

# MT. SAN ANTONIO COLLEGE

## TELECOMMUNICATION ROOM SPECIFICATIONS

### COMMUNICATION EQUIPMENT ROOM FITTINGS

All telecommunications room installations shall be done by a certified telecommunications contractor with material and labor covered under extended warranties for compliance with the Mt. San Antonio College standards.

At minimum, telecommunication contract shall:

1. Have 10-years' experience in the design, installation, testing and maintenance of data communication systems and associated inside and outside networking cabling and systems.
2. Possess a complete and full working knowledge of data/networking systems, cabling and infrastructure planning in accordance with ANSI/TIA/EIA 568 and 569 specifications.
3. Has performed successful installations on at least three (3) projects similar in scope and size, with portfolio submission available.
4. Can provide job reference for at least three (3) similar projects, including scope of work, project type, owner/user contact name and telephone number.
5. Hold and maintains a valid California C-7 or C-10 Contractors Licenses and can exhibit validity upon request.
6. Possesses the ability to create AUTOCAD "as built" documentation, including hardcopy and digital media.
7. Possesses calibrated acceptance testing equipment (full results reports only) as delineated within ANSI/TIA/EIA 568 Building Wiring Standards.
8. Contractor must be Belden Certified and provide proof of certification.

### MATERIALS, EQUIPMENT, COMPONENTS AND FITTINGS:

#### EQUIPMENT RACK AND WIRE MANAGEMENT COMPONENTS

PRODUCT	PRODUCT DESCRIPTION
55053-703	Chatsworth 7' Standard Rack
50120-703	Chatsworth 7' Quad rack 4-Post Frame
30094-703	Chatsworth Vertical Cable Manager - 4.4"
30095-703	Chatsworth Vertical Cable Manager - 6"
30096-703	Chatsworth Vertical Cable Manager - 10"
30339-719	Chatsworth Universal 1U Horizontal Cable Manager
30330-719	Chatsworth Universal 2U Horizontal Cable Manager
CPPL48WBLY	Panduit Mini-Com 48-Port Modular Patch Panel (2U)
CPPL24WBLY	Panduit Mini-Com 24-Port Modular Patch Panel (1U)
DP48584TV25Y	Panduit DP5e 24-Port Punch-down Patch Panel;
S66-M1-25	Siemens Split 66 Block

**CABLING - STANDARD INTERIOR LOCATIONS**

PRODUCT NO.	PRODUCT DESCRIPTION
2413-D15	Belden CAT6+, 4-Pair, U/UTP-Unshielded, Plenum-CMP Cable - Blue
2413-008	Belden CAT6+, 4-Pair, U/UTP-Unshielded, Plenum-CMP Cable - Gray
2413-010	Belden CAT6+, 4-Pair, U/UTP-Unshielded, Plenum-CMP Cable - Black
2413-004	Belden CAT6+, 4-Pair, U/UTP-Unshielded, Plenum-CMP Cable - Yellow

**MODULAR JACKS - (Color to Match Color of CAT6 Cable)**

PRODUCT NO.	PRODUCT DESCRIPTION
CJ688TGBU	Panduit Mini-Com TX6 Jack Module - Blue
CJ688TGIG	Panduit Mini-Com TX6 Jack Module - Gray
CJ688TGBL	Panduit Mini-Com TX6 Jack Module - Black
CJ688TGYL	Panduit Mini-Com TX6 Jack Module - Yellow

**CABLE RUNWAY – LADDER RACK COMPONENTS**

PRODUCT NO.	PRODUCT DESCRIPTION
AS REQUIRED – Chatsworth Universal Cable Runway – 12" W to 24" W depending upon cable density. - <b>Part #: 10250-7XX (12, 15, 18 and 24)</b>	
AS REQUIRED – Chatsworth Support, Junction and Seismic Bracing Products	

**GENERAL NOTES:**

1. All telecommunications work shall comply with the latest edition of the Mt. SAC telecommunications infrastructure standards and current manufacture and BICSI telecommunications infrastructure standards and practices and all other applicable federal, state and local codes. Where the construction documents indicate more restrictive requirements, the documents shall govern but, the construction documents shall not be interpreted as authority to violate any code or regulation.
2. In the event of a conflict or inconsistency between items indicated on the plans and/or specifications or with code requirements, the note specification or code which prescribes and establishes the more complete job or the higher standard shall prevail.
3. The contractor shall check all drawings furnished immediately upon their receipt and promptly notify construction manager and district representatives of any discrepancies. This includes but not limited to, discrepancies between drawings and specifications, or drawings and manufacturer installation instructions that will cause extended warranty issues, or drawings and governing codes and best practices. The contractor shall bring to the attention of the construction manager and district representatives any discrepancies between drawings and how the contractor normally delivers the services described in the drawings or specifications.
4. Omissions from the drawings or specifications or the misdescription of details of work which are clear and necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the contractor from performing such omitted or misdescribed details of the work but they shall be performed as if fully and correctly set forth and described in the drawings and specifications.
5. For those elements that do not require details or shop drawings on the approved drawings, the installation shall be subject to the approval of the electrical engineer and the field representative for the College.
6. Electrical contractor to provide and install (X) 4" conduit sleeve stubbed into the to the IDF. Conduit sleeves will be used to run fiber optic cabling.
7. Electrical contractor to provide and install (X) 4" conduit sleeves to support horizontal station cabling.

8. Communications contractor to provide and install 8' H x 4' W x ¾" AC Grade fire treated plywood backboard throughout IDF room. Plywood shall have (2) two coats of fire-retardant paint and primer applied.
9. Communications contractor to provide and install (1) one ea. 19" wide 4-post rack (Chatsworth Quad rack 4-post rack – Part #: 50120-703). Anchor to finished floor.
10. Communications contractor to provide install (1) one ea. 19" wide 2-post rack (Chatsworth Standard 2-post rack – Part #: 55053-703). Anchor to finished floor.
11. Communications contract to provide and install 12" ladder rack with cable runway elevation kit attached to rack top mounting plate. Use ladder rack to secure racks to room structure.
12. Communications contract shall provide and install all patch panels and horizontal wire management in two-post racks as necessary to support the number of category 6 cables being terminated with room for future growth.
13. Electrical contractor to provide and install 120v/20amp quadplex outlet on dedicated circuit centered at rear base of two-post and four-post racks with outlet facing back wall. Coordinate exact location with College IT representative. *(See Figure 1.1 below)*
14. Electrical contractor to provide and install 208v/30amp outlet (NEMA I6-30) on dedicated circuit centered at rear base of two-post and four-post racks with outlet facing back wall. Coordinate exact location with College IT representative. *(See Figure 1.1 below)*
15. Electrical contractor to provide and install 120v/20amp duplex convenience electrical outlets.
16. Communications contractor to provide and install (1) one ea. 10" wide vertical cable managers (Chatsworth MCS Master Cabling Section - 10" Double-sided – Part #: 30096-703).
17. Communications contractor to provide and install (1) one ea. 4" wide vertical cable managers (Chatsworth MCS Master Cabling Section - 4" double-sided – Part #: 30094-703).
18. Communications contractor shall provide and install telecommunication ground busbar (TGB).
19. Communications contractor shall provide and install telecommunication main ground busbar (TMGB).
20. Electrical contract to provide and install appropriate lighting. Contractor to coordinate installation of lighting fixtures with cable tray and equipment in IDF to ensure adequate service lighting on both sides of racks.
21. HVAC contractor to provide and install split HVAC unit with hardwired independent controls. Provide monitoring capabilities for facilities physical plant.

**END**