

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF
INFORMATION TECHNOLOGY
NETWORK & COMMUNICATIONS SERVICES

NETWORK COMMUNICATIONS DESIGN & WIRING STANDARDS



Appendix B

Approved Materials

Item Description	Manufacturer	Part Number
Copper Cable and Connectivity		
DataGain Four Pair Category 6 UTP - Plenum Green	Superior Essex	66-240-5B
DataGain Four Pair Category 6 UTP- Plenum Blue	Superior Essex	66-240-2B
DataGain Four Pair Category 6 UTP - Plenum Yellow- WAP	Superior Essex	66-240-6B
DataGain Four Pair Category 6 UTP - Plenum Violet - Special Circuits	Superior Essex	66-240-7B
Single Gang Faceplate, Fog White	Ortronics	OR40300158
Dual Gang Faceplate, Fog White	Ortronics	OR-40300159
Single Category 6, RJ-45 568B, Coupler	Ortronics	OR-S21600
Dual Category 6, RJ-45 568B, Coupler	Ortronics	OR-S22600
Faceplate Blank Insert	Ortronics	OR-40300164
Faceplate Blank Insert -package of 10	Ortronics	OR-40300191
Single Gang Surface Mount Wall box, Standard Depth - Fog White	Ortronics	OR-40300061
Single Gang Surface Mount Wall box, Deep - Fog White	Ortronics	OR-40300185
Surface Mount Wall box Magnet	Ortronics	OR-70900020
Clarity Category 6 110 Block-100 pair	Ortronics	OR-110ABC6100
Clarity Category 6 110 Block-300 pair	Ortronics	OR-110ABC6300
Patch Panel Bezel Kit 24 Module	Ortronics	OR-401045286
Patch Panel Bezel Kit 12 Module	Ortronics	OR-401045284
Clarity High Density Patch Panel 24 Port	Ortronics	OR-PHD66U24
Clarity High Density Patch Panel 48 Port	Ortronics	OR-PHD66U48
Clarity High Density Patch Panel 96 Port	Ortronics	OR-PHD66U96
Clarity Mod Cord Cat 6 3 ft.	Ortronics	OR-MC603-06
Clarity Mod Cord Cat 6 5 ft.	Ortronics	OR-MC605-06
Clarity Mod Cord Cat 6 7 ft.	Ortronics	OR-MC607-06
Clarity Mod Cord Cat 6 9 ft.	Ortronics	OR-MC609-06
Clarity Mod Cord Cat 6 15 ft.	Ortronics	OR-MC615-06
Clarity Mod Cord Cat 6 20 ft.	Ortronics	OR-MC620-06
Clarity Mod Cord Cat 6 25 ft.	Ortronics	OR-MC625-06
Fiber Optic Cable and Connectivity		
Multimode Armor Rated Premises Distribution Plenum 50/125 um OM4 TeraFlex Bend Resistant Laser Optimized		
6 Strand	Superior Essex	L4006P401
8 Strand	Superior Essex	L4008P401
12 Strand	Superior Essex	L4012P401
24 Strand	Superior Essex	L4024PK1Q
48 Strand	Superior Essex	L4048P401
Multimode Premises Distribution Plenum Rated 50/125 um		

