SECTION 27 11 16

Communications Cabinets, Racks, Frames and Enclosures

[Specifier Notes] – This document uses hidden text to guide the specifier through various options while editing the document. Hidden text may be turned on two ways: with the “Show/Hide” symbol “¶” in the ribbon; or selecting “File” above the ribbon at the top left, then “Options” at the very lower left, then “Display” on the left side of the menu pop-up, and then check the box next to “Hidden Text.”

**Please delete this note before printing.**

1. GENERAL
	1. SECTION INCLUDES
		1. Rack Mountable Hardware.
		2. Wall Mountable Hardware.
	2. RELATED SECTIONS

[Specifier Notes]: Remove sections not required under project scope of work.

* + 1. Section 27 13 23 - Communications Optical Fiber Backbone Cabling.
		2. Section 27 13 23 13 - Communications Optical Fiber Splicing and Terminations.
		3. Section 33 82 23 - Optical Fiber Communications Distribution Cabling.
	1. SUBMITTALS
		1. Submit in accordance with requirements of Section 01 30 00 - Administrative Requirements.
		2. Submittals for Initial Selection:
			1. Product Data: Manufacturer's technical data sheets, specifications, performance data and installation instructions for all products referenced in the scope of work defined in this section.
			2. Shop Drawings: Submit shop drawings required to depict the requirements for fabrication and installation. Include the following drawings as applicable:
				1. Proposed riser and horizontal cabling diagram.
				2. Overlay of system components on floor plans.
			3. Sample Warranty Information:
				1. Submit confirmation and details of manufacturer’s warranty, extended warranty, and replacement policies.
		3. Closeout submittals
			1. Maintenance Contracts.
			2. Operation and Maintenance Data.
			3. Preventative Maintenance Instructions.
			4. Final Site Survey.
			5. Warranties for all manufactured components specified in this section.
	2. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Minimum 25 years in business manufactured at a facility in the United States.
		2. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer of optical fiber.
	3. DELIVERY STORAGE AND HANDLING
		1. Deliver, store and handle materials and products in accordance with the manufacturer's instructions and recommendations and industry standards.
		2. Store all materials in the manufacturer’s original packaging until ready for installation. Protect all products from damage or exposure to adverse environmental conditions, including weather, humidity, and dust.
	4. Project Conditions
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
	5. Warranty
		1. Manufacturer’s Warranty: Manufacturer agrees to replace or refund the purchase price of products that fail from defects in material and workmanship within the specified warranty period.
			1. Warranty Period: One (1) year from date of Substantial Completion.
		2. Manufacturer’s Extended Warranty: Manufacturer agrees to replace or refund the purchase price of products that are installed by a manufacturer-certified installer that fail from defects in material and workmanship within the specified warranty period.
			1. Warranty Period: Twenty-five (25) years from date of Substantial Completion.
1. PRODUCTS
	1. MANUFACTURERS

[Specifier Notes] – Retain the following Paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + 1. Basis of Design Manufacturer: Corning Optical Communications LLC.
			1. Address: 4200 Corning Place; Charlotte, NC 28216.
			2. Toll Free Phone: (800)743-2675.
			3. Phone: (828)901-5000.
			4. Fax: (828)325-5060.
			5. Website: [www.corning.com/opcomm](https://www.corning.com/opcomm)
			6. Email: ccsamericas@corning.com

[Specifier Notes] – Retain the following Paragraph if this document is written as a PERFORMANCE specification, without listing a manufacturer as a basis of design. Insert manufacturers that sell products comparable to those specified in this section. Delete if not required.

