

DIVISION 27 – COMMUNICATIONS

27 00 00 COMMUNICATIONS

27 01 00 Operation and Maintenance of Communications Systems

27 01 10 Operation and Maintenance of Structured Cabling and Enclosures

27 01 20 Operation and Maintenance of Data Communications

27 01 30 Operation and Maintenance of Voice Communications

27 01 40 Operation and Maintenance of Audio-Video Communications

27 01 50 Operation and Maintenance of Distributed Communications and Monitoring

27 05 00 Common Work Results for Communications

27 05 13 Communications Services

27 05 13.13 Dialtone Services

27 05 13.23 T1 Services

27 05 13.33 DSL Services

27 05 13.43 Cable Services

27 05 13.53 Satellite Services

27 05 26 Grounding and Bonding for Communications Systems

27 05 28 Pathways for Communications Systems

27 05 28.29 Hangers and Supports for Communications Systems

27 05 28.33 Conduits and Backboxes for Communications Systems

27 05 28.36 Cable Trays for Communications Systems

27 05 28.39 Surface Raceways for Communications Systems

27 05 43 Underground Ducts and Raceways for Communications Systems

27 05 46 Utility Poles for Communications Systems

27 05 48 Vibration and Seismic Controls for Communications Systems

27 05 53 Identification for Communications Systems

27 06 00 Schedules for Communications

27 06 10 Schedules for Structured Cabling and Enclosures

27 06 20 Schedules for Data Communications

27 06 30 Schedules for Voice Communications

27 06 40 Schedules for Audio-Video Communications

27 06 50 Schedules for Distributed Communications and Monitoring

27 08 00 Commissioning of Communications

27 10 00 STRUCTURED CABLING

27 11 00 Communications Equipment Room Fittings

27 11 13 Communications Entrance Protection

27 11 16 Communications Cabinets, Racks, Frames and Enclosures

27 11 19 Communications Termination Blocks and Patch Panels

27 11 23 Communications Cable Management and Ladder Rack

27 11 26 Communications Rack Mounted Power Protection and Power Strips

27 13 00 Communications Backbone Cabling

27 13 13 Communications Copper Backbone Cabling

27 13 13.13 Communications Copper Cable Splicing and Terminations

27 13 23 Communications Optical Fiber Backbone Cabling

27 13 23.13 Communications Optical Fiber Splicing and Terminations

27 13 33 Communications Coaxial Backbone Cabling

27 13 33.13 Communications Coaxial Splicing and Terminations

27 13 43 Communications Services Cabling

27 13 43.13 Dialtone Services Cabling

27 13 43.23 T1 Services Cabling

27 13 43.33 DSL Services Cabling

27 13 43.43 Cable Services Cabling

27 13 43.53 Satellite Services Cabling

27 15 00 Communications Horizontal Cabling

27 15 00.16 Voice Communications Horizontal Cabling

27 15 00.19 Data Communications Horizontal Cabling

27 15 00.23 Audio-Video Communications Horizontal Cabling

27 15 00.39 Patient Monitoring and Telemetry Communications Horizontal Cabling

27 15 00.43 Nurse Call and Intercom Communications Horizontal Cabling

27 15 00.46 Paging Communications Horizontal Cabling

27 15 00.49 Intermediate Frequency/Radio Frequency Communications Horizontal Cabling

27 15 00.53 Antennas Communications Horizontal Cabling

27 15 13 Communications Copper Horizontal Cabling

27 15 23 Communications Optical Fiber Horizontal Cabling

- 27 15 33** Communications Coaxial Horizontal Cabling
- 27 15 43** Communications Faceplates and Connectors
- 27 16 00** Communications Connecting Cords, Devices and Adapters
- 27 16 13** Communications Custom Cable Assemblies
- 27 16 16** Communications Media Converters, Adapters, and Transceivers
- 27 16 19** Communications Patch Cords, Station Cords, and Cross Connect Wire
- 27 20 00** DATA COMMUNICATIONS
- 27 21 00** Data Communications Network Equipment
- 27 21 13** Data Communications Firewalls
- 27 21 16** Data Communications Routers, CSU/DSU, Multiplexers, Codec's, and Modems
- 27 21 26** Data Communications Network Management
- 27 21 29** Data Communications Switches and Hubs
- 27 21 33** Data Communications Wireless Access Points
- 27 22 00** Data Communications Hardware
- 27 22 13** Data Communications Mainframes
- 27 22 16** Data Communications Storage and Backup
- 27 22 19** Data Communications Servers
- 27 22 23** Data Communications Desktops
- 27 22 26** Data Communications Laptops
- 27 22 29** Data Communications Handhelds
- 27 24 00** Data Communications Peripheral Data Equipment
- 27 24 13** Printers
- 27 24 16** Scanners
- 27 24 19** External Drives
- 27 24 23** Audio-Video Devices
- 27 24 26** Virtual Reality Equipment
- 27 24 29** Disaster Recovery Equipment
- 27 25 00** Data Communications Software
- 27 25 13** Virus Protection Software
- 27 25 16** Application Suites
- 27 25 19** Email Software
- 27 25 23** Graphics/Multimedia Software



