

FACILITY DESIGN GUIDELINES CHANGE LOG - DECEMBER 2021

Section	Description of Change
1.1.3	New requirement - Life Safety drawing standards to be provided on floorplans for all disciplines
1.2.2.3	New requirement for noise studies for industrial and/or athletic uses
1.3.1.6	New sub-section provided to address specific requirements when site surveys are included in the scope of work.
1.4.3.5.3	New guideline item #7 pertaining to the selection of delayed egress hardware.
1.4.4.4	Prohibition against rooftop generators
1.4.5.2	New requirement - Low supply/high return duct routing for IT equipment. Revised IT room cooling setpoint to 80°.
1.4.5.3	New requirement - Energy Star equipment.
1.4.5.7	New language added to Maker Lab Spaces section to address potential air permitting requirements.
Chapter 4	New chapter - All Energy and Utility related material from previous Chapters 3, 6, and elsewhere has been consolidated here.
5.2.4	Spray Fireproofing Design and Specification section modified to remove duplicated efforts and simplify the approach to tracking the SFRM material used.
5.3.1	New language allows for brick with metal stud backup based on hygrothermal analysis provided for review (no longer requires D&F)
5.3.1.2	New language added to the <i>Sealants, Caulking, and Seals</i> subsection to address a maximum permitted caulk joint.
5.4.2.2	New language added to address desired slope of roof saddles and crickets.
5.4.2.4	New exception added to subsection item #1 regarding the minimum compressive when a high-density cover board is provided.
5.4.2.5	Additional acceptable systems have been added to the single-ply membrane roofing section.
6.4.3	Toilet and bath accessories #1: OFCI clarification for accessories provided by the University and installed by the Contractor.
Chapter 7	Modified and relocated site utility requirements to Chapter 4 - Energy and Utilities.
7.1.1	New requirement - All serviceable components above ceiling to be as low as possible.
7.1.1	New requirement - Removal of all plumbing/mechanical components taken out of service.
7.1.1	New requirement - Glycol management procedures.
7.1.3	Consolidated metering/submetering requirements.
7.1.7	Clarified BAS closeout process.
7.3.1.1	New requirement - Dedicated bypass for meter in addition to dedicated bypass for PRV.
7.3.1.2	New requirements for DHW generation to facilitate LTHW transition. Additional requirements for tankless water heaters.
7.3.2	Allowance of mechanical joints for domestic cold and hot water systems operating below 190°.
7.3.2	New requirement - Faucet components required to be 'above deck'. App programming/operation restrictions.
7.3.2	Pressure testing reduced from 200 to 150 PSI.

