Ethernet Installation Premises Ready Considerations

To help assure customer premises readiness, below is a list of some of the items to be considered in preparing the premises. Verizon may ask that the customer perform a site survey with Verizon prior to installation of Verizon cable and equipment. Please note that anything in this document that is identified as being the responsibility of the customer must be provided or performed by you the customer, at no cost to Verizon.



Environmental Factors

The customer must provide an environment suitable for Verizon's cable and equipment.

Temperature and humidity:

Ambient Temperature (degrees Farenheit):	Short-term (4 hours or less)	35-100
	Recommended	65 - 80
% Relative Humidity:	Short-term (4 hours or less)	20 - 80
	Recommended	30 - 55

- Dust free environment.
- Adequate lighting.
- > Space for a cabinet, rack, or wall mount based on the service(s) ordered. Specific requirements will be determined at the site survey.



Cable Path and Conduit

- ➤ The customer must provide a cable path.
- Verizon will utilize common building telecom riser shafts where available. The customer must perform any necessary core drilling or other premises preparation work.
- Verizon usually will install rigid plastic tubing in which Verizon will install Verizon's fiber optic cable. Verizon usually does not require intra-building metallic conduit for installation of its fiber optic cable.
- ➤ If the customer or the building owner/manager requires metallic conduit, the conduit must be provided by the customer.
- If metallic conduit is to be used, the required conduit specifications are 2" electrical conduit with pull rope or tape installed. Conduit routes must be designed with gradual bends (bend radius should be a minimum of 15 times the diameter of the cable to be placed) and a maximum of two 90° bends or 180° of total bends between pull boxes. The customer must provide to Verizon engineering drawings or as-built documentation if the route is extensive and/or complex.
- ➤ Verizon will co-occupy a conduit provided by the customer or building owner/manager that contains the telecommunications cable(s) of other person(s) only if the customer provides a spare, roped, sub-duct for Verizon's cable.
- ➤ Verizon will place riser-rated cable that meets applicable fire and electrical code requirements. When a custom-er-provided cable path includes air plenum space, Verizon will install plenum-rated cable and additional charges to the customer and an extended installation interval will apply. (As an alternative, the customer may provide metallic conduit through the air plenum space for Verizon's use, which will avoid the need for installation of plenum-rated cable.)



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Power (as needed)

- The customer must provide commercial AC power for Verizon's equipment. The amperage, number and type of receptacles will be determined at the site survey. Dedicated circuits backed up by UPS/generator systems are strongly recommended.
- ➤ Verizon, at its discretion, may elect to accept alternative electric power arrangements such as -48V DC. Options can be discussed at the site survey.

For Switched Ethernet Service (SES/"TLS"), Network Interface Devices (NID's) placed at the customer's premises must be on surge protected electric power circuits. The customer must provide these electric power circuits and all necessary electric power. The cost of repairing any power surge related damage suffered by Verizon equipment will be charged to the customer.

- ➤ The customer must provide adequate grounding capability.
- The customer must provide a 120V AC, 20 A, convenience outlet for Verizon's use.



Ground

- The customer must provide a 3/4" metallic conduit from the Verizon equipment to a Verizon approved building ground. Verizon will run the appropriate gauge wire to the Verizon approved ground connection. Grounding options in order of preference are:
 - 1. Building Service Ground.
 - 2. Main Electric Box.
 - 3. Building Steel.
 - **4**. Metallic Water Pipe. Must be in direct contact with the earth for 10' or more and electrically continuous to the point where the protector ground wire is installed. There must be a bond placed around any meters.



Backboard

The customer must provide a backboard if one is needed for the installation. The backboard must be $4 \text{ feet } \times 8$ feet $\times 3$ inches. Variations can be discussed at the site survey.



Service Demarcation

➤ The standard interface for the demarcation with Verizon equipment will be a CAT 5 connector or optical connector in the proposed cabinet, bay, or wall space based on the type of service ordered and the customer's requirements. The type of interface to be used will be determined at the site survey.



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Premises Access and Use

The customer must provide Verizon access to all portions of the premises for which Verizon needs access in order to install Verizon's conduit, cable and equipment. The customer must obtain building owner/manager permission for installation of Verizon's conduit, cable and equipment.



Occupancy Charges

The customer must provide space, electric power and cable paths for Verizon's use. Verizon will not pay any charges for space, power, or cable paths.



Other Requirements

- The foregoing list of requirements for premises readiness is not intended to be a complete list of premises readiness requirements. Other requirements may apply.
- Applicable Verizon tariffs and contracts apply. In the event of a conflict between this document and a Verizon tariff or contract, the Verizon tariff or contract will control and supersede this document.

NOTES:

