

SECTION 27 15 43

COMMUNICATIONS FACEPLATES AND CONNECTORS

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes requirements for faceplates and connectors within the Communications Cabling System. General requirements for faceplates and connectors are covered in Division 27 Specification Section *Communications - General Requirements*.

1.02 RELATED SECTIONS

- A. The requirements of Division 27 Specification Section *Communications - General Requirements* shall serve as the basis for the requirements of this Section, and are incorporated by reference into this Section.

1.03 SUBMITTALS

- A. Comply with the Submittal portion of Division 27 Specification Section *Basic Communications Requirements*. Provide submittal information for the following:
 - 1. Product Data

PART 2 - MATERIALS

2.01 GENERAL

- A. Manufacturer: Unless otherwise indicated, equipment in this Section shall be of the same Manufacturer as that specified under Division 27 Specification Section *Communications - General Requirements*.
- B. Part Numbers: Refer to the Equipment Schedule(s) for specific manufacturers and part numbers.

2.02 FACEPLATES

- A. General: Provide faceplates for outlets in the locations and gang counts as shown on the Drawings or as specified below. Faceplates shall be complete with blank inserts/fillers for covering unused connector openings. Faceplates and fittings shall be dimensionally suitable for securely mounting connectors, providing a snug and sure fit – loose connectors are not acceptable. Faceplates shall be complete with port identification labels, and shall be provided with appropriate adapters, fittings and adapters as required.
- B. Color: The color of non-stainless steel faceplates shall be <coordinated with the Owner and Architect prior to purchase and delivery ivory or white unless specified below. Faceplates shall match electrical circuit insert.
- C. Faceplates/Fittings:
 - 1. For wall-mount telephone locations:
 - a. Faceplates shall be brushed stainless steel with stainless steel mounting lugs suitable for mounting wall-mount telephones. Faceplates shall be dimensionally suitable for securely mounting 8-position/8-conductor IDC (RJ45 style) connectors.
 - 2. For specialized mounting requirements (including but not limited to furniture, furniture “pop-ups” and enclosures, floor-boxes, poke-throughs, surface mounted raceway, etc.):
 - a. Provide faceplates and fittings as required to support the specialized mounting. Faceplates and fittings shall be manufactured specifically for the equipment that they are to be mounted into (“general purpose” faceplates field modified for the specialized use are not acceptable unless specifically noted otherwise on the Drawings). Faceplates and fittings shall be approved by both the equipment manufacturer and the communications cabling system manufacturer, and shall be coordinated and verified compatible by the Contractor, equipment manufacturer and cabling system manufacturer prior to procurement and delivery. The provision of the correct faceplates and fittings for use in specialized mounting requirements is the sole responsibility of the Contractor.
 - 3. For Wireless Access Point (WAP) and Security Camera (SC) locations:
 - a. Provide surface housing outlet box. Surface housing shall be dimensionally suitable for securely mounting (2) 8-position/8-conductor IDC (RJ45 style) connectors.

- D. Wall Cutout Faceplate Mounting Brackets: Provide brackets for mounting faceplates over wall cutouts (i.e. flush-mount faceplates with no in-wall outlet box) as required.
- E. Provide blank faceplates, matching those faceplates in use, for all unused communications back boxes.

2.03 CONNECTORS

- A. General: Connectors shall meet or exceed the TIA/EIA standards and as called for in the Governing Requirements.
- B. Horizontal:
 - 1. Copper: Copper connectors shall be 8-position/8-conductor, insulation displacement connector (IDC), non-keyed, and shall accept modular 8-position/8-conductor plugs. Connectors shall have a universally color-coded wiring pattern for T568B. Copper connectors Category rating shall be the same as that specified under Division 27 Specification Section *Communications - General Requirements*.
 - a. Color shall be ivory or white. Black in MDF/IDF closets.
 - 2. Fiber: Connectors shall be ceramic, epoxy polish, and shall be LC, specific to the fiber core size to be connectorized. Fiber connectors shall be complete with adapters and adapter plates where required for mounting in faceplates. Fiber connectors may also be uncam type Panduit brand.
- C. Backbone:
 - 1. Fiber: Fiber connectors shall be complete with bulkheads, adapters and adapter plates where required for mounting in fiber patch panels. Connectors shall be ultra-polished (UPC), ceramic, epoxy polish, and shall be LC, specific to the fiber core size to be connectorized.
 - a. For multimode fiber, provide field installable connectors.
 - b. For single mode fiber, provide manufacturer pre-connectorized pigtail assemblies (tested and certified by the manufacturer prior to installation).
 - c. Additions to legacy optical fiber cables with SC-style terminations shall be terminated with Panduit SC/LC-type connectors to match the installed cabling.
 - d. All green-field (new) optical backbones shall be terminated using Panduit LC-type connectors.
 - e. The Contractor shall provide all consumable materials for optical fiber connector terminations.
 - f. Outdoor single-mode/loose-tube fiber shall be terminated using fan-out kits and Panduit LC connectors.

PART 3 - EXECUTION

3.01 FACEPLATES

- A. Install all faceplates level and perpendicular to the floor. If long side of existing outlet box is mounted horizontal, use horizontal faceplates.
- B. Connector icons shall be inserted into connector/faceplate by Contractor. Coordinate icon installation with Owner prior to cable installation.

3.02 CONNECTORS

- A. Horizontal:
 - 1. Copper: Terminate connectors using the T568B wiring pattern at both ends of the cable.
 - 2. Fiber: Connectorize fiber strictly according to Manufacturer's instructions using manufacturer specified tools and termination kits. All fiber strands within a cable shall be connectorized – the installation of “dark fiber” is not acceptable unless shown otherwise on Drawings. Visually verify connectorization after installation with a minimum 200x magnification microscope to ensure that no physical damage has occurred during the installation process.
- B. Backbone:

1. Copper:
 - a. Comply with Division 27 Specification Section *Communications - Termination Equipment*.
2. Fiber: Connectorize fiber strictly according to Manufacturer's instructions using manufacturer specified tools and termination kits. All fiber strands within a cable shall be connectorized – the installation of “dark fiber” is not acceptable unless shown otherwise on Drawings.
 - a. Connectors: Visually verify connectorization after installation with a minimum 200x magnification microscope to ensure that no physical damage has occurred during the installation process.
 - b. Pigtailed: Connect pigtailed to fiber with fusion splicing – mechanical splicing is not acceptable.

PART 4 - EQUIPMENT SCHEDULE

4.01 –

27 15 43 - FACEPLATES AND CONNECTORS (FC)		
DESCRIPTION	"PanGen"	Special Rqmt/Notes
SURFACE MOUNT BOX/HOUSING (BISCUIT)	CBXJ2EI-A	
GFCI FRAME, 2 PORT, ELECTRIC IVORY	CFG2EI	
GFCI FRAME, 4 PORT, ELECTRIC IVORY	CFG4EI	
2 PORT ANGLED FACEPLATE	CFPHS2	Use with wiremold raceway.
FACEPLATE, 4 PORT, CLASSIC, SLOPED	CFPHSL4EI	
FACEPLATE, 2 PORT, CLASSIC, SLOPED	CFPSL2EIY	
FACEPLATE, 4 PORT, CLASSIC, SLOPED	CFPSL4EIY	
FACEPLATE, 6 PORT, CLASSIC, SLOPED	CFPSL6EIY	
MINI-COM MODULE, CAT 6	CJ688TGBL	
MINI-COM MODULE, CAT 6	CJ688TGEI	
BOX ADAPTER	MIWB AEI	Allows installation of single gang faceplate on
ULTIMATE ID SINGLE GANG HORIZONTAL SLOPED COMM. SNAP ON FACPLATE 2-POS.	UIT70FH2EI	
ULTIMATE ID SINGLE GANG HORIZONTAL SLOPED COMM. SNAP ON FACPLATE 4-POS.	UIT70FH4EI	
ULTIMATE ID SINGLE GANG VERTICAL SLOPED COMM. SNAP ON FACPLATE 2-POS.	UIT70FV2EI	
ULTIMATE ID SINGLE GANG VERTICAL SLOPED COMM. SNAP ON FACPLATE 2-POS.	UIT70FV4EI	
2-POSITION MODULE	CMD15HDEIY	Terminates on site to low-skew VGA cable at

END OF SECTION 27 15 43