27 25 26 Customer Relationship Management Software
27 25 29 Operating System Software
27 25 33 Database Software
27 25 37 Virtual Private Network Software
27 25 39 Internet Conferencing Software
27 26 00 Data Communications Programming and Integration Services
27 26 13 Web Development
27 26 16 Database Development
27 26 19 Application Development
27 26 23 Network Integration Requirements
27 26 26 Data Communications Integration Requirements
27 30 00 VOICE COMMUNICATIONS
27 31 00 Voice Communications Switching and Routing Equipment
27 31 13 PBX/ Key Systems
27 31 23 Internet Protocol Voice Switches
27 32 00 Voice Communications Telephone Sets, Facsimiles and Modems
27 32 13 Telephone Sets
27 3216 Wireless Transceivers
27 32 23 Elevator Telephones
27 32 26 Ring-Down Emergency Telephones
27 32 29 Facsimiles and Modems
27 32 36 TTY Equipment
27 33 00 Voice Communications Messaging
27 33 16 Voice Mail and Auto Attendant
27 33 23 Interactive Voice Response
27 33 26 Facsimile Servers
27 34 00 Call Accounting
27 34 13 Toll Fraud Equipment and Software
27 34 16 Telemanagement Software
27 35 00 Call Management
27 35 13 Digital Voice Announcers
27 35 16 Automatic Call Distributors



- 27 35 19** Call Status and Management Displays
- 27 35 23** Dedicated 911 Systems
- 27 40 00** AUDIO-VIDEO COMMUNICATIONS
- 27 41 00** Audio-Video Systems
- 27 41 13** Architecturally Integrated Audio-Video Equipment
- 27 41 16** Integrated Audio-Video Systems and Equipment
- 27 41 16.25** Integrated Audio-Video Systems and Equipment for Restaurants and Bars
- 27 41 16.28** Integrated Audio-Video Systems and Equipment for Conference Rooms
- 27 41 16.29** Integrated Audio-Video Systems and Equipment for Board Rooms
- 27 41 16.51** Integrated Audio-Video Systems and Equipment for Classrooms
- 27 41 16.61** Integrated Audio-Video Systems and Equipment for Theaters
- 27 41 16.62** Integrated Audio-Video Systems and Equipment for Auditoriums
- 27 41 16.63** Integrated Audio-Video Systems and Equipment for Stadiums and Arenas
- 27 41 19** Portable Audio-Video Equipment
- 27 41 23** Audio-Video Accessories
- 27 42 00** Electronic Digital Systems
- 27 42 13** Point of Sale Systems
- 27 42 16** Transportation Information Display Systems
- 27 42 19** Public Information Systems
- 27 50 00** DISTRIBUTED COMMUNICATIONS AND MONITORING SYSTEMS
- 27 51 00** Distributed Audio-Video Communications Systems
- 27 51 13** Paging Systems
- 27 51 13.13** Overhead Paging Systems
- 27 51 16** Public Address and Mass Notification Systems
- 27 51 19** Sound Masking Systems
- 27 51 23** Intercommunications and Program Systems
- 27 51 23.20** Commercial Intercommunications and Program Systems
- 27 51 23.30** Residential Intercommunications and Program Systems
- 27 51 23.50** Educational Intercommunications and Program Systems
- 27 51 23.63** Detention Intercommunications and Program Systems
- 27 51 23.70** Healthcare Intercommunications and Program Systems
- 27 52 00** Healthcare Communications and Monitoring Systems



- 27 52 13** Patient Monitoring and Telemetry Systems
- 27 52 16** Telemedicine Systems
- 27 52 19** Healthcare Imaging Systems
- 27 52 23** Nurse Call/Code Blue Systems
- 27 53 00** Distributed Systems
- 27 53 13** Clock Systems
- 27 53 16** Infrared and Radio Frequency Tracking Systems
- 27 53 19** Internal Cellular, Paging, and Antenna Systems
- 27 60 00** *Reserved*
- 27 70 00** *Reserved*
- 27 80 00** *Reserved*
- 27 90 00** *Reserved*