, Solid Color Reinforced Composite.
43	<b>RESTROOM ACCESSORIES</b>	BOBRICK, Bradley, Xlerator, American
44	<b>LOCKERS</b>	Debourgh, Lyon, Penco, Republic
45	<b>STORAGE/TRANSFER</b>	Tyga-Box System or EQUAL
46	<b>FIRE EXTINGUISHERS/ CABINET W/LOCKS</b>	
47	<b>GENERAL</b>	Larsens, Potter Roeme, JL Industries (KEY # LL24 <b>NOTE:</b> Required Semi or fully recessed cabinets
48	<b>DIV. 11: EQUIPMENT</b>	
49	<b>FOOD SERVICE EQUIPMENT</b>	Hobart, <i>Wolfe, Dwyer</i>
50	<b>KITCHEN, APPLIANCES</b>	KitchenAid, <i>Frigidaire, Samsung, Chambers,</i>

51	<b>DIV. 12: FURNISHINGS</b>	
52	<b>BLEACHERS</b>	
53	<b>INTERIOR, GYMNASIUM, TELESCOPIC, STND.</b>	Irwin Telescopic, Studisteel, Southern Bleacher Company
54	<b>WINDOW COVERING</b>	
55	SOLAR SHADE	Mecho Shade, <i>Levelor, Suntec</i>
56	BLINDS - VERTICAL/ HORIZONTAL	Levelor, <i>Rivera, Hunter-Douglas</i>
57	<b>BIKE RACK</b>	
58	GENERAL	Brandir, Cycloops (frames to be of a lockable design)
59	<b>DIV. 13: SPECIAL CONSTRUCTION</b>	
60	<b>MODULAR STRUCTURES</b>	GE, Capital, Williams Scotsman, Aurora
61	<b>DIV. 14: CONVEYING EQUIPMENT</b>	
62	<b>STANDARD ELEVATORS</b>	Mitsubishi, Thyssen Krupp (Dover), Kone, Schindler
63	<b>ELEVATOR CAMERA</b>	Sony, Panasonic, (analog) <b>NOTE:</b> Required in every elevator cab, including service elevator
64	<b>CONTROLLER</b>	MOTION CONTROLS..... <b>NOTE:</b> Required that controls are universal & no proprietary.
65	<b>ELEVATOR DOORS</b>	GAL DOOR EQUIPMENT
66	<b>ELEVATOR CAB LIGHT FIXTURE</b>	ERIM FIXTURES
67	<b>WHEELCHAIR LIFTS</b>	Mitsubishi, Thyssen Krupp (Dover), Garaventa
68	<b>EXIT STAIR EVACUATION CHAIRS</b>	Garaventa Evacuation chairs, EVACU-TRAC CD7 or better <b>NOTE:</b> Required at every exit stair, every floor.
69	<b>DIV. 21: FIRE SUPPRESSION</b>	
70	<b>HYDRANTS</b>	James Jones or EQUAL
71	<b>DIV. 22: PLUMBING</b>	
72	<b>PIPE</b>	
73	<b>DOMESTIC, /POTABLE</b>	C900 BLUE, COPPER K, #80 PVC
74	<b>UNDERGROUND WATER IRRIGATION PIPING</b>	Schedule 40 and Schedule 80 PVC ½" TO 3"
75	<b>UNDERGROUND SANITARY PIPING</b>	CAST IRON, SDR-35
76	<b>ABOVE GROUND SANITARY PIPING</b>	CAST IRON TYLER PIPE/DWV COPPER
77	<b>PIPE TUBING AND FITTINGS</b>	C-900, MEGA LUG FTGS APPROVED CI CONN FLANGE
78	<b>STEEL PIPE FUEL GAS/NATURAL GAS</b>	BLACK SCH 40 INDOOR ONLY W/ SIMILAR FTGS
79	<b>STEEL PIPE WATER OR AIR</b>	<del>Galvanized Domestic Only</del> NO SUBSTITUTE
80	<b>BRASS PIPE</b>	Red Brass, Schedule 40
81	<b>COPPER TUBING</b>	Type "K" or "TYPE L" GRADES ONLY, NO "M", No Substitutes
82	<b>BRASS SCHEDULE 40 SOLDER JOINT FTG's</b>	Domestic
83	<b>SCREWED FITTINGS</b>	Domestic
84	<b>GAS PIPING UNDERGROUND</b>	POLY PIPE, STEEL TRANSITION, YELLOW TRACER WIRE, BUTT FUSION OR SOCKET
85	<b>BUILDING DRAIN, WASTE &amp; VENT</b>	CAST IRON NO HUB, NO HUB COUPLINGS, CAST IRON, FTGS./DWV COPPER (Domestic ONLY)
86	<b>PIPE AND FITTINGS</b>	Standard D2751-88 Cast Iron, no-hub pipe and fittings (waste) (Domestic ONLY)

