

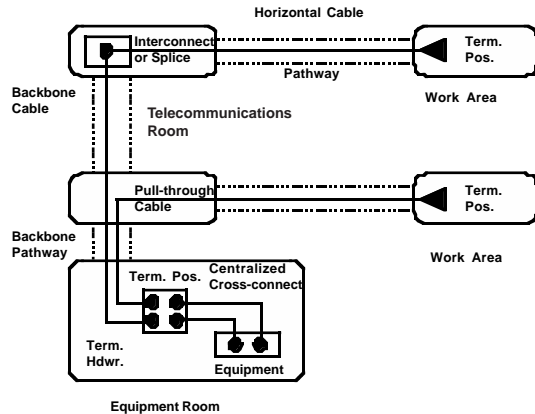
The purpose of TSB-72 is to assist in the planning of fiber-to-the-desk cabling system utilizing centralized electronics versus the traditional method of distributing the electronics to the individual floors.

Work area connections are extended to the main cross-connect by utilizing either pull-through cables, an interconnect or a splice in the telecommunications room.

Use of an interconnection between the horizontal and backbone cabling provides the greatest flexibility, ease of manageability and can easily migrate to a cross-connect.

The maximum horizontal cabling length is specified at 90 m (295 ft). The distance of horizontal and backbone cabling combined with work area cords, patch cords and equipment cords is not to exceed 300 m (984 ft).

Centralized cabling systems shall be located within the same building of the work areas being served. All move and change activity shall be performed at the main cross-connect. Horizontal links may be added and removed in the telecommunications room.



When using the pull-through method, the cable is to have a continuous sheath from the work area through the telecommunications room to the centralized cross-connect. The pull-through cable length shall be limited to 300 m (984 ft).

When designing a centralized cabling system, provisions shall be made to allow for the migration from pull-through, interconnect or splice to a cross-connect implementation. To facilitate this migration, sufficient space shall be left in the telecommunications room for additional patch panels. In addition, adequate cable slack shall be left in telecommunications room to allow for the cables to be moved to the cross-connect location.

Slack can be stored as either cable or unjacketed fibers. When storing slack, provisions shall be made to ensure bend radius limitations are not violated. Cable slack can be stored within enclosure or on the wall of the telecommunications room. Protective enclosures shall be used when storing slack fibers.

When planning the wall-mount or rack-mount layout, provisions should be made to allow future growth.

When sizing backbone cabling, provisions should be made for future horizontal links thereby minimizing the need for additional backbone cables. The backbone fiber count should be capable of supporting present and future networking technologies. Typically two fibers are required for each application connection required at the work area.

Labeling of the centralized cabling system shall follow the requirements as specified in TIA/EIA-606.

To ensure correct fiber polarity, the centralized cabling system shall implement the A-B orientation at the work area and B-A orientation at the centralized cross-connect as specified in section 12.7.1 of ANSI/TIA/EIA-568-A.

Fibers can be joined by either using re-mateable connectors or splices. If connectors are used the connector shall meet the specifications as defined in TIA-568-A. Fibers may be fusion or mechanically spliced, provided the requirements as specified in TIA-568-A are met.