OM4 TeraFlex Bend Resistant Laser Optimized		
6 Strand	Superior Essex	44006PG01
12 Strand	Superior Essex	44012PG01
24 Strand	Superior Essex	44024PK01
48 Strand	Superior Essex	44048PG01
72 Strand	Superior Essex	44072PG01
96 Strand	Superior Essex	44096PG01
144 Strand	Superior Essex	44144PG01
Multimode Premises Distribution Riser Rated 50/125 um OM4 TeraFlex Bend Resistant Laser Optimized		
6 strand	Superior Essex	43006PG01
12 Strand	Superior Essex	43012PG01
24 Strand	Superior Essex	43024PK01
48 Strand	Superior Essex	43048PG01
72 Strand	Superior Essex	43072PG01
96 Strand	Superior Essex	43096PG01
144 Strand	Superior Essex	43144PG01
Multimode Premises Distribution Riser Rated 62.5/125 um		
6 strand	Superior Essex	440066G01
12 Strand	Superior Essex	440126G01
24 Strand	Superior Essex	440246K01
48 Strand	Superior Essex	440486G01
72 Strand	Superior Essex	440726G01
96 Strand	Superior Essex	440966G01
144 Strand	Superior Essex	441446G01
Multimode Loose Tube All Dielectric Indoor/Outdoor LSZH NFPA-130 50/125 um OM4 TeraFlex Bend Resistant Laser Optimized		
6 strand	Superior Essex	HZ006P021
12 Strand	Superior Essex	HZ012P021
24 Strand	Superior Essex	HZ024P021
48 Strand	Superior Essex	HZ048P021
72 Strand	Superior Essex	HZ072P021
96 Strand	Superior Essex	HZ096P021
144 Strand	Superior Essex	HZ144P021
Multimode Loose Tube Armored Indoor/Outdoor LSZH NFPA-130 50/125 um OM4 TeraFlex Bend Resistant Laser Optimized		
6 strand	Superior Essex	HZ006P121
12 Strand	Superior Essex	HZ012P121

24 Strand	Superior Essex	HZ024P121
48 Strand	Superior Essex	HZ048P121
72 Strand	Superior Essex	HZ072P121
96 Strand	Superior Essex	HZ096P121
144 Strand	Superior Essex	HZ144P121
Singlemode Loose Tube All Dielectric Indoor/Outdoor LSZH NFPA-130 TeraFlex Bend Resistant		
6 strand	Superior Essex	HZ006K021
12 Strand	Superior Essex	HZ012K021
24 Strand	Superior Essex	HZ024K021
48 Strand	Superior Essex	HZ048K021
72 Strand	Superior Essex	HZ072K021
96 Strand	Superior Essex	HZ096K021
144 Strand	Superior Essex	HZ144K021
Singlemode Loose Tube Armored Indoor/Outdoor LSZH NFPA-130 TeraFlex Bend Resistant		
6 strand	Superior Essex	HZ006K121
12 Strand	Superior Essex	HZ012K121
24 Strand	Superior Essex	HZ024K121
48 Strand	Superior Essex	HZ048K121
72 Strand	Superior Essex	HZ072K121
96 Strand	Superior Essex	HZ096K121
144 Strand	Superior Essex	HZ144K121
Fiber Optic Connectors		
ST Multimode OM1	Corning	95-000-51
ST Singlemode OS2	Corning	95-200-51
SC Multimode Unicam OM1	Corning	95-000-40
SC Singlemode Unicam OS2	Corning	95-200-41
SC Multimode Unicam OM3/OM4	Corning	95-050-41-x-
SC Singlemode Unicam OS2	Corning	95-200-41
Unicam installation kit	Corning	TKT-Unicam-PFC
Fiber Optic Splice Enclosures		
7" Fusion Splice Tray, 12 fiber	Ortronics	OR-62600003
12 Strand Fusion Splice Tray - for use in FC-C enclosures	Ortronics	OR-FST2-F012
Heat Shrink Fusion Splice Protective Sleeve (50 pk)	Ortronics	OR-20500043
Fiber Optic Termination Enclosures		
Wall Mount Fusion Splice Enclosure - holds four 7" 12 fiber splice trays and 4 adapter panels	Ortronics	OR-615SMFC-24P/S