87	<b>PLUMBING FIXTURES</b>	
88	<b>TOILET FIXTURES (Low Flow, Viterous China)</b>	American Standard, <i>Zurn, Kohler</i> , 1.28 GPF (Sloan valves-#111-1.280ES0S-YO Royal Optima)
89	<b>SINKS</b>	American Standard, <i>Kohler, Zurn</i> (Vitreous China Lavatories)
90	<b>KITCHEN SINKS</b>	Elkay, <i>Kohler, Zurn, Franke</i> (Stainless Steel) ( or as determined acceptable by ELAC)
91	<b>SERIVCE SINKS</b>	Chicago Wall mount (Faucets & Sinks)
92	<b>URINALS (Low Flow)</b>	American Standard, <i>Sloan (vlave) Kohler (china porcelain)</i>
93	<b>URINALS (Waterless)</b>	<del>Falcon, Kohler, Sloan (or as determined acceptable by ELAC) Subject to review by ELAC</del> <del>DO NOT USW</del>
94	<b>FAUCETS</b>	Chicago/Brass Craft-automatic, OR MANUAL ONLY, NO ZURN OR SUBSTITUTE
95	<b>FLUSH VALVES - TOILETS, URINALS</b>	Sloan ONLY, MANUAL OR SENSOR...NO ZURN OR SUB, 1.28 GPF
96	<b>DOMESTIC WATER HEATER</b>	RHEEM, <i>BRADFORD WHITE</i> , Lochinvar
97	<b>CIRCULATING PUMP</b>	<i>GRUNDFOS</i> or <i>Honeywell</i> WITH EQUAL TIMERS IF NECESSARY/NO SUBSTITUTE
98	<b>PLUMBING VALVES AND ACCESSORIES</b>	
99	<b>GENERAL</b>	NIBCO, <i>Kohler, Sloan</i> , DOMESTIC PRODUCT ONLY, LEAD FREE WHERE APPLICABLE/ NO SUBSTITUTE
100	<b>EXPANSION TANKS</b>	AMTROL, <i>Watts</i>
101	<b>BACKFLOW PREVENTERS</b>	<i>Watts, Zurn/WILKINS</i>
102	<b>EXTINGUISHERS/CABINETS</b>	<i>Larsens, Potter Roeme, JL Industries</i> <b>NOTE:</b> Required Semi or fully recessed cabinets
103	<b>CLEAN OUTS</b>	<i>J.R. Smith, Zurn,</i>
104	<b>FLOOR DRAINS</b>	<i>J.R. Smith Model 2005Y (round top),</i>
105	<b>TRAP PRIMERS</b>	Sloan tail piece (use for system having low-flow fixtures) automatic or connect to flush valve
106	<b>ROOF DRAINS</b>	<i>J.R. Smith, Zurn, Josam</i>
107	<b>BALL VALVES</b>	NIBCO (BRASS, FULL PORT)
108	<b>GATE VALVES</b>	NIBCO (UNION BONNET, RAISED STEM)
109	<b>GLOBE VALVES</b>	NIBCO (BRASS)
110	<b>CHECK VALVES</b>	NIBCO (BRASS)
111	<b>VALVES( WATER, BELOW GROUND)</b>	STOCKHAM (CAST IRON FLANGED AWWA WITH OPERATING NUT)
112	<b>BACKWATER VALVES</b>	Zurn, JR Smith
113	<b>DRAIN PUMPS</b>	Well Pump, Peerless
114	<b>PRESSURE REGULATOR</b>	Watts
115	<b>CHECK VALVES for 4" or larger line</b>	Zurn
116	<b>HOSE BIBB BOX</b>	Stainless steel recessed w/ loose key handle, Acorn 8141/8102 <b>NOTE:</b> Required 2-3 exterior lockable hose bibs per elevation.
117	<b>PISTON WATER HAMMER</b>	MIFAB MWA Series
118	<b>BOILER</b>	Lockinvar, Raypack (NO Condensing Boilers)
119	<b>EMERGENCY EYEWASH &amp; SHOWER</b>	
120	<b>EMERGENCY EYEWASH &amp; SHOWERS</b>	<i>Haws, Bradley, Watersaver</i> <b>NOTE:</b> Required at every eye wash station.

121	<b>WATER FOUNTAINS</b>	
122	<b>DRINKING</b>	Haws, <i>Halsey Taylor</i> ,
123	<b>DIV. 23: HEATING, VENTILLATION &amp; AIR CONDITIONING (HVAC)</b>	(MUST HAVE BACNET CONTROL PANEL TO TALK TO CAMPUS NETWORK)
124	<b>A/C UNITS, ROOF MOUNTED</b>	(GAS ELECTRICS/HEAT PUMPS)CARRIER, YORK & TRANE, Daikin (McQuay)
125	<b>A/C UNITS WALL MOUNTED</b>	BARD, HEAT PUMPS, TRANE
126	<b>AIR HANDLERS – CUSTOM</b>	TEMTRON, UNITED METAL PRODUCTS, TRANE, ENERGY LABS, Daikin (McQuay)
127	<b>AIR HANDLERS</b>	CARRIER, YORK, TRANE, Daikin (McQuay)
128	<b>HVAC HYDRONIC CONTROL VALVE</b>	BELIMO TWO WAY
129	<b>HVAC HEATING &amp; COOLING CONTROL VALVE</b>	BELIMO PICCV TWO WAY WITH RESERVING SWITCH
130	<b>HVAC HYDRONIC PIPE FLANGE ADAPTER CONNECTIONS</b>	OMNI,
131	<b>MOTORS</b>	BALDOR, GE, DAYTON
132	<b>PUMPS</b>	PACO, BELL & GOSSETT, ARMSTRONG
133	<b>COOLING TOWERS</b>	BALTIMORE AIR COIL, <i>MARLEY</i> , <i>EVAPCO</i> (STAINLESS STEEL)
134	<b>OTHER FILTERS</b>	AMERICAN, <i>FAN &amp; TRIDERN</i> , 3-M
135	<b>BOILER CONTROLS-HOT WATER</b>	Lockinvar, <i>Raypack</i> , <i>Parker</i>
136	<b>BOILER CONTROLS-STEAM</b>	Parker
137	<b>FAN COILS DX</b>	Carrier, York, Trane,
138	<b>COMPUTER ROOM AC UNITS</b>	APC, LIEBERT, DATA AIRE
139	<b>CHILLED WATER FAN COILS</b>	Carrier, York, Trane, McQuay, Daikin
140	<b>AIR COOLED CHILLER</b>	Carrier, York, Trane, McQuay, Daikin
141	<b>CENTRIFUGAL WATER-COOLED CHILLER</b>	Carrier, York, Trane, McQuay, Daikin
142	<b>SCREW-TYPE AIR COOLED CHILLER</b>	Carrier, York, Trane, McQuay, Daikin
143	<b>SCREW-TYPE WATER COOLED CHILLER</b>	Carrier, York, Trane, McQuay, Daikin
144	<b>SCROLL-TYPE AIR COOLED CHILLER</b>	Carrier, York, Trane, McQuay, Daikin
145	<b>CHILLER-GENERAL</b>	Carrier, York, Trane, McQuay, Daikin
146	<b>ABSORBTION CHILLER</b>	Carrier, York, Trane, McQuay, Daikin
147	<b>OTHER ABSORBTION CHILLER</b>	BROAD, THERMAX
148	<b>VENTILATORS AND EXHAUST FANS</b>	COOK, GREENHECK
149	<b>FIRE SMOKE DAMPER</b>	BELIMO W/ END SWITCH TO COMMUNICATE TO EMS, <i>RUSKIN AND KRUGER</i>
150	<b>VARIABLE FREQUENCY DRIVES</b>	ABB, DANFOSS, TOSHIBA (With BACnet compatibility)
151	<b>HYDRONIC PIPING</b>	CARBON STEEL, SCH 80, INSULATED PVC PERMA PIPE, THERMACOR AND ROVANCO
152	<b>AIR CONIDITIONING THERMOSTAT</b>	TOTAL LINE, 3-HEATING/2-COOL/HEATPUM/DIGTIAL 7 DAY PROGRAMMABLE PIN P 374-2800
153	<b>THERMOSTAT LOCK BOX</b>	HONEYWELL/LARGE OPQUE/PINTG 512B1007
154	<b>DIV. 25: INTEGRATED AUTOMATION</b>	
155	<b>ENERGY MANAGEMENT SYSTEM</b>	Alerton-Climatech (sole-source)

