

Checklist

Customer: _____

Date: _____

Phone: _____

This checklist is designed to cover the basic information necessary to begin cabling system design and specify fiber optic products. Organized in a sequence typical of fiber optic design, it also corresponds to the chapter order of the Design Guide.

1. Preliminary Design Considerations (Chapter 1)

Communication Requirements

	Campus Backbone	Building Backbone	Horizontal Cabling	Data Center
Data				
• Ethernet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Token Ring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Fast Ethernet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• FDDI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Fibre Channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Gigabit Ethernet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• 10 Gigabit Ethernet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Wireless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Voice				
• T1	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
• T3	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
• TDM	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
• VOIP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Video				
• Video conference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Broadcast	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
• _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Telemetry/Sensor				
• Environmental	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
• Process	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
• Card readers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

2. Network Design and Installation Considerations (Chapter 2)

Campus Backbone

- One-level hierarchical star
- Two-level hierarchical star
- Backbone ring

Building Backbone

- One-level hierarchical star
- Two-level hierarchical star
- Centralized cabling

Horizontal Cabling

- Single-user outlet
- Multiuser outlet
- Centralized cabling
- Zone cabling

Equipment Room / Demarcation Point

- Star

Data Center

Backbone

- Star
- Centralized cabling

Horizontal

- Star
- Zone cabling

Checklist

3. Fiber Type and Performance (Chapter 3)

Campus Backbone

- LANscape® Pretium™ 550 Solutions
- Single-mode
- Other

Building Backbone

- LANscape Pretium 300 Solutions
- Other

Horizontal Cabling

- Standard 50/125 μm
- Other

Data Center

Backbone Cabling

- LANscape Pretium 300 Solutions
- LANscape Other

Horizontal Cabling

- LANscape Pretium 300 Solutions
- LANscape Other

LANscape Solutions

LANscape Solutions cable with standard 50/125 μm multimode fiber has a maximum attenuation of 3.5 dB/km at 850 nm and 1.5 dB/km at 1300 nm with a minimum OFL bandwidth of 500 MHz•km at 850 nm and 500 MHz•km at 1300 nm. The minimum EMB is 510 MHz•km at 850 nm as predicted by RML BW, per TIA/EIA 455-204 and IEC 60793-1-41, for intermediate performance laser-based systems up to 1 Gb/s.

LANscape Solutions cable with low-water-peak single-mode fiber has a maximum attenuation of 0.4 dB/km at 1310 nm, 0.4 dB/km at 1383 nm and 0.3 dB/km at 1550 nm.

LANscape Pretium 300 Solutions

LANscape Pretium Solutions cable with laser-optimized 50/125 μm multimode fiber has a maximum attenuation of 3.0 dB/km at 850 nm and 1.5 dB/km at 1300 nm with a minimum OFL bandwidth of 1500 MHz•km at 850 nm and 500 MHz•km at 1300 nm. The minimum EMB is 2000 MHz•km at 850 nm as predicted by calculated minimum EMB (minEMBc), per TIA/EIA 455-220 and IEC 60793-1-49, for high-performance laser-based systems up to 10 Gb/s.

LANscape Pretium 550 Solutions

LANscape Pretium Solutions cable with laser-optimized 50/125 μm multimode fiber has a maximum attenuation of 3.0 dB/km at 850 nm and 1.5 dB/km at 1300 nm. The minimum EMB is 4700 MHz•km at 850 nm as predicted by minEMBc, per TIA/EIA 455-220 and IEC 60793-1-49, for high performance laser-based systems up to 10 Gb/s. The 550 m distance is equivalent to a 4700 EMB system with standards-compliant transceiver and fiber characteristics, 3.0 dB/km cable attenuation and 1.0 dB total connector loss.

Other

- 50/125 μm
 - _____ dB/km @ 850 nm
 - _____ dB/km @ 1300 nm
 - _____ MHz•km @ 850 nm (OFL BW)
 - _____ MHz•km @ 1300 nm (OFL BW)
 - _____ MHz•km @ 850 nm (EMB up to 1 Gb/s)
 - _____ MHz•km @ 850 nm (EMB up to 10 Gb/s)
- 62.5/125 μm
 - _____ dB/km @ 850 nm
 - _____ dB/km @ 1300 nm
 - _____ MHz•km @ 850 nm (OFL BW)
 - _____ MHz•km @ 1300 nm (OFL BW)
 - _____ MHz•km @ 850 nm (EMB up to 1 Gb/s)
- Single-mode
 - _____ dB/km @ 1310 nm
 - _____ dB/km @ 1383 nm
 - _____ dB/km @ 1550 nm

