

GENERAL REQUIREMENTS FOR
LIGHTGUIDE CABLING

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1. GENERAL

1.1 Purpose

1.1.1 This section should be used as a general reference for lightguide cabling. Any specific problems should be directed to the responsible PECC or local RTAC Organization.

1.2 References

1.2.1 The following documents may be useful:

For No 5 ESS:	
ED-97868-50 G60	Slack Storage
ED-5D112-40	Equipment Draw.
ED-5D040-30	Cabling
For Toll:	
ED-97868-10	Common System - Cabling For Digital Cableways
ED-97868-50	Common System Specification For Line-up, Cross-aisle & Via Racks, and Method of Installation of Digital Cableway.
ED-97868-50 G60	Slack Storage

2. REQUIREMENTS

2.1 General

2.1.1 Lightguide cables, such as the 1800 and 1801 types, shall be segregated from switchboard cables when run on cable racks, either on separate racks or by the use of shields or "snap-on" cable brackets.

2.2 Handling

2.2.1 Lightguide cable shall not be pulled, kinked or twisted during or after installation. A minimum bending radius of 1-1/2" is required.

2.2.2 Lightguide cable that is kinked or otherwise damaged during handling or installation, shall be discarded and replaced by a new cable.

2.3 Fastening

2.3.1 Generally, lightguide cables shall not be tied or clipped to cable racks, cable brackets, or other framework details. Where it is necessary to secure the cables in order to hold them in place (or in formation)

they may be taped to adjacent cabling. They may also be tied with twine to the cable rack or framework details.

2.3.2 However, where the cables are to be tied, they shall be protected from contact with the twine and the metalwork by wrapping the cables with RM-583101, 1/64" thick sheet fiber. Although protected, the cables shall not be tied or sewn so tightly as to cause the fiber protection to deform the cables.

2.3.3 Nylon cable ties shall not be used for banding or securing lightguide cables since they will cause deformation of the cables when applied at the normally required tensions. Deformation could adversely affect the transmission characteristics of the glass fibers.

2.4 Storage

2.4.1 Where slack in a lightguide cable is to be stored on the cable rack, the excess cable shall be coiled onto a slack storage reel. The reel is mounted on the cable rack as indicated on drawing ED-97868-50 (For Group 60) which covers such a condition for the digital cableway lineup rack. Where required, the storage reel may be similarly mounted on the cable horn brackets of bar-type cross-aisle racks or ladder-type racks.

Engineering Planning Manager
(Installation)

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