FACILITY DESIGN GUIDELINES CHANGE LOG - DECEMBER 2021

- 7.3.4 Clarified where aerators are not allowed.
- 7.3.4 New requirement - Tankless water heaters allow for low flow fixture operation.
- 7.4.1.3 New requirement - 8" coil clearances.
- 7.4.1.4 Clarified piping and duct labelling to be a minimum of 20 ft intervals.
- 7.4.2.1 Allowance of mechanical joints for heating water systems operating below 190°.
- 7.4.2.2 Pressure testing reduced from 200 to 150 PSI.
- 7.4.3.3 New requirement - unions on both sides of all control valves.
- 7.4.4.1 New requirements - Heating sources and reduction of fossil fuels. Clarified pressure reducing station requirements.
- 7.4.4.3 New requirement - Blending loop for building HW generation in lieu of heat exchanger.
- 7.4.4.3 Modified fail position of heating control valves.
- 7.4.4.3 Modified humidifier controls.
- 7.4.5.1 New requirement - Ventilation matrix.
- 7.4.5.2 Clarified thermal duct liner is not permitted.
- 7.4.5.3 Removed VAV requirement of 10% minimum flow.
- 7.4.5.3 New requirement - All exhaust air in UVA Health buildings shall discharge directly outside.
- 7.4.5.3 Clarified exhaust plume requirements.
- 7.4.5.3 New requirement - Variable geometry nozzles are not allowed.
- 7.4.5.4 New requirement - Smoke damper BAS interface.
- 7.4.5.7 New requirement - Toxic gas monitoring system for hazardous & cryogenic storage/use. Modified monitoring requirements.
- 7.4.6.1 New requirement - VRF branch valves and BAS monitoring.
- 7.4.6.3 New requirements - Butterfly valve disc and CHW piping materials. Stainless steel bolts required for groove type fittings.
- 7.4.6.3 New requirement - BAS control valve on supply side and check valve on return, for CHW coils with freezing concerns.
- 7.4.7.1 New requirement - Cooling coil condensate recovery.
- 7.6.1.8.5 Classroom lighting to be coordinated with ITS-Classroom Support during DD
- 7.6.2.8 New requirement - Exterior lighting controlled by photocell, not BAS.
- 7.6.2.9 New requirement - EC motor control to be modulating, not stepped. VFD's to have MS/TP BACnet interface.
- 7.6.2.10 New requirement - Line reactor for VFDs. Modified VFD BAS interface and pulse requirements.
- 7.6.3 New requirement - Use "Speed Sleeves" (or equal) at rated telecomm or electrical rooms.
- 7.6.3.5 New requirement - Class 2 wiring standards for BAS.
- 7.7.1 New requirements - Native BAS from pre-approved vendors only and restrictions on packaged equipment controls.
- 7.7.1.1 New requirements - Occupancy sensor auxiliary contacts, CO2 concentrations setpoint maximum/minimums, and freeze protections.
- 7.7.1.2 New requirement - Safeties to include a minimum of two contacts.
- 7.7.1.3 New requirement - Outside air conditions obtained from Leake weather station.
- 7.7.1.4 Clarified requirements for fire alarm smoke detectors and BAS integration.
- 7.7.3 New requirement - All BAS power to be shown on Electrical plans. Clarifications on BAS closeout procedures.

FACILITY DESIGN GUIDELINES CHANGE LOG - DECEMBER 2021

Chapter 8	New chapter - Green building standards moved from Appendix G to Chapter 8.
8.1.1.1	Modified economizer requirement to align with VECC.
8.1.1.1	New requirement - Energy recovery that aligns with VECC.
8.1.1.1	New requirement - Right-sizing equipment.
8.1.1.1	New requirement - Low GWP refrigerants.
8.1.1.2	Modified requirement to consolidate lighting standards and preferences.
8.1.1.2	New requirement - Non-LED fixtures shall not be reused.
8.1.1.3	New requirement - Fossil fuel free design.
8.1.1.4	New requirement - Energy efficient equipment.
8.1.1.5	New requirement - Energy compliance tables for envelope, fenestration, lighting, and fan systems.
8.1.2.1	Modified requirements related to filter size and system requirements.
8.1.2.2	New requirement - Clarifies preference of duct lining to sound attenuators and additional acoustical treatment guidance.
8.1.2.3	Modified dehumidification requirement from 60%RH to 60F dewpoint.
8.1.2.4	New requirement - Operable windows shall have HVAC interlocks.
8.1.4	Modified requirement to consolidate water fixture standards and preferences.
8.1.5.1	Modified and consolidated requirements related to irrigation.
8.1.5.2	Modified and consolidated requirements related to plantings.
--	Removed requirements associated with stormwater, soil protection, and tree protection that are otherwise covered in the FDG or supporting documents.
8.2.1	Modified requirement to include additional sustainability goals and priorities.
8.2.2.1	Modified requirement for clarity.
8.2.2.2.2	New requirement - Fossil fuel free design for capital projects.
App A - Figure 11	New requirement - IT room setpoints of 80°/55°.
App A - Figure 11B	Modified Building HWS/R design temperatures to 130°/100°.
App A - Figure 11C	Modified Massie Plant HWS/R design temperatures.