Checklist

4. Fiber Count (Chapter 4)

Campus Backbone (Hybrid Cable)

- _____ x 50/125 μ m fibers
- _____ x Single-mode fibers

Building Backbone

- Decentralized
_____ x 50/125 μ m fibers
- Centralized cabling
_____ x 50/125 μ m fibers

Horizontal Cabling

- Single-user outlet
_____ x 50/125 μ m fibers
- Multiuser outlet
_____ x 50/125 μ m fibers
- Zone cabling
_____ x 50/125 μ m fibers

Data Center

- Backbone
_____ x 50/125 μ m fibers
- Horizontal
_____ x 50/125 μ m fibers

Equipment Room / Demarcation Point

- _____ x 50/125 μ m fibers
- _____ x Single-mode fibers

5. Cable Types (Chapter 5)

Campus Backbone

- ALTOS® All-Dielectric Cable
- ALTOS Lite™ Armored Cable
- FREEDM® Indoor/Outdoor Cable (stranded loose tube)
- FREEDM Indoor/Outdoor Cable (ribbon)
- FREEDM LST™ Indoor/Outdoor Cable (stranded loose tube)
- FREEDM One Indoor/Outdoor Cable (tight buffered)
- FREEDM Interlocking Armored Indoor/Outdoor Cable (ribbon)
- FREEDM LST Interlocking Armored Indoor/Outdoor Cable (stranded loose tube)

Building Backbone

- MIC® Cable
- FREEDM Indoor/Outdoor Cable (stranded loose tube)
- FREEDM Indoor/Outdoor Cable (ribbon)
- FREEDM LST Indoor/Outdoor Cable (stranded loose tube)
- MIC Interlocking Armored Cable
- Ribbon Riser Cable
- FREEDM One Indoor/Outdoor Cable (tight buffered)
- FREEDM Interlocking Armored Indoor/Outdoor Cable (ribbon)
- FREEDM LST Interlocking Armored Indoor/Outdoor Cable (stranded loose tube)

Horizontal Cabling

- MIC Cable

Patch Cord / Equipment Cables

- Zipcord cable
- Single-fiber cable
- Ribbon interconnect cable

Data Center Backbone and Horizontal Cabling

- MIC Cable
- Ribbon cable
- Interlocking armored cable

6. Splicing Methods (Chapter 6)

Fusion

- X77
- M90
- miniMass® Micro Fusion Splicer (ribbon)
- OptiSplice™ Premier iLID Fusion Splicer

Mechanical

- CamSplice™ Mechanical Splice

Other

- _____

Checklist

7. Connector Types and Termination Methods (Chapter 7)

(SM = Single-Mode; MM = Multimode)

Connector Type	SM	MM
<input type="checkbox"/> SC (duplex SC) connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> ST [®] Compatible Connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> MT-RJ connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> LC connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> MTP [®] Connector	<input type="checkbox"/>	<input type="checkbox"/>

Campus Backbone

<input type="checkbox"/> No-epoxy/no-polish UniCam [®] Connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Anaerobic connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Heat-cured connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Buffer tube fan-out kit	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Ribbon fan-out kit	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Ribbon cable spider fan-out kit	<input type="checkbox"/>	<input type="checkbox"/>

Building Backbone

<input type="checkbox"/> No-epoxy/no-polish UniCam Connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Anaerobic connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Heat-cured connector	<input type="checkbox"/>	<input type="checkbox"/>

Horizontal Cabling

<input type="checkbox"/> No-epoxy/no-polish UniCam Connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Anaerobic connector	<input type="checkbox"/>	<input type="checkbox"/>

Patch Cord / Equipment Cables

Electronic Interface

<input type="checkbox"/> ST Compatible Connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SC connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> MT-RJ connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> LC connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> MTP Connector	<input type="checkbox"/>	<input type="checkbox"/>

Data Center

<input type="checkbox"/> No-epoxy/no-polish UniCam Connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Anaerobic connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Heat-cured connector	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Ribbon fan-out kit	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Ribbon cable spider fan-out kit	<input type="checkbox"/>	<input type="checkbox"/>

Cable Type

	SM	MM
<input type="checkbox"/> Zipcord cable	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Single-fiber cable	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Ribbon interconnect cable	<input type="checkbox"/>	<input type="checkbox"/>

