

## **EXHIBIT 2A**

### **Cabling Specifications**

February 14, 2020

#### **Generalized Local Area Network Cabling Specifications**

##### **Structured Copper Cabling**

- All structured cabling must be installed to meet EIA/TIA Category 6 and 6A industry Standard and a manufacturer warranty provided to OGS.
- LAN cabling will be distributed to an estimated two (2) Tel Data Closets per floor.
- Green sheath cable should be utilized during a new construction scenario. When adding to existing infrastructure the existing cable manufacturer should be matched for consistency.
- All data closets must have a consistent air exchange to minimize heat build-up in the closets.
- All Wireless Access Points (WAPS) should be cabled with category 6A cable, jacks and patch panels.
- Faceplates utilized will depend upon which furniture is selected. The landlord will need to work with their installer to determine which faceplate will fit into the modular furniture. The faceplate color TBD by the tenant.
- Network cables will need to be supported by J-hooks or cable saddles spaced at 48" intervals above the dropped ceiling. Cable support apparatus may be connected to building steel or connected to wall structures.
- Cabling shall be routed to run along established walk ways, where feasible to do so. This is to avoid working over the desks of individuals for the latter installation of additional cables.
- All LAN cables will be tested to the established EIA/TIA standards for Category 6 and 6A. Paper and electronic test

reports shall be provided to OGS for review and acceptance. At a minimum the report must provide the following:

- o Cable ID number
  - o Near end and far end cross talk attenuation
  - o Wire mapping
  - o Cable length
- All cables will be labeled at both ends of the cable with a corresponding cable identification number.
  - Patch panels and data jacks shall be machine labeled with a cable ID number that meets industry standard.

### **Network Room Layout**

- The landlord should provide and install Chatsworth 12" Telco-Style Cable Runway within all Tel/Data closets. **Part number 11252-113** and all associated hardware to attach to the wall. Runway is required to properly route the cable entering the closets over to the network racks. The cable runway will be installed over the network racks and be positioned in a manner as to provide 36 - 48 inches of space behind the network rack. <http://www.chatsworth.com/products/> is the link to the Chatsworth web site where the other component parts can be found.
- The Landlord shall ground all network rack assemblies with a #6 ground to building steel.
- The landlord shall provide and install Chatsworth, 7' x 19" 2-post data racks (**PN 46353-503**) and 6" Chatsworth MCS vertical wire management within the rack array (**PN 30092-703**). Four (4) racks will be required for the main network closet and two (2) for each Satellite closet. Five (5) vertical wire managers will be required for the main closet and three (3) vertical wire managers will be required for each satellite closet. Racks must be secured to the floor and the ladder rack.

### **Structured Fiber Optic Cabling**

- As needed the landlord shall install a **50 micron, armored fiber optic cables** to unite the satellite closets with the main network closet. The cables are Corning MIC 250 Interlocking armored distribution cables (OM3) Corning **part number 012TD8-T1380-A3**. The cable is to be terminated on LC Unicam fiber tips and terminated in Corning housings in each network closet. The landlord shall provide and install two (2) Corning **CCH01U** fiber termination housings, one (1) in each satellite closet. Each housing shall contain one (1) **CCH-CP12-E4** fiber termination panel. The landlord shall provide one (1) **CCH01U** fiber termination panel in the main network closet. This housing shall have two (2) **CCH-CP12-E4** fiber termination panels.  
<http://www.corning.com/worldwide/en/products/communication-networks/products.html>
- All fiber optic cables will be labeled with wrap around labels at 20' intervals along the entire route. A 62.5 FM, 50 micron 5M, 8.3 micron single mode FS or hybrid FMS labeling identifier should be denoted at each end of each fiber optic riser or tie cable.
- All fiber optic cables must be tested and certified according to the EIA/TIA standards for the type of cable being installed. Copies of the end to end test results shall be provided to OGS upon completion of the cable installation.
- If physical diversity is required to deliver a circuit to the building main distribution frame (MDF) the building must have separate physical paths of entry for a contract vendor to install the required data circuit as needed.
- The landlord must provide an "as-built" drawing detailing the location of each network cable with its corresponding Cable ID number.

### **Network Room Electrical**

- Two (2) - 20 amp - double duplex power circuits (quad box) will be provided for each satellite network closet rack assembly. The receptacles are to be provided at the base of the rack line up.

- Eight (8) - 20 amp- double duplex power circuits (quad box) shall be provided for the rack array in the main network closet. The receptacles are to be provided at the base of the rack line up.