

AT&T - Building Requirements for Fiber Transport Equipment (DS3 and Above)

*** The requirements outlined below are the responsibility of the party ordering service. ***

<u>Single Point of Contact (SPOC)</u> – The party ordering service from AT&T must provide a local contact's name and phone number with whom the AT&T engineering representative can speak regarding scheduling, building access and problem resolution, should the need arise. An Outside Plant Engineer will contact the SPOC to confirm the provisioning interval and/or schedule a site visit, if required. In order for AT&T to confirm the firm provisioning interval, the SPOC must:

- Be familiar with the location where service has been requested
- Have decision making power to address the service requirements requested
- Have the authority to confirm the ready date for all requirements that are responsibility of the customer

Note: For resale orders, the Reseller ordering from AT&T is responsible for coordinating the customer requirements listed herein with the end user, and ensuring that the end user meets those requirements on a timely basis in order to avoid service order delays.

Fiber Cable Supporting Structure – A clear underground or aerial path is required from the property line where AT&T facilities exist, to the telephone equipment room to support the entrance fiber. For example, if conduit is used:

- Minimum 2" conduit with a pull rope from the property line to the point of entrance. A 4" conduit is
 recommended, and 4" conduit schedule 40 is <u>required</u> in some regions (e.g. AT&T Southern New
 England Telephone (SNET), and AT&T West for new constructions).
- Minimum 3' sweeping radius no right angles no more than three 90° angles without a pull box.
 Dimensions for pull box space 12" x 12" x 18"
- A clear path with conduit or cable tray needs to be provided from the point of entrance to the demarcation location where the equipment will be placed (if applicable).
- You are encouraged to share this information with your Electrical Contractor.

Floor Space and Environmental Requirements – As a standard, fiber transport equipment is placed in a common area with access to the entire building. It is the tenant's responsibility to obtain the necessary permissions from the building owner for use of the common area.

- 1. Please see the drawing below for the minimum space requirements for Transport equipment. In addition to the space reflected on this drawing, we also require a clear 3' area around the equipment for access. Specific requirements may be discussed with the AT&T engineering representative.
- 2. The floor must be sturdy and able to withstand from 750 lbs. (without batteries) to 1,100 lbs. (with batteries) per bay of equipment.
- 3. Operating environment should be between +40° F and 100° F at 20% to 50% relative humidity.
- 4. With cabinet installations, if the floor is a raised computer floor, there must be no obstructions below the floor tiles and a small section of tile must be cut to allow for cable entry.
- 5. Other regional specifications must be met as dictated by OSHA and local regulatory agencies (e. g. Earthquake Bracing).
- 6. Individual consideration will be given to the particular circumstances of a customer's space limitations. If, during a site visit, adequate common space is not available, Engineering will discuss alternative arrangements to see if the SPOC can provide additional space in a common area. If no alternate common area is available, the issue will be referred to Sales.



Customer Coverage Document

for Fiber Deployment on Premise

<u>Power</u> – It is required that you provide permanent dedicated power for the equipment being installed. Power requirements can consist of nominal –48VDC, 110V, 125V, 220V, etc. Depending on the type of equipment placed, AT&T may require Hubble "twistlock" type outlets. AT&T may also require more than one power outlet for some equipment types. There are specific amperage requirements for different equipment types. These items need to be discussed with an AT&T engineering representative to ensure that service can be provisioned on time. Unless the customer provides Uninterrupted Power Service (UPS), AT&T places battery backup, appropriate to the equipment that needs to be installed.

<u>**Grounding**</u> – If the customer site will be using a stand-alone, centralized bulk power plant (now or at any time in the future), then grounding is required as follows: #2 stranded ground is required from the customer's earth electrode system to the equipment room. This would be connected to a grounding bus bar, or otherwise directly connected to different components. A #6 stranded ground is required from the grounding bus bar to the network equipment.

If the customer site will not be using a stand-alone, centralized bulk power plant (now or at any time in the future), and instead will be using an embedded or integrated power configuration (where the power plant is located within the same rack or cabinet as the equipment it powers), then grounding is required as follows: A #6 stranded ground is required from the customer's earth electrode system to the equipment room. This would be connected to a grounding bus bar, or otherwise directly connected to different components. A #6 stranded ground is required from the grounding bus bar to the network equipment.

Specific requirements may be discussed with the AT&T engineering representative. Please see the attached drawing for the appropriate grounding requirements. <u>Figure 5-4 ATT-TP-76416</u>

A metallic path to the site's earth electrode system must be available in the area where the network equipment is located. Using either a direct connection to network equipment or a connection to the equipment grounding system, a bond must be made, in order of preference, to one or more of the following:

a) A dedicated grounding conductor extended from the site's earth electrode system - this conductor may or may not be terminated at a bus bar; either arrangement is acceptable.

b) Building structural steel, provided it is bonded to the site's earth electrode system.

Notes regarding Grounding Bus Bar: The only grounding requirement from customers is the #2 or #6 ground lead as specified above. There is no requirement for customers to provide a grounding bus bar. AT&T may or may not provide a bus bar, based on specific premises conditions. Some customers choose to provide a bus bar based on other grounding requirements at their facility. To meet AT&T requirements, the grounding bus bar, if provided, should be a solid drilled copper bar to which our technicians can attach a ground lead with a crimp connector. (It should not be the type of ground bar with screw down lugs, typically used by electricians in electrical panels or on the side of load centers.)

<u>Support Structure</u> – When equipment is to be placed in the center of a terminal room, overhead ladder racking or under floor cable tray from the wall to the fiber equipment must be provided



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<u>Wall Backboard</u> – 4' x 8' x 3/4" Fire rated Plywood fastened to studs. In some instances, at customer request, a customer provided bay can be used in lieu of the wall backboard. This alternate arrangement must be discussed with the AT&T engineering representative.

AT&T Sales Representative: _____

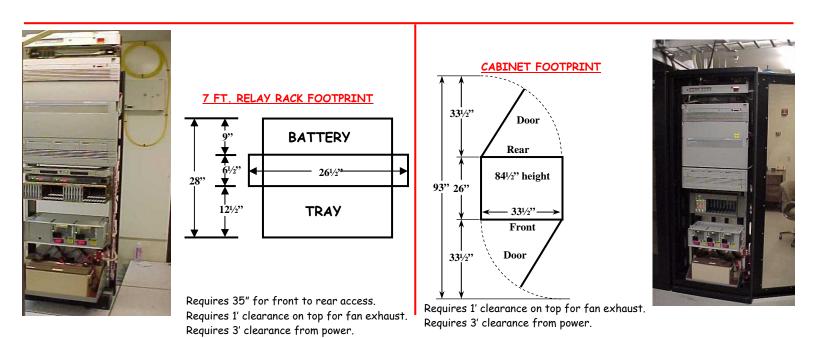
Telephone Number: _____

Date Covered with Customer: 00/00/200 (Month/Day/Year)

Customer Site Contact Name: _____

Telephone Number: _____

- No expedites of quoted due dates will be considered until the room is ready for service.
- The customer must have the site ready by the quoted customer ready date to avoid any delays in providing the requested service. In cases where there is no quoted customer ready date before the due date is firmed, the customer must have the site ready 25 days before the due date of the service order. If delays are anticipated, the customer should contact their engineering representative as soon as they are aware of the problem, so our work forces can be re-scheduled.
- Transport equipment varies from vendor to vendor, but the footprint and floor space requirements are approximately the same. Higher bandwidth equipment may require more than one bay or cabinet and different power requirements. An AT&T engineering representative will clarify if any variations are necessary once the type of equipment is determined.
- The equipment examples below depict minimum footprint requirements for fiber transport equipment systems with the approximate bandwidth capacity from 1 DS3 up to 12 DS3's.



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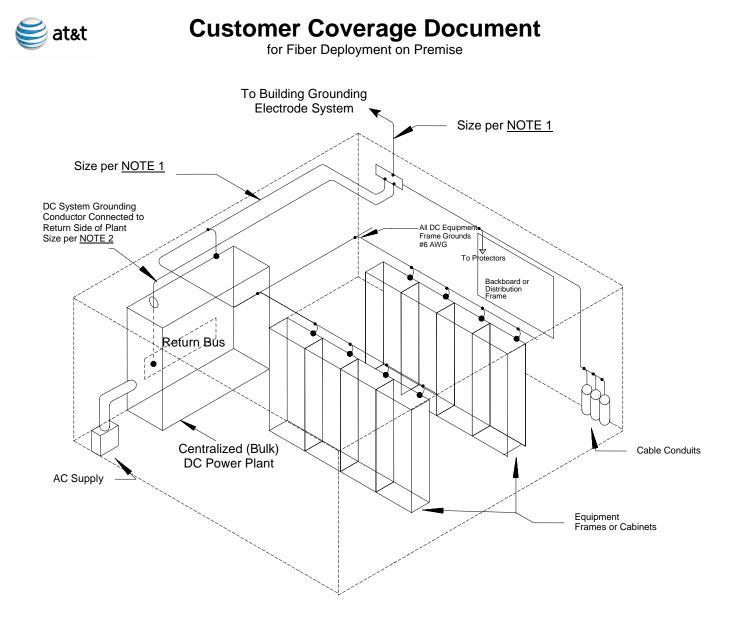


Figure 5-4 ATT-TP-76416

Figure