* + 1. Manufacturer List:
			1. Manufacturer:
		2. Substitution Limitations:
			1. Submit substitution requests in accordance with provisions of Section 01 60 00.
			2. Single manufacturer will provide, from a single source, optical fiber and accessories.
	1. PERFORMANCE REQUIREMENTS
		1. Cabling System Hardware Requirements:
			1. General Requirements: Provide cabling system hardware able to support interconnections to active telecommunications equipment for voice and data applications in a multi-vendor, multi product environment.
			2. Structured cabling system hardware should adhere to the following:
				1. General: Provide cabling system hardware in compliance with ANSI/TIA-568-D and ANSI/TIA-570-D.
				2. Labelling: Provide cabling system labelled in compliance with ANSI/TIA-606-B.
				3. Pathways: Provide cabling system for pathways and spaces in compliance with ANSI/TIA-569-C.
				4. Grounding and Bonding: Provide cabling system grounded and bonded in accordance with ANSI/TIA-607-C.
				5. Color Coding: Provide cabling system color coded in compliance with ANSI/TIA-598-C.
				6. Data Centers: Provide cabling system in compliance with ANSI/TIA-942-B.
	2. WAll MOUNTED HARDWARE
		1. Wall-Mounted Telecommunication Outlet.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: Wall-Plate Outlet (WLL), by Corning Optical.
			2. Construction: Provide outlet of thermoplastic injection molding with a textured finish consisting of a base and snap-in removable cover and connection panels.

[Specifier Notes] – Retain one of the four following paragraphs.

* + - * 1. Color: Black.
				2. Color: White.
				3. Color: Beige.
				4. Color: Gray.
				5. Connection Panels: Provide connection panels with optical fiber adapters or copper jacks used for connecting horizontal and work area cables.
				6. Surface Raceway: Provide cutouts for surface raceway.
				7. Cable Strain Relief: Provide tie-down points to relieve distribution cable strain.
				8. Fiber Routing: Provide interior hub with fiber retaining fingers to control minimum bend radius and fiber slack retention.
				9. Safety: Compliant with UL 1863.
				10. Flame Retardant: Pass, when tested in accordance with UL 94V-0.

[Specifier Notes] – Retain one of the two following paragraphs.

* + - 1. Wall Mounting: Provide outlet capable of mounting directly to gypsum wall board sheathing or concrete walls. Provide mounting holes such that outlet can be mounted to single- and double-gang utility boxes.
			2. Partition mounting: Provide mounting brackets to allow outlet mounting to furniture panels.
			3. Labeling: Provide outlet with labels including identification information and termination position identification.
			4. Capacity: Up to five (5) connector panels.
				1. Provide Snap-in removable connector panels that accept standard industry fiber optic adapters and copper jacks.
			5. Fiber Panels: Maximum 25 fiber ports. Provide the minimum following fiber panels:

[Specifier Notes] – Remove or retain the following paragraphs to meet project requirements.

* + - * 1. One (1) simplex SC.
				2. One (1) duplex SC.
				3. One (1) MT-RJ (SC style).
				4. Two (2) simplex SC.
				5. Two (2) threaded ST.
				6. Two (2) duplex SC.
				7. Two (2) MT-RJ (SC style).
			1. Copper Connector Panels: Maximum 10 copper jacks. Provide the minimum following copper panels:

[Specifier Notes] – Remove or retain the following paragraphs to meet project requirements.

* + - * 1. One (1) CAT3.
				2. One (1) CAT5.
				3. Two (2) CAT3.
				4. Two (2) CAT5.
		1. 2-Unit Wall-Mounted Connector Housings.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: WCH-02P, by Corning Optical.
			2. Construction: Provide housing of 16 gauge aluminum with front and side access capable of holding two (2) panels, modules, splice, and/or storage cassettes.
				1. Cable Strain Relief: Provide means for strain-relieving fiber optic cables inside the housing.
				2. Safety: Compliant with UL 1863.
				3. Flame Retardant: Pass, when tested in accordance with UL 94V-0.
			3. Dimensions: 16.1 inches long, 7.4 inches tall, 4.2 inches deep (409 x 188 x 107 mm).

[Specifier Notes] – Retain one of the two following paragraphs.

* + - 1. Wall Mounting: Provide housing capable of mounting directly to gypsum wall board, plywood, concrete, steel or brick.
		1. 4-Unit Wall-Mounted Connector Housings.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: WCH-02P, by Corning Optical.
			2. Construction: Provide housing of 16 gauge aluminum with front and side access capable of holding four (4) panels, modules, splice, and/or storage cassettes.
				1. Cable Strain Relief: Provide means for strain-relieving fiber optic cables inside the housing.
				2. Safety: Compliant with UL 1863.
				3. Flame Retardant: Pass, when tested in accordance with UL 94V-0.
			3. Dimensions: 16.1 inches long, 14.1 inches tall, 4.2 inches deep (409 x 358 x 107 mm).