156	<b>DIV. 26: ELECTRICAL</b>	
157	<b>ELECTRICAL FIXTURES</b>	
158	<b>INTERIOR LIGHT FIXTURES(florescent, LED, HID) No incandesce light fixture</b>	Prudential, Lithonia, HE Williams, Lightolier
159	<b>CONNECT WITH EMERGENCY LIGHTS</b>	Alertron to emergency grid
160	<b>EXIT SIGNS</b>	LED, Active Safety™, Pentico, Lithonia, Exitronix
161	<b>ELECTRONIC WIRELESS WALL CLOCKS</b>	PRIMEX ONLY NO SUB
162	<b>ELECTRICAL OUTLETS</b>	<b>NOTE:</b> Required 2-3 dedicated lockable electrical outlets per elevation.
163	<b>INTERIOR SUSPENDED LIGHTS</b>	Prudential, Lithonia, Philips
164	<b>LIGHTING/INDOOR-OUTDOOR</b>	
165	<b>VANDAL PROOF LIGHTING FIXTURES</b>	Rude, Stanco, Sequoia, BE, Lucalux, Matalux
166	<b>LANDSCAPING FIXTURES</b>	
167	<b>EXTERIOR LIGHTS-PARKING LOT</b>	LED (Lamp wattage to match existing)
168	<b>LIGHT SENSORS</b>	"Watt Stopper", LUTRON
169	<b>PARKING LOT</b>	Philips, Gardco, Gullwing LED GL 13 & GL 18
170	<b>ATHLETIC FIELD</b>	Musco, <i>Morris, Lithonia</i>
171	<b>ELECTRICAL EQUIPMENT</b>	
172	<b>MAIN SWITCHBOARD</b>	Square D, GE, Cutler Hammer. Selection to match existing
173	<b>MAIN DISTRIBUTION SWITCHBOARDS</b>	Square D, GE, Cutler Hammer. Selection to match existing
174	<b>DRY TYPE TRANSFORMERS</b>	Square D, GE, Cutler Hammer.
175	<b>MAGNETIC MOTOR STARTERS</b>	Square D, GE, Cutler Hammer.
176		Dialog Plus Controller
177	<b>SOFT START MOTOR STARTERS</b>	Square D, GE, Cutler Hammer.
178	<b>PANELBOARDS</b>	Square D, GE, Cutler Hammer.
179	<b>MCC (MOTOR CONTROL CENTERS)</b>	Square D, GE, Cutler Hammer.
180	<b>DRIVES</b>	ABB, <i>Toshiba, Square D</i>
181	<b>ELECTRICAL FINISH FACE PLATES</b>	STAINLESS FINISH PLATES
182	<b>ELECTRIC VEHICLES/ CHARGERS</b>	
183	<b>ELECTRICAL VEHICLES AND CHARGERS</b>	Taylor Dunn, <i>Honda, Club Car Precedent</i>
184	<b>CHARGER Mfr</b>	Taylor Dunn, <i>Honda, Amstron</i>
185	<b>EMERGENCY POWER SYSTEM-GRID MATRIX</b>	
186	<b>CONNECT WITH SUMP PUMPS</b>	Alertron to emergency grid
187	<b>CONNECT WITH CO2 SENSORS</b>	Alertron to emergency grid
188	<b>CONNECT WITH EMS/CMMMS</b>	Alertron to emergency grid
189	<b>EMERGENCY MANAGEMENT SYSTEM</b>	
190	<b>EMERGENCY MANAGEMENT SYSTEM</b>	Alerton-Climatech
191	<b>ENERGY MANAGEMENT SYSTEM</b>	Alerton-Climatech
192	<b>FIRE PROTECTION</b>	
193	<b>ELECTRONICS</b>	Alerton
194	<b>LIGHTING SUPPLIES</b>	
195	<b>LIGHT BULBS, FLOURESCNETS T-8's</b>	Sylvania, GE, Phillips, 4100K, Min 80CRI, (Sylvania Preferred), LED
196	<b>BALLASTS</b>	Sylvania, <i>Phillips, GE</i> (Sylvania Preferred)
197	<b>OTHER</b>	
198	<b>EMERGENCY POWER SYSTEMS</b>	
199	<b>GENERATORS</b>	Onan, Caterpillar, APC, Kohler
200	<b>UPS</b>	APC, MGE, Schneider Electric

201	<b>DIV. 27: COMMUNICATIONS</b>	
202	<b>27 05 00 COMMON RESULTS FOR COMM</b>	
203	<b>Structured Cabling System Warranty</b>	Minimum 25 year warranty
204	<b>27 05 26 GROUNDING &amp; BONDING</b>	
205	<b>Bus Bar</b>	Lyncote XIT, <i>Chatsworth, Hargar</i>
206	<b>27 05 28 PATHWAYS FOR COMM SYSTEMS</b>	
207	<b>EMT Conduits &amp; Couplings &amp; Connectors</b>	Appleton, Crouse-Hinds
208	<b>Conduit Supports</b>	Kindorf, Unistrut, Thomas & Betts
209	<b>Hangers &amp; Cable Ties</b>	Chatsworth Products, Cooper B-Line, Caddy, Mono
210	<b>Metal Outlet Boxes - Double Gang, Extra Deep</b>	Appleton, <i>Raco, Steel City</i>
211	<b>Pull Boxes and Cabinets</b>	Hoffman Enclosures, <i>Wire Guard</i>
212	<b>Cable Tray</b>	Cooper B-Line, <i>Panduit, Leviton</i>
213	<b>27 05 43 UG DUCTS &amp; RACEWAY FOR COMM</b>	
214	<b>Manholes</b>	Utility Vault (Oldcastle), <i>Jensen, Brooks</i>
215	<b>Pull boxes</b>	Utility Vault (Oldcastle), <i>Jensen, Brooks w/ Spring Loaded LID</i>
216	<b>MH/PB Hardware</b>	INWESCO products
217	<b>Conduits (Schedule 40 or Type C)</b>	Carlon, Wiremold, Panduit
218	<b>Detectable Warning Tape</b>	Carlon
219	<b>Pull, Rope 1700 lb tensile strength</b>	Carlon
220	<b>Bonding ribbon (In vaults)</b>	INWESCO Cat 12A55
221	<b>Bonding ribbon clamps (In vaults)</b>	INWESCO Cat 12A56
222	<b>Fargo Clamp</b>	INWESCO Cat 12A57
223	<b>Ground Rod</b>	INWESCO Cat 12A60
224	<b>Ground Inserts (Cast Bronze)</b>	INWESCO Cat 12H69
225	<b>Manhole Lids</b>	Alhambra Foundry, <i>OPW manhole</i>
226	<b>Manhole Ladders</b>	Alhambra Foundry - Model A-3382 w/ A3383 Support bar
227	<b>27 11 00 COMM EQUIP. ROOM FITTINGS</b>	
228	<b>Ladder Racks</b>	Chatsworth Products, <i>Homaco, Square D</i>
229	<b>Equipment Racks</b>	APC NetShelter, <i>SIEMON VERSAPOD, V600, V800, Netshelter SX, Netshelter SV</i>
230	<b>Wall-Mounted Cabinets</b>	Cooper B-Line DAMAC
231	<b>Horizontal Managers</b>	SIEMON WM - 145-5, <i>Chatsworth, Ortronics and APC</i>
232	<b>Fiber Optic Terminals (FOT's)-Housing</b>	SIEMON RIC-3-72-01, <i>SIEMON RIC 3-48-01, SIEMON RIC 3-36-01, LIGHTSTACK LS-1V-01, LS-4V-01</i>
233	<b>Fiber Terminal Adapters and Connectors</b>	SIEMON RIC-FLC6-01, <i>LIGHTSTACK LS-12-LC-5V-01, LIGHTSTACK LS-12-LC-SM-01</i>
234	<b>Plywood</b>	Arch. Wood Protection, <i>Chemco, National Plywood Industries</i>
235	<b>Fire Retardant Paint</b>	Flamort Co., Inc., <i>FireNoMore International,</i>
236		International Fire Retardants, Inc. or EQUAL
237	<b>Patch panels</b>	SIEMON ZXAS-PNL (F)-V48K, <i>TERA Z6AS-PNL (A)-U48K, ZMAX ZSPNLAV48E</i>
238	<b>Cable Tags &amp; Splice Labels</b>	3M, <i>Panduit, Tech Products</i>
239	<b>Protector Panels</b>	Circa, <i>Emerson, CommScope, Cook</i>

240	<b>27 13 00 COMM BACKBONE CABLING</b>	
241	<b>Fiber Tube Cable (OSP and Riser)</b>	Sumitomo Electric FutureFLEX or equal
242	<b>Fiber Cable - OSP and Riser</b>	Sumitomo Electric FutureFLEX ABF-50U OM4 or equal
243	<b>Copper OSP Cable</b>	General Cable, <i>Superior Essex</i> , CommScope
244	<b>Splice Cases - Outside</b>	Preformed, 3M, <i>PSI</i>
245	<b>Splice Cases - Inside</b>	Reliable, 3M
246	<b>Splice Bay &amp; Relay Labels</b>	3M, 5000 Scotchlite Decal System
247	<b>ABF Tube Clips</b>	Sumitomo Electric FutureFLEX
248	<b>27 15 00 COMM HORIZONTAL CABLING</b>	
249	<b>Station Cabling</b>	SIEMON 9T7R4E1006R1, TERA E109T7P4E1006R1, ZMAX 6AF-UTP-9A6P4A506RIA
250	<b>Jacks</b>	SIEMON Z6ASK01, TERA T7F011, ZMAX Z6ASK03
251	<b>Faceplates</b>	SIEMON, TERA, ZMAX
252	<b>Emergency Phone (Blue light)</b>	Talk-A-Phone ETP-WM & ETP-MT/R bases w/ VOIP 500D <b>NOTE:</b> Required - parking structures: 4-min. per floor, surface parking lots at every 50 ft radius (250 LF max from source)
253	<b>Elevator Phone</b>	Talk-A-Phone VOIP 500D or as current future upgrade
254	<b>CLASSROOM VOIP INTERCOM</b>	Valcom, Algo, Cyberdata, 2N
255	<b>27 40 00 AUDIO VISUAL</b>	
256	<b>CONTROL SYSTEM</b>	UTELOGY, CRESTRON DIGITAL MEDIA,
257	<b>PROJECTOR</b>	PANASONIC, NEC-Minimum 1920 x 1080 resolution, Laser/LED, HDBase T Connectivity 2-power 200m Lens w/ image shift in all directions
258	<b>PROJECTOR SCREEN</b>	DA-LITE, ELITE, Draper
259	<b>LECTERN</b>	SPECTRUM FREEDOM XRS, FORBES-AV, VREM AV, Spectrum Masters lectern
260	<b>DOCUMENT CAMERA</b>	WOLFFVISION, HoverCam, SAMSUNG,
261	<b>MICROPHONE</b>	SHURE
262	<b>NETWORK SWITCH</b>	Cisco Catalyst 3850 IP Based-POE+, upgradable to latest technical advances
263	<b>ANNOTATION DEVICE</b>	SMART TECHNOLOGIES
264	<b>INTERACTIVE DISPLAY</b>	SMART TECHNOLOGIES Smart Technologies, Epson, Panasonic
265	<b>CLASSROOM LIGHTING CONTROL</b>	CRESTON, LUTRON
266	<b>SPEAKERS</b>	JBL, Extron, Crestron
267	<b>PC COMPUTERS</b>	HP ELITE SERIES
268	<b>LECTURE CAPTURE</b>	Ensemble
269	<b>ELECTRONIC QUEUEING SYSTEM</b>	Q-Matic, Q-Less
270	<b>DIV. 28: ELECTRONIC SAFETY &amp; SECURITY</b>	
271	<b>28 10 00 ELECTRONIC ACCESS CONTROL</b>	
272	<b>Card Readers</b>	HID ICLASS SE contactless smart card (R40 type) - no sub. Requires ICLASS Standard Compatibility, 920NTNTEK00000 (Typical model) w/ a "request to exit" device
273	<b>Software</b>	Lenel OnGuard
274	<b>Controllers</b>	Lenel OnGuard. LNL 3300



<b>275</b>	<b>28 20 00 ELECTRONIC SURVEILLANCE</b>	
276	CCTV Cameras	High Definition/MEGA Pixel Axis P-Series + Q-Series w/zipstream
277	ANALOG VIDEO to IP ENCODER	AXIS: Q74 Series
278	System Server	Lenel Enterprise NVR
279	Recording System	NETAPP FAS2240 or newer
<b>280</b>	<b>WIRELESS ACCESS POINTS</b>	
281	Indoor Access Points	Cisco Aironet 3800 Series
282	Outdoor Access Points	Cisco Aironet 3802E Series W/NEMA 4 ENCLOSURE + Ext antennas
<b>283</b>	<b>NETWORK SWITCHES</b>	
284	Data Switches	Cisco Catalyst 3850 IP Based-POE+
<b>285</b>	<b>FIRE ALARM SYSTEM</b>	
286	GENERAL	Edwards (EST 3) with Mass Notification
287	FIRE ALARM PULL STATION	EST CAT 45 KEY
288	SPEAKER/STROLL AMBER ALERT	EDWARDS W/ MASS NOTIFICATION
<b>289</b>	<b>DIV. 32: EXTERIOR IMPROVEMENTS</b>	
<b>290</b>	<b>IRRIGATION SYSTEMS</b>	
291	IRRIGATION CONTROLLER	Toro TMC-424E Series, Irritol TMC 424 Series
292	CONTROLLER REMOTE SITE MANAGEMENT	Toro TriComm Site Management
293	CONTROLLER HAND-HELD REMOTE CONTROL	Toro TMR-1
294	CONTROLLER ENCLOSURE	V.I.T. Strong Box SB-xxSS with QP, CSA, RGVRS Options
295	RAIN SENSOR	Toro TRS
296	CONTROL WIRE - COMMON	Paige P7001D 12 AWG White
297	CONTROL WIRE - HOT	Paige P7001D 14 AWG Colored
298	WATERPROOF WIRE CONNECTOR	Spears DS-500 Dri-Splice
299	GROUNDING ROD	Paige 182007 with Paige 1820037P Connection
300	DIELECTRIC CONNECTION	Approved by Electrical Engineer
301	BOOSTER PUMP	Barrett Irriboost with Variable Speed Drive and SS Enclosure
302	BASKET STRAINER	Yardney SBx-T Series, Purple
303	BASKET STRAINER ENCLOSURE	V.I.T. Strong Box SBBC-xxSS with QP Option
304	PRESSURE REGULATOR	Wilkins 500 Series
305	MASTER VALVE	Toro 220 Brass or Toro P-220S Plastic, or Rainbird P220 Brass series with Pressure regulator
306	FLOW SENSOR	Toro TFS Series
307	FERTILIZER INJECTOR	EZ-FLO EZ Series
308	GATE VALVE (2" and SMALLER)	Nibco T-113 Series
309	GATE VALVE (2 1/2" and LARGER)	Nibco F-619-SON Series
310	BALL VALVE (2" and SMALLER)	Nibco T-585-70 Series
311	AIR RELEASE VALVE	Cla-Val #33-A Series
312	QUICK COUPLING VALVE	Rain Bird #44-NP or TORO #44 NP Series
313	ELECTRIC CONTROL VALVE	Toro 220 Brass, Toro P-220S Plastic, or Rainbird P-220 brass series
314	DRIP ZONE VALVE KIT	Toro TPV Series
315	VALVE BOX	NDS Pro Plus Series (green plastic with purple bolt-down cover)
316	MAINLINE PIPING (6" and LARGER)	Pacific Plastics or equal CL200 PVC Gasketed - Purple
317	MAINLINE PIPING (2" - 4")	Pacific Plastics or equal CL315 Solvent-Weld PVC - Purple

318	<b>MAINLINE PIPING (1 1/2" and SMALLER)</b>	Pacific Plastics or equal SCH 40 Solvent-Weld PVC – Purple or Sch 80 PVC
319	<b>LATERL LINE PIPING</b>	Pacific Plastics or equal SCH 40 Solvent-Weld PVC – Purple, or SCH 80 PVC
320	<b>PIPE / WIRE SLEEVING</b>	Pacific Plastics or equal SCH 40 Solvent-Weld PVC
321	<b>PIPE FITTINGS (MAINLINE)</b>	Spears or equal SCH 80 PVC
322	<b>PIPE FITTINGS (LATERAL LINES)</b>	Spears or equal SCH 40 PVC
323	<b>ARTIFICIAL TURF COOLING SYSTEM HEADS</b>	Toro TS90TP Series
324	<b>LARGE TURF ROTOR HEADS</b>	Toro TR70P Series
325	<b>MEDIUM ROTOR HEADS</b>	Toro T5 Series
326	<b>SMALL ROTOR HEADS</b>	Toro 570Z-PRX-COM-E with Tor Precision Rotating Nozzle
327	<b>FIXED SPRAY HEADS</b>	Toro 570Z-PRX-COM-E with Toro Precision Spray Nozzle
328	<b>FLOOD BUBBLER</b>	Toro 570Z-PRX-COM-E with Toro FB-PC Nozzle
329	<b>TREE ROOT WATERING SYSTEM</b>	Rain Bird RWS Series
330	<b>DRIP LINE SYSTEMS</b>	Toro DL2000 RGP-xxx-xx-E Series
331	<b>DRIP SYSTEM FITTINGS / ACCESSORIES</b>	Toro - Miscellaneous
332	<b>LANDSCAPE DESIGN</b>	
333	<b>LARGE TREES</b>	Ceadrus deodora, Deodar cedar
334		Platanus racemosa, California sycamore
335		Quercus agrifolia, Coast live oak
336	<b>MEDIUM TREES PRIMARILY FOR SHADE</b>	Cinnamomum camphora, Camphor tree
337		Jacaranda mimosifolia, Jacaranda
338		Liriodendron arnoldii, Tulip tree
339		Platanus acerifolia 'Yarwoodii', Yarwood plane tree
340		Podocarpus gracilior, Fern pine
341		Quercus ilex, Holly oak
342		Ulmus parvifolia 'Drake', Drake Chinese elm
343	<b>SMALL TREES FOR FLOWERS &amp; FRAGRANCE</b>	Agonis flexusa, Peppermint tree
344		Arbutus 'Marina', Marina strawberry tree
345		Bauhinia 'Blakeana' Hong Kong orchid tree
346		Callistemon viminalis, Weeping bottle brush
347		Cassia leptophylla, Gold medallion tree
348		Eucalyptus erythricorys, Red cap gum
349		Eucalyptus torquata, Coral gum
350		Lagerstromia indica, Crape myrtle
351		Laurus nobolis, Sweet bay
352		Lyonothamus asplenifolius, Catalina ironwood
353		Magnolia "Little gem", Little gem magnolia
354		Pistacia chinensis, Chinese pistace
355		Tabebuia lpe, Pink trumpet tree
356	<b>PALMS</b>	Brahea armata, Mexican blue palm
357		Chamaerops humilis, Meditteranean fan palm
358		Cycas revoluta, Sago palm
359		Trachycarpus fortunei, Winmill palm
360		Washingtonia filifera, California fan palm
361		Washingtonia robusta, Mexican fan palm

