

Section D7080

Distributed Communications and Monitoring Systems

D7080 – Subsections:

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- D7030.11: Distributed Antenna Systems (DAS)
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D7080 - Introduction

1. This section applies to low-voltage cabling and related infrastructure for distributed communications and monitoring systems (C*Cure, Paging, BAS, DAS, etc.) as directed by UCB Access Services and other UCB departments. This section does not apply to cabling and infrastructure for voice and data cabling, as identified in other sections of these specifications, which are intended support UCB OIT services.
2. All distributed communications and monitoring systems that do not have service from OIT shall have separate pathways for cabling and separate locations for electronics. Conduit is the preferred pathway structure for cabling for these systems.
 - a. CU Access Services must approve the C*Cure pathway design prior to installation.
 - b. See **D7010** for exceptions allowing other services within the OIT pathways.
3. Separate pathways shall be used for systems such as, but not limited to, inter-department voice/data/TV systems (none OIT supported voice/data/TV), paging systems, clock systems, public address and mass notification systems, sound systems, intercom systems, fire alarm and Andover systems, DAS, and C*Cure system.
4. Contact CU Access Services for specific additional project requirements: 303-492-6609 (office).
5. The current BAS (building automation systems) setup for new buildings will be one Ethernet uplink from the TR to a location outside the TR as indicated by the Facilities BAS group. At the designated location Facilities will maintain and arrange supply of a data switch that will support the BAS within the building. Horizontal cabling from the designated location of the BAS to the endpoints can be run within the OIT pathways as covered in this standard for Horizontal cabling for other services.

D7080.11 – Distributed Antenna Systems (DAS)

1. A qualified DAS Consultant shall provide complete designs, drawings, specifications, and space requirements for all projects where DAS systems are required.
2. Separate pathways and cabling for the DAS system shall be designed by the DAS Consultant with drawings and specifications provided to OIT for review and approval as part of the SD, DD, and CD project phases. These designs shall comply with all CU OIT Standards herein.
3. It is preferred that all DAS equipment be located in separate rooms from the telecommunications TRs and ERs. If any DAS equipment is to be located within the TRs and ERs, the space and environmental requirements for these rooms, specified in Section **D7030**, will be revised to accommodate this additional equipment without impacting the OIT equipment in these rooms.
4. The DAS Consultant shall provide a complete equipment design for ALL required DAS equipment to provide service from all major wireless carriers (Verizon, T-Mobile, AT&T, and Sprint). Complete drawings and specifications for the DAS design shall be provided to OIT for review and approval as part of the SD, DD and CD project phases. The design shall include, but not be limited to:

- a. Room detail drawings with footprint, rack layout, and wall design, including locations and types of power receptacles, for all rooms with DAS equipment. If the DAS equipment will be located in the TRs and ERs, the room design shall be coordinated with the Telecommunications Low Voltage Consultant for those rooms.
- b. Full DAS rack details showing all DAS equipment, cable terminations, etc., for all major carriers. The DAS equipment shall not be co-located in any racks with OIT equipment or cable terminations.
- c. The maximum HVAC loads (BTU/Hr) and power consumption (Watts) for all DAS equipment for all major carriers.
- d. Complete equipment lists and specification sheets for all DAS equipment for all major carriers.
- e. Documentation of all requirements for UCB outside plant fiber cable strands, including termination points in other campus buildings for all major carriers.

Appendices