Local Area Networks (LAN) Design Checklist

Customer Name: _________________________________ Date: __________________________

Take advantage of this design checklist to guide you through the creation of your LAN bill of materials.

Cabling

Environment

☐ Indoor
  • High crush potential – recommend armor or duct
  • Horizontal – requires minimum general rating
  • Floor to floor – requires minimum riser rating
  • Within air-handling spaces – requires minimum plenum rating

☐ Indoor/outdoor
  • High crush potential – recommend armor or duct
  • Horizontal – requires minimum general rating
  • Floor to floor – requires minimum riser rating
  • Within air-handling spaces – requires minimum plenum rating

☐ Outdoor (up to 50 ft exposed within building)
  • Direct buried – recommend armor or duct

☐ Industrial/mining/petrochemical
  • High crush potential – recommend armor or duct
  • Is it tray-rated?

☐ Micro cable
  • For installation in microduct systems using air-assisted installation methods

Fiber Requirements

☐ Existing fiber network?
☐ Bandwidth requirements?
☐ Fiber distance?
☐ Fiber type(s):
  • OM1
  • OM2
  • OM3
  • OM4
  • OS2

Connectivity

Field-Termination Method

☐ No-epoxy/no-polish (UniCam®) connectors
☐ Hand-polished (anaerobic) connectors
☐ Fusion splicing pigtailed

Connector Type

☐ Existing electronics or patch panels?
  • Adapter style: ______

☐ New electronics or patch panels (see hardware section)?
  • Adapter style: ______
Equipment and Accessories
Termination
- Cable fan-out kits (if using loose tube or ribbon cable with connectors)
- Consumables (if fusion splicing or anaerobic connectors)
- Connector tool kit (anaerobic or UniCam® connectors)
- Fusion splicer

Cable Access
- Cable access tools (hook blade, pliers, side snips, electrician strips, friction tape, electrical tape, seam ripper, cable cutter, or cable stripper)

Hardware
- Indoor
  - Rack mountable – closet connector housing (CCH)
    - Rack units needed?
    - Connector panels?
      - Adapter style (should match connector type): 
  - Fusion splicing pigtailed cassettes?
    - CCH pigtailed cassettes (everything included in one part number – connector panel, splice tray, pigtail, heat-shrinks, and cable ties)
  - Armored cable?
    - Grounding kit
  - Security needed?
    - Lock kit
  - Wall mountable
    - Which wall-mountable housing?
      - Single-panel housing (SPH)
      - Wall-mountable connector housing (WCH)
      - Industrial connector housing (ICH)
    - Connector panels?
      - Adapter style (should match connector type): 
- Outdoor
  - Distribution
    - Environmental distribution center (EDC)?
      - Composite construction or stainless steel
      - Cable entry port fittings
    - Connector panels?
      - Adapter style (should match connector type): 
  - Fusion splicing pigtailed cassettes?
    - Splice tray holders
    - Splice trays
    - Pigtails
    - Heat-shrinks
  - Armored cable?
    - Grounding kit
  - NEMA/IP rating required?
    - Choose industrial option
  - Security needed?
  - Lock kit
  - Splicing closures
    - Number of splices needed?
    - Splice trays
    - Heat-shrinks
    - How many cables are entering/leaving?

Note: Repeat hardware section for every location where splicing or termination occurs.

Now it will be easier to create your bill of materials.
Need assistance? Call our systems engineers at 800-743-2671 and ask for the Technical Support Desk.