362	<b>SHRUBS INACTIVE AREAS</b>	Achillea sp., Yarrow
363		Arctostaphylos 'Sunset', Sunset manzanita
364		Berberis 'Golden abundance' Oregon grape
365		Carpenteria Calif., Bush anemone
366		Fremontedendron 'California gold', California fremontia
367		Garrya elliptica, Coast silk tassle
368		Heteromeles arbutifolia, Toyon
369		Heuchera sp., Alum root
370		Penstemon 'Margarita BOP', Penstemon
371		Rhamnus calif. 'San Bruno's mound', Coffeeberry
372		Rhus integrifolia, Lemonade berry
373		Ribes sanguineum, Pink flowering currant
374		Ribes viburnifolium, Catalina evergreen currant
375		Romneya coulteri, Matilija poppy
376	<b>SHRUBS IN IRRIGATED AREAS</b>	Agave attenuata, Fox tail agave
377		Anigozanthus sp., Kangaroo paw
378		Baccharis pilularis 'Pigeon point', Coyote bush
379		Callistemon 'Little John' Little John bottlebrush
380		Cistus sp., Rockrose
381		Coelonema pulchrum, Pink breath of heaven
382		Cotoneaster sp., Cotoneaster
383		Elaeagnus pungens, Silverberry
384		Hemerocallis sp., Daylily
385		Juniperus sp., Juniper
386		Lantana sp., Lantana
387		Leptospermum sp., Australian tea tree
388		Ligustrum texanum, Texas privet
389		Myrtus communis, Myrtle
390		Osmanthus fragrans, Sweet olive
391		Phormium tenax, Flax
392		Pittosporum tobira sp., Tobira
393		Raphiolepis indica sp., Indian hawthorne
394		Rosmarinus officinalis, Rosemary
395		Viburnum tinus sp., Laurustinus
396		Westringia fruticosa, Coast rosemary

**Preferred Exterior Finishes, Materials & Color Palette**

- Plaster
- Brick
- CMU
- Concrete
- Metal panels (zinc)
- Steel
- Glazing
- Anti-Graffiti Coatings (Required-full height of the building)
- Paint & Color Palette (variations of beige)

**Interior Finishes, Materials & Color Palette**

- Floor & Wall Tile & Grout
- Resilient Flooring & Base
- Carpet Tile (See District Master Agreement)

- Acoustical Ceiling Tile (Required 2 x 4)
- Wall Covering – Fabric Wrapped Panels
- Paint & Color Palette
- Toilet Compartments
- Restroom Accessories
- Drinking Fountains

**Fixtures, Furnishings & Equipment**

- Modular Casework
- Laboratory Casework
- Instruction Boards (White Boards, Tack Boards, etc.)
- Projectors and Projection Screens
- Flat Panel Monitors
- Modular Furniture
- Loose and Fixed Seating
- Work Surfaces