[Specifier Notes] – Retain one of the two following paragraphs.

* + - 1. Wall Mounting: Provide housing capable of mounting directly to gypsum wall board, plywood, concrete, steel or brick.
		1. 6-Unit Wall-Mounted Connector Housings.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: WCH-02P, by Corning Optical.
			2. Construction: Provide housing of 16 gauge aluminum with front and side access capable of holding four (4) panels, modules, splice, and/or storage cassettes.
				1. Cable Strain Relief: Provide means for strain-relieving fiber optic cables inside the housing.
				2. Safety: Compliant with UL 1863.
				3. Flame Retardant: Pass, when tested in accordance with UL 94V-0.
			3. Dimensions: 16.1 inches long, 14.1 inches tall, 5.73 inches deep (409 x 358 x 146 mm).

[Specifier Notes] – Retain one of the two following paragraphs.

* + - 1. Wall Mounting: Provide housing capable of mounting directly to gypsum wall board, plywood, concrete, steel or brick.
		1. 11-Tray Wall-Mounted Splice Housings.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: WSH-11PST-F, by Corning Optical.
			2. Construction: Provide housing of 16 gauge aluminum with front and side access capable of holding eleven (11) splice trays.
				1. Cable Strain Relief: Provide means for strain-relieving fiber optic cables inside the housing.
				2. Safety: Compliant with UL 1863.
				3. Flame Retardant: Pass, when tested in accordance with UL 94V-0.

[Specifier Notes] – Retain one of the two following paragraphs.

* + - 1. Wall Mounting: Provide housing capable of mounting directly to gypsum wall board, plywood, concrete, steel or brick.
		1. 16-Tray Wall-Mounted Splice Housings.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: WSH-16PST-F, by Corning Optical.
			2. Construction: Provide housing of 16 gauge aluminum with front and side access capable of holding eleven (16) splice trays.
				1. Cable Strain Relief: Provide means for strain-relieving fiber optic cables inside the housing.
				2. Safety: Compliant with UL 1863.
				3. Flame Retardant: Pass, when tested in accordance with UL 94V-0.

[Specifier Notes] – Retain one of the two following paragraphs.

* + - 1. Wall Mounting: Provide housing capable of mounting directly to gypsum wall board, plywood, concrete, steel or brick.
		1. Single Panel Housings.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: SPH-01P, by Corning Optical.
			2. Construction: Provide housing of 14-gauge aluminum with front door access capable of holding one (1) CCH connector panel.
				1. Safety: Compliant with UL 1863.
				2. Flame Retardant: Pass, when tested in accordance with UL 94V-0.
			3. Wall Mounting: Provide housing capable of mounting directly to gypsum wall board, plywood, concrete, steel or brick.
	1. Rack Mounted Hardware
		1. 2-Tray EDGE8 HD Housings.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: EDGE8-01U, by Corning Optical.
			2. Construction: Provide housing of 16 gauge aluminum with front and side access capable of holding two (2) trays.
				1. Cable Strain Relief: Provide means for strain-relieving fiber optic cables inside the housing.
				2. Panel Access: Provide sliding trays to allow for front and rear panel and module access.
				3. Safety: Compliant with UL 1863.
				4. Flame Retardant: Pass, when tested in accordance with UL 94V-0.
			3. Capacity: Provide trays capable of holding up to 6 (six) modules. Maximum 48 fiber ports.
			4. Dimensions: 17 inches wide, 1.7 inches tall, 22.1 inches deep (432 x 44 x 561 mm).
			5. Rack Mounting: Provide housing capable of mounting directly into 19-inch racks and cabinets.
		1. 3-Tray EDGE8 HD Housings.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: EDGE8-01U-SP, by Corning Optical.
			2. Construction: Provide housing of 16 gauge aluminum with front and side access capable of holding three (3) trays.
				1. Cable Strain Relief: Provide means for strain-relieving fiber optic cables inside the housing.
				2. Panel Access: Provide sliding trays to allow for front and rear panel and module access.
				3. Safety: Compliant with UL 1863.
				4. Flame Retardant: Pass, when tested in accordance with UL 94V-0.
			3. Capacity: Provide trays capable of holding up to 6 (six) modules. Maximum 72 fiber ports.
			4. Dimensions: 17 inches wide, 1.7 inches tall, 22.1 inches deep (432 x 44 x 561 mm).
			5. Rack Mounting: Provide housing capable of mounting directly into 19-inch racks and cabinets.
		1. 6-Tray EDGE8 HD Housings.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: EDGE8-02U, by Corning Optical.
			2. Construction: Provide housing of 16 gauge aluminum with front and side access capable of holding six (6) trays.
				1. Cable Strain Relief: Provide means for strain-relieving fiber optic cables inside the housing.
				2. Panel Access: Provide sliding trays to allow for front and rear panel and module access.
				3. Safety: Compliant with UL 1863.
				4. Flame Retardant: Pass, when tested in accordance with UL 94V-0.
			3. Capacity: Provide trays capable of holding up to 6 (six) modules. Maximum 144 fiber ports.
			4. Dimensions: 17 inches wide, 3.4 inches tall, 22.1 inches deep (432 x 88 x 561 mm).
			5. Rack Mounting: Provide housing capable of mounting directly into 19-inch racks and cabinets.
		1. 12-Tray EDGE8 HD Housings.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: EDGE8-04U, by Corning Optical.
			2. Construction: Provide housing of 16 gauge aluminum with front and side access capable of holding twelve (12) trays.
				1. Cable Strain Relief: Provide means for strain-relieving fiber optic cables inside the housing.
				2. Panel Access: Provide sliding trays to allow for front and rear panel and module access.
				3. Safety: Compliant with UL 1863.
				4. Flame Retardant: Pass, when tested in accordance with UL 94V-0.
			3. Capacity: Provide trays capable of holding up to 6 (six) modules. Maximum 288 fiber ports.
			4. Dimensions: 17 inches wide, 7 inches tall, 22.1 inches deep (432 x 177 x 561 mm).
			5. Rack Mounting: Provide housing capable of mounting directly into 19-inch racks and cabinets.
		1. EDGE8 MTP to LC Duplex Module.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: ECM8-RM08, by Corning Optical.
			2. Construction: Provide 8 fiber cable assembly within a protective housing, with front accessible LC adapters interfacing with rear accessible MTP connectors.
				1. Capacity: Maximum 4 fiber ports.
				2. Polarity: Straight-through polarity. Provide internal wiring to ensure correct fiber polarity throughout the system.
				3. Operational Temperature: -10°C to +60°C (14°F to +140°F).
			3. Fiber Panels: Maximum 8 fiber MTP connectors. Provide the following MTP adapter on the rear of the module:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. MTP 8 fiber non-pinned MM.
				2. MTP 8 fiber non-pinned SM.
			1. LC Connector Panels: Maximum 4 LC duplex connectors. Provide the following LC adapter on the front of the module:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. LC duplex MM.
				2. LC UPC duplex SM.
				3. LC APC duplex SM.
			1. Installation: Provide housing capable of front or rear installation into EDGE8 HD Housing trays.
		1. EDGE8 MTP to LC Duplex Module.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: ECM8-UM08, by Corning Optical.
			2. Construction: Provide 8 fiber cable assembly within a protective housing, with front accessible LC adapters interfacing with rear accessible MTP connectors.
				1. Capacity: Maximum 4 fiber ports.
				2. Polarity: Universal Polarity. Provide internal wiring to ensure correct fiber polarity throughout the system.
				3. Operational Temperature: -10°C to +60°C (14°F to +140°F).
			3. Fiber Panels: Maximum 8 fiber MTP connectors. Provide the following MTP adapter on the rear of the module:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. MTP 8 fiber non-pinned MM.
				2. MTP 8 fiber non-pinned SM.
			1. LC Connector Panels: Maximum 4 LC duplex connectors. Provide the following LC adapter on the front of the module:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. LC duplex MM.
				2. LC UPC duplex SM.
				3. LC APC duplex SM.
			1. Installation: Provide housing capable of front or rear installation into EDGE8 HD Housing trays.
		1. EDGE8 Port Breakout Module.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: ECM8-04, by Corning Optical.
			2. Construction: Provide 8 fiber cable assembly within a protective housing, with front accessible LC adapters interfacing with rear accessible MTP connectors, enabling conversion from a single 4-channel parallel optic port to a patch panel representation with four LC duplex ports.
				1. Capacity: Maximum 4 fiber ports.
				2. Polarity: Provide internal wiring to ensure correct fiber polarity throughout the system.
				3. Operational Temperature: -10°C to +60°C (14°F to +140°F).
			3. Fiber Panels: Maximum 8 fiber MTP connectors. Provide the following MTP adapter on the rear of the module:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. MTP 8 fiber non-pinned MM.
				2. MTP 8 fiber non-pinned SM.
			1. LC Connector Panels: Maximum 4 LC duplex connectors. Provide LC UPC duplex SM adapter on the front of the module:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. LC duplex MM.
				2. LC UPC duplex SM.
			1. Installation: Provide housing capable of front or rear installation into EDGE8 HD Housing trays.
		1. EDGE8 Port Breakout Module.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: ECM8-05, by Corning Optical.
			2. Construction: Provide 8 fiber cable assembly within a protective housing, with front accessible LC adapters interfacing with rear accessible MTP connectors, enabling conversion from a single 4-channel parallel optic port to a patch panel representation with four LC duplex ports.
				1. Capacity: Maximum 4 fiber ports.
				2. Polarity: Provide internal wiring to ensure correct fiber polarity throughout the system.
				3. Operational Temperature: -10°C to +60°C (14°F to +140°F).
			3. Fiber Panels: Maximum 8 fiber MTP connectors. Provide the following MTP adapter on the rear of the module:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. MTP 8 fiber non-pinned MM.
				2. MTP 8 fiber non-pinned SM.
			1. LC Connector Panels: Maximum 4 LC duplex connectors. Provide LC duplex MM adapter on the front of the module:
			2. Installation: Provide housing capable of front or rear installation into EDGE8 HD Housing trays.
		1. EDGE8 Adapter Panels MTP.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: EDGE8-CP, by Corning Optical.
			2. Construction: Provide pass-through fiber cable assembly within a protective housing, with front and rear accessible MTP connectors, enabling the mating of trunks, harnesses, and patch chords.
				1. Capacity: Maximum 4 ports.
				2. Operational Temperature: -10°C to +60°C (14°F to +140°F).
			3. Fiber Panels: Provide the following MTP adapter:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. MTP 8 fiber non-pinned MM.
				2. MTP 8 fiber non-pinned SM.
				3. MTP 16 fiber non-pinned MM.
				4. MTP 16 fiber non-pinned SM.
				5. MTP 24 fiber non-pinned MM.
				6. MTP 24 fiber non-pinned SM.
				7. MTP 32 fiber non-pinned MM.
				8. MTP 32 fiber non-pinned SM.
			1. Installation: Provide housing capable of front or rear installation into EDGE8 HD Housing trays.
		1. EDGE8 Adapter Panels LC.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required

* + - 1. Basis of Design Product: EMOD8-CP, by Corning Optical.
			2. Construction: Provide pass-through fiber cable assembly within a protective housing, with front and rear accessible LC connectors, enabling the mating of trunks, harnesses, and patch chords.
				1. Capacity: Maximum fiber 4 ports.
				2. Operational Temperature: -10°C to +60°C (14°F to +140°F).
			3. Fiber Panels: Maximum 4 LC duplex adapters.
			4. Installation: Provide housing capable of front or rear installation into EDGE8 HD Housing trays.
		1. EDGE8 Tap Modules
			1. Basis of Design Product: ETM8, by Corning Optical.
			2. Construction: Provide 8 fiber cable assembly within a protective housing, with fiber optic splitter to divide the signal into two outputs. Provide front and rear accessible connectors, enabling the mating of trunks, harnesses, and patch chords for MTP terminations and LC duplex adapters.

[Specifier Notes] – Retain one of the two following paragraphs to meet project requirements.

* + - * 1. Capacity: Maximum 2 fiber ports.
				2. Capacity: Maximum 4 fiber ports.
			1. Operational Temperature: -10°C to +60°C (14°F to +140°F).

[Specifier Notes] – Retain the following paragraph to meet project requirements.

* + - 1. Fiber Panels: Provide the following MTP adapter on the rear of the module:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. MTP non-pinned MM.
				2. MTP non-pinned SM.

[Specifier Notes] – Retain the following paragraph to meet project requirements.

* + - 1. Split Ratio: Provide

Fiber Panels: Provide the following MTP adapter on the front of the module:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. MTP non-pinned MM.
				2. MTP non-pinned SM.

[Specifier Notes] – Retain the following paragraph to meet project requirements.

* + - 1. LC Connector Panels: Provide the following LC adapter on the rear of the module:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. LC duplex MM.
				2. LC UPC duplex SM.
				3. LC APC duplex SM.

[Specifier Notes] – Retain the following paragraph to meet project requirements.

* + - 1. LC Connector Panels: Provide the following LC adapter on the front of the module:

[Specifier Notes] – Retain one of the following paragraphs to meet project requirements.

* + - * 1. LC duplex MM.
				2. LC UPC duplex SM.
				3. LC APC duplex SM.
			1. Split Ratio: Provide passive optical tap to allow for live feed monitoring. Provide the following split ratio:
				1. 50/50
				2. 70/30
				3. 80/20
				4. 90/10
			2. Installation: Provide housing capable of front or rear installation into EDGE8 HD Housing drawers.
	1. Rack mounted hardware accessories
		1. EDGE8 Tray Kit 12-Pack.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: EDGE8-01U-TRAY, by Corning Optical.
			2. Construction: Provide twelve (12) trays of 16 gauge aluminum, capable of holding up to 6 (six) modules.
				1. Panel Access: Provide sliding trays to allow for front and rear panel and module access.
				2. Safety: Compliant with UL 1863.
				3. Flame Retardant: Pass, when tested in accordance with UL 94V-0.
			3. Rack Mounting: Provide housing capable of mounting directly into EDGE8 HD Housings.
		1. EDGE8 Tray Kit 12-Pack.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: EDGE8-02U-TRAY, by Corning Optical.
			2. Construction: Provide twelve (12) trays of 16 gauge aluminum, capable of holding up to 6 (six) modules.
				1. Panel Access: Provide sliding trays to allow for front and rear panel and module access.
				2. Safety: Compliant with UL 1863.
				3. Flame Retardant: Pass, when tested in accordance with UL 94V-0.
			3. Rack Mounting: Provide housing capable of mounting directly into EDGE8 HD Housings.
		1. EDGE8 Tray Kit 1-Pack.

[Specifier Notes] – Retain the following paragraph if this document is a PROPRIETARY Specification, with Corning Optical products listed as the Basis of Design. Delete if not required.

* + - 1. Basis of Design Product: EDGE8-TRAY, by Corning Optical.
			2. Construction: Provide one tray of 16 gauge aluminum, capable of holding up to 6 (six) modules.
				1. Panel Access: Provide sliding trays to allow for front and rear panel and module access.
				2. Safety: Compliant with UL 1863.
				3. Flame Retardant: Pass, when tested in accordance with UL 94V-0.
			3. Rack Mounting: Provide housing capable of mounting directly into EDGE8 HD Housings.
1. EXECUTION
	1. EXAMINATION
		1. Verification of Conditions: Do not begin installation until substrates have been properly prepared.
		2. Evaluation and Assessment: If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
	2. PREPARATION
		1. Surface Preparation: Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
	3. INSTALLATION
		1. Install all products in this section following the product manufacturer’s published installation and application manuals and guidelines.
	4. FIELD QUALITY CONTROL
		1. Testing Agency: Owner may engage a qualified testing agency to perform tests and inspections.
			1. Inspections: Fiber optic cables, accessories, and installation are subject to inspection for compliance with requirements and photograph documentation of conditions to be concealed by subsequent Work.
		2. Tests: As determined by Owner's testing agency from among the following tests:
			1. Optical Fiber Cabling Components: Test in accordance with ANSI/TIA 568.3-D.
			2. Optical Power Loss: Test in accordance with ANSI/TIA-526-14-C.
		3. Fiber optic cable will be considered defective if it does not pass tests and inspections.
	5. PROTECTION
		1. Protect installed products until substantial completion, replace damaged materials and retest.

End of Section