



TELECOMMUNICATIONS ROOM READINESS REQUIREMENTS

In alignment with CSU and Cal Poly telecommunications standards, during construction of new facilities at Cal Poly, various Building Systems must be installed, tested and commissioned by Contractors and their Subcontractors in preparation for the structure to be accepted and formally occupied by the University.

Many Building Systems must have Telephone and/or Data connections in order to be completely ready for the University to accept the new facility.

With that in mind, Cal Poly ITS must build-out the Telephone and Data Networks to the new structure in order to connect its Building Systems for service. Doing so requires that both the Telephone and Data Networks must be largely completed as designed.

The following is a summary of Cal Poly ITS requirements for the Contractor and Subcontractors to make the Tele/Data Network spaces ready for installation of the University's equipment to allow full testing and commissioning of the new Building Systems.

- 1) All Telecommunications Rooms conveying Building Systems circuits must be substantially complete:
 - A. Cal Poly ITS personnel must have reasonable and unobstructed access to the Telecommunications Room(s)
 - B. Room(s) must have door with lock and closer. Door must close with HVAC functioning.
 - C. Room(s) must have drywall, door frames, backboards and flooring in completed form:
 - i. Concrete floors must be moisture sealed.
 - ii. Tiled floors must be sealed.
 - D. Room(s) must have all electrical and lighting complete and functional:
 - i. Electrical service to Room(s) must be stable and continuous – no temporary power.
 - E. Room(s) must have HVAC system complete and functional:
 - i. Room temperature must be stabilized.
 - F. Room(s) must have all conduits, raceways, racks and wire management completely and correctly installed.
 - G. Room(s) and all installed materials must be vacuumed and wiped clean, and the room must remain free of dust, debris and trash:
 - i. No additional work may be done that will create dust and debris.

- ii. No storage of Contractor tools or materials allowed once room is ready for equipment installation.
- 2) All cabling for Telephone and Data Networks must be substantially complete:
- A. All Outside Plant (OSP) cable feeds from campus distribution networks to structure must be complete.
 - B. All Structured Cabling related to the facility must be substantially complete:
 - i. All OSP and Structured Cabling must be dressed neatly in raceways and include appropriate slack loops.
 - C. All Building Systems cabling entering the Telecommunications Room(s) must be substantially complete.
 - i. All cabling within the Telecommunications Room(s) must be appropriately terminated:
 - ii. All fiber cores must be terminated with appropriate connectors in fiber enclosures.
 - iii. All UTP Riser and Inside Wire (I.W.) copper cabling must be terminated on appropriate 66-blocks.
 - iiii. All Structured Cabling must be terminated on 48-port RJ-45 Patch Panels (**568A** Wiring Pattern).
 - D. All individual cables must be labelled in accordance with Cal Poly ITS labelling standards.
 - E. All fiber and copper cabling must be tested and pass the appropriate I.E.E.E. test parameters.
 - F. After passing, all Cable Test Results must be submitted to Cal Poly ITS for review and acceptance.
- 3) Cal Poly ITS will install Telephone and Data circuits and devices only after all the above conditions have been met.
- 4) Examples of Building Systems covered by the above may include, but are not limited to:
- A. Fire Alarm (FACP)
 - B. Elevator telephones and Emergency ("Code Blue") telephones
 - C. EMS/BMS Systems
 - D. HVAC Systems
 - E. Lighting Control Systems
 - F. Security Systems – Including Cameras
 - G. Access Control Systems (Door Access Control)
 - H. Irrigation Controllers
 - I. Changeable Message Boards