

**GUIDELINES FOR ARCHITECTS AND ENGINEERS**  
**Fairfax County BDCD**

**Table of Contents**

<u>Division</u>	<u>Revision</u>	<u>Title</u>
010000	1	General Design Requirements - Exhibit 010000A – Plan Set Cover Sheet
030000		Concrete
040000		Masonry
050000		Metals
060000		Wood and Plastics
070000	1	Thermal and Moisture Protection
080000	1	Doors and Windows
090000	1	Finishes
100000	1	Specialties
110000	1	Equipment
120000		Furnishings
130000		Special Equipment
140000		Conveying Systems
210000		Fire Suppression
220000	1	Plumbing
230000	1	HVAC
260000	1	Electrical - Exhibit #1 – Panel Schedule (with NEC demand factors) - Exhibit #2 – Generator Connection Box - Exhibit #3 – Generator Schematic Detail - Exhibit #4 – Grounding Grid (Counterpoise) Detail
270000	New	Information Technology (was Appendix B)
280000	New	Electronic Safety and Security
300000		Sitework

**Appendices**

Appendix A Negative Pressure Rooms

March 2024 Update

**GUIDELINES FOR ARCHITECTS AND ENGINEERS**  
**Fairfax County BDCD**

**The March 2024 version incorporates the following updates:**

Rev.	Spec. No.	Revision Description	Date Approved
1	010000-General Design Requirements	I.F – New – Cover sheets only needs to be stamped I.X – Energy strategy updated to reflect current County policy.	3/28/24
1	070000-Thermal and Moisture Protection	I.L – Revised to require safety rail on all roof hatches. I.M – New – added safety pin information on roof access hatches. I.Y – Added requirement for access to all roof areas.	3/28/24
1	080000-Doors and Windows	I.M – Operable windows to be tied into the BAS. I.Q - Moved Physical Access Control System (PACS) information to new section 280000. I.S – New – residential grade windows not allowed. I.T – New – specify doors inside apparatus bays exposed to exterior as exterior grade. Misc. – Updated acceptable lock hardware products (removed Corbin & Sargent) and procedure (Section III)	3/28/24
1	090000-Finishes	II.A.4 Added CertainTeed and USG as acceptable manufacturers of ceiling tiles. II.D.6 – Updated link to Carpet End Use Application Table II.E.2 – Bamboo flooring no longer allowed	3/28/24
1	100000-Specialties	I.C – Added User supplies flags. I.D.1 – Added piano style hinges on partition doors. I.D.4 – Added that paper towel dispensers are not allowed. I.E.3.m – Janitor closet light to be sensor operated. I.H new – Added requirement to label stairwells per office of Fire Marshal. II.B.1 – Corrected model on bottle filling station. II.B.7 – Deleted obsolete hand dryers, added new dryers	3/28/24
1	110000-Equipment	I.A.1 and I.D.1 – Changed clothes dryers and ranges from gas to electric. I.A.5 – Added that dryer vents shall be accessible. I.H. Moved Electronic Security information to new section 280000.	3/28/24
1	220000-Plumbing	I.A.4 New, added requirement to use electric equipment in lieu of gas fired equipment. (also revised products section accordingly) I.B.3.e – Battery operated, or backup fixtures not allowed on lavatories.I.B.3.r New – Water piping not allowed in unheated spaces	3/28/24
1	230000-HVAC	I.A.1, New, added requirement to use electric equipment in lieu of gas fired equipment. 1.A.9 – New – Cooling tower drains to be routed to sanitary sewer. I.B.4 – Updated Life Cycle Cost Analysis requirements. I.C - Main Fuel Tank, Day Tank & Piping for Diesel Generators updated. I.C.21 – Added training requirement for Veeder Root leak detection system. I.C.22 – Added to connect Veeder Root to BAS.	3/28/24

**GUIDELINES FOR ARCHITECTS AND ENGINEERS**  
**Fairfax County BCD**

Rev.	Spec. No.	Revision Description	Date Approved
		I.E.2.b – Added layout space requirement on roof top equipment. II.A.q Changed fire station exhaust extraction from Plymovent to Air Vacuum Corporation	
1	260000-Electrical	I.C.3 Added note that propane is not allowed as a generator fuel. I.C.12.g – Deleted specific use of 4-D battery requirement on Emergency Generators. I.C.12.u – Corrected 48 conductor to 4 conductor. I.G.2.t – New - Telecom wiring not allowed for lighting. I.I.5/I.I.12.b/I.I.13 – Updated LEED metering information I.L – Added New MC Cable use restrictions. I.H.51 - Added Fire Alarm Document Cabinet requirement II.F.4 - Added PowerLogic meter	3/28/24
1	270000-Information Technology	Was Appendix B. Miscellaneous information revised and added. Changes shown in red.	3/28/24
0	280000-Electronic Safety and Security	New division, transferred from 080000 and 110000. Information rewritten by Department of Emergency Management and Security.	3/28/24

**GUIDELINES FOR ARCHITECTS AND ENGINEERS**  
**Fairfax County BDCD**

**The December 2022 version incorporates the following updates:**

Rev.	Spec. No.	Revision Description	Date Approved
1	110000-Equipment	I.H.7 – New Security Programming requirements	11.30.2022
1	140000-Conveying Systems	I.T – Added illumination requirement II.A.1. – Added elevator suppliers (non-proprietary only allowed)	11.30.2022
1	210000-Fire Suppression	8. – Added clarification of Hazard Group selection in shell spaces.	11.30.2022
1	220000-Plumbing	I.B.3.d – Revised to include water meter information previously in Electrical Guideline.	11.30.2022
2	230000-HVAC	I.A.6.c – Added access panel minimum size. I.C.11 – Moved fuel leak detection requirement from 260000 Electrical. I.D.5 – Revised to clarify compressors on DX units. I.E.1.d – Revised lower end of temperature range to 69 degrees from 71 for Sleeping Areas in Fire Stations. I.E.2.j – Added HVAC shutdown on condensate drain water detection. I.G – Replaced all “EMCS” terminology with “BAS” and added BAS Graphics requirements. I.G.5 – Added FMD’s Energy Metering System (BuildingLogiX) requirement for natural gas metering. I.G.6 thru10 – Added BAS Graphics requirements. I.H.5 Commissioning Report Review II.A.1.f & i – Added Daiken as approved Air Handler and Rooftop Unit manufacturer. II.A.1.m - Updated Veeder Root model number. EXHIBIT 230000-A – Added cost data.	11.30.2022
2	260000-Electrical	I.A.13 – Added surge protection information. I.A.14 – Added Main Electric Room requirement to have a minimum of 20 percent future use wall space. I.A.15 – Added conduit requirements for future solar panel additions. I.C.3 – Emergency Generator – Added requirement to evaluate diesel versus natural gas. I.C – Emergency Generator – moved fuel system requirements to HVAC Guideline 230000 I.E.4 – Added Tamper Resistant receptacle requirement. I.F.22 – revised Auto-Dialer to be cellular. I.G – Lighting. Organized into General, Interior & Exterior I.G.c.4 – Revised exterior CCT to match Zoning requirements I.G.c.7 – Revised photocell and timer requirements on pole type fixtures. I.I – Term “EMCS” replaced with “BAS” sections, I.I.12 – Moved and updated metering information from Product section and added requirements for loading into FMD’s Energy Metering System. II.E.1 – Added manufacturers for Exterior Site Lights. II.F – Revised Meter from Schneider PowerLogic to Honeywell E-Mon, added main meter and meter for Solar applications.	11.30.2022

**GUIDELINES FOR ARCHITECTS AND ENGINEERS**  
**Fairfax County BDCD**

**The March 2022 version incorporated the 2021 revisions and following updates:**

Rev.	Spec. No.	Revision Description	Date Approved
1	030000-Concrete	I P. - Field bending of concrete reinforcement	3.10.2022
1	080000-Doors and Windows	I Q.2 - Correction to Card Readers Specification	3.10.2022
1	230000-HVAC	I.E.1 - Deleted use of VRF Systems I.E.2.k - Moved article from specs to design criteria I.F.29.a/b - Deleted VRF specifications I.F.32 - Added note to not allow crimping of refrigerant tubing.	3.10.2022
1	260000-Electrical	I.A.13 - Added Service Entrance-rated Transient Voltage Surge Suppressor I.F.49/50 - New, Fire Alarm wiring requirements I.G.18.c - Occupancy (Motion) Sensors II.D.1 - Revised Silent Knight model from 5820XL to 6820. II.E.3 - Revised vendors for Occupancy (Motion) Sensors	3.10.2022
1	300000-Sitework	I.D.2 – Add BMP 3 <sup>rd</sup> Party Inspection requirements I.D.8 – Requires all U.G. stormwater pipe to be RCP. I.I.2 – Added minimum paving thicknesses.	3.10.2022