Three Slot Rack Mount Enclosure; 1RU patching only	Ortronics	OR-FC01U-P
Three Slot Rack Mount Enclosure; 1RU patching & Splice (2 splice trays)	Ortronics	OR-FC01U-C
Six Slot Rack Mount Enclosure; 2RU patching only	Ortronics	OR-FC02U-P
Six Slot Rack Mount Enclosure; 2RU patching & splice (6 splice trays)	Ortronics	OR-FC02U-C
Nine Slot Rack Mount Enclosure, 3RU patch only	Ortronics	OR-FC03U-P
Nine Slot Rack Mount Enclosure, 3RU patch & splice (11 splice trays)	Ortronics	OR-FC03U-C
12 Slot Rack Mount Enclosure, 4RU patch only	Ortronics	OR-FC04U-P
12 Slot Rack Mount Enclosure, 4RU patch & splice (holds 16 splice trays)	Ortronics	OR-FC04U-C
Six Port ST Coupler Panel, Multimode	Ortronics	OR-OFP-STS06NB
12 Port ST Coupler Panel, Multimode, 50 micron	Ortronics	OR-OFP-STD12LC
Six Port ST Coupler Panel, Singlemode	Ortronics	OR-OFP-STS06NC
12 Port ST Coupler Panel, Singlemode	Ortronics	OR-OFP-STD12AC
Six Port SC Coupler Panel, Multimode, 50 micron	Ortronics	OR-OFP-SCD06LC
12 Port SC Coupler Panel, Multimode, 50 micron	Ortronics	OR-OFP-SCD12LC
Six Port SC Coupler Panel, Singlemode	Ortronics	OR-OFP-SCD06AC
12 Port SC Coupler Panel, Singlemode	Ortronics	OR-OFP-SCD12AC
Innerduct		
1-1/4" Plenum Innerduct	Premier	P125T-4000
1-1/2" Plenum Innerduct	Premier	P150T-3500
2" Plenum Innerduct	Premier	n/a
1 1/4" Plenum Coupling	Premier	CP-125-P
1 1/2" Plenum Coupling	Premier	CP-150-P
1-1/4" PVC Innerduct	Premier	49009-020
1-1/2" PVC Innerduct	Premier	49010-020
2" PVC Innerduct	Premier	49099-020
1-1/4" Outside Plant Innerduct	Premier	SW-125-SDR11-5000
1-1/2" Outside Plant Innerduct	Premier	SW-150-SDR11-5000
2" Outside Plant Innerduct	Premier	SW-200-SDR11-4000
Equipment Rack and Hardware		
Standard 19 x 84" Open Relay Rack	Ortronics	OR-604004600
Mighty Mo6 19" x 86" Equipment Rack, 6.5" Channel	Ortronics	OR-MM6706
Mighty Mo6 19" x 86" Equipment Rack, 16.25" Channel	Ortronics	OR-MM6716
Mighty Mo 10 Server Relay Rack 7'	Ortronics	OR-MM107SVR
19" x 38" Wall Mount Equipment Rack	Ortronics	OR-604045450
6" Vertical Wire Management (Mighty Mo 6)	Ortronics	OR-MM6VMD706
10" Vertical Wire Management (Mighty Mo III)	Ortronics	OR-MM6VMD710
3/4" Latchduct, 6' Section	Panduit	LD-5EI6-A
1.5" Latchduct, 6' Section	Panduit	LD-10EI6-A

3/4" Latchduct Fittings	Panduit	xx-5EI-E
1.5" Latchduct Fittings	Panduit	xx-10EI-E
Single Gang Faceplate Extension Ring	Ortronics	OR-40300010
12" x 10' Ladder Rack	CPI	10250-712
12" Ladder Rack Coupler Kit	CPI	11301-001
12" End Angle Bracket	CPI	11421-712
12" Triangle Bracket	CPI	11746-712
12" x 10' Cable Tray	Cablofil	CF54/300EZ
12" Cable Tray Splice (50 pk)	Cablofil	EDRNEZ
Hardware Standard for LAN/WAN Devices		
Routers		
ASR 1000 series	Cisco	
ASR 9000 series	Cisco	
7300 series routers	Cisco	
800 Series ISR	Cisco	
2900 Series ISR	Cisco	
4000 Series ISR	Cisco	
MX960	Juniper	
MX480	Juniper	
MX240	Juniper	
MX104	Juniper	
MX80	Juniper	
MX40	Juniper	
MX10	Juniper	
MX5	Juniper	
Switch: Administrative/Closet		
Catalyst 4500E	Cisco	
Catalyst 3850	Cisco	
Catalyst 3650	Cisco	
Catalyst 2960-X/XR	Cisco	
Catalyst 2960-L	Cisco	
Catalyst 3560-CX	Cisco	
Catalyst 2960-CX	Cisco	
Catalyst 6800	Cisco	
Catalyst 6500	Cisco	
Catalyst 4500-X	Cisco	
Catalyst 3850	Cisco	
ME 3800X	Cisco	
Catalyst 3750 Metro Switches	Cisco	
ME 3600X	Cisco	
ME 3400 Series	Cisco	
ME 4900 Series	Cisco	

EX4300	Juniper	
EX4200	Juniper	
EX3400	Juniper	
EX3300	Juniper	
EX2300	Juniper	
EX2200	Juniper	
Switch: Data Center/Server		
Nexus 9000	Cisco	
Nexus 7000	Cisco	
Nexus 5000	Cisco	
Nexus 3000	Cisco	
Nexus 2000 Series Fabric Extenders	Cisco	
Nexus 1000V Switch for Microsoft Hyper-V	Cisco	
Switch: Industrial		
Cisco 2500 Series Connected Grid Switches	Cisco	
Cisco Industrial Ethernet 5000 Series Switches	Cisco	
Cisco Industrial Ethernet 4010 Series Switches	Cisco	
Cisco Industrial Ethernet 4000 Series Switches	Cisco	
Cisco Industrial Ethernet 3010 Series Switches	Cisco	
Cisco Industrial Ethernet 3000 Series Switches	Cisco	
Cisco Industrial Ethernet 2000 Series Switches	Cisco	
Cisco Industrial Ethernet 2000U Series Switches	Cisco	
Cisco Industrial Ethernet 1000 Series Switches	Cisco	
CN Series switches	Comnet	
CW Series switches	Comnet	
Voice/Telephony		
Expansion Modules		
1416 Expansion Module	Avaya	700469968
2420 Expansion Module	Avaya	700381825
9600 Expansion Module	Avaya	700462518
6424 Expansion Module	Avaya	108544511
Media Gateways		
G450	Avaya	700506956
G450 pwr	Avaya	700432529
G430	Avaya	700469273
G650	Avaya	700394950
G650 pwr-655A	Avaya	700406135

Media Modules		
710B - DS1	Avaya	700466634
711 - 8 port Analog Combo	Avaya	700394661
712 - 8 port digital	Avaya	700394745
714 - 8 port 4-Sta 4-Trunk	Avaya	700395221
714b - 8 port 4 Sta 4-Trunk	Avaya	700453889
716 - 24 port analog	Avaya	700394703
717 - 24 port digital	Avaya	700394711
Servers		
S8300	Avaya	700463532
HP Proliant DL360G7	Hewlet Packard	HP608341-003
Phones		
9620	Avaya	700461205
9630	Avaya	700426729
9640	Avaya	700383920
9650	Avaya	700383938
9611G	Avaya	700480593
9621	Avaya	700480601
9641	Avaya	700480627
2420	Avaya	700381585
6424	Avaya	700276132
8434	Avaya	107707986 R
1416	Avaya	700469869
ATT Two line Analog	Avaya	ML17929
2500 -Desk	Cortelco	250013-VBA-20M
2554 - Wall	Cortelco	255413-VBA-20M
2500 Kiosk - 2 Line Analog	Astra	9417CW
AORA Viking	Avaya	1600A - EWP
Polycom - 2200	Avaya	07880-160
256-001 Indoor Rugged Telephone, Industrial, Weather proof – with Licenses	GAI-Tronics	
E-1600-30A-EWP with licenses	Red Viking	
Steel Compact Telephone: Model # SCT-10-H – with licenses	Guardian Telecom	
T2100 emergency telephone – with licenses	Vandal Proof Tele.	
TN Boards		
2312 BP - IP Interface	Avaya	700463441
799 DP CLAN	Avaya	700463458
2224CP - 24 Port Digital	Avaya	700394646
793 CP - 24 Analog	Avaya	700394729
464 HP - DS1	Avaya	700463474

2602 AP - Medial Processor	Avaya	700394794
2501 AP - Val Announcement Board	Avaya	700463474
771DP - Maintenance/Test	Avaya	700393408
747 B- CO Trunk	Avaya	700463490