

## TELECOM CLOSET

### Generic Specifications:

- A. Plywood Back Boards
  - 1. Minimum three walls shall have plywood.
  - 2. Backboards shall be rigidly installed and painted.
  - 3. Backboards shall be 3/4in. A-C plywood, C surface facing the wall. The plywood should be void-free and fire-rated.
  - 4. Plywood shall be mounted 6in. AFF.
  - 5. Plywood shall be 8ft. in height.
- B. Lighting
  - 1. Lighting intensity shall be at least 540 lux (50 foot-candles), 3 ft. AFF inside the closet
  - 2. Cable tray should not block any lighting.
  - 3. No Electrical Transformer
    - a) There shall NOT be any Electrical Transformers located in the Telecom Room/Closet.
- C. Telecom Rack Power
  - 1. Standard Rack Power Requirement
    - a) Above each telecom rack there should be 2 ea dedicated 120V 20 amp female twist lock outlets on 20amp circuits as a standard. This will vary depending on equipment needs.
    - b) Twist lock outlets shall be accessible without removing ceiling tiles.
    - c) Outlets shall be mounted at the 8 ft. elevation.
      - aa. **Example** 20 amp Twist Locks
        - a. Hubbell locking plug 20 amp 125V L5-20P B/W - Manufacture Part #: HBL2311 (MALE)
        - b. Hubbell locking connector 20 amp 125V L5-20R B/W - Manufacture Part #: HBL2313 (FEMALE)
  - 2. Convenience Outlets
    - a) Telecommunications room shall also include 120V AC, 20 amp convenience outlets spaced at 6 ft. to 8 ft. intervals around the room or as specified in telecom drawings.
- E. False Ceilings
  - 1. False ceilings are not suggested in telecommunications spaces. In the event false ceilings are utilized for environmental control, specific arrangements to accommodate overhead cable runs must be made by installing no lower than 10 ft. above floor to give sufficient clearance above equipment racks if possible.
- F. Housekeeping
  - 1. No other equipment is allowed in a telecom room/closet (i.e. furnace, water heater, transformer, sink, storage materials, etc.
- G. Telecom Lock and Key Requirement
  - 1. All telecom spaces shall have a lock keyed with the standard UPRR communications lock from the following Vendor:
    - a) Locking Systems International Inc.  
Steve Harris  
Phone: 407-401-4565  
Email: [steve@lockingsystems.com](mailto:steve@lockingsystems.com)
      - aa. This lock has been copy right protected for Union Pacific Telecom.

bb. A key will NOT be delivered with the lock.  
cc. All orders submitted by non-Union Pacific Telecom Employees will need approval by one of the following personnel:

1. Dale Fries  
Phone: 402-544-3606  
Email: [dafries@up.com](mailto:dafries@up.com)
2. Ray Wellman  
Phone: 402-544-5086  
Email: [rwellman@up.com](mailto:rwellman@up.com)

2. Telecom Spaces are preferably locked with the mechanical push button lock, part number: 5021XKWL-26D-41.

**Note:** Push button locks are important because push button codes can be used if necessary to access the telecom room without a key. Only Telecom personnel and authorized non UPRR Personnel will be allowed to have a key.

#### H. Floors

1. Shall be static free (using asphalt/linoleum tile).

## PATHWAYS

### A. Electromagnetic Interference

1. To avoid Electromagnetic Interference (EMI), all pathways shall provide clearances of at least:

- a. 1.2 m (4 ft.) from large motors or transformers.
- b. 0.3 m (1 ft.) from conduit and cables used for electrical power distribution.
- c. 12 cm (5 in.) from fluorescent lighting.

- A. There must be a pathway from the telecom closet to above the dropped ceiling.
  - a. Two 2" conduits will suffice

## Telecom Room Notes

- Remove and replace sheet rock ceiling
- Patch and paint walls and ceiling
- New plywood for telecom south wall
- Patch openings in east and south walls
- Remove water heater and pipes
- Telecom Room floor to be painted with Kilz 1-Part Epoxy Acrylic concrete & Garage Floor Paint (Slate Gray)
- Add 2- 4" conduits through wall to feed cable management tray