Length

8. Connecting Hardware and Outlets (Chapter 8)

Main Cross-Connect

<input type="checkbox"/> Closet Distribution Frame (CDF)
<input type="checkbox"/> Inter-Bay Storage Unit (IBU)
<input type="checkbox"/> Pretium [™] Connector Housing (PCH)
<input type="checkbox"/> Closet Connector or Splice Housing (CCS)
<input type="checkbox"/> _____

Intermediate Cross-Connect

<input type="checkbox"/> Closet Distribution Frame (CDF)
<input type="checkbox"/> Inter-Bay Storage Unit (IBU)
<input type="checkbox"/> Pretium Connector Housing (PCH)
<input type="checkbox"/> Wall-Mountable Closet Housing (WCH)
<input type="checkbox"/> Closet Connector or Splice Housing (CCS)
<input type="checkbox"/> _____

Horizontal Cross-Connect

(Telecommunications Room)

Backbone Cabling

<input type="checkbox"/> Wall-Mountable Closet Housing (WCH)
<input type="checkbox"/> Pretium Connector Housing (PCH)
<input type="checkbox"/> _____

Horizontal Cabling

<input type="checkbox"/> Closet Connector Housing (CCH)
<input type="checkbox"/> Industrial Connector Housing (ICH)
<input type="checkbox"/> Wall-Mountable Interconnect Center (WIC)
<input type="checkbox"/> _____

Centralized Cabling

<input type="checkbox"/> Closet Splice Housing (CSH)
<input type="checkbox"/> Wall-Mountable Splice Housing (WSH)
<input type="checkbox"/> _____

Zone Cabling

<input type="checkbox"/> Fiber Zone Box (FZB) - passive

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Checklist

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Work Area

Single-User

- Workstation Multimedia Outlet (WMO)
- Desk-Link™ Wall Outlet (DLS)
- Ruggedized Information Outlet (RIO)
- _____

Multuser

- Workstation Multimedia Outlet (WMO)
- _____

Indoor Splice / Transition Point Hardware

- Wall-Mountable Splice Housing (WSH)
- Closet Splice Housing (CSH)
- Optical Splice Enclosure (OSE)

Outdoor Hardware

- Splice closure (SCF)
- Environmental Distribution Center (EDC)
- Industrial Connector Housing (ICH)
- _____

Data Center

Main Distribution Area

- Closet Distribution Frame (CDF)
- Pretium™ Connector Housing (PCH)
- Closet Connect or Splice Housing (CCS)

Horizontal Distribution Area

- Closet Distribution Frame (CDF)
- Pretium Connector Housing (PCH)
- Closet Connect or Splice Housing (CCS)

Zone Distribution Area

- Fiber Zone Box (FZB)

Equipment Distribution Area

- Closet Distribution Frame (CDF)
- Pretium Connector Housing (PCH)
- Closet Connect or Splice Housing (CCS)

9. Data Centers, Preterminated Cables and Hardware (Chapter 9)

Campus Backbone

- MTP® Connector trunks
(connectors both ends with grips)

Building Backbone

- Connectorized cables
(connectors both ends with grips)
- MTP Connector trunks
(connectors both ends with grips)

Horizontal Cabling

- Prestubbed hardware
(connectorized one end pre-loaded in hardware)
- Connectorized cable
(connectors both ends)

Data Center

- Connectorized cables
(connectors both ends with grips)
- MTP Connector trunks
(MTP Connectors both ends with grips)

Checklist

10. Testing and Documentation (Chapter 10)

Campus Backbone

- End-to-end attenuation
- Splice/connector loss
- OTDR inspection

Building Backbone

- End-to-end attenuation
- Connector loss
- OTDR inspection

Horizontal Cabling

- End-to-end attenuation

Transmitter / Receiver Levels

- Power meter test

Troubleshooting

- Power meter
- Visual fault locator
- Model 500 Optical Multitester

11. Engineering Services Required (Contact Corning Cable Systems Distributor or Sales Representative)

Installation Services

- Network design and site survey
- On-site technical assistance
- Splicing, termination and testing services
- Troubleshooting and restoration
- _____

Training

- Network Cabling Design for LAN, Building and Campus Applications (TS LAN Design 500)
- Fiber Optic Installation and Splicing for LAN, Building and Campus Applications (TS LAN 500)
- Fiber Optic Design and Installation Course for Data Centers (TS DC 300)
- Fiber Optic On-the-Job Training (TS-19)
- Specialized Fiber Optic Course (TS-13)
- _____

Equipment

- Fusion splicer
- OTDR
- Attenuation test set
- Test fiber box
- Fiber talk set
- _____



Corning Cable Systems



Fiber Cabling Solutions